



A message from the Director, Oregon Parks and Recreation Department

I am pleased to present Oregon Trails 2005-2014: A Statewide Action Plan. This plan is the product of more than two years of consultation and collaboration of recreation 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 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.

OPRD has taken an innovative approach to statewide trails planning by conducting simultaneous motorized, non-motorized and water trails plans. Each is a comprehensive study and depiction of the state of recreational trail and non-motorized boating use in Oregon. Oregon is the first state in the nation to complete a statewide water trails plan. This plan has identified three critical factors which pose a serious threat to long-term non-motorized boating access to waterways in Oregon including a rapid increase in participation in non-motorized boating, a lack of legal clarity and understanding of the public's right to Oregon's waterways for recreational purposes and an increasing potential for conflicts between non-motorized boaters and waterfront property owners. To address these concerns, the plan proposes a state-administered water trails program intended to develop a statewide system of water trails carefully designed to minimize conflicts between non-motorized boaters and waterfront property owners.

Although this Action Plan is completed, it's ultimate success rests on the continued support of stakeholders across the state to actively participate in implementing these strategies. By building on the momentum and collaboration of this planning process, each of us can help to turn this Action Plan into a world-class trail system—one that offers high-quality trail facilities and opportunities that will satisfy users—both Oregonians and visitors to our beautiful state—for generations to come.

Sincerely,

Tim Wood
Director – Oregon Parks and Recreation Department

TABLE OF CONTENTS

A Message From the Director, Oregon Parks and Recreation Department	i
Acknowledgements	vii
Introduction	1
Executive Summaries	
Motorized Trails Plan Executive Summary	12
Non-motorized Trails Plan Executive Summary	19
Water Trails Plan Executive Summary	28
Motorized Trails Plan.....	39
Non-motorized Trails Plan.....	93
Water Trails Plan.....	171
Appendices	233
Appendix A: 2004 Oregon Statewide Trails Inventory Project	235
Appendix B: Combined Trail User Analysis From the Oregon Statewide Trail User and Non-motorized Boater Survey Report.....	267
Appendix C: Oregon Statewide Trail User And Non-motorized Boater Survey Methodology	289
Appendix D: Trail Design, Maintenance and Accessibility Publication List	299
Appendix E: Potential Trail Funding Sources in Oregon.....	321
Appendix F: Motorized Trail Benefits Bibliography.....	331
Appendix G: Non-Motorized Trail Benefits Bibliography.....	337
Appendix H: Water Trail Benefits Bibliography.....	349
Appendix I: List of Regional Motorized Trail Issue Comments	354
Appendix J: List of Regional Non-motorized Trail Issue Comments.....	383
Appendix K: List of Regional Water Trail Issue Comments	413

List of Tables

TABLE 1: Trails Plan Steering Committee Meeting Schedule	5
TABLE 2: Regional Trails Issues Workshops.....	7
TABLE 3: OHV Trip Related Expenditures, Income and Jobs By Region in Oregon	13
TABLE 4: Total Annual Expenditures, Income and Jobs By Region in Oregon.....	13
TABLE 5: Extent of Motorized Trail Participation	15
TABLE 6: Information Sources – Motorized	16
TABLE 7: Motorized Trail Funding Priorities	17
TABLE 8: Extent of Non-motorized Trail Participation	24
TABLE 9: Information Sources – Non-motorized.....	24
TABLE 10: Non-motorized Trail Funding Priorities	25
TABLE 11: Change In Annual Boating Participation - Statewide (1987 - 2002).....	28
TABLE 12: Extent of Non-motorized Boating Participation	33
TABLE 13: Preferred Place for Favorite Non-motorized Boating Activity.....	34
TABLE 14: Information Sources – Non-motorized Boaters.....	34
TABLE 15: Water Trail Funding Priorities	35
TABLE 16: Regional Definitions.....	46
TABLE 17: OHV Trip Expenditures: By Region in Oregon	47
TABLE 18: OHV Trip Expenditures: In-State and Out-of-State Visitor Contributions in Oregon.....	47
TABLE 19: Total OHV Trip Expenditures: By Type of Purchase.....	48
TABLE 20: OHV Trip Expenditures.....	48
TABLE 21: Comparison of Average Trip Expenditures to Other Types of Recreation	49
TABLE 22: Total Annual Expenditures: By Region in Oregon	49
TABLE 23: Total Annual Expenditures: By Type of Purchases.....	50
TABLE 24: Annual Expenditures: Income and Jobs By Region in Oregon	50
TABLE 25: Identification of Top Statewide Motorized Trail Issues	55
TABLE 26: Motorized Demographics.....	58
TABLE 27: Extent of Motorized Trail Participation	59
TABLE 28: Frequency of Motorized Trail Participation	59
TABLE 29: Favorite Motorized Trail Activity.....	60
TABLE 30: Preferred Level of Difficulty – Motorized	60
TABLE 31: Distance Traveled for Most Frequent and for Favorite Motorized Activities.....	61
TABLE 32: Use Trails as Much As Wanted – Motorized.....	61
TABLE 33: Reasons for Not Using Trails as Much as Wanted – Motorized	62
TABLE 34: Satisfaction with Motorized Trail Services	63
TABLE 35: Satisfaction with Motorized Trail Information.....	64
TABLE 36: Information Sources – Motorized	64
TABLE 37: Overall Satisfaction with Trail Experience – Motorized	65
TABLE 38: Motorized Trail Funding Priorities	66
TABLE 39: Opinion on Motorized Operator Safety Certification	67
TABLE 40: Importance of Signage – Motorized.....	67
TABLE 41: Membership in a Club or Group – Motorized	68
TABLE 42: ATV Grant Program Evaluation Criteria Point Summary	80
TABLE 43: Rail-Trail Economic Contribution Estimates.....	101
TABLE 44: Crime Rates: Comparing Statistics For the Nation vs. Rail Trails	104
TABLE 45: Rail-Trails Reporting Minor Crimes	105
TABLE 46: Identification of Key Statewide Non-motorized Trails Issues	114
TABLE 47: Identification of Top Statewide Non-motorized Trail Concerns.....	115
TABLE 48: Non-motorized Demographics	118
TABLE 49: Extent of Non-motorized Trail Participation	119
TABLE 50: Frequency of Non-motorized Trail Participation	119
TABLE 51: Favorite Non-motorized Trail Activity.....	120
TABLE 52: Distance Traveled for Most Frequent and for Favorite Non-motorized Activities.....	121

TABLE 53: Preferred Setting for Most Frequent and Favorite Non-motorized Trail Activities.....	121
TABLE 54: Preferred Non-motorized Trail Type.....	122
TABLE 55: Use Trails as Much As Wanted – Non-motorized	122
TABLE 56: Reasons for Not Using Trails as Much as Wanted – Non-motorized	123
TABLE 57: Satisfaction with Non-motorized Trail Services.....	124
TABLE 58: Satisfaction with Non-motorized Trail Information.....	125
TABLE 59: Information Sources – Non-motorized.....	126
TABLE 60: Overall Satisfaction with Trail Experience – Non-motorized.....	127
TABLE 61: Non-motorized Trail Funding Priorities	128
TABLE 62: Primary Use of Non-motorized Trails.....	129
TABLE 63: Preferred Surface Type for Non-motorized Trail Users	129
TABLE 64: Importance of Non-motorized Trail Types.....	130
TABLE 65: Importance of Signage - Non-motorized	131
TABLE 66: Membership in a Club or Group – Non-motorized	131
TABLE 67: RTP Grant Program Evaluation Criteria Point Summary.....	148
TABLE 68: Change In Annual Participation - Statewide. (1987 - 2002)	175
TABLE 69: Identification of Top Statewide Water Trail Issues	186
TABLE 70: Non-motorized Boater Demographics.....	189
TABLE 71: Extent of Non-motorized Boating Participation	190
TABLE 72: Frequency of Non-motorized Boating Participation.....	190
TABLE 73: Favorite Non-motorized Boating Activity	191
TABLE 74: Preferred Place for Favorite Non-motorized Boating Activity.....	191
TABLE 75: Distance Traveled for Most Frequent and for Favorite Non-motorized Boating Activities	192
TABLE 76: Preferred Setting for Non-motorized Boating Activities	192
TABLE 77: Preferred Non-motorized Watercraft Trail Type	193
TABLE 78: Use Trails as Much As Wanted – Non-motorized Boaters	193
TABLE 79: Reasons for Not Using Non-motorized Watercraft as Much as Wanted.....	194
TABLE 80: Satisfaction with Non-motorized Boating Services.....	195
TABLE 81: Information Sources – Non-motorized Boaters.....	195
TABLE 82: Satisfaction with Non-motorized Boating Information	196
TABLE 83: Overall Satisfaction with Non-motorized Boating Experience.....	196
TABLE 84: Water Trail Funding Priorities	197
TABLE 85: Activities Combined with Non-motorized Boating.....	198
TABLE 86: Amount Willing to Pay for Water Trail Use.....	198
TABLE 87: Revenues Generated by Different Non-motorized Boater Fee Structures.....	199
TABLE 88: Preferred Methods of Fee Payment - Non-motorized Boaters	199
TABLE 89: Importance of Signage to Water Trail Users	200
TABLE 90: Shared Use of Water Trails.....	200
TABLE 91: Opinions about Non-motorized Boaters Rights to Use Waterways.....	201
TABLE 92: Membership in a Club or Group – Non-motorized Boaters	202
TABLE 93. Opinions about Non-motorized Boaters Rights to Use Waterways.....	218

ACKNOWLEDGEMENTS

The following individuals developed and prepared Oregon Trails 2005-2014: A Statewide Action Plan

PRIMARY OPRD PROJECT STAFF

Terry Bergerson

Project Manager & Primary Author

Sean Loughran

Technical Assistance & Review and
Issues Workshop Facilitation

OTHER OPRD STAFF

Kathy Schutt

Planning Manager

Wayne Rawlins

Motorized Trails Team Member

Steve Brutscher

Water Trails Team Member

Tammy Baumann

Administrative Support

OPRD MANAGEMENT

Tim Wood

Director

Dave Wright

Assistant Director, Operations

OTHER OPRD CONTRIBUTORS

(Listed in Alphabetical Order)

Kim Baker

Dolly Bullington

Ian Caldwell

Jennifer Deeder

Heather Durant

Chris Havel

Rocky Houston

Mike Law

MaryAnne Lee

Mike Niss

Richard Walkoski

2004 OREGON STATEWIDE TRAILS INVENTORY PROJECT

Dr. Michael Wing

Oregon State University—Forest
Engineering Department

2004 OREGON STATEWIDE TRAIL USER & NON-MOTORIZED BOATER SURVEY PROJECT

Dr. Woody Carter

Tony Silvaggio

University of Oregon—Oregon Survey
Research Laboratory

MOTORIZED TRAILS PLAN STEERING COMMITTEE MEMBERS

(Listed in Alphabetical Order)

John Barnes

Oregon Department of Forestry

Julie Barrell

ATV Account Allocation Committee

Barrett Brown

Lobos Motorcycle Club

Alan Cook

Unaffiliated Enthusiast

Jeff Farm

Oregon Parks & Recreation Department

Pat Harris

ATV Account Allocation Committee

Tyrrell Hart

ATV Account Allocation Committee

John Lilly

Oregon Division of State Lands

Ron Price

Bureau of Land Management/ U.S.
Forest Service

Peggy Spieger

Oregon State Snowmobiling
Association

Don Taylor
Tillamook County Deputy

ALL-TERRAIN VEHICLE GRANT CRITERIA SUBCOMMITTEE

(Listed in Alphabetical Order)

Julie Barrell
ATV Account Allocation Committee

Jeff Farm
Oregon Parks & Recreation Department

Pat Harris
ATV Account Allocation Committee

Tyrrell Hart
ATV Account Allocation Committee

Ron Price
Bureau of Land Management/ U.S.
Forest Service

NON-MOTORIZED TRAILS PLAN STEERING COMMITTEE MEMBERS

(Listed in Alphabetical Order)

Ric Balfour
International Mountain Biking
Association

John Barnes
Oregon Department of Forestry

Dr. Minot Cleveland
Oregon Coalition for Promoting Physical
Activity

Ernie Drapela
Oregon Recreational Trails Advisory
Council

Chuck Frayer
U.S. Forest Service

Mel Huie
METRO Parks, Trails & Greenspaces

David Lewis
Oregon Bicycle & Pedestrian Advisory
Committee

Dan Miller
National Park Service, Rivers & Trails
Program

Dr. Jane Moore
Office of Health Promotion & Chronic
Disease Prevention

Mike Reedy

Oregon Recreational Trails Advisory
Council

Ann Rogers
Oregon Historical Trails Advisory
Council

Bruce Ronning
Oregon Recreational Trails Advisory
Council

Gail Throop
U.S. Forest Service

Jack Wiles
Oregon Parks & Recreation Department

Margaret Wolf
Bureau of Land Management

RECREATIONAL TRAILS PROGRAM GRANT CRITERIA SUBCOMMITTEE

(Listed in Alphabetical Order)

Ernie Drapela
Oregon Recreational Trails Advisory
Council

Pat Harris
ATV Account Allocation Committee

Mike Reedy
Oregon Recreational Trails Advisory
Council

Ann Rogers
Oregon Historical Trails Advisory
Council

Bruce Ronning
Oregon Recreational Trails Advisory
Council

WATER TRAILS PLAN STEERING COMMITTEE MEMBERS

(Listed in Alphabetical Order)

Sue Abbott
National Park Service, Rivers & Trails
Program

Ernie Drapela
Oregon Recreational Trails Advisory
Council

Rhine Messmer
Oregon Department of Fish & Wildlife

John Lilly
Oregon Division of State Lands

Bruce Ronning

Oregon Recreational Trails Advisory
Council

Cindy Scherrer

Alder Creek Kayak

Larry Miller

Oregon Parks & Recreation Department

Wayne Schuyler

Oregon State Marine Board

Chuck Solin

Oregon Recreational Trails Advisory
Council

Gail Throop

U.S. Forest Service

Reed Waite

Washington Water Trails Association

Margaret Wolf

Bureau of Land Management

INTRODUCTION

The Oregon Parks and Recreation Department (OPRD) was given responsibility for recreation 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."

At the start of this planning effort, the Oregon State Off-Highway Vehicle (OHV) Study and Oregon Recreation Trails Plan had been in place since 1995. Although many of the findings included in these plans are still relevant, considerable change has occurred on Oregon's OHV areas/trails and recreational trails in the last 9 years including a 13% state population increase between 1995 and 2003 and increases in OHV ownership and recreational trails use. As a general rule, planning documents of this type have a usable shelf life of 10 years. As a result, there was a need to update the trails plans for both OHV and recreational trail uses.

Support for the Plan

During the months of October through December of 2001, OPRD staff conducted a series of regional recreation issues workshops across the state as part of the Statewide Comprehensive Outdoor Recreation Plan (SCORP) planning process. Recreation providers from across the state expressed a strong desire for OPRD to update the Oregon State Off-Highway

Vehicle Study and Oregon Recreation Trails Plan. According to these providers, the plan should examine use of all types of trails (motorized, recreational and water trails) and include the participation of state, federal, county and municipal providers and advocacy groups.

The SCORP planning effort's recreational participation study (Oregon Outdoor Recreation Survey) findings also emphasize the importance of trail-related activities in the state. The study estimated statewide resident and non-resident recreation participation for a list of 76 individual outdoor recreation activities. Of these 76 activities, the most popular resident activities are running and walking for exercise (49.2 million estimated annual user days¹) and walking for pleasure (47.7 million annual user days). For non-residents (from households in Washington, Idaho, and California who lived in counties adjacent to Oregon) recreating in the state of Oregon, running and walking for exercise (10.5 million annual user days), RV/Trailer Camping (6.2 million annual user days), and walking for pleasure (5.1 million annual user days) were the most popular.

Based on information gathered during the SCORP issues workshops and the Oregon Outdoor Recreation Survey, the SCORP Advisory Committee identified the development of a concurrent statewide motorized and non-motorized trails plan as a key objective in order to provide an adequate supply of quality trail facilities and opportunities to satisfy a growing number

¹ A user day is one instance of participation in a single outdoor recreation activity by one person.

of motorized and recreational trail users throughout the state of Oregon.

In addition to OPRD having a current SCORP to receive and obligate Land & Water Conservation Fund (LWCF) under Section 206(d) of the Recreational Trails Program legislation, the state is also required to have a recreational trails plan (motorized and non-motorized) in order to be eligible to receive and obligate Federal Recreation Trails dollars.

Finally, the U.S. Center for Disease Control (CDC), the Oregon Department of Human Services, Health Services, and the Oregon Coalition for Promoting Physical Activity (OCPPA) are currently promoting physical activity and the health benefits associated with participation in recreational trail activities.

The OCPPA has recently completed a plan entitled the Oregon Plan for Physical Activity², which states that, "Physical inactivity together with poor eating habits contributes significantly to the development of obesity, high blood pressure, heart disease, cancer, and diabetes, which are the leading causes of disease and death among Oregonians. The current epidemic of obesity in the United States has hit Oregon particularly hard. At 22%, our state has the highest percentage of adult obesity of any state west of the Rockies. Our youth follow closely behind, with 28% of eight graders and 21% of eleventh graders currently overweight." Close-to home non-motorized trails provide a safe, inexpensive avenue for regular exercise for people living in rural, urban and suburban areas.

² Oregon Coalition for Promoting Physical Activity (2003). A Healthy Active Oregon: The Statewide Physical Activity Plan.

Additional Information from Issues Workshops

Public recreation providers in 8 of the 11 SCORP planning regions voted the "Need For Recreational Trails and Trail Connectivity" as a top LWCF issue. As a result, this need was identified as one of three top statewide LWCF issues for inclusion in the 2003-2007 Oregon SCORP plan.

Recreation providers reported a need for additional recreational trails including walking, hiking, bicycling and equestrian multiple-use trails. In addition, the concept of trail connectivity was supported throughout the state. Trail connectivity involves:

- linking urban trails to outlying Federal trail systems;
- linking neighborhood, community and regional trails;
- connecting community parks and other recreational and public facilities; and
- connecting neighboring communities (e.g., Ashland to Medford).

Recreation providers also felt the trails plan should address a growing interest in canoe, rafting, and kayak routes (water trails) throughout the state. Although the state enjoys a variety of high-quality paddling opportunities, additional recreational infrastructure is needed to satisfy a growing demand for paddling sports. Necessary resources/facilities/services needed for water trail development include water access sites and support facilities, overnight camping facilities, directional signage, maps, brochures and other marketing tools to properly market new water trail opportunities and paddling clinics.

Although OHV riding continues to grow in Oregon and nationally, riding areas have closed as public land managers are faced with increasingly complex decisions related to balancing recreation use with resource protection. Recreation providers report that cross-country OHV travel is damaging the state's natural resource base. In addition, the growing use of OHVs has prompted the U.S. Forest Service to revise its management of motorized forest use so that the agency can better sustain and manage National Forest System lands and resources.

The state needs to take a proactive approach by exercising leadership in shaping a long-term vision for OHV recreation to include:

1. changing riding patterns to avoid impacts,
2. resolving use conflicts and resource degradation, and
3. creating more designated OHV riding areas in the state.

Needed OHV facilities and services include:

- OHV trail riding areas, All-Terrain Vehicle (ATV), motorcycle and 4x4) including trails, parking areas, restrooms, tow vehicles, camping facilities, communication links to emergency services and law enforcement,
- OHV parks in reasonably close proximity to metropolitan areas, and
- designated motocross and challenge courses for motorcycles, ATV's, 4-wheel drive vehicles and truck pulling.

There is a concern that such riding areas be thoroughly separated from hikers, kayakers,

campers, cyclists and other human-powered users of public lands and that environmental impacts be closely managed and monitored.

Because of the role federal lands play in serving OHV riding – planning clearly requires a state/federal partnership.

A Concurrent State Motorized and Non-motorized Trail and Water Trails Planning Process

There are considerable benefits associated with a concurrent State Motorized and Non-motorized Trail and Water Trails planning process including:

- providing user groups with comparative information to emphasize areas of common ground and understanding;
- packaging three plans into one volume, providing a one-stop planning document for recreational planners who often work on motorized, non-motorized trails/riding area planning and water trails;
- cost savings from a combined motorized, non-motorized & water trails user survey; and
- administrative and travel cost savings with conducting concurrent but separate regional issues workshops.

The purpose of the planning process is to provide information and recommendations to guide OPRD and other agencies in Oregon in their management of motorized and non-motorized trail/riding resources. Early in the planning process, OPRD established separate motorized, non-motorized and water trails steering

committees to guide the statewide planning effort.

The plans are written primarily for recreation planners and land managers. In its component parts, it provides background on trail users and on current trends affecting OHV, and recreational trail and water trail opportunities. The plans are designed as an information resource as well as a planning tool to guide agencies for the next 10 years.

Specific planning objectives include:

1. Assessing the needs and opinions of Oregon's citizens as they relate to trail recreation opportunities and management (motorized, non-motorized and water);
2. Establishing priorities for expenditures from the Oregon ATV Grant Program, Federal Recreational Trails Program and other applicable sources;
3. Developing strategic directions to guide activities for the Oregon Parks and Recreation Department's ATV Program, statewide recreational trails planning and water access goals;
4. Gathering additional inventory measurement data for motorized and non-motorized trail resources and facilities to add to information gathered for the "2001 Oregon Statewide Outdoor Recreational Resource/Facility Inventory Bulletin;"
5. Conducting a systematic inventory of existing and potential water trails and facilities, identifying priority needs and potential funding sources; and
6. Recommending actions that enhance motorized, non-motorized

and water trail opportunities to all agencies and private sector entities providing trail resources in Oregon.

The results of the concurrent statewide motorized, non-motorized and water trails planning effort are presented in the following chapters of Oregon Trails 2005: A Statewide Action Plan.



MAJOR PLANNING COMPONENTS

The following section includes a brief description of the major planning components of the concurrent trails planning effort. If a planning component is a part of the motorized, non-motorized and water trails plan, it will be identified as a “Common” component. Planning components unique to one trail plan are identified by the specific trail planning type.

1. Trails Plan Steering Committees (Common)

Early in the trails planning effort, OPRD established 3 separate steering committees (motorized, non-motorized, and water) to assist with the concurrent planning process. Steering committee members were selected to ensure adequate agency/organizational and geographic coverage and trail-user group representation.

OPRD asked Steering Committee Members to assist with the following tasks for their specific planning effort:

- reviewing the basic planning framework;
- determining the basic plan outline;
- identifying significant statewide trails issues and solutions;
- recommending actions that enhance motorized, non-motorized and water trail opportunities in the state;
- reviewing survey methodology and instruments;
- reviewing draft planning materials;
- recommending a set of project evaluation criteria for the OPRD administered All-Terrain Vehicle Grant Program (Motorized Trail

Committee Members Only) and Recreational Trail Grant Program (Non-motorized Trail Committee Members Only); and

- assisting in the development of a proposed state-administered water trails program (Water Trail Committee Members Only).

Three rounds of steering committee meetings were held during the 2-year planning process as shown in the following table.

Trails Planning Type	Round 1 Meeting Dates	Round 2 Meeting Dates	Round 3 Meeting Dates
Motorized	2/25/03	9/16/03	10/12/04
Non-motorized	3/5/03	9/23/03	10/14/04
Water	3/12/03	9/24/03	10/25/04

Meeting objectives for each round of meetings were as follows.

Round 1:

- Bring committee members up-to-date on statewide trails planning progress;
- Review proposed trails planning framework; and
- Identify potential problems/weaknesses and improvements to the proposed planning framework.

Round 2:

- Review trails planning progress;

- Identify the top 3 issues in each of the 6 trails planning regions;
- Identify the top statewide trails issues; and
- Develop a set of proposed goals, objectives and strategies for addressing the top statewide trails issues.

Round 3:

- Review trails planning progress;
- Review 2004 Oregon Statewide Trail User and Non-motorized Boater Survey results;
- Review Oregon Statewide Trail Inventory Project results; and
- Review and finalize (in the appropriate meeting) the ATV grant program criteria (Motorized Trail Committee), RTP grant program criteria (Non-motorized Trail Committee) or the Proposed State-Administered Water Trails Program For Oregon (Water Trail Committee).

During the second round meetings, the motorized and non-motorized trail steering committee members recommended that OPRD establish separate ATV and RTP Grant Program Subcommittees for addressing the technical aspects of developing specific evaluation criteria. As a result, OPRD selected a five-member motorized and four-member non-motorized subcommittee to develop a final set of grant criteria for inclusion in the respective trails plans. Members were selected based on prior experience with the administration of grant funding in Oregon.

Two subcommittee meetings were held (Motorized on 9/28/04 and Non-motorized on 9/30/04) to determine the final set of grant criteria for inclusion in the plans.

During these meetings, each subcommittee assisted OPRD staff in the development of a draft set of grant evaluation criteria. Subcommittee members were provided a final review and comment period before the criteria were finalized.

Finally, each member of the Motorized and Non-motorized Trails Plan Steering Committees was given an opportunity to review their respective criteria before inclusion in the final trails plan.

2. Benefits of Trails (Common)

During the trails issues workshops, public recreation providers and trail interest groups suggested that the trails plan include trail benefits information to help them to better make the argument for proposed trail projects and address some common misconceptions adjacent property owners have about proposed trails (e.g. increases in crime and decreases in property values). They also asked that the plan provide information in a variety of ways including brief summaries and bibliography lists for those interested in conducting additional research on their own.

The plan includes information on the benefits of motorized, non-motorized and water trails. In addition, separate bibliographies are available for each of the three trail types in Appendices F, G, and H. Direct web links are included in each bibliography for those reports/articles currently available online.

3. Regional Planning Approach (Common)

After a discussion of potential regional boundaries, OPRD planning staff identified a total of 6 regions for the trails planning effort. Each region is of sufficient geographic area to have a unique set of

issues and associated management concerns. The 6 planning regions are identified in the figure below.



4. Regional Trails Issue Workshops (Common)

During the months of April and May 2003, OPRD staff conducted a series of 9 regional trails issues workshops across the state. Table 2 (below) includes the locations of each of the workshops and the specific trails planning region to which the issue comments were assigned. Please note that some regions had more than one workshop.

Each workshop included an afternoon session open to all public recreation providers (including federal and state agencies, county, municipal, port and special district recreation departments, and American Indian Tribes) and an evening session open to the general public (including interested members of the public, trail user groups or clubs, commercial organizations or other organizations).

TABLE 2: Regional Trails Issues Workshops

Trails Planning Region	Workshop Location
Northwest Region	Lincoln City
	Portland
	Eugene
Southwest Region	Bandon
	Grants Pass
North Central Region	Bend
South Central Region	Klamath Falls
Northeast Region	LaGrande / Union
Southeast Region	Burns

Trail issues were defined as high-impact issues related to recreational trail opportunities in the region. Trail issues could be related to outdoor recreation areas, programs and projects.

At the conclusion of each workshop, participants were given 3 colored dots to assist in prioritizing the importance of the issues gathered. Participants placed their

colored dots on those issues they felt were of most importance in the planning region.

Approximately 230 people attended a workshop, including representatives from 56 public-sector recreation provider organizations. During the workshops, 733 trails issue comments were gathered and recorded including 281 motorized, 292 non-motorized and 160 water trail issue comments.

Next, all comments gathered at the regional public recreation provider and general public workshops were posted on the trails planning website for a comment period from March 19 to July 16, 2003. The site was developed for electronic submittal of comments. A letter was sent out to all workshop participants requesting that they review the website comments list to ensure that their comment(s) had been recorded properly. In addition, a letter was sent to trail user groups or clubs and commercial organizations across the state requesting additional comments through the website.

Complete listings of all issues gathered at the workshops and through the website are included in Appendices I, J and K.

5. Identification of Top Regional and Statewide Trail Issues (Common)

Following the issue collection process, OPRD staff developed a set of issue summary papers (separate sets for motorized, non-motorized and water trails issues) to assist members of the three steering committees in the process of identifying top regional issues. The appropriate set of issue summary papers were distributed to each of the three steering committee members prior to the Round 2 meetings.

A regional issues analysis section in the issue summary paper included a prioritized issues list from each of the regional workshops with separate listings for public provider and general public workshops. An additional section included a summary of the combined prioritization results of all workshops held in the region (including all workshop locations and sessions). Those issues receiving the highest total accumulation of dots from all public provider and general public workshops held in the region were shown in bold. During the Round 3 meetings, steering committee members used a voting process to identify top regional motorized, non-motorized and water trails issues to include in the plan.

After the regional voting was completed, the committee members reviewed the number of times a particular issue was voted as a top regional issue. In addition, OPRD staff further refined and summarized all regional issue comments into a set of statewide issue categories. The number of issue comments collected in a given category provided a measure of the relative importance of the issue category to workshop and internet participants. The following is a description of this analysis:

- Categorical analysis for trail issue comments gathered at all public provider workshops across the state. Key issues were identified based on the total number of public provider comments.
- Categorical analysis for trail issue comments gathered at all general public workshops across the state. Key issues were identified based on the total number of general public comments.
- Categorical analysis for trail issue comments gathered at all public

provider and general public workshops across the state. Key issues were identified based on the total number of public provider and general public comments.

Finally, a matrix was developed to summarize results from this categorical analysis. This statewide issues summary paper was distributed to each steering committee member on August 19, 2003.

During the Round 2 steering committee meetings, OPRD staff provided each of the three steering committees with an opportunity to vote for a set of top statewide trail issues. Those issues receiving the highest number of votes were determined by the steering committees to be the top statewide trail issues.

6. The 2004 Oregon Statewide Trail User and Non-motorized Boater Survey (Common)

The 2004 Oregon Statewide Trail User and Non-motorized Boater Survey was conducted over a four-month period from January to April 2004 by the University of Oregon's Survey Research Laboratory. The survey randomly screened over 15,000 Oregon telephone households to identify respondents reporting trail and non-motorized boat use in the past year. Statistically reliable results are reported for each of three distinct user groups (motorized and non-motorized trail users and non-motorized boaters) at the state level.

The purpose of the survey was to assess the needs and opinions of Oregon's citizens about trail opportunities and management, assess the need for future investment in trail facilities and opportunities and provide trail planners with up-to-date information for local and

regional trails planning. The survey report includes a separate set of results for each of the three user groups. The telephone survey instrument can be accessed on the trails planning website at:

http://egov.oregon.gov/OPRD/PLANS/trails_planning_newsletters.shtml

7. Oregon Statewide Trails Inventory Project (Common)

The Oregon Statewide Trails Inventory Project provides a systematic review and inventory of the entire public trail system in Oregon. The overall goal of the project was to create databases containing trail information that can be accessed by government agencies, libraries, and the general public for management and trip planning purposes. The databases are designed to be compatible with geographic information systems (GIS) and allow agencies and other users to identify and map resources and characteristics for public lands in Oregon.

During a 11-month period from September 2003 to July 2004, Oregon State University collected inventory data for existing and proposed motorized, non-motorized and water trails from recreation providers across the state. In total, trail specific attribute information was collected and entered into a database for 735 trails. In addition GIS map files were collected for 147 trails. A final trails inventory report is included in Appendix A.

8. Statewide Goals, Objectives and Strategies for Top Statewide Issues (Common)

A set of goals, objectives and strategies have been developed for each of the top 4 statewide motorized trail issues, top 2 non-motorized trail issues and 5 non-motorized trail concerns, and top 6 statewide water trails issues based on findings from the

trails planning effort. Brainstorming sessions were held during the Round 2 steering committee meetings to develop initial drafts. Committee members were also asked to review and comment on a draft set of goals, objectives and strategies for each of the three plans.

This planning effort recognizes that in Oregon there are finite resources to satisfy the demands of a growing number and diversity of trail users. The increased sharing of resources sometimes creates friction between the diverse types of user groups competing for limited trail space. Rather than focusing on individual user groups, the plans goals, objectives and strategies are designed to optimize the use of limited trail resources in ways that benefit all users and their appropriated trail uses. Decisions on how to best allocate resources for specific user groups are more appropriately addressed in local and regional planning efforts.

9. All Terrain Vehicle (ATV) Grant Program Project Selection Criteria (Motorized)

To allocate ATV Grant Program funds in an objective manner, a set of Project Selection Criteria were developed for evaluating motorized trail grant proposals. A substantial number of the total evaluation points available are tied directly to findings from the motorized trails planning effort.

10. Recreational Trail Program (RTP) Grant Program Project Selection Criteria (Non-motorized)

To allocate RTP Grant Program funds in an objective manner, a set of Project Selection Criteria were developed for evaluating motorized, 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.

11. A Proposed Water Trail Program For Oregon (Water)

The water trails planning effort has identified three critical factors which pose a serious threat to long-term non-motorized boating access to waterways in Oregon including a rapid increase in participation in non-motorized boating, a lack of legal clarity and understanding of the public's right to Oregon's waterways for recreational purposes and an increasing potential for conflicts between non-motorized boaters and waterfront property owners. To address these concerns, the plan proposes an OPRD-administered Water Trails Program intended to develop a statewide system of water trails carefully designed to minimize conflicts between non-motorized boaters and waterfront property owners.

12. Creating Connections: The Oregon Recreational Trails How-To Manual (Common)

Members of the Statewide Non-motorized Trails Plan Steering Committee believe that evidence of sound trails planning should be a critical factor to consider in evaluating requests for OPRD administered trail-related grant funding. As a result, the steering committee requested that the trails planning effort include a manual to encourage citizens, civic organizations, governments and private enterprise to collaborate more effectively on trail development.

To satisfy this request, OPRD staff developed a document entitled Creating Connections: The Oregon Recreational Trails How-To Manual. The manual provides information and resources specific to Oregon for trail planning, acquisition,

construction and management. The document is a modified version of the original publication, *Creating Connections: The Pennsylvania Greenways and Trails How-To Manual*, published in 1998 by the Pennsylvania Greenways Partnership—a cooperative effort of the Pennsylvania Department of Conservation and Natural Resources, Pennsylvania Environmental Council, Pennsylvania Field Office of the Rails-to-Trails Conservancy, and the Conservation Fund. The state of Oregon and OPRD gratefully acknowledges the Pennsylvania Greenways Partnerships' permission to use their publication.

Due to the size of the document, it is not included in this trails plan. The *Creating Connections: The Oregon Recreational Trails How-To Manual* document is now available in an electronic format at <http://www.prd.state.or.us/trailsplanning-manual.php> or hardcopy by contacting Tammy Baumann at OPRD by phone: 503.986.0733 or email: tammy.baumann@state.or.us.

13. Trails Planning Website (Common)

Early in the planning process, OPRD staff developed a trails planning website for people across the state to access current information about the trails planning process. One of the primary objectives of the website was to build interest in the trails plan through the course of the 2-year planning effort. The website was also useful in disseminating major planning results, gathering issue comments, and the review of preliminary draft materials. The website address is:

<http://egov.oregon.gov/OPRD/PLANS/trailsplanning.shtml>



MOTORIZED TRAILS PLAN EXECUTIVE SUMMARY

Introduction

The Oregon State Off-Highway Vehicle (OHV) study has been in place since 1995. Although many of the findings included in this plan are still relevant, considerable change has occurred on Oregon's OHV areas/trails in the last 9 years including a 13% state population increase between 1995 and 2003 and increases in OHV ownership and trail use. As a general rule, planning documents of this type have a usable shelf life of 10 years. As a result, there is a need to update the trails plan for OHV use.

For the purposes of this planning effort, motorized trail uses include ATV riding, off-road motorcycling, dune buggy/sand rail riding, four-wheel or other high-clearance vehicle riding, and snowmobiling on designated motorized trails and riding areas in the state. A motorized trail is defined as a regularly maintained recreation pathway typically used by off-highway vehicles. The designated trail or riding area should be purposefully planned and constructed for motorized recreation purposes.

The purpose of the motorized trails planning effort is to provide information and recommendations to guide OPRD and other agencies in Oregon in their management of motorized trail/riding resources. The plan is designed to:

- Assess the needs and opinions of Oregon's citizens as they relate to motorized trail/riding opportunities and management;
- Establish priorities for expenditures from the ATV Grant Program;

- Develop strategic directions to guide activities for the Oregon Parks and Recreation Department's ATV Program;
- Gather additional inventory measurement data for motorized trail resources and facilities; and
- Recommend actions that enhance motorized trail opportunities to all agencies and the private sector providing trail resources in Oregon.

The plan has been developed as an information resource as well as a planning tool to guide agencies for the next 10 years.

Summary of Planning Results

This section includes a brief summary of results for the following major components of the statewide motorized trails planning effort.

Economic Importance of Off-Highway Vehicle (OHV) Recreation in Oregon

The plan summarizes the findings from the Oregon State University report entitled "The 1999 Oregon Off-Highway Vehicle User Survey." The study was undertaken to provide a reliable estimate of the economic impact of motorized recreation in Oregon. In estimating economic impacts, the study identified the jobs and income that are the result of OHV recreation and assessed the revenues generated from motorized recreation in the state.

The study estimated that OHV recreation contributed an estimated \$120.4 million and 1,809 jobs into Oregon's economy in 1999. OHV recreation has economic significance in both the origin and

destination areas. The South Coast region is by far the most impacted with 529 jobs generated by trip expenditures. The greater proportion of overnight and out-of-state visitors to the South Coast accounts for much of this impact. OHV recreation also has a substantial economic significance in the region where people live. Annual expenditures on items like vehicles, parts, and maintenance take place in people's

home regions, accounting for 586 jobs in the Willamette Valley where the majority of OHV riders reside

Table 3 (below) includes annual expenditures, income and jobs associated with spending (e.g. gas and oil, food and beverages, lodging, etc.) by Oregonians and out-of-state visitors in the region of the state where the OHV activity occurred.

Region	In-State Resident Expenditures (Millions)	Out-of-State Visitor Expenditures (Millions)	Combined Expenditures (Millions)	Income	Jobs
South Coast	\$14.2	\$13.6	\$27.8	\$8.7	529
Central Coast	\$2.5	\$.7	\$3.2	\$.9	53
North Coast	\$3.3	\$.9	\$4.2	\$1.4	58
Willamette Valley	\$2.8	\$.7	\$3.5	\$1.4	61
Eastern Oregon	\$1.2	\$.3	\$1.5	\$.4	23
Northeastern Oregon	\$3.2	\$.8	\$4.0	\$1.2	72
Southern Oregon	\$1.3	\$.3	\$1.6	\$.5	26
Central Coast	\$.5	\$.1	\$.6	\$.1	9
Total All Regions	\$29.0	\$17.4	\$46.4	\$14.6	831

Table 4 (below) includes total annual expenditures by Oregonians on OHV-related products and services (e.g. the purchase of new vehicles, trailers, insurance, storage, maintenance, etc.) in the region of the state where they reside.

Region	In-State Expenditures (Millions)	Income	Jobs
South Coast	\$4.7	\$1.4	61
Central Coast	\$4.2	\$1.2	58
North Coast	\$7.5	\$2.4	92
Willamette Valley	\$42.4	\$15.2	586
Eastern Oregon	\$.5	\$.2	8
Northeastern Oregon	\$4.0	\$1.0	754
Southern Oregon	\$6.3	\$1.9	92
Central Coast	\$2.4	\$.6	28
Total All Regions	\$74.1	\$23.9	978

Key Statewide Motorized Trails Issues

The plan also identifies key motorized trail issues that affect the future of OHV recreation in Oregon. During the months of April and May 2003, OPRD staff conducted a series of 9 regional trail issues workshops across the state. Approximately 230 people attended a workshop, including representatives from 56 public-sector recreation provider organizations. Information from these workshops was used in the process of developing top regional and statewide motorized trails issues.

The 4 top statewide motorized trail issues include:

Statewide Issue A: Need For New Trails/Motorized Riding Areas

Recreation providers and the general public consistently reported in the planning workshops that OHV use on public lands in Oregon has increased substantially in recent years. However, there are an insufficient number of designated motorized areas to accommodate growing numbers of OHV enthusiasts in Oregon. Recreational providers reported that additional designated motorized areas are needed to proactively address increasing levels of resource impacts associated with high use levels in designated motorized areas. In addition, there is a need for more riding opportunities on lands outside of federal ownership including private timberlands, state or local government land, and to work with private landowners for access.

Statewide Issue B: Need For Regional Interagency Coordination/ Cooperation in Trail Planning and Management

Recreation providers and the general public consistently reported that successful OHV facility development and management relies on good coordination and communication between OHV organizations, federal, state, and local agencies, tribal governments and other stakeholders.

Statewide Issue C: Need For User Education/Training (Regulatory & Safety Information)

Recreation providers and the general public expressed a need for additional user education and safety training in Oregon for youth involved or interested in motorized recreation (including OHV and snowmobile riding). Also reported was a need for more safety training facilities, instructors, and user-friendly training opportunities.

Statewide Issue D: Concern About Trail Closures/Loss of Riding Opportunities

A number of private landowners have closed riding areas in Oregon in recent years due to personal liability, increasing vandalism and resource impacts. Trails and riding areas on public lands have also been closed as a result of resource protection issues associated with National Environmental Policy Act (NEPA) regulatory compliance and conflicts with other recreation users.

The 2004 Oregon Statewide Motorized Trail User Survey

The 2004 Oregon Statewide Motorized Trail User Survey was conducted over a four-month period from January to April 2004 by the University of Oregon’s Survey Research Laboratory. The purpose of the survey was to assess the needs and opinions of Oregon’s citizens about trail opportunities and management, assess the need for future investment in trail facilities and opportunities and provide trail planners with up-to-date information for local and regional trails planning.

The survey found that seven percent of Oregon households have a person reporting motorized trail use, amounting to 98,000 households in the state. ATV riding is the most popular activity, with 70% of motorized trail users having engaged in that activity during the past year (Table 5) followed by off-road motorcycling (44%). Most motorized respondents are male, and the median age is 40 – 49 years old. More than half have some college (62%), although most are not college graduates (21%). Median income is \$40,000 to \$69,999.

N = 196	Participated in Last Year	Estimated Oregon Households
ATV riding (3 and 4 wheel)	70%	68,600
Off-road motorcycling	44%	43,100
4-wheel driving (stock) ³	44%	43,100
4-wheel (modified) ⁴	29%	28,400
Snowmobiling	24%	23,500
Sand rail riding	11%	10,800
Dune buggy riding	11%	10,800
Competitive trail events	10%	9,800
Other	8%	7,800
Sampling error for this question is ± 6%.		

Fifty nine percent of motorized trail users reported that they would like to participate in their activity more than they do. Lack of time is the primary roadblock for motorized trail users followed by lack of nearby trails.

Motorized trail enthusiasts use many information sources in planning for their trail outing. A few favorites stand out: people’s advice, brochures and maps, and the internet. Motorized trail users were also asked about satisfaction with a variety of information sources. Users reported more dissatisfaction with agency responses, guidebooks and signage information.

³ 4-wheel stock with original tires, such as SUVs, trucks, and jeeps.

⁴ 4-wheel stock with modified tires and/or suspension upgrades.

TABLE 6: Information Sources – Motorized		
N = 196	Use Source	Favorite Source
Advice of people	91%	38%
Brochures, maps	86%	26%
Gather information along the way	72%	3%
Visitor centers	65%	7%
Sporting goods stores	59%	4%
Internet	53%	11%
Phone trail management agencies	49%	3%
Books, magazines, newspapers	41%	2%
Clubs, groups, trail organizations	18%	2%
Other	9%	5%
Sampling error for this question is $\pm 6\%$		

Overall, motorized trail users were extremely satisfied with their overall motorized trail experience in Oregon. Ninety four percent of motorized trail users reported being either “very satisfied” (48%) or “somewhat satisfied” (46%) with their overall motorized trail experience. Only six percent say they are “not very satisfied”, and not one respondent selected “not at all satisfied.”

Finally, motorized trail users were asked to prioritize a variety of funding possibilities related to their sport. Cleaning up litter and trash on the trails and repairing major trail damage are clearly leading priorities, followed by education and safety, better information and signage, and routine trail upkeep (Table 7).



N = 195-196	Mean	Very Important	Some what Important	Not That Important	A Top Funding Priority ⁵
Clean up litter and trash	2.7	74%	22%	4%	113
Repairing major trail damage	2.6	67%	28%	5%	117
Providing information, maps, signs	2.4	50%	44%	6%	83
Providing educational, safety, and trail etiquette information	2.4	52%	35%	14%	82
Routine upkeep of existing trails	2.4	49%	47%	5%	80
Developing support facilities	2.3	44%	39%	17%	73
Enforcing rules and regulations	2.3	46%	36%	18%	72
Acquire access land	2.3	49%	34%	17%	65
Developing new trails	2.3	48%	38%	14%	63
Acquire land for new trails	2.2	44%	33%	24%	63
Children's play areas	2.1	41%	27%	32%	63
Providing interpretive information	1.9	19%	55%	27%	31
Trails for competitive trail events	1.8	23%	34%	43%	31
Sampling error for this question is $\pm 6\%$					

Statewide Motorized Trail Goals, Objectives and Strategies

A set of long-range goals, objectives and strategies were developed for each of the top 4 Statewide Motorized Trails Issues based on findings from the motorized trails planning effort. These goals, objectives and strategies were developed for use by motorized recreation decision makers across the state to develop policies and actions for resolving the 4 top statewide motorized trail issues.

Note: Specific strategies are identified in this plan for addressing each objective, but are not included in the following summary. A full listing of statewide motorized trail goals, objectives and strategies is included in the motorized trails plan.

Top statewide motorized trail issues and accompanying goals and objectives include:

Statewide Issue A: Need For New Trails/Motorized Riding Areas

Goal: Increase the supply of high-quality OHV opportunities for all trail users throughout Oregon.

- Objective 1: Provide additional public or privately owned OHV recreation areas.
- Objective 2: Greater emphasis on developing OHV riding areas on private and local government land.
- Objective 3: Develop additional OHV opportunities in reasonably close proximity to communities and urban areas.
- Objective 4: Develop additional riding opportunities at existing OHV recreation areas.
- Objective 5: Increase the diversity of OHV opportunities.

⁵ Number of respondents selecting this answer. Asked only if respondent answered "very important."

Statewide Issue B: Need For Regional Interagency Coordination/Cooperation in Trail Planning and Management

Goal: Promote coordination and cooperation between public agencies, private organizations and motorized trail users.

- Objective 1: Develop a regional planning approach to motorized trails planning.
- Objective 2: Standardize statewide OHV management practices.

Statewide Issue C: Need For User Education/Training (Regulatory & Safety Information)

Goal: Educate and inform Oregon's trail users on the proper use of, and user safety and the environmental impacts associated with motorized recreation.

- Objective 1: Increase the number of OHV trail users who are educated and trained in OHV operation, safety, rules and regulations and user ethics.
- Objective 2: Reduce the number of personal injury accidents involving recreational OHV use.
- Objective 3: Educate hunters on existing OHV rules and regulations.

Statewide Issue D: Concern About Trail Closures/Loss of Riding Opportunities

Goal: Provide for motorized recreation on public and private lands.

- Objective 1: Limit the loss of riding opportunities on public and private lands.
- Objective 2: Improve the public image of OHV use and management in the state.

All-Terrain Vehicle Grant Program Evaluation Criteria

The motorized trails plan concludes with a set of project selection criteria for evaluating acquisition, development and planning project proposals for the ATV Grant Program. The criteria make the connection between findings from the trails planning effort and how limited ATV grant monies should be allocated.

NON-MOTORIZED TRAILS PLAN EXECUTIVE SUMMARY

Introduction

The Oregon Parks and Recreation Department (OPRD) was given responsibility for recreation 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.”

The Oregon Recreation Trails Plan has been in place since 1995. Although many of the findings included in this plan are still relevant, considerable change has occurred on Oregon’s recreational trails in the last 9 years including a 13% state population increase between 1995 and 2003 and increases in recreational trail use. As a general rule, planning documents of this type have a usable shelf life of 10 years. As a result, there was a need to update the trails plan for non-motorized trail uses.

The purpose of this non-motorized trails planning effort was to provide information and recommendations to guide OPRD and other agencies in Oregon in their management of non-motorized trail resources. The plan is designed to:

- Assess the needs and opinions of Oregon’s citizens as they relate to non-motorized trail opportunities and management;

- Establish priorities for expenditures from the Federal Recreational Trails Grant Program;
- Develop strategic directions to guide activities for statewide recreational trails planning;
- Gather additional inventory measurement data for non-motorized trail resources and facilities; and
- Recommend actions that enhance non-motorized trail opportunities to all agencies and the private sector providing trail resources in Oregon.

The plan has been developed as an information resource as well as a planning tool to guide agencies for the next 10 years.

For the purposes of this planning effort, non-motorized trail uses include (but are not limited to) hikers, backpackers, mountain bike riders, equestrians, runners, walkers, bicycle riders, inline skaters and individuals with functional impairments. A non-motorized trail is defined as a regularly maintained recreation pathway typically used by a variety of non-motorized trail users. The designated trail should be purposefully planned and constructed for non-motorized recreation purposes, but in some cases can be used for commuter purposes. Non-motorized trails do not include city streets and sidewalks and bike lanes incorporated into the design of city streets and rural highways.

Summary of Planning Results

This section includes a brief summary of results for the following major components of the statewide non-motorized trails planning effort.

Benefits of Non-motorized Trails

During the trails issues workshops, public recreation providers and trail interest groups suggested that the non-motorized trails plan include trail benefits information for them to better be able to make the case for proposed trail projects and address some common misconceptions adjacent landowners have about proposed trails. This chapter summarizes the many benefits that non-motorized trails can provide in the state of Oregon.

Across Oregon, non-motorized recreational trails are stimulating tourism and recreation-related spending. Local trail users, vacationers and conference attendees provide direct economic benefits to hotels, restaurants and other businesses from increases in tourist activity and increased spending on durable goods such as bikes or skates, and soft goods such as gasoline, food and drinks. This, in turn, attracts and revitalizes businesses, creates jobs, and increases public revenue.

People owning property bordering a proposed trail sometimes are concerned that developing a trail will lower their property values. However, a rather substantial body of research from across the U.S. demonstrates that proximity to trails and open space has very little impact on the value of property. In many cases, trails often increase the value of residential property and the ability to sell a property. The benefits summary includes research finding specific to trail impacts on property values and the ability to sell and information regarding the relationship between proximity to trails and crime.

Trail activities such as walking, jogging or running, in-line skating, cross-country skiing, and bicycling are well documented to help improve health and fitness when

done on a regular basis. Physical activity need not be unduly strenuous for an individual to reap significant health benefits. Even small increases in light to moderate activity, equivalent to walking for about 30 minutes a day, will produce measurable benefits among those who are least active. Regular, moderate exercise has been proven to reduce the risk of developing coronary heart disease, stroke, colon cancer, hypertension, diabetes, osteoporosis, obesity, and depression.⁶ This health benefit accrues to the individual, and, in the form of reduced health-care costs, to society as well.

Additional benefits of non-motorized trails include:

- **Social Benefits:** Trail projects help build partnerships among private companies, landowners, neighboring municipalities, local government and advocacy groups. All are able to take pride in having worked together to successfully complete a trail project.
- **Educational Benefits:** People of all ages can learn more about nature, culture or history along trails. Of particular importance, trails provide firsthand experiences that educate citizens about the importance of the natural environment and respect for nature.
- **Recreational Benefits:** Linear corridors offer several benefits over traditional park facilities. These benefits include providing greater perimeter area, multiple visitor experiences, increased access, and

⁶ Centers for Disease Control and Prevention (1996). Surgeon General's Report on Physical Activity and Health, Department of Health and Human Services. July.

lower acquisition and development costs.

- **Environmental Benefits:** Trails can be an integral part of our natural environment and should be used as a tool for conservation. Trails can be planned to assist with preserving important natural landscapes, providing necessary links between fragmented habitats and providing tremendous opportunities for protecting plant and animal species.
- **Preserving our History and Culture:** Trails have the power to connect us to our heritage by preserving historic places and by providing access to them. They can also give people a sense of place and an understanding of the enormity of past events such as Native American trails, the Lewis and Clark expedition, westward migration along the Oregon Trail and accessing historic sites throughout the state.

Key Statewide Non-motorized Trails Issues

The plan also identifies key non-motorized trail issues that affect the future of recreational trail management in Oregon. During the months of April and May 2003, OPRD staff conducted a series of 9 regional trail issues workshops across the state. Approximately 230 people attended a workshop, including representatives from 56 public-sector recreation provider organizations. Information from these workshops was used in the process of developing top regional and statewide non-motorized trail issues and concerns.

The 2 top statewide non-motorized trail issues include:

Statewide Issue A: Need For Trail Connectivity

As in the SCORP planning effort and the 1971 Trails Act, recreation providers and other workshop attendees consistently reported in issues workshops the need for non-motorized trail connectivity within their regions. According to recreation providers, trail connectivity involves linking urban trails to outlying Federal trail systems; linking neighborhood, community and regional trails; connecting community parks and other recreational and public facilities; and connecting neighboring communities (e.g. Ashland and Medford). 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.

Statewide Issue B: Need For Trail Maintenance

Recreation providers strongly stated that they are struggling to maintain existing trails due to increasing use levels and declining maintenance budgets. At the same time, providers are being asked by user groups to develop more and more new trails. A common argument made across the state was that additional priority should be given to maintain what we currently have before adding additional facilities. According to providers, there always seems to be funding available for trail development—but not for routine day-to-day trail maintenance.

Statewide Non-motorized Trail Concern 1: Need For More Trails In Close Proximity To Where People Live

Recreation providers and other workshop attendees in issues workshops across the state voiced a need for more trails in close

proximity to where people live. A recently completed plan entitled, *A Healthy Active Oregon: The Statewide Physical Activity Plan*, points out that the current epidemic of obesity has hit Oregon hard⁷. At 22%, our state has the highest percentage of adult obesity of any state west of the Rockies. Add that to 38% of Oregon adults who are overweight and we have the startling total of 60% of Oregonians not at a healthy weight. Our youth follow closely behind, with 28% of eighth graders and 21% of eleventh graders currently overweight. The *Statewide Physical Activity Plan* is a call to action for all who can have an impact on promoting daily physical activity to improve the health of Oregonians. The plan has identified the need for more community trails as a top priority.

The Oregon Outdoor Recreation Survey⁸ was conducted over a one-year period from February 2001 to January 2002 by Oregon State University's (OSU) College of Forestry as a part of the Oregon Park and Recreation Department's Statewide Comprehensive Outdoor Recreation Planning (SCORP) effort. The findings of the survey identified that the most popular everyday activities in Oregon are running and walking for exercise and walking for pleasure. According to the OSU report, these activities are generally engaged in near home, and on a regular basis. These findings help to make the case that neighborhood trails are essential in providing Oregonians with a means to

⁷ Oregon Coalition for Promoting Physical Fitness (2003). *A Healthy Active Oregon: The Statewide Physical Activity Plan*.

⁸Rebecca Johnson (2002). *Oregon's Statewide Comprehensive Outdoor Recreation Plan (SCORP): Demand and Needs Analysis*. Department of Forest Resources, Oregon State University.

realize the health and fitness benefits associated with daily exercise.

Statewide Non-motorized Trail Concern 2: Need For Additional Non-motorized Trails

Recreation providers and trail users stated that there is a strong need for additional non-motorized trail opportunities in areas experiencing high population growth and in trail planning regions with current shortages of non-motorized trails of all types. Recreation providers stated that trails are not always seen as top priorities in relation to other community needs or even other recreational needs. As a result, recreation providers must work together to make a stronger case that trails are important to communities and provide a broad range of social and economic benefits to communities and are deserving of a higher position on the city, county, state and federal political agendas.

Statewide Non-motorized Trail Concern 3: Need To Consider Public Ways (Roads, Railroads, Utility Corridors) Proposed For Closure Or Abandonment For Non-motorized Trail Use

Oregon is crossed by thousands of miles of linear facilities such as railroad beds, pipelines, canals, utility rights-of-ways and roads. Public utility and irrigation easements include oil and natural gas pipelines, sewer lines, irrigation ditches, electrical transmission, telephone and television lines, and fiber optic cable.

Recreation providers and other workshop attendees stated that there are opportunities to make greater use of such transportation rights-of-ways and public utility and irrigation easements for recreational trail development.

Statewide Non-motorized Trail Concern 4: Need For Trail Accessibility Information

Recreation providers in several regions reported a need for improved trail access for people with disabilities. At the same time, these providers stated that not all trails can or should be accessible to all users. There was general agreement that providing key trail type and condition information to users has the potential to increase the usability of existing trails and enable everyone, of all ages and abilities, to enjoy the benefits of recreational trails. To make better use of the existing trail infrastructure, all trail providers need to do a better job informing trail users of the conditions they will encounter on trails to allow each individual to decide if a particular trail is accessible to them.

Statewide Non-motorized Trail Concern 5: Need For Regional Interagency Coordination/ Cooperation In Trail Management

Recreation providers and other workshop attendees consistently reported that successful non-motorized trail development, management and planning relies on good coordination and communication between trail organizations, federal, state, and local agencies, tribal governments and other stakeholders.

The 2004 Oregon Statewide Non- motorized Trail User Survey

The 2004 Oregon Statewide Non-motorized Trail User Survey was conducted over a four-month period from January to April 2004 by the University of Oregon's Survey Research Laboratory. The purpose of the survey was to assess the needs and

opinions of Oregon's citizens about trail opportunities and management, assess the need for future investment in trail facilities and opportunities and provide trail planners with up-to-date information for local and regional trails planning.

The survey found that thirty three percent of Oregon households have a person reporting non-motorized trail use, amounting to 438,500 households in the state. Hiking (87%) and walking for pleasure (82%) are the most popular activities among non-motorized trail participants, with bicycling (38%) and jogging or running (29%) also having a sizable proportion of participants (see Table 8). Most non-motorized respondents are female (56%), and the median age is 40-49 years old. A sizable majority has some college (83%), with about half being college graduates (49%). Median income is \$40,000 to \$69,000.

Fifty three percent of non-motorized trail users reported that they would like to participate in their activity more than they do. Lack of time is the primary roadblock for non-motorized trail users.

Non-motorized trail users use many information sources in planning for their trail outing (see Table 9). A few favorites stand out: people's advice, printed resources like books, magazines, brochures, and maps, and the internet are the leading sources. Non-motorized trail users were also asked about satisfaction with a variety of information sources, and they report a high level of overall satisfaction. Users reported more dissatisfaction with agency responses, agency websites and route maps.

N = 326	Participated in Last Year	Estimated Oregon Households
Trail hiking or day hiking	87%	381,500
Walking for pleasure	82%	359,500
Bicycling (other than mountain biking)	38%	166,700
Jogging or running	29%	127,200
Backpacking overnight	16%	70,200
Mountain biking (on natural terrain trails)	14%	61,400
Cross-country skiing	12%	52,600
Horseback riding	7%	30,700
Roller blading (in-line skating)	5%	21,900
Hiking with horses, mules, llama	2%	8,800
Competitive trail events	2%	8,800
Other	13%	57,000

Sampling error for the "in last year" question is \pm 4%.

N = 320-325	Use Source	Favorite Source
Advice of people	88%	24%
Books, magazines, newspapers	80%	19%
Brochures, maps	95%	18%
Internet	64%	15%
Visitor information centers	83%	8%
ODOT road signs	80%	3%
Gather information along the way	66%	3%
State highway maps	81%	3%
Sporting goods stores	51%	2%
Phone trail management agencies	39%	2%
Clubs, groups	15%	1%
Phone toll-free numbers	42%	0%
Other	14%	2%

Sampling error for this question is \pm 5%

Overall, non-motorized trail users were “extremely satisfied” with their overall non-motorized trail experience in Oregon. Ninety nine percent of non-motorized trail users reported being either “very satisfied” (79%) or “somewhat satisfied” (20%) with their overall non-motorized trail experience. Only one percent said they are “not at all satisfied”.

Finally, non-motorized trail users were asked to prioritize a variety of funding possibilities related to their sport (see Table 10 below). Routine upkeep of existing trails, repairing major damage, and cleaning up litter and trash are highest ranked priorities, followed by better information and signage, support facilities, enforcement, and acquiring land for new trails.

TABLE 10: Non-motorized Trail Funding Priorities
(1 = Not That Important, 3 = Very Important)

N = 320-325	Mean	Very Important	Somewhat Important	Not That Important	A Top Funding Priority ⁹
Routine upkeep of existing trails	2.7	73%	24%	3%	208
Repairing major damage	2.6	66%	32%	2%	193
Clean up litter and trash	2.6	68%	25%	6%	172
Renovating deteriorated trails	2.5	50%	45%	5%	144
Support facilities	2.3	43%	43%	15%	107
Enforcing rules and regulations	2.3	44%	38%	18%	105
Acquire land for new trails	2.2	39%	41%	21%	104
Acquire access land	2.2	37%	47%	16%	94
Providing education, safety, and trail etiquette information	2.2	35%	48%	17%	83
Developing new trails	2.1	32%	50%	18%	77
Interpretive information	1.9	19%	55%	26%	45
Landscaping along trails	1.4	6%	29%	65%	14

Sampling error for this question is $\pm 5\%$.

Statewide Non-motorized Trail Goals, Objectives and Strategies

A set of long-range goals, objectives and strategies were developed for each of the top 2 Statewide Non-motorized Trails Issues and 5 Trail Concerns based on findings from the non-motorized trails planning effort. These goals, objectives and strategies were developed for use by non-motorized trail decision makers across the state to develop policies and actions for resolving the 2 top statewide non-motorized trail issues and 5 concerns.

Note: Specific strategies are identified in this plan for addressing each objective, but are not included in the following summary. A full listing of statewide non-motorized trail goals, objectives and strategies is included in the non-motorized trails plan.

Top statewide non-motorized trail issues and concerns and accompanying goals and objectives include:

⁹ Number of respondents selecting this answer. Asked only if respondent answered “very important.”

Statewide Issue A: Need for Trail Connectivity

Goal: Identify and encourage key trail linkages between and among local, regional and statewide trails to better use the state's existing non-motorized trail system.

- Objective 1: Collect and disseminate statewide multi-jurisdictional non-motorized trails information.
- Objective 2: Develop a regional approach to non-motorized trails planning.
- Objective 3: Provide technical assistance and outreach for regional non-motorized trails planning.
- Objective 4: Focus resources towards the most significant components of local and regional trail systems.

Statewide Issue B: Need For Trail Maintenance

Goal: Preserve and maintain the public's substantial investment in the existing infrastructure of trails and related facilities.

- Objective 1: Inform the public, and state and local leaders, about the importance of maintenance in protecting the long-term viability of Oregon's trail system.
- Objective 2: Increase the amount of resources

available for trail maintenance.

- Objective 3: More effectively engage volunteers as stewards of Oregon's trail system to help preserve the legacy for future generations.

Statewide Concern 1: Need For More Trails In Close Proximity To Where People Live

Goal: Promote daily physical activity by improving local access to trails.

- Objective 1: Inform the public about existing community trails close to where they live.
- Objective 2: Encourage local governments to conduct community trails planning efforts to identify and prioritize local trail needs that will provide close-to-home trail opportunities.
- Objective 3: Encourage local recreation providers to seek innovative funding mechanisms for urban trail development.
- Objective 4: Develop and disseminate information on the personal and societal benefits of trails to a wide variety of local consumers such as policymakers, public works departments, school administrators, planners, business owners and leaders, chambers of

commerce and developers.

- Objective 5: Increase cooperation and communication with community-based health organizations related to trail development.

Statewide Concern 2: Need For Additional Non-motorized Trails

Goal: Support the development of new trails.

- Objective 1: Increase funding devoted to expanding trail opportunities for all Oregonians.

Statewide Concern 3: Need To Consider Public Ways (Roads, Railroads, Utility Corridors) Proposed For Closure Or Abandonment For Non-motorized Trail Use

Goal: Ensure trail use is evaluated when roads, railroads and utility corridors are considered for abandonment, change of use, or shared use.

- Objective 1: Develop additional trails along canal and utility easements and transportation rights-of-way.

Statewide Concern 4: Need For Trail Accessibility Information

Goal: Better inform the public about accessible trail opportunities.

- Objective 1: Develop and distribute information related to trail access.

Statewide Concern 5: Need For Regional Interagency Coordination/Cooperation In Trail Management

Goal: Promote coordination and cooperation between public agencies, private organizations and non-motorized trail users.

- Objective 1: Standardize statewide trail management practices.

Recreational Trails Program (RTP) Grant Program Evaluation Criteria

The non-motorized trails plan concludes with a set of project selection criteria for evaluating motorized, non-motorized and water trail grant proposals for the RTP Grant Program. The criteria make the connection between findings from the motorized, non-motorized and water trails planning efforts and how limited RTP grant monies will be allocated.



WATER TRAILS PLAN EXECUTIVE SUMMARY

Introduction

The Oregon Parks and Recreation Department (OPRD) was given responsibility for recreation 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.”

The Oregon Recreation Trails Plan has been in place since 1995. Although many of the findings included in this plan are still relevant, considerable change has occurred on Oregon’s recreational trails in the last 9 years including a 13% state population increase between 1995 and 2003 and increases in recreational trail use. As a general rule, planning documents of this type have a usable shelf life of 10 years. As

a result, there was a need to update the trails plan for recreational trail uses.

During the most recent SCORP planning process, recreation providers reported a need for the trails plan to address a growing interest in canoe, rafting, and kayak routes (water trails) throughout the state. Although the state enjoys a variety of high-quality paddling opportunities, additional recreational infrastructure is needed to satisfy a growing demand for paddling sports. According to recreation providers, necessary resources/facilities/services needed for water trail development include water access sites and support facilities, overnight camping facilities, directional signage, maps, brochures and other marketing tools to properly market new water trail opportunities and paddling clinics.

The SCORP planning effort also identified that during a 15-year period from 1987-2002, participation in non-motorized boating activities had more than doubled in the state of Oregon (see Table 11 below).

Activity	1987 User Occasions*	2002 User Occasions	Change	% Change
Power Boating	2,668,085	2,751,190	**	**
Non-motorized Boating***	929,369	2,210,552	1,281,183	+138%

* A user occasion is defined as each time an individual participates in a single outdoor recreation activity

** Within the +/- 8% Confidence Interval.

*** Non-motorized boating includes canoeing, sea kayaking, whitewater kayaking and whitewater rafting.

¹⁰ Oregon Parks and Recreation Department (2003). 2003-2007 Oregon Statewide Comprehensive Outdoor Recreation Plan. pp. 4-12.

These survey results further reinforced the need for a water trails plan in Oregon.

The purpose of the water trails planning effort is to provide information and recommendations to guide OPRD and other agencies in Oregon in their management of water trail resources. The plan is designed to:

- Assess the needs and opinions of Oregon’s citizens as they relate to water trail opportunities and management;
- Establish priorities for expenditures from the Federal Recreational Trails Grant Program;
- Develop strategic directions to guide activities for statewide water trail planning;
- Gather additional inventory measurement data for water trail resources and facilities; and
- Recommend actions that enhance water trail opportunities to all agencies and the private sector providing trail resources in Oregon.

The plan has been developed as an information resource as well as a planning tool to guide agencies for the next 10 years.

In Oregon, water trails (like other recreational trails) are corridors between specific locations on a lake, river or ocean. Water trails are primarily designed for small watercraft such as canoes, sea and whitewater kayaks, rafts and drift boats. Necessary water trail facilities include a safe place for the public to put in, parking, restrooms, a safe place to take out, and in some cases day-use sites and overnight campsites. Water trails offer a variety of challenge levels on white water, moving water, flat water and tidewater and

emphasize low-impact use and encourage stewardship of the resource.

Summary of Planning Results

This section includes a brief summary of the results for the following major components of the statewide water trails planning effort.

Benefits of Water Trails

As previously mentioned, non-motorized boating has grown in popularity in recent years in the state of Oregon. This increase in participation translates into financial benefits for communities that provide access to water trails. Water trails as a recreation destination provide rural communities with income to local boat liveries and outfitters, motels and bed and breakfasts, restaurants, grocery stores, gas stations and shops.¹¹ Evidence from economic studies include:

- An Oregon study of guides and packers¹² indicates that in 1986, the outfitter/guide industry in Oregon (for river, land and marine activities) had a direct impact of \$42.5 million. This resulted in a total economic impact of \$300 million to the overall Oregon economy.
- River recreation in Oregon is one of the activities that attracts people from other areas. In the Columbia Gorge region (consisting of Hood River and Wasco Counties), revenues from transient lodging taxes grew just over 25% during 1992/93, following a similar increase

¹¹ Water Trails For Wisconsin. University of Wisconsin Extension.

¹² Bureau of Land Management (1987). Recreation 2000. Washington, D.C. U.S. Department of the Interior, Bureau of Land Management.

of approximately 21.4% in the previous fiscal year¹³.

- The Outdoor Recreation Coalition of America estimated that a total of \$200 million was spent on retail sales for paddle sports outdoor recreation equipment, apparel, and accessories in 1996.
- According to a survey conducted by the National Association of Canoe Liveries and Outfitters, the average river trip covers 10.8 miles and takes 4 hours and 15 minutes, the average charge per guest is \$13.00, and 85% of guests are between 20-50 years of age.

The recreational experience provided by water trails are often their foremost attraction. In addition to the entertainment values of recreation, there is a significant health and fitness benefit.

Many people realize exercise is important for maintaining good health in all stages of life, however many do not regularly exercise. The U.S. Surgeon General estimates¹⁴ that 60% of American adults are not regularly active and another 25% are not active at all. In communities across the country, people do not have access to trails, parks, or other recreation areas close to their homes. Water trails provide a safe, inexpensive avenue for regular exercise for

people living in rural, urban and suburban areas¹⁵.

Exercise derived from recreational activities lessens health-related problems and subsequent health care costs. Regular, moderate exercise has been proven to reduce the risk of developing coronary heart disease, stroke, colon cancer, hypertension, diabetes, osteoporosis, obesity, and depression. This kind of exercise is also know to protect against injury and disability because it builds muscular strength and flexibility, which helps to maintain functional independence in later years of life¹⁶. A nationwide study on the cost of obesity¹⁷, concluded that increasing participation in regular moderate activity by the more than 88 million inactive Americans over age 15 could reduce annual national medical costs by \$76 billion in 2000 dollars.

Additional benefits of water trails include:

- Conservation/Stewardship Benefits: Water trail activities can support the conservation of the aquatic and shore land ecosystems. Trail builders and activists are a respected constituency who advocate for resource protection, and participate in resource restoration. In addition, by promoting minimum-impact practices, water trails embrace the "Leave No Trace" code of outdoor

¹³ Oregon Tourism Division (1994). 1992 Economic Impacts and Visitor Volume in Oregon. Prepared by Dean Runyan Associates, Portland, OR: Oregon Tourism Division, Economic Development Department.

¹⁴ Centers for Disease Control and Prevention. (1996). Surgeon General's Report on Physical Activity and Health. Department of Health and Human Services. July 1996.

¹⁵ Benefits of Trails and Greenways. From Trails and Greenways Clearinghouse.

¹⁶ Centers for Disease Control and Prevention. (1996). Surgeon General's Report on Physical Activity and Health. Department of Health and Human Services. July 1996.

¹⁷ Pratt, M., Macera, C., and Wang, G. (2000). Higher Direct Medical Costs Associated With Physical Inactivity. *The Physician and Sports Medicine* 28(10).

ethics that promote the responsible use and enjoyment of the outdoors.

- Educational Benefits: Water trail organizations use comprehensive trail guides, signage, public outreach, and informative classes to encourage awareness of the natural, cultural, and historical attributes of the trail¹⁸. Water trails are also a perfect classroom for the teaching biologist, botanist, and ecologist, both amateur and professional. Educators naturalists, rangers and scoutmasters—all can demonstrate and illustrate their lessons along the water trail¹⁹.

Key Statewide Water Trail Issues

The plan also identifies key water trail issues that affect the future of non-motorized boating management in Oregon. During the months of April and May 2003, OPRD staff conducted a series of 9 regional trail issues workshops across the state. Approximately 230 people attended a workshop, including representatives from 56 public-sector recreation provider organizations. Information from these workshops was used in the process of developing top regional and statewide water trail issues.

The 6 top statewide water trail issues include:

Statewide Issue A: Need To Address Conflicts Between Non-motorized Boaters And Waterfront Property Owners

Recreation providers and other workshop attendees clearly stated a need to proactively address potential conflicts between paddlers and waterfront property owners. Several strategies were mentioned in the issues workshops including:

- Providing a sufficient number of public access points at reasonable intervals along designated water trails.
- Developing and disseminating an appropriate assortment of information resources (signs, maps and brochures) to inform the public of all available water trail facilities.
- Incorporating water trail guidelines that emphasize a proper respect for private property.

According to recreation providers, there is a need to better inform the public about the extent and limitations of the public's interest in the state's waterways. The primary objective is to better inform non-motorized boaters on where they legally can launch or access the water and shore to ensure long-term access to floatable waterways in Oregon in a way that is considerate of the interests and concerns of private property owners.

Statewide Issue B: Need For More Public Access To Waterways

Recreation providers and other workshop attendees across the state consistently reported a need for more public access to waterways to accommodate the needs of a growing number of non-motorized boaters. Both providers and other workshop attendees made a case that additional public access is needed at the

¹⁸ Water Trails for Wisconsin. University of Wisconsin Extension.

¹⁹ North American Water Trails, Inc. Why Water Trails?

starting point, at reasonable intervals along, and at the final take out point of paddling routes throughout the state.

Statewide Issue C: Need For Adequate And Consistent Information Resources Including Signs, Maps, Level Of Difficulty And Water Level Information And Available Paddling Opportunities

Recreation providers and workshop attendees made a strong case for developing a central web-based repository for interested non-motorized boaters to get information about existing flat water, moving water and whitewater paddling opportunities available throughout the state of Oregon. There is also a need for maps and information to promote paddling opportunities throughout the state.

Statewide Issue D: Need For Safety-Related Information, User Education And Outreach

Both recreation providers and other workshop attendees stated that there is a strong need to adequately inform people of conditions they may encounter on Oregon waterways before actually getting onto the water. In addition, there is a need for emergency response training to ensure that the necessary skills and knowledge are in place to avoid and properly respond to water-related emergency situations.

There is also a need to reduce visitor impacts to the environment along paddling routes. Environmental impacts occur from such things as improperly disposed human and solid waste, disturbing wildlife, camping on private land and using soap too close to the river. As a result, there is a need for more information available on how to reduce visitor impacts such as

Leave No Trace and Tread Lightly! to develop an appropriate user ethic.

Statewide Issue E: Need For A Dedicated Funding Source For Water Trail Development

Across the state, recreation providers and other workshop attendees strongly made a case for a designated funding source for water trail facility development. Currently, there are grant programs funding motorized and non-motorized terrestrial trail projects and a motorized watercraft facility program, but no resources are specifically designated for non-motorized watercraft facility development. As a result, there is a need to explore funding opportunities/sources such as a non-motorized boater fee to fund water trail development.

Statewide Issue F: Need For Information Describing The Social And Economic Benefits Of Water Trails

Recreation providers stated that there is often local resistance to developing water trail opportunities and encouraging more visitors to the local area. Community members often view increasing use of nearby waterways as potentially harmful to their local quality of life. As a result, recreation providers need information to better educate communities about the social and economic benefits associated with water trail development.

The 2004 Oregon Statewide Non-motorized Trail User Survey

The 2004 Oregon Statewide Non-motorized Boater Survey was conducted over a four-month period from January to April 2004 by the University of Oregon's Survey Research Laboratory. The purpose of the survey was to assess the needs and

opinions of Oregon’s citizens about non-motorized boating opportunities and management, assess the need for future investment in water trail facilities and opportunities and provide trail planners with up-to-date information for local and regional trails planning.

The survey found that fourteen percent of Oregon households have a person reporting non-motorized boating participation, amounting to 185,200

households in the state. White water rafting (47%), canoeing (42%) and drift boating (36%) are the most popular activities among non-motorized boaters (see Table 12). Gender is split closely at 55% male/ 45% female for non-motorized boaters, and the median age is 40-49 years old. A sizable majority have some college (86%), with almost two-thirds being college graduates (61%). Median income is \$40,000 to \$69,000.

TABLE 12: Extent of Non-motorized Boating Participation

N = 248	Participated in Last Year	Estimated Oregon Households
White water rafting	47%	86,600
Canoeing	42%	77,400
Drift boating	36%	66,300
White water kayaking	16%	29,500
Sea kayaking	9%	16,600
Other	31%	57,109

Sampling error for the “in last year” question is ± 5%.

The survey asked non-motorized boaters the type of waterway they preferred for the activity they enjoy the most (see Table 13). Whitewater rivers and streams are the preferred favorite, with flat water rivers and streams a close second, followed by lakes. Different user groups have clearly different preferences.



N = 29-243	All Non-motorized Boaters	Canoeists	Drift Boaters	Sea Kayakers
	N = 247	N = 63	N = 50	N = 29
Whitewater rivers and streams	37%	5%	32%	17%
Flat water rivers and streams	32%	44%	46%	31%
Lakes	22%	38%	14%	34%
Tidewaters	3%	5%	2%	7%
The ocean	2%	2%	2%	3%
Freshwater wetlands	2%	5%	2%	3%
If volunteered: no preference	2%	2%	2%	3%
Sampling error	± 5%	± 12%	± 14%	± 18%

Sixty five percent of non-motorized boaters reported that they would like to participate in their activity more than they do. Lack of time is by far the primary roadblock for non-motorized boaters.

Non-motorized boaters use many information sources in planning for their paddling trip (See Table 14). A few favorites stand out: people’s advice, printed resources like brochures, maps, books and magazines, and the internet. Non-motorized boaters were asked about satisfaction with a variety of information sources, and they report a high level of overall satisfaction. Users reported more dissatisfaction with signage, level of difficulty information, route maps, and agency responses.

N = 248	Use Source	Favorite Source
Advice of people	91%	37%
Brochures, maps	90%	13%
Books, magazines, newspapers	79%	15%
Sporting goods stores	71%	3%
Visitor information centers	69%	3%
Gather information along the way	65%	1%
Internet	63%	15%
Phone management agencies	46%	3%
Clubs, groups, water trail organizations	19%	2%
Other	13%	4%
Sampling error for this question is ± 5%		

Overall, non-motorized boaters were “extremely satisfied” with their overall non-motorized boating experience in Oregon. Ninety nine percent of non-motorized boaters reported being either “very satisfied” (75%) or “somewhat satisfied” (24%). Only one percent said they are “not very satisfied.”

Finally non-motorized boaters were asked to prioritize a variety of funding possibilities related to developing and maintaining water trails. Maintaining existing facilities, cleaning up litter and trash, and enforcing existing rules/regulations are highest ranked priorities (See Table 15).

N = 242-246	Mean	Very Important	Somewhat Important	Not That Important	A Top Funding Priority ²⁰
Maintaining existing facilities	2.7	71%	28%	2%	156
Clean up litter and trash	2.7	70%	24%	5%	143
Enforcing existing rules/regulations	2.4	48%	38%	13%	93
Acquire land for public access	2.3	44%	37%	18%	84
Providing education, safety, and trail etiquette information	2.3	40%	45%	15%	79
Providing law and safety enforcement	2.2	33%	55%	11%	77
Developing support facilities	2.2	30%	60%	10%	58
Providing information, maps, signs	2.2	32%	60%	8%	57
Developing camping facilities	1.9	16%	53%	31%	34
Identify new water trail routes	1.9	17%	57%	27%	30
Providing interpretive information	1.9	11%	66%	23%	19
Sampling error for this question is \pm 5%					

²⁰ Number of respondents selecting this answer. Asked only if respondent answered “very important.”

Statewide Water Trail Goals, Objectives and Strategies

A set of long-range goals, objectives and strategies were developed for each of the top 6 Statewide Water Trail Issues based on findings from the water trails planning effort. These goals, objectives and strategies were developed for use by water trail decision makers across the state to develop policies and actions for resolving the 6 top statewide water trail issues.

Note: Specific strategies are identified in this plan for addressing each objective, but are not included in the following summary. A full listing of statewide water trail goals, objectives and strategies is included in the water trails plan.

Top statewide water trail issues and accompanying goals and objectives include:

Statewide Issue A: Need To Address Conflicts Between Non-motorized Boaters And Waterfront Property Owners

Goal: Promote a better understanding of issues and concerns related to recreational use of waterways between/among non-motorized boaters and waterfront property owners.

- Objective 1: Increase the number of non-motorized boaters who understand that the actions of paddlers often cause tension with waterfront property owners and are informed on ways to minimize those conflicts.

- Objective 2: Develop and disseminate water trails information to enable non-motorized boaters to make informed decisions on where to paddle.
- Objective 3: Recognize the importance of sound planning and public involvement in the development of water trail routes.
- Objective 4: Define the publics' right to use waterways.

Goal: Promote and encourage responsible water trail development and use.

- Objective 1: Develop a statewide approach to water trail development.
- Objective 2: Provide the appropriate framework and support for a state water trails system.

Statewide Issue B: Need For More Public Access To Waterways

Goal: Facilitate the development of public access to waterways for non-motorized boaters.

- Objective 1: Determine where access to waterways currently exists.
- Objective 2: Identify ways to develop new access to waterways.

Statewide Issue C: Need For Adequate And Consistent Information Resources Including

Signs, Maps, Level Of Difficulty And Water Level Information And Available Paddling Opportunities

Goal: Provide user-friendly, easy-to-find information resources for non-motorized boaters to help them engage in appropriate water trail activities.

- Objective 1: Develop water trail information standards.
- Objective 2: Encourage the use of water trail information standards in water trail development projects.
- Objective 3: Develop a web-based approach for providing water trail information.

Statewide Issue D: Need For Safety-Related Information, User Education And Outreach

Goal: Encourage the safe and low-impact use of water trails.

- Objective 1: Inform the public on the inherent risks and dangers associated with water-based recreation.
- Objective 2: Provide safety-related information and services for State Designated Water Trails.
- Objective 3: Provide low-impact recreational use information for State Designated Water Trails.

Statewide Issue E: Need A Dedicated Funding Source For Water Trail Development

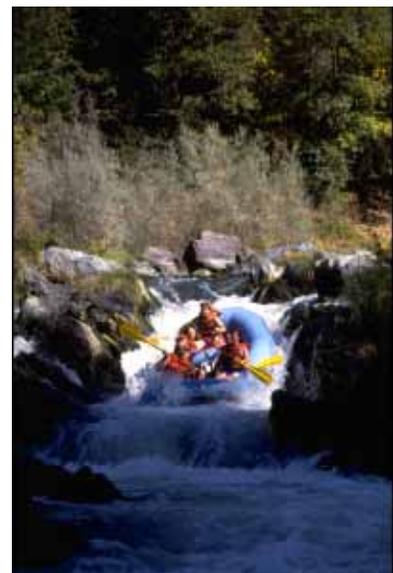
Goal: Pursue a dedicated funding source for a State Water Trail Program.

- Objective 1: Educate key stakeholders on the need for a dedicated funding source for water trail development.
- Objective 2: Identify the most effective funding mechanism for water trail development in the state.

Statewide Issue F: Need For Information Describing The Social And Economic Benefits Of Water Trails

Goal: Educate key stakeholders about the economic and community benefits of water trails.

- Objective 1: Develop and disseminate information on the benefits of water trails.



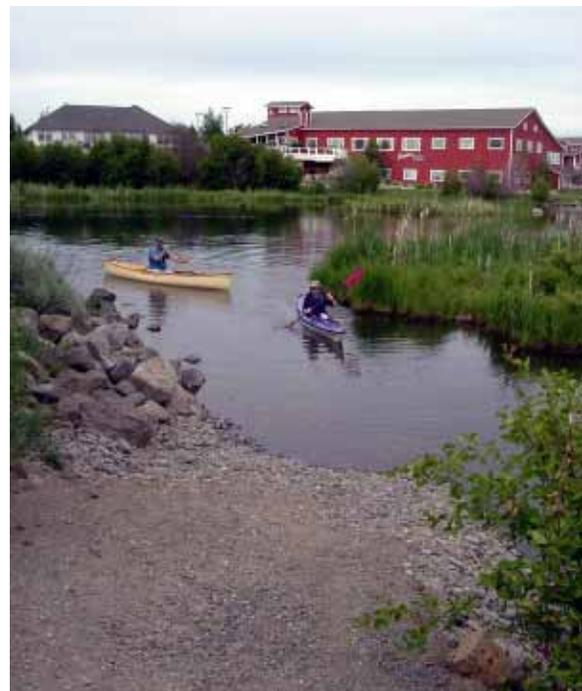
A Proposed State-Administered Water Trails Program for Oregon

The water trails planning effort has identified three critical factors which pose a serious threat to long-term non-motorized boating access to waterways in Oregon including a rapid increase in participation in non-motorized boating, a lack of legal clarity and understanding of the public's right to Oregon's waterways for recreational purposes and an increasing potential for conflicts between non-motorized boaters and waterfront property owners. To address these concerns, the plan proposes an OPRD-administered Water Trails Program intended to develop a statewide system of water trails carefully designed to minimize conflicts between non-motorized boaters and waterfront property owners.

This proposed non-motorized boating management approach is based on findings and conclusions drawn from the Oregon water trails planning process and an investigation of non-motorized boating management and water trail development materials from Oregon and across the country. Key components of the proposed Oregon Water Trails Program include:

- A Dedicated Funding Source — The key to creating an "Oregon Water Trail System" is establishing a stable funding source.
- A Water Trails Grant Program — Grant funding would be directed through local grassroots initiatives coordinated across jurisdictional boundaries in the creation, management and promotion of individual trail components.

- Technical Support From The Administering Agency — Providing services to water trail development.
- An Official "Oregon Water Trail" Designation — To showcase premier water trails providing consistent user information, quality experiences and that meet paddler expectations.



MOTORIZED TRAILS PLAN

TABLE OF CONTENTS

Introduction	43
Economic Importance of OHV Recreation In Oregon	46
Introduction	46
Trip Expenditures In Oregon.....	47
Annual Expenditures In Oregon	49
Conclusion	50
IDENTIFICATION OF REGIONAL AND STATEWIDE MOTORIZED TRAILS ISSUES	51
The Public Workshop Process.....	51
List Of Top Regional Motorized Trails Plan Issues.....	52
Determining Top Statewide Motorized Issues	55
2004 Oregon Statewide Motorized Trail User Survey	57
Research Background	57
Survey Results	57
STATEWIDE MOTORIZED TRAIL GOALS, OBJECTIVES AND STRATEGIES	69
Goals, Objectives And Strategies For Top Statewide Issues	69
Statewide Motorized Trail Issue A:Need For New Trails/Managed Riding Areas.....	69
Statewide Motorized Trail Issue B:Need For Regional Interagency Coordination/Cooperation In Trail Planning & Management.....	73
Statewide Motorized Trail Issue C:Need For User Education/Training (Regulatory & Safety Information)	74
Statewide Motorized Trail Issue D:Concern About Trail Closures/Loss Of Riding Opportunities.....	76
All-Terrain Vehicle Grant Program Evaluation Criteria	79
Technical Review - Application Completeness	79
Project Priority Scoring System.....	79
ATV Grant Program Evaluation Criteria Point Summary	80
Staff Evaluation Criteria	80
ATV Account Allocation Committee Member Evaluation Criteria	81

Introduction

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 Oregon Parks and Recreation Department from the Oregon Department of Transportation 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 the following purposes:

1. A portion of the monies are transferred to the Oregon Department of Transportation (ODOT) for the development and maintenance of snowmobile facilities;
2. Planning, promotion and implementation of a statewide all-terrain vehicle program including acquisition, development and maintenance of all-terrain vehicle areas;
3. Education and safety training for all-terrain vehicle operators;
4. Provision of first aid and police services in all-terrain vehicle areas;
5. Costs of investigating, developing or promoting new programs for all-terrain vehicle users and of advising people of possible usage areas for all-terrain vehicles;
6. Costs of coordinating between all-terrain vehicle user groups and the managers of public lands;

7. Costs of providing consultation and guidance to all-terrain vehicle user programs; and
8. Costs of administration of the all-terrain vehicle program, including staff support.

ATV grant monies are available to public and privately owned land managers and ATV clubs and organizations.

ORS 390.565 also established the All-Terrain Vehicle-Account Allocation Committee (ATV-AAC), consisting of seven voting members and four nonvoting members appointed by the Oregon Parks and Recreation Commission. ATV-AAC members advise the Oregon Parks and Recreation Department on the allocation of monies in the ATV Account.

The Oregon State Off-Highway Vehicle (OHV) study has been in place since 1995. Although many of the findings included in this plan are still relevant, considerable change has occurred on Oregon's OHV areas/trails in the last 9 years including a 13% state population increase between 1995 and 2003 and increases in OHV ownership and trail use. As a general rule, planning documents of this type have a usable shelf life of 10 years. As a result, there was a need to update the trails plan for OHV use.

The purpose of this motorized trails planning effort was to provide information and recommendations to guide OPRD and other agencies in Oregon in their management of motorized trail/riding resources. The plan is designed to:

- Assess the needs and opinions of Oregon's citizens as they relate to

motorized trail/riding opportunities and management;

- Establish priorities for expenditures from the ATV Grant Program;
- Develop strategic directions to guide activities for the Oregon Parks and Recreation Department's ATV Program;
- Gather additional inventory measurement data for motorized trail resources and facilities; and
- Recommend actions that enhance motorized trail opportunities to all agencies and the private sector providing trail resources in Oregon.

The plan has been developed as an information resource as well as a planning tool to guide agencies for the next 10 years.

For the purposes of this planning effort, motorized trail uses include ATV riding, off-road motorcycling, dune buggy/sand rail riding, four-wheel or other high-clearance vehicle riding, and snowmobiling on designated motorized trails and riding areas in the state. A motorized trail is defined as a regularly maintained recreation pathway typically used by off-highway vehicles. The designated trail or riding area should be purposefully planned and constructed for motorized recreation purposes.

The motorized trails plan includes the following chapters:

Chapter 1. Economic Importance of OHV Recreation in Oregon.

This chapter summarizes the findings from the Oregon State University report entitled "The 1999 Oregon Off-Highway Vehicle User Survey." The study identified that Off-Highway Vehicle recreation contributed an estimated \$120 million and 1,809 jobs to Oregon's economy in 1999.

Chapter 2. Identification of Top Regional and Statewide Motorized Trail Issues.

This chapter includes a list of the 3 top regional motorized trail issues in each of the 6 trails planning regions and the 4 top statewide motorized trail issues identified during the planning process.

Chapter 3. The 2004 Oregon Statewide Motorized Trail User Survey.

This chapter presents key findings from the 2004 telephone survey of Oregon motorized trail users. The purpose of the survey was to assess the needs and opinions of Oregon's citizens about trail opportunities and management, assess the need for future investment in trail facilities and opportunities and provide trail planners with up-to-date information for local and regional motorized trail/area planning.

Chapter 4. Statewide Motorized Trail Goals, Objectives and Strategies.

This chapter focuses on a set of long-range goals, objectives and strategies for the top 4 Statewide Motorized Trails Issues as identified through the motorized trails planning effort. These goals, objectives and strategies were developed for use by motorized recreation decision makers across the state to develop policies and actions for resolving the 4 top statewide motorized trail issues.

Chapter 5. All-Terrain Vehicle Grant Program Evaluation Criteria.

The motorized trails plan concludes with a set of project selection criteria for evaluating acquisition, development and planning proposals for the ATV Grant Program. The criteria make the connection between findings from the trails planning effort and how limited ATV grant monies can be allocated.



Economic Importance of OHV Recreation in Oregon

The following is a summary of findings from the Oregon State University report entitled "The 1999 Oregon Off-Highway Vehicle User Survey".²¹ The study identified that Off-Highway Vehicle recreation contributed an estimated \$120 million and 1,809 jobs to Oregon's economy in 1999.

Introduction

The 1999 Oregon Off-Highway Vehicle User Survey was undertaken to provide a reliable estimate of the economic impact of motorized recreation in Oregon. In estimating economic impacts, the study identified the jobs and income that are the result of OHV recreation and assessed the revenues generated from motorized recreation in the state. Revenue estimates included those associated with the following:

- Trip expenditures by Oregonians and out-of-state visitors including gas and oil, food and beverage, lodging, rentals, medical costs, and other retail purchases in the region of the state where the OHV activity occurred; and
- Annual expenditures by Oregonians including the purchase of new vehicles, trailers, insurance, storage, maintenance, high-performance parts and labor, accessories, and specialty clothing in the region of the state where they reside.

Economic data were compiled at the regional level and statewide. For a description of regional boundaries for the study see Table 16.

²¹ Johnson, R.L., Leahy, J.E. (1999). The 1999 Oregon Off-Highway Vehicle User Survey. Department of Forest Resources. Oregon State University. Corvallis, OR.

TABLE 16: Regional Definitions

Region Name	Counties Included in Region
North Coast	Clatsop, Tillamook, Columbia, Washington, & Yamhill
Central Coast	Lincoln, Benton, & Polk
South Coast	Coastal part of Lane, Coastal part of Douglas, Coos, & Curry
Willamette Valley	Multnomah, Clackamas, Marion, Linn, Non-coastal Lane, & Non-coastal Douglas
Southern Oregon	Josephine, Jackson, & Klamath
Central Oregon	Hood River, Wasco, Sherman, Gilliam, Jefferson, Wheeler, Deschutes, & Crook
Northeast Oregon	Morrow, Umatilla, Union, Wallowa, Grant & Baker
Eastern Oregon	Lake, Harney, & Malheur

The following is a description of the economic contributions of OHV recreation to the State of Oregon in 1999.



Trip Expenditures in Oregon

OHV trip-related expenditures in the state of Oregon during 1999 were estimated at \$46.4 million (Table 17). Oregonians made \$29 million in trip expenditures while non-resident visitors made \$17.4 million in trip expenditures during the year (Table 18). Nearly \$27.8 million was spent in the South Coast Region (Table 17). This is more than 6 times the amount of expenditures made in any other region.

Region	Expenditures
South Coast	\$27,773,693
Central Oregon	\$3,181,588
North Coast	\$4,220,482
Willamette Valley	\$3,515,508
Eastern Oregon	\$1,508,274
Northeastern Oregon	\$3,976,265
Southern Oregon	\$1,638,417
Central Coast	\$598,1136
Total All Regions	\$46,412,363

Region	In-State Expenditures	Out-of-State Visitor Expenditures	Combined Expenditures
South Coast	\$14,175,411	\$13,598,283	\$27,773,693
Central Oregon	\$2,537,294	\$644,293	\$3,181,588
North Coast	\$3,365,812	\$854,670	\$4,220,482
Willamette Valley	\$2,803,597	\$711,911	\$3,515,508
Eastern Oregon	\$1,202,837	\$305,437	\$1,508,274
Northeastern Oregon	\$3,171,048	\$805,216	\$3,976,265
Southern Oregon	\$1,306,630	\$331,787	\$1,638,417
Central Coast	\$477,011	\$121,124	\$598,136
Total All Regions	\$29,039,641	\$17,372,722	\$46,412,363

For all the regions, about 25% of trip expenditures (Table 19) went towards lodging (hotels, motels, bed and breakfasts, and camping). About 18% each was spend on gas and oil, restaurants, and at grocery stores.

Type of Purchase	In-State	Out-of-State	Total
Gas and oil	\$5,683,405	\$2,959,925	\$8,643,330
Restaurants and taverns	\$4,915,214	\$3,446,160	\$8,361,374
Food and beverages from grocery stores	\$5,235,247	\$2,958,407	\$8,193,654
Hotels/motels/ bed & breakfasts	\$3,349,230	\$2,046,545	\$5,395,775
Camping/RV	\$3,572,311	\$2,510,448	\$6,082,759
Amusements	\$891,806	\$630,858	\$1,522,664
ATV rentals	\$383,119	\$367,521	\$750,640
Repairs/maintenance	\$2,481,558	\$1,009,799	\$3,491,357
First aid	\$182,937	\$113,060	\$295,997
Other retail	\$2,344,813	\$1,330,000	\$3,674,813
Total All Regions	\$29,039,640	\$17,372,722	\$46,412,363

OHV trip expenditures created an additional 831 jobs and \$14.6 million in personal income in Oregon (Table 20). The Central Coast region was the least affected with 9 jobs and \$155,000 in personal income.

Income and Jobs By Region in Oregon		
Region	Income	Jobs
South Coast	\$8,706,779	529
Central Oregon	\$956,672	53
North Coast	\$1,353,088	58
Willamette Valley	\$1,363,987	61
Eastern Oregon	\$373,168	23
Northeastern Oregon	\$1,178,168	72
Southern Oregon	\$535,641	26
Central Coast	\$154,568	9
Total All Regions	\$14,622,071	831

The study found an average per person per day OHV trip expenditure of \$29 (Table 21). Other recreation activities, like snow play (\$45), fishing (\$31), and camping (\$18) have average trip expenditures above and below this amount.

TABLE 21: Comparison of Average Trip Expenditures to Other Types of Recreation		
Average Expenditure Per Person/Per Day in 1999 \$		Type of Activity
OHV Recreation		
	\$45	Snowmobile
	\$40	OHV
	\$29	OHV (OSU)
	\$28	Motorized
Other Recreation		
	\$67	Downhill Skiing
	\$43	General Day Use
	\$31	Fishing
	\$31	Nature Study/Interpretive
	\$29	OHV (OSU)
	\$29	Snow play
	\$29	Water Recreation
	\$18	Camping
	\$12	Non-motorized Dispersed

Annual Expenditures in Oregon

Oregonians made an estimated \$74 million in annual expenditures during 1999 (Table 22). Nearly \$42.4 million was spent in the Willamette Valley region. This is more than 5 times the amount of expenditures made in any other region.

TABLE 22: Total Annual Expenditures: By Region in Oregon	
Region	Expenditures
South Coast	\$4,690,143
Central Oregon	\$4,231,087
North Coast	\$7,485,729
Willamette Valley	\$42,438,022
Eastern Oregon	\$545,098
Northeastern Oregon	\$3,978,974
Southern Oregon	\$6,279,200
Central Coast	\$2,442,878
Total All Regions	\$74,076,911

For all the regions, about 49% of annual expenditures went towards purchasing vehicles (Table 23). About 12% were spent on maintenance, high-performance parts and trailers.

Region	Expenditures
OHV Vehicle(s)	\$36,493,885
OHV Trailer	\$7,818,522
Insurance	\$3,134,213
Storage	\$1,396,128
Maintenance	\$10,164,019
High Performance Parts	\$9,249,693
Accessories	\$4,071,771
Specialty Clothing	\$1,748,680
Total All Regions	\$74,076,911

Annual expenditures created an additional 978 jobs and \$23.9 million in personal income in Oregon (Table 24). The Willamette Valley region accounts for most of this, with 586 jobs and \$15.2 million in personal income. Eastern Oregon was the least affected with 8 jobs and \$167,000 in personal income.

Region	Income	Jobs
South Coast	\$1,386,292	61
Central Oregon	\$1,233,324	58
North Coast	\$2,402,462	92
Willamette Valley	\$15,216,407	586
Eastern Oregon	\$166,872	8
Northeastern Oregon	\$1,008,753	54
Southern Oregon	\$1,922,044	92
Central Coast	\$551,167	28
Total All Regions	\$23,887,321	978

Conclusion

The study identified that Off-Highway Vehicle recreation contributed an estimated \$120.4 million and 1,809 jobs in to Oregon's economy 1999. OHV recreation has economic significance in both the origin and destination areas. The South Coast region is by far the most impacted with 529 jobs generated by trip expenditures. The greater proportion of overnight and out-of-state visitors to the South Coast accounts for much of this impact. OHV recreation also has a substantial economic significance in the region where people live. Annual expenditures on items like vehicles, parts, and maintenance take place in people's home regions, accounting for 586 jobs in the Willamette Valley where the majority of OHV riders reside.

IDENTIFICATION OF REGIONAL AND STATEWIDE MOTORIZED TRAILS ISSUES

Public involvement played a central and recurring role throughout the Oregon statewide trails planning process. OPRD conducted a series of 9 regional public workshops across the state during 2003 to discuss the major issues that affect the provision of motorized trail opportunities in Oregon.

The Public Workshop Process

During April and May of 2003, OPRD staff completed a series of 9 regional trail issues workshops across the state. Each workshop included an afternoon session open to all public recreation providers and an evening session open to the general public.

The widest possible range of “public” was invited to participate in the process. For the afternoon sessions, an invitation letter was sent to all public-sector recreation providers in the state requesting participation in their respective regional trails issues workshops. For the general public workshops (evening sessions), ads were placed for each workshop in local and regional newspapers. In addition, press releases were sent out to media outlets prior to each workshop. In keeping with the plan’s regional approach and to maximize input and participation, 9 sites were selected from around the state for the issues workshops (a table of meeting locations is included in Table 2 on page 7).

Both afternoon and evening workshops included a brief description of the trails planning region, workshop process, and how the regional issues information was to be used in the plan. Next, participants listened to a 20-minute presentation on

the statewide planning effort. Each workshop included a separate issues gathering process for motorized, non-motorized, and water trails issues.

Trail issues were defined as any high-impact issue related to providing recreational trail opportunities within the region. Issues could be related to trail facilities, management (e.g. user conflicts), programs, projects and funding. At the conclusion of daytime and evening workshop each workshop attendees were given 3 colored dots to assist in prioritizing the importance of issues gathered. Participants placed their colored dots on those issues they felt were of most important in the planning region.

A thorough description of how top regional issues were determined is included under the Major Planning Component heading in Chapter 1 (page 5).



List of Top Regional Motorized Trails Plan Issues

The following list includes those issues identified as top regional motorized trails issues.



Northwest Region

Northwest Trails Planning Region

(Includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Lincoln, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lane and Benton Counties.)

-
- A. Need for adequate and consistent information resources including signs, maps, regulation and level-of-difficulty information, brochures, websites and a central statewide website to access such information in a single location.
 - B. Need for new trails within the region including loop trails.
 - C. Need to better manage for trail-related environmental impacts and resource protection through careful selection of riding area locations, planning, design, public education and understanding the capacity limits of motorized areas.
-

Southwest Trails Planning Region

(Includes Coos, Curry, Josephine, Jackson and Douglas Counties)

-
- A. Need to increase motorized trail and trailhead capacity within the region by developing motorized recreation opportunities on private timberlands and designating trails/areas for motorized use including trails currently used in that manner.
 - B. Need for increased user education (rules, regulations, restrictions, environmental) and safety training in the region.
 - C. Need to provide managed motorized areas within the region to better protect natural resources and reduce the number of neighbor complaints. Many impacts are the result of enthusiasts riding in areas not appropriate for motorized use.
-

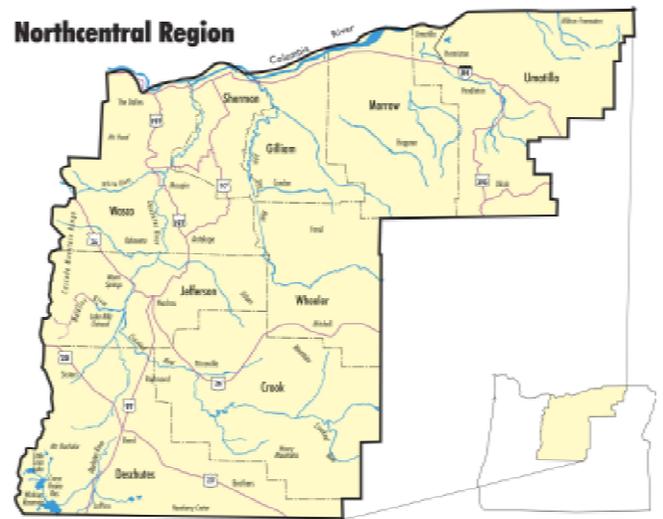
Southwest Region



North Central Trails Planning Region

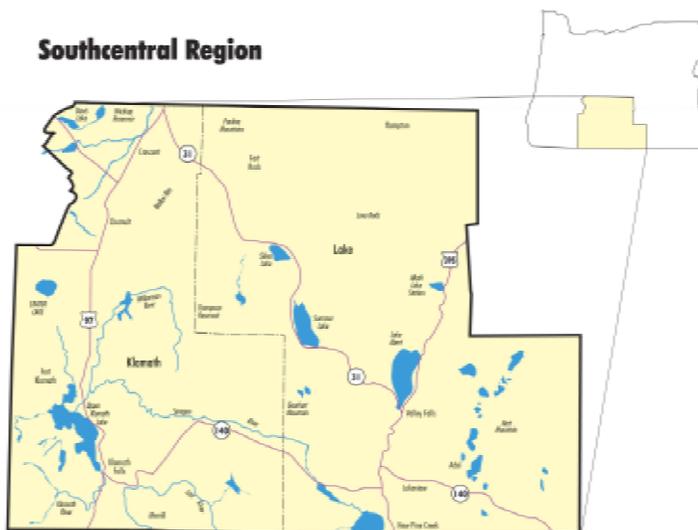
(Includes Wasco, Sherman, Gilliam, Morrow, Umatilla, Jefferson, Wheeler, Deschutes and Crook Counties)

-
- A. Use snow park areas for OHV use during summer months such as currently occurring at Edison.
 - B. Agencies should not close/eliminate OHV trails within the region as a result of resource damage. Rather, OHV trails should be either repaired or rerouted to minimize resource damage.
 - C. Need for more Class II (4-wheel drive jeeps, SUVs) riding opportunities in the region. This includes a wide variety of Class II riding opportunities—particularly technical riding areas.
-



South Central Trails Planning Region

(Includes Klamath and Lake Counties)



-
- A. Need for more designated motorized areas to accommodate increasing numbers of OHV enthusiasts in the region. Unfortunately, the current trend is for closing existing riding opportunities within the region.
 - B. Need for interagency cooperation for development of a seamless long-range trail system across jurisdictional boundaries.
 - C. Need for increased management (safety, environmental and regulatory) of OHV riding areas within the region.
-

Northeast Trails Planning Region

(Includes Wallowa, Union, Grant and Baker Counties)

A. There is a need for standardized trail signage to provide consistency and continuity between the riding areas in the region. Resource managers should use a common set of trails signing, information and regulatory standards.

B. Need for additional motorized camping areas and related facilities (staging areas, restrooms and amenities) to minimize damage to existing riding areas within the region.

C. Need for more motorized trails throughout the region, especially in Baker, Pine and Wallowa Valley Ranger Districts.



Southeast Trails Planning Region

(Includes Harney and Malheur Counties)

A. Need to consider OHV use on roads proposed for closure or abandonment and to review recreational use on roads previously closed or abandoned.

B. Need for designated and managed OHV areas for ATVs and motorcycles to proactively address growing levels of resource degradation associated with off-road vehicle use within the region.

C. Need for safety information and training for young adults (over 15 years of age) who are beginning to ride snowmobiles in the region.

Determining Top Statewide Motorized Issues

During the September 16, 2003 motorized trail plan steering committee meeting, OPRD staff used a sheet including information presented in the first 2 columns of Table 25 (below) to provide steering committee members an opportunity to vote for a set of top Statewide Motorized Trail Issues. Table 25 includes the total number of committee member votes each issue received. Those issues with the highest number of votes (shown in bold) were determined by the steering committee to be 4 Statewide Motorized Trail Issues.

Motorized Trail Issues	Total # of Comments (Issue Scoping)	# of Committee Votes
Need For Adequate & Consistent Information Resources	40	0
Need For Regional Interagency Coordination/Cooperation in Trail Planning & Management	28	5
Need To Better Manage For Environmental Impacts	28	0
Need For User Education/Training (Regulatory & Safety Information)	27	5
Need For New Trails/Managed Riding Areas	27	7
Need For Additional Law Enforcement/Emergency Response	20	2
Need For Trailheads & Support Facilities (Restrooms, Parking, Camping)	16	2
Concern About Trail Closures/Loss of Riding Opportunities	14	3
Need For a Wider Variety of Challenge Opportunities (From Children's Play Areas to Hill Climb Areas)	12	1
Need For Trail Maintenance/Rehabilitation	12	0
Need To Address User Conflicts/Multiple Use	10	0
Need For Better Trail Planning & Design	10	0
Need to Explore Recreation Opportunities on Private Timberlands	10	0
Need For Close-To-Home Riding Opportunities (Near Urban Areas)	10	1
Need To Connect Existing Trail Systems	9	1
Need For Additional & Alternative Funding Sources	7	1
Need to Consider Roads Proposed For Closure or Abandonment for Motorized Use	6	2
Need For More Snow Parks/Snowmobile Trails	5	0
Need To Consider Motorized Trail Development as an Economic Development Tool	5	0
Need To Revise the ATV Grant Application Process	5	0
Need For 4-Wheel Drive Vehicle Trails	4	2
Need For OHV Vendors & Manufacturers to Take a Greater Responsibility For OHV Management	3	0
Confusion Over Trail Pass Requirements	2	0
Need More "OHV Educated" Federal Staff	2	2
Need To Consider Snow Parks & Snowmobile Trails For Summer OHV Use	2	0
Need To Prepare For Emerging Trail Technologies (Segway, Geocaching)	2	0
Need For Diverse Set of Outdoor Recreation Opportunities	1	0

The Top Statewide Motorized Trail Issues for Oregon are as follows:

- Statewide Issue A: Need For New Trails/Managed Riding Areas
- Statewide Issue B: Need For Regional Interagency Coordination/Cooperation In Trail Planning and Management
- Statewide Issue C: Need For User Education/Training (Regulatory & Safety Information)
- Statewide Issue D: Concern About Trail Closures/Loss Of Riding Opportunities



2004 Oregon Statewide Motorized Trail User Survey

by Woody Carter and Tony Silvaggio
University of Oregon, Oregon Survey Research Laboratory

Research Background

This chapter presents key findings from the 2004 telephone survey of Oregon motorized trail users. The project was part of the Oregon Trails 2005-2014: A Statewide Action Plan effort, funded by the Oregon Parks and Recreation Department. The survey randomly screened over 15,000 Oregon telephone households to identify respondents reporting trail and non-motorized boat use in the past year. Separate questionnaires were administered for motorized trail users, non-motorized trail users, and non-motorized boaters.

The survey employed a random digit dial methodology to identify Oregon residents who reported qualifying trail or non-motorized boating use in the last year. Data collection was conducted in two waves. An initial list of 9,500 telephone numbers was called to identify motorized trail users, non-motorized trail users, and non-motorized boaters. At the end of this data collection sufficient motorized trail users and non-motorized boaters were not achieved, so an additional 5,950 telephone numbers were called in association with another survey. This additional screening resulted in quotas for trail and water users being achieved that permit a sampling error for each group of $\pm 5-6\%$. The random telephone design and low sampling errors contribute to making this one of the most scientifically rigorous studies of trail users conducted to date for Oregon.

Motorized Trail Users

The following section provides survey results specific to motorized trail users.

Motorized Trail User Demographic Information

Seven percent of Oregon households have a person reporting motorized trail use, amounting to 98,000 households in the state. Screening procedure asked first for any motorized trail user in the household, and such a person, if present, was interviewed about motorized trail use. The results reported here thus related to households with a motorized trail user, not to other individuals in those households.

Basic demographics of motorized trail users are provided in the following table:

TABLE 26: Motorized Demographics	
N = 196	
Gender:	
Male	72%
Female	28%
Age:	
18 – 29	20%
30 – 39	28%
40 – 49	27%
50 – 59	18%
60 – 69	5%
70+	2%
Education:	
Less than high school	4%
High school graduate	34%
Some college	41%
Bachelors	17%
Masters	3%
Doctorate	1%
Income:	
Less than \$18,000	7%
\$18,000 - \$24,999	5%
\$25,000 - \$39,999	19%
\$40,000 – \$69,999	36%
\$70,000 - \$99,999	19%
\$100,000+	14%
Sampling error for this question is $\pm 6\%$	

Most motorized respondents are male, and the median age is 40 – 49 years old. More than half have some college (62%), although most are not college graduates (21%). Median income is \$40,000 to \$69,999.

Frequency of Motorized Trail Participation

The survey asked motorized trail users about the frequency of their Off-Highway Vehicle (OHV) trail use in the past year. The following table reports the percentage participation in each activity, and the estimated number of Oregon households that this represents²²:

N = 196	Participated in Last Year	Estimated Oregon Households
ATV riding (3 and 4 wheel)	70%	68,600
Off-road motorcycling	44%	43,100
4-wheel driving (stock) ²³	44%	43,100
4-wheel (modified) ²⁴	29%	28,400
Snowmobiling	24%	23,500
Sand rail riding	11%	10,800
Dune buggy riding	11%	10,800
Competitive trail events	10%	9,800
Other	8%	7,800

Sampling error for this question is $\pm 6\%$.

The survey also asked how often the respondent engaged in each activity in the last year:

N = 196	In Last Year	Of Participants in Last Year, How Often?			
		Weekly	2-3 a Month	Once a Month	Less Often
ATV riding (3 and 4 wheel)	70%	12%	34%	19%	34%
Off-road motorcycling	44%	16%	29%	20%	35%
4-wheel driving (stock) ²⁵	44%	21%	24%	24%	31%
4-wheel (modified) ²⁶	29%	21%	21%	33%	24%
Snowmobiling	24%	13%	26%	17%	44%
Sand rail riding	11%	0%	23%	18%	59%
Dune buggy riding	11%	14%	19%	0%	67%
Competitive trail events	10%	0%	16%	21%	63%
Other	8%	6%	25%	50%	19%

Sampling error for the "in last year" question is $\pm 6\%$. Sampling error for the frequency questions ranges from $\pm 8\%$ for the most common activity to $\pm 22\%$ for the least common.

²² The survey did not ask how many in the household participated in each activity, so no figure for total participation can be estimated.

²³ 4-wheel stock with original tires, such as SUVs, trucks, and jeeps.

²⁴ 4-wheel stock with modified tires and/or suspension upgrades.

²⁵ 4-wheel stock with original tires, such as SUVs, trucks, and jeeps.

²⁶ 4-wheel stock with modified tires and/or suspension upgrades.

The data reflect considerable overlap in motorized trail activities. All-Terrain Vehicle (ATV) riding is the most popular activity, with 70% of motorized trail users having engaged in that activity in the past year. Of those participating in motorized trail activities, weekly frequency of use is highest for 4-wheel (stock) and 4-wheel (modified) users, at 21% each. ATV, off-road motorcycle, and snowmobile users show the most frequent use two to three times a month (in season). Among the “other” activities are poker runs (traveling to a series of destinations to pick up a playing card at each, forming a poker hand at the final stop), hunting, 6x6 amphibians, and go karts.

Favorite Motorized Trail Activity

When asked to name their favorite activity, motorized trail users show a preference for ATV riding (3 and 4 wheel) and off-road motorcycling:

TABLE 29: Favorite Motorized Trail Activity N = 196	
ATV riding (3 and 4 wheel)	40%
Off-road motorcycling	25%
4-wheel driving (stock)	11%
Snowmobiling	11%
4-wheel (modified)	8%
Sand rail riding	3%
Dune buggy riding	1%
Competitive trail events	1%
Sampling error for this question is $\pm 6\%$	

Combining stock and modified vehicles, 19% of motorized users choose 4-wheel driving as their favorite motorized trail activity. Although snowmobiling is only available to most Oregonians for part of the year, it is still selected by more than one in ten as their favorite activity.

Preferred Level of Difficulty – Motorized

The survey asked motorized trail users the level of trail difficulty they prefer. The results are included in Table 30 below:

TABLE 30: Preferred Level of Difficulty – Motorized N = 185	
The more difficult blue square trails	51%
The most difficult black diamond trails	28%
The easiest green circle trails	21%
Sampling error for this question is $\pm 7\%$	

Moderate difficulty is preferred over both the most difficult and the easiest trails.

Distance Traveled for Motorized Activities

To reach their most frequent motorized trail activity, trail users travel a median of 41 to 50 miles (one way).²⁷ The median is the number that reflects the answer given by a cumulative 50% of respondents, so half travel longer and half a shorter distance. They travel about the same distance to reach their favorite activity, as the following table reveals.

TABLE 31: Distance Traveled for Most Frequent and for Favorite Motorized Activities ²⁸				
N = 194				
Miles Traveled (One Way)	Most Frequent Activity		Favorite Activity	
	Percentage	Cumulative	Percentage	Cumulative
1 – 10	15%	15%	12%	12%
11 – 20	14%	29%	14%	26%
21 – 30	9%	38%	7%	33%
31 – 40	6%	44%	7%	41%
41 – 50	13%	57%	13%	53%
51 – 75	13%	71%	13%	66%
76 – 100	11%	81%	14%	80%
Over 100 miles	18%	100%	20%	100%
Sampling error for this question is $\pm 6\%$				

More than half of motorized trail users travel more than 40 miles to enjoy their favorite motorized trail activity, and one-fifth travel more than 100 miles. This travel burden restricts motorized trail user's ability to enjoy their sport, as revealed in the following section.

Reason Motorized Trail Not Used as Much as Desired

Fifty-nine percent of motorized trail users report they would like to participate in their activities more than they do:

TABLE 32: Use Trails as Much As Wanted – Motorized	
N = 115	
Want to use trails more	59%
Use trails as much as want to	41%
Sampling error for this question is $\pm 9\%$	

²⁷ Since the top category for this question went above 200 miles, the mean distance would be higher.

²⁸ Respondents were not restricted to destinations in Oregon.

This reflects a very large reservoir of unmet needs. The survey asked about the causes of this problem, the constraints to motorized trail use:

TABLE 33: Reasons for Not Using Trails as Much as Wanted – Motorized
1 = The Major Reason, 4 = Not an Important Reason

N = 114-115	Mean	The Major Reason	An Important Reason	A Somewhat Important Reason	Not an Important Reason
Lack of time	2.2	41%	24%	16%	20%
None close by	2.8	24%	15%	17%	44%
Lack of information	3.0	12%	18%	24%	46%
Lack of money	3.3	9%	13%	19%	59%
Weather	3.3	6%	11%	25%	57%
Overcrowding	3.4	6%	6%	27%	61%
Hard to get to	3.6	5%	7%	6%	82%
User fees	3.6	5%	6%	13%	76%
Health	3.7	4%	4%	7%	84%
No one to go with	3.7	4%	3%	17%	77%
Poor maintenance	3.7	2%	5%	12%	81%
Difficult to get equipment	3.9	1%	4%	4%	91%
Personal safety	3.8	0%	6%	10%	84%
Too challenging	4.0	0%	1%	2%	97%
Other	1.7	51%	37%	9%	3%

Sampling error for this question is $\pm 9\%$

Lack of time is the primary roadblock for motorized trail users; the lack of nearby trails is second. These two are closely related, since distant travel to motorized trails means it takes more time to participate in this sport. Lack of information is also an important reason motorized users do not use trails as much as they would like. Lack of money, overcrowding, and weather are not major or important reasons but do score a bit higher as a “somewhat” important reason.

A very sizable 30% of motorized users offer other reasons they do not participate in motorized trail use as much as they would like. The leading reasons are trail closures and fire danger. Among the comments:

They don't allow you on them. There are half a dozen and there is no reason some of these trails should be closed to motorized use. For example: Mount Defiance, they should not shut the gate so that motorized vehicles cannot use it.

All the lands that we have to do this with are being taken away by environmental groups that don't respect anybody's right to be able to enjoy the forest.

Seasonal closing. They close the trails but there's still the amount of people that want to use them so it makes for congestion. That brings up safety issues.

The fire season around here. They generally have the forests shut off to where you can't get off anything but maintained roads. In the summer time, that's probably the biggest reason why you can't go as much as you would like.

Satisfaction with Motorized Trail Services

The questionnaire asked motorized respondents to rate their satisfaction with five measures of trail service. The following table presents that data, listed in order of a decreasing "very satisfied" evaluation.

TABLE 34: Satisfaction with Motorized Trail Services					
1 = Not at All Satisfied, 4 = Very Satisfied					
N = 186-190	Mean	Very Satisfied	Somewhat Satisfied	Not Very Satisfied	Not at All Satisfied
Access to trails	3.2	38%	49%	9%	4%
Maintenance	3.1	36%	44%	16%	5%
Enforcement	3.1	31%	55%	6%	7%
Support facilities	3.1	34%	40%	19%	6%
Information	2.7	16%	45%	31%	8%
Sampling error for this question is ± 6%					

In such satisfaction rankings, any combined "not at all/not very" total score above 10% is usually justification for attention by planners. The fact that all the measures exceed this threshold suggests that trail planning should prioritize addressing this user group's concerns, especially in the areas of information (combined 39% dissatisfied), support facilities (25%), and maintenance (21%).

Motorized trail users were asked about satisfaction with a variety of information sources. Combined very/somewhat satisfied scores were high, with all but agency responses near or above the 80% combined rating. However, as the table below shows, dissatisfaction passed the 10% threshold for all categories except interpretive information. Users are more dissatisfied with agency responses, guidebooks, and signage than with other dimensions. Respondents answering "Don't Know," excluded from the table, amounted to 47% for agency websites, 39% for agency responses, 34% for guidebooks, and 25% for route maps, suggesting considerable lack of familiarity with these sources.

TABLE 35: Satisfaction with Motorized Trail Information
(1 = Not At All Satisfied, 4 = Very Satisfied)

N = 103-91	Mean	Very Satisfied	Somewhat Satisfied	Not Very Satisfied	Not at All Satisfied
Interpretive (170)	3.3	41%	50%	8%	1%
Level of difficulty (170)	3.2	33%	54%	9%	4%
Route maps (147)	3.2	33%	52%	12%	3%
Rules and regulations (191)	3.2	34%	48%	13%	6%
Signage (187)	3.0	30%	49%	17%	4%
Agency websites (103)	3.0	28%	52%	12%	8%
Guidebooks (129)	3.0	24%	57%	14%	5%
Government agency responses (119)	2.7	21%	40%	27%	12%

Sampling error for these questions ranges from $\pm 6\%$ to $\pm 9\%$

The survey asked respondents for the information sources they use and for their one favorite source:

TABLE 36: Information Sources – Motorized

N = 196	Use Source	Favorite Source
Advice of people	91%	38%
Brochures, maps	86%	26%
Gather information along the way	72%	3%
Visitor centers	65%	7%
Sporting goods stores	59%	4%
Internet	53%	11%
Phone trail management agencies	49%	3%
Books, magazines, newspapers	41%	2%
Clubs, groups, trail organizations	18%	2%
Other	9%	5%

Sampling error for this question is $\pm 6\%$

A majority of respondents have used many of these information sources. A few favorites stand out: people’s advice, brochures and maps, and the internet. Clubs, groups, and trail organizations rank low on both lists, probably because only 10% of motorized trail users report membership in a motorized trail organization or club. In the “other” category of responses, some respondents cite “memory” from having grown up in the area or visited it often as their source of information.

Overall Satisfaction with Motorized Trail Experience

Motorized trail users were asked for their overall evaluation of the motorized trail experience in Oregon. Only six percent say they are not very satisfied, and not one respondent selected “not at all satisfied.” Almost half report they are very satisfied.

Very Satisfied	48%
Somewhat Satisfied	46%
Not Very Satisfied	6%
Not at All Satisfied	0%
Sampling error for this question is $\pm 6\%$	

This positive finding is tempered by the fact that other trail user types, reported in later sections of this report, are much more satisfied with their Oregon trail experience. Of the three types of trail users interviewed, motorized users are by far the least satisfied with their trail experience in Oregon.

Motorized trail users were asked what would increase their satisfaction, many respondents echoed the plea for more motorized trails:

The trails that we have – overall – are very good. We just don't have enough. When you load up and are ready to go you're afraid of getting there and not having a place to park.

I feel they need to enforce the laws a little more. Mostly where I go is BLM land in Deschutes County. In 1995, there was a fire and they plowed the roads and made the roads inaccessible to ATVs. And it's becoming like a garbage dump. People with motorized vehicles are driving on meadows and river banks. A little more enforcement without harassment.

I'd like a better website that'd be easy to access and that you could find the information you need. Save a tree, print it on the web. Location of trails and the varying difficulty of the trails, just general facility information, and where they're open and when they're not.

If you knew where to go, it would be a lot better. You get tired of going to the same place. Sand Lake is so crowded we usually can't find a place to park. And Florence is a four and a half hour drive. I'd like more trails to go to in Eastern Oregon. Or I'd love to go to coast range like out on the Tillamook Burns. I don't know if you can go there or not.

Less structured regulations. Most off road vehicle enthusiasts are looking to get away from structured regulations, and the structured and regulated trails defeat the purpose.

That's basically why I am in the somewhat category, it's better than having nothing, but it's not the ideal. It's not really what you're looking to experience.

I used to have a 4-wheeler, then they changed the 4 wheeler law to load and un-load to change trails. You have to move about 1 mile to change trails. About three years ago the law was changed, and it went too far. Now we have to load and trailer to move to other trails since we can't ride ATV on gravel road/FS road to move to the next loop. I sold the ATV as a result of the law change, it was too much hassle that took away enjoyment.

Motorized Trail Funding Priorities

Motorized trail users were asked to prioritize a variety of funding possibilities related to their sport. Cleaning up litter and trash on the trails and repairing major trail damage are clearly leading priorities, followed by education and safety, better information and signage, and routine trail upkeep. The table below shows the complete results:

N = 195-196	Mean	Very Important	Somewhat Important	Not That Important	A Top Funding Priority ²⁹
Clean up litter and trash	2.7	74%	22%	4%	113
Repairing major trail damage	2.6	67%	28%	5%	117
Providing information, maps, signs	2.4	50%	44%	6%	83
Providing educational, safety, and trail etiquette information	2.4	52%	35%	14%	82
Routine upkeep of existing trails	2.4	49%	47%	5%	80
Developing support facilities	2.3	44%	39%	17%	73
Enforcing rules and regulations	2.3	46%	36%	18%	72
Acquire access land	2.3	49%	34%	17%	65
Developing new trails	2.3	48%	38%	14%	63
Acquire land for new trails	2.2	44%	33%	24%	63
Children's play areas	2.1	41%	27%	32%	63
Providing interpretive information	1.9	19%	55%	27%	31
Trails for competitive trail events	1.8	23%	34%	43%	31
Sampling error for this question is $\pm 6\%$					

²⁹ Number of respondents selecting this answer. Asked only if respondent answered "very important."

Among the “other” funding priorities motorized users mention are availability of gas and water near the trails, increased law enforcement, and more services for children.

Motorized Operator Safety Certification

The survey asked, “I would like to ask your opinion about a potential Oregon state (Off Highway Vehicle/OHV) operator safety certification program. Do you strongly oppose, somewhat oppose, somewhat support, or strongly support a one time OHV operator safety certification?” Results show that a slight majority of motorized trail users favor a motorized operator safety certification.

Support garners 53% of motorized users, opposition 43%. Twenty-six percent oppose the proposal strongly, 17% oppose somewhat, 24% support somewhat, and 29% support strongly. The remaining four percent volunteer that they do not have enough information to comment or are not sure.

TABLE 39: Opinion on Motorized Operator Safety Certification N = 110 ³⁰	
Oppose strongly	26%
Oppose somewhat	17%
Support somewhat	24%
Support strongly	29%
Don't know, not sure, neutral (if volunteered)	4%
Sampling error for this question is ± 9%	

Signage for Motorized Trails

Motorized trail users were asked to rate the importance of signs at different trail locations:

TABLE 40: Importance of Signage – Motorized (1 = Not As Important, 3 = Very Important)				
N = 192-194	Mean	Very Important	Somewhat Important	Not as Important
At trailhead	2.6	73%	17%	9%
Trail junctions	2.6	70%	20%	10%
Along trail	2.3	50%	34%	16%
Stream crossings	2.2	47%	26%	26%
Sampling error for this question is ± 6%				

Motorized trail users rank signage at the trailhead and at trail junctions as most important.

³⁰ This question was added after data collection had started, so a smaller number of respondents were surveyed.

Club Membership – Motorized

Motorized trail users were asked if they belong to a trail club or group.

TABLE 41: Membership in a Club or Group – Motorized	
N = 196	
Yes	10%
No	90%
Sampling error for this question is $\pm 6\%$	

Only 10% of motorized users report membership in a group or club related to their activity. Although this represents 9,800 households in Oregon, as many as another 88,000 households contain no club or group member, reflecting a large potential membership for such organizations.

STATEWIDE MOTORIZED TRAIL GOALS, OBJECTIVES AND STRATEGIES



Goals, Objectives and Strategies for Top Statewide Issues

The chapter focuses on a set of long-range goals, objectives and strategies for the top four Statewide Motorized Trails Issues as identified through the motorized trails planning effort. A brainstorming session during the September 16, 2003 Motorized Trails Steering Committee Meeting produced an initial set goals, objectives and strategies for resolving these top statewide issues.

For the purposes of this plan:

- Goals are general, broadly stated, desirable conditions toward which all non-motorized trail providers in the state should direct their efforts.
- Objectives are the proposed long-range solutions to the issues and the discrete problem areas involved. Objectives do not represent the complete solution to the identified issue, but are aspects of the solution identified during the planning process.
- Strategies are what need to be done to accomplish each objective and identify which specific motorized trail providers would be responsible for the strategies within the state's ten-year planning cycle.

Statewide Motorized Trail Issue A:

Need For New Trails/Managed Riding Areas

Recreation providers and the general public consistently reported in the planning workshops that OHV use on public lands in the state of Oregon has increased substantially in recent years. This growth in OHV participation was also identified in the 2003-2007 Oregon Statewide Comprehensive Outdoor Recreation Plan (SCORP). A comparison of ATV participation estimates from the 1986-1987 Pacific Northwest Recreation Study and the 2002 Oregon Outdoor Recreation Survey showed a 38% statewide increase in annual ATV participation (from 1.6 to 2.2 million annual user occasions).

According to recreation providers and rider groups, there are an insufficient number of designated motorized areas to accommodate growing numbers of Class I (three and four-wheel ATVs), Class II (four-wheel drive vehicles including jeeps, pickups, SUVs) and Class III (dual sport or dirt motorcycles) OHV enthusiasts in Oregon. Recreational providers reported that additional designated motorized areas are needed to proactively address increasing levels of resource impacts associated with high use levels in designated motorized areas.

In recent years, the trend in motorized recreation in Oregon has been that more motorized areas and trails are being closed to use rather than opened. The U.S. Forest Service (USFS) and Bureau of Land Management (BLM) have been and are currently designating developed trail systems for OHV use in areas previously designated as generally open to cross-country travel. Although this may help reduce resource impacts and user conflict and improve riding conditions, the development of designated trail systems often results in an overall reduction in total miles of OHV trails. In cases where closures and management strategies have reduced the inventory of OHV trails, the result has often been increased pressure on other trails and riding areas and increased violation of posted closures.

Snowmobile club members also reported a strong need for more organized and maintained snowmobile trails to satisfy a growing user base. This growth in snowmobile use was also identified in the SCORP plan with a 97% statewide increase in annual snowmobile participation (from .2 to .4 million annual user occasions). Recreation providers further confirmed this need by repeatedly stating that Sno-Park areas are at overflow capacity during peak-use winter weekends and holidays.

In addition, recreation providers reported a substantial increase in off-highway 4-wheel drive vehicle use in the state. According to recreation providers, this use has resulted in trail damage and resource impacts. Drivers are looking for opportunities to test their vehicles and driving skills. To address this existing need and reduce impacts on sensitive lands, there is a need for trails and play areas specifically designed for challenging 4-wheel drive use. Such trails should be designed to accommodate a

wide range and variety of vehicle types (from Hummers to Suzuki Samurai) and to accommodate a range of vehicle widths, lengths and technical driving areas for a range of driving capabilities.

Agency and riding club representatives stated that there are a growing number of OHV enthusiasts in the Willamette Valley—but few nearby riding opportunities available. A similar shortage of riding opportunities in reasonably close proximity to metropolitan areas was reported in a number of regions throughout the state. Currently, Oregonians are traveling considerable distances to access riding opportunities. Lack of close-to-home riding areas increases illegal riding or trespass to closed areas. As a result, there is a need to develop new trails and managed OHV riding areas within reasonable day-use distance of urban areas.

Finally, recreation providers and members of the general public reported that there is a need for more riding opportunities on privately owned properties in the state. They stated a need to explore recreation opportunities on private timberlands and work with private landowners for access. In addition, OHV vendors and manufacturers need to take greater responsibility in providing motorized riding areas and facilities in the state. Local recreation providers such as County Recreation & Park Departments and Special Park & Recreation Districts should be encouraged to pursue motorized trail development as a component of their overall economic development strategies (e.g. Morrow and Coos County OHV Riding Areas).



Goal #1:

Increase the supply of high-quality OHV opportunities for all trail users, throughout Oregon.

Objective 1: Provide additional public or privately owned OHV recreational areas.

Strategies/Actions for Addressing Objective 1:

- Develop criteria for evaluating potential OHV riding areas which includes identifying recreational need, limitations of the OPRD-administered ATV program and process, environmental concerns (such as soils, vegetation, habitat, wildlife, and cultural and historic resources), infrastructure needs (roads and facilities) and social constraints (urban growth patterns and projections) and land use compatibility.
- Identify potential sites for appropriate public or privately owned and managed OHV riding areas.
- Develop methods to gather comprehensive stakeholder input from OHV groups, environmental organizations, private landowners, and local and federal agencies early

in the process of identifying potential OHV areas.

- Develop case studies that showcase the planning and development of well-designed and managed OHV areas on both public and private lands.
- Evaluate existing and proposed Sno-Park and OHV staging areas for all-season, shared use to maximize the value of facility investments.

Objective 2: Greater emphasis on developing OHV riding opportunities on private and local government land.

Strategies/Actions for Addressing Objective 2:

- Additional funding priority for development of OHV riding areas on private, county or local recreation provider lands.
- Explore recreation opportunities on private lands and work with private landowners for motorized access.
- Encourage OHV vendors and manufacturers and the private sector to take a greater role in providing motorized riding areas, facilities and services.
- Encourage public/private partnerships in providing OHV riding areas, facilities and services.

Objective 3: Develop additional OHV opportunities in reasonably close proximity to communities and urban areas.

Strategies/Actions for Addressing Objective 3:

- Inventory and evaluate appropriate public or privately owned OHV sites for high-intensity motorized use within proximity of urban areas using adopted evaluation criteria adopted under Objective 1.
- Provide legal corridors or easements for OHV travel between communities, adjacent trail systems and public lands.
- Identify existing underdeveloped/unmanaged OHV dispersed use areas appropriate for development into formal and appropriately managed OHV riding areas. After development, new managed OHV riding areas should be listed in *The Official Guide To Oregon Off Highway Vehicle Recreation*³¹.
- Provide funding priority for the completion of well-designed and well-managed OHV riding areas and trail systems.

Objective 4: Develop additional riding opportunities at existing OHV recreational areas as identified in *The Official Guide to Oregon Off Highway Vehicle Recreation*.

Strategies/Actions for Addressing Objective 4:

³¹ Map published by the Oregon Parks and Recreation Department.

- Inventory all OHV trails at the 40 OHV areas included in the Oregon OHV Guide.
- Evaluate the potential for increasing user capacity at each of these 40 OHV riding areas.
- Provide funding priority for agencies proposing to increase user capacity at the 40 OHV riding areas where such a need exists.
- Assemble and disseminate information to OHV area managers on subjects essential for effective management and development of OHV areas.

Objective 5: Increase the diversity of OHV opportunities.

Strategies/Actions for Addressing Objective 5:

- Plan and develop additional children's riding (play) areas at OHV staging areas or campgrounds.
- Plan, design and develop additional OHV "challenge opportunities."
- Develop or renovate trail systems to diversify the range of riding opportunities available to accommodate enthusiasts of all experience levels.
- Provide OHV opportunities in a wide range of Recreational Opportunity Spectrum (ROS) setting classification types, from Rural to Semi-Primitive Motorized.
- Plan, design and develop trails/areas specifically for high-challenge and technical 4-wheel drive use, and including features such as rock crawls.
- Increase winter Sno-Park capacity where need has been identified.

Statewide Motorized Trail Issue B:

Need For Regional Interagency Coordination/Cooperation in Trail Planning & Management

Recreation providers and the general public consistently reported that successful OHV facility development and management relies on good coordination and communication between OHV organizations, federal, state, and local agencies, tribal governments and other stakeholders. In many regions, providers and user groups stressed the need for regional coordination and information sharing between agencies for motorized trail planning, operations and management.



Regional coordination and communication should also encourage:

- adopting consistent design, construction and maintenance standards;
- developing and implementing directional and regulatory signing consistency;
- developing regulatory and law enforcement consistency;
- sharing limited trail maintenance resources and OHV equipment;

- taking a regional approach, rather than having each agency working independently, to more effectively address riding capacity issues;
- taking a regional approach, rather than having each agency working independently, to more effectively address user conflict (e.g. OHV users and hunters);
- a regional approach, rather than having each agency working independently, to more effectively develop and distribute riding information and other promotional materials; and
- connecting existing trails and riding areas where opportunities exist.

Managing agencies should strive to provide users with seamless and coherent trail experiences that are not disrupted by administrative boundaries.

Goal #2:

Promote coordination and cooperation between public agencies, private organizations and motorized trail users.

Objective 1: Develop a regional approach to motorized trail planning.

Strategies/Actions for Addressing Objective 1:

- Establish regional OHV working groups (e.g. COHVOPS), including representatives from OHV organizations, federal, state, and local agencies, tribal governments and other stakeholders, to work in cooperation with managing agencies in trail planning, funding and design to facilitate the

identification of multi-jurisdictional priorities.

- Develop multi-jurisdictional regional OHV plans.
- Involve OHV organizations, motorized trail enthusiasts and other interested stakeholders in the development of regional OHV plans.
- Provide additional scoring points in the ATV Grant Program for grant requests satisfying priority needs identified through a regional committee process.
- Create corridors to link existing OHV trails and riding areas.

Objective 2: Standardize statewide OHV management practices.

Strategies/Actions for Addressing Objective 2:

- Coordinate the standardization of rules and regulations across management boundaries.
- Review and revise any state laws or agency regulations or rules to create consistency in the regulation of motorized recreation (e.g. gravel road use).
- Use design and construction standards included in the publication, *Park Guidelines for Off-Highway Vehicles: A Resource Guide to Assist in the Planning, Development, Enhancement and Operation of OHV Recreation Facilities*³².

³² Fogg, G. E. In Association With The National Off-Highway Vehicle Conservation Council. (2002). *Park Guidelines for Off-Highway Vehicles. A Resource Guide to Assist in the Planning, Development, Enhancement*

- Develop directional and regulatory signing standards.
- OPRD will provide coordination between the agency, other agencies and non-agency stakeholders in the implementation of the statewide motorized trails plan.
- Promote communication and information sharing through websites, OHV management workshops or other public forums.

Statewide Motorized Trail Issue C:

Need For User Education/Training (Regulatory & Safety Information)

Recreation providers and the general public consistently reported a need for additional user education and safety training in Oregon for youth involved with or interested in motorized recreation (including Off-Highway Vehicle and snowmobile riding). Recreation providers reported a strong need for education to help develop an appreciation and respect for the natural resource base. They recommended that such educational efforts be incentive based, fun, and area specific to ensure youth participation.

Recreation providers and the general public expressed a need for trail user education, including existing programs such as Tread Lightly! and Right Rider and education on riding regulations, shared use and information resources currently not available. In addition, motorized providers,

and Operation of OHV Recreation Facilities. National Recreation and Park Association.

retailers and enthusiasts need to be better informed on who needs safety training. Also reported was a need for more safety training facilities, instructors, and user-friendly training opportunities (times and locations). Recreation providers strongly recommended that training classes be provided on a prearranged schedule, throughout the year, to ensure that the riding public has regular and dependable access to training opportunities. A need was also expressed for providing additional incentives for retaining instructors.

Recreation providers expressed a need for better coordination with the Oregon Department of Fish and Wildlife (ODF&W) to address the high degree of OHV use violation that occurs during the hunting season. Knowledge and compliance of motorized regulations are poor among hunters who use OHVs solely during the hunting season. Problems include illegal cross-country travel, not purchasing an ATV sticker, trespass in closed areas, operating on roads closed to OHV travel and improper handling of weapons.

OHV user groups are very concerned about the negative publicity directed towards the entire user community as a result of the actions of these violators. As a result, there is a need to better educate hunters on existing OHV rules and regulations. A suggestion was made that when hunters purchase a tag from ODF&W that, in addition to hunting regulations, they receive information about OHV rules and regulations.

Goal #3:

Educate and inform Oregon's trail users on the proper use of, and user safety and the

environmental impacts associated with motorized recreation.

Objective 1: Increase the number of OHV users who are educated and trained in OHV operation, safety, rules and regulations and user ethics.

Strategies/Actions for Addressing Objective 1:

- Develop a comprehensive statewide OHV education and training program.
- Develop a statewide organizational network to promote and conduct OHV training and outreach programs.
- Develop additional OHV training facilities where need has been identified.
- Review the adoption of mandatory OHV training requirements.
- Work with manufacturers and retailers to provide educational information (e.g. videos, brochures and maps) to users at point of sale.

Objective 2: Reduce the number of personal injury accidents involving recreational OHV use.

Strategies/Actions for Addressing Objective 2:

- Develop systematic methods to track OHV-related accidents and injuries.
- Develop systematic methods to track OHV-related law enforcement citations issued.
- Identify specific law enforcement and safety training strategies to

reduce the number of OHV-related accidents (see Objective 1 above).

- Establish a forum to review site and facility design to minimize existing/potential safety problems.
- Reduce safety problems associated with overcrowding through construction of additional riding areas, additional facilities, and site design.
- Evaluate laws and regulations promoting user safety, and revise as necessary.
- Provide funding priority for safety-related education and enforcement at riding areas with high numbers of OHV-related accidents.
- Provide OHV safety training tailored specifically for Oregon riders.

Objective 3: Educate hunters on existing OHV rules and regulations.

Strategies/Actions for Addressing Objective 3:

- Develop a teaching module on OHV safety and ethics for inclusion in ODF&W's hunter safety program.
- Add an OHV rules and regulations section to all ODF&W hunter guides (tag program).
- Promote and support coordination among all agencies to reduce hunting season OHV violations.
- Provide training opportunities for ODF&W game enforcement officers on current OHV rules and regulations.

Statewide Motorized Trail Issue D:

Concern About Trail Closures/Loss of Riding Opportunities

A number of private landowners have closed riding areas in Oregon in recent years due to personal liability, increasing vandalism and resource impacts. Trails and riding areas on public lands have been closed as a result of resource protection issues associated with National Environmental Policy Act (NEPA) regulatory compliance (e.g. Threatened and Endangered Species, cultural and natural resource protection, protection of plants and wildlife, soil and water), and conflicts with other recreational users. According to recreation providers and user groups, such trail and area closures are squeezing more and more use onto the state's 40 OHV riding areas, resulting in greater resource impacts and unsafe conditions.

Several potential strategies were mentioned in the public workshops to help address this problem, including:

- Where feasible, rather than close/eliminate OHV trails as a result of resource damage, OHV trails should be either repaired or rerouted to minimize resource damage. At a minimum, these trails should be studied to identify design strategies to minimize resource damage.
- Consider recreational use of roads scheduled for abandonment on federal lands.
- Evaluate and, where appropriate, reduce the amount of time that motorized riding areas are closed

due to fire restrictions (e.g. Morrow County's fire management plan).

In addition, OHV participation continues to rise rapidly in the U.S. and in the state. According to a recent BLM national strategy report³³, "This popularity is evidenced by the fact that recreational enthusiasts are buying motorized OHVs at a rate of 1,500 units per day nationwide, with nearly one-third of them doing so as first-time buyers of such vehicles." Similar purchase patterns are also occurring in the state of Oregon. During a period from 1998 to 2003, the number of registered off-highway vehicles in Oregon has increased by approximately 130% (from 25,525 registered OHVs in 1998 to 58,040 in 2003).

According to the BLM report, "Motorized OHV use is now firmly established as a major recreational activity on BLM-administered public lands." Despite differing perspectives of OHV enthusiasts, non-motorized recreationists and environmentalists over the legitimacy of motorized OHV use on public lands—it is evident that motorized recreation is here to stay. It is also evident that, in addition to improving OHV management, recreation providers must do a better job in educating and informing the general public of the legitimate need of a growing number of OHV enthusiasts to have access to high-quality riding opportunities throughout the state.

³³ Bureau of Land Management. (2001). National Management Strategy for Motorized Off-Highway Vehicle Use on Public Lands. U.S. Department of the Interior Bureau of Land Management.



Goal #4:

Provide for motorized recreation on public and private lands.

Objective 1: Limit the loss of riding opportunities on public and private lands.

Strategies/Actions for Addressing Objective 1:

- Reduce unwarranted closures through comprehensive review/input/analysis by all stakeholders.
- Work with federal, state and local agencies to create more opportunity for public input in the road closure process.
- Work with private landowners to maintain access to private motorized riding areas.
- Develop case study examples that showcase successful OHV development/management on private lands.
- Reduce the amount of time that motorized riding areas are closed due to fire restrictions.

Objective 2: Improve the public image of OHV use and management in the state.

Strategies/Actions for Addressing Objective 2:

- Develop a public relations strategy for reinforcing the legitimate need of OHV enthusiasts to have access to high-quality riding opportunities throughout the state.
 - Inform the public of OHV development/management success stories in the state.
 - Work with Sports Utility Vehicle (SUV) and OHV manufacturers and dealers to stop the use of product development and marketing strategies (e.g. advertisements showing SUVs running through streambeds and sensitive alpine areas and the manufacture and marketing of after-market products resulting in increased OHV decibel levels) which reinforce a negative public image of OHV use on public lands.
 - Ensure compliance with current sound limits through education, enforcement, and working with OHV retailers.
- As soon as possible, revise appropriate Oregon Administrative Rules pertaining to Motorized Trail use to establish a statewide maximum sound limit of 96 decibels for Class I, II and III Off-Highway Vehicles in Oregon.
 - Within the plan's 10-year timeframe, revise appropriate Oregon Administrative Rules pertaining to motorized trail use to establish statewide maximum sound limit of 93 decibels or lower for Class I, II and III Off-Highway Vehicles in Oregon.

All-Terrain Vehicle Grant Program Evaluation Criteria

Note: The following evaluation criteria are intended for use in evaluating acquisition, development and planning project proposals.

Technical Review - Application Completeness

As part of the All-Terrain Vehicle (ATV) grant evaluation process, the Oregon Parks and Recreation Department (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 projects submitted to OPRD for grant funding make it through the technical review, they will then be scored by ATV Account Allocation Committee (ATV-AAC) 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, trails plan steering committee members, and trail user survey respondents. 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-AAC member scores. The highest possible score for a project will be 100 points. (See Potential ATV Program Evaluation Criteria Point Summary on the next page 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 Evaluation Criteria Point Summary

TABLE 42: ATV Grant Program Evaluation Criteria Point Summary	
CRITERIA TYPE	MOTORIZED
	Potential Points
TECHNICAL REVIEW	
1. Compliance Criteria	0
ATV-AAC MEMBER EVALUATION CRITERIA	
2. Readiness to Proceed	4
3. Matching Shares	5
4. Close-To-Home Opportunities	6
5. Trail Maintenance	10
6. Top Statewide Trail Issues	12
7. Local Needs and Benefits	10
8. Motorized Trail Opportunities	6
9. Class II (4x4) Trail Opportunities	5
10. Economic Development Opportunities	4
11. Motorized Trail "Destination Area"	6
12. Motorized Trail Design & Management	7
13. Project Urgency	5
14. Discretionary Committee Member Criteria	20
TOTAL POTENTIAL POINTS	100

Staff Evaluation Criteria

1. Compliance Criteria (0 Points)

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 disqualification of consideration for new grant assistance 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 Account Allocation Committee Member Evaluation Criteria

2. Readiness To Proceed (4 Points)

OPRD intends to ensure that available ATV grant dollars are used in a timely manner once funding is awarded to a project sponsor.

A. 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
- Construction plans
- Archaeological surveys

_____ points awarded (0-4 points)

(The rating team will determine a value from 0-4 points based on the information provided by the applicant.)

B. Acquisition Status (For acquisition projects only)

Project sponsor has demonstrated what it will take for their particular trail-related land acquisition to be completed in a timely manner including items such as:

- Completed appraisal
- Preliminary Title Report
- Level 1 or higher Environmental Assessment
- Proof of willing seller or donor

_____ points awarded (0-4 points)

(The rating team will determine a value from 0-4 points based on the information provided by the applicant.)

C. 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

(The rating team will determine a value from 0-4 points based on the information provided by the applicant.)

3. Matching Shares (5 Points)

Priority points will be provided to the extent that the applicant match the ATV grant with contributions from its own cash and/or in-kind services.

For evaluating project proposals from public-sector applicants

- The applicant meets:
 - 20 to 30% of the project’s value (1 point)
 - 30.1 to 40% of the project’s value (2 points)
 - 40.1 to 50% of the project’s value (3 points)
 - 50.1 to 60% of the project’s value (4 points)
 - Over 60% of the project’s value (5 points)

For evaluating project proposals from non-profit applicants

- The applicant meets:
 - Over 20% of the project’s value (5 points)

_____ points awarded (0-5 points)

4. Close-To-Home Trail Opportunities (6 Points)

The 2004 Oregon Statewide Trail User and Non-motorized Boater Survey identified that over half of motorized trail users travel more than 40 miles to enjoy their favorite trail activity, and one-fifth travel more than 100 miles. The survey also reports that lack of time and lack of close by riding opportunities are the top two reasons why motorized trail users do not use trails as much as they wanted. A project sponsor that develops a close-to-home motorized trail project will receive up to 6 priority points.

- The applicant should describe how their project is intending to provide close-to-home motorized trail opportunities including information such as driving distances from nearby communities and populations served.

_____ points awarded (0-6 points)

(The rating team will determine a value from 0-6 points based on the information provided by the applicant.)

5. Trail Maintenance (10 Points)

A. Commitment to Long-Term Maintenance.

Trail maintenance was identified as the top funding priority for all trail user groups in the 2004 Oregon Statewide Trail User and Non-motorized Boater Survey.

- The applicant should carefully describe how they plan to continue trail operation and maintenance after the project is completed. List maintenance requirements (including the level of annual maintenance required for the trail) and strategies to be used. Also describe the degree of commitment by reporting on such items as on-going funding, partnerships with other agencies, or volunteer maintenance.

_____ points (0-10 points)

*Note: Please provide commitment from sources other than the ATV Grant Program.

(The rating team will determine a value from 0-10 points based on the information provided by the applicant.)

6. Top Statewide Trail Issues (12 Points)

The Oregon Trails 2005-2014: A Statewide Action Plan involved representatives from 56 public-sector provider organizations (including representatives from federal, state, county, and municipal agencies, Park and Recreation Districts, Ports, and Native American Tribes) and many citizen and interest groups in the process of identifying top statewide trail issues. The following trails plan criteria are based on this public input process.

A. Statewide Motorized Trail Issues

Statewide trail issues were identified during the current trails planning process. Project proposals addressing statewide trail issues will receive additional priority points. The top statewide motorized trail issues are included below.

Statewide Motorized Trail Issues

Issue A: Need for new trails/managed riding areas.

Issue B: Need for regional interagency coordination/cooperation in trail planning and management.

Issue C: Need for user education/training (regulatory and safety information).

If the motorized trail project addresses:

0 statewide motorized trail issues.....	0 points
1 statewide motorized trail issue	4 points
2 statewide motorized trail issues.....	8 points
3 statewide motorized trail issues.....	12 points

Points awarded: _____ (0-12 points)

Note: No points are awarded for statewide Motorized Trail Issue D: Concern About Trail Closures/Loss of Riding Opportunities.

7. Local Needs And Benefits Criteria (10 Points)

A. Comprehensive Planning

Project sponsors are strongly encouraged to develop project applications that meet high priority needs of the intended clientele. The assessment of these needs should be based upon coordinated, long-range planning.

Priority points are awarded to projects satisfying priority needs, as identified in a current comprehensive local plan or recreation master plan, county or regional master plan, trail system plan or land use/management plan.

_____ points awarded (0 or 5 points)

Note: The local planning document must be adopted/approved by the applicable governing body.

(5 points for projects identified in a current plan, 0 points for all other projects.)

B. Public Involvement

Involving the public throughout a trail development project can be the cornerstone for future success. Public involvement is a means of building support and developing a constituency and a partnership for the development effort.

The extent to which public involvement through public meetings/ workshops, open houses, interviews, questionnaires, and so forth were used in the long-range comprehensive planning process to identify public support for this trail 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. Motorized Trail Opportunities (6 Points)

A. Need for riding opportunities outside of federal lands

According to recreation providers and members of the general public, there is a need for more riding opportunities on lands outside of federal ownership. They stated a need to explore motorized recreation opportunities on private timberlands, state or local government land, and work with private landowners for access.

The motorized trail project will develop riding opportunities on private, state, county or local recreation provider land.

_____ points awarded (0 or 3 points)

Note: If funded, riding opportunities on private land must be open to the general public.

(3 points for projects located outside of federal lands, 0 points for projects on federal lands.)

B. Need to maximize the sustainable carrying capacity at existing managed riding areas

In recent years, the trend in motorized recreation in Oregon has been that more motorized areas and trails are being closed to use rather than opened. The result has been increased pressure on other trails and riding areas and increased violation of posted closure. As a result, there is a need to develop additional riding opportunities at existing OHV recreation areas identified in The Official Guide to Oregon Off Highway Vehicle Recreation³⁴.

Priority points are awarded to design, management and marketing projects intending to maximize the sustainable carrying capacity at the 40 OHV riding areas where such a need exists.

_____ points awarded (0-3 points)

(The rating team will determine a value from 0-3 points based on the information provided by the applicant.)

³⁴ A listing of managed OHV riding areas in the state is available at the following website:
<http://atv.prd.state.or.us/places.php>

9. Class II (4x4) Trail Opportunities (5 Points)

The 2003-2007 Oregon SCORP demand and needs analysis and regional issues workshops identified a need for additional Class II trails (for 4-wheel drive vehicles such as jeeps, pickups, SUV's) in the state. This need was also reinforced during the trails planning regional issues workshops. Class II trails should be designed to accommodate a wide range and variety of vehicle types (from Hummers to Suzuki Samurai) and to accommodate a range of vehicle widths, lengths and, where appropriate, technical driving areas for a range of driving capabilities.

Priority points are awarded for developing Class II trails.

_____ points awarded (0-5 points)

(The rating team will determine a value from 0-5 points based on the information provided the applicant.)

10. Economic Development Opportunities (4 Points)

The findings from the Oregon State University report entitled "The 1999 Oregon Off-Highway Vehicle User Survey" identified that Off-Highway Vehicle recreation contributed an estimated \$120 million and 1,809 jobs in the Oregon economy in 1999. Trip expenditures by Oregonians and out-of-state visitors include gas and oil, food and beverages, lodging, rentals and other retail purchases in the region of the state where the OHV activity occurred.

OPRD would like to encourage the development of motorized trails in areas of the state designated as economically distressed by the Oregon Economic & Community Development Department. Such areas could greatly benefit from the trip expenditures and job creation associated with Off-Highway Vehicle recreation.

Priority points are awarded for developing OHV trail opportunities in economically distressed counties and nearby economically distressed cities (see listing of counties and cities on the following page).

_____ points awarded (0 or 4 points)

(4 points for project sponsors with a project in an economically distressed county or nearby economically distressed city, 0 points for all other project sponsors.)

Economically Distressed Counties in Oregon		Economically Distressed Cities in Oregon			
Baker	Klamath	City	County	City	County
Columbia	Lake	Albany	Benton	Jefferson	Marion
Coos	Linn	Monroe	Benton	Mill City	Marion
Crook	Malheur	Estacada	Clackamas	Mount Angel	Marion
Douglas	Morrow	Johnson City	Clackamas	Scotts Mills	Marion
Gilliam	Sherman	Seaside	Clatsop	Stayton	Marion
Grant	Umatilla	Warrenton	Clatsop	Woodburn	Marion
Harney	Wallowa	Port Orford	Curry	Falls City	Polk
Hood River	Wasco	Butte Falls	Jackson	Independence	Polk
Jefferson	Wheeler	Eagle Point	Jackson	Monument	Polk
Josephine		Gold Hill	Jackson	Monmouth	Polk
		Phoenix	Jackson	Willamina	Polk
		Rogue River	Jackson	Garibaldi	Tillamook
		Talent	Jackson	Tillamook	Tillamook
		Cottage Grove	Lane	Elgin	Union
		Creswell	Lane	La Grande	Union
		Florence	Lane	North Powder	Union
		Lowell	Lane	Summerville Town	Union
		Oakridge	Lane	Union	Union
		Springfield	Lane	Unity	Union
		Veneta	Lane	Cornelius	Washington
		Westfir	Lane	Forest Grove	Washington
		Aumsville	Marion	Gaston	Washington
		Detroit	Marion	Amity	Yamhill
		Gates	Marion	Dayton	Yamhill
		Gervais	Marion	Layfayette	Yamhill
		Hubbard	Marion	McMinnville	Yamhill
		Idanha	Marion	Sheridan	Yamhill

11. Motorized Trail “Destination Area” (6 Points)

Priority points will be awarded for projects intending to develop motorized trail destination areas. Destination areas are designed, developed and operated to primarily serve the specific needs and desires of OHV enthusiasts.

Factors considered in identifying motorized trail destination areas include miles of trail, acres of sand/open riding area, scenic qualities, ease of access, onsite and nearby facilities, quality of

trails, seasonal/local weather conditions, travel distances and the amount of use. Motorized trail destination areas often include additional motorized riding facilities such as children’s play areas, motocross tracks, hill climbs, rock crawls and special event facilities. Facilities like restrooms, camping, water, and in some cases OHV parts stores are provided. Finally, public services such as law enforcement, first aid, and search and rescue are provided.

The Oregon Parks and Recreation Department has identified a list of current motorized trail destination areas in the state. Current motorized trail “destination areas” in Oregon include the Tillamook OHV Area, Central Oregon (including East Fort Rock and Millican Valley), Morrow County Trails, Winom Frazier, Oregon Dunes National Recreation Area, Sand Lake Recreation Area, Prospect and John’s Peak.

Priority points will be awarded for motorized trail projects that are in a current motorized trail destination area or intending to develop a new motorized trail destination area. If the applicant is proposing the development of a new motorized trail destination area not included in the above list, they should clearly state the reasons why the area should be considered by the ATV-AAC as a motorized trail destination area.

_____ points awarded (0 or 6 points)

(6 points for project sponsors with a project in a motorized destination area or proposed destination area, 0 points for all other project sponsors.)

12. Motorized Trail Design And Management (7 Points)

Increasing use levels often results in resource impacts on motorized trails and damage to trail facilities. Resource damage can be proactively prevented or minimized through innovative and sustainable trail and facility design and management practices.

Priority points will be given to projects demonstrating trail design and management practices which serve as a means to conserve and maintain high quality or sensitive natural or cultural resources in the project 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.

The National Park Service describes a sustainable trail as follows³⁵.

A Sustainable Trail:

- Supports current and future use with minimal impact to the area’s natural systems.
- Produces negligible soil loss or movement while allowing vegetation to inhabit the area.
- Recognizes that pruning or removal of certain plants may be necessary for proper maintenance.

³⁵ National Park Service, Rocky Mountain Region, January 1991.

- Does not adversely affect the area’s animal life.
- Accommodates existing use while allowing only appropriate future use.
- Requires little rerouting and minimal long-term maintenance.

In addition, specific examples of sustainable efforts are included on the OPRD grant website at: <http://egov.oregon.gov/OPRD/GRANTS/docs/2005.sustainability.pdf> under the heading Sustainability in OPRD Grant Programs.

The project sponsor should describe how the motorized project results in a well designed, managed and sustainable OHV riding area or trail system. The applicant should also address specific strategies for “sound” (decibel level) management.

_____ points awarded (0-7 points)

(The rating team will determine a value from 0-7 points based on the information provided by the applicant.)

13. Project Urgency (5 Points)

The ATV Account Allocation Committee is aware that timing can often be a critical factor in the acquisition and operation of motorized recreation areas. 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, meeting project completion deadlines, public health and safety concerns or impacts on cultural and natural resources.

For trail projects, land acquired with ATV grant funding must be directly related to the provision of motorized recreation. As such, park and open space acquisitions are not eligible for ATV grant funding.

Note: 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 (0 or 5 points)

(5 points for project sponsors with an urgent trail project, 0 points for all other sponsors.)

14. Discretionary Committee Member Criteria (20 Points)

The ATV Account Allocation Committee 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-AAC members may award the project additional points based upon their subjective evaluation³⁶ of key project considerations included in the list below.

- 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 their 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.
- Mixed-Use Trails: Project sponsors should provide evidence that the project will support Class I, II and III riding opportunities serving a wide range of abilities including the handicapped and a range of skill levels.
- 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 on the following pages.

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 (0-20 points)

³⁶ This list is not intended to be a complete list of all discretionary criteria to be considered by ATV-AAC members. Other considerations could include special needs, project presentation and superior leverage of funding and partnership.

REGIONAL MOTORIZED TRAIL ISSUES

Northwest Region: Includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Lincoln, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lane and Benton Counties.

Issue A: Need for adequate and consistent information resources.

Issue B: Need for new trails including loop trails.

Issue C: Need to better manage for trail-related environmental impacts and resource protection through careful selection of riding area locations, planning, design, public education and understanding the capacity limits of motorized areas.

Southwest Region: Includes Coos, Curry, Josephine, Jackson, and Douglas Counties.

Issue A: Need to increase motorized trail and trailhead capacity within the region by developing motorized recreation opportunities on private timberlands and designating trails/areas for motorized use including trails currently used in that manner.

Issue B: Need for increased user education (rules, regulations, restrictions, environmental) and safety training in the region.

Issue C: Need to provide managed motorized areas.

North Central Region: Includes Wasco, Sherman, Gilliam, Morrow, Umatilla, Jefferson, Wheeler, Deschutes and Crook Counties.

Issue A: Need to use snow park areas for OHV use during summer months.

Issue B: Need to repair or reroute OHV trails to minimize resource damage.

Issue C: Need for a wide variety of Class II (4-wheel drive, jeep, SUV) riding opportunities—particularly technical riding areas.

South Central Region: Includes Klamath and Lake Counties.

Issue A: Need for more designated motorized areas.

Issue B: Need for interagency cooperation for developing a seamless long-range trail system across jurisdictional boundaries.

Issue C: Need for increased management (safety, environmental and regulatory) of OHV riding areas.

Northeast Region: Includes Wallowa, Union, Grant and Baker Counties.

Issue A: Need for standardized trail signage to provide consistency and continuity between riding areas.

Issue B: Need for additional motorized camping areas and related facilities (staging areas, restrooms and amenities) to minimize damage to existing riding areas.

Issue C: Need for more motorized trails throughout the region—especially in Baker, Pine and Wallowa Valley Ranger Districts.

Southeast Region: Includes Harney and Malheur Counties.

Issue A: Need to consider OHV use of roads proposed for closure or abandonment and to review recreational use on roads previously closed or abandoned.

Issue B: Need for designated and managed OHV areas for ATVs and motorcycles.

Issue C: Need for safety information and training for young adults (over 15 years of age) who are beginning to ride snowmobiles.

NON-MOTORIZED TRAILS PLAN

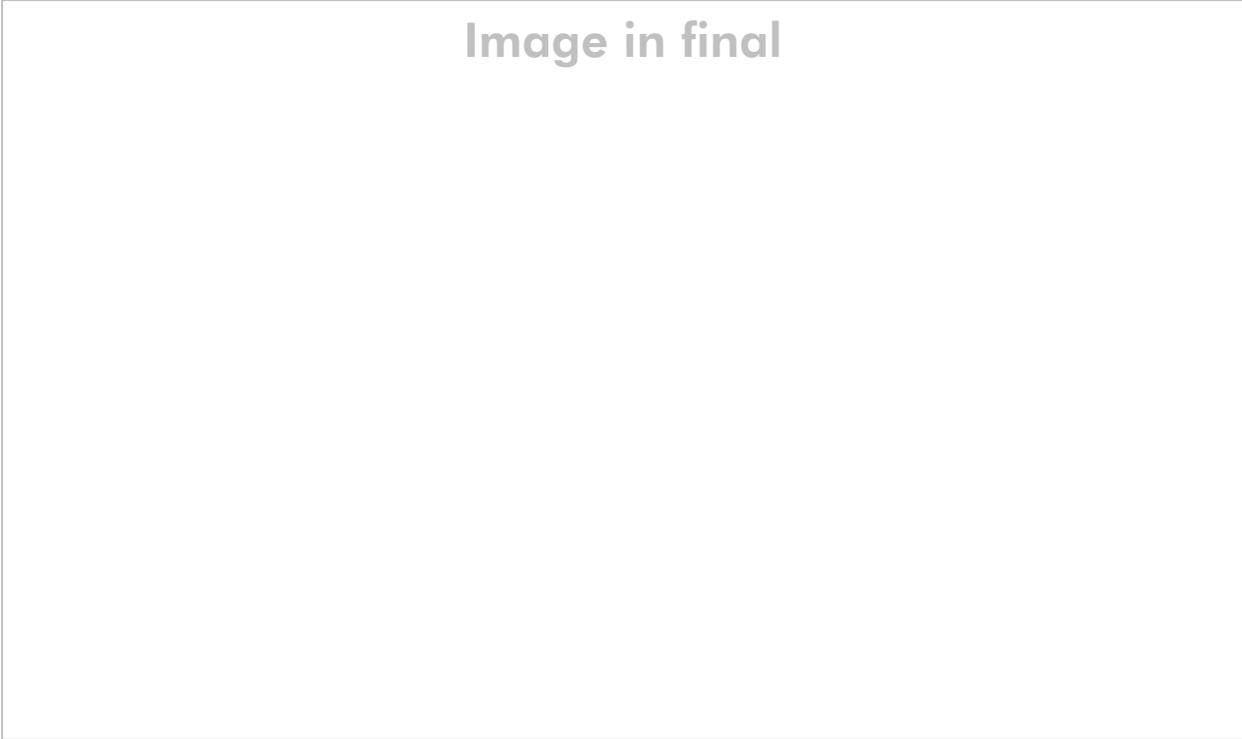


TABLE OF CONTENTS

Introduction	97
Benefits Of Non-motorized Trails	100
1. Economic Benefits.	100
2. Health and Fitness Benefits.	106
3. Social Benefits.	107
4. Educational Benefits.	108
5. Recreation Benefits.	108
6. Environmental Benefits.	108
7. Preserving Our History and Culture.....	109
Identification of Regional and Statewide Non-motorized Trails Issues	110
The Public Workshop Process.....	110
List Of Top Regional Non-Motorized Trails Plan Issues	111
Determining Top Statewide Motorized Issues	114
2004 Oregon Statewide Non-motorized Trail User Survey	117
Research Background	117
Survey Results	117
Goals, Objectives And Strategies For Top Statewide Trail Issues and Concerns	132
Statewide Non-motorized Trail Issue A:Need For Trail Connectivity	132
Statewide Non-motorized Trail Issue B:Need For Trail Maintenance	135
Need For More Trails In Close Proximity To Where People Live	137
Statewide Non-motorized Trail Concern 2:Need For Additional Non-motorized Trails.....	140
Statewide Non-motorized Trail Concern 3:Need To Consider Public Ways (Roads, Railroads, Utility Corridors) Proposed For Closure Or Abandonment For Non-motorized Trail Use	141
Statewide Non-motorized Trail Concern 4:Need For Trail Accessibility Information.....	142
Statewide Non-motorized Trail Concern 5:Need For Regional Interagency Coordination/Cooperation In Trail Management	143
Next Steps.....	144
Recreational Trail Program Evaluation Criteria	147
Technical Review - Application Completeness	147
Project Priority Scoring System.....	147
Recreational Trail Program Evaluation Criteria Point Summary	148
OPRD Technical Review	148
Recreational Trails Advisory Committee Member Evaluation Criteria.....	149

Introduction

The Oregon Parks and Recreation Department (OPRD) was given responsibility for recreation 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 1971, the Oregon legislature created the Oregon Recreation Trails Program and the Oregon Recreation Trails Advisory Council (ORTAC). This seven-member council, appointed by the Parks and Recreation Commission, advises the Department and the Commission on statewide trail matters that come before the department. They also make recommendations to other trail managing agencies and non-governmental groups. In 1979 the Council approved the first state trails plan. Eight years later, in 1987, the Council adopted the following Mission and Goals Statement:

The Advisory Council will:

- Take the lead in establishing a statewide system of interconnected trails;
- Provide a public forum for trail issues;
- Publicize the value of trails and the need for public involvement in planning, developing, and maintaining trails;

- Work with land management agencies at the inception of trail plans as well as at the review of final drafts;
- Contribute information to state and federal budgeting plans for trails, and monitor the budgeting process;
- Promote private funding, development, and maintenance of public trails;
- Coordinate trails plans with adjacent states;
- Support volunteer groups. Help them coordinate trail development and maintenance with trail management agencies;
- Promote use of trails by providing maps and information to the public; and
- Periodically revise the Oregon Recreational Trails Plan.

The Oregon Recreation Trails Plan has been in place since 1995. Although many of the findings included in this plan are still relevant, considerable change has occurred on Oregon’s recreational trails in the last 9 years including a 13% state population increase between 1995 and 2003 and increases in recreational trail use. As a general rule, planning documents of this type have a usable shelf life of 10 years. As a result, there was a need to update the trails plan for non-motorized trail uses.

The purpose of this non-motorized trails planning effort was to provide information and recommendations to guide OPRD and other agencies in Oregon in their management of non-motorized trail resources. The plan is designed to:

- Assess the needs and opinions of Oregon’s citizens as they relate to non-motorized trail opportunities and management;
- Establish priorities for expenditures from the Federal Recreational Trails Grant Program;
- Develop strategic directions to guide activities for statewide recreational trails planning;
- Gather additional inventory measurement data for non-motorized trail resources and facilities; and
- Recommend actions that enhance non-motorized trail opportunities to all agencies and the private sector providing trail resources in Oregon.

The plan has been developed as an information resource as well as a planning tool to guide agencies for the next 10 years.

For the purposes of this planning effort, non-motorized trail uses include (but are not limited to) hikers, backpackers, mountain bike riders, equestrians, runners, walkers, bicycle riders, inline skaters and individuals with functional impairments. A non-motorized trail is defined as a regularly maintained recreation pathway typically used by a variety of non-motorized trail users. The designated trail should be purposefully planned and constructed for non-motorized recreation purposes, but in some cases can be used for commuter purposes. Non-motorized trails do not include city streets and sidewalks and bike lanes incorporated into the design of city streets and rural highways.

The non-motorized trails plan includes the following chapters:

Chapter 1. Benefits of Non-motorized Trails

During the trails issues workshops, public recreation providers and trail interest groups suggested that the non-motorized trails plan include trail benefits information for them to better make the case for proposed trail projects and address some common misconceptions adjacent landowners have about proposed trails. This chapter summarizes the many benefits that non-motorized trails can provide in the state of Oregon.

Chapter 2. Identification of Top Regional and Statewide Non-motorized Trail Issues

This chapter includes a list of the 3 top regional non-motorized trail issues in each of the 6 trails planning regions and the 2 top statewide non-motorized trail issues and 5 top statewide trail concerns identified during the planning process.

Chapter 3. The 2004 Oregon Statewide Non-motorized Trail User Survey

This chapter presents key findings from the 2004 telephone survey of Oregon non-motorized trail users. The purpose of the survey was to assess the needs and opinions of Oregon’s citizens about trail opportunities and management, assess the need for future investment in trail facilities and opportunities and provide trail planners with up-to-date information for local and regional non-motorized trail planning.

Chapter 4. Statewide Non-motorized Trail Goals, Objectives and Strategies

This chapter focuses on a set of long-range goals, objectives and strategies for the top 2 Statewide Non-motorized Trails Issues and 5 top Statewide Non-motorized Trail Concerns as identified through the non-motorized trails planning effort. These goals, objectives and strategies were

developed for use by non-motorized recreation decision makers across the state to develop policies and actions for resolving the 2 top statewide non-motorized trail issues and 5 non-motorized trail concerns.

Chapter 5. Recreational Trails Program (RTP) Evaluation Criteria

The non-motorized trails plan concludes with a set of project selection criteria for evaluating non-motorized, motorized and water trail grant proposals for the Federal Recreational Trails Program. The criteria make the connection between findings from the 2005-2014: A Statewide Action Plan effort and how limited RTP grant monies will be allocated.



Benefits of Non-motorized Trails

During the trails issues workshops, public recreation providers and trail interest groups suggested that the trails plan include trail benefits information for them to better make the case for proposed trail projects and address some common misconceptions adjacent landowners have about proposed trails (e.g. increases in crime and decreases in property values).

Trails positively impact individuals and improve communities by providing not only recreation opportunities and health and fitness benefits, but also by influencing economic and community development. The following is a summary of the many benefits that non-motorized trails can provide in the state of Oregon.

1. Economic Benefits.

a. Money spent in communities by trail users.

Across Oregon, non-motorized recreational trails are stimulating tourism and recreation-related spending. Local trail users, vacationers and conference attendees provide direct economic benefits to hotels, restaurants and other businesses from increases in tourist activity and increased spending on durable goods such as bikes or skates, and soft goods such as gasoline, food, and drinks. This, in turn, attracts and revitalizes businesses, creates jobs, and increases public revenue.



Evidence from economic studies include:

- Events associated with the Oregon Trail Sesquicentennial celebration in 1993³⁷ (coordinated by the nonprofit Oregon Trail Coordinating Council) included the "Official Oregon Trail Sesquicentennial Wagon Train" (joined by over 10,000 people along its route and 20,000 for evening programs), the "Oregon Trail Fest" kickoff event (a two-day event in Portland involving nearly 100,000 people), "Company's Coming" (a statewide clean-up day), and "Trail's End Finale" (with over 5,000 participants). Also, considerable commemorative merchandise including license plates, rifles, pins, blankets, checks, coins, traveler's journals, and wine were produced and marketed. The Council raised over \$4.5 million in federal, state, and private funds estimated to have leveraged another \$19.8 million in additional revenues in the form of contributions. Preliminary estimates of visitor spending generated by the Oregon Trail Interpretive

³⁷ Renner, J. (1994). Making a Case for the Economic Benefits of Historic and Heritage Tourism. Paper Presented at the 12th. National Trails Symposium. Anchorage, AK. September 28-October 1, 1994.

Center near Baker City, OR, for example, recorded 672,555 visitors from May 23, 1992 through July 1994.

- A study conducted by the National Park Service Rivers, Trails and Conservation Assistance Program³⁸ examined the economic impact of three rail-trails from May 1990 to February 1991. The trails included two suburban/rural trails—the Heritage Trail in Iowa and the St. Marks Trail in Florida, and an urban trail—the Lafayette/Moraga Trail in California. Estimates for average user expenditures and total economic activity resulting from trail use are included in Table 43.

Trail Name/Length	Average User Expenditures	Annual Economic Contribution
Suburban/Rural Trails		
Heritage Trail (IA) 26 mi.	\$9.21	\$1.2 million
St. Marks Trail (FL) 16 mi.	\$11.02	\$1.9 million
Urban Trail		
Lafayette/Moraga (CA) 7.6 mi.	\$3.97	\$1.5 million

The more rural trails had average expenditures significantly larger than the urban trail (but the urban trail had significantly more users). The study found that auto-related expenditures were the largest trip-related expenditures, and visitors staying at least one night in the area generated the largest average expenditures. Trail-related equipment, such as bicycles and skates, represented the single largest source of expenditures for all three trails.

- Users of the Sugar River Trail in southwestern Wisconsin were surveyed during a period from 1979 through 1985.³⁹ Analysis of this survey data showed a low average in 1979 of \$5.20 per person and a high average in 1984 of \$10.99 being spent per trail user. Based on these estimates and amount of trail use, the total annual contribution of the trail to the local economy ranged from \$158,704 to \$522,025.
- A study of trail users of the Northern Central Rail Trail (NCRT)⁴⁰ near Baltimore, reported that trail visitation grew from under 10,000 visitors per year in 1984 to over 450,000 in 1993. The value of goods purchased because of the NCRT for 1993 was estimated in excess of \$3.4 million. Trail users who had purchased goods for use on the trail spend on average \$203 in 1993. Similarly, users who purchased soft goods (food, etc.) before

³⁸ National Park Service. (1992). The Impacts of Rail-Trails, A Study of Users and Nearby Property Owners From Three Trails. Rivers, Trails and Conservation Assistance Program.

³⁹ Lawton, K. (1986). The Economic Impact of Bike Trails: A Case Study of the Sugar River Trail. Unpublished Manuscript. New Glarus, WI: Sugar River State Trail Corp.

⁴⁰ PKF Consulting. (1994). Analysis of Economic Impacts of the Northern Central Rail Trail. Prepared for the Maryland Greenways Commission, Maryland Department of Natural Resources.

or after using the trail spent an average of \$6.30 per visit. Additionally, the study estimated that the trail supports 264 jobs statewide.

- A study of visitors to Wisconsin's Elroy-Sparta State Trail⁴¹ found that suburban and rural trails with historic or natural characteristics that encourage vacation-style trips generate more revenue per use than urban and suburban trails used for light recreation and commuting. Half of all trail users to the Elroy-Sparta State Trail were identified as out-of-state visitors who bring new money into the state. Total expenditures in 1988 were over \$1.2 million. The study reported that spending by out-of-state visitors for lodging, bike rentals, bus shuttle service, and restaurant meals was roughly twice as high as for in-state visitors. The study also reported that peak-season hotel rooms along the Elroy-Sparta Trail were booked up a full year in advance.
- The Minnesota Department of Natural Resources analyzed survey data gathered on six rail-trails from 1980 through 1988 and found that trip-related expenditures varied greatly depending upon which trail was visited and how far users traveled to get to the trails⁴². Users who traveled less than 25 miles to get to the trails spend an average of \$.61 to \$2.86 per day, depending on the trail visited. Those traveling 25 miles and farther spent up to \$53.20 per day on average.

b. Impacts on property values and ability to sell.

People owning property bordering a proposed trail sometimes are concerned that developing a trail will lower their property values. However, a rather substantial body of research from across the U.S. demonstrates that proximity to trails and open space has very little impact on the value of property. In many cases, trails often increase the value of residential property and the ability to sell a property. Research findings include:

- In a survey sponsored by the National Association of Home Builders⁴³ recent homebuyers 55 years and older were asked to identify amenities that would seriously influence their decision to purchase a home. According to study results, walking and jogging trails are the most desirable amenity, with roughly half of active adults and older seniors (52%) saying the presence of trails would seriously influence the home buying decision. This number increases substantially with annual incomes greater than \$75,000 (65%). Outdoor spaces (especially parks) were second on the list at 51%, followed by public transportation at 46%.

⁴¹ Schwecke, Sprehn, Hamilton and Gray. (1989). A Look at Visitors on Wisconsin's Elroy-Sparta Bike Trail. University of Wisconsin Extension, Madison, WI.

⁴² Regnier, C. (1989). Minnesota Off-Road Bike Trail Use: 1980-1988. St. Paul, MN: Minnesota Department of Natural Resources, Trails and Waterways Unit. Unpublished paper.

⁴³ Wylde, M. (2000). Boomers on the Horizon: Housing Preferences of the 55+ Market. Survey Sponsored by the National Association of Home Builders.

- A study in Salem, Oregon⁴⁴ found that proximity to greenbelt parcels (privately owned in this case) added a premium of \$1,200 per acre, in comparison to similar properties 1,000 feet or more from the greenbelt.

- A study of property values in Eugene, Oregon⁴⁵ examined the effects of the South Ridgeline Trail on the property values of nearby homes. The study found that distance to the nearest trailhead was strongly significant in the sale price of a home. The study concluded that the value of a home increased \$6.77 for every foot of decrease in this distance.



- A study of real estate agents with experience along Seattle's 12.1 mile Burke-Gilman Trail⁴⁶ found the trail had increased the value of homes near, but not on, the trail by 6.5%. The trail has had no significant effect on the value of homes immediately adjacent to the trail. In addition, the study showed homes and condominiums near and adjacent to the trail are easier to sell because of their proximity to the trail.
- A study of property values in Boulder, Colorado⁴⁷ noted that housing prices declined an average of \$4.20 for each foot of distance from a greenbelt up to 3,200 feet. In one neighborhood, this figure was \$10.20 for each foot of distance. The study determined that, other variables being equal, the average value of property adjacent to the greenbelt would be higher than those 3,200 feet away.

c. Attracting businesses.

Many communities want to attract new, expanding, or relocating businesses to their area in order to increase their employment and tax bases. The importance of "quality of life" is increasingly cited as a major factor in corporate and business location decisions. As an amenity that plays an important role in increasing a community's "quality of life", trails are becoming more and more attractive to businesses and their employees⁴⁸.

- The City of Pueblo, Colorado attributes the investment in trails and parks along the Arkansas River and Fountain Creek as one of the most important components in the economic revitalization efforts of this industrial city.⁴⁹

⁴⁴ Nelson, A. (1986). Using Land Markets to Evaluate Urban Containment Programs. *APA Journal*, Spring, pp. 156-171.

⁴⁵ Jensen, D., and Durham, J. (2003). The Property Value Effects of the South Ridgeline Trail. University of Oregon Economics. Department Undergraduate Honor Papers. Faculty Advisor: Harbaugh, B.

⁴⁶ Seattle Engineering Department (1987). Evaluation of Burke-Gilman Trail's Effect on Property Values and Crime. Seattle, WA. Office for Planning.

⁴⁷ Correll, Lillydahl and Singell. (1978). The Effects of Greenbelts on Residential Property Values: Some Findings on the Political Economy of Open Space, *Land Economics*.

⁴⁸ National Park Service. (1995). Economic Impacts of Protecting Rivers, Trails and Greenway Corridors. *Rivers Trails and Conservation Assistance*, National Park Service. Fourth Edition (Revised).

⁴⁹ Federal Highway Administration (1992). Transportation Potential and Other Benefits of Off-Road Bicycle and Pedestrian Facilities. U.S. Department of Transportation. Case Study No. 7. Publication No. FHWA-PD-92-040.

- The River Walk is often visited by prospective businesses looking to relocate to the San Antonio, Texas area. A business location along the River Walk is considered very desirable because the pedestrian system provides a retreat for employees during lunch and access to valuable green space within the central business district.⁵⁰
- A survey of 71 economists rated factors for Arizona's attractiveness as a place to live, work, vacation, retire, and locate future plants and corporate headquarters. The strongest factors contributing to Arizona's positive image were climate, job opportunities, and open space including abundant outdoor recreation opportunities. Seventy firms relocated or expanded their businesses in Arizona, creating 27,800 jobs and \$970 million in indirect salaries and wages⁵¹. Chief executive officers of these firms said they chose Arizona for its "outdoor lifestyle and recreation opportunities."⁵²

d. Proximity to Trails and Crime.

People owning property bordering a proposed trail often are concerned that developing a trail will increase crimes such as muggings, assault, rape, trespass, burglary and vandalism. However, studies from across the U.S. consistently report no increase in crimes against people or against property that can be attributed to a specific trail, and that support by property owners for trails generally increases over time⁵³. Research findings include:

- A comprehensive study sponsored by the Rails-to-Trails Conservancy examined the incidence of crime at 372 rail-trails across the United States⁵⁴. Overall, the study shows that rail-trails are safe places for people to recreate (see Table 44 below). In 1995, only eleven of 372 rail-trails experienced any type of major crime, such as mugging, assault, rape and murder. When contrasted with general major crime statistics in urban, suburban and rural areas, rail-trails have experienced very low major crime rates.

Crime	Urban		Suburban		Rural	
	U.S.	Rail-Trails	U.S.	Rail-Trails	U.S.	Rail-Trails
Mugging	335	0.53	102	0.00	19	0.00
Assault	531	0.58	293	0.02	203	0.01
Forcible Rape	43	0.04	29	0.00	26	0.01
Murder	11	0.04	4	0.01	5	0.01

⁵⁰ Federal Highway Administration (1992). Transportation Potential and Other Benefits of Off-Road Bicycle and Pedestrian Facilities. U.S. Department of Transportation. Case Study No. 7. Publication No. FHWA-PD-92-040.

⁵¹ National Park Service. (1995). Economic Impacts of Protecting Rivers, Trails and Greenway Corridors. Rivers Trails and Conservation Assistance, Fourth Edition (Revised).

⁵² Valley National Bank. (1980). Arizona's Favorable Image Spurs Economic Growth. Arizona Progress November. Phoenix, AZ: Economic Research Department.

⁵³ Florida Department of Environmental Protection (1998). Thinking Green. A Guide to the Benefits and Costs of Greenways and Trails. Office of Greenways and Trails, Tallahassee, FL.

⁵⁴ Tracy, T., and Morris, H. (1998). Rail-Trails and Safe Communities: The Experience on 372 Trails. Rails-to-Trails Conservancy. Washington, D.C.: National Park Service.

⁵⁵ FBI Uniform Crime Reports. (1995). Rails-to-Trails Conservancy.

The study also reported incidents of minor crimes at the 372 rail-trails (see Table 45). It also cites several local law enforcement agencies that state heavy trail usage acts as a deterrent in formerly isolated areas.

Crime	Urban	Suburban	Rural
Burglary	0%	.01%	.01%
Trespassing	5%	3%	4%
Graffiti	26%	17%	12%
Littering	24%	24%	25%
Sign damage	22%	22%	23%
Unauthorized motorized use	18%	14%	23%

A total of 36 urban, 82 suburban and 254 rural rail-trails were surveyed in 1995.

- A 1978 study of the Lafayette/Moraga Trail near San Francisco⁵⁷ found that over 60% of property owners surveyed reported no problems due to the presence of the trail. The problems most commonly related by property owners were trespass and motor vehicle use of the trail. The study concluded that most property owners believed there were fewer problems after creation of the trail than before, and 92% felt the trail had either improved or had no effect on the quality of their neighborhoods. A follow-up study by the National Park Service in 1992⁵⁸ reported that neighborhood perceptions of problems due to crime and/or nuisances were largely unchanged from the 1978 report.
- A similar result was observed in a 1990 USDA Forest Service study⁵⁹ of 19 trails in Illinois. While the study found that typical users did not perceive problems, respondents from urban settings reported slightly greater perception of problems than did those from suburban and rural greenways.
- A study of the Burke-Gilman Trail in Seattle⁶⁰ reported that homes bordering the trail actually had lower rates of burglary and vandalism than the neighborhood average.

⁵⁶ Tracy, T., and Morris, H. (1998). Rail-Trails and Safe Communities: The Experience on 372 Trails. Rails-to-Trails Conservancy. Washington, D.C.: National Park Service.

⁵⁷ Correll, Lillydahl, and Singell. (1978). The Effects of Greenbelts on Residential Values: Some Findings on the Political Economy of Open Space. Land Economics, 54(2), pp. 207-217.

⁵⁸ National Park Service. (1992). The Impacts of Rail-Trails, A Study of Users and Nearby Property Owners From Three Trails. Rivers, Trails and Conservation Assistance Program.

⁵⁹ Gobster, P. (1990). The Illinois Statewide Trail User Study. Rails-to-Trails Conservancy. Chicago, U.S. Forest Service.

⁶⁰ Seattle Engineering Department (1987). Evaluation of Burke-Gilman Trail's Effect on Property Values and Crime. Seattle, WA. Office for Planning.

2. Health and Fitness Benefits.

Trail activities such as walking, jogging or running, in-line skating, cross-country skiing, and bicycling are well documented to help improve health and fitness when done on a regular basis⁶¹. Physical activity need not be unduly strenuous for an individual to reap significant health benefits. Even small increases in light to moderate activity, equivalent to walking for about 30 minutes a day, will produce measurable benefits among those who are least active. This health benefit accrues to the individual, and, in the form of reduced health-care costs, to society as well.

Many people realize exercise is important for maintaining good health in all stages of life, however many do not regularly exercise. The U.S. Surgeon General estimates⁶² that 60% of American adults are not regularly active and another 25% are not active at all. In communities across the country, people do not have access to trails, parks, or other recreation areas close to their homes. Non-motorized trails provide a safe, inexpensive avenue for regular exercise for people living in rural, urban and suburban areas.

Exercise derived from trail-related activities lessens health related problems and subsequent health care costs. Regular, moderate exercise has been proven to reduce the risk of developing coronary heart disease, stroke, colon cancer, hypertension, diabetes, osteoporosis, obesity, and depression. This kind of exercise is also known to protect against injury and disability because it builds muscular strength and flexibility, which

⁶¹ State of Indiana. (2000). Indiana Trails Plan 2000.

⁶² Benefits of Trails and Greenways. Trails and Greenways Clearinghouse.

helps to maintain functional independence in later years of life⁶³.

A nationwide study on the cost of obesity⁶⁴ concluded that increasing participation in the amount of regular moderate activity by the more than 88 million inactive Americans over age 15 could reduce annual national medical costs by \$76 billion in 2000 dollars. A recently completed plan entitled, A Healthy Active Oregon: The Statewide Physical Activity Plan, points out that the current epidemic of obesity has also hit Oregon hard⁶⁵. At 22%, our state has the highest percentage of adult obesity of any state west of the Rockies. Add that to 38% of Oregon adults who are overweight and we have the startling total of 60% of Oregonians not at a healthy weight. Our youth follow closely behind, with 28% of eighth graders and 21% of eleventh graders currently overweight. The Statewide Physical Activity Plan is a call to action for all who can have an impact on promoting daily physical activity to improve the health of Oregonians. The plan has identified the need for more community trails as a top priority.

The Oregon Outdoor Recreation Survey was conducted over a one-year period from February 2001 to January 2002 by Oregon State University's (OSU) College of Forestry as a part of Oregon Parks and Recreation's Statewide Comprehensive Outdoor Recreation planning effort. The

⁶³ Centers for Disease Control and Prevention. (1996). Surgeon General's Report on Physical Activity and Health. Department of Health and Human Services. July 1996.

⁶⁴ Pratt, M., Macera, C., and Wang, G. (2000). Higher Direct Medical Costs Associated With Physical Inactivity. *The Physician and Sports Medicine* 28(10).

⁶⁵ Oregon Coalition for Promoting Physical Fitness (2003). A Healthy Active Oregon: The Statewide Physical Activity Plan.

findings of the Oregon Outdoor Recreation Survey⁶⁶ identified that the most popular everyday activities in Oregon are running and walking for exercise and walking for pleasure. According to the OSU report, these activities are generally engaged in near home, and on a regular basis. These findings help to make the case that neighborhood trails are essential in providing all Oregonians with a means to realize the health and fitness benefits associated with daily exercise.

Finally, every year, premature deaths cost American companies an estimated 132 million lost workdays at a price tag of \$25 billion. Each year, finding and training replacements costs industry more than \$700 million. In addition, American businesses lose an estimated \$3 billion every year because of employee health problems (National Park Service, 1983). Providing close-to-home access to trails can encourage regular exercise, improve overall employee health and help to reduce these work-related costs.

3. Social Benefits.

Trail projects help build partnerships among private companies, landowners neighboring municipalities, local government, and advocacy groups. Each trail contains elements of local character and regional influence, and reflects the hard work, enthusiasm, and commitment of individuals, organizations, elected officials, and agencies. All are able to take pride in having worked together to successfully complete a trail project⁶⁷. In

addition, when residents are encouraged to become involved in a trail project, they feel more connected to the community⁶⁸.

Because of their linear design, trails act as a meeting place for the community. As a result, trails promote family unity as well as strengthen friendships and neighbor relations. They are places where entire families, friends and neighbors can gather and recreate together safely.

Neighborhood trails can improve pride in a community in other ways as well. A trail that runs through a community often leads to the residents and business owners showing their "best side" by cleaning or fixing up their property. A popular and well-managed trail can also serve as a focal point for a community for special events and a gathering place. These activities can lead to greater interaction between residents and improve the cohesion of a community⁶⁹.



⁶⁶ Johnson, R. (2002). Oregon's Statewide Comprehensive Outdoor Recreation Plan: Demand and Needs Analysis. Oregon State University, Department of Forest Resources.

⁶⁷ National Bicycle and Pedestrian Clearinghouse (1995). The Economic and Social Benefits of Off-Road Bicycle and Pedestrian Facilities. NBPC

Technical Brief. Technical Assistance Series, Number 2.

⁶⁸ Warren, N. (1998). Nova Scotia Hiking Trails Study. Nova Trails Federation.

⁶⁹ State of Indiana (2000). Indiana Trails 2000.

4. Educational Benefits.

Trails present a unique opportunity for education. People of all ages can learn more about nature, culture or history along trails. Of particular importance, trails provide firsthand experiences that educate citizens about the importance of the natural environment and respect for nature. This education can be accomplished using comprehensive trail guides, signage, public outreach, and informative classes to encourage awareness of the natural, cultural, and historical attributes of the trail.

Restricted budgets in schools across the nation have heavily affected transportation and have reduced educators' abilities to provide away-from-the-classroom learning experiences⁷⁰. As a result, trails are becoming more and more valuable as real-life outdoor laboratories for learning about the natural environment. Trails can provide a perfect classroom for the teaching biologist, botanist, and ecologist, both amateur and professional. Educators, naturalists, rangers and scoutmasters—all can demonstrate and illustrate their lessons along the trail⁷¹.

5. Recreation Benefits.

Linear corridors offer several benefits over traditional park facilities⁷². These benefits include providing greater perimeter area,

⁷⁰ Federal Highway Administration (1992). Transportation Potential and Other Benefits of Off-Road Bicycle and Pedestrian Facilities. U.S. Department of Transportation. Case Study No. 7. Publication No. FHWA-PD-92-040.

⁷¹ North American Water Trails, Inc. Why Water Trails?

⁷² Federal Highway Administration (1992). Transportation Potential and Other Benefits of Off-Road Bicycle and Pedestrian Facilities. U.S. Department of Transportation. Case Study No. 7. Publication No. FHWA-PD-92-040.

multiple visitor experiences, increased access, and lower acquisition and development costs. Many trails have multiple recreation benefits such as providing access to fishing, vista points for photography, picnic areas for socializing, and camping areas. They also provide access to areas for enjoying solitude, observing wildlife and experiencing the natural environment⁷³. Finally, multiple-use trails serve a wide range of recreationists including bicyclists, walkers, joggers, equestrians, in-line skaters, people in wheelchairs, hikers, bird-watchers, parents with strollers, picnickers, and people who just want to sit in the sunshine.



6. Environmental Benefits.

Trails can be an integral part of our natural environment and should be used as a tool for conservation. Trails can be planned to assist with preserving important natural landscapes, providing necessary links between fragmented habitats and providing tremendous opportunities for protecting plant and animal species. Increased development has contributed to the creation of habitat "islands"—isolating wildlife, reducing their natural habitats and survival. Trails with sufficiently wide corridors of natural area can provide that

⁷³ State of California. (2001). California Recreational Trails Plan. Department of Parks and Recreation.

important link between these island populations and habitats and increase the available land to many wildlife species⁷⁴.

In addition, trails can help improve air and water quality. Trails provide enjoyable and safe options for transportation, which helps reduce air pollution⁷⁵. They can also improve air quality by protecting the plants that naturally create oxygen and filter out air pollutants. By protecting land along rivers and streams, trails prevent soil erosion and filter pollution caused by surface runoff.

7. Preserving our History and Culture.

Trails have the power to connect us to our heritage by preserving historic places and by providing access to them⁷⁶. They can give people a sense of place and an understanding of the enormity of past events, such as Native American trails, the Lewis and Clark expedition, westward migration along the Oregon Trail and accessing historic sites throughout the state. Special events such as the previously mentioned Oregon Trail Sesquicentennial celebration help to point out the importance of historic trails to all Oregonians. In addition, other trails preserve transportation corridors. Rail-trails along historic rail corridors (e.g. the OC&E-Woods line Trail in Klamath Falls) provide a glance at the importance of this mode of transportation.



⁷⁴ San Diego County. Five-Year Strategic Plan. Appendix C.

⁷⁵ Practical Horseman (2002). Ride Where Trains Once Rolled.

⁷⁶ Trails and Greenways Clearinghouse. Benefits of Trails and Greenways.

IDENTIFICATION OF REGIONAL AND STATEWIDE NON-MOTORIZED TRAILS ISSUES

Public involvement played a central and recurring role throughout the Oregon statewide trails planning process. OPRD conducted a series of 9 regional public workshops across the state during 2003 to discuss the major issues that affect the provision of non-motorized trail opportunities in Oregon.

The Public Workshop Process

During April and May of 2003, OPRD staff completed a series of 9 regional trail issues workshops across the state. Each workshop included an afternoon session open to all public recreation providers and an evening session open to the general public.

The widest possible range of “public” was invited to participate in the process. For the afternoon sessions, an invitation letter was sent to all public-sector recreation providers in the state requesting participation in their respective regional trails issues workshops. For the general public workshops (evening sessions), ads were placed for each workshop in local and regional newspapers. In addition, press releases were sent out to media outlets prior to each workshop. In keeping with the plan’s regional approach and to maximize input and participation, 9 sites were selected from around the state for the issues workshops (a table of meeting locations is included in Table 2 on page 7).

Both afternoon and evening workshops included a brief description of the trails planning region, workshop process, and how the regional issues information was to be used in the plan. Next, participants listened to a 20-minute presentation on the statewide planning effort. Each workshop included a separate issues gathering process for motorized, non-motorized, and water trails issues.

Trail issues were defined as any high-impact issue related to providing recreational trail opportunities within the region. Issues could be related to trail facilities, management (e.g. user conflicts), programs, projects and funding. At the conclusion of daytime and evening workshop each workshop attendees were given 3 colored dots to assist in prioritizing the importance of issues gathered. Participants placed their colored dots on those issues they felt were of most important in the planning region.

A thorough description of how top regional issues were determined is included under the Major Planning Component heading on page 5.



List of Top Regional Non-motorized Trails Plan Issues

The following list includes those issues identified as top regional non-motorized trails issues.

Northwest Trails Planning Region

(Includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Lincoln, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lane and Benton Counties.)

A. Need for trail connectivity within the region providing access from urban to rural trails, connections between public facilities, parks and open space and connections from state and regional trails to community trails.

B. Need for additional non-motorized trails (for all user types)—especially in close proximity to where people live.

C. Need for additional funding for non-motorized trail acquisition and development. Potential strategies include allocating a certain portion of the state's lottery fund; acquisitions of fee title, easements and land exchanges; and ways to allow users to pay for trail facilities and services.



Southwest Trails Planning Region

(Includes Coos, Curry, Josephine, Jackson and Douglas Counties)



A. Need for trail connectivity in the region including making trail connections within urban areas and to trails in adjacent public lands to connect communities with nearby parks and open spaces and connect land-based trails with water trails.

B. Need for funding and technical assistance for easements, permitting fee title, and acquisitions for trail projects. Population growth has increased the cost of land acquisition and easements and reduced the supply of available land acquisition opportunities.

C. Need for additional funding for trail maintenance within the region. Increased grant funding priority should be given to maintaining what we currently have before adding additional trail facilities.

North Central Trails Planning Region

(Includes Wasco, Sherman, Gilliam, Morrow, Umatilla, Jefferson, Wheeler, Deschutes and Crook Counties)

A. Need for additional funding for trail maintenance and development.

B. Need to develop and extend a regional trails system within the region. The system should connect urban parks and open space, including connections to recreational opportunities on outlying public lands.

C. Need for trail access opportunities that do not require user fees or permits. Such trail opportunities should include minimal levels of improvements.



South Central Trails Planning Region

(Includes Klamath and Lake Counties)



A. Need for connectivity of trail systems within the region linking parks, public facilities and communities. There is also an opportunity to build connections between urban and wilderness areas.

B. Need for dedicated funding for trail operation and maintenance. Potential funding sources include taxes on the purchase of recreational equipment or franchise fees (utility fees) on trail corridors.

C. Need for better education/ information on the sharing of multiple-use trails within the region.

Northeast Trails Planning Region

(Includes Wallowa, Union, Grant and Baker Counties)

A. Need to secure long-term funding for non-motorized trail maintenance within the region. This issue is particularly relevant with U.S. Forest Service trail maintenance.

B. Need for connectivity between community trail systems, greenways, outlying state parks and forestlands within the region.

C. Need for greater cooperation between state and federal agencies in providing trail opportunities within the region.



Southeast Trails Planning Region

(Includes Harney and Malheur Counties)



A. Need for non-motorized trails in the region.

B. Lack of good information on existing non-motorized trail opportunities within the region.

C. Need to consider non-motorized use of roads proposed for closure or abandonment and to review recreational use on roads previously closed or abandoned.

Determining Top Statewide Non-motorized Issues

After the regional voting was completed, the committee members reviewed the number of times a particular issue was voted as a top regional issue. The following table includes a listing of those issues voted as a "Top 3 Regional Issue" in more than one Trails Planning Regions. Based on this information, the two highlighted issues included in Table 46 were identified by the steering committee as Key Statewide Non-motorized Trails Issues.

TABLE 46: Identification of Key Statewide Non-motorized Trails Issues	
Non-motorized Trails Issue	# of Regions Issue Was Voted A Top 3 Regional Trail Issue
Need for trail connectivity	4 Regions
Need for trail maintenance	4 Regions
Need for more trails	2 Regions
Need for funding for trail acquisition	2 Regions

During the September 23, 2003 steering committee meeting, OPRD staff used a sheet including information presented in the first 2 columns of Table 47 (below) to provide steering committee members an opportunity to vote for a set of top Statewide Non-motorized Trail Concerns. Table 47 includes the total number of committee member votes each issue received. Those issues with the highest number of votes (shown in bold) were determined by the steering committee to be the 5 top Statewide Non-motorized Trail Concerns. Although not as critical as the 2 top Statewide Issues, resolution of these 5 top Statewide Trail Concerns is a priority during the plan's 10-year planning horizon.

TABLE 47. Identification of Top Statewide Non-motorized Trail Concerns		
Non-motorized Trail Issue	Total # of Comments From Issue Scoping	# of Committee Votes
Need For Adequate & Consistent Information Resources	32	
Need For Trail Connectivity	22	
Need To Address User Conflict/Multiple Use/Shared Use	20	
Need For Trail Maintenance/Funding For Maintenance/Volunteers	19	
Need For A State Administered Funding Source For Trail Acquisition & Development	19	4
Need For Additional Non-motorized Trails	17	8
Need For User Education & Training (Regulatory & Safety)	14	1
Need For Regional Interagency Coordination/ Cooperation In Trail Planning & Management	13	5
Need For Trailheads & Support Facilities (restrooms, parking, camping, etc.)	13	4
Need To Better Manage Environmental Impacts	12	
Need For Increased Law Enforcement Presence (particularly at trailheads)	11	
Need For More Trails In Close Proximity To Where People Live	11	10
Need For Information on the Social & Economic Benefits of Trails	11	4
Need For More Equestrian Trails & Trailheads	9	1
Need For Trail Planner Toolbox and Trail Planning Assistance	6	1
Need To Explore Recreation Opportunities on Private Timberlands	6	
Need For Long-Distance Hiking Opportunities	5	2
Need To Prepare For Emerging Technologies (e.g. Segways, Geocaching)	5	
Need For Statewide Trail Design & Construction Standards - Particularly at Railroad Crossings	5	
Need For Improved Public Access To Trails	5	7
Need For a Simpler Trail Fee Collection System	4	
Need For Local Trail Planning & Environmental Assessment	4	
Need For Inventory of Railroad Rights-Of-Ways & Other Potential Trail Development Opportunities	4	3
Need For Additional Trail-Related Interpretation/Education Opportunities	4	
Need For Better Management Of Dogs & Other Pets On Trails	4	
Need For A Wider Variety Of Challenge Opportunities (experience, technology advancements)	4	
Need To Consider Public Ways (roads, railroads, utility corridors) proposed For Closure or Abandonment For Non-motorized Use	4	8

The final set of Top Statewide Non-motorized Issues are:

- Statewide Trail Issue A: Need for trail connectivity
- Statewide Trail Issue B: Need for trail maintenance

The final set of Top Statewide Non-motorized Trail Concerns are:

- Statewide Trail Concern 1: Need for more trails in close proximity to where people live
- Statewide Trail Concern 2: Need for additional non-motorized trails
- Statewide Trail Concern 3: Need to consider public ways (roads, railroads, utility corridors) proposed for closure or abandonment for non-motorized trail use
- Statewide Trail Concern 4: Need for trail accessibility information (such as key trail type and condition information allowing individuals to decide whether a particular trail is accessible to them or not)
- Statewide Trail Concern 5: Need for regional interagency coordination/ cooperation in trail planning and management



2004 Oregon Statewide Non-motorized Trail User Survey

by Woody Carter and Tony Silvaggio
University of Oregon, Oregon Survey Research Laboratory

Research Background

This chapter presents key findings from the 2004 telephone survey of Oregon non-motorized trail users. The project was part of the Oregon Trails 2005-2014: A Statewide Action Plan effort, funded by the Oregon Parks and Recreation Department. The survey randomly screened over 15,000 Oregon telephone households to identify respondents reporting trail and non-motorized boat use in the past year. Separate questionnaires were administered for motorized trail users, non-motorized trail users, and non-motorized boaters.

The survey employed a random digit dial methodology to identify Oregon residents who reported qualifying trail or non-motorized boating use in the last year. Data collection was conducted in two waves. An initial list of 9,500 telephone numbers was called to identify motorized trail users, non-motorized trail users, and non-motorized boaters. At the end of this data collection sufficient motorized trail users and non-motorized boaters were not achieved, so an additional 5,950 telephone numbers were called in association with another survey. This additional screening resulted in quotas for trail and water users being achieved that permit a sampling error for each group of $\pm 5-6\%$. The random telephone design and low sampling errors contribute to making this one of the most scientifically rigorous studies of trail users conducted to date for Oregon.

Non-motorized Trail Users

The following section provides survey results specific to non-motorized trail users.

Non-motorized Trail User Demographic Information

Thirty three percent of Oregon households have a person reporting non-motorized trail use, amounting to 438,500 households in the state. Screening procedure asked first for any motorized trail user or non-motorized boaters in the household, and those persons, if present, were interviewed about those usage patterns. If neither usage type was present in the household, a non-motorized trail user was interviewed if present. The results reported here thus relate to households without any motorized trail user or non-motorized boater present, and thus will not reflect the views of non-motorized trail users who live in such households. The biases introduced due to this sampling design are negligible.

Basic demographics of non-motorized trail users are provided in the following table:

TABLE 48: Non-motorized Demographics N = 326	
Gender:	
Male	44%
Female	56%
Age:	
18 – 29	14%
30 – 39	22%
40 – 49	27%
50 – 59	20%
60 – 69	12%
70+	4%
Education:	
Less than high school	3%
High school graduate	14%
Some college	34%
Bachelors	31%
Masters	14%
Doctorate	4%
Income:	
Less than \$18,000	13%
\$18,000 - \$24,999	7%
\$25,000 - \$39,999	19%
\$40,000 – \$69,999	32%
\$70,000 - \$99,999	17%
\$100,000+	13%
Sampling error for this question is \pm 4%	

Most non-motorized respondents are female, and the median age is 40 – 49 years old. A sizable majority has some college (83%), with about half being college graduates (49%). Median income is \$40,000 to \$69,999.

Non-motorized Trail Participation

The survey asked non-motorized trail users about the frequency of their participation in different activities. The following table reports the percentage participation in each activity, and the estimated number of Oregon households that this represents⁷⁷:

⁷⁷ The survey did not ask how many in the household participated in each activity, so no figure for total participation can be estimated.

TABLE 49: Extent of Non-motorized Trail Participation

N = 326	Participated in Last Year	Estimated Oregon Households
Trail hiking or day hiking	87%	381,500
Walking for pleasure	82%	359,500
Bicycling (other than mountain biking)	38%	166,700
Jogging or running	29%	127,200
Backpacking overnight	16%	70,200
Mountain biking (on natural terrain trails)	14%	61,400
Cross-country skiing	12%	52,600
Horseback riding	7%	30,700
Roller blading (in-line skating)	5%	21,900
Hiking with horses, mules, llama	2%	8,800
Competitive trail events	2%	8,800
Other	13%	57,000

Sampling error for the "in last year" question is $\pm 4\%$.

The survey also asked how often the respondent engaged in each activity in the last year:

TABLE 50: Frequency of Non-motorized Trail Participation

N = 326	In Last Year	Of Participants in Last Year, How Often?			
		Weekly	2-3 a Month	Once a Month	Less Often
Trail hiking or day hiking	87%	11%	23%	20%	46%
Walking for pleasure	82%	28%	21%	20%	32%
Bicycling (other than mountain biking)	38%	29%	22%	17%	31%
Jogging or running	29%	43%	24%	12%	22%
Backpacking overnight	16%	0%	6%	11%	83%
Mountain biking (on natural terrain trails)	14%	15%	17%	17%	50%
Cross-country skiing	12%	13%	10%	18%	60%
Horseback riding	7%	21%	17%	17%	46%
Roller blading (in-line skating)	5%	13%	6%	25%	56%
Hiking with horses, mules, llama	2%	0%	14%	43%	43%
Competitive trail events	2%	20%	20%	0%	60%
Other	13%	14%	10%	26%	50%

Sampling error for the "in last year" question is $\pm 4\%$. Sampling errors for the frequency questions are from $\pm 5\%$ for the most common activity to $\pm 44\%$ for the least common.

Non-motorized trail users report frequent participation in their trail activities. Hiking and walking for pleasure lead the group, with bicycling and jogging or running also having a sizable proportion of participants. Joggers and runners are the most likely to engage in their

activities weekly, followed by bicyclers, walkers, horseback riders, and participants in competitive trail events. Among the “other” activities cited are snow shoeing, camping, and hunting.

When asked to select their favorite non-motorized trail activities, respondents answered as follows:

TABLE 51: Favorite Non-motorized Trail Activity N = 326	
Trail hiking or day hiking	41%
Walking for pleasure	24%
Bicycling (other than mountain biking)	10%
Jogging or running	5%
Backpacking overnight	4%
Mountain biking (on natural terrain trails)	4%
Horseback riding	4%
Cross-country skiing	2%
Roller blading (in-line skating)	1%
Hiking with horses, mules, llama	0%
Competitive trail events	0%
Other	6%
Sampling error for these questions is $\pm 4\%$	

Trail hiking and walking for pleasure lead the list, with all others garnering smaller percentages, led by bicycling.

Distance Traveled and Preferred Setting for Non-motorized Activities

To reach their most frequent non-motorized trail activity, trail users travel a median of only one to ten miles (one way).⁷⁸ The median is the number that reflects the answer given by a cumulative 50% of respondents; half travel farther, and half not as far. Non-motorized trail users travel only a bit further, 11 to 20 miles, to reach their favorite activity:

⁷⁸ Since the top category for this question went above 200 miles, the mean distance would be higher.

TABLE 52: Distance Traveled for Most Frequent and for Favorite Non-motorized Activities⁷⁹
N = 316

Miles Traveled (One Way)	Most Frequent Activity		Favorite Activity	
	Percentage	Cumulative	Percentage	Cumulative
1 – 10	51%	51%	44%	44%
11 – 20	10%	62%	13%	57%
21 – 30	11%	72%	9%	66%
31 – 40	6%	78%	4%	70%
41 – 50	7%	85%	8%	78%
51 – 75	6%	92%	9%	87%
76 – 100	5%	96%	7%	93%
Over 100 miles	4%	100%	7%	100%

Sampling error for this question is $\pm 5\%$

For both their most frequent and favorite non-motorized activities, respondents prefer trails in remote areas followed by a rural area or park. For their most frequent activities, non-motorized trail users prefer urban and suburban settings (combined 38%) more than they do for their favorite activities (combined 28%). Non-motorized trail users prefer remote areas for their favorite activities, as the following table reveals:

TABLE 53: Preferred Setting for Most Frequent and Favorite Non-motorized Trail Activities
N = 325

	Most Frequent Activity	Favorite Activity
Remote area	33%	45%
Rural area or park	29%	28%
Urban setting	23%	18%
Suburban setting	15%	10%

Sampling error for this question is $\pm 4\%$

Comparing the last two tables, it is interesting to note that although 33% of respondents feel their most frequent activity is in a remote area, 85% report this activity is within 50 miles of their home. This suggests that users feel they are having a “remote” experience when they may actually be very close to a rural or a suburban setting.

Respondents were presented with six types of trails, such as day-use, loop, or multi-day trails, and asked, “How likely is it you would use each of these trail types?” The following table presents the results:

⁷⁹ Respondents were not restricted to destinations in Oregon.

TABLE 54: Preferred Non-motorized Trail Type			
N = 312-325	Very Likely	Somewhat Likely	Not as Likely
Short, day-use trail	75%	21%	4%
Trail to specific destinations	69%	26%	5%
Loop trail	68%	25%	6%
Interpretive or nature trail	59%	33%	8%
Interconnected network of trails	54%	33%	13%
Multi-day trail	26%	26%	48%
Sampling error for this question is \pm 5%			

Day use trails, trails to specific destinations, and loop trails are most preferred. Only overnight backpacking trails are unlikely to be used by a sizable proportion of non-motorized trail users, but even for these, more than half the respondents say they are at least somewhat likely to use such a trail.

Reasons Non-motorized Trails Not Used as Much as Desired

Over half of non-motorized trail users report they would like to participate in non-motorized trail activities more than they do. This reflects a large reservoir of unmet need.

TABLE 55: Use Trails as Much As Wanted – Non-motorized	
N = 324	
Want to use trails more	53%
Use trails as much as want to	47%
Sampling error for this question is \pm 4%	

The survey asked for constraints to non-motorized trail use:

TABLE 56: Reasons for Not Using Trails as Much as Wanted – Non-motorized 1 = The Major Reason, 4 = Not an Important Reason					
N = 171-172	Mean	The Major Reason	An Important Reason	A Somewhat Important Reason	Not an Important Reason
Lack of time	1.7	59%	25%	11%	6%
Lack of information	3.4	3%	11%	30%	56%
None close by	3.5	4%	8%	24%	65%
No one to go with	3.5	4%	9%	22%	65%
User fees	3.5	2%	12%	17%	69%
Lack of money	3.6	5%	3%	14%	78%
Overcrowding	3.6	2%	5%	23%	70%
Health	3.7	6%	3%	9%	81%
Hard to get to	3.7	2%	5%	12%	81%
Personal safety	3.7	2%	4%	14%	81%
Conflicts with other user groups	3.8	1%	3%	17%	80%
Too challenging	3.9	1%	1%	4%	94%
Poor maintenance	3.9	0%	2%	11%	87%
Sampling error for this question is $\pm 7\%$					

Lack of time is the overwhelming roadblock for non-motorized trail users; all other reasons lag far behind. Lack of information, lack of trails nearby, overcrowding, user fees, conflicts with other groups, and no one to go with score a bit higher than others as a “somewhat important” reason.

Almost a quarter of respondents (22%) offer other reasons they are not on the trail as much as they would like, among them family responsibilities, lack of transportation to the trailhead, and laziness. Verbatim comments include:

I don't have a car, so sometimes it's hard to get out of town. I have to get a ride. I don't think a bus runs by Spencer's Butte. Without a bus I can't go on my own.

I take care of my disabled daughter who needs 24 hour care, so I have to have a caregiver to go anywhere without her.

Limited parking at very popular sites makes trails hard to get to.

Satisfaction with Non-motorized Trail Services

Next, non-motorized trail respondents were asked to rate their satisfaction with five measures of trail service. The following table present that data, listed in order of a decreasing “very satisfied” evaluation.

Non-motorized trail users report a high degree of satisfaction with trail services. In such satisfaction rankings, a combined total “not at all/not very” satisfied score above 10% is usually justification for attention by planners. Only support facilities (combined 12% dissatisfaction) and information (10%) surpass this threshold, and only barely, suggesting that trail planning might prioritize addressing these two user group concerns.

TABLE 57: Satisfaction with Non-motorized Trail Services (4= Very Satisfied, 1 = Not at All Satisfied)					
N = 282-325	Mean	Very Satisfied	Somewhat Satisfied	Not Very Satisfied	Not at All Satisfied
Access to trails	3.6	68%	29%	2%	1%
Enforcement	3.4	48%	44%	6%	2%
Maintenance	3.4	45%	47%	7%	2%
Support facilities	3.3	44%	44%	10%	2%
Information	3.3	38%	53%	8%	2%
Sampling error for these questions ranges from $\pm 4\%$ to $\pm 5\%$					

Not included in the figures above, 11% responded “don’t know” to the question about enforcement, suggesting they are not very aware of efforts being made in this area. Another seven percent answered “don’t know” to the question about information.

Satisfaction with Information Sources

Non-motorized trail users were asked about satisfaction with a variety of information sources, and they report a high level of overall satisfaction. As the figure and table below show, dissatisfaction passed the ten percent threshold for agency responses (13%), agency websites (11%), and route maps (11%).

Only respondents able to rate the information sources were included. Respondents answering “Don’t Know,” excluded from the table, amounted to 22% of non-motorized trail respondents for agency websites, 21% for government agency responses, 11% for guidebooks, and 10% for route maps, suggesting considerable lack of familiarity with these sources.

TABLE 58: Satisfaction with Non-motorized Trail Information (4= Very Satisfied, 1= Not at All Satisfied)					
N = 154-312	Mean	Very Satisfied	Somewhat Satisfied	Not Very Satisfied	Not at All Satisfied
Interpretive	3.5	60%	36%	4%	1%
Level of difficulty	3.5	57%	35%	7%	2%
Rules and regulations	3.5	55%	40%	5%	1%
Agency responses	3.3	49%	38%	7%	6%
Agency websites	3.3	46%	44%	8%	3%
Signage	3.3	42%	50%	6%	2%
Route maps	3.3	42%	47%	10%	1%
Guidebooks	3.3	41%	49%	9%	1%
Sampling error for this question ranges from ± 5 to $\pm 7\%$					

A number of respondents suggest additional information needs not currently being met, especially those of handicapped and of dog owners:

Fewer people at the campgrounds next to where I want to hike, because I just won't go to those. They seem overcrowded, loud, noisy, and my husband being handicapped I have to take two kinds of trips. The ones I take with him because he can't hike, but I'm stuck. The rules are too confining about where I can park my van and spend the night. There are not enough places for that. I just want an obscure, lonely parking spot. My handicapped husband can be happy at the van, while I hike. I want to be able to park along the side of the stream. I would be willing to pay user fee for closer access.

I think that it's very under-reported how many dog owners there are. And with my job there is less and less time to get my dog outside. I would be very inclined to use more of the parks if there were better guides about their availability for dog use.

Information Sources for Non-motorized Trail Users

The survey asked non-motorized trail respondents for the information sources they use and for their one favorite source. The results are listed below, ranked in order of most favorite to least favorite source:

TABLE 59: Information Sources – Non-motorized		
N = 320-325	Use Source	Favorite Source
Advice of people	88%	24%
Books, magazines, newspapers	80%	19%
Brochures, maps	95%	18%
Internet	64%	15%
Visitor information centers	83%	8%
ODOT road signs	80%	3%
Gather information along the way	66%	3%
State highway maps	81%	3%
Sporting goods stores	51%	2%
Phone trail management agencies	39%	2%
Clubs, groups	15%	1%
Phone toll-free numbers	42%	0%
Other	14%	2%
Sampling error for this question is $\pm 5\%$		

A majority of respondents have used many of the information sources. Favorite information sources are more evenly divided than for other user types, with people’s advice, printed resources like books, magazines, brochures, and maps, and the internet the leading sources. Clubs and groups rank low on both lists, probably because only seven percent of respondents report membership in a non-motorized trail organization or club. “Other” answers provided include television shows, bookstores, and AAA (American Automobile Association).

Overall Satisfaction with Non-motorized Trail Experience

Non-motorized trail users were asked for their overall evaluation of the non-motorized trail experience in Oregon, and almost 80% select the highest category of “very satisfied.” This is the highest level of satisfaction of the three user groups surveyed. Less than one percent reports a combined not very satisfied/not at all satisfied rating.

TABLE 60: Overall Satisfaction with Trail Experience – Non-motorized N = 325	
Very Satisfied	79%
Somewhat Satisfied	20%
Not Very Satisfied	0%
Not at All Satisfied	1%
Sampling error for this question is \pm 4%	

When asked how their overall non-motorized trail experience might be improved, respondents had a variety of responses and ideas. Some are reproduced below:

If we felt a little more safe with the parking and cars. I don't know how to do that. We have had car broken into twice in an urban area near the arboretum in Portland, near the Zoo, while we were using a trail.

The whole vehicle stuff is a downer for me, when trying to bird, when you have people dune bugging. It just shows we need more open spaces and green spaces to enjoy it as we want to.

My biggest suggestion is to let users know what a trail's main use is – if it is mainly motorized, let people know so they don't end up sharing the trail with ATVs while on foot. Once you get out on trail with kids, you don't want to turn around to find another one.

Some of us who are blind don't even read Braille because of our learning disabilities. There needs to be other media than just print, needs to be for, if it's supposed to be there for people, for everybody and not just the elite who are able bodied. How much harder would it be to have something in raised print, if you're going to put it in print anyways so both people would benefit from it? Not only that, have it on tape for people who can't read the print. For people who are physically disabled have things elevated for them.

Creating a guide book for dog owners which explains which parks are friendly and what rules you have to observe.

I guess just, knowing more about where trails are located. Whenever I look online, it pops up with a lot of websites that don't necessarily deal with hiking. I'd like the information all in one place.

Downloadable maps on the web for specific trails. Maybe a little more on what interpretation is available, and maybe actual better enforcement for people that are using trails inappropriately.

Non-motorized Trail Funding Priorities

Non-motorized trail users were asked to prioritize a variety of funding possibilities related to their sport. Routine upkeep of existing trails, repairing major damage, and cleaning up litter and trash are highest ranked priorities, followed by better information and signage, support facilities, enforcement, and acquiring land for new trails.

The complete distribution of answers is provided in the following table:

N = 320-325	Mean	Very Important	Somewhat Important	Not That Important	A Top Funding Priority ⁸⁰
Routine upkeep of existing trails	2.7	73%	24%	3%	208
Repairing major damage	2.6	66%	32%	2%	193
Clean up litter and trash	2.6	68%	25%	6%	172
Renovating deteriorated trails	2.5	50%	45%	5%	144
Support facilities	2.3	43%	43%	15%	107
Enforcing rules and regulations	2.3	44%	38%	18%	105
Acquire land for new trails	2.2	39%	41%	21%	104
Acquire access land	2.2	37%	47%	16%	94
Providing education, safety, and trail etiquette information	2.2	35%	48%	17%	83
Developing new trails	2.1	32%	50%	18%	77
Interpretive information	1.9	19%	55%	26%	45
Landscaping along trails	1.4	6%	29%	65%	14
Sampling error for this question is $\pm 5\%$.					

Ten percent of non-motorized trail users provide priorities for funding not mentioned including preservation of trail-less wilderness and a variety of innovative ideas:

I'd like the parks service to purchase land simply to prevent development, but I don't feel like building trails on land is important. Human access isn't as important as preservation.

Ecological integrity is my top priority for natural sites in Oregon.

Tape recorded trails signs that can be activated by buttons for those who can't read or see.

⁸⁰ Number of respondents selecting this answer. Asked only if respondent answered "very important."

Should have an international “go out and experience trails” day. An appreciation day⁸¹.

Use of Non-motorized Trails

When asked what they use non-motorized trails for, most choose “recreation.” Ninety-seven percent of non-motorized trail users answer recreation and fitness alone or in combination. Only two percent report they use non-motorized trails primarily for commuting or other transportation purposes:

TABLE 62: Primary Use of Non-motorized Trails N = 325	
Recreation	77%
Fitness	13%
Combination (if volunteered)	8%
Commuting, transportation	2%
Sampling error for this question is $\pm 4\%$	

Preferred Non-motorized Trail Surface Type

The survey asked non-motorized trail users, “For [your] favorite activity, what is your preferred trail surface type? Would it be a native or natural surface, such as packed soil, sand, grass, rock or snow; woodchip; gravel or rock, such as pea gravel or crushed rock; a hardened surface like asphalt or concrete; or boardwalk, wood or engineered plastic?” The responses:

TABLE 63: Preferred Surface Type for Non-motorized Trail Users N = 325	
Natural surface	75%
Hardened surface like asphalt or concrete	14%
Woodchip	4%
Gravel or rock	3%
Boardwalk, wood, plastic	2%
No preference (if volunteered)	1%
Sampling error for this question is $\pm 4\%$	

Natural surface is the overwhelming favorite, with asphalt/concrete a distant second and no other surface garnering more than 4% of response.

Importance of Non-motorized Trails

The survey asked respondents, “In your opinion, how important is it to you to have non-motorized trails for the following recreation trail activities?” Responses are presented in the following table:

⁸¹ There actually is such a day, in June. However, this and other such suggestions indicate the low level of public awareness of initiatives that are being taken.

Respondents provide overwhelming support for hiking and walking trails. Although backpacking is not a highly popular trail use, there is disproportionate support for trails for backpackers. Jogging, bicycling, and cross-country skiing trails also have support.

TABLE 64: Importance of Non-motorized Trail Types (1 = Not as Important, 3 = Very Important)				
N = 315-317	Mean	Very Important	Somewhat Important	Not As Important
Trail hiking or day hiking	2.9	85%	14%	1%
Walking for pleasure	2.7	77%	20%	3%
Overnight backpacking	2.2	47%	27%	26%
Jogging or running	2.1	40%	28%	32%
Cross-country skiing	2.0	37%	24%	39%
Bicycling (other than mountain biking)	2.1	35%	35%	29%
Mountain biking (on natural terrain trails)	1.8	25%	26%	49%
Horseback riding	1.7	26%	20%	54%
Hiking with horses, mules, llama	1.6	20%	24%	56%
Competitive trail events	1.6	17%	22%	61%
Geocaching	1.5	13%	24%	63%
Roller blading (in-line skating)	1.4	11%	19%	70%
Sampling error for this question is \pm 5%				

Mean answers present one number that summarizes all responses. The full distribution of answers illuminates the intensity of respondent views. Hiking and walking remain far in front of the other choices. Although only 16% of non-motorized trail users report having backpacked in the past year, almost half feel that trails for such users are very important. More than half of non-motorized trail users feel it is not as important to have trails for horseback riding, hiking with stock, competitive trail events, geocaching, and roller blading.

Signage for Non-motorized Trails

Non-motorized trail users were asked to rate the importance of signs at different trail locations:

TABLE 65: Importance of Signage - Non-motorized (1 = Not That Important, 3 = Very Important)				
N = 313-326	Mean	Very Important	Somewhat Important	Not That Important
Trail junctions	2.8	78%	20%	3%
At trailhead	2.7	74%	19%	7%
Along trail	2.5	59%	30%	11%
Stream crossings	2.1	41%	28%	31%
Sampling error for this question is \pm 5%				

Trail junctions and at the trailhead are ranked highest, with along the trail and at stream crossings trailing behind.

Club Membership – Non-motorized

Non-motorized trail users were asked if they belong to a trail club or group.

TABLE 66: Membership in a Club or Group – Non-motorized	
N = 326	
Yes	7%
No	93%
Sampling error for this question is \pm 4%	

Only seven percent of non-motorized trail users report membership in a group or club related to their activity. Although this represents a sizable 30,700 households in Oregon, as many as another 408,000 households with non-motorized trail users contain no club or group member, reflecting a large potential membership for such organizations.

STATEWIDE NON-MOTORIZED TRAIL GOALS, OBJECTIVES AND STRATEGIES



Goals, Objectives and Strategies for Top Statewide Trail Issues and Concerns

The chapter focuses on a set of long-range goals, objectives and strategies for the top two Statewide Non-motorized Trails Issues and five Statewide Trail Concerns as identified through the non-motorized trails planning effort. A brainstorming session during the September 23, 2003 Non-motorized Trails Steering Committee Meeting produced an initial set of goals, objectives and strategies for resolving these top statewide issues and concerns.

For the purposes of this plan:

- Goals are general, broadly stated, desirable conditions toward which all non-motorized trail providers in the state should direct their efforts.
- Objectives are the proposed long-range solutions to the issues and the discrete problem areas involved. Objectives do not represent the complete solution to the identified issue, but are aspects of the solution identified during the planning process.
- Strategies are what need to be done to accomplish each objective and identify which specific non-motorized trail providers would be responsible for the strategies within the state's ten-year planning cycle.

Trail managers and planners in the state of Oregon must address the needs of a wide variety of non-motorized trail users such as (but not limited to) hikers, backpackers, mountain bike riders, equestrians, runners, walkers, bicycle riders, inline skaters and individuals with functional impairments.

During this statewide trails planning process, all trail users had an opportunity to voice their specific needs and concerns through the issues workshops held across the state and the statewide non-motorized trail user survey. This plan recognizes that in Oregon there are finite resources to satisfy the demands of a growing number and diversity of trail users. The increased sharing of resources sometimes creates friction between the diverse user groups competing for limited trail space. Rather than focusing on individual user groups, the following statewide goals, objectives and strategies are designed to optimize the use of limited trail resources in ways that benefit all users and their appropriate trail uses. Decisions about how to best allocate resources for specific user groups are more appropriately addressed in local and regional trails planning efforts.

Statewide Non-motorized Trail Issue A:

Need for Trail Connectivity

As in the Statewide Comprehensive Outdoor Recreation Plan (SCORP), recreation providers and other workshop attendees consistently reported in issues workshops the need for non-motorized trail connectivity within their regions. According to recreation providers, trail connectivity involves linking urban trails to outlying Federal trail systems; linking neighborhood, community and regional trails; connecting community parks and other recreational and public facilities; and connecting neighboring communities (e.g.

Ashland to Medford). 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.

Recreation providers stated that in order to properly plan for trail connectivity, there is a need for regional multi-jurisdictional trail planning entities (e.g. Deschutes Bike and Pedestrian Committee) to facilitate regional and urban trail system planning. Such groups would work with private landowners, irrigation districts and public agencies (federal, state and local) to coordinate the trails planning process and facilitate idea sharing and the communication process. In addition, there is a need for a shared vision between local, state and federal recreation providers on a regional scale that can be used to identify trail development priorities. Such an overall vision is essential in order to see trails projects through to completion and to ensure that individual trail projects make sense as part of the larger trail system.

According to recreation providers, the prioritization of trail development projects should be done at a regional level using gap analysis and a peer review process. At the local level, projects should be developed using grass roots organizations such as community solution teams to get a broader perspective on what other governmental agencies are doing which might affect trail development.

Finally, recreation providers stated that there is a need for a central database or statewide GIS system including all Local Transportation System Plans and current inventories of existing and proposed trails so that trails planners and local public officials are better aware of the current

status of trails planning within their jurisdiction. The trails planning information should be easily accessible such as on a website.



Goal #1:

Identify and encourage key trail linkages between and among local, regional and statewide trails to better use the state's existing non-motorized trail system.

Objective 1: Collect and disseminate statewide multi-jurisdictional non-motorized trails information.

Strategies/Actions for Addressing Objective 1:

- OPRD will develop a GIS-compatible statewide trails inventory database that will allow agencies and other users to identify and map trail resources and characteristics for non-motorized trails of Statewide, Regional and Local Significance.
- OPRD and ORTAC will develop a vision map of trails of Statewide Significance (including those trails or existing trail maps in GIS format) showing the backbone or spine of a statewide trails system that could be linked to regional or local trail

systems, and can be used for identifying statewide priorities.

- OPRD will collect vision maps from those regions in the state that have existing regional trail system maps in GIS format, and can be used to identify regional priorities and encourage other regions to develop trail system maps.
- Develop a list of potential funding sources for non-motorized trail development, maintenance and planning to be made available to providers.

Objective 2: Develop a regional approach to non-motorized trail planning.

Strategies/Actions for Addressing Objective 2:

- Establish regional working groups (e.g. Coos Regional Trails Partnership, Metro Greenspaces Technical Advisory Committee) including representatives from trail organizations, federal, state, and local agencies, tribal governments and other stakeholders, to work in cooperation with managing agencies in trail planning, funding, and design to facilitate the identification of multi-jurisdictional priorities.
- Develop regional non-motorized trails plans (multi-jurisdictional) to identify regional priorities.
- Involve trail organizations, non-motorized trail users and other interested stakeholders, private conservancies, foundations, and land trust organizations in the

development of regional non-motorized trails plans.

- Identify potential funding sources for regional trails planning.

Objective 3: Provide technical assistance and outreach for regional non-motorized trails planning.

Strategies/Actions for Addressing Objective 3:

- The Oregon Recreational Trails Advisory Council (ORTAC) will develop and implement a regional trails planning forum process to promote interagency coordination.
- OPRD will develop a trails planning how-to manual to encourage connectivity.
- Develop case studies that showcase the planning and development of well designed and managed regional trail systems (e.g. Rivers to Ridges Planning process spearheaded by the Lane Council of Governments).

Objective 4: Focus resources towards the most significant components of local and regional trail systems.

Strategies/Actions for Addressing Objective 4:

- Develop a statewide GIS system to collect maps of all trails of local and regional significance identified in the statewide trails inventory as they become available.
- OPRD and ORTAC will perform a "gap analysis" of the statewide GIS system to identify local and regional trail connection priorities.

- Provide additional scoring points in trail-related OPRD administered grant programs for projects identified in this forum process as top local and regional trail system priorities.
- ORTAC will establish a process for regularly reporting the development of, and connections to, the "State Significant" trail system (e.g. Desert Trail, Corvallis to Sea, Bear Creek Greenway).
- OPRD will work with the National Park Service (NPS) Rivers and Trails Program to identify and provide planning assistance for the most significant trail development projects in the state.

Statewide Non-motorized Trail Issue B:

Need for Trail Maintenance

Recreation providers strongly stated that they are struggling to maintain existing trails due to increasing use levels and declining maintenance budgets. At the same time, providers are being asked by user groups to develop more and more new trails. A common argument made across the state was that additional priority should be given to maintaining what we currently have before adding additional facilities. According to providers, there always seems to be funding available for trail development—but not for routine day-to-day trail maintenance.

Recreation providers argue that compliance with health and safety regulations must continue to be addressed by trail providers throughout the state. Deterioration of our trail system jeopardizes the safety and health of trail users, discourages continued

visitation, and threatens the investments already made in trail resources. Delaying maintenance will result in increased long-term costs; deterioration is less expensive to fix if diagnosed and dealt with early. Poor maintenance can also foster lack of respect and encourage depreciative behavior. Providers reported that we are already beginning to lose the use of some trails due to lack of maintenance and associated resource damage.

Recreation providers and other workshop attendees felt a need for a dedicated long-term funding source for non-motorized trail maintenance in the state. Funding suggestions mentioned during issues workshops included:

- A trail use pass;
- Direct trail use fees;
- Out-of-state user fees;
- Taxes on the purchase of recreational equipment; and
- Recreation Trail Program priority for maintenance projects.

According to recreation providers and other workshop attendees, there is a need to make better use of trail clubs and other volunteers for conducting trail maintenance. In addition, there are opportunities to engage private conservancies, foundations and land trust organizations as partners and providers in trail planning, development, management and maintenance.

Finally, providers argued that there is a need for consistent trail design and maintenance standards and procedures to proactively address resource damage occurring on trails. They reported a need for high-quality trail construction and maintenance information in the state. Such

resources are currently available, but simply need to be housed in a central statewide location.

Goal #2:

Preserve and maintain the public's substantial investment in the existing infrastructure of trails and related facilities

Objective 1: Inform the public, and state and local leaders, about the importance of maintenance in protecting the long-term viability of Oregon's trail system.

Strategies/Actions for Addressing Objective 1:

- Develop promotional materials for the general public stressing the importance of trail maintenance in getting the longest life out of the public's investment in trails.
- Develop case studies that showcase successful trail maintenance programs and methods.
- Encourage the use of standardized trail assessment methods (e.g. Universal Trail Assessment Process, USFS inventory and assessment process, OPRD inventory and assessment process) by all public recreation providers to conduct a trail condition assessment to determine short-term and long-term maintenance needs.
- Each public recreation provider in the state should conduct a facility condition report for trails and prepare a maintenance plan.

Objective 2: Increase the amount of resources available for trail maintenance.

Strategies/Actions for Addressing Objective 2:

- ORTAC and the state trails coordinator should work with other trail management organizations to identify and push for innovative and improved maintenance funding sources at the federal, state and local levels.
- ORTAC and the state trails coordinator should investigate the potential for initiating a trails foundation with a mission of funding trail maintenance.
- Recreation providers should better prioritize trail maintenance needs among other budget items.
- Establish public and private partnerships to augment trail maintenance budgets.
- Provide additional scoring points in trail-related OPRD administered grant programs for trail maintenance identified in a trail condition assessment process and included in a maintenance plan.

Objective 3: More effectively engage volunteers as stewards of Oregon's trail system to help preserve the legacy for future generations.

Strategies/Actions for Addressing Objective 3:

- Create an interagency volunteer information clearinghouse to match volunteers with local trail

maintenance projects (e.g. Washington Trails Association).

- Encourage agencies to fund volunteer coordinator positions.
- Provide volunteer coordination training for trail managers and appropriate maintenance training for volunteers.
- Encourage organized trail groups and trail users to become more active in Adopt-A-Trail and other volunteer programs.
- Organize maintenance and clean-up events or other special projects on heavily used and high-visibility trails.
- Create an annual award for the best maintained trail/trail system in the state using volunteer assistance (such as the Doug Newman Award).
- Encourage agencies to award outstanding trail volunteer efforts at the local level.
- Better use National and State Trails Day as an opportunity to recognize volunteers and the importance of trail maintenance.

Statewide Non-motorized Trail Concern 1:

Need For More Trails In Close Proximity To Where People Live

Recreation providers and other workshop attendees in issues workshops across the state voiced a need for more trails in close proximity to where people live. This need is clearly in line with the findings of the 2002 Oregon Outdoor Recreation Survey that identified running and walking for exercise and walking for pleasure as the most

popular everyday outdoor recreation activities of Oregonians. According to the OSU report, these activities are generally engaged in near home, and on a regular basis and state residents demand these opportunities in the communities in which they live.

Trail users also stressed the need to recognize the benefits that trails provide to communities such as attracting businesses, increasing overall quality-of-life, and drawing additional residents to the community. In addition, urban trails need to be considered as an important component of the urban transportation system. Additional trails also encourage the disbursement of recreational use in urban areas.

Finally, the U.S. Center for Disease Control (CDC), the Oregon Department of Human Services, Health Services, and the Oregon Coalition for Promoting Physical Activity (OCPPA) are currently promoting physical activity and the health benefits associated with participation in recreational trail activities. The OCPPA has recently completed a plan entitled the Oregon Plan for Physical Activity⁸², which states that, "Physical inactivity together with poor eating habits contributes significantly to the development of obesity, high blood pressure, heart disease, cancer, and diabetes, which are the leading causes of disease and death among Oregonians. The current epidemic of obesity in the United States has hit Oregon particularly hard. At 22%, our state has the highest percentage of adult obesity of any state west of the Rockies. Our youth follow closely behind,

⁸² Oregon Coalition for Promoting Physical Activity (2003). A Healthy Active Oregon: The Statewide Physical Activity Plan.

with 28% of eight graders and 21% of eleventh graders currently overweight."

According to the plan, "Communities need to make daily physical activity the easy choice, where parks and recreation facilities are available to children and adults in neighborhoods and are easily accessible by walking, bicycling, and public transit." The plan has identified providing pathways and trails in parks, along rivers, and in other natural settings to encourage walking and bicycling for exercise and transportation as a key strategy. The Oregon Department of Human Services, Health Services is also working with the CDC to develop federal funding for trail projects that would enhance other funding programs such as the Recreation Trails Program, TEA-21 grants, the Land & Water Conservation Fund and the Local Government Grant Program.



Goal #3:

Promote daily physical activity by improving local access to trails.

Objective 1: Inform the public about existing community trails close to where they live.

Strategies/Actions for Addressing Objective 1:

- Explore public/public and public/private partnerships to develop and disseminate trail maps and information to residents and communities of all sizes.
- Include trail users in the development of maps and information.
- OPRD will develop a GIS-compatible statewide trails inventory database that will allow trail users to access trail resources and characteristics for non-motorized trails of Statewide, Regional and Local Significance.
- OPRD will develop a search engine for public web access to the trails inventory database to assist individuals to find nearby trails.
- Encourage recreation providers to develop trail maps.
- Target trail information distribution to the disabled and the elderly populations through appropriate clubs and organizations such as the American Association of Retired Persons (AARP) and school children as part of the "Safe Routes to School" program.
- Seek recognition of trails as part of local transportation systems and that trails provide an alternative to the automobile for local trips.

Objective 2: Encourage local governments to conduct community trails planning efforts to identify and prioritize local trail needs that will provide close-to-home trail opportunities.

Strategies/Actions for Addressing Objective 2:

- Provide additional scoring points in trail-related OPRD administered grant programs for grant requests satisfying priority needs identified through a local trails planning process—especially trails of regional and local significance.
- Involve trail organizations, non-motorized trail users, local business leaders and other interested stakeholders in the development of local trails plans.
- Identify potential funding sources/assistance for community trails planning (including funding for GIS mapping).
- Develop case studies that showcase the planning and development of well-designed and managed community trail systems (e.g. Jacksonville, Sisters and Bend).
- Work with transportation and school officials to provide children with safe pedestrian and bicycle routes to and from schools.
- Develop conveniently accessible trail networks which interconnect communities with shopping and employment districts, community activity centers, public transportation stops, parklands, and trails of local, regional and statewide significance.

Objective 3: Encourage local recreation providers to seek innovative funding mechanisms for urban trail development.

Strategies/Actions for Addressing Objective 3:

- Encourage local recreation providers to work with their City Council to develop Park Systems Development Charges (SDC) that can be used to provide funding for trail acquisition and development to keep pace with population growth and new development.
- Ensure that trails plans are incorporated into local land development ordinances to make sure that the development of the local trail system is considered with all land development proposals.
- Establish private foundations dedicated to urban trail systems (e.g. Portland 40-Mile Loop Land Trust and Ashland Woodlands & Trails Foundation).
- Recreation providers should consider other local revenue sources for addressing trail deficiencies (e.g. general obligation bonds, grants and gifts, local option taxes, regional funding or niche taxes).
- Develop case studies that showcase innovative and successful funding strategies for urban trail development (e.g. Bend Urban Trails Plan).

Objective 4: Develop and disseminate information on the personal and societal benefits of trails to a wide variety of local consumers such as policymakers, public works departments, school administrators, planners, business owners and leaders, chambers of commerce and developers.

Strategies/Actions for Addressing Objective 4:

- Compile, summarize and distribute information describing the physiological, economic, environmental, social, psychological and educational benefits associated with community trails.

Objective 5: Increase cooperation and communication with community-based health organizations related to trail development.

Strategies/Actions for Addressing Objective 5:

- Partner with health care systems and providers to support and promote trail development in communities throughout the state.
- Revise applicable health-related funding programs to include trail projects.
- Work with the Active Community Environments (ACE) Working Group to advocate for trail development as a means of building healthy communities.

Statewide Non-motorized Trail Concern 2:

Need For Additional Non-motorized Trails

Recreation providers and trail users stated that there is a strong need for additional non-motorized trail opportunities in areas experiencing high growth rates and in trail planning regions with current shortages of non-motorized trails of all types. There also was a reported need for more non-commercial groomed cross-country ski trails, more snow parks and related facilities and additional equestrian camps and day-use trailheads.

Recreation providers stated that trails are not always seen as top priorities in relation to other community needs or even other recreational needs. As a result, recreation providers must work together to make a stronger case that trails are important to communities and provide a broad range of social and economic benefits to communities and are deserving of a higher position on the city, county, state and federal political agendas.

Finally, recreation providers and other workshop attendees stated a strong need for a state administered funding source for non-motorized trail development that is similar to the ATV grant fund program that taps user contributions and is not dependent on federal funding.



Goal #4:

Support the development of new trails.

Objective 1: Increase funding devoted to expanding trail opportunities for Oregonians.

Strategies/Actions for Addressing Objective 1:

- ORTAC will develop a statewide interagency marketing plan for educating local, state and federal politicians on the outstanding value of investing in non-motorized trails in the state of Oregon (RTP, Enhancements, LWCF, Local Government Grant Program— Measure 66, RTCA).
- ORTAC will advocate at local, state, and national levels for increased funding for trail planning, development, maintenance and operation (Partnerships with Public Health, Transportation and Urban Planning Organizations).
- ORTAC and the state trails coordinator should investigate an "Oregon Trails Foundation" concept with a mission of providing funding for trail planning, construction and maintenance.

Statewide Non-motorized Trail Concern 3:

Need To Consider Public Ways (Roads, Railroads, Utility Corridors) Proposed For Closure Or Abandonment For Non-motorized Trail Use

Oregon is crossed by thousands of miles of linear facilities such as railroad beds, pipelines, canals, utility rights-of-way and roads. Public utility and irrigation easements include oil and natural gas pipelines, sewer lines, irrigation ditches, electrical transmission, telephone, and television lines, and fiber optic cable. Recreation providers and other workshop attendees argued that there are opportunities to make greater use of such transportation rights-of-way and public utility and irrigation easements for recreational trail development.

Goal #5:

Ensure trail use is evaluated when roads, railroads & utility corridors are considered for abandonment, change of use, or shared use.

Objective 1: Develop additional trails along canal and utility easements and transportation rights-of-way.

Strategies/Actions for Addressing Objective 1:

- Work with federal, state and local agencies to create more

opportunity for public input in the road closure/vacation process.

- Use the State Transportation Planning Goal and Transportation Planning Rule (OAR 660-12) requiring cities and counties to develop utility/pipeline plans as a part of local transportation system plans to identify potential trail opportunities.
- OPRD should create a notification process to alert park and recreation agencies of all railroad notices of intention to file for Exempt Abandonment.
- Contact railroad managers to explore Rail-With-Trail possibilities on railroad lines that are still in use, but receive little train traffic in areas where need has been determined.

Statewide Non-motorized Trail Concern 4:

Need For Trail Accessibility Information

Recreation providers in several regions reported a need for improved trail access for people with disabilities. At the same time, these providers argued that not all trails can or should be accessible to all users. There was general agreement that providing key trail type and condition information to users has the potential to increase the usability of existing trails and enable everyone, of all ages and abilities, to enjoy the benefits of recreational trails. To make better use of the existing trail infrastructure, all trail providers need to do a better job informing trail users of the conditions they will encounter on trails to allow each individual to decide if a particular trail is accessible to them.

To date, there have been only limited efforts by recreation providers to provide consistent trail access information for trails in the state of Oregon. There is no centralized trails information source in the state. In addition, there is no standardized methodology used for gathering and disseminating accessibility information.



Goal #6:

Provide the public with better trail accessibility information.

Objective 1: Develop and distribute key trail type and condition information to allow users to evaluate if a trail is accessible to them.

Strategies/Actions for Addressing Objective 1:

- ORTAC will host a statewide trail accessibility meeting involving a wide range of stakeholders to evaluate standard trail access assessment approaches and disseminate trail accessibility information.
- Develop a statewide sign program for conveying trail access information at trailheads.
- Work closely with different groups of elderly and disabled trail users to identify the types of information most important to allow each individual to decide if a particular trail is accessible to them.

Statewide Non-motorized Trail Concern 5:

Need For Regional Interagency Coordination/Cooperation In Trail Management

Recreation providers and other workshop attendees consistently reported that successful non-motorized trail development, management and planning relies on good coordination and communication between trail

organizations, federal, state, and local agencies, tribal governments and other stakeholders. In many regions, providers and user groups stressed the need for regional coordination and information sharing between agencies for non-motorized trail planning, operations and management.

Regional coordination and communication should also encourage:

- adopting consistent design, construction and maintenance standards,
- developing and implementing directional and regulatory signing consistency,
- developing regulatory and law enforcement consistency,
- sharing limited trail maintenance resources and equipment,
- taking a regional approach, rather than having each agency working independently, to more effectively address trail capacity issues,
- taking a regional approach, rather than having each agency working independently, to more effectively address user conflict (e.g. mountain bikers and equestrians),
- taking a regional approach, rather than having each agency working independently, to more effectively develop and distribute trail information and other promotional materials,
- taking a regional approach, rather than having each agency working independently, to more effectively identify trail grant funding priorities, and
- connecting existing trails where opportunities exist.

According to recreation providers and other workshop attendees, managing agencies should strive to provide users with seamless and coherent trail experiences that are not disrupted by administrative boundaries.

Goal #7:

Promote coordination and cooperation between public agencies, private organizations and non-motorized trail users.

Objective 1: Standardize statewide trail management practices.

Strategies/Actions for Addressing Objective 1:

- Coordinate the standardization of rules and regulations across management boundaries.
- Review and revise any state laws or agency regulations or rules to create consistency in the regulation of non-motorized trail use.
- Develop statewide design and construction standards.
- Develop statewide directional and regulatory signing standards and standard messages.
- ORTAC will provide coordination between the OPRD, other agencies and non-agency stakeholders in the implementation of the 2005-2014: Non-motorized Trails Action Plan.
- Promote communication and information sharing through websites, trail workshops or other public forums.

Next Steps

This chapter includes an extensive list of strategies recommended by a wide range

of stakeholders who are dedicated to providing high-quality trail opportunities across the state. In total, these strategies are intended to enable many to work together in resolving the top two Statewide Non-motorized Trails Issues and five Statewide Trail Concerns identified through the non-motorized trails planning effort. The OPRD would like to thank all those who participated in this important part of the overall planning process.

This plan is ambitious and intended to be so, however, it is not necessarily an expectation or measure of success that every strategy be implemented within the plan's 10-year timeframe. As we proceed towards implementation, we must keep in mind that the ultimate success of the plan rests on the continued support of stakeholders across the state to actively participate in implementing these strategies. There are two entities that must take a lead role in engaging stakeholders across the state in the implementation of these strategies—the OPRD and its commission appointed advisory body, the Oregon Recreation Trails Advisory Council.

ORTAC Priority Strategies

ORTAC advises the Oregon Parks and Recreation Department on statewide trail matters that come before the department. They also make recommendations to other trail managing agencies and non-government groups and assist OPRD on a variety of funding committees. As a result, ORTAC will play a vital role in implementing a number of important strategies included in this chapter. The following is a list of **high-priority strategies** that ORTAC will focus on early in the 10-year planning cycle.

- Provide coordination between agency and non-agency

stakeholders in the implementation of the non-motorized trails plan.

- Develop and implement a regional trails planning forum process to promote interagency coordination (Participate in those that exist and try to encourage them whenever they do not).
- Develop a vision map of trails of "Statewide Significance" showing the backbone or spine of a statewide trail system that could be linked to regional or local trail systems and can be used for identifying statewide priorities.
- Perform a "gap analysis" of the statewide trails system to identify local and regional trail connection priorities.
- Establish a process for regularly reporting on the development of and connections to, the "Statewide Significant" trail system (e.g. newsletters, website, quarterly meetings).
- Work with other trail management organizations to identify and advocate for innovative and improved maintenance funding sources at the federal, state and local levels.
- Develop a statewide interagency marketing plan for educating local, state and federal politicians on the outstanding value of investing in non-motorized trails in the state of Oregon (sell the benefits, stories of current funding programs— Enhancements, LWCF, RTP, Local Grant Program).
- Advocate at the local, state and national levels for increased funding for trail planning, development, maintenance and operation.

- Investigate an "Oregon Trails Foundation" concept with a mission of providing funding for trail planning, construction and maintenance.
- Host a statewide trail accessibility forum involving a wide range of stakeholders to evaluate standard trail assessment approaches and disseminate trail accessibility information.

As with any long-term plan, the implementation strategies included in this chapter may change over the course of the planning cycle. The Council's public meeting process will provide opportunities for agency and citizen participation when implementation strategies need to be revised over time as circumstances change and opportunities arise.

OPRD Priority Strategies

The Oregon Parks and Recreation Department was given responsibility for recreation trails planning in 1971 under the "State Trails Act" (ORS 390.950 to 390.990). In addition, the agency administers Recreational Trails Program, a federal-aid assistance program to help states provide recreational trails among other funding sources. As such, OPRD will also play a vital role in implementing a number of important strategies included in this chapter.

The following is a list of high-priority strategies that OPRD will focus on during the 10-year planning cycle.

- Develop a GIS-compatible statewide trails inventory database that will allow agencies and other users to identify and map trail resources and characteristics for non-motorized

trails of Statewide and Regional Significance.

- Develop a search engine for public web access to the trails inventory database to assist individuals to find nearby trails.
- Collect vision maps from those regions in the state that have existing regional trail system maps in GIS format that can be used to identify regional priorities and encourage other regions to develop trail system maps.
- Work with advisory committees to provide additional scoring points in trail-related OPRD administered grant programs for projects identified in ORTAC's regional trails planning forum process as top local and regional trail system priorities.
- Work with the NPS Rivers and Trails Program to identify and provide planning assistance for the most significant trail development projects in the state.
- Work to create a non-profit organization responsible for developing an interagency volunteer information clearinghouse to match volunteers with local trail maintenance projects (e.g. Washington Trails Association); providing volunteer coordination training for trail managers and appropriate maintenance training for volunteers; and organizing maintenance and clean-up events or other special projects on heavily used and high-visibility trails.
- Create an annual award for the best maintained trail/trail system in the state using volunteer assistance (such as the Doug Newman Award).

- Better use National and State Trails Day as an opportunity to recognize volunteers and the importance of trail maintenance.
- Provide additional scoring points in trail-related OPRD administered grant programs for grant requests satisfying priority needs identified through a local trails planning process—especially trails of regional and local significance.
- Develop case studies that showcase the planning and development of well-designed and managed community trail systems (e.g. Jacksonville, Sisters and Bend).
- Work with the Oregon Coalition for Promoting Physical Activity and the statewide Active Community Environments Working Group to foster communities where people of all ages and abilities can easily and safely enjoy walking, bicycling and other forms of recreation.



Recreational Trail Program 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 & 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 Advisory Committee (RTAC) 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 steering committee members, and trail user survey respondents. These criteria have been designed to evaluate and prioritize motorized and non-motorized terrestrial trail and water trail projects.

The project score will be calculated as an average of the sum of all individual RTAC member scores. The highest possible score for a project will be 100 points. (See Potential RTP Evaluation Criteria Point Summary on the next page 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 RTP grant funds available each year.



Recreational Trail Program Evaluation Criteria Point Summary

TABLE 67: RTP Grant Program Evaluation Criteria Point Summary			
CRITERIA TYPE	MOTORIZED	NON-MOTORIZED	WATER
	Potential Points	Potential Points	Potential Points
TECHNICAL REVIEW			
1. Compliance Criteria	0	0	0
RTAC MEMBER EVALUATION CRITERIA			
2. First Time Awards	3	3	3
3. Matching Shares	7	7	7
4. Close-To-Home Opportunities	10	10	10
5. Long-Term Commitment to Trail Maintenance	5	5	5
6. Top Statewide Trail Issues	21	15	21
7. Local Needs and Benefits	15	15	15
8. Motorized Trail Opportunities	6	0	0
9. Public Access to Waterways	0	0	6
10. Trail Design & Management	5	5	5
11. Non-motorized Trail Connectivity	0	7	0
12. Multi-Use Trails	5	5	5
13. Economic Development Opportunities	3	3	3
14. NST, NRT or NHT	0	5	0
15. Project Urgency	5	5	5
16. Discretionary Committee Member Criteria	15	15	15
TOTAL POTENTIAL POINTS	100	100	100

Note: The variation in the allocation of points reflects the differences in priorities for the three trail types as reported in the current state trails plan.

OPRD Technical Review

1. Compliance Criteria (0 Points) (For motorized, non-motorized and water trail projects)

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 (for past RTP funded projects see progress

and completion responsibilities included in the current Oregon Recreational Trail Program Fund Grants Manual and project agreements),

- Funds are expended and projects completed within the agreement period, and
- Each new project proposal satisfies the requirements of the Transportation Equity Act for the 21st Century (TEA-21) and are 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 **disqualification of consideration for new grant assistance** 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.

___ Yes ___ No

b. The project sponsor is in compliance with applicable guidelines for current and past projects.

___ Yes ___ No

Recreational Trails Advisory Committee Member Evaluation Criteria

2. First Time Awards (3 Points) (For motorized, non-motorized and water trail projects)

Priority points are given to projects from project sponsors that have not received an RTP grant to date.

- The project sponsor has never received Recreational Trail Program funding.
_____ points awarded (0 or 3 points)

(3 points for project sponsors who have not received an RTP grant to date, 0 points for all other project sponsors.)

3. Matching Shares (7 Points) (For motorized, non-motorized and water trail projects)

Priority points will be provided to the extent that the applicant match the RTP grant with contributions from their own cash and/or in-kind services.

- The applicant provides:

0 to 19.9% of the project's value.....	(0 points)
20 to 25% of the project's value.....	(1 point)
25.1 to 30% of the project's value.....	(2 points)
30.1 to 35% of the project's value.....	(3 points)
35.1 to 40% of the project's value.....	(4 points)
40.1 to 45% of the project's value.....	(5 points)
45.1 to 50% of the project's value.....	(6 points)
Over 50% of the project's value.....	(7 points)

_____ points awarded (0-7 points)

4. Close-To-Home Trail Opportunities (10 Points) (For motorized, non-motorized and water trail projects)

A. Close-To-Home Motorized Trail Projects (For motorized trail projects)

The 2004 Oregon Statewide Trail User and Non-motorized Boater Survey identified that over half of motorized trail users travel more than 40 miles to enjoy their favorite trail activity, and one-fifth travel more than 100 miles. The survey also reports that lack of time and lack of close by riding opportunities are the top two reasons why motorized trail users do not use trails as much as they wanted. A project sponsor that develops a close-to-home motorized trail project will receive up to 10 priority points.

- The applicant should describe how their project is intending to provide close-to-home motorized trail opportunities including information such as driving distances from nearby communities and populations served.

_____ points awarded (0-10 points)

(The rating team will determine a value from 0-10 points based on the information provided by the applicant.)

B. Close-To-Home Non-motorized and Water Trail Projects (For non-motorized and water trail projects)

According to the Oregon Outdoor Recreation Survey⁸³, the most popular everyday activities in Oregon are running and walking for exercise and walking for pleasure. According to the OSU report, these activities are generally engaged in near home, and on a regular basis. The implication for outdoor recreation planners and managers is that people demand such opportunities in the communities in which they live, and nearby. In addition, exercise derived from non-motorized trail activities lessens health-related problems and subsequent health care costs. Regular, moderate exercise has been proven to reduce the risk of developing coronary heart disease, stroke, colon

⁸³Rebecca Johnson (2002). Oregon's Statewide Comprehensive Outdoor Recreation Plan (SCORP): Demand and Needs Analysis. Department of Forest Resources, Oregon State University.

cancer, hypertension, diabetes, osteoporosis, obesity, and depression⁸⁴. Project sponsors are strongly encouraged to submit projects that develop "close-to-home" trail facilities.

- To qualify as a "close-to-home" trail, the trail must be located in or connect to a trail or trailhead located within an urban growth boundary (UGB), unincorporated community boundary, or a Tribal community. A **map clearly identifying the trail location and UGB or unincorporated community boundary or Tribal community boundary drawn on it must be submitted in order to receive points.**

The non-motorized or water trail project will develop close-to-home non-motorized or water trail facilities.

_____ points awarded (0-10 points)

(10 points for project sponsors qualifying as a "close to home" trail, 0 points for all other project sponsors.)

5. Long-Term Commitment To Trail Maintenance (5 Points)

(For motorized, non-motorized and water trail projects)

A. Commitment to Long-Term Maintenance

Trail maintenance was identified as the top funding priority for all trail user groups in the 2004 Oregon Statewide Trail User and Non-motorized Boater Survey.

- The applicant should carefully explain how they plan to continue trail operation and maintenance after the project is complete. List maintenance requirements (including the level of annual maintenance required for the trail) and strategies to be used. Also describe the degree of commitment by reporting on such items as on-going funding, partnerships with other agencies, or volunteer maintenance (e.g. youth conservation or service corps). Include appropriate documentation such as volunteer hour tracking reports, cooperative agreements, donations, private sponsorships support letters, or signed memoranda of understanding—as may be useful in demonstrating commitment to maintenance.

_____ points awarded (0-3 points)

(The rating team will determine a value from 0-3 points based on the information provided by the applicant.)

B. Identification of Trail Maintenance Need

During the issues workshops, recreation providers stated a need to use a systematic process in determining the need for trail maintenance.

⁸⁴ Centers for Disease Control and Prevention (1996). Surgeon General's Report on Physical Activity and Health, Department of Health and Human Services. July.

- Priority points are awarded for trail maintenance (see note below) identified in a trail condition assessment process and included in a maintenance plan. _____ points (0-2 points)

(The rating team will determine a value from 0-2 points based on the information provided by the applicant.)

Note: The RTP grant program **does not fund routine trail maintenance** work but **does fund trail rehabilitation/restoration projects**. See specific routine trail maintenance and trail rehabilitation/restoration definitions below.

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 culverts, water bars, 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.

6. Top Statewide Trail Issues (21 Points Motorized, 15 Points Non-motorized And 21 Points Water) (For motorized, non-motorized and water trail projects)

The statewide trails plan involved representatives from 56 public-sector provider organizations (including representatives from federal, state, county, and municipal agencies, Park and Recreation Districts, Ports, and Native American Tribes) and many citizen and interest groups in the process of identifying top statewide and regional trail issues. The following trails plan criteria are based on this public input process.

Statewide trail issues were identified during the current trails planning process. Project proposals addressing statewide motorized, non-motorized and water trail issues and non-motorized trail concerns will receive additional priority points. To receive points, project sponsors should describe how the project addresses appropriate statewide trail issues and concerns. Statewide non-motorized, motorized and water trail issues and non-motorized trail concerns are included below.

(FOR MOTORIZED TRAIL PROJECTS)

Statewide Motorized Trail Issues

Issue A: Need for new trails/managed riding areas.

Issue B: Need for regional interagency coordination/cooperation in trail planning and management.

Issue C: Need for user education/training (regulatory and safety information).

If the motorized trail project addresses:

- 0 statewide motorized trail issues..... 0 points
- 1 statewide motorized trail issue 7 points
- 2 statewide motorized trail issues..... 14 points
- 3 statewide motorized trail issues..... 21 points

Points awarded: _____ (0-21 points)

Note: No points are awarded for Statewide Motorized Trail Issue D: Concern About Trail Closures/Loss of Riding Opportunities.

(FOR NON-MOTORIZED TRAIL PROJECTS)

STATEWIDE NON-MOTORIZED TRAIL ISSUES

Issue A: Need for trail connectivity (see trail network definitions on page 162).

Issue B: Need for trail maintenance (see trail maintenance definitions on the preceding page).

If the non-motorized project addresses:

- 0 statewide non-motorized trail issues 0 points
- 1 statewide issue (either A or B) 5 points
- 2 statewide issues (both A and B)..... 10 points

Points awarded: _____ (0-10 points)

(FOR NON-MOTORIZED TRAIL PROJECTS)

STATEWIDE NON-MOTORIZED TRAIL CONCERNS

Trail Concern 1: Need for more trails in close proximity to where people live. According to the statewide trail user survey, lack of time is the greatest barrier to participation in non-motorized activities. Close to home trails allow people to use trails in a more time-efficient manner.

- Trail Concern 2: Need for additional non-motorized trails.
- Trail Concern 3: Need to consider public ways (roads, railroads, and utility corridors) proposed for closure or abandonment for non-motorized trail use.
- Trail Concern 4: Need for trail accessibility information (such as key trail type and condition information allowing individuals to decide whether a particular trail is accessible to them or not).
- Trail Concern 5: Need for regional interagency coordination/cooperation in trail management.

If the non-motorized project addresses:

- 0 statewide non-motorized trail concerns 0 points
- 1 statewide non-motorized trail concern..... 1 points
- 2 statewide non-motorized trail concerns 2 points
- 3 statewide non-motorized trail concerns 3 points
- 4 statewide non-motorized trail concerns 4 points
- 5 statewide non-motorized trail concerns 5 points

Points awarded: _____ (0-5 points)

(FOR WATER TRAIL PROJECTS)

STATEWIDE WATER TRAIL ISSUES

- Issue A: Need to address conflicts between non-motorized boaters and waterfront property owners.
- Issue B: Need for more public access to waterways.
- Issue C: Need for adequate and consistent user and safety information resources (e.g. signs, maps, level of difficulty and water level information and available paddling opportunities) user education and outreach. (Recognize that a maximum of 5% of total RTP funding allocation will be awarded to “education” projects.)

If the project addresses:

- 0 statewide water trail issues 0 points
- 1 statewide water trail issue 7 points
- 2 statewide water trail issues 14 points
- 3 statewide water trail issues 21 points

Points awarded: _____ (0-21 points)

7. Local Needs And Benefits Criteria (15 Points)

(For motorized, non-motorized and water trail projects)

A. Comprehensive Planning

Project sponsors are strongly encouraged to develop project applications that meet high priority needs of the intended clientele. The assessment of these needs should be based upon coordinated, long-range planning.

The extent to which the project will satisfy priority needs, as identified in a current comprehensive local plan or recreation/park master plan, county or regional master plan, trail system plan, land use/ management plan or a regional trails planning forum process. The comprehensive plan must clearly identify and describe the specific proposed trail project.

_____ points awarded (0 or 10 points)

Note: The local planning document should be adopted/approved by the applicable governing body.

(10 points for projects identified in a current plan, 0 points for all other projects.)

B. Public Involvement

Involving the public throughout a trail development project can be the cornerstone for future success. Public involvement is a means of building support and developing a constituency and a partnership for the development effort.

The extent to which public involvement through public meetings/ workshops, open houses, interviews, questionnaires, and so forth were used in the long-range comprehensive planning process to identify public support for this trail 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. Motorized Trail Opportunities (6 Points) (For motorized trail projects)

A. Need for riding opportunities outside of federal lands

According to recreation providers and members of the general public, there is a need for more riding opportunities on lands outside of federal ownership. They

stated a need to explore motorized recreation opportunities on private timberlands, state or local government land, and work with private landowners for access.

The motorized trail project will develop riding opportunities on private, state, county or local recreation provider land.

_____ points awarded (0 or 3 points)

Note: If funded, riding opportunities on private land must be open to the general public.

(3 points for projects located outside of federal lands, 0 points for projects on federal lands.)

B. Need to maximize the sustainable carrying capacity at existing managed riding areas

In recent years, the trend in motorized recreation in Oregon has been that more motorized areas and trails are being closed to use rather than opened. The result has been increased pressure on other trails and riding areas and increased violation of posted closure. As a result, there is a need to develop additional riding opportunities at existing OHV recreation areas identified in The Official Guide to Oregon Off Highway Vehicle Recreation⁸⁵.

The motorized trail project intends to maximize the sustainable carrying capacity at one of the 40 OHV riding areas where such a need exists.

_____ points awarded (0-3 points)

(The rating team will determine a value from 0-3 points based on information provided by the applicant.)

9. PUBLIC ACCESS TO WATERWAYS (6 POINTS) (For Water Trail Projects)

Recreation providers and other workshop attendees across the state consistently reported a need for more public access to waterways to accommodate the needs of a growing number of non-motorized boaters. Priority points will be awarded to water trail projects providing new or improving existing points of legal entry to the water (at the starting point, at reasonable intervals along, and at the final take out point of paddling routes), developed facilities at public access points (e.g. adequate parking, restroom facilities, boat launches), and information describing how people can access the paddling opportunity (e.g. water trail guides, brochures, signage).

⁸⁵ A listing of managed OHV riding areas in the state is available at the following website: <http://atv.prd.state.or.us/places.php>

- The water trail development increases public access to Oregon’s waterways.

_____ points awarded (0-6 points)

(The rating team will determine a value from 0-6 points based on the information provided by the applicant.)

10. TRAIL DESIGN AND MANAGEMENT (5 POINTS) (For motorized, non-motorized and water trail projects)

Increasing use levels often results in resource impact on recreational trails and damage to trail facilities. Such impacts and damage can be proactively prevented or minimized through innovative and sustainable trail and facility design and management practices.

The National Park Service describes a sustainable trail as follows⁸⁶.

A Sustainable Trail:

- Supports current and future use with minimal impact to the area’s natural systems.
- Produces negligible soil loss or movement while allowing vegetation to inhabit the area.
- Recognizes that pruning or removal of certain plants may be necessary for proper maintenance.
- Does not adversely affect the area’s animal life.
- Accommodates existing use while allowing only appropriate future use.
- Requires little rerouting and minimal long-term maintenance.

In addition, specific examples of sustainable efforts are included on the OPRD grant website at: <http://egov.oregon.gov/OPRD/GRANTS/docs/2005.sustainability.pdf> under the heading Sustainability in OPRD Grant Programs.

- The trail project will result in a well-designed, managed and sustainable trail or trail system.

_____ points awarded (0-5 points)

Note: RTP funds are not intended for trail planning and management projects. To gain points, applicants will need to show proof that proper trail design and management strategies and sustainability efforts are included in the development project.

(The rating team will determine a value from 0-5 points based on the information provided by the applicant.)

⁸⁶ National Park Service, Rocky Mountain Region, January 1991.

11. Non-motorized Trail Connectivity (7 Points) (For non-motorized trail projects)

According to recreation providers in the state, trail connectivity involves linking urban trails to outlying Federal trail systems; linking neighborhood, community and regional trails; connecting community parks and other recreational and public facilities; and connecting neighboring communities (e.g. Ashland to Medford). During the trail issues workshops, 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. As a result, priority points will be awarded for non-motorized trail projects that connect to another trail system to form trail networks.

If the project*:

- is not part of a local, regional or statewide trail network0 points
- is a part of a local, regional or statewide trail network7 points

_____ points awarded (0-7 points)

*The applicant must clearly describe why the trail is a part of a local, regional or statewide trail network in relation to the following specific trail system definitions.

Trail Network Definitions

A non-motorized trail of local significance as identified in a local trail system gap analysis.

Trails of local significance are those trails making important community connections to local destinations (within the community boundary) such as public lands, parks, town centers, cultural or historic sites, neighborhoods and schools or transportation systems (e.g. light rail).

A non-motorized trail of regional significance as identified in a regional (multi-jurisdictional) trails planning effort. Trails of regional significance are trails that connect to regionally significant sites, are multi-jurisdictional, multi-use and that connect to statewide or other regionally significant trails.

A non-motorized trail of statewide significance. Trails of statewide significance are trails forming a network making connections beyond local and regional boundaries, connecting major destinations such as large public natural lands, communities, cultural or historic sites of statewide or national significance and providing long-distance recreational opportunities. Trails of statewide significance will form the spine of the statewide trail network to which trails of regional and local significance can connect.

12. Multi-Use Trails (5 Points) (For motorized, non-motorized and water trail projects)

The 2004 Oregon Statewide Trail User and Non-motorized Boater Survey reported that a wide variety of user groups participate on Oregon's motorized and non-motorized trails and waterways in the state. Multi-use trails are trails that permit more than one user group to use the trail. Multi-use trails can include a mix of motorized and non-motorized uses or can be limited to either motorized or non-motorized uses.

A project that includes the development of multi-use trails will receive up to 5 priority points. The applicant must identify which of the trail user groups included in the table below will be allowed to use to use the trail.

If the project will was designed to accommodate:

1 user group	0 points
2 user groups.....	1 point
3 user groups.....	2 points
4 user groups.....	3 points
5 user groups.....	4 points
6 or more user groups	5 points

_____ points awarded (0-5 points)

Note: Points will not be awarded for user groups not included in the table below.

TRAIL USER GROUPS

MOTORIZED TRAIL	NON-MOTORIZED TRAIL	WATER TRAIL
ATV riders	Hikers (including walkers, runners, backpackers)	White water rafters
Off-road motorcyclists	Bikers (road & mountain)	Canoeists
4-wheel drivers	Equestrian (including all stock user)	Drift boaters/ Row boaters
Snowmobilers	Cross-country skiing/Nordic	White water kayakers
Sand rail/Dune buggy drivers	Other wheeled uses (rollerbladers/ inline skaters, roller skaters)	Sea kayakers
ADA accommodations	ADA accommodations	Sail boaters
		Inner tubers
		ADA accommodations

13. Economic Development Opportunities (3 Points) (For motorized, non-motorized and water trail projects)

Across Oregon, motorized, non-motorized and water trails are stimulating tourism and recreation-related spending. Local trail users, vacationers and conference attendees provide direct economic benefits to hotels, restaurants, gas stations, and other business from increases in tourist activity and spending on durable goods such as bikes or skates, motorized recreation equipment, and non-motorized watercraft, and soft goods such as gasoline, food, and drinks. This, in turn, attracts and revitalizes businesses, creates jobs, and increases public revenue.

OPRD would like to encourage the development of motorized, non-motorized and water trails in areas of the state designated as economically distressed by the Oregon Economic & Community Development Department. Such areas could greatly benefit from economic benefits associated with recreational trail use.

- Priority points are awarded for developing trail opportunities in economically distressed counties or nearby an economically distressed cities (see listing of counties and cities on the following page).

_____ points awarded (0-3 points)

(3 points for project sponsors with a project in an economically distressed county or nearby an economically distressed city, 0 points for all other project sponsors.)

**Economically
Distressed Counties in
Oregon**

Baker	Klamath
Columbia	Lake
Coos	Linn
Crook	Malheur
Douglas	Morrow
Gilliam	Sherman
Grant	Umatilla
Harney	Wallowa
Hood River	Wasco
Jefferson	Wheeler
Josephine	

Economically Distressed Cities in Oregon

City	County	City	County
Albany	Benton	Jefferson	Marion
Monroe	Benton	Mill City	Marion
Estacada	Clackamas	Mount Angel	Marion
Johnson City	Clackamas	Scotts Mills	Marion
Seaside	Clatsop	Stayton	Marion
Warrenton	Clatsop	Woodburn	Marion
Port Orford	Curry	Falls City	Polk
Butte Falls	Jackson	Independence	Polk
Eagle Point	Jackson	Monument	Polk
Gold Hill	Jackson	Monmouth	Polk
Phoenix	Jackson	Willamina	Polk
Rogue River	Jackson	Garibaldi	Tillamook
Talent	Jackson	Tillamook	Tillamook
Cottage Grove	Lane	Elgin	Union
Creswell	Lane	La Grande	Union
Florence	Lane	North Powder	Union
Lowell	Lane	Summerville Town	Union
Oakridge	Lane	Union	Union
Springfield	Lane	Unity	Union
Veneta	Lane	Cornelius	Washington
Westfir	Lane	Forest Grove	Washington
Aumsville	Marion	Gaston	Washington
Detroit	Marion	Amity	Yamhill
Gates	Marion	Dayton	Yamhill
Gervais	Marion	Layfayette	Yamhill
Hubbard	Marion	McMinnville	Yamhill
Idanha	Marion	Sheridan	Yamhill

14. National Scenic Trail, National Recreation Trail Or National Historic Trail (5 Points) (For non-motorized trail projects)

Non-motorized trail projects located on a National Scenic Trail, National Recreation Trail or National Historic Trail in Oregon will receive 5 priority points.

_____ points awarded (0 or 5 points)

Note: Please provide a map and documentation indicating that the project is located on a designated National Scenic Trail, National Recreation Trail or National Historic Trail.

(5 points for project sponsors with a project on National Scenic, National Recreation, or National Historic Trails, 0 points for all other sponsors.)

15. Project Urgency (5 Points) (For motorized, non-motorized and water trail projects)

The Recreational Trails Advisory Committee (RTAC) is aware that timing 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, meeting project completion deadlines, public health and safety concerns or impacts on cultural and natural resources.

For trail projects, land acquired with RTP grant funding must be directly related to the provision of trail recreation. As such, park and open space acquisitions are not eligible for RTP grant funding.

Note: 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.)

16. Discretionary Committee Member Criteria (15 Points) (For motorized, non-motorized and water trail projects)

Consistent with RTP guidance, RTAC membership represents a broad range of motorized and non-motorized trail users that take place in 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 following⁸⁷:

- 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 provides sufficient value (through a cost/benefit analysis), is cost comparable to other trail facilities of its type in their geographic area, 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.
- Basic Intent of TEA-21: A development project is considered to be questionable, elaborate, or borderline with respect to the basic intent of The Transportation Equity Act for the 21st Century if serious questions arise concerning the following:
 - 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.
 - Mixed use: 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 disabled 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, non-motorized and water trail issues are included on the following pages.

Note: Locate the project sponsor's region and identify each regional motorized, non-motorized or water trail issue addressed in the project proposal.

_____ points awarded (0-15 points)

⁸⁷ This list is not intended to be a complete list of all discretionary criteria to be considered by RTAC members. Other considerations could include superior design, ADA compliance, special needs, project presentation, superior leverage of funding and partnership including the use of volunteers, heritage context and/or potential for legacy.

REGIONAL MOTORIZED TRAIL ISSUES

Northwest Region: Includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Lincoln, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lane and Benton Counties.

Issue A: Need for adequate and consistent information resources.

Issue B: Need for new trails including loop trails.

Issue C: Need to better manage for trail-related environmental impacts and resource protection through careful selection of riding area locations, planning, design, public education and understanding the capacity limits of motorized areas.

Southwest Region: Includes Coos, Curry, Josephine, Jackson, and Douglas Counties.

Issue A: Need to increase motorized trail and trailhead capacity within the region by developing motorized recreation opportunities on private timberlands and designating trails/areas for motorized use including trails currently used in that manner.

Issue B: Need for increased user education (rules, regulations, restrictions, environmental) and safety training in the region.

Issue C: Need to provide managed motorized areas.

North Central Region: Includes Wasco, Sherman, Gilliam, Morrow, Umatilla, Jefferson, Wheeler, Deschutes and Crook Counties.

Issue A: Need to use snow park areas for OHV use during summer months.

Issue B: Need to repair or reroute OHV trails to minimize resource damage.

Issue C: Need for a wide variety of Class II (4-wheel drive, jeep, SUV) riding opportunities—particularly technical riding areas.

South Central Region: Includes Klamath and Lake Counties.

Issue A: Need for more designated motorized areas.

Issue B: Need for interagency cooperation for developing a seamless long-range trail system across jurisdictional boundaries.

Issue C: Need for increased management (safety, environmental and regulatory) of OHV riding areas.

Northeast Region: Includes Wallowa, Union, Grant and Baker Counties.

Issue A: Need for standardized trail signage to provide consistency and continuity between riding areas.

Issue B: Need for additional motorized camping areas and related facilities (staging areas, restrooms and amenities) to minimize damage to existing riding areas.

Issue C: Need for more motorized trails throughout the region—especially in Baker, Pine and Wallowa Valley Ranger Districts.

Southeast Region: Includes Harney and Malheur Counties.

Issue A: Need to consider OHV use of roads proposed for closure or abandonment and to review recreational use on roads previously closed or abandoned.

Issue B: Need for designated and managed OHV areas for ATVs and motorcycles.

Issue C: Need for safety information and training for young adults (over 15 years of age) who are beginning to ride snowmobiles.

REGIONAL NON-MOTORIZED TRAIL ISSUES

Northwest Region: Includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Lincoln, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lane and Benton Counties.

Issue A: Need for trail connectivity.

Issue B: Need for additional non-motorized trails (for all user types)—especially in close proximity to where people live.

Issue C: Need for additional funding for non-motorized trail acquisition and development.

Southwest Region: Includes Coos, Curry, Josephine, Jackson, and Douglas Counties.

Issue A: Need for trail connectivity.

Issue B: Need for funding and technical assistance for easements, permitting fee title, and acquisitions for trail projects.

Issue C: Need for additional funding for trail maintenance.

North Central Region: Includes Wasco, Sherman, Gilliam, Morrow, Umatilla, Jefferson, Wheeler, Deschutes and Crook Counties.

Issue A: Need for additional funding for trail maintenance and development.

Issue B: Need to develop and extend a regional trails system.

Issue C: Need for trail access opportunities that do not require user fees or permits.

South Central Region: Includes Klamath and Lake Counties.

Issue A: Need for trail connectivity.

Issue B: Need dedicated funding for trail operation and maintenance.

Issue C: Need for better education/information on the sharing of multiple-use trails.

Northeast Region: Includes Wallowa, Union, Grant and Baker Counties.

Issue A: Need to secure long-term funding for non-motorized trail maintenance.

Issue B: Need for trail connectivity.

Issue C: Need for greater cooperation between state and federal agencies in providing trail opportunities.

Southeast Region: Includes Harney and Malheur Counties.

Issue A: Need for additional non-motorized trails.

Issue B: Need for information on existing non-motorized trails.

Issue C: Need to consider non-motorized use of roads proposed for closure or abandonment and to review recreational use on roads previously closed or abandoned.

REGIONAL WATER TRAIL ISSUES

Northwest Region: Includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Lincoln, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lane and Benton Counties.

Issue A: Need for more public access to waterways.

Issue B: Need for a designated funding source for non-motorized watercraft facility development.

Issue C: Need to properly address the navigability issue and clearly define to users where they legally can launch or access the water and shore.

Southwest Region: Includes Coos, Curry, Josephine, Jackson, and Douglas Counties.

Issue A: Need for additional access to waterways and launch/landing facilities.

Issue B: Need to provide adequate and consistent information resources for designated water trail routes for trip preparation and navigation.

Issue C: Need for a dedicated funding source for non-motorized water trail development.

North Central Region: Includes Wasco, Sherman, Gilliam, Morrow, Umatilla, Jefferson, Wheeler, Deschutes and Crook Counties.

Issue A: Need to identify water trail resource impacts associated with rapid growth of water-based recreation.

Issue B: Need for additional water trail facilities—particularly those providing close-to-home paddling opportunities.

Issue C: Need for leave-no-trace practices, respect for private property rights of waterfront property owners and need to reduce resource impacts.

South Central Region: Includes Klamath and Lake Counties.

Issue A: Need for public access on some waterways and information on points of water access.

Issue B: Need for adequate public properties along water trails to reduce conflicts with waterfront property owners.

Issue C: Need for a dedicated funding source for water trail development.

Northeast Region: Includes Wallowa, Union, Grant and Baker Counties.

Issue A: Need for a non-motorized boater education program.

Issue B: Need for a central information source for interested non-motorized boaters to access information regarding flat and whitewater paddling opportunities.

Issue C: Need to consider the potential for user conflict between an increasing number of non-motorized and motorized boaters using facilities developed primarily for motorized watercraft.

Southeast Region: Includes Harney and Malheur Counties.

Issue A: Need to educate communities about the economic benefits associated with water trail development to address local opposition to trail development.

Issue B: Need for additional water access facilities, marketing and interpretive information related to water trail development.

Issue C: There are a number of flat water-paddling opportunities (including Lake Owyhee, the Malheur National Wildlife Refuge, connections to irrigation canals and other remote settings) that could be developed as water trails.

WATER TRAILS PLAN

Image in final

TABLE OF CONTENTS

Introduction.....	175
Benefits Of Water Trails.....	178
1. Economic Benefits	179
2. Recreational Value and Health Benefits	180
3. Conservation/Stewardship Benefits.....	181
4. Educational Benefits	181
Identification of Regional and Statewide Water Trails Issues.....	182
The Public Workshop Process.....	182
List Of Top Regional Water Trails Plan Issues	183
Determining Top Statewide Water Trails Issues	186
2004 Oregon Statewide Non-Motorized Boater Survey	188
Research Background	188
Survey Results	188
Statewide Water Trail Goals, Objectives And Strategies.....	203
Statewide Water Trail Issue A:Need To Address Conflicts Between Non-Motorized Boaters And Waterfront Property Owners	203
Statewide Water Trail Issue B:Need For More Public Access to Waterways	207
Statewide Water Trail Issue C:Need For Adequate and Consistent Information Resources Including Signs, Maps, Level of Difficulty and Water Level Information and Available Paddling Opportunities.	208
Statewide Water Trail Issue D:Need For Safety-Related Information, User Education and Outreach.....	210
Statewide Water Trail Issue E:Need A Dedicated Funding Source For Water Trail Development.	212
Statewide Water Trail Issue F:Need For Information Describing the Social and Economic Benefits of Water Trails.....	213
A Proposed State-Administered Water Trails Program For Oregon	214
Introduction	214
Federal And State Navigability Laws And Non-Motorized Boating In Oregon.....	216
A Proposed Oregon Water Trails Program	219
An Official "Oregon Water Trail" Designation	220
A Better Understanding Between Paddlers And Waterfront Property Owners	221
Facilitate The Development Of Public Access To Waterways	223
Provide User Friendly, Easy-To-Find Information Resources	225
Providing Safety-Related Information, User Education And Outreach	227
A Dedicated Funding Source	228
Using A Dedicated Funding Source	230
Next Steps.....	231

Introduction

The Oregon Parks and Recreation Department (OPRD) was given responsibility for recreation 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.”

The Oregon Recreation Trails Plan has been in place since 1995. Although many of the findings included in this plan are still relevant, considerable change has occurred on Oregon’s recreational trails in the last 9 years including a 13% state population increase between 1995 and 2003 and increases in recreational trail use. As a general rule, planning documents of this type have a usable shelf life of 10 years. As

a result, there was a need to update the trails plan for recreational trail uses.

During the most recent SCORP planning process, recreation providers reported a need for the trails plan to address a growing interest in canoe, rafting, and kayak routes (water trails) throughout the state. Although the state enjoys a variety of high-quality paddling opportunities, additional recreational infrastructure is needed to satisfy a growing demand for paddling sports. According to recreation providers, necessary resources/facilities/services needed for water trail development include water access sites and support facilities, overnight camping facilities, directional signage, maps, brochures and other marketing tools to properly market new water trail opportunities and paddling clinics.

The SCORP planning effort also identified that during a 15-year period from 1987-2002, participation in non-motorized boating activities had more than doubled in the state of Oregon (see Table 68 below).

Activity	1987 User Occasions*	2002 User Occasions	Change	% Change
Power Boating	2,668,085	2,751,190	**	**
Non-motorized Boating***	929,369	2,210,552	1,281,183	+138%

* A user occasion is defined as each time an individual participates in a single outdoor recreation activity

** Within the +/- 8% Confidence Interval.

*** Non-motorized boating includes canoeing, sea kayaking, whitewater kayaking and whitewater rafting.

⁸⁸ Oregon Parks and Recreation Department (2003). 2003-2007 Oregon Statewide Comprehensive Outdoor Recreation Plan. pp. 4-12.

These survey results further reinforced the need for a water trails plan in Oregon.

The purpose of this water trails planning effort was to provide information and recommendations to guide OPRD and other agencies in Oregon in their management of water trail resources. The plan is designed to:

- Assess the needs and opinions of Oregon's citizens as they relate to water trail opportunities and management;
- Establish priorities for expenditures from the Federal Recreational Trails Grant Program;
- Develop strategic directions to guide activities for statewide water trail planning;
- Gather additional inventory measurement data for water trail resources and facilities; and
- Recommend actions that enhance water trail opportunities to all agencies and the private sector providing trail resources in Oregon.

The plan has been developed as an information resource as well as a planning tool to guide agencies for the next 10 years.

In Oregon, water trails (like other recreational trails) are corridors between specific locations on a lake, river or ocean. Water trails are primarily designed for small watercraft such as canoes, sea and whitewater kayaks, rafts and drift boats. Necessary water trail facilities include a safe place for the public to put in, parking, restrooms, a safe place to take out, and in some cases day-use sites and overnight campsites. Water trails offer a variety of challenge levels on white water, moving water, flat water and tidewater and

emphasize low-impact use and provide stewardship of the resource.

The water trails plan includes the following chapters:

Chapter 1. Benefits of Water Trails.

The chapter summarizes the economic, recreational, health-related, conservation/stewardship and educational benefits of water trails.

Chapter 2. Identification of Top Regional and Statewide Water Trail Issues.

This chapter includes a list of the 3 top regional water trail issues in each of the 6 trails planning regions and the 6 top statewide water trail issues identified during the planning process.

Chapter 3. The 2004 Oregon Statewide Non-motorized Boater Survey.

This chapter presents key findings from the 2004 telephone survey of Oregon non-motorized boaters. The purpose of the survey was to assess the needs and opinions of Oregon's citizens about non-motorized boating opportunities and management, assess the need for future investment in water trail facilities and opportunities and provide trail planners with up-to-date information for local and regional water trail planning.

Chapter 4. Statewide Water Trail Goals, Objectives and Strategies.

This chapter focuses on a set of long-range goals, objectives and strategies for the top 6 statewide

water trails issues as identified through the water trails planning effort. These goals, objectives and strategies were developed for use by decision makers across the state to develop policies and actions for resolving the 6 top statewide water trail issues.

Chapter 5. A Proposed State-Administered Water Trails Program For Oregon.

The water trails planning effort has identified three critical factors which pose a serious threat to long-term non-motorized boating access to waterways in Oregon including a rapid increase in participation in non-motorized boating, a lack of legal clarity and understanding of the public's right to Oregon's waterways for recreational purposes and the increasing potential for conflicts between non-motorized boaters and waterfront property owners.

To address these concerns, the plan proposes an OPRD-administered water trails program intended to develop a statewide system of water trails carefully designed to minimize conflicts between non-motorized boaters and waterfront property owners. The proposed water trails program is based on findings and conclusions drawn from the Oregon water trails planning process and an investigation of non-motorized boating management and water trail development materials from Oregon and across the country.



Benefits of Water Trails

Introduction

In Oregon, water trails (like other recreational trails) are corridors between specific locations on a lake, river or ocean. Water trails are primarily designed for small watercraft such as canoes, sea and whitewater kayaks, rafts and drift boats. Necessary water trail facilities include a safe place for the public to put in, parking, restrooms, a safe place to take out, and in some cases day-use sites and overnight campsites. Water trails offer a variety of challenge levels on white water, flat water and tidewater and emphasize low-impact use and encourage stewardship of the resource.

The following is a summary of the many benefits that water trails can provide to the state of Oregon.

1. Economic Benefits.

As previously mentioned, non-motorized boating has grown in popularity in recent years in the state of Oregon. This increase in participation translates into financial benefits for communities that provide access to water trails. Water trails as a recreation destination provide rural communities with income to local boat liveries and outfitters, motels and bed and breakfasts, restaurants, grocery stores, gas stations and shops.⁸⁹

Evidence from economic studies include:

- An Oregon study of guides and packers⁹⁰ indicates that in 1986, the

⁸⁹ Water Trails For Wisconsin. University of Wisconsin Extension.

⁹⁰ Bureau of Land Management (1987). Recreation 2000. Washington, D.C. U.S.

outfitter/guide industry in Oregon (for river, land and marine activities) had a direct impact of \$42.5 million. This resulted in a total economic impact of \$300 million to the overall Oregon economy.

- River recreation in Oregon is one of the activities that attracts people from other areas. In the Columbia Gorge region (consisting of Hood River and Wasco Counties), revenues from transient lodging taxes grew just over 25% during 1992/93, following a similar increase of approximately 21.4% in the previous fiscal year⁹¹.
- For every \$1 paid to canoeing outfitters, customers spent \$5 for gas, groceries, restaurants, campgrounds, and other lodging. Seventy canoe liveries in Florida generate \$38.5 million per year⁹².
- During the 1999 summer season, anglers and canoeists combined brought \$2.2 million of new spending to the Kickapoo and Timber Coulee watersheds in the state of Wisconsin⁹³. The total estimated economic impact was \$3.25 million, which helped to support approximately 85 local jobs.

Department of the Interior, Bureau of Land Management.

⁹¹ Oregon Tourism Division (1994). 1992 Economic Impacts and Visitor Volume in Oregon. Prepared by Dean Runyan Associates, Portland, OR: Oregon Tourism Division, Economic Development Department.

⁹² Stout, A. (1986). Testimony at Orlando, Florida PCAO hearing.

⁹³ Anderson, A., Hewitt, L. and Marcouiller, D. (2001). Canoeing and Angling in Southwestern Wisconsin. University of Wisconsin-Extension. Madison, WI.

Approximately 80% of the canoeists rented boats from one of the local liveries. An average canoeist spent \$93 during their trip. That included boat rental, a night in a motel or campground, beer in a local tavern or breakfast at a local diner.

- In 2001, kayakers, rafters and other recreational users of the Wild and Scenic reach of the Chattooga River in northwestern South Carolina, northeastern Georgia, and southwestern North Carolina spent \$1.8 million in the six county area, resulting in a \$2.7 million overall economic contribution⁹⁴.
- The Outdoor Recreation Coalition of America estimated that a total of \$200 million was spent on retail sales for paddle sports outdoor recreation equipment, apparel, and accessories in 1996.
- According to a survey conducted by the National Association of Canoe Liveries and Outfitters, the average river trip covers 10.8 miles and takes 4 hours and 15 minutes, the average charge per guest is \$13.00, and 85% of guests are between 20-50 years of age.
- A study in San Jose, California⁹⁵ reported that "People who exercise regularly have 14% lower claims against their medical insurance, 30% fewer days in the hospital, and

have 41% fewer claims greater than \$5,000."

2. Recreational Value and Health Benefits.

The recreational value of water trails are often their foremost attraction. In addition to the entertainment values of recreation, there is a significant health and fitness benefit as paddling involves exercise. This health benefit accrues to the individual, and, in the form of reduced health-care costs, to society as well.

Many people realize exercise is important for maintaining good health in all stages of life, however many do not regularly exercise. The U.S. Surgeon General estimates⁹⁶ that 60% of American adults are not regularly active and another 25% are not active at all. In communities across the country, people do not have access to trails, parks, or other recreation areas close to their homes. Water trails provide a safe, inexpensive avenue for regular exercise for people living in rural, urban and suburban areas⁹⁷.

Exercise derived from recreational activities lessens health related problems and subsequent health care costs. Regular, moderate exercise has been proven to reduce the risk of developing coronary heart disease, stroke, colon cancer, hypertension, diabetes, osteoporosis, obesity, and depression. This kind of exercise is also know to protect against injury and disability because it builds muscular strength and flexibility, which helps to maintain functional independence

⁹⁴ Moore, R., and Siderlis, C. (2003). Wild and Scenic Chattooga River An Economic Asset to Georgia, North Carolina and South Carolina.

⁹⁵ City of San Jose (1988). Feasibility Study: Corporate Wellness Program. Department of Parks, Recreation, and Community Services.

⁹⁶ Centers for Disease Control and Prevention. (1996). Surgeon General's Report on Physical Activity and Health. Department of Health and Human Services. July 1996.

⁹⁷ Benefits of Trails and Greenways. From Trails and Greenways Clearinghouse.

in later years of life⁹⁸. A nationwide study on the cost of obesity⁹⁹, concluded that increasing participation in regular moderate activity by the more than 88 million inactive Americans over age 15 could reduce annual national medical costs by \$76 billion in 2000 dollars.

Every year, premature deaths cost American companies an estimated 132 million lost work days at a price tag of \$25 billion. Finding and training replacements costs industry more than \$700 million each year. In addition, American businesses lose an estimated \$3 billion every year because of employee health problems (National Park Service, 1983).

3. Conservation/Stewardship Benefits.

Water trail activities can support the conservation of the aquatic and shore land ecosystems. Trail builders and activists are a respected constituency who advocate for resource protection, and participate in resource restoration. The water trail community is a watchdog (e.g. through the citizen enforcement provision of the Clean Water Act), helping to prevent damage to the environment and striving to sustain the natural integrity of the trail and its watershed¹⁰⁰.

By promoting minimum-impact practices, water trails embrace the "Leave No Trace" code of outdoor ethics that promote the

⁹⁸ Centers for Disease Control and Prevention. (1996). Surgeon General's Report on Physical Activity and Health. Department of Health and Human Services. July 1996.

⁹⁹ Pratt, M., Macera, C., and Wang, G. (2000). Higher Direct Medical Costs Associated With Physical Inactivity. *The Physician and Sports Medicine* 28(10).

¹⁰⁰ Wisconsin Water Trails: Basic Concepts. Lakes Partnership.

responsible use and enjoyment of the outdoors. A trail user who is educated to respect the quality of the water, shore land vegetation and wildlife habitat is a good caretaker. As users learn protection and restoration on the trail, they will be inclined to apply these principles in their daily lives¹⁰¹.

4. Educational Benefits

Water trail organizations use comprehensive trail guides, signage, public outreach, and informative classes to encourage awareness of the natural, cultural, and historical attributes of the trail¹⁰².

Every teacher knows the value of outdoor laboratories, the value of learning from real life. Students have great experiences along pathways or in the fields. But what about marine and riverine environments? Not every community can build an aquarium. Water trails connect the teacher and the student with these ecosystems and their living population. The water trail is a perfect classroom for the teaching biologist, botanist, and ecologist, both amateur and professional. Educators naturalists, rangers and scoutmasters—all can demonstrate and illustrate their lessons along the water trail¹⁰³.

Chances are your community started at the water's edge. Prior to the railroad, virtually all of community development occurred along North American's waterways. Water was the primary means of transportation. Communities great and small trace their beginnings to waterside commerce,

¹⁰¹ Water Trails for Wisconsin. University of Wisconsin Extension.

¹⁰² Water Trails for Wisconsin. University of Wisconsin Extension.

¹⁰³ North American Water Trails, Inc. Why Water Trails?

industry, or transportation. Whether they were Native American settlements, military encampments, early European-settled villages, trading posts, outposts on the trails west, or fishing communities or seaports, Oregon grew up along the water. As a result, water trails touch Oregon's being like no other concept.

So as a water trail proceeds, it touches and laces together sites through which our heritage can be experienced and understood. Seen from a small boat, our communities' roots are manifest. Water trails become linear classrooms for your children. And visitors will come to share your history with you¹⁰⁴.



¹⁰⁴ North American Water Trails, Inc. Why Water Trails?

IDENTIFICATION OF REGIONAL AND STATEWIDE WATER TRAILS ISSUES

Public involvement played a central and recurring role throughout the Oregon statewide trails planning process. OPRD conducted a series of 9 regional public workshops across the state during 2003 to discuss the major issues that affect the provision of water trail opportunities in Oregon.

The Public Workshop Process

During April and May of 2003, OPRD staff completed a series of 9 regional trail issues workshops across the state. Each workshop included an afternoon session open to all public recreation providers and an evening session open to the general public.

The widest possible range of “public” was invited to participate in the process. For the afternoon sessions, an invitation letter was sent to all public-sector recreation providers in the state requesting participation in their respective regional trails issues workshops. For the general public workshops (evening sessions), ads were placed for each workshop in local and regional newspapers. In addition, press releases were sent out to media outlets prior to each workshop. In keeping with the plan’s regional approach and to maximize input and participation, 9 sites were selected from around the state for the issues workshops (meeting locations are included in Table 2 on page 7).

Both afternoon and evening workshops included a brief description of the trails planning region, workshop process, and how the regional issues information was to be used in the plan. Next, participants listened to a 20-minute presentation on the statewide planning effort. Each

workshop included a separate issues gathering process for motorized, non-motorized, and water trails issues.

Trail issues were defined as any high-impact issue related to providing recreational trail opportunities within the region. Issues could be related to trail facilities, management (e.g. user conflicts), programs, projects and funding. At the conclusion of daytime and evening workshop each workshop attendees were given 3 colored dots to assist in prioritizing the importance of issues gathered. Participants placed their colored dots on those issues they felt were of most important in the planning region.

A thorough description of how top regional issues were determined is included in the Major Planning Component heading in Chapter 1 (page 5).



List of Top Regional Water Trails Plan Issues

The following list includes those issues identified as top regional water trails issues.

Northwest Trails Planning Region

(Includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Lincoln, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lane and Benton Counties.)

-
- A. Need for more public access to waterways.
 - B. Need for a designated funding source for non-motorized watercraft facility development.
 - C. Need to properly address the navigability issue and clearly define to users where they can and cannot exit their watercraft.
-



Southwest Trails Planning Region

(Includes Coos, Curry, Josephine, Jackson and Douglas Counties)



-
- A. Need for additional access to waterways and launch/landing facilities.
 - B. Need to provide adequate and consistent information resources (route maps, water classification, condition and regulatory information, web-based repository) for designated water trail routes for trip preparation and navigation.
 - C. Need for a dedicated funding source for non-motorized water trail development.
-

North Central Trails Planning Region

(Includes Wasco, Sherman, Gilliam, Morrow, Umatilla, Jefferson, Wheeler, Deschutes and Crook Counties)

A. Need to identify water trail resource impacts associated with rapid growth of water-based recreation to properly balance natural/environmental aspects with increasing use.

B. Need for additional water trail facilities (particularly close-to-home).

C. Need for leave-no-trace practices (e.g. sanitation and litter), respect for rights of waterfront landowners and need to reduce impacts on the resource.



South Central Trails Planning Region

(Includes Klamath and Lake Counties)

A. Need for public access on some waterways and information on points of water access.

B. Need for adequate public properties along water trails to reduce conflicts with waterfront property owners.

C. Need for a dedicated funding source for water trail development.



Northeast Trails Planning Region

(Includes Wallowa, Union, Grant and Baker Counties)

A. Strong need for a non-motorized boater education program providing information on how to properly launch and use a non-motorized watercraft, safety training for running rivers, and how to comply with existing federal and state regulations.

B. Need for a central information source for interested non-motorized boaters to access information regarding flat and whitewater paddling opportunities within the region.

C. Need to consider the potential for user conflict between an increasing number of non-motorized and motorized boaters using facilities developed primarily for motorized boaters.



Southeast Trails Planning Region

(Includes Harney and Malheur Counties)



A. Need to educate communities about the economic benefits associated with water trail development to offset local opposition to trail development.

B. Need for additional water access facilities, marketing and interpretive information related to water trail development.

C. There are a number of flat-water paddling opportunities within the region including Lake Owyhee, the Malheur National Wildlife Refuge, connections to irrigation canals and other remote settings that could be developed as water trails.

Determining Top Statewide Water Trails Issues

After regional water trail issues were identified, steering committee members were given a final opportunity to review the statewide issue category summaries and a listing of top regional water trail issues. Next, OPRD staff used a sheet including information presented in the first 2 columns of Table 69 (below) to provide steering committee members an opportunity to vote for a set of top Statewide Water Trails Issues. Table 69 includes the total number of committee member votes each issue received. Those issues with the highest number of votes were determined by the steering committee to be the 6 Statewide Water Trails Issues.

Water Trail Issues	Total # of Comments From Issue Scoping	# of Committee Votes For Top Issues
Need For Adequate & Consistent Information Resources Including Signs, Maps, Level Of Difficulty, Water Level Information & Statewide Website	23	9
Need To Proactively Manage Environmental Impacts (Including Effects On Wildlife, Carrying Capacity)	16	3
Need For More Public Water Access And Periodic Take-Out Points	13	9
Need For Proper Facility Development For Water Trails	13	0
Need To Proactively Address Potential Conflicts With Adjacent Landowners & Clarify Navigability Issues	12	11
Need To Identify, Develop & Promote Water Trail Opportunities	11	1
Need For Safety-Related Information, User Education & Outreach	10	5
Need To Address User Conflicts Between Non-motorized & Motorized Boaters	10	3
Need For Water Trails Planning & Design Assistance/Expertise	9	1
Need For Regional Interagency Coordination/Cooperation In Trail Planning & Management	7	2
Need For A Designated Funding Source For Non-motorized Watercraft	7	5
Need For Information On The Social & Economic Benefits Of Water Trails	6	4
Need For Private-Sector Involvement In Water Trail Facility & Service Development	5	0
Need To Use Water Trails As Vehicles For Environmental And Historic Interpretation	3	0
Need For Maintenance/Rehabilitation Of Existing Facilities Including Use of Volunteers	3	2
Need For More Urban Trails In Close Proximity To Where People Live	3	0

The final set of Top Statewide Water Trail Issues include:

- Statewide Trail Issue A: Need to address conflicts between non-motorized boaters and waterfront property owners

- Statewide Trail Issue B: Need for more public access to waterways
- Statewide Trail Issue C: Need for adequate and consistent information resources including signs, maps, level-of-difficulty and water level information and available paddling opportunities
- Statewide Trail Issue D: Need for safety-related information, user education and outreach
- Statewide Trail Issue E: Need for a dedicated funding source for water trail development
- Statewide Trail Issue F: Need for information describing the social and economic benefits of water trails



2004 Oregon Statewide Non-motorized Boater Survey

by Woody Carter and Tony Silvaggio
University of Oregon, Oregon Survey Research Laboratory

Research Background

This chapter presents key findings from the 2004 telephone survey of Oregon non-motorized boaters. The project was part of the Oregon Trails 2005-2014: A Statewide Action Plan effort, funded by the Oregon Parks and Recreation Department. The survey randomly screened over 15,000 Oregon telephone households to identify respondents reporting trail and non-motorized boat use in the past year. Separate questionnaires were administered for motorized trail users, non-motorized trail users, and non-motorized boaters.

The survey employed a random digit dial methodology to identify Oregon residents who reported qualifying trail or non-motorized boating use in the last year. Data collection was conducted in two waves. An initial list of 9,500 telephone numbers was called to identify motorized trail users, non-motorized trail users, and non-motorized boaters. At the end of this data collection sufficient motorized trail users and non-motorized boaters were not achieved, so an additional 5,950 telephone numbers were called in association with another survey. This additional screening resulted in quotas for trail and water users being achieved that permit a sampling error for each group of \pm 5-6%. The random telephone design and low sampling errors contribute to making this one of the most scientifically rigorous studies of trail users conducted to date for Oregon.

Non-motorized Boaters

The following section provides survey results specific to non-motorized boaters in Oregon.

Non Motorized Boater Demographic Information

Fourteen percent of Oregon households have a person reporting non-motorized boating participation, amounting to 185,200 households in the state. Screening procedure asked first for any motorized trail user or non-motorized boaters in the household, and those persons, if present, were interviewed about those usage patterns. The results reported here thus relate to households without any motorized trail user present, and thus will not reflect the views of non-motorized boaters who live in such households. The biases introduced due to this sampling design are believed to be negligible.

Basic demographics of non-motorized boaters are provided in the following table:

TABLE 70: Non-motorized Boater Demographics	
N = 248	
Gender:	
Male	55%
Female	45%
Age:	
18 – 29	8%
30 – 39	21%
40 – 49	29%
50 – 59	29%
60 – 69	10%
70+	3%
Education:	
Less than high school	3%
High school graduate	12%
Some college	25%
Bachelors	35%
Masters	17%
Doctorate	9%
Income:	
Less than \$18,000	4%
\$18,000 - \$24,999	4%
\$25,000 - \$39,999	18%
\$40,000 – \$69,999	33%
\$70,000 - \$99,999	22%
\$100,000+	20%
Sampling error for this question is \pm 5%	

Gender is split closely at 55% male/45% female for non-motorized boaters, and the median age is 40 – 49 years old. A sizable majority have some college (86%), with almost two-thirds being college graduates (61%). Median income is \$40,000 to \$69,999.

Frequency of Non-motorized Boating Participation

The survey asked non-motorized boaters about the frequency of their participation in different activities. The following table reports the percentage participation in each activity, and the estimated number of Oregon households that this represents¹⁰⁵:

¹⁰⁵ The survey did not ask how many in the household participated in each activity, so no figure for total participation can be estimated.

N = 248	Participated in Last Year	Estimated Oregon Households
White water rafting	47%	86,600
Canoeing	42%	77,400
Drift boating	36%	66,300
White water kayaking	16%	29,500
Sea kayaking	12%	22,227
Other	28%	51,862

Sampling error for the "in last year" question is $\pm 5\%$.

The survey also asked how often the respondent engaged in each activity in the last year. Non-motorized boaters report considerably less use, and less frequent use, than either motorized or non-motorized trail users. Whitewater rafting and canoeing are the two leading activities, while those who participate in drift boating and other water activities report higher levels of weekly and monthly participation:

N = 248	In Last Year	Of Participants in Last Year, How Often?			
		Weekly	2-3 a Month	Once a Month	Less Often
White water rafting	47%	3%	8%	16%	73%
Canoeing	42%	8%	8%	15%	70%
Drift boating	36%	13%	17%	25%	45%
White water kayaking	16%	5%	8%	26%	62%
Sea kayaking	12%	0%	10%	14%	76%
Other	28%	16%	17%	32%	36%

Sampling error for the "in last year" question is $\pm 5\%$. Sampling errors for the frequency questions are from $\pm 9\%$ for the most common activity to $\pm 21\%$ for the least common.

Twenty eight percent of respondents report another type of non-motorized boating including inner tubing, sailing, snorkeling, swimming, and windsurfing.

Favorite Non-motorized Boating Activity

Respondents provided a ranking of their favorite non-motorized boating activity:

TABLE 73: Favorite Non-motorized Boating Activity N = 246	
White water rafting	29%
Canoeing	26%
Drift boating	20%
White water kayaking	5%
Sea kayaking	5%
Other	16%
Sampling error for this question is $\pm 5\%$	

The list of preferred water activities is in exactly the same order as the most frequent activity.

Favorite Place for Non-motorized Boating Activity

The questionnaire asked non-motorized boaters, "For [the] activity you enjoy the most, is your favorite kind of place on flat water rivers and streams, white-water rivers and streams, lakes, freshwater wetlands, tidewaters, or the ocean?" The results are as follows:

TABLE 74: Preferred Place for Favorite Non-motorized Boating Activity			
N = 50-243	All Non-motorized Boaters	Canoeists	Drift Boaters
	N = 243	N = 63	N = 50
Whitewater rivers and streams	37%	5%	32%
Flat water rivers and streams	32%	44%	46%
Lakes	22%	38%	14%
Tidewaters	3%	5%	2%
The ocean	2%	2%	2%
Freshwater wetlands	2%	5%	2%
If volunteered: no preference	2%	2%	2%
Sampling error	$\pm 5\%$	$\pm 12\%$	$\pm 14\%$

Whitewater rivers and streams are the preferred favorite, with flat water rivers and streams a close second, followed by lakes. Different user groups have clearly different preferences.

Distance Traveled and Preferred Setting for Non-motorized Boating Activities

To reach their most frequent non-motorized boating activity, paddlers travel a median of 31 to 40 miles (one way).¹⁰⁶ The median is the number that reflects the answer given by a cumulative 50% of respondents; half travel farther, and half not as far. They travel the same distance to reach their favorite activity, as the following table reveals. The following table shows the full breakdowns of distance traveled:

¹⁰⁶ Since the top category for this question went above 200 miles, the mean distance would be higher.

TABLE 75: Distance Traveled for Most Frequent and for Favorite Non-motorized Boating Activities ¹⁰⁷				
N = 243				
Miles Traveled (One Way)	Most Frequent Activity		Favorite Activity	
	Percentage	Cumulative	Percentage	Cumulative
1 – 10	25%	25%	23%	23%
11 – 20	14%	39%	13%	36%
21 – 30	12%	51%	12%	48%
31 – 40	6%	57%	5%	53%
41 – 50	10%	67%	10%	63%
51 – 75	10%	78%	10%	73%
76 – 100	10%	87%	13%	86%
Over 100 miles	13%	100%	14%	100%
Sampling error for this question is $\pm 5\%$				

Respondents were asked about their preferred setting for these activities. The following table present the results.

TABLE 76: Preferred Setting for Non-motorized Boating Activities		
N = 245-248	Most Frequent Activity	Favorite Activity
Rural area or park	45%	41%
Remote area	35%	40%
Urban setting	9%	9%
Suburban setting	11%	10%
Sampling error for this question is $\pm 5\%$		

For non-motorized boaters, differences between most frequent and favorite activities are equal to or smaller than the sampling error, indicating that they may not differ at all. Rural areas or parks and remote areas are considerably more popular than suburban or urban settings.

Preferred Water Trail Type

Respondents were asked, “The next questions ask about the type of water trail facilities and services you would like to see developed for non-motorized boaters in Oregon. How likely is it that you would use each of the following water trail types?” The following table presents the results for different trail types.

¹⁰⁷ Respondents were not restricted to destinations in Oregon.

TABLE 77: Preferred Non-motorized Watercraft Trail Type			
N = 241-247	Very Likely	Somewhat Likely	Not as Likely
Short, day-use water trail	66%	25%	9%
Water trail to a specific destination	53%	31%	16%
Interpretive, nature, or historic water trail	46%	40%	15%
Loop water trail	44%	25%	31%
Multi-day water trail	33%	35%	32%
Sampling error for this question is ± 5			

Day use and trails to specific destinations are most favored, but even a multi-day water trail would be used by one-third of non-motorized boaters.

Reason for Not Using Non-motorized Watercraft as Much as Desired

Over 63% of non-motorized boaters report they would like to participate in their activities more than they do.

TABLE 78: Use Trails as Much As Wanted – Non-motorized Boaters	
N = 248	
Want to use trails more	65%
Use trails as much as want to	35%
Sampling error for this question is $\pm 5\%$	

As with the other user groups studied in this report, this reflects a large reservoir of unmet needs. The survey asked for the constraints to non-motorized watercraft use:

N = 159	Mean	The Major Reason	An Important Reason	A Somewhat Important Reason	Not an Important Reason
Lack of time	1.8	55%	22%	11%	12%
Low water	3.4	4%	11%	29%	56%
Weather	3.4	3%	9%	32%	57%
Lack of money	3.5	8%	6%	19%	67%
None close by	3.5	6%	7%	16%	71%
No one to go with	3.5	5%	9%	17%	69%
Overcrowding	3.5	3%	8%	24%	66%
Lack of information	3.6	2%	8%	19%	72%
Difficult to get equipment	3.7	3%	4%	12%	81%
User fees	3.7	2%	4%	18%	76%
Hard to get to	3.7	2%	6%	13%	79%
Personal safety	3.7	1%	6%	13%	81%
Health	3.8	3%	3%	6%	89%
Poor maintenance of support facilities	3.8	1%	4%	9%	86%
Too challenging	3.9	0%	1%	5%	94%
Sampling error for this question is $\pm 7\%$					

Lack of time is by far the primary roadblock for non-motorized watercraft users. No other reason approaches lack of time as a reason preventing these respondents from enjoying their activities as much as they would like to.

Thirty-one percent of non-motorized boaters report other reasons for not participating in activities as often as they would like. Most respondents indicate family responsibilities, especially young children, as a reason. Also mentioned was the difficulty in getting permits.

Non-motorized Boater Evaluation of Services

The questionnaire asked non-motorized boating respondents to rate their satisfaction with five measures of service. The following graph and table present that data, listed in order of a decreasing “very satisfied” evaluation.

Non-motorized boaters report a high degree of satisfaction. In such satisfaction rankings, any combined “not at all/not very” satisfied score above 10% is usually justification for planning attention. All but access to water exceed this threshold, suggesting that trail planning should prioritize addressing the remaining four user group concerns, especially information (combined 22% dissatisfaction).

N = 210-245	Mean	Very Satisfied	Somewhat Satisfied	Not Very Satisfied	Not at All Satisfied
Access to water	3.5	56%	38%	5%	0%
Support facilities	3.3	42%	45%	12%	2%
Maintenance of facilities	3.3	40%	50%	8%	2%
Enforcement	3.2	40%	47%	10%	3%
Information	3.0	31%	48%	17%	5%
Sampling error for this question is $\pm 6\%$					

Information Sources for Non-motorized Boaters

The survey asked non-motorized boater respondents for the information sources they use and for their one favorite source:

N = 248	Use Source	Favorite Source
Advice of people	91%	37%
Brochures, maps	90%	13%
Books, magazines, newspapers	79%	15%
Sporting goods stores	71%	3%
Visitor information centers	69%	3%
Gather information along the way	65%	1%
Internet	63%	15%
Phone management agencies	46%	3%
Clubs, groups, water trail organizations	19%	2%
Other	13%	4%
Sampling error for this question is $\pm 5\%$		

A majority of respondents have used most of these information sources. A few favorites stand out: people's advice, printed resources like brochures, maps, books, and magazines, and the internet. Clubs and groups rank low on the list, probably because only five percent of respondents report membership in a paddling organization or club. Among the other sources identified are resorts, television shows, the yellow pages, and the American Automobile Association (AAA).

Non-motorized boaters were asked about satisfaction with a variety of information sources, and they report a high level of overall satisfaction. As table below shows, dissatisfaction

passed the ten percent threshold for signage (combined 18%), level of difficulty (16%), route maps (13%), and agency responses (13%). Only respondents able to rate the information sources were included. Respondents answering “Don’t Know,” excluded from the table, amounted to 16% for agency websites and 12% for agency responses, suggesting lack of familiarity with these sources.

TABLE 82: Satisfaction with Non-motorized Boating Information (1 = Not at All Satisfied, 4 = Very Satisfied)					
N = 123-233	Mean	Very Satisfied	Somewhat Satisfied	Not Very Satisfied	Not at All Satisfied
Interpretive information	3.4	51%	42%	6%	1%
Agency websites	3.3	40%	55%	4%	2%
Rules and regulations information	3.3	39%	52%	9%	0%
Route maps	3.2	39%	49%	10%	3%
Level of difficulty	3.2	38%	46%	12%	4%
Guidebooks	3.2	34%	56%	8%	2%
Agency responses to questions	3.2	33%	54%	10%	3%
Signage	3.1	33%	49%	16%	2%
Sampling error for these questions vary from $\pm 6\%$ to $\pm 8\%$					

Overall Satisfaction with Non-motorized Boating Experience

Non-motorized boaters were asked for their overall evaluation of the non-motorized boating experience in Oregon, and 75% select the highest category of “very satisfied.” This is a very high level of satisfaction. Less than one percent reports a combined not very satisfied/not at all satisfied rating.

TABLE 83: Overall Satisfaction with Non-motorized Boating Experience N = 248	
Very Satisfied	75%
Somewhat Satisfied	24%
Not Very Satisfied	1%
Not at All Satisfied	0%
Sampling error for this question is $\pm 5\%$	

Funding Priorities for Water Trails

Non-motorized boaters were asked to prioritize a variety of funding possibilities related to developing and maintaining water trails. Maintaining existing facilities, cleaning up litter and trash, and enforcing existing rules/regulations are highest ranked priorities, with many of the remaining alternatives clumped together.

N = 242-246	Mean	Very Important	Somewhat Important	Not That Important	A Top Funding Priority ¹⁰⁸
Maintaining existing facilities	2.7	71%	28%	2%	156
Clean up litter and trash	2.7	70%	24%	5%	143
Enforcing existing rules/regulations	2.4	48%	38%	13%	93
Acquire land for public access	2.3	44%	37%	18%	84
Providing education, safety, and trail etiquette information	2.3	40%	45%	15%	79
Providing law and safety enforcement	2.2	33%	55%	11%	77
Developing support facilities	2.2	30%	60%	10%	58
Providing information, maps, signs	2.2	32%	60%	8%	57
Developing camping facilities	1.9	16%	53%	31%	34
Identify new water trail routes	1.9	17%	57%	27%	30
Providing interpretive information	1.9	11%	66%	23%	19
Sampling error for this question is $\pm 5\%$					

Eleven percent of non-motorized boaters identify other funding priorities including waterway access, water quality and maintenance of riparian areas:

Access to waterways seems to be more for the middle or upper income levels, and I think it's valuable to make such access available to those with less resources.

Above all – water quality, the Department of Agriculture and the Department of Environmental Quality have to be central. If you don't have water quality no one's going to want to put their boat in the water.

Just the maintenance on the existing ones there. I guess they want money for more signs and such, but from what I see, they can't keep up with what they already have.

¹⁰⁸ Number of respondents selecting this answer. Asked only if respondent answered “very important.”

Activities Combined with Non-motorized Boating

The survey asked, “If you get out of your non-motorized watercraft during a trip, which of the following activities would you most likely do?” Respondent answers:

TABLE 85: Activities Combined with Non-motorized Boating N = 248	
Use bathroom	83%
Picnic	76%
Observe nature	73%
Hike	65%
Camp	62%
Swim	58%
Fish	48%
Other	9%
Sampling error for this question is $\pm 5\%$	

The high percentages shown in the above table indicate that non-motorized boaters get out of their watercraft for a variety of shore-based activities. Top activities include using a bathroom, picnicking, and observing nature. The “other” activities include bird watching, hunting, photography, and sun bathing.

Willingness to Pay Fees for Water Trail Development and Maintenance

The survey asked non-motorized boaters “How much would you be willing to pay each year to use water trails if money was used to develop and maintain water trails in Oregon?” Starting with \$25, interviewers offered smaller and smaller amounts until the respondent agreed to a figure. The results are as follows:

TABLE 86: Amount Willing to Pay for Water Trail Use N = 243	
\$25 per year	53%
\$20 per year	15%
\$15	10%
\$10	7%
\$5	4%
Not be willing to pay anything	11%
Sampling error for this question is $\pm 5\%$	

Eighty-nine percent of non-motorized boaters reported that they would be willing to pay a yearly fee for water trail development and maintenance. More than half of non-motorized boaters would be willing to pay \$25 per year to use water trails. The results suggest that authors underestimated non-motorized boater willingness to pay for their activities and should have started at a larger amount. Eighty-five percent would be willing to pay at least \$10. If all

Oregon households using non-motorized watercraft paid such a fee, this would generate the following revenues:

TABLE 87: Revenues Generated by Different Non-motorized Boater Fee Structures (185,222 Households)	
\$25 per year	\$ 4,630,550
\$20 per year	\$ 3,704,440
\$15	\$ 2,778,330
\$10	\$ 1,852,220
\$5	\$ 925,110
Sampling error for this question is $\pm 5\%$	

Eleven percent of the non-motorized boaters oppose fees in any form. Verbatim comments relating to this position include the following:

I'll always be against user fees. We've already paid our taxes and that's supposed to be taken care of that way. I do a lot of hiking, but just don't use trails that require user fees. I don't use trailheads, I park elsewhere and go cross country for access. The same with canoeing, if there's a fee or crowds, I won't go there. Same with campgrounds. If there's a fee, I don't use them.

When asked what method of payment they preferred, those respondents who are willing to pay a fee are almost equally split among the four offered: a voluntary boater pass, a parking fee at the put-in, an annual boat registration, and an access fee at launch sites:

TABLE 88: Preferred Methods of Fee Payment - Non-motorized Boaters N = 215	
Voluntary non-motorized boater pass	27%
Parking fee at boat access points	26%
Annual non-motorized boat registration	23%
Ramp or access fees at launch sites	21%
Sampling error for this question is $\pm 6\%$	

Importance of Water Trail Signage

The survey asked non-motorized boaters the importance of a range of types of warning and informational signs associated with water trail use. Every item received a “very important” ranking from a sizable proportion of respondents. Hazard warnings stand out as the highest priority, but non-motorized boaters value signage at all the listed locations.

TABLE 89: Importance of Signage to Water Trail Users (1 = Not That Important, 3 = Very Important)				
N = 246-248	Mean	Very important	Somewhat important	Not That Important
Hazards	2.8	81%	13%	6%
Take-out points	2.6	67%	26%	8%
At the put-in	2.5	63%	26%	11%
Portages	2.5	61%	30%	10%
On the highway	2.4	58%	26%	16%
Camping areas	2.4	53%	32%	15%
Rest areas	2.3	48%	35%	17%
Sampling error for this question is \pm 5%				

Shared Use of Water Trails

Respondents were asked, “Which of the following comes closest to your view regarding the shared use of water trails: Trails should allow multiple activities, but keep motorized and non-motorized activities at different locations, or, trails should allow both motorized and non-motorized activities at the same locations?” Non-motorized boaters overwhelmingly support the segregation of their activities from motorized water users:

TABLE 90: Shared Use of Water Trails N = 244	
Different locations for motorized and non-motorized	76%
Allow at same locations	14%
Mix of these (if volunteered)	10%
Sampling error for this question is \pm 5%	

One respondent’s comment illustrates the thinking behind a preference for different locations:

I do not support motorized water vehicles on most waterways. It's a source of pollution and is a danger concern with families. It's one of the reasons we don't go out as much as we like. When they are out, fees for them should be much higher due to the pollution.

Non-motorized Boaters Perceived Right to Use Waterways

The survey asked, “I'm going to read some common watercraft activities. For each one, please tell me whether you think you can legally participate in the following activities on rivers and waterways in Oregon.” The activities included traveling anywhere on a river where the boat will float, anchoring in a river to fish, stopping on shore to picnic, stopping on shore to fish, and portaging around a fence, rapid, or waterfall. The following table reports the results:

TABLE 91: Opinions about Non-motorized Boaters Rights to Use Waterways				
N = 215-241	Legal	Illegal	Depends (only if volunteered)	Don't Know
Anchor to fish	46%	26%	18%	10%
Travel anywhere boat will float	41%	48%	8%	3%
Stop to picnic	38%	21%	39%	2%
Fish on shore	37%	21%	34%	8%
Portage around obstacles	36%	30%	20%	14%
Sampling errors for these question are from $\pm 5\%$ to $\pm 6\%$				

Survey responses to these questions suggest existence of a sizable information gap among non-motorized boaters regarding the public's rights to use the waterways in Oregon. This gap in understanding is likely based on a gap in law and public policy regarding public access.

According the Department of State Lands (DSL), the only circumstances in Oregon where the public has absolute assurance of its rights to use the beds and banks of Oregon's streams is where they have been declared "title" navigable by the courts, the legislature or the State Land Board (there are 11 rivers so designated) or when streams border or abut or are surrounded by publicly owned land (e.g. within a National Forest). In Oregon, waterways subject to the ebb and flow of tide are state-owned usually to the line of high tide (there are about 230 such waterways); and meandered lakes are state-owned (there are about 75 meandered lakes).

The DSL, in consultation with the Oregon Department of Justice, advises that a common law right of use exists for the public to make reasonable and incidental use of the beds and banks of streams not yet determined navigable. According to Oregon court cases interpreting the public's right to use waterways, the public has the right to float waterways even where the bed is privately owned. This common law right or so called "floatage easement" means that the public has the right to be on the water surface, and may mean that boaters may get out of their watercraft to wade, anchor or portage their boat, or get out of their boat to stand on the stream bank. However, the precise limits of these rights and universal acceptance of the existence of the common law so-called "floatage easement" has not been determined or found. On streams not yet determined to be navigable, there is no legal clarity as to the public's rights to use the beds and banks for recreational purposes.

As a result, the "correct" answer to these questions is likely "it depends" (since the activities described are so fact-driven and situational). The gap can lead to person-to-person conflicts between waterfront private property owners and non-motorized boaters, each with strongly held expectations and understandings as to their individual and collective rights. This view is clearly evidenced in the statement of one respondent:

There needs to be more accessibility, and it needs to be exact, so there is no contention about it. People get into fights because the landowners think no one else has the right to fish because they think they own out to the middle of the river, and that no one has any right to fish there.

I live on the river, and own a camp on the river. I have had issues with people portaging around spots, and using my land because that is the only way they can get around it, and I would like to see there be some kind of information so that people would know more about it.

From a recreation management perspective, the survey results suggest a need for educating non-motorized boaters on where they legally can launch or access the water and shore on boatable waterways in Oregon (e.g. common rules of the trail) to ensure long-term access to waterways in a way that is considerate of the interests and concerns of private property owners.

Club Membership – Non-motorized Boaters

Non-motorized boaters were asked if they belong to a paddling club or group.

TABLE 92: Membership in a Club or Group – Non-motorized Boaters	
N = 248	
Yes	5%
No	90%
Sampling error for this question is $\pm 6\%$	

Only 5% of non-motorized boaters report membership in a group or club related to their activity. Although this represents 9,300 households in Oregon, as many as another 175,400 households contain no club or group member, reflecting a very large potential membership for such organizations.

STATEWIDE WATER TRAIL GOALS, OBJECTIVES AND STRATEGIES



Goals, Objectives and Strategies For Top Statewide Water Trail Issues

The chapter focuses on a set of long-range goals, objectives and strategies for the top six Statewide Water Trail Issues as identified through the water trails planning effort. A brainstorming session during the September 24, 2003 Water Trails Steering Committee Meeting reviewed and evaluated information gathered at the statewide workshops and produced an initial set of goals, objectives and strategies for resolving these top statewide issues and concerns.

For the purposes of this plan:

- Goals are general, broadly stated, desirable conditions toward which all non-motorized trail providers in the state should direct their efforts.
- Objectives are the proposed long-range solutions to the issues and the discrete problem areas involved. Objectives do not represent the complete solution to the identified issue, but are aspects of the solution identified during the planning process.
- Strategies are what need to be done to accomplish each objective and identify which specific outdoor recreation providers would be responsible for the strategies within the state's ten-year planning cycle.

Statewide Water Trail Issue A:

Need To Address Conflicts Between Non-motorized Boaters And Waterfront Property Owners

Recreation providers and other workshop attendees consistently reported in the planning workshops that non-motorized boating in the state of Oregon has increased substantially in recent years. This perception of non-motorized boating participation was also confirmed in the 2003-2007 Oregon SCORP. A comparison of non-motorized boating participation estimates from the 1986-1987 Pacific Northwest Recreation Study and the 2002 Oregon Outdoor Recreation Survey showed a 138% statewide increase in annual non-motorized boating participation (from .9 to 2.2 million annual user occasions).

Privately owned lands account for 4,075 miles (76%) of the 5,375 miles of lands (above normal high water) lying along the approximately 165 rivers and streams used for recreational boating and fishing in the state of Oregon.¹⁰⁹ As a result, any discussion of developing water trails to better manage for a growing number of

¹⁰⁹ Oregon State Marine Board. (1998). Managing River Recreation: A Statewide Assessment of Needs for Boating Access, Facilities, Enforcement, and Education. A Report to the Joint Legislative Interim Committee on Navigability.

non-motorized boaters on the state's waterways must take into consideration waterfront property owner concerns about impacts of recreational river use on their property.

Recreation providers and other workshop attendees clearly stated a need to proactively address potential conflicts between paddlers and waterfront property owners. Several strategies were mentioned in the issues workshops including:

- Providing a sufficient number of public access points at reasonable intervals along designated water trails.
- Developing and disseminating an appropriate assortment of information resources (signs, maps and brochures) to inform the public of all available water trail facilities.
- Incorporating water trail guidelines that emphasize a proper respect for private property.

According to recreation providers, there is a need to better inform the public about the extent and limitations of the public's interest in the state's waterways. The primary objective is to better inform non-motorized boaters on where they legally can launch or access the water and shore to ensure long-term access to floatable waterways in Oregon in a way that is considerate of the interests and concerns of private property owners.

Goal #1:

Promote a better understanding of issues and concerns related to recreational use of waterways between/among

non-motorized boaters and waterfront property owners.

Objective 1: Increase the number of non-motorized boaters who understand that the actions of paddlers often cause tension with waterfront property owners and are informed on ways to minimize those conflicts.

Strategies/Actions for Addressing Objective 1:

- Develop and distribute information to inform the paddling public of the primary causes of non-motorized boater/waterfront property owner conflict (e.g. trash and litter, vandalism, trespassing, illegal fires).
- Review existing "good boater" safety and user conduct information (e.g. materials from the Marine Board and Leave No Trace) and repackage these materials as a voluntary code of conduct for responsible water trails use (with emphasis on respecting the resource including the rights of waterfront property owners).
- Include this voluntary code of conduct in all State Designated Water Trail brochures, guides, maps, site signage and on the State Water Trails Website.
- Inform non-motorized boaters where they legally can launch or access the water and shore on floatable waterways in Oregon (e.g. common rules of the trail).

Objective 2: Develop and disseminate water trails information to enable non-motorized boaters to make informed decisions on where to paddle.

Strategies/Actions for Addressing Objective 2:

- OPRD will inventory existing water trails in the state and develop a website to disseminate information on State Designated Water Trails to the general public.
- Develop the appropriate combination of printed and placed (sign) information to clearly indicate which shoreline areas are open for public use and which are not (e.g. similar to highway rest areas).

Objective 3: Recognize the importance of sound planning and public involvement in the development of water trail routes.

Strategies/Actions for Addressing Objective 3:

- Water trail planners and managers should develop and implement a Water Trail Management Plan for existing and proposed water trails to reduce conflict along and manage non-motorized boater use of the waterway along the extent of the water trail.
- Water trail planners should identify and engage stakeholders in the water trails planning process.
- Water trail planners should engage waterfront property owners early in the water trails planning process.

- Water trail planners should engage public land managers and regulatory agencies in the water trails planning process.
- Develop a toolbox component including a process for effectively engaging waterfront property owners in water trails planning.
- Develop case studies that showcase successful efforts to involve waterfront property owners in water trail development projects.
- Develop a brochure to better inform waterfront property owners, public officials, and enforcement personnel about water trail issues.

Objective 4: Define the publics' right to use waterways.

Strategies/Actions for Addressing Objective 4:

- Educate and inform non-motorized boaters of the current laws relating to public access to floatable waterways.
- Encourage the state to more clearly define the rights of the public and waterfront property owners regarding the beds and banks of waterways of the state for which navigability has not been determined.

Goal #2:

Promote and encourage responsible water trail development and use.

Objective 1: Develop a statewide approach to water trail development.

Strategies/Actions for Addressing Objective 1:

- Create a state-administered Water Trails Program to manage water trail planning, designation and management in Oregon as a way to address recreational watercraft use of waterways.
- Hold a discussion among officials from state agencies including the Marine Board, Division of State Lands, Department of Fish & Wildlife and Oregon Parks and Recreation Department, the Governor's Office and key members of the state legislature to provide direction for implementing the plan.
- Develop a description of the Water Trails Program using information included in the Water Trails Plan Goals, Objectives and Strategies.
- Create an official "State Water Trail Designation" within the Water Trails Program to promote good planning, public involvement and design of water trails throughout the state.
- Revise appropriate Oregon Administrative Rules pertaining to Non-motorized Trail use to direct the Oregon Recreational Trails Advisory Council to provide coordination between OPRD, other

agencies and non-motorized boating stakeholders in the implementation of the water trails plan and support and enhance statewide non-motorized boating opportunities and programs.

Objective 2: Provide the appropriate framework and support for a state water trails system.

Strategies/Actions for Addressing Objective 2:

- Develop a set of water trail evaluation criteria to identify requirements that must be met in order for a water trail to become a State Designated Water Trail. As many trails take years to fully develop and may have changes over the years, the criteria will also determine at what point a trail is "open" and recognized as a State Designated Water Trail and at what point it may have lost the characteristics that make it a viable water trail and be removed from the list.
- Develop an official nomination process for water trail sponsors to apply for State Water Trail Designation and a process for determining the readiness for acceptance of new water trails as State Designated Water Trails.
- Develop a set of grant criteria for evaluating water trail project applications eligible for OPRD administered grant programs.
- Provide funding priority for grant proposals on State Designated Water Trails or for projects designed to meet specific State Designated

Water Trail qualification requirements.

Statewide Water Trail Issue B: Need For More Public Access To Waterways

Recreation providers and other workshop attendees across the state consistently reported a need for more public access to waterways to accommodate the needs of a growing number of non-motorized boaters. Both providers and other workshop attendees made a case that additional public access is needed at the starting point, at reasonable intervals along, and at the final take out point of paddling routes throughout the state. Since paddling routes often cross multiple jurisdictional boundaries, there is a need for increased coordination and communication between land management agencies to properly address jurisdictional and easement issues associated with developing public water access and parking facilities.

Attendees at the general public workshops in several regions stated that there are opportunities to work with private landowners to allow recreational access/easements to accommodate non-motorized boaters. According to other workshop attendees, there is a need to explore recreation opportunities on private timberlands and work with private landowners for access. Some keys to success for securing use on private lands are user education (respect for private property) and the purchase of recreational easements, permits or fee title.

Finally, recreation providers reported that it is often difficult to manage where people

access waterways due to conditions that vary with flow on a seasonal basis. Non-motorized boaters typically access the water where conditions allow. As a result, there is a need for design guidance to assist with water trail access, site selection, design and management that is compatible with the natural environment and changing water conditions.



Goal #3:

Facilitate the development of public access to waterways for non-motorized boaters.

Objective 1: Determine where access to waterways currently exists.

Strategies/Actions for Addressing Objective 1:

- Collect information provided by the Marine Board on existing public water access sites on public and private lands and water-based recreational facilities found at these sites (this inventory is a part of the Marine Board's Six-Year Boating Facility Plan).
- Make this water access information available to public, non-profit or

grass roots organizations interested in developing water trails in the state.

- Assist public, non-profit or grass roots organizations to inventory their significant waterway corridors to identify water trail development opportunities.

Objective 2: Identify ways to develop new access to waterways.

Strategies/Actions for Addressing Objective 2:

- Develop a set of basic criteria for water trail planners to acquire and technical assistance for developing high-quality access sites along water trails.
- Develop a set of water trail site and facility design standards.
- Inform water trail proponents of existing funding sources for acquisition and development of water trail access sites.
- Develop additional funding sources for agencies to acquire, develop and maintain water trail access sites.
- Encourage interagency partnerships to address jurisdictional and access issues and better share resources among agencies.
- Create incentives to encourage waterfront property owners to allow public access to the waterways along water trails (e.g. providing property tax breaks).

Statewide Water Trail Issue C:

Need For Adequate And Consistent Information Resources Including Signs, Maps, Level Of Difficulty And Water Level Information And Available Paddling Opportunities.

Recreation providers made a case that trails are a key economic development tool in many areas of the state. There are opportunities to develop partnerships with local chambers of commerce, the Oregon Tourism Commission, and the tourism industry regarding water trail marketing. There is a need for maps and information to promote paddling opportunities throughout the state.

Towards this end, both recreation providers and other workshop attendees made a strong case for developing a central web-based repository for interested non-motorized boaters to get information about existing flat water, moving water and white water paddling opportunities available throughout the state of Oregon. The site should be designed for trip planning and include information about water access locations, permits required, level-of-difficulty, current water conditions, navigational maps and descriptions of the type of experience visitors can expect. Such information will assist non-motorized boaters to make informed river use decisions on their trip. River guidebooks can also be used as marketing tools for drawing paddlers to a particular water route.



Goal #4:

Provide user-friendly, easy-to-find information resources for non-motorized boaters to help them engage in appropriate water trail activities.

Objective 1: Develop water trail information standards.

Strategies/Actions for Addressing Objective 1:

- Develop minimum-standard requirements for water trail guides¹¹⁰.

¹¹⁰ The main purpose of a Water Trail Guide is to assist trail travelers during their trip. Water Trail Guides are multiple-page documents that typically include a trail map and describe the route of the trail and suggest paddling approaches. Water Trail Guides may also list campsites and other facilities and other information directly pertinent to the trail such as information on low-impact camping,

- Develop minimum-standard requirements for water trail informational brochures¹¹¹.
- Develop minimum-standard requirements for water trail signage.

Objective 2: Encourage the use of water trail information standards in water trail development projects.

Strategies/Actions for Addressing Objective 2:

- Provide additional scoring points in trail-related OPRD administered grant programs for grant requests for water trail guides, informational brochures and water trail sign projects including minimum-standard requirements included under strategies for addressing Objective 1 (above).

Objective 3: Develop a web-based approach for providing water trail information.

Strategies/Actions for Addressing Objective 3:

- Develop a water trails website to house general information (geographic location, length of trip, level-of-difficulty, etc.) about the

stewardship, permits and equipment required and user safety.

¹¹¹ The main purpose of a Water Trail Informational Brochure is to serve as a promotional tool to attract new users to a Water Trail. Water Trail Informational Brochures are one-page multiple-fold documents that typically include a trail map, description of trail facilities and a brief description of the route.

Oregon Water Trails Program and State Designated Water Trails.

- Develop a website template for water trail providers to share more site-specific information about water trails on their agency/organizational website.
- Develop a map template for water trail providers to post water trail maps online.
- Include web links from the Oregon Water Trails website to the sponsoring agency/ organization's (water trail manager's) website to allow the general public to get more site-specific information about the State Designated Water Trails and water trail planning.

Statewide Water Trail Issue D:

Need For Safety-Related Information, User Education And Outreach.

Both recreation providers and other workshop attendees stated that there is a strong need to adequately inform people of conditions they may encounter on Oregon waterways before actually getting onto the water. Specific strategies mentioned included:

- increased non-motorized boater education,
- increased safety training specifically designed for running rivers,
- increased training to ensure compliance with existing federal and state regulations,
- increased promotion of safety-related information,

- additional safety-related outreach programs,
- creating vendor/rental training courses requiring equipment renters to show competency to operate equipment, and
- coordinating information development delivery with other agencies including the U.S. Coast Guard, Marine Board, etc.

In addition, search and rescue efforts on isolated river stretches are often very difficult, time consuming and costly. There is a need for emergency response training to ensure that the necessary skills and knowledge are in place to avoid and properly respond to water-related emergency situations. To proactively address this problem, we need to educate people before getting on the water.

Recreation providers stated a need to establish some sort of classification system to address such things as level of difficulty (using the International Scale of River Difficulty), setting type (e.g. ROS setting), services and improvements for use in marketing water trails. They made a case that the statewide water trails inventory should gather such classification information during the data collection process.

Finally, recreation providers stated that there is a need to reduce visitor impacts to the environment along paddling routes. Environmental impacts occur from such things as improperly disposed human and solid waste, disturbing wildlife, camping or landing on private land and using soap too close to the river. As a result, there needs to be more information available on how to reduce visitor impacts such as providing programs like Leave No Trace and Tread

Lightly! to develop an appropriate user ethic. There is a need for consistent, quality information, which is simple to understand and includes a distinct regional flavor (e.g. need for different information on the coast as opposed to information needed in an area such as Bend).

Goal #5:

Encourage the safe and low-impact use of water trails.

Objective 1: Inform the public on the inherent risks and dangers associated with water-based recreation.

Strategies/Actions for Addressing Objective 1:

- Develop a universal non-motorized boating difficulty rating scale (for white water, flat water and moving water conditions) with individual descriptions for the inherent dangers associated with the use of such types of waterways and include this rating in all water trail brochures, guides, maps and on the State Water Trails Website. Since river conditions change due to flooding or closed due to tree snags, the applicability of rating scale information will always be subject to current water conditions.
- Develop a set of basic skill requirements for non-motorized boating for each of the rating types included in the universal non-motorized boating difficulty rating scale and include this basic skill requirement information in all water trail brochures, guides, maps and on the State Water Trails Website.



Objective 2: Provide safety-related information and services for State Designated Water Trails.

Strategies/Actions for Addressing Objective 2:

- Create a regional forum process (including input from state and federal agencies, local recreation providers, State Police, County Sheriffs Departments, Coast Guard, retailers and paddling organizations) to encourage the development of regional safety plans for State Designated Water Trails to leverage limited resources.
- Work with emergency service providers to develop appropriate response standards for State Designated Water Trails.
- Identify organizations currently providing paddling skills training in the state and develop partnerships to increase the public's access to paddling certification programs already in place.
- Include a current list of organizations providing paddling skills training on the State Water Trail website.

- Develop an "Educate-the-Paddler Program" to encourage volunteers to distribute safety and stewardship information at State Designated Water Trail access locations.
- Where applicable (e.g. on loop trails close to population centers), create a free-of-charge "Life Jacket Loan-Out Program" to encourage **each person to wear a personal flotation device** while using a State Designated Water Trail. (Could be a component strategy of the Educate-the-Paddler Program.)

Objective 3: Provide low-impact recreational use information for State Designated Water Trails.

Strategies/Actions for Addressing Objective 3:

- Using existing resources such as Leave No Trace, develop a water trail code of ethics outlining simple universal principles of conduct when accessing or using State Designated Water Trails.
- Include this water trail code of ethics in all State Designated Water Trail brochures, guides, maps, site signage and on the State Water Trails Website.
- Work with manufacturers and retailers to distribute code of ethics information for water recreation to non-motorized boaters at the point of sale.

Statewide Water Trail Issue E:

Need A Dedicated Funding Source For Water Trail Development.

Across the state, recreation providers and other workshop attendees strongly made a case for a designated funding source for water trail facility development. Currently, there are grant programs funding motorized and non-motorized terrestrial trail projects and a motorized watercraft facility grant program, but no resources specifically designated for non-motorized watercraft facility development. As a result, there is a need to explore funding opportunities/ sources such as a non-motorized boater registration fee to fund water trail development.

Goal #6:

Pursue a dedicated funding source for a State Water Trail Program.

Objective 1: Educate key stakeholders on the need for a dedicated funding source for water trail development.

Strategies/Actions for Addressing Objective 1:

- Develop and distribute a set of tangible benefits that non-motorized boaters would receive for their investment in water trail development.
- Develop and distribute a set of tangible benefits that waterfront property owners would receive as a

result of public investment in water trail development, easements, etc.

- Distribute information about the economic benefits of water trails to local communities.

Objective 2: Identify the most effective funding mechanism for water trail development in the state.

Strategies/Actions for Addressing Objective 1:

- Investigate the non-motorized boating publics' level-of-acceptance of various water trail funding mechanism options such as non-motorized watercraft registration, a boater pass, parking fees or launch access fees.
- Identify non-motorized boating funding programs or related programs successfully used in other states and examine their applicability in the state of Oregon.
- Investigate potential legal questions associated with using various non-motorized boating funding models in the state.

Statewide Water Trail Issue F:

Need For Information Describing The Social And Economic Benefits Of Water Trails.

Recreation providers stated that there is often local resistance to developing water trail opportunities and encouraging more visitors to the local area. Community members often view increasing use of nearby waterways as potentially harmful to their local quality of life. As a result,

recreation providers need information to better educate communities about the social and economic benefits associated with water trail development.

Goal #7:

Educate key stakeholders about the economic and community benefits of water trails.

Objective 1: Develop and disseminate information on the benefits of water trails.

Strategies/Actions for Addressing Objective 4:

- Compile and summarize information describing the physiological, economic, environmental, social, psychological and educational benefits associated with water trails.
- Compile and summarize information describing the demographic characteristics of non-motorized boaters in the state of Oregon.
- Distribute benefits and demographic information to a wide variety of local consumers such as policymakers, waterfront property owners, public works departments, public recreation providers, planners, business owners and leaders, chambers of commerce and developers.

A Proposed State-Administered Water Trails Program for Oregon

By Terry Bergerson

Introduction

This chapter presents a comprehensive vision for managing non-motorized boating in the state of Oregon through the development of a statewide system of water trails. For the purposes of planning consistency, an official concept description for a water trail in the state of Oregon is as follows¹¹²:

"Water trails in Oregon are recreational boating routes on a lake, river, or ocean, which are suitable for canoes, sea kayaks, white water rafts and kayaks, drift boats and rowboats. Like conventional trails, water trails are corridors between specific locations. Although water trails are primarily developed for use by non-motorized watercraft, many are also open for use by motorized watercraft (unless current motorized boating restrictions are in place). Water trails are comprised of a number of public or public/private recreation facilities including a safe place to put in, parking for motorized vehicles, sanitation facilities, a safe place to take out, and in some cases day-use sites and overnight camping areas. Some water trails are simply day paddles while others stretch for hundreds of miles. Water trails provide a full spectrum of paddling experiences, from wilderness settings with minimal facility development to urban settings

with centralized facility development, and a variety of challenge levels on whitewater, moving water, flat water and tidewaters. Each water trail is unique, a reflection of Oregon's diverse geology, ecology and communities. Typically, water trails emphasize low-impact use and provide stewardship of the resource. Water trails are intended to connect people—physically, visually and spiritually—to the natural, cultural and historic resources of the state¹¹³."

The proposed non-motorized boating management approach is based on findings and conclusions drawn from the Oregon water trails planning process and an investigation of non-motorized boating management and water trail development materials. Specific information sources include:

- General water trail management discussions at the March 12, 2003 and September 24, 2003 Water Trails Plan Steering Committee Meetings;
- A series of 9 water trail issues workshops held across the state during the months of April and May 2003;
- A listing of top regional and statewide water trail issues identified in the water trails planning process;

¹¹² Based on information included in the document Chesapeake Bay Gateways Network (2000). Chesapeake Water Trails: A Vision. Available on the Internet at: <http://www.baygateways.net/pubs/watertrails.pdf.pdf>

¹¹³ Oregon water trails concept description finalized during the March 12, 2002 Water Trails Steering Committee Meeting. Salem, OR.

- Goals, objectives and strategies developed during the planning process for addressing top statewide water trail issues;
- Results from the 2004 Oregon Statewide Trail User and Non-motorized Boater Survey;
- Water trail program information from other areas of the country; and
- Water-based recreation information from the Oregon State Marine Board and Department of State Lands.

Two critical factors have been identified which pose a serious threat to long-term non-motorized boating access to waterways in Oregon. **These factors are a rapid increase in participation in non-motorized boating in the state and the lack of legal clarity regarding the public's rights to Oregon's waterways for recreational purposes.** It is essential that any comprehensive vision for non-motorized boating management in the state proactively address these critical factors.

The rapid growth in non-motorized boating participation was initially reported in the 2003-2007 Oregon Statewide Comprehensive Outdoor Recreation Plan¹¹⁴. A comparison of non-motorized boating participation estimates from the 1986-1987 Pacific Northwest Recreation Study¹¹⁵ and

¹¹⁴ Oregon Parks and Recreation Department (2003). Oregon Statewide Comprehensive Outdoor Recreation Plan: 2003-2007.

¹¹⁵ Denver Hospodarsky, Donald Field and Perry Brown (1988). The Pacific Northwest Outdoor Recreation Study: Oregon Survey. National Park Service Cooperative Park Studies

the 2002 Oregon Outdoor Recreation Survey¹¹⁶ showed a 138% increase in annual non-motorized boating participation (from .9 to 2.2 million annual user occasions) in the state. According to the 2003-2007 Oregon SCORP, although the state enjoys a variety of high-quality paddling opportunities, additional recreational infrastructure is needed to satisfy a growing demand for paddling sports. Recreation providers felt that the Oregon Statewide Water Trails Plan should address this growing demand through the development of canoe, rafting and kayaking routes (water trails) throughout the state.

In addition to an increase in statewide participation, recreation management of non-motorized boating is further complicated by a number of issues concerning navigability law including:

- the relative obscurity of navigability law regarding the public's right to use the bed and banks of rivers and streams for recreational purposes;
- the lack of legal clarity as to the public's rights to use the beds and banks that have not yet been determined navigable for state ownership purposes; and
- commonly held and communicated misperceptions by river recreationists about the public's rights to use Oregon's waterways.

This combination of factors has led to an increasing potential for conflicts between

Unit and Department of Forest Recreation Resources, Oregon State University.

¹¹⁶ Rebecca Johnson (2002). Oregon's Statewide Comprehensive Outdoor Recreation Plan (SCORP): Demand and Needs Analysis. Department of Forest Resources, Oregon State University.

non-motorized boaters and waterfront property owners in the state of Oregon.

The need to address conflicts between non-motorized boaters and waterfront property owners was stressed by recreation providers and other water trails issue workshop attendees across the state. As a result, "the need to proactively address conflicts between non-motorized boaters and waterfront property owners" was identified as the top statewide issue in the water trails plan. According to recreation providers, the primary objective of a statewide non-motorized boating management strategy must be to better inform non-motorized boaters on where they legally can launch or access the water and shore to ensure long-term access to floatable waterways in Oregon.

The following Oregon Parks and Recreation Department (OPRD)-administered water trails program framework is presented as a potential comprehensive management strategy for development of a statewide system of water trails carefully designed to minimize conflicts between non-motorized boaters and waterfront property owners. This can be accomplished through encouraging water trail development that includes proper management planning, consulting with waterfront property owners, adequate public facilities along the length of the water trail (e.g. parking, sanitation facilities, designated public access points), and the provision of trip information (trail guides, maps, proper trail ethics) that will allow paddlers to safely and respectfully use Oregon's waterways in a manner that is considerate of the interests and concerns of private property owners along these waterways and other waterway users (e.g. boaters, fisherman, and so forth).

This framework is also intended to address each of the six top water trail issues and related goals, objectives and strategies identified in the statewide water trails plan. Besides the need to proactively address conflicts between non-motorized boaters and waterfront property owners, the framework will also address the other 5 top water trail issues including the:

- Need for more public access to waterways;
- Need for adequate and consistent information resources including signs, maps, level of difficulty and water level information and available paddling opportunities;
- Need for safety-related information, user education and outreach;
- Need for a dedicated funding source for water trail development; and
- Need for information describing the social and economic benefits of water trails.

Federal and State Navigability Laws and Non-motorized Boating in Oregon

The issue of who owns the beds and banks of Oregon's waterways and the determination of the public's rights to use waters of this state has been around a long time. In recent years, since 1990, the Oregon Department of State Lands (DSL) has been working to resolve this issue. However, more is needed in order to determine legal clarity regarding the public's rights to Oregon's waterways for recreational purposes.

According to the DSL, the only circumstances in Oregon where the public has absolute assurance of its rights to use the beds and banks of Oregon's streams is

where they have been declared "title" navigable by the courts, the legislature or the State Land Board (there are 11 rivers so designated) or when streams border or are surrounded by publicly owned land (e.g. within a National Forest). In Oregon, waterways subject to the ebb and flow of tide are state-owned usually to the line of high tide (there are about 230 such waterways); and meandered lakes are state-owned (there are about 75 meandered lakes).

The DSL, in consultation with the Oregon Department of Justice, advises that a common law right of use exists for the public to make reasonable and incidental use of the beds and banks of streams not yet determined navigable. According to Oregon court cases interpreting the public rights to use the waterways, the public has the right to float waterways even where the bed is privately owned. This common law right or so called "floatage easement" means that the public has the right to be on the water surface, and may mean that boaters may get out of their watercraft to wade, anchor or portage their boat, or get out of their boat and stand on the stream bank. The precise limits of these rights and universal acceptance of the existence of "floatage easement" has not yet been determined or found. On streams not yet determined to be navigable, there is no legal clarity as to the public's rights to use the beds and banks for recreational purposes. Until such legal certainty is determined, there will be a gap in law and public policy regarding public access to waterways for recreational purposes in the state of Oregon.

Another complicating factor is the ratio of private to public lands along rivers and streams used for recreational boating and fishing in Oregon. According to the

Oregon State Marine Board¹¹⁷, as much as 76% of the 5,375 miles of lands lying along the approximately 165 rivers and streams used for recreational boating and fishing in Oregon are in private ownership.

During the statewide water trails planning effort, the DSL and OPRD were interested in learning about non-motorized boaters current understanding of their legal rights to use rivers and waterways in the state for recreational purposes. In the 2004 Oregon Statewide Trail User and Non-motorized Boater Survey, a random sample of non-motorized boaters were asked for their opinions about the legality of a number of common watercraft activities on rivers and waterways in Oregon including traveling anywhere on a river where the boat will float, anchoring in a river to fish, stopping on shore to picnic, stopping on shore to fish, and portaging around a fence, rapid, or waterfall. The following table reports the results.

¹¹⁷ Oregon State Marine Board. (1998). *Managing River Recreation: A Statewide Assessment of Needs for Boating Access, Facilities, Enforcement, and Education*. A Report to the Joint Legislative Interim Committee on Navigability.

N = 215-241	Legal	Illegal	Depends (only if volunteered)	Don't Know
Anchor to fish	46%	26%	18%	10%
Travel anywhere boat will float	41%	48%	8%	3%
Stop to picnic	38%	21%	39%	2%
Fish on shore	37%	21%	34%	8%
Portage around obstacles	36%	30%	20%	14%
Sampling errors for these question are from $\pm 5\%$ to $\pm 6\%$				

The "correct" answer to these questions is likely "it depends" (since the activities described are so fact-driven and situational). Responses to this set of survey questions suggest considerable misunderstanding among non-motorized boaters regarding the public's rights to use the waterways in Oregon. This gap in understanding is likely based on the previously described gap in law and public policy regarding public access. Such misunderstanding among non-motorized boaters regarding the public's right to use the waterways in Oregon can lead to person-to-person conflicts between waterfront property owners and non-motorized boaters, each with strongly held expectations and understandings as to their individual and collective rights.

Based on existing public information and findings of the statewide water trail process, the following critical points have been identified:

- Only a small percentage of the 165 rivers and streams used for recreational boating in Oregon have been declared "title" navigable.
- Due to the length of time involved in the legal process, only a small percentage of Oregon rivers and

streams used for recreational boating in Oregon will be declared "title" navigable at the end of the water trail plan's 10-year planning horizon.

- There is no legal clarity as to the public's rights to use the beds and banks for recreational purposes on rivers and streams that have not yet been determined navigable.
- There is no reason to assume that legal clarity will be determined as to the public's rights to use the beds and banks for recreational purposes on streams yet determined to be navigable during the water trail plan's 10-year planning horizon.
- Currently, non-motorized boaters do not understand the navigability issues regarding the public's right to use waterways in Oregon.
- In recent years, there has been substantial growth in non-motorized boating participation in the state of Oregon.
- Public recreation providers, workshop attendees, and water trail steering committee members have identified the need to proactively address potential conflicts between

paddlers and waterfront property owners as the top statewide issue that must be addressed in order to ensure long-term access to floatable waterways in Oregon.

It is evident that the gap in law and public policy regarding public access to Oregon's waterways is creating an increased potential for conflicts between a growing number of non-motorized boaters and waterfront property owners. From a recreation management standpoint, it would be unfair to both waterfront property owners and Oregon's non-motorized boaters to simply ignore this problem until the time that the legislature or the courts finally resolve the uncertainty as to the public's rights to use the beds and banks for recreational purposes on rivers and streams that have not yet been determined navigable.

During the September 24, 2003 water trails steering committee meeting, a discussion was held regarding potential management strategies for resolving top statewide water trail issues. There was consensus among committee members that the state should consider the creation of a state water trail program. The purpose of a state water trail program would be to promote the development of a "water trails system" to better manage waterways for a rapidly growing number of non-motorized boaters in Oregon. A key objective of the program would be to actively engage service providers, local non-profit trails organizations and waterfront property owners in the early stages of water trail development in Oregon in order to proactively address the potential for conflicts between water trail users and waterfront property owners.

A Proposed Oregon Water Trails Program

The need for a state water trail program is certainly not unique to the state of Oregon. A number of state and regional water trails programs currently exist across the country. Examples of successful programs include the:

- Chesapeake Bay Gateway Network - Water Trails Program;
- Florida Greenway and Trails Program;
- Humboldt Bay Water Trails Program;
- Maryland Water Trails Program;
- North Carolina Water Trails Program;
- Northeastern Illinois Water Trails Program; and
- Pennsylvania Water Trails Program.

The primary mission of such regional or state water trails programs is to develop a statewide/regional system of water trails to complement the existing statewide/regional non-motorized terrestrial trail network. An outstanding example of a well-designed water trail program is the Chesapeake Bay Gateway Network, a partnership organization in the Chesapeake Bay Watershed (including portions of Maryland, Virginia, Delaware, Washington D.C., and Pennsylvania). The goal of the organization is to create a system of biking, water and walking trails and driving routes linking parks, wildlife refuges, historic communities, maritime museums, and waterways. The Chesapeake Water Trails mission¹¹⁸ is, "To

¹¹⁸ Chesapeake Bay Gateways Network (2000). Chesapeake Water Trails: A Vision. Available on the Internet at: <http://www.baygateways.net/pubs/watertrails.pdf>

establish interconnected water trails and important resource areas within the Chesapeake watershed through local grassroots initiatives coordinated across jurisdictional boundaries in the creation, management, and promotion of individual trail components." Water trail programs also promote environmentally responsible recreation and encourage resource awareness, stewardship, and conservation by water trail users.

Typically, state water trail programs assist with water trail funding, provide services to water trail development efforts, ensure that adequate, consistent information and planning methods are used, leverage public and private resources and target gaps in water trail formation. Organizations proposing to add their water trail to the system agree to adhere to common standards such as:

- water trail management planning;
- access identification;
- route planning;
- public outreach;
- signage, mapping, both in printed and internet formats; and
- trail stewardship.

In water trail programs where grant monies are available (such as the Chesapeake Bay Water Trails Program), funding is conditional on compliance with such trail standards. These common trail infrastructure and management elements create a connection between the user and the statewide system. According to the Chesapeake Bay Water Trails Vision, this connection is strengthened through involvement with trail maintenance, resource monitoring, educational activities and trail associations.

An Official "Oregon Water Trail" Designation

Several states including North Carolina and Pennsylvania have developed an official "State Water Trail Designation" to showcase premier water trails in their respective states. The intent of this designation is to ensure that all state designated water trails provide consistent information, quality experiences and meet paddler expectations. The trail designation process would include developing and adopting a set of standards to determine the readiness for acceptance of new paddling trails into the state system. All groups wishing to add their local water trail to the water trail system would need to meet the requirements included in this set of criteria.

The Oregon Water Trails Program should create an official "Oregon Water Trail" designation as was done in North Carolina, Pennsylvania and Chesapeake Bay Water Trail Programs. During the March 12, 2003 Water Trail Advisory Committee Meeting, committee members reviewed and proposed a set of minimum requirements for identifying which paddling routes might be considered for state designation in Oregon. Those criteria include:

- A nonprofit or local grass roots organization, public agency or water trail association responsible for management and maintenance of any facilities associated with the water trail.
- Support of the local government(s) in whose jurisdiction the water trail lies.
- A water trail management plan or management plan addressing recreational use of the waterway.
- Basic facilities including a safe place to put in, designated and signed

parking for motorized vehicles, sanitation facilities at designated access points and a safe place to take out.

- A published water trail guide for the water trail with a set of standard minimum information requirements.

Only those water trails meeting all these minimum requirements would be considered for official "Oregon Water Trail" designation. Since some water trails will be more developed with demonstrated success and public support than others, the state should consider establishing more than one category of "Oregon Water Trails" (e.g. small grants and large grants) to encourage new water trails to develop over time.

An Oregon Water Trail Advisory Group (with non-motorized boating management experience) could be created to provide technical assistance to state agency staff in addressing standards, coordinating promotion and user information, and for developing a website for the water trails program. The advisory group would be a subcommittee of the existing Oregon Recreational Trails Advisory Council.

In addition, the state will need to develop a nomination process for water trail sponsors to apply and determine readiness for official "Oregon Water Trail" designation. The decision to officially designate an "Oregon Water Trail" should be made by the Oregon Water Trails Advisory Group.

A Better Understanding Between Paddlers and Waterfront Property Owners

The water trails program should also be used to promote a better understanding of issues and concerns related to recreational

use of waterways between/among non-motorized boaters and waterfront property owners. This is of particular importance, since there has been no comprehensive, ongoing information campaign to educate non-motorized boaters about navigability issues by the state.

The following are a number of specific water trail program educational strategies that should be considered.

Strategy 1: Develop and distribute information to inform the paddling public of the primary causes of non-motorized boater/property owner conflict.

The Oregon State Marine Board's Report to the Joint Legislative Interim Committee on Navigability¹¹⁹, identified a list of the most common problems on Oregon's rivers as reported by river users, federal managers, state and local providers, and law enforcement personnel. The top problems identified (in order of magnitude) include trash and litter, vandalism, trespassing, theft, public nuisance, illegal fires, public urination, and harassment. The water trails program should develop printed materials and public outreach strategies to inform non-motorized boaters of these primary causes of conflict. In addition, organized river clean-up events and adopt-a-water trail and water trail monitoring programs could be used to address many of these problems.

¹¹⁹ Oregon State Marine Board (1998). Managing River Recreation: A Statewide Assessment of Needs for Boating Access, Facilities, Enforcement, and Education.

Strategy 2: Review existing "good boater" safety and user conduct information (e.g. materials from the Marine Board and Leave No Trace) and repackage these materials as a voluntary code of conduct for responsible water trail use (with emphasis on respecting the resource including the rights of adjacent landowners.)

While paddlers generally have a minimal impact on the environment while on the water, their use of the land for access, camping and picnicking can result in common recreational impacts. Typical problems include soil erosion and compaction, vegetation loss, disturbance of nesting wildlife, introduction of invasive species and improper disposal of trash and human waste¹²⁰.

It is common for water trail programs across the country to embrace the "Leave No Trace" code of outdoor ethics that promote the responsible use and enjoyment of the outdoors. Leave No Trace (LNT), Inc. is a non-profit organization dedicated to establishing a nationwide code of outdoor ethics by which to shape a sustainable future for natural lands. LNT skills and ethics publications are typically based on a set of seven principals including:

- Plan Ahead and Prepare;
- Travel and Camp on Durable Surfaces;
- Dispose of Waste Properly;
- Leave What You Find;
- Minimize Campfire Impacts;
- Respect Wildlife; and
- Be Considerate of Other Visitors.

¹²⁰ N. Settina and R. Kauffman. (2001). Water Trails. Parks and Recreation. National Parks and Recreation Association, September.

There was concern among steering committee members that, due to the diversity of paddling conditions across the state (e.g. waterways in mountains, deserts, rainforests and marine environments), a series of responsible water trail use messages and ethics may be required—not just a single generic message for all areas of the state.

Once completed, the responsible water trail messages and ethics should be included on all water trail maps, guides, signs, and public outreach efforts.

Strategy 3: Inform non-motorized boaters on the rules of the trail (e.g. where they can legally launch or access the water and shore on water trails, etc.).

As mentioned earlier, privately owned lands account for 76% of lands lying along the approximately 165 rivers and streams used for recreational boating and fishing in Oregon. As such, many water trails will be narrow ribbons of public access through a privately owned landscape (water trails are commonly referred to as ribbons of discovery). Water trail facilities, rules, maps and guides are specifically designed to provide the non-motorized boater with the ability to travel through this narrow ribbon of public access in a legal and responsible manner.

A non-motorized boater paddling on a water trail is analogous to an automobile driver traveling on an interstate highway. Along the course of the highway, a number of entrance and exit ramps are located for access and egress. Similarly, well marked, designed, and located public access points allow the water trail user a place to park their vehicles and legally (and

safely) launch or access the water and shore on water trails.

In addition, the highway includes a number of public rest stop areas where travelers can stretch their legs, picnic, and use restroom facilities. In the same manner, longer distance water trails may have public day-use areas with appropriate facilities at reasonable paddling intervals along the route. On multi-day trails, camping facilities will also be provided.

Finally, highway rules enable the driver safe passage down the highway corridor. Similarly, water trail maps and guides, signs (should minimize visual pollution, high maintenance, vandals, flood, targets, theft) and public outreach efforts will include an easy to understand description of the public's rights and limitations for use of the waterway for recreational purposes over the entire course of the water trail. In addition, maps and appropriate route markers will enable the user to determine their current position and the location of water trail facilities while on the trail corridor.

Strategy 4: Develop a web-based toolbox that describes a process for effectively engaging waterfront property owners in the water trails planning process.

Waterfront property owners may have a number of concerns, fears, and misconceptions and actual experiences regarding water trail development. Open communications throughout the water trails planning process can address landowner concerns and often dispel fears and misconceptions. It is important to recognize that landowner concerns are legitimate and must be met for any potential trail development that will take place on private lands. The water trails

program would develop a toolbox to assist in engaging landowners throughout the planning process for any water trail. The toolbox effort should also investigate tax strategies that could encourage recreational easements on private lands.

Facilitate the Development of Public Access To Waterways

During the regional issues workshops, recreation providers and other workshop attendees across the state consistently reported a need for more public access to waterways to accommodate the needs of an increasing number of paddlers in the state. Both providers and other workshop attendees made a case that additional public access is needed at the starting point, at reasonable intervals along, and at the final take out point of paddling routes throughout the state. Since paddling routes often cross multiple jurisdiction boundaries, there is a need for increased coordination and communication between land management agencies to properly address jurisdictional and easement issues associated with developing public water access and parking facilities.

The water trails program could be used to facilitate the development of public access to waterways for non-motorized boaters. The following are a number of specific water trail program strategies that should be considered to facilitate the development of public access to waterways.

Strategy 5: Assist public, non-profit or grass roots organizations to inventory their significant waterway corridors to identify water trail development opportunities.

According to the Chesapeake Water Trail Vision, the first step in any water trail planning effort is to conduct an objective

analysis of suitability and feasibility for a water trail. If the proposed water corridor is determined appropriate for establishing a water trail, the next step is to conduct a comprehensive water trail resource assessment. A water trail resource assessment should include an examination of items such as physical features, resource needs, flora/fauna, historic and cultural attributes, existing recreational facilities, scenery, educational opportunities, hazards, access, ownership, water quality/quantity, and potential day use, camping and interpretive sites.

It is essential that limited water trail program funding be directed towards those water trails that will provide paddlers with a safe and enjoyable experience. As a result, **the suitability and feasibility analysis and resource assessment are critical planning components** in identifying which water trail development projects are appropriate for development. Due to the technical expertise required for such analysis, water trail program staff should assist public, non-profit or grass roots organizations in conducting such critical analysis to **identify water trail development opportunities that are worthy of an investment of limited state resources.**

Strategy 6: Identify a "trail manager" for existing and proposed water trails.

The intent of this strategy is to identify a principal point of contact for each existing and proposed water trail. The trail manager does not have to be a managing entity, but must be easily accessible and responsive to questions and issues involving water trail planning, development and management—and must represent consensus of all the trail owners/managers.

Strategy 7: Develop a set of water trail site and facility design standards.

As mentioned earlier, the intent of establishing an official "Oregon Water Trail Designation" is to ensure that all state designated water trails provide consistent information, quality experiences and meet paddler expectations. The Oregon Water Trail Program and the Oregon Water Trails Advisory Group should develop a formally recognized set of water trail development standards suitable for Oregon's natural environment.

Water trail development standards should define consistent standards for water trail improvements, such as site location and spacing, campsites, launching/landing sites and rest areas planned for the water trail. Due to the wide variety of paddling experiences and settings available in Oregon (e.g. a variety of challenge opportunities on whitewater, moving water, flat water and tidewater in a variety of settings from wilderness to urban), a range of standards should be developed that reflect Oregon's diversity and the diverse interests of paddlers. For example, it would be appropriate for more minimal facility development standards for water trails in wilderness settings where paddlers seek a more self-reliant experience testing their outdoor skills¹²¹. On the other hand, more hardened, centralized facility development standards would be appropriate on water trails in high-use urban settings where paddlers are looking for the convenience of facility development and the user may be less skilled in outdoor

¹²¹ The intent of the National Wild and Scenic River designation is to preserve the natural character of the river as much as possible. The desired experience is natural or primitive and the goal for overnight camping is to minimize evidence of prior or routine use.

travel. The standards should serve strictly as a guideline for the design and development of water trails and should be adapted to local environmental and site conditions. The appropriate level of facility development should create a balance between user desires and the need to manage the impacts of use.

Strategy 8: Encourage interagency partnerships to address jurisdictional and access issues and better share resources among agencies when water trails cross jurisdictional boundaries.

Recreation providers and other workshop attendees consistently reported that successful water trail development and management relies on good coordination and communication between trail organizations, federal, state, and local agencies, tribal governments and other stakeholders. In many regions, providers and user groups stressed the need for regional coordination and information sharing between agencies for water trail planning, operations and management.

Regional water trail coordination and communication should also encourage:

- Adopting consistent design, construction and maintenance standards;
- Developing and implementing directional and regulatory signing consistency;
- Developing regulatory and law enforcement consistency;
- Sharing limited trail maintenance resources and equipment;
- Addressing trail capacity issues;
- Addressing user conflict (e.g. motorized and non-motorized boaters);

- Developing and distributing trail information and other promotional materials;
- Identifying water trail grant funding priorities; and
- Connecting existing trails where opportunities exist.

The Oregon Water Trails Program and the Oregon Water Trails Advisory Group should develop and implement a regional water trails planning forum process to promote interagency coordination in developing the Oregon Water Trail System. Regional boundaries will be determined through consensus among recreation providers in a specific geographic area of the state.

Provide User Friendly, Easy-To-Find Information Resources

During the regional issues workshops, recreation providers made a case that trails are a key economic development tool in many areas of the state. Water trails as a recreation destination provide rural communities with income to local boat liveries and outfitters, motels and bed and breakfasts, restaurants, grocery stores, gas stations and shops.¹²² For example, an Oregon study of guides and packers¹²³ indicates that in 1986, the outfitter/guide industry in Oregon (for river, land and marine activities) had a direct impact of \$42.5 million. This resulted in a total economic impact of \$300 million to the overall Oregon economy.

¹²² Water Trails For Wisconsin. University of Wisconsin Extension.

¹²³ Bureau of Land Management (1987). Recreation 2000. Washington, D.C. U.S. Department of the Interior, Bureau of Land Management.

Both recreation providers and other workshop attendees made a strong case for developing a central web-based repository for interested non-motorized boaters to get information about existing flat water, moving water and whitewater paddling opportunities available throughout the state of Oregon. The site should be designed for trip planning and include information about water access locations, permits required, level-of-difficulty, current water conditions, navigational maps and descriptions of the type of experience visitors can expect. Such information will assist non-motorized boaters to make informed river use decisions on their trip. River guidebooks can also be used as marketing tools for drawing paddlers to a particular water route.

Specific water trail program strategies that should be considered to facilitate the development of easy-to-find information resources for water trails include the following.

Strategy 9: Develop a statewide website to house general information about the Oregon water trails program and information about trails with "Oregon Water Trail" designation (geographic location, length of trip, level-of-difficulty, and so forth).

A number of water trail programs (Maryland, North Carolina, Chesapeake Bay) use a central program website to disseminate system-wide water trails information (e.g. planning, design, and user information). Those programs with an official water trail designation typically feature user information about trails accepted into the statewide/ regional system (an additional incentive for becoming a part of the system). User

information typically includes a system-wide map, a general description of each water trail, and safety-related information about non-motorized boating in the state. Such information assists users to gain basic information about the paddling route and to determine if they have the appropriate set of skills to negotiate the water trail route. Web links are included to managing agency websites to allow users to access more detailed information about specific water trails.

Strategy 10: 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.

It would not be reasonable for a statewide water trail program to be responsible for presenting and updating site-specific water trail information on a central website over time. To provide consistent site-specific water trail information for each official "Oregon Water Trail" the Water Trail Program should develop a set of minimum standards for water trail providers to use to present water trail information to the boating public. Minimum requirements would include items such as route descriptions, water trail guides, brochures, maps, rules and regulations, permits required, trail closure information, safety information, emergency response information, listings of local livery service providers (equipment rentals) and camping/lodging information.

As previously mentioned, a non-motorized boater paddling on a water trail is analogous to an automobile driver traveling on an interstate highway. High-quality trail maps and appropriate route markers are essential to enable the water trail user to determine their current position and the location of water trail facilities while on the

trail corridor. Each website should include a downloadable map with sufficient detail to allow users to navigate the entire length of the water trail corridor.

Strategy 11: Develop minimum-standard requirements for water trail guides¹²⁴, water trail informational brochures¹²⁵, and water trail signage.

The Chesapeake Bay Network has developed an outstanding set of graphic design guidelines for their Water Trail Network¹²⁶. The guidelines can serve as a model to enhance the identity of the network as a key tool for exploring, learning about, enjoying and conserving Oregon's waterways. This is achieved by developing a degree of consistency throughout the network, while respecting the diversity of the unique characteristics of individual water trails. The guide provides models for effective graphic design and requirements and options for use of the "Oregon Water Trails" logo, fonts and design principals in publications, signage

¹²⁴ The main purpose of a Water Trail Guide is to assist trail travelers during their trip. Water Trail Guides are multiple-page documents that typically include a trail map and describe the route of the trail. Water Trail Guides may also list campsites and other facilities and other information directly pertinent to the trail such as information on low-impact camping, stewardship, permits and equipment required and user safety.

¹²⁵ The main purpose of a Water Trail Informational Brochure is to serve as a promotional tool to attract new users to a Water Trail. Water Trail Informational Brochures are one-page multiple-fold documents that typically include a trail map, description of trail facilities and a brief description of the route.

¹²⁶ Gateway Network Graphic Style Manual. Available on the internet at: <http://www.baygateways.net/graphicstandards.cfm>

and other communications. The Oregon Water Trail Program should develop a similar guide to graphic standards, an official "Oregon Water Trail" logo, and signage examples for placement on the statewide water trails program website.

Providing Safety-Related Information, User Education and Outreach

Both recreation providers and other workshop attendees stated that there is a need to adequately inform people of conditions they may encounter on Oregon's waterways before actually getting on the water. In addition, search and rescue efforts on isolated river stretches are often very difficult, time consuming and costly. There is a need for emergency response training to ensure that the necessary skills and knowledge are in place to avoid and properly respond to water-related emergency situations. To proactively address this problem, we need to educate people before getting on the water. The following are a number of specific water trail program strategies that should be considered to facilitate the provision of safety-related information, user education and outreach.

Strategy 12: Develop a universal non-motorized boating difficulty rating scale.

The Water Trail Program should research existing universal non-motorized boating difficulty rating scales (for whitewater, flat water and moving water conditions) for modification and use in Oregon. The scale(s) should include individual descriptions for the inherent dangers associated with the use of such types of waterways and include this rating in all water trail brochures, guides, maps and on the State Water Trails website. Since river

conditions change due to flooding or trails are closed due to tree snags, the applicability of rating scale information will always be subject to current water conditions.

Strategy 13: Develop a set of basic skill requirements for non-motorized boating.

The Water Trail Program staff should research basic skill requirements for non-motorized boating for each of the rating types included in the universal non-motorized boating difficulty rating scale and adapt them for use in Oregon. This basic skill requirement information should be included in all water trail brochures, guides, maps and on the State Water Trails website.

Strategy 14: Create a regional forum process to encourage regional water trail safety plans.

The Oregon Water Trails Program will create a regional forum process (including input from state and federal agencies, local recreation providers, State Police, County Sheriffs Departments, Coast Guard, retailers and paddling organizations) to encourage the development of regional safety plans for designated "Oregon Water Trails" to leverage limited resources. Again, regional boundaries will be determined through consensus among recreation providers in a specific geographic area of the state.

Strategy 15: Develop appropriate emergency response standards.

The Oregon Water Trails Program will work with emergency service providers to develop appropriate response standards for designated "Oregon Water Trails."

Strategy 16: Enhance paddling skills training.

The Oregon Water Trails Program will identify organizations currently providing paddling skills training in the state and develop partnerships to increase the public's access to paddling certification programs already in place.

Strategy 17: Develop an "Educate-the-Paddler Program."

The Oregon Water Trails Program will develop an "Educate-the-Paddler Program" to encourage volunteers to distribute safety and stewardship information at designated "Oregon Water Trail" access locations. This program could be tied into existing "SOLV" and "Down by the Riverside" programs.

Strategy 18: Develop a "Life Jacket Loan Out Program."

The Oregon Water Trails Program will, where applicable (e.g. on loop trails close to population centers), create a free-of-charge "Life Jacket Loan-Out Program" to encourage each person to wear a personal flotation device while using designated "Oregon Water Trails" (e.g., the Leaburg Fire District life jacket loan-out program on the McKenzie River). This could be a component of the Educate-the-Paddler Program or a reward for training.

A Dedicated Funding Source

The key to creating an "Oregon Water Trail System" is establishing a stable funding source for water trail development. During the issues workshops, recreation providers and other workshop attendees throughout the state strongly made a case for a designated funding source for water trail facility development. Currently, there are grant programs funding motorized and non-motorized terrestrial trail projects and a motorized watercraft facility grant

program, but no resources specifically designated for non-motorized watercraft facility development. As a result, the need for a funding source for water trail development was identified as a top statewide water trail issue.

After the need for funding was identified, OPRD added a series of questions in the 2004 Oregon Statewide Non-motorized Boater Survey to gather information about non-motorized boaters willingness to pay for water trail development and maintenance. The survey questions were designed to test the willingness of those individuals who derive direct benefit from water trails to invest in their chosen activity, rather than asking all state taxpayers—even those who would never use water trails—to pay more. The following results are taken from the survey report.

The survey asked non-motorized boaters "How much would you be willing to pay each year to use water trails if money was used to develop and maintain water trails in Oregon?" Starting with \$25, interviewers offered smaller and smaller amounts until the respondent agreed to a figure. The results are as follows:

\$25 per year	53%
\$20 per year	15%
\$15	10%
\$10	7%
\$5	4%
Not be willing to pay anything	11%
Sampling error for this question is ± 5%	

Eighty nine percent of non-motorized boaters reported that they would be willing to pay a yearly fee for water trail

development and maintenance. More than half of non-motorized boaters would be willing to pay \$25 per year to use water trails. If a \$25 annual fee were instituted, it would generate over \$4.6 million annually just from Oregon households reporting use of non-motorized watercraft in the last year (based on survey estimates of 185,200 households in the state having one or more persons participating in non-motorized boating).

When asked what method of payment they preferred, those respondents who are willing to pay a fee are almost equally split among the four options offered: a voluntary boater pass, a parking fee at the put-in, an annual boat registration, and an access fee at launch sites:

Voluntary non-motorized boater pass	27%
Parking fee at boat access points	26%
Annual non-motorized boat registration	23%
Ramp or access fees at launch sites	21%
Sampling error for this question is ± 6%	

In the past, state agencies have run into strong opposition to proposals for establishing a non-motorized boater registration fee system in the state of Oregon. The results of the 2004 Oregon Statewide Non-motorized Boater Survey indicate that this strong opposition is not representative of the opinions of the general Oregon non-motorized boating population.

A more detailed discussion of the history of non-motorized boat registration in Oregon

and an analysis of non-motorized boat registration in other states is included in the 2001 Oregon State Marine Board report entitled, *Non-motorized Boat Registration: An Assessment of Programs in Other States*¹²⁷.

Using a Dedicated Funding Source

As with other water trail programs in the country, a certain portion of the user-fees would be earmarked for administration of the water trails program for dedicated staff to provide services to water trail development efforts, ensure that adequate, consistent information and planning methods are used, leverage public and private resources and target gaps in water trail information. Many of the administrative expenses would be associated with program needs previously identified in this chapter. In addition, a portion of the user fees would be used to administer the centerpiece of the water trails program—the water trails grant program. Finally, an amount would be kept in reserve to deal with emergency program needs.

The majority of user-fees collected would be directed towards the development of a statewide system of water trails to complement the existing statewide non-motorized trail network. An OPRD-administered "Oregon Water Trails Grant Program" could be created for the purpose of administering and awarding grant funding towards the creation of a statewide system of water trails. The remainder will be used to fund staff to develop the program's structure, operating principles, website, coordination with other

¹²⁷ Jeanine Stier (2001). *Nonmotorized Boat Registration: An Assessment of Programs in Other States*. Oregon State Marine Board.

state agencies, and keep a solid foundation under the program.

The following organizations would be eligible for water trail grant funding through the proposed Oregon Water Trails Grant Program:

- Non-profit organizations that are registered with the State of Oregon as a non-profit, will name a successor at the time of any change in organizational status, and which does not discriminate on the basis of age, disability, gender, income, race, and religion.
- Municipal agencies (cities, towns, special park and recreation districts).
- State agencies (Oregon Parks and Recreation Department, Oregon State Marine Board, Oregon Department of Transportation, Oregon Department of Fish & Wildlife, Oregon Department of Forestry, and Oregon Department of State Lands).
- Federal government agencies (U.S. Forest Service, National Park Service, Bureau of Reclamation, U.S. Army Corps of Engineers, Bureau of Land Management, U.S. Fish & Wildlife Service).
- Other government entities (Indian tribal governments, regional governments, port districts).

As with the Chesapeake Bay Water Trail Program, Oregon Water Trails Grant Program funding would be directed through local grassroots initiatives coordinated across jurisdictional boundaries in the creation, management, and promotion of individual trail components. Grant funding would be conditional on compliance with system-wide

management planning, access identification, route planning, public outreach, signage, mapping and trail stewardship standards. This program approach is also similar to the successful National Scenic Byways Program.

Projects eligible for Oregon Water Trails Grant Program funding would include:

- Water trail management planning;
- Water trail land acquisition;
- Water trail facility development (new and additional);
- Water trail maintenance;
- Water trail operations and maintenance equipment;
- Water trail information resources (e.g. guides, informational brochures, maps, sign projects, websites);
- Water trail enforcement of rules/regulations; and
- Water trail safety.

Grant funding would be available for designated "Oregon Water Trails," new water trail projects requesting grant funding to meet specific nomination criteria requirements, and for land banking for water trail put-in, rest areas and take-out parcels (when such parcels have been identified in a water trail management plan). It is important to note that water trail funding would be available for a wide variety of water trail types ranging from minimal facility development in wilderness settings to more hardened, centralized facility development in high-use urban settings. For example, a white-water trail on a Wild and Scenic River might have hardened put-in and take-out facilities with little facility development between these points.

An early administration task would be to develop an Oregon Water Trail Grant Program evaluation process including a set of evaluation criteria for rating and identifying projects to receive funding. The evaluation criteria should be directly tied to priorities identified in the Statewide Water Trails Plan. As with a number of other OPRD-administered grant programs, the previously mentioned Oregon Water Trail Advisory Group (with non-motorized boating management experience) would be responsible for evaluating grant proposals and determining funding recipients in a fair and impartial manner.

Since the Oregon Water Trails Program will ask non-motorized boaters to directly invest in the creation of a statewide water trail network, the program must be able to quickly demonstrate a return on investment by putting new facilities on the ground. Therefore, an annual report card should be established to let non-motorized boaters know how their fees are being used in a timely and responsible manner.

Next Steps

This chapter concludes with a set of critical initial steps that must be undertaken in order to move the Oregon Water Trails Program from concept to reality. These steps include:

Step 1

Holding a discussion among officials from state agencies including the Marine Board, Department of State Lands, Department of Fish & Wildlife and Oregon Parks and Recreation Department, the Governor's Office, appropriate federal agencies, tribes, private property interests, recreation groups and key members of the state legislature to develop a legislative strategy for creating an Oregon Water Trails Program administered

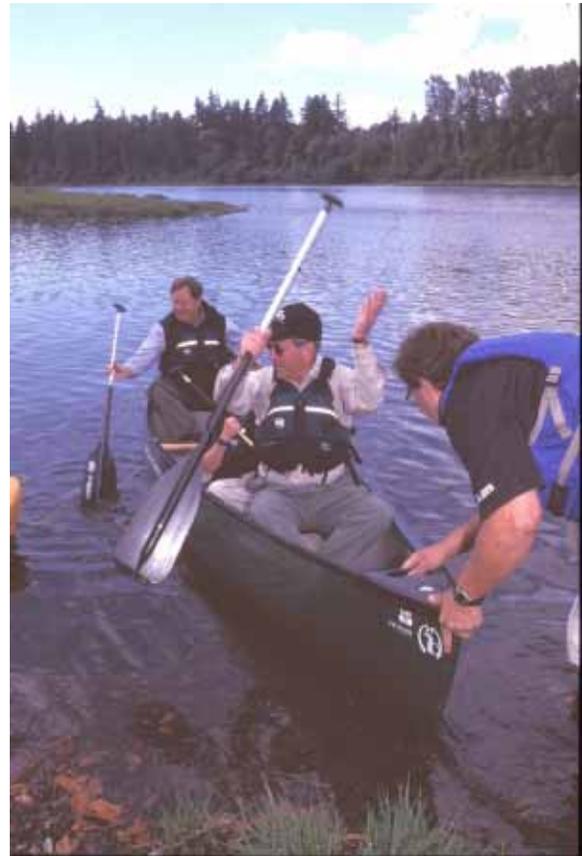
by the Oregon Parks and Recreation Department.

Step 2

Pursuing a dedicated funding source for statewide water trail planning and development. This effort will involve:

- Identifying non-motorized boating funding programs or related programs successfully used in other states and examine their applicability in the state of Oregon.
- Investigating potential legal questions associated with using various non-motorized boating funding models in the state.
- Distributing benefits of water trails information to policymakers, local communities, public works departments, public recreation providers, planners, business owners and leaders, chambers of commerce, and developers.
- Working with the state legislature to establish necessary legislation for a user-based fee collection program.

to accommodate an OPRD-administered water trails program.



Step 3

Properly staffing the Oregon Water Trails Program within the Oregon Parks and Recreation Department.

Step 4

Creating an Oregon Water Trails Advisory Group within the Oregon Recreational Trails Advisory Council to provide technical assistance, address standards, coordinate promotion and user information, and a website for the statewide system of trails.

Step 5

Revising appropriate Oregon Administrative Rules pertaining to non-motorized trail use

APPENDICES

APPENDIX A: 2004 OREGON STATEWIDE TRAILS INVENTORY PROJECT

Introduction

The Oregon Statewide Trails Inventory Project (OSTIP) is intended to provide a systematic review and inventory of selected public trail systems in Oregon. The overall goal of the inventory project is to create databases containing trail information that can be accessed by the Oregon Parks and Recreation Department (OPRD) and other entities as a resource for planning and provision of public information. In addition, the trail databases were to be compatible with geographic information systems (GIS) in order to facilitate mapping of trail resources and characteristics for public lands in Oregon.

Public trail resources in the statewide inventory include existing and proposed:

- non-motorized recreational trails of connectivity significance,
- water trails,
- and off-road highway vehicle (OHV) trails and accessible areas in managed riding areas.

As part of a 2-year statewide planning effort, OPRD funded and provided assistance in identifying information contacts and data gathering. Michael G. Wing of Oregon State University (OSU) served as principal investigator for OSTIP.

Inventory Definitions and Methods

The strategy of the inventory process was to collect trails data directly from public trail providers using a set of trail inventory forms. Providers would be identified primarily through previous recreation inventory studies conducted by the OPRD and also through contacts with managers from organizations that provide recreation trails. The inventory forms were tailored for the broad the categories of trail resources within Oregon (non-motorized, water, and motorized) and designed to be completed within a short time period by trail providers. The inventory forms were delivered to providers through regular mail and through Internet email, when email addresses were available. More detail on delivery methods is provided later in this chapter.

Trail Definitions

To guide the inventory process and the creation of trail inventory forms, definitions of trails and trail providers were developed by OPRD and OSU staff with feedback from advisory committees for three broad categories of the trail types: non-motorized, water, and motorized. The trail definitions were intended to help identify the full scope of trails and activities to be included in the inventory.

For the purposes of the trails inventory, the following definitions of trails apply:

Recreational trails* in Oregon are used by a variety of outdoor enthusiasts, both in urban areas and the backcountry. For the purposes of this inventory, a terrestrial “trail” is defined as a regularly maintained recreation pathway typically used by hikers, skiers, equestrians, bicyclists, and off-road motor vehicles. The designated** trail should be

purposefully planned and constructed for recreation purposes, but in some cases can be used for commuter purposes.

* Recreational trails do not include city streets and sidewalks and bike lanes incorporated into the design of city streets and rural highways.

** A significant percentage of existing trails were not purposefully planned or constructed for the use they are now receiving.

Water trails in Oregon are recreational boating routes on a lake, river, or ocean. Water trails are typically designed for users of small watercraft such as canoes, sea kayaks, rowboats, hand-carried sailboats, and drift boats. Like other recreational trails, water trails are corridors between specific locations. Water trails are comprised of recreation facilities including a safe place for the public to put in, parking for motorized vehicles, sanitation facilities, a safe place to take out, and in some cases day-use sites and overnight camp sites. Although water trails may be primarily developed for users of non-motorized watercraft, Oregon's waterways are open to all types of watercraft, including motorized watercraft (unless current state or federal regulations prohibit or restrict their use).

Within the two broad definitions of trails provided above, three designations of trail uses were applied to help guide inventory efforts. The three designations are:

Non-motorized Recreational Trails

- Existing and proposed recreational trails provided by Federal and State Agencies, American Indian Tribes, County and City Park and Recreation Departments, Special Park and Recreation and Port Districts.

Water Trails

- Existing and proposed water trails provided by Federal and State Agencies, American Indian Tribes, County and City Park and Recreation Departments, Special Park and Recreation and Port Districts.

Motorized trails

- Trails systems located in the states 40 Designated Off Highway Vehicle (OHV) Management Areas.
- Existing and proposed trails on federal lands used for snowmobiling.

Oregon's Designated Off Highway Vehicle Management Areas

Existing off-road motorized recreational trails at the state's 40 Designated OHV Management Areas including:

Blue Mountain (USFS)
Blue Ridge (BLM)
Chetco (USFS)

Morrow County Trails
Mt. Baber ATV Trails (ODF)
Mt. Fanny (USFS)

Christmas Valley Sand Dunes (BLM)	North Umpqua (USFS)
Crane Mountain (USFS)	Oregon Dunes NRA (USFS)
Cottage Grove (USFS)	Pine Grove (USFS)
Diamond Lake (USFS)	Prairie City (USFS)
East Fort Rock (USFS)	Prospect (USFS)
Edison Butte (USFS)	Roseland Recreation Site (BLM)
Elliott Ridge (USFS)	Sand Lake Recreation Area (USFS)
Galice (USFS)	Santiam Pass (USFS)
Green Mountain (USFS)	Shotgun Creek OHV Area (BLM)
Henderson Flat (USFS)	Tillamook OHV Area (ODF)
Honeyman State Park (OPRD)	Unity (USFS)
Huckleberry Flat (USFS)	Upper Nestucca OHV Area (BLM)
John's Peak (BLM)	Upper Walla Walla (USFS)
Klamath Sportsman's Park (Park Assn)	Virtue Flat (BLM)
McCubbins Gulch (USFS)	West End-Sunflower (USFS)
McGrew 4WD Trail (USFS)	Winchester OHV Trails (Coos Co.)
Millican Valley (BLM)	Winom Frazier (USFS)

Snowmobile trails

Snowmobile trails of interest to the inventory included those existing and proposed trails on federal lands currently covered under the Oregon Department of Transportation's (ODOT) 2003-2004 agreement with the Oregon State Snowmobile Association (OSSA). These snowmobile trails are groomed at least once during the winter season by local snowmobile clubs with financial assistance provided under the ODOT/OSSA agreement. In addition, the U.S. Forest Service (USFS) provided a separate list of snowmobile trails located on USFS-managed trails. These are included in Appendix M (Winter Trail Miles Summary, Class 3, 4, and 5).

Through the direction of the Oregon Parks and Recreation Department (OPRD), a series of meetings between federal, state, and local agency representatives were held to identify attributes for inclusion into the trail inventory forms. These attributes are described below.

Existing Trail Inventory Attributes

1. Trail Name
2. Agency Identification Number
3. Inventory Identification Number
4. Managing Agency/Organization
5. Provider Type
6. County(s)
7. City(s)
8. Length of Trail (miles)
9. Average Width of Trail (feet)
10. Does Trail Have Shoulders? (Yes/No) If Yes, Width of Shoulders (Feet)
11. Is This Trail a Rails-To-Trails Conversion Project? (Yes, No)
12. Trail Uses Permitted

13. Trail Surface Type
14. Difficulty Rating
15. Traditional Season of Use (Winter, Spring, Summer Fall, Year round) Is it officially closed outside of this period? If yes, give begin/end dates of closure.
16. Location of designated public trailheads (A public trailhead is a designated public use trail access point which has been designed and developed for public trail access purposes and provides some level of trail-related amenities such as parking, trail information, rubbish containers and water and sanitary facilities.)
17. Location of public boat launch sites (Water Trails)
18. Type of public boat launch facility (boat ramp, fixed dock, floating dock, beach) (Water Trails)
 - If beach, is the surface mud, sand, cobble or rock?
19. Do water levels or winds affect availability/suitability of site? (Water Trails)
20. Speed limit or horsepower restrictions (Water Trails)
21. Dogs Allowed
22. Closure Status (Temporary, Seasonal, or Permanent)
23. Trail Accessibility
24. Recreational Opportunity Spectrum (ROS) Setting Classification
25. Is a trail map is currently available in GIS format (yes, no)
 - If yes: contact name, file format (e.g. shape file)
 - If no: provide hard copy of best map available
26. Functional designation of significance (Statewide, Regional, or Local Significance)
27. Is this trail covered by an existing adopt-a-trail or partnership agreement? If yes, by who?
28. Is this trail also a commuter trail?

Motorized Trail Attributes

1. Designated OHV Management Areas
2. Agency Identification Number
3. Inventory Identification Number
4. Managing Agency/Organization
5. Provider Type
6. County(s)
7. City(s)
8. Acres of Designated Riding Area
8. Uses Permitted
9. Difficulty Rating
10. Is an area map currently available in GIS format (yes, no)
 - If yes: contact name, file format (e.g. shape file)
 - If no: provide hard copy of best map available
11. Recreational Opportunity Spectrum (ROS) Setting Classification

Proposed Trail Attributes

1. Trail Name
2. Inventory Identification Number

3. Managing Agency/Organization
4. Provider Type
5. County(s)
6. City(s)
7. Length of Trail (miles)
8. Average Width of Trail (feet)
9. Will the Trail Have Shoulders? (Yes/No) If Yes, Width of Shoulders (Feet)
10. Is This Trail a Rails-To-Trails Conversion Project? (Yes, No)
11. Estimated Date of Trail Construction (0-5 years, 6-10 years, 11-20 years, 21 years or more)
12. Trail Uses Permitted
13. Trail Surface Type
14. Difficulty Rating
15. Traditional Season of Use (Winter, Spring, Summer Fall, Year Round)
16. Location of Proposed Public Boat Launch Sites (Water Trails)
17. Speed limit or horsepower (Water Trails) restrictions
18. Recreational Opportunity Spectrum (ROS) Setting Classification
19. Is the trail's conceptual alignment map currently available in GIS format (yes, no)
 If yes: contact name, file format (e.g. shape file)
 If no: provide hard copy of best map available
21. Functional designation of significance (Statewide, Regional, or Local Significance)
22. Will this trail also be a commuter trail?

Attribute Categories

While the majority of attributes described above are intuitive, categories were developed or used from existing classification frameworks to build inventory questions. The following sections list those attributes and describe the categories that the trails inventory applied.

Managing Agency or Organization

- Federal Agency
- State Agency
- American Indian Tribe
- Regional Park & Recreation Department/District
- County Park & Recreation Department
- Special Park & Recreation District
- City Park & Recreation Department
- Port District
- Private Landowner/Non-Profit Landowner
- Other

Trail Use Categories

Motorized

- Class I (3 and 4 wheel ATVs)
- Class II (Dune Buggies and 4x4 Vehicles)
- Class III (Off-Highway Motorcycles)

- Snowmobiles

Non-motorized

- Cross-Country Skiing
- Snowshoeing
- Environmental Education/Interpretation
- Hiking/Walking/Running
- Horseback Riding
- In-Line Skating
- Skateboarding
- Mountain Biking (On trails with natural surfaces)
- Road Biking (On trails with hardened surfaces)

Water

- Non-motorized Watercraft
- Non-motorized Watercraft and Motorized Watercraft-Electric Only
- All Motorized Watercraft including Motorized Watercraft

Trail Surface Types

Motorized and Non-motorized (in order of artificiality)

- Native/Natural Surface (e.g. packed soil, sand, grass or rock)
- Hog Fuel/Woodchip
- Gravel/Rock (e.g. pea gravel or crushed rock)
- Hardened Surface (e.g. asphalt, concrete, soils mixed with stabilizing agents, granular stone, chip seal, crusher fines)
- Boardwalk (e.g. wood or engineered plastic)

Difficulty Rating

Motorized

Degree of Difficulty: Ratings are assigned to trails under ideal conditions and are based on difficulty compared to other trails in the area. A trail rated easiest by one area's standard could possibly be rated more or even most difficult elsewhere. Trail conditions are always subject to change due to the weather and other acts of nature.

- Easiest (Green Circle)
- More Difficult (Blue Square)
- Most Difficult (Black Diamond)

Non-motorized

Trail Difficulty Levels

- Easy: Limited skill and challenge required to travel trail.

- Moderate: Some skill and challenge required to travel trail.
- Difficult: High degree of skill and challenge to travel trail.
- Most Difficult: Very high degree of skill and challenge to travel trail.

Water

The following difficulty ratings are used for rivers and inland waters and are taken from the International Scale of River Difficulty.

- Class I: Easy. Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight, self-rescue is easy.
- Class II: Novice. Straightforward rapids with wide, clear channels which are evident without scouting. Occasional maneuvering may be required, but rocks and medium sized waves are easily missed by trained paddlers. Swimmers are seldom injured and group assistance, while helpful, is seldom needed.
- Class III: Intermediate. Rapids with moderate irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies are powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims.
- Class IV: Advanced. Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting is necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong Eskimo roll is recommended.
- Class V: Expert. Extremely long, obstructed, or very violent rapids which expose a paddler to above average endangerment. Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex, demanding routes. Rapids may continue for long distances between pools, demanding a high level of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the scale, several of these factors may be combined. Scouting is mandatory but often difficult. Swims are dangerous, and rescue is difficult even for experts. A

very reliable Eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential for survival.

- Class VI: Extreme. One grad more difficult than Class V. These runs often exemplify the extremes of difficulty, unpredictability and danger. The consequences of errors are very severe and rescue may be impossible. For teams of experts only, at favorable water levels, after close personal inspection and taking all precautions. This class does not represent drops thought to be unrunnable, but may include rapids which are only occasionally run.

ROS Setting Classification

The Recreation Opportunity Spectrum (ROS) was developed by U.S. Forest Service researchers in the 1970s to categorize the experiences and settings that visitors might expect in a designated area. Over time, the ROS has evolved to include more categories and specificity than the original version. The following categories for non-motorized, water, and motorized trails were used for the trails inventory.

Primitive: Area is characterized by an essentially unmodified natural environment of fairly large size. Interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use within the area is not permitted.

Semi-Primitive Non-motorized: Area is characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is not permitted.

Semi-Primitive Motorized: Area is characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is permitted.

Roaded Natural: Area is characterized by predominantly natural-appearing environments with moderate evidence of sights and sounds of man. Such evidence usually harmonizes with the natural environment. Interactions between users may be moderate to high, with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is allowed and incorporated into construction standards and design of facilities.

Rural: An area that is characterized by a natural environment, which has been substantially modified by development of structures, vegetative manipulation or pastoral agricultural development. Resource modification and utilization practices may be used to enhance specific recreation activities and maintain vegetative cover and soil. Sights and sounds of humans are readily evident, and the interaction between users is

often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are provided for special activities. Moderate densities are present away from developed sites. Facilities for intensified motorized use and parking is available.

Urban: Area is characterized by a substantially urbanized environment, although the background may have natural-appearing elements. Renewable resource modification and utilization practices are often used to enhance specific recreation activities. Vegetation cover is often exotic and manicured. Sights and sounds of humans are predominant on site. Large numbers of users can be expected, but on site and in nearby areas. Facilities of highly intensified motor use and parking are available with forms of mass transit often available to carry people throughout the site.

Nature-dominant within Urban: Apparently undisturbed, natural environment, with limited development within an urban context. Expect moderate to high interaction and visual or noise disturbance. An example would be a nature preserve within a city.
Park-like within Urban: Primarily maintained grass and shade tree environment within an urban setting. There will be moderate to extensive facilities, and a heavy amount of interaction between people. An example would be a day-use or picnic area within a city.

Facility-dominant within Urban: Predominantly built setting of pavement and structures, intended for leisure or recreation use within the urban context. Expect a high level of interaction, management, and visitor controls. Areas may include small areas of grass, other vegetation, and/or shade trees growing within a paved area. Examples would be paved plaza parks or ornamental gardens.

Functional Designation of Trail Significance

In order to avoid over-reporting of trail resources that were minimal in scope and visitor use from a statewide perspective, a trails connectivity significance classification scheme was developed for the inventory. This hierarchy described trails according to their influence on a statewide, regional, or local level. Trail providers were encouraged to focus their reporting efforts on trails of statewide and regional significance, and to minimize the number of local trails that they reported. The levels of significance were applied only to non-motorized trails. Descriptions of significance and examples of trails in each of the three significance categories accompanied survey inventory forms.

Trails of Statewide Significance- Trails forming a network making connections beyond local and regional boundaries, connecting major destinations such as large public natural lands, communities, cultural or historic sites of statewide or national significance and providing long-distance recreational opportunities. Trails of Statewide Significance will form the spine of the statewide trail network to which trails of Regional and Local Significance can connect. Examples include the Banks to Vernonia Trail and the Portland to Pacific Crest Trail.

Trails of Regional Significance- Trails that connect to regionally significant sites, are multi-jurisdictional, multi-use and that connect to national, state, or other regional trails. Examples include the 40-Mile Loop, Springwater Corridor Trail, and the proposed Tualatin River Greenway Trail and Sandy River Gorge Trail.

Trails of Local Significance- Trails making important community connections to local destinations (within the community boundary) such as public lands, parks, town centers, cultural or historical sites, neighborhoods and schools. Examples include the Jacksonville Woodlands Project and the Bear Creek to Pacific Crest Trail.

Inventory Survey Instruments

A set of inventory forms (included in Appendix K) were developed using the attributes and categories described above for each of the trail types (existing and proposed non-motorized, water, and motorized). The method of delivery and timing was dependent on the provider type and is described below.

General recreation trail providers include public trail providers other than state and federal agencies and have a more localized influence. Examples include City and County Parks and Recreation Departments. A list of providers was drawn from the Statewide Comprehensive Outdoor Recreation Plan (SCORP) and other sources. Dillman's "Mail and Internet Surveys" was used to guide a mail survey. An initial survey was sent by mail to all general providers asking them to list any public trails that met the significance examples that were provided on the survey and to provide full contact information including an email address. One week prior to the initial mail survey being delivered, an email announcement was sent to all providers with known addresses to let them know of the forthcoming survey. Survey respondents were also asked whether GIS trails data were available, to list a GIS contact person, and to include a hardcopy trails map if GIS data were not available. A cover letter and pre-stamped envelope accompanied the initial mailing. Approximately one week after the initial mailing, a postcard was sent to all general providers thanking them for responding to the survey and encouraging them to respond if they hadn't. Approximately three weeks after the initial mailing, non-respondents received a reminder letter with an additional survey form and pre-stamped envelope. As a final attempt, all non-respondents were contacted by telephone to encourage survey submission. Of the 155 general recreation providers identified, 109 responded for a 70% response rate.

All providers who reported trails information were asked to provide more detailed trails information in a second follow-up survey. Providers were contacted by email using the addresses provided in the initial survey. Each email contained the list of trails that were provided by the respondent in the initial survey. Survey forms were attached to the emails in Excel format and respondents were asked to complete the attachments and email them back. A WWW interface was also developed for survey submission and direct links to the WWW site were provided in each email. In addition, all respondents were offered the opportunity to receive hardcopies of the survey instruments if they preferred. Non-respondents received two email reminders and if no response was received by email, a follow-up telephone call. Of the 80 contacts that were identified, 65 (81%) responded with at least partial trails information.

Bureau of Land Management (BLM) and U.S. Forest Service (USFS) representatives were identified and a joint meeting was organized by OPRD staff to inform agency representatives

of the inventory and desired inventory information. An Oregon Department of Forestry (ODF) contact for recreation trails was also identified and met with OSU staff to discuss the inventory. The BLM provided inventory information from a majority of its management areas. The USFS contact was able to provide information for a portion of the USFS trail system prior to the submission deadline; the ODF representative was able to provide information for one OHV area prior to submission deadline. USFS and BLM inventory information was delivered by hard copy and electronic means to OPRD and OSU staff. ODF inventory materials were delivered by electronic means directly to OSU staff. The USFS contact's material that was delivered after the submission deadline is contained in Appendix M.

OPRD recreation trail providers were also accessed through two surveys similar to those used for the general recreation providers. The initial survey, asking for trail names, significance type, GIS contact information or a hard copy trail map, was managed internally by OPRD staff. The results were provided to OSU staff to facilitate a more detailed follow-up survey. Emails were sent to all OPRD providers asking for more detailed information. Reminder emails were sent to non-respondents by both OSU and OPRD staff. Altogether 34 OPRD staff were asked to provide trails information and at least partial trails information was reported by or for each contact.

For National Park Service (NPS) contacts, OPRD staff identified and personally called each of the NPS units in the state of Oregon. After identifying the contact, survey materials were emailed. NPS respondents delivered completed materials to OPRD staff, who in turn delivered the materials to OSU staff.

Several agencies within Oregon provide a limited number of recreation trails for public use. Representatives from the Oregon Department of Fish and Wildlife (ODFW), U.S. Army Corp of Engineers (ACOE), Bureau of Reclamation (BOR), and U.S. Fish and Wildlife Service (USFW) were identified and OSU staff made personal telephone contacts with each representative contacted directly by telephone. All agencies responded except the ODFW.

Although the majority of OHV areas are managed by federal or state agencies in Oregon, two OHV areas are operated by county government entities: Morrow County Trails and Winchester OHV Trails. OSU staff made telephone contact with the OHV manager from both areas and requested inventory data through subsequent email communications. A second telephone call was made to both OHV managers but only the Winchester OHV manager submitted inventory data.

GIS contacts provided by survey respondents were contacted by email or other means if no email address was provided (a seldom occurrence). Two follow-up emails were sent to each non-respondent as a reminder. As a final means of encouraging data submission, phone calls were made to GIS contacts that did not respond to email contacts.

Trails Inventory Database Creation Methods

All tabular trails inventory data reported by respondents were entered into Excel spreadsheets to create databases for each of the inventory trail components (non-motorized, water, and motorized). Database entries were checked for consistency and errors prior and, following this process, separate Excel databases were created for each of the trail types and their existing or, when available, proposed entities. A total of seven inventory databases representing 733 trails were created.

Table 1. Listing of Inventory Databases

Database Name	Description	Trails
ExistingNMtrails.xls	Existing non-motorized trails inventory data	355
ProposedNMtrails.xls	Proposed non-motorized trails w/ inventory data	166
ExistingWaterTrails.xls	Existing water trails inventory data	27
ProposedWaterTrails.xls	Proposed water trails inventory data	17
ExistingOHVtrails.xls	Existing OHV trails	126
ExistingSnowTrails.xls	Existing snow trails	42
Grand Total		733

Each database contains the list of attributes that was requested by trails inventory forms. In addition, several attributes were added to each database (e.g., a unique identifier, OPRD planning region) to assist in organization and analysis. A list of attributes and attribute descriptions for each database is included in Appendix H.

GIS Database Creation Methods

GIS data were requested from all inventory respondents who completed an inventory form. All inventory respondents were asked whether GIS data were available and, if so, to provide a GIS contact person for those trails. When possible, data were requested from GIS contacts via email. Otherwise, initial contacts were made via telephone. In many instances, communication with GIS contacts revealed that GIS data were not yet available for trails, were still in production, or were not yet available for distribution due to privacy concerns.

GIS data providers were asked to send GIS data in ArcView shapefile, ArcInfo cover, or any common GIS format. GIS data providers were also asked to include an attribute in the GIS database that contained the trail name, and to submit complete map projection information, any available metadata, and current contact information. All GIS contacts were provided a list of trail names that were reported by the trail provider who originally identified them as a GIS contact. In addition, the trail name list was augmented by the type and status of each trail (e.g. existing non-motorized trail).

GIS data were received for existing and proposed non-motorized and water trails. GIS data were received for existing motorized trails but not for proposed motorized trails. All GIS data received were converted into an ArcInfo cover format and transformed into the Oregon Lambert projection for consistency with GIS layers provided by other state agencies in Oregon. The Oregon Lambert has been identified by the Oregon Geospatial Enterprise Office as the recommended map projection. Converting data into an ArcInfo coverage format ensures that

data topology is correct. For ease of use and transferability, the final databases were converted into an ArcView shapefile format.

A total of 19 useable GIS databases were received from GIS contacts for non-motorized trails leading to the creation of 1, 145 trails. From the 19 databases, 132 useable trails were created that matched trails reported by inventory respondents, with 80 existing trails and 52 proposed. A listing of non-motorized trails in GIS format is included in Appendix H. Three useable databases were received from water trails GIS providers and a total of four water trails were created from these databases. Three of the water trails had inventory information reported by a trail provider; two of the water trails were existing and the third was proposed. A listing of water trails in GIS format is included in Appendix I. GIS data were provided for four OHV areas. However, one of the provided databases contained only an area boundary, and did not contain specific trail locations. Approximately 34 existing motorized trails/areas were created from the submitted OHV GIS databases. Of these trails, 14 had inventory information reported by a trails provider. A listing of motorized trails/areas in GIS format with attached inventory information is available in Appendix J.

Every trail in the inventory databases was assigned a unique numeric identifier for organizational and GIS data joining applications. The identifier was applied in intervals of five to provide opportunities for future trails to be added to the databases.

Statewide Significant Trails Vision GIS Database

A statewide GIS database of significant trails was created for a listing of trails provided by OPRD staff. A total of 25 trails were identified for mapping and all or portions of 11 of these trails were provided by GIS contacts. In addition, all or parts of 11 trails were created through digitizing based on the "Statewide Trails Vision Map" (SSCGIS 1985) or through other existing maps. The location of the remaining trails could not be discerned through available materials. In total, 19 of the 25 statewide significant trails were represented in a GIS database. When possible, GIS trail segments were attributed with the GIS inventory code to facilitate a linkage to the trails databases. When inventory data for statewide trails were not available, a value of 0 was assigned to the inventory code. The final database is in an ArcView shapefile format and a list of these trails appears in Table 2.

Table 2. Trails Included in the Statewide Significant Trails Database

Trail Name
Banks to Vernonia Trail
Bear Creek Greenway
Columbia River Trail
Corvallis to the Sea Trail
Desert Trail
Eugene to Pacific Crest Trail
Mollala River Corridor
New Oregon Trail / Northern Intertie
North Umpqua River National Recreation Trail
OC&E Woods Line State Trail
Oregon Coast Trail
Pacific Crest National Scenic Trail
Portland to the Sea Trail
Rogue River Trail
Row River Trail
Southern Intertie Trail
Springwater Corridor
Upper Deschutes River Trail
Vernonia to Scappoose Corridor

Non-motorized Trails GIS Database

Three GIS databases were created for non-motorized trails. All databases were converted into an ArcView shapefile format. The initial database contains data for all non-motorized trails, regardless of whether complete information was reported for the trail name or whether inventory data were reported for the trail. A second database was created for only existing non-motorized trails that had inventory information reported and a third GIS database was created for proposed non-motorized trails that had inventory information reported.

Water Trails GIS Database

Three GIS databases were created for water trails. The first database contains all GIS data for water trails that were received from GIS contacts. The second database contains all GIS data that were provided for existing water trails and the third contains all GIS data that were reported for proposed water trails. All databases are in an ArcView shapefile.

Motorized Trails GIS Database

Two databases were created for each of the OHV GIS contacts that provided spatial data. The initial database contains data for all motorized trails, regardless of whether complete information was reported for the trail name or whether inventory data were reported for the trail. A second database was created for only existing non-motorized trails that had inventory information reported and a third GIS database was created for proposed non-motorized trails that had inventory information reported.

A GIS database was also created to represent the 40 OHV areas featured in the “ATV Oregon” map produced by Oregon State Parks. This database contains point locations of approximate OHV locations as indicated by the source map and was created by digitizing.

Table 3: Listing of GIS Databases

GIS Database Name	Description	Trails
All_nmtrails	All non-motorized trails	1,145
Enmtrails	Existing non-motorized trails w/ inventory data	80
Pnmtrails	Proposed non-motorized trails w/ inventory data	52
All_wtrails	All non-motorized trails	4
Ewtrails	Existing water trails w/ inventory data	2
Pwtrails	Proposed water trails w/ inventory data	1
All_mtrails	All motorized trails	34
Mtrails	All motorized trails w/ inventory data	14
Statesigtrails	Trails of statewide significance	25
OHV_areas	Locations of OHV areas	40 (areas)

GIS Data Accuracy

Several GIS databases were created for the inventory project using hardcopy maps at broad spatial scales. Other databases were created based on existing GIS data that were delivered to the principal investigator by trail providers with varying levels of GIS expertise. Given these circumstances, no guarantees or statements of data accuracy and consistency in the spatial representation of features on any map or other product produced from these databases is made. The databases should only be used to represent approximate locations of the features referenced within and should not be used for any other purpose.

Results

This chapter will present results from the statewide trails inventory from several perspectives. The initial perspective presents trail counts and mileages for all trail types and by existing and proposed status. Results are then provided for each of the trails types and present trail counts and mileages by managing agency and OPRD planning region.

Statewide totals for existing trails

A total of 549 existing trails were inventoried. The largest number of trails and mileage were reported in the non-motorized use category (65%), followed by the motorized (23%), and snow trails (7.7%). The remainder of the existing trails were water trails. Trail mileages that were reported included a grand total of 4,028 miles when all trail categories were considered. The majority of the total trail mileage was reported in the non-motorized category (56%), followed by water (23.1%), snow (11%), and motorized (9%).

Table 4. Existing Trail Counts and Mileage

Trail Type	Trail Counts	Trail Count %	Trail Mileage	Trail Count %
Non-motorized	355	64.7%	2260.5	56.1%
Water	27	4.9%	930.1	23.1%
Motorized	125	22.8%	378.7	9.4%
Snow	42	7.7%	458.2	11.4%
Grand Total	549	100.0%	4027.5	100.0%

Statewide totals for proposed trails

In total, 166 proposed trails were reported by inventory respondents. The largest percentage was reported within the non-motorized trail category (89%), followed by the water (9%) and motorized (2%) categories. In terms of reported mileage for proposed trails, the water (44%) and non-motorized (43%) categories contained the majority of mileage, with motorized mileage figures having a small percentage of the total (13%).

Table 5. Proposed Trail Counts and Mileage

Trail Type	Trail Counts	Trail Count %	Trail Mileage	Trail Count %
Non-motorized	166	89.2%	663.2	43.4%
Water	17	9.1%	666.0	43.6%
Motorized	3	1.6%	200.0	13.1%
Snow	0	0.0%	0	0.0%
Grand Total	186	1	1529.2	100.0%

Existing non-motorized trails

A total of 355 existing non-motorized trails were inventoried. The primary managing organization type for non-motorized trails was state agencies and accounted for about 31% of all trails reported, followed by federal agencies (28%), and city park and recreation departments (27%). Just over 2,260 miles of existing non-motorized trails were reported, with federal agencies reporting the majority of mileage (56%), followed by state agencies (21%), and city park and recreation departments (18%).

Table 6. Existing Non-motorized Trail Counts and Mileages by Primary Managing Organization

Primary Managing Organization	Trail Count	Trail Count %	Trail mileage	Trail mileage %
City Park & Recreation Department	95	26.8%	398.7	17.6%
County Park & Recreation Department	20	5.6%	68.1	3.0%
Federal Agency	100	28.2%	1264.0	55.9%
Other	3	0.8%	4.1	0.2%
Port District	2	0.6%	1.9	0.1%
Private Landowner/Non-Profit Landowner	1	0.3%	0.8	0.0%
Regional Park & Recreation Department/District	1	0.3%	14.5	0.6%
Special Park & Recreation District	24	6.8%	44.0	1.9%
State Agency	109	30.7%	464.5	20.5%
Grand Total	355	100.0%	2260.5	100.0%

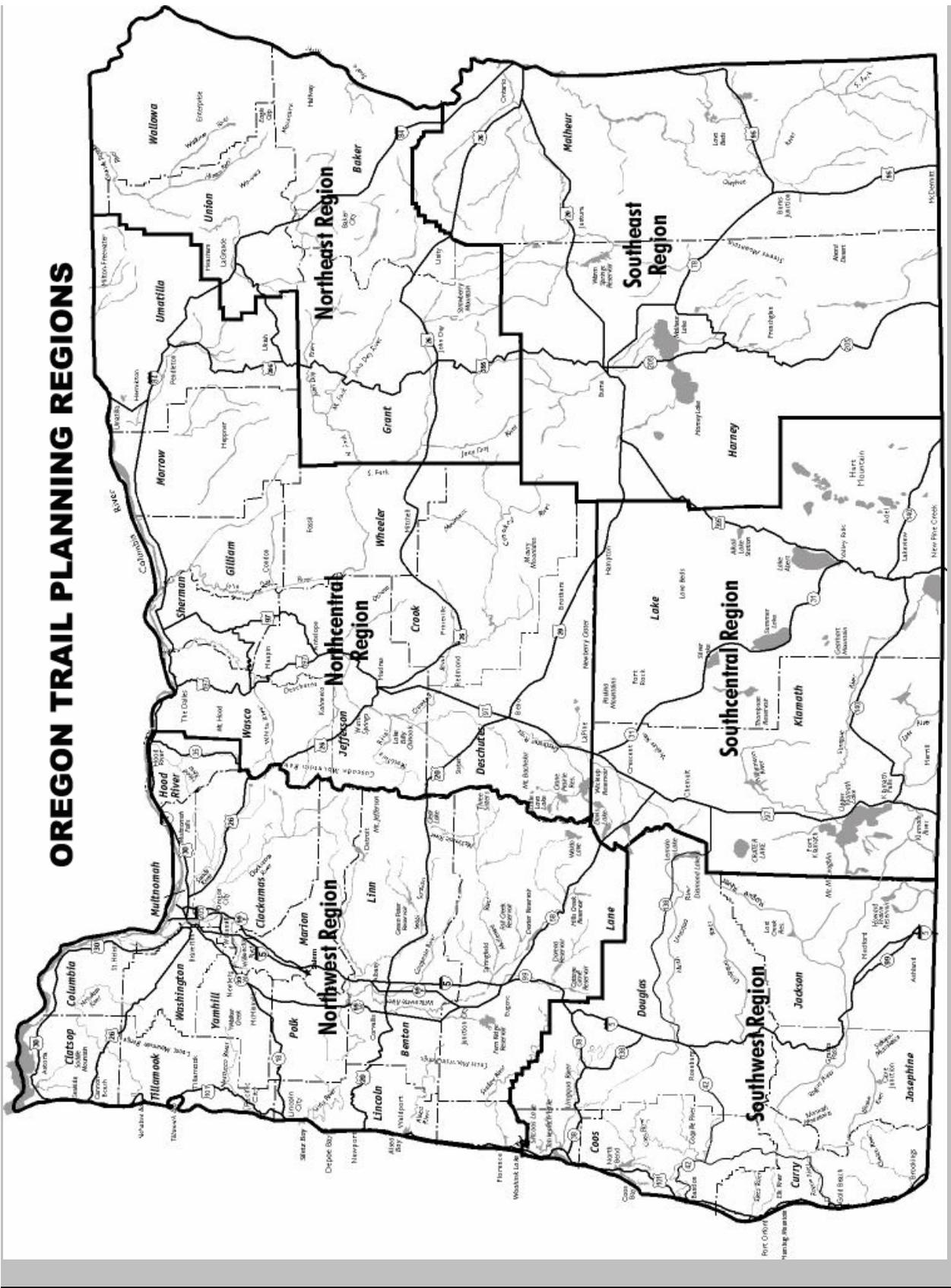
The largest number of existing non-motorized trails was reported in the Northwest planning region- over half of all trails were located in this area (a map of the trails planning

regions is included on the following page). Approximately 21% were reported in the Southwest region and 13% in the North central region. The Northwest region accounted for 36% off all trail mileage reported and the Southwest region contained 24% of all mileage.

Table 7. Existing Non-motorized Trail Counts and Mileages by Trails Planning Region

Trails Planning Region	Trail count	Trail Count %	Trail mileage	Trail mileage %
North central	45	12.7%	109.0	4.8%
Northeast	22	6.2%	307.3	13.6%
Northwest	186	52.4%	814.1	36.0%
Southcentral	21	5.9%	333.9	14.8%
Southeast	5	1.4%	164.8	7.3%
Southwest	76	21.4%	531.5	23.5%
Grand Total	355	100.0%	2260.5	100.0%

OREGON TRAIL PLANNING REGIONS



Proposed non-motorized trails

A total of 166 proposed non-motorized trails were reported in the trails inventory. Half of the proposed trails had a city park and recreation department listed as the primary managing agency. Nearly 15% were listed under the management of a county park and recreation department and 13% with a federal agency. Federal agencies as a primary managing organization accounted for almost 30% of the entire mileage of proposed non-motorized trails, followed by city park and recreation departments (22%) and private/non-profit organizations (20%).

Table 8. Proposed Non-motorized Trail Counts and Mileages by Primary Managing Organization

Primary Managing Organization	Trail Count	Trail Count %	Trail Mileage	Trail Mileage %
City Government	1	0.6%	0.0	0.0%
City Park & Recreation Department	83	50.0%	147.2	22.2%
County Park & Recreation Department	24	14.5%	78.9	11.9%
Federal Agency	21	12.7%	195.0	29.4%
Port District	3	1.8%	3.4	0.5%
Private/Non-Profit	5	3.0%	132.5	20.0%
Regional Park & Recreation Department/District	2	1.2%	8.1	1.2%
Special Park & Recreation District	8	4.8%	53.6	8.1%
State Agency	19	11.4%	44.5	6.7%
Grand Total	166	100.0%	663.2	100.0%

Nearly 69% of all proposed non-motorized trails were located in the Northwest OPRD planning region and another 20% in the North central, leaving approximately 21% of all proposed trails in other regions. The largest proposed non-motorized trail mileage was in the Northwest region (52%) with a significant percentage (34%) also occurring in the North central region.

Table 9. Proposed Non-motorized Trail Counts and Mileages by OPRD Planning Region

OPRD Region	Trail Count	Trail Count %	Trail Mileage	Trail Mileage %
North central	32	19.3%	226.5	34.2%
Northeast	6	3.6%	6.2	0.9%
Northwest	114	68.7%	342.0	51.6%
Southcentral	5	3.0%	19.2	2.9%
Southwest	9	5.4%	69.3	10.4%
Grand Total	166	100.0%	663.2	100.0%

Existing water trails

A total of 27 existing water trails were reported by trail providers with the majority (51%) being primarily managed by federal agencies. State agencies reportedly managed 33% of the existing water trails. The combined mileage of the water trails was approximately 930 miles. Of this total federal agencies accounted for 64% of the total mileage and city park and recreation departments for 22%.

Table 10. Existing Water Trail Counts and Mileages by Primary Managing Organization

Primary Managing Organization	Trail Count	Trail Count %	Trail Mileage	Trail Mileage %
City Park & Recreation Department	2	7.4%	200.0	21.5%
Federal Agency	14	51.9%	598.6	64.4%
Special Park & Recreation Department	2	7.4%	0.4	0.0%
State Agency	9	33.3%	131.2	14.1%
Grand Total	27	100.0%	930.1	100.0%

The Northwest trails planning region contained nearly 41% of all existing water trails with the Northeast and Southcentral regions each containing almost 19%. The Northwest region contained the largest percentage of water trail miles (38%), followed by the North central (24%), and Northeast (11%) regions.

Table 11. Existing Water Trail Counts and Mileages by OPRD Planning Region

OPRD Region	Trail Count	Trail Count %	Trail Mileage	Trail Mileage %
North central	3	11.1%	220.0	23.7%
Northeast	5	18.5%	134.5	14.5%
Northwest	11	40.7%	354.5	38.1%
Southcentral	5	18.5%	32.1	3.5%
Southeast	2	7.4%	105.0	11.3%
Southwest	1	3.7%	84.0	9.0%
Grand Total	27	100.0%	930.1	100.0%

Proposed water trails

A total of 17 proposed water trails were reported in the inventory. State agencies were the primary manager of 35% of the proposed water trails that were reported, with city and county park and recreation departments each being reported as the primary managing organization for about 18% of the trails. All but three of the 17 proposed water trails included mileage reports for a total of 666 miles. State agencies were reported as the primary management organization for almost 63% of the total mileage, followed by non-profit organizations (22%), and county park and recreation departments (11%).

Table 12. Proposed Water Trail Counts and Mileages by Primary Managing Organization

Primary Managing Organization	Trail Count	Trail Count %	Trail Mileage	Trail Mileage %
City Park & Recreation Department	3	17.6%	11	1.7%
County Park & Recreation Department	3	17.6%	75	11.3%
Federal Agency	1	5.9%	12	1.8%
Non-Profit	1	5.9%	146	21.9%
Port District	2	11.8%	5	0.8%
Special Park & Recreation District	1	5.9%	1	0.2%
State Agency	6	35.3%	416	62.5%
Grand Total	17	100.0%	666	100.0%

The Northwest trails planning region contained the largest number of proposed water trails (11) while also accounting for the largest percentage of total proposed river trail mileage (89%). The North central region contained the next largest number of proposed water trails (18%) followed by the Southwest region (12%).

Table 13. Proposed Water Trail Counts and Mileages by OPRD Planning Region

OPRD Region	Trail Count	Trail Count %	Trail Mileage	Trail Mileage %
North central	3	17.6%	58	8.7%
Northwest	11	64.7%	594	89.2%
Southcentral	1	5.9%	2	0.3%
Southwest	2	11.8%	12	1.8%
Grand Total	17	100.0%	666	100.0%

Oregon State Marine Board Boat Access Inventory Database

The Oregon State Marine Board (OSMB) has conducted several inventories of boat access sites in Oregon. The most recent of these occurred in 2003-2004 and involved sending facility surveys to know boat access site providers. The population for the recent inventory survey was drawn from 772 publicly owned boat access sites reported in the OSMB's "Six-Year Boating Facilities Plan" (1998). Data were collected from 690 of the publicly owned access sites and have recently been entered into a database. Significant attributes for the 2003-2004 OMB inventory include:

- Facility Name
- County
- Managing Organization and Contact Information
- Directions
- Fish Species Present
- Ramp Type
- Amenities
- Launch Type
- Parking Availability
- Moorage Availability
- Speed Limits
- Electric Motor Permissibility
- Motor Permissibility

The 690 publicly managed boat access sites include a variety of provider types. Approximately 33% are managed by federal agencies, 29% by county government, and 20% by state agencies.

Table 14. OSMB Boat Access Sites

Primary Managing Organization	Site Count	Site %
City	77	11.2%
County	198	28.7%
Federal Agency	230	33.3%
Port Commission	29	4.2%
Parks & Recreation District	9	1.3%
State Agency	147	21.3%
Grand Total	690	100.0%

The spatial distribution of the boat access sites is concentrated in the western portion of Oregon. The Northwest trails planning region accounted for almost half of all inventoried boat access sites, with the Southwest planning region containing 23% of the sites, and the North central region containing 15% of the sites.

Table 15. OSMB Boat Access Sites by OPRD Planning Region

OPRD region	Site Count	Site %
North central	103	14.9%
Northeast	27	3.9%
Northwest	325	47.1%
Southcentral	54	7.8%
Southeast	26	3.8%
Southwest	155	22.5%
Grand Total	690	100.0%

Existing motorized trails

Forty managed OHV areas exist in Oregon and a map of these locations is contained in Figure 2 on the following page. A total of 14 existing motorized trails systems or areas reported information to the statewide inventory. Of the 14 systems or areas, all but two of them were managed by a federal agency. Several of the areas did not report the available acreage of the system or area but among those that did, the Winom-Frazier OHV Complex (152,000 acres) and the Tillamook OHV Area (112,000 acres) were among the largest.

Table 16. Motorized Trails System/Area Name, Management Organization, and Size

Motorized Trail System/Area Name	Managing Organization	Management Unit	Acres
Cottage Grove	USFS	Umpqua NF	12
North Umpqua	USFS	Umpqua NF	
Diamond Lake	USFS	Umpqua NF	
Blue Mountain OHV Trail	USFS	Wallowa-Whitman NF	8,200
Winom-Frazier OHV Complex	USFS	Wallowa-Whitman NF	152,000
Mt. Fanny OHV Trails	USFS	Wallowa-Whitman NF	5,000
Mt. Emily System	USFS	Wallowa-Whitman NF	2,000
Coos County Forest	Coos County	Coos County Forest	2,500
Christmas Valley Sand Dunes	BLM	Lakeview Resource Area	9,125
North Spit	BLM	Coos Bay District Office	
Virtue Flat Play Area	BLM	Vale District Office	3,560
Shotgun Creek OHV	BLM	Eugene District Office	10,300
Blue Ridge Trail System	BLM	Coos Bay District Office	
Tillamook OHV Area	Oregon Dept. of Forestry	Tillamook State Forest	112,000

A total of 126 trails were reported by the 14 existing motorized system or area providers. The largest number of trails was in the Tillamook OHV (44) and Shotgun Creek OHV (31) areas. The Tillamook OHV Area had the largest number of miles (67) of existing motorized trails while the Blue Mountain OHV had the second largest total (60).

Table 17. Motorized Trail Systems/Areas, Permitted Uses*, and Trail Mileage

System/Area Name	Permitted Uses	Number of Trails	Total Length (miles)
Blue Mountain OHV Trail	Class I,III	2	60.0
Blue Mountain OHV Trail Total		2	60.0
Blue Ridge Trail System	Class III	10	13.0
Blue Ridge Trail System Total		10	13.0
Christmas Valley Sand Dunes	Class I,II,III		
Christmas Valley Sand Dunes Total			
Coos County Forest	Class I,III	1	29.0
Coos County Forest Total		1	29.0
Cottage Grove	Class I,II,III	1	7.1
	Class III	2	11.8
Cottage Grove Total		3	18.9
Diamond Lake	Class I	2	4.1
	Class I,III	2	9.9
	Class III	1	7.0
Diamond Lake Total		5	21.0
Mt. Emily System	Class I,III	2	7.2
Mt. Emily System Total		2	7.2
Mt. Fanny OHV Trails	Class I	5	15.2
Mt. Fanny OHV Trails Total		5	15.2
North Spit Trail System	Class I,II,III	1	8.0
	Class III	1	0.5
North Spit Trail System Total		2	8.5
North Umpqua RD	Class I,III	1	6.5
	Class III	8	24.5
North Umpqua RD Total		9	31.0
Shotgun Creek OHV Area	Class I,II	1	0.9
	Class I,II,III	1	1.3
	Class I,III	9	7.4
	Class III	20	14.1
Shotgun Total		31	23.7
Tillamook OHV Area	Class I,II,III	13	21.7
	Class I,III	20	27.0
	Class II	1	0.2
	Class III	10	18.3
Tillamook OHV Area Total		44	67.2
Virtue Flat Play Area	Class I,II,III	1	30.0
Virtue Flat Play Area Total		1	30.0
Winom-Frazier OHV Complex	Class I,III	10	54.1
Winom-Frazier OHV Complex Total		10	54.1
Grand Total		125	378.7
Permitted uses: Class I (3 and 4 Wheel ATVs) Class II (Dune Buggies and 4x4 Vehicles) Class III (Off-Highway Motorcycles)			

Proposed motorized trails

The U.S. Forest Service reported two proposed motorized systems and both were expected to be completed within five years. The systems are expected to be in excess of 50 miles each and should be notable additions to the existing set of motorized trail systems and areas. No other proposed motorized trails were reported.

Table 18. Proposed Motorized Trail Systems/Areas

Systems/Area Names	Primary Management Organization	Forest	Expected Completion	Expected Trail Length (miles)	Permitted Use*
Burnt River/Blue Mtn Loops	USFS	Wallowa-Whitman	0-5 years	50-100	Class I,III
Sled OHV Area	USFS	Wallowa-Whitman	0-5 years	150	Class I,III
*Permitted uses: Class I (3 and 4 Wheel ATVs) Class II (Dune Buggies and 4x4 Vehicles) Class III (Off-Highway Motorcycles)					

Existing snow trails

Preliminary estimates of snowmobile trail lengths were provided by ODOT's Karen Morrison. Overall, 6410 miles were estimated, with the vast majority being managed by the U.S. Forest Service.

Table 19. Estimate of Number of Snowmobile Trail Miles in Oregon*

Agency	Agency Unit	Miles
USFS	Deschutes	1,093
	Freemont	113
	Malheur	1,241
	Mt. Hood	644
	Ochoco	204
	Rogue	160
	Umatilla	987
	Umpqua	197
	Wallowa-Whitman	770
	Hells Canyon NRA	40
	Willamette	259
	Winema	663
	USFS Total	6,371
BLM	Medford BLM	30
NPS	Crater Lake NP	9
Grand Total		6,410
*Estimate by Karen Morrison (ODOT)		

Forty-two existing snowmobile trails were inventoried with a reported distance of 458 miles. Forty-one of the trails were under U.S. Forest Service jurisdiction and totaled 449 miles in trail length. The remaining trail was the Crater Lake Trail within the Crater Lake National Park, comprising 9 miles.

Table 20. Existing Snowmobile Trails in Oregon

Primary Agency	Agency Unit	Number of Trails	Trail Length (miles)
NPS	Crater Lake Natl Park	1	9.3
NPS Total		1	9.3
USFS	Umpqua NF	17	150.5
	Wallowa-Whitman NF	24	298.4
USFS Total		41	448.9
Grand Total		42	458.2

Existing snowmobile providers were also asked what other uses were permitted on snowmobile trails. The National Park Service allowed snowshoeing and cross-country skiing its reported snowmobile trail. The U.S. Forest Service permitted snowshoeing and cross-country skiing on the majority of its trails in the Wallowa-Whitman National Forest but only about half of the trails in the Umpqua National Forest. ATV use was only permitted on two trails in the Umpqua National Forest.

Table 21. Other Uses Permitted on Existing Snowmobile Trails

Agency	Agency Unit	Snowshoe Trails	Snowshoe Trail Miles	XC Ski Trails	XC Ski Trail Miles	OHV Trails	OHV Trail Miles
NPS	Crater Lake Natl Park	1	9.3	1	9.3	0	0
NPS Total			9.3		9.3		0
USFS	Umpqua NF	8	28.1	7	28.1	2	15.9
	Wallowa-Whitman NF		298.4		298.4		0
USFS Total		24	326.5	24	326.5		15.9
Grand Total		33	335.8	32	335.8	2	15.9

Recommendations

Improving the database

With any collection of data that is gathered from a multitude of different sources, there will be gaps in data continuity and quality. One of the major disappointments of this project was not receiving data in a timely manner (or at all) from several key data providers at the federal, state, county, and metropolitan levels of reporting. In several cases, data were delivered as the final databases were being analyzed and the reporting was in progress; these data were not added to the databases due to time constraints. The data delivery problems occurred despite the fact that providers had in excess of four months in which to respond to the original data request and were given reminders of the importance of their response by both OPRD and OSU staff. Accordingly, one method of improving the database would be to encourage these providers to submit data, if they haven't already, and to enter the data into the database. A list of inventory respondents and trails reported is included in Appendices A-E.

Another method of improving the database would be to identify the gaps that exist and attempt to fill those with repeat contacts. In terms of future inventory efforts, some streamlining of the attribute list requested on inventory forms may result in higher response rates and a better quality of response. One attribute that seemed to provide difficulty was the set of the trailhead coordinates. The attribute was difficult for many to report and also difficult to enter into the database due to formatting problems. Given that the quality of the reported coordinate data is suspect (there is a wide variety of GPS skill levels and GPS equipment among trail providers), this is probably one field that future inventories might choose to omit.

Updating the trail data

A master database should be established and one person, or a small group of people, should hold the responsibility of updating the database. Organizations sometimes allow databases to propagate throughout many locations and do not assign centralized updating responsibilities. This can result in many different versions of a database with no one being certain about which one is the most current or reliable. The OPRD should make the copies of the master database available to those who require the data and are approved to use it. People who receive the database should be informed that the data they receive is a copy of a master database and that they are not to distribute the copy without permission.

To facilitate updates, I would encourage that an inventory update sheet be created that can be downloaded from a WWW site or mailed to people if necessary. This inventory update sheet should include all the attributes that the original inventory included and that are still of interest to those using the inventory database. The person(s) responsible for managing the database should review the update information and determine whether the updates merit inclusion into the inventory database. A record of decision should be maintained and the party submitting the update should be informed of the decision. Once an update is approved, the new record information should be entered into the database and the old record should be removed. A date attribute should be added to the database that allows the data of most recent update to be included into the database.

Mapping the trail inventory database on a statewide GIS

The key to any successful GIS project is the quality of data upon which the GIS is based. Unfortunately, spatial information regarding trail locations is a low, if not non-existent, priority for many organizations. This is evidenced by the lack of GIS data that providers were able to make available when asked to deliver GIS databases for the statewide trails inventory. In many instances, GIS data were listed on an inventory sheet as being available, yet when the indicated GIS contact person was asked to deliver the data, it turned out the data either never existed, was a work in progress, or in a format or condition that precluded it from being shared with others.

One recommendation to help solve this problem would be for OPRD to establish a GPS-based trail location program and to make funding and training available to those providers who have an interest in creating GIS databases of their trail systems. I believe that it's important to provide some direction in this area so as to have at least minimal control on the quality and contents of databases that providers assemble. This program should establish minimum requirements for GPS equipment used to locate trail resources so as to avoid

unacceptable measurement accuracy levels. The program might consider investing in several GPS units that could be loaned to providers for short time periods, given that the providers either possessed the adequate knowledge to competently operate the loaner GPS or attended a training session that was either given or approved by OPRD staff. The program should develop a set of measurement accuracy requirements that will guide users in selecting GPS settings, map projection parameters, and choosing time periods in which data collection will be most optimal. A standard (and required) set of attributes should also be created that users must address during their spatial data collection and database creation.

Another solution to filling spatial data gaps may be to individually target providers whose trail resources are significant and to make an investment in collecting location information from their trail systems. This could involve hiring contractors to collect the data, developing in-house expertise so that field crews could go measure trail resources when needed, or encouraging providers through incentives to generate GIS data of their trails.

Regardless, this inventory has generated a base data layer of GIS trails upon which future systems can be developed. I would recommend that until measurement accuracy protocols are developed and practiced, that the mapping and display of local trails be minimized. The trails that are most suitable at present for GIS mapping are trails of statewide and regional significance, due to their typically being more prominent, spatially, when compared to local trails. A protocol should also be developed for updating GIS information for trail systems. I would recommend an approach to updating the GIS database that is similar to that proposed earlier in this section for inventory updates:

1. Establish a person or small group who are solely responsible for a master GIS database.
2. Develop an update application form whereby interested parties can submit proposed update information.
3. Establish a system whereby the person(s) in control of the master database evaluate and react to update proposals.
4. Add approved updates to the GIS database and remove outdated information.

Once GIS location information exists in a digital database, it is relatively straight-forward to add attribute information to the GIS through a process known as “table joining.” This capability should be available in any commercial GIS.

**APPENDIX B: COMBINED TRAIL USER ANALYSIS FROM
THE OREGON STATEWIDE TRAIL USER
AND NON-MOTORIZED BOATER SURVEY
REPORT**

2004 Oregon Statewide Trail User and Non-motorized Boater Survey – Comparison of Trail Users and Non-motorized Watercraft Users

Final Report for the Oregon Parks and Recreation Department

by Woody Carter and Tony Silvaggio
Oregon Survey Research Laboratory

Introduction

This section includes combined survey results to identify differences and similarities between user groups.

Demographics - All Users

About 35% of Oregon households, or 463,243 total households in the state, have at least one person who uses Oregon motorized or non-motorized trails or non-motorized watercraft. The demographics of these users is presented in the following table:

TABLE 1: Demographics of All Trail Users and Non-motorized Boaters				
	All Users (Weighted)	Motorized Trail	Non- motorized Trail	Non-motorized Boater
	N = 770	N = 196	N = 326	N = 248
Gender:				
Male	51%	72%	44%	55%
Female	49%	28%	56%	45%
Age:				
18 – 29	14%	20%	14%	8%
30 – 39	22%	28%	22%	21%
40 – 49	28%	27%	27%	29%
50 – 59	22%	18%	20%	29%
60 – 69	11%	5%	12%	10%
70+	3%	2%	4%	3%
Education:				
Less than high school	3%	4%	3%	3%
High school graduate	16%	34%	14%	12%
Some college	32%	41%	34%	25%
Bachelors	30%	17%	31%	35%
Masters	13%	3%	14%	17%
Doctorate	5%	1%	4%	9%
Income:				

Less than \$18,000	10%	7%	13%	4%
\$18,000 - \$24,999	6%	5%	7%	4%
\$25,000 - \$39,999	19%	19%	19%	18%
\$40,000 - \$69,999	33%	36%	32%	33%
\$70,000 - \$99,999	18%	19%	17%	22%
\$100,000+	15%	14%	13%	20%
Sampling Error	$\pm 2\%$	$\pm 6\%$	$\pm 4\%$	$\pm 5\%$

Motorized respondents are primarily male, non-motorized respondents and boaters are more evenly split. Motorized users tend to be younger, and boaters to be older, than non-motorized trail users. Motorized respondents report less education, and boaters more, than non-motorized trail users. Income is more comparably distributed among the three groups. Non-motorized trail users report somewhat lower incomes, non-motorized boaters higher, with motorized in between.

Low-income groups are greatly underrepresented in motorized, non-motorized and non-motorized boating participation. As a result, management strategies could be targeted towards providing low-income families with opportunities to participate in these activities.

Satisfaction with the Oregon Trail Experience – All Users

Oregon trail users and non-motorized boaters are overwhelmingly satisfied with their trail experience. The survey asked, “How satisfied are you with your overall [motorized trail/non-motorized trail/non-motorized boating] experience in Oregon?” The mean scores show a remarkably high degree of satisfaction:

TABLE 2: Mean Overall Satisfaction (1 = Not at All Satisfied, 4 = Very Satisfied) N = 769	
Non-motorized trail	3.8
Non-motorized boating	3.7
Motorized trail	3.4
Overall mean (all users, weighted)	3.7
Sampling error for this question is $\pm 2\%$	

Mean rankings summarize information from all the answers in one number. These high rankings reflect the state’s outstanding trail infrastructure and its overall stewardship of these recreational assets. The intensity of satisfaction can be judged by the full distribution of answers:

	All Users (Weighted)	Motorized Trail	Non-motor- ized Trail	Non- motorized Boating
	N = 769	N = 196	N = 325	N = 248
Mean	3.7	3.4	3.8	3.7
Very satisfied	74%	48%	79%	75%
Somewhat satisfied	24%	46%	20%	24%
Not very satisfied	1%	6%	0%	1%
Not at all satisfied	0%	0%	1%	0%
Sampling error for this question varies from $\pm 4\%$ to $\pm 6\%$				

Although these two tables demonstrate a high degree of overall satisfaction, they also reflect a gap between motorized trail and non-motorized users in terms of satisfaction with their trail experience. Non-motorized trail and non-motorized boaters are most satisfied with their linear outdoor recreation experience in Oregon. Motorized trail users are also satisfied – but much less so.

The questionnaire drilled down into satisfaction to uncover the details of these findings by asking for rankings of access to trails, enforcement, maintenance, support facilities, and information. The data reveal that information and support facilities are the lowest ranked overall. For the most part, the individual user groups agree on the order of ranking. Motorized trail users are less satisfied across the board with the dimensions of their trail use experience.

	Mean Score			
	All Users (Weighted)	Motorized	Non- motorized	Water
	N = 680	N = 188	N = 282	N = 210
Access to trails	3.5	3.2	3.6	3.5
Enforcement	3.3	3.1	3.4	3.2
Maintenance	3.3	3.1	3.4	3.3
Support facilities	3.3	3.1	3.3	3.3
Information	3.1	2.7	3.3	3.0
Average of means	3.3	3.0	3.4	3.3
Sampling error for this question varies from $\pm 2\%$ to $\pm 7\%$				

The percentage of respondents who select the “very satisfied” category is an indicator of the intensity of user satisfaction. The table below shows that over all, the most strongly felt satisfaction is with access to trails, with the other categories lagging behind. Satisfaction with information is the lowest rated, with only 16% of motorized trail users saying they are “very satisfied” along that dimension. For most items, the data suggest the same gap in satisfaction

between motorized and other users noted earlier. However, it is notable that the strength of that difference is somewhat moderated for maintenance and enforcement, suggesting that those two dimensions are priority needs for all trails users.

TABLE 5: Satisfaction with Trail Services – All Users				
Trail Service	Percent Very Satisfied			
	All Users (Weighted)	Motorized	Non- motorized	Water
	N = 637	N = 188	N = 325	N = 246
Access to trails/water	61%	38%	68%	56%
Enforcement	43%	31%	48%	40%
Support facilities	42%	34%	44%	42%
Maintenance	42%	35%	45%	40%
Information	33%	16%	38%	31%
Sampling error for this question varies from $\pm 2\%$ to $\pm 6\%$				

Evaluation of Trail Information

To explore the details of respondent information needs and rankings, the survey asked respondents to evaluate a range of information sources. An analysis of “Don’t Know” responses suggests which sources are used most and which are less used.

TABLE 6: Satisfaction with Trail Information – “Don’t Know”				
Source of Information	Percent Answering “Don’t Know”			
	All Users (Weighted)	Motorized	Non-motorized	Water
	N = 769	N = 196	N = 325	N = 248
Rules and regulations	5%	2%	5%	6%
Signage	5%	4%	4%	7%
Interpretive	7%	13%	6%	6%
Level of difficulty	16%	13%	14%	21%
Route maps	23%	25%	22%	23%
Guidebooks	31%	34%	25%	25%
Agency responses	44%	39%	46%	39%
Agency websites	50%	47%	50%	49%
Sampling error for this question varies from $\pm 2\%$ to $\pm 6\%$				

As measured by willingness to rate each source, overall familiarity with information sources is relatively high. Even the least familiar item, agency websites, is rated by half the respondents. A sizable majority of respondents feel able to answer questions about signage, rules, and interpretive information. A sizable minority are unable to evaluate guidebooks and route maps. The different user groups do not vary much in their willingness to make evaluations of information sources, suggesting user groups do not differ much in their familiarity with information sources.

The following table presents respondent satisfaction with those information sources they were able to rate.

	Mean Score			
	All Users (Weighted)	Motorized	Non- motorized	Water
	N = 380	N = 103	N = 154	N = 123
Interpretive	3.5	3.3	3.5	3.4
Rules and regulation	3.4	3.1	3.5	3.3
Level of difficulty	3.4	3.2	3.5	3.2
Route maps	3.3	3.2	3.3	3.2
Agency websites	3.3	3.0	3.3	3.3
Agency responses	3.2	2.7	3.3	3.2
Signage	3.2	3.1	3.3	3.1
Guidebooks	3.2	3.0	3.3	3.2
Sampling error for these questions ranges from $\pm 2\%$ to $\pm 9\%$				

The percentage given the “very satisfied” ranking is an indicator of the intensity of satisfaction. On this basis, the following table shows that interpretive information and information about rules and regulations, level of difficulty, and signage are rated highest.

	Percent Very Satisfied ¹²⁸			
	All Users (Weighted)	Motorized	Non-motorized	Water
	N = 380+	N = 103+	N = 154+	N = 147+
Interpretive	55%	41%	60%	51%
Rules and regulations	48%	34%	55%	39%
Level of difficulty	49%	33%	57%	38%
Route maps	40%	33%	42%	39%
Agency websites	42%	28%	46%	40%
Agency responses	39%	21%	49%	33%
Signage	38%	30%	42%	33%
Guidebooks	37%	24%	41%	34%
Sampling error for these questions varies from $\pm 2\%$ to $\pm 9\%$				

Again we see a sizable difference between motorized and other users in satisfaction with available information. This information gap between motorized and other users, especially non-motorized land trail users, is a key finding of this research. Combined with the other

¹²⁸ Excludes those who answered “Don’t Know.”

problems with information gathering in consumer planning for trail and water use presented in this report, it suggests information is a key area for state programming.

Respondent verbatim comments, detailed in Appendix C to this report, provide a flavor of the variety of information-related issues and needs. Each comment below is from a different user:

Information on level of difficulty. At major put ins on rivers there should be signage as to the water level and the difficulty level. It would be nice to have some uniform way of gauging the river class and levels.¹²⁹

More information and more access, two things that I seem to have to dig a lot for and end up going to the same places.

I would like to see greater publication of the trail system. Currently the trail systems are publicized by clubs; I would like something that details all of the trails in Oregon, versus going to each individual club.

Knowing more about where they're located. When ever I look on line, it pops up with a lot of web sites that don't necessarily have anything to do with hiking. I'd like the information all in one place. It's all about instant gratification.

To know the trail was in bad shape. You can almost figure it out when they don't have their sign in good shape. When there's a storm, and there's a fallen tree, you don't know about it until you encounter them.

To have accurate maps of what is out there and what some of the attractions are on the different trails. I think it would be good if the interpretative information is updated. The sign might be faded from the sun or mention things that are not there anymore.

For AAA you need to know the name of the place before they can give you information. Their maps don't have any camp locations or hiking trails.

Let users know what main use is. If it is mainly motorized, let people know so they don't end up sharing trail with ATVs while on foot. Once you get out on a trail with kids, you don't want to turn around to find another one.

I don't find the waterways that are restricted to non-motorized craft. If I had those options I'd paddle more.

I couldn't find a trail that I wanted to go on. I couldn't find it (University Falls). I drove to get there and I used a map, but I still couldn't find it.

Finding them, knowing where to go, how to get there, and maybe what to expect. Have you ever seen the book Fishing in Oregon? It names many streams, creeks, lakes,

¹²⁹ Verbatims in this report have been edited for grammar and ease of understanding.

how to get there, what to expect, and possibly what to need. It changes the whole world of fishing, it makes a big difference. I've traveled all the way across the state of Oregon because this lake or that lake is a certain way, and I would never know except for that book.

From these and other comments, it is clear that respondents want more detailed information, more accurate and timely updates of information, one stop shopping for information, and information organized around potential and primary use. Of course, there are users who feel less is better when it comes to information:

Sometimes I wish for the more remote trails people had to research a little harder to find them so they wouldn't get so crowded. There are no surprises left. The Oregonian publishes great secret trails, but they should leave them secret.

Increasing Trail Use – All Users

The survey asked trail users “During the past 12 months, did you want to use [motorized trails/non-motorized trails/non-motorized watercraft] in Oregon more than you actually did, or did you use them about as much as you wanted to?” Fifty-seven percent of all trail users reported they want to use trails more than they do, suggesting a huge unmet craving for trail and non-motorized boating use available to be tapped if roadblocks to that use can be overcome. The breakdown by user types: 63% of non-motorized boaters, 60% of motorized trail users, and 53% of non-motorized trail users wish they could use trails more.

	All Users ¹³⁰	Motorized	Non-motorized	Water
	N = 768	N = 196	N = 324	N = 248
Satisfied with amount of use	43%	41%	47%	37%
Want more of this activity	57%	59%	53%	63%
Sampling error for these questions ranges from ± 2% to ± 6%				

The following table reports the mean importance of a range of constraints to trail use:

¹³⁰ This table includes only respondents who said they wish they used trails more.

TABLE 10: Mean Score for Reasons for Not Using Trails as Much as Wanted (1 = Major Reason, 4 = Not an Important Reason)				
	All Users (Weighted)	Motorized	Non- motorized	Non- motorized Boater
	N = 443	N = 115	N = 169	N = 159
Lack of time	1.8	2.2	1.7	1.8
None close by	3.4	2.8	3.5	3.5
Low water levels	3.4	n/a	n/a	3.4
Lack of information	3.4	3.0	3.4	3.6
Weather	3.4	3.3	n/a	3.4
Lack of money	3.5	3.3	3.6	3.5
No one to go with	3.5	3.7	3.5	3.5
Overcrowding	3.6	3.5	3.6	3.5
User fees	3.6	3.6	3.5	3.7
Personal safety	3.7	3.8	3.7	3.7
Health	3.7	3.7	3.7	3.8
Hard to get to	3.7	3.6	3.7	3.7
Difficult to get equipment	3.8	3.9	n/a	3.7
Poor maintenance	3.8	3.7	3.9	3.8 ¹³¹
Potential conflicts with other user groups	3.8	n/a	3.8	n/a
Too challenging	3.9	4.0	3.9	3.9
Sampling error for these questions ranges from $\pm 3\%$ to $\pm 9\%$				

Across the board, lack of time is overwhelmingly dominant as the explanation given by users wishing they spent more time on the trail and waterway. When all users are combined, all other reasons are clumped very close to 4.0, “not an important reason.” Neither resource issues (money, information, equipment) nor trail characteristics (maintenance, overcrowding, fees) are perceived as important contributors to this problem. Only for motorized trail users does anything approach time as a roadblock, and that is the perceived lack of nearby trail opportunities.

The table showing the percentage selecting each item as “the major reason” suggests the intensity of respondent opinion:

¹³¹ In the case of water users, the question was worded “poorly maintained support facilities.”

	All Users (Weighted)	Motorized	Non- motorized	Water
Want more of their activity	57%	59%	53%	63%
The major reason:				
	N = 443	N = 114	N = 169	N = 160
Lack of time	55%	41%	59%	55%
None close by	7%	24%	4%	6%
Lack of money	6%	9%	5%	8%
Health	5%	4%	6%	3%
Weather	5%	6%	n/a	3%
Lack of information	4%	12%	3%	2%
No one to go with	4%	4%	4%	5%
Low water levels	4%	n/a	n/a	4%
Overcrowding	3%	6%	2%	3%
User fees	3%	5%	2%	2%
Hard to get to	3%	5%	2%	2%
Difficult to get equipment	2%	1%	n/a	3%
Poor trail maintenance	1%	2%	2%	1% ¹³²
Personal safety	1%	0%	2%	1%
Too challenging	1%	0%	1%	0%
Potential conflicts	1%	n/a	1%	n/a
Sampling error for these questions ranges from ± 2% to ± 9%				

This analysis presents a more detailed picture. For non-motorized trail and non-motorized boaters, lack of time is the overwhelming roadblock to enjoying their activities as much as they would like. For motorized trail users, however, money and information supplement an attenuated lack of time and close-by trails as key reasons. These findings suggest that efforts to provide a compressible trail experience – especially one taking less time in getting to the trail and other non-trail activities like seeking information, packing, and securing permits – would be welcomed by users.

A sizable proportion of users offered other reasons for not using trails and waterways as much as they would like, presented in full in Appendix C. Answers included having a teenage daughter, fire danger, closures, limited access or parking, fees, gates, laziness, age, and the following:

Because all the lands that we have to do this with are being taken away by environmental groups that don't respect anybody's right to be able to enjoy the forest.

¹³² For non-motorized boaters, this referred to maintenance of support facilities.

I don't have a car, so sometimes it's hard to get out of town. I have to get a ride. I don't think a bus runs by Spencer's Butte. Without a bus I can't go on my own.

As a mother of two small children I want safe trails. And as a woman I don't feel safe being outside.

For the last year it's because I have an infant. There's not a way to go non-motorized boating with an infant.

Water quality. A lot of the water in the Willamette is – well, I don't want put my boat in it.

Lack of overnight facilities. Down on the coast you can't stay overnight at any of the facilities with a motor home. We'd go a lot more if we could park our motor home on site.

These responses suggest a planning priority could be to provide information that would allow users to overcome their individual roadblocks, perhaps through learning from others like them who use trails and waterways more.

Preferred Trail Type – Non-motorized and Water

Non-motorized trail users and non-motorized boaters were asked the type of trail they preferred.

TABLE 12: Preferred Type of Trail 3 = Very Likely to Use, 1 = Not as Likely to Use			
Type of Trail	Mean Likelihood to Use Trail		
	Both User Groups (Weighted)	Non- motorized	Water
	N = 553	N = 312	N = 241
Short, day-use trail	2.7	2.7	2.6
Trail to destination	2.6	2.6	2.4
Loop trail	2.5	2.6	2.1
Nature trail	2.5	2.5	2.3
Interconnected network	2.4	2.4	n/a
Multi-day trail	1.9	1.8	2.0
Sampling error for these variables ranges from ± 2% to ± 5%			

Both groups report similar preferred trails, led by short day-use trails and trails to specific destinations. Unlike non-motorized trail users, non-motorized boaters prefer nature trails over loop trails. The percentage of respondents who choose the “very likely to use” category is a measure of strength of opinion. The following table presents the percentage of non-motorized and water trail users who said they were very likely to use each of the trail types:

Type of Trail	Very likely to use trail		
	Both User Groups (Weighted)	Non-motor- ized Trail	Water Trail
	N = 553	N = 312	N = 241
Short, day-use trail	72%	75%	66%
Trail to destination	65%	69%	54%
Loop trail	61%	68%	44%
Interpretive or nature trail	58%	59%	47%
Interconnected network	53%	54%	n/a
Multi-day trail	28%	26%	33%
Sampling error for these questions ranges from $\pm 2\%$ to $\pm 5\%$			

Day use trails are ranked highest, followed by trails to a specific destination and loop trails. All of the choices receive a high ranking, with the exception of multi-day trails. A smaller proportion of non-motorized boaters than non-motorized trail users report they are very likely to use any type of trail.

Non-motorized trail users and non-motorized boaters were also asked their preferred setting for both the activity they do the most and the one they enjoy the most.

N = 245-325	Non-motorized		Non-motorized Boaters	
	Most Frequent	Favorite	Most Frequent	Favorite
Urban setting	23%	18%	9%	9%
Suburban setting	15%	10%	11%	10%
Rural area or park	29%	28%	45%	41%
Remote area	33%	45%	35%	40%
Sampling error for these questions ranges from $\pm 4\%$ to $\pm 5\%$				

There is more difference between what non-motorized trail users do most vs. what they enjoy most, than there is for non-motorized boaters. Areas closer to wilderness rank higher in all categories. Non-motorized trail users prefer remote areas, while non-motorized boaters prefer a rural area or park.

Information Sources – All Users

The survey asked trail users about their use of a variety of sources to gain information about trails.

	Percent Using Source			
	All Users (Weighted)	Motorized	Non- motorized	Non- motorized Boaters
	N = 762	N = 196	N = 320	N = 246
Brochures, maps	92%	86%	95%	90%
Advice of people	89%	91%	88%	90%
State highway maps	81%	n/a	81%	n/a
ODOT road signs	76%	n/a	76%	n/a
Visitor centers	77%	65%	83%	69%
Books, magazines	74%	41%	80%	79%
Along the way	67%	72%	66%	65%
Internet	62%	53%	64%	63%
Stores	57%	59%	51%	71%
Phone agencies	42%	49%	39%	46%
Toll free numbers	42%	n/a	42%	n/a
Clubs, groups	16%	18%	15%	19%
Sampling error for these questions ranges from $\pm 2\%$ to $\pm 6\%$				

The most widely used information sources are brochures, advice, and state highway maps. Close behind are ODOT road signs, visitor centers, and books and magazines. With the exception of clubs and groups, all the potential information sources were referenced by a sizable number of trail users, suggesting that a shotgun approach is necessary to supply needed information.

Respondents were asked for the information source they use the most.

	All Users (Weighted)	Motorized	Non- motorized	Non-motorized Boater
	N = 764	N = 196	N = 322	N = 246
Advice of people	31%	38%	24%	37%
Brochures, maps	18%	26%	18%	13%
Internet	14%	11%	15%	15%
Books, magazines	14%	2%	19%	15%
Visitor centers	6%	7%	8%	3%
Along the way	3%	3%	3%	1%
Stores	3%	4%	2%	3%
Phone agencies	3%	3%	2%	3%
ODOT road signs	3%	n/a	3%	n/a
State highway maps	3%	n/a	3%	n/a
Clubs, groups	2%	2%	1%	2%
Toll free numbers	0%	n/a	0%	n/a
Sampling error for these questions ranges from $\pm 2\%$ to $\pm 6\%$				

This table presents a fuller picture of the information sources preferred by each user group. The advice of knowledgeable friends and experts is primary. Brochures and maps are the next most important information sources, especially for motorized trail users. The internet is emerging as a valued source but is not challenging the first two as of yet. Books and magazines are next, but primarily for non-motorized and water users. Other sources are not favored as the most used source of information.

Club Membership – All Users

Clubs and organized groups ranked low in both of the above tables, and this is because a relatively small proportion of users are members of such groups:

	All Users	Motorized	Non- motorized	Non- motorized Boater
	N = 770	N = 196	N = 326	N = 248
Member of club	7%	10%	7%	5%
Number of Oregon households	49,800	9,800	30,700	9,300
Sampling error for these questions ranges from $\pm 2\%$ to $\pm 6\%$				

Only eight percent of trail users report membership in a club or group organized around their sport. This minority, however, translates into a very large number of households – well more than 100,000.

Funding Priorities—All Users

The heart of the trail user survey was the effort to identify user preferences for trail funding priority options. To investigate this issue, the survey asked a battery of questions of the following form: “Trail managers have limited resources to develop and maintain trails, and must focus their money and time on the most serious needs first. In your opinion, how important is it that they [acquire land for new trails.] Would that be not as important, somewhat important, or very important?” The bracketed phrase was augmented by a list of options. listed below.

	Mean Score 1 = Not as important, 3 = Very important			
	All Users (Weighted)	Motorized	Non- motorized	Water
	N = 755	N = 193	N = 320	N = 242
Clean up litter and trash	2.6	2.7	2.6	2.7
Routine upkeep of existing trails	2.7	2.4	2.7	2.7 ¹³³
Repairing major damage	2.6	2.6	2.6	n/a
Fix deteriorated trails	2.5	n/a	2.5	n/a
Acquire access land	2.1	2.3	2.2	2.3
Support facilities	2.3	2.3	2.3	2.2
Camping facilities	1.9	n/a	n/a	1.9
Enforcement of rules and regulations	2.3	2.3	2.3	2.4
Providing education, safety, and trail etiquette information	2.2	2.4	2.2	2.3
Providing information, maps, signs	2.3	2.4	n/a	2.2
Providing law and safety enforcement	2.2	n/a	n/a	2.2
Developing new trails	2.2	2.3	2.1	n/a
Acquire land for new trails	2.1	2.2	2.2	1.9 ¹³⁴
Children’s play areas	2.1	2.1	n/a	n/a
Interpretive information	1.9	1.9	1.9	1.9
Trails for competitive trail events	1.8	1.8	n/a	n/a
Landscaping along trails	1.4	n/a	1.4	n/a
Sampling error for these questions ranges from $\pm 2\%$ to $\pm 6\%$				

Most notable in the table is the agreement in average rankings across the user groups for most items. The overall emphasis is on improved upkeep for the state’s current resources rather than on supplementing them. The one exception is in the development of new trails, where motorized trail users perceive a greater need for new trails for their activities and a slightly reduced need for maintaining existing trails. Although information appears as a

¹³³ For water users, this question was worded “maintaining existing facilities.”

¹³⁴ For water users, this question was worded “identify new water trail routes.”

consistent high priority need for respondents in earlier answers, when asked to select priorities, trail users would prefer limited state money be spent on other trail needs.

The percentage of users selecting “very important” as a funding priority is an indicator of the intensity of feeling. The following table presents this ranking:

	Percent Very Important			
	All Users (Weighted)	Motorized	Non- motorized	Non- motorized Boaters
	N = 759	N = 196	N = 320	N = 243
Clean up litter and trash	70%	74%	68%	70%
Routine upkeep of existing trails	69%	49%	73%	71% ¹³⁵
Repairing major damage	66%	67%	66%	n/a
Fix deteriorated trails	50%	n/a	50%	n/a
Enforcement of rules and regulations	45%	46%	44%	48%
Acquire access land	42%	49%	37%	44%
Children’s play areas	41%	41%	n/a	n/a
Support facilities	40%	44%	43%	30%
Providing education, safety, and trail etiquette information	39%	52%	35%	40%
Providing information, maps, signs	38%	50%	n/a	32%
Developing new trails	35%	48%	32%	n/a
Acquire land for new trails	34%	44%	39%	17% ¹³⁶
Trails for competitive trail events	23%	23%	n/a	n/a
Camping facilities	16%	n/a	n/a	16%
Interpretive information	17%	19%	19%	11%
Landscaping along trails	6%	n/a	6%	n/a
Sampling error for these questions ranges from ± 2% to ± 6%				

Maintenance of current outdoor resources remains the priority, but there are clear differences in emphasis among the user groups. The distinctive priorities for motorized trail users are acquiring land for new trails and for access, education and safety, information and signage, and developing new trails. Non-motorized trail users and non-motorized boaters agree on most “very important” rankings, except for support facilities and developing new trails, which non-motorized boaters select less often, and acquiring access land and education and safety, which they select more often.

¹³⁵ For non-motorized boaters, this referred to maintaining existing facilities.

¹³⁶ For water users, this question was worded “identify new water trail routes.”

More than ten percent of respondents identify other funding priorities, and these are included in full in the Appendix C to this report. They include many interesting ideas. Following are some representative comments:

Important for there to be places to dispose trash at sites, important to remind people to dispose of trash.

I think that they should have more of a campaign to recruit volunteers to help reduce the cost of all that other stuff. If we're going to use it then we should be a part of maintaining it.

Motorized courses for kids are not available in her area (Pendleton), but the rules say kids can't ride without the course. So there is no way for kids to legally ride.

Let people be people, don't go nuts with rules and regulations. Environmentalists want too much and they have too many restrictions.

I'd like the parks service to purchase land simply to prevent development, but I don't feel like building trails on land is important. Human access isn't as important as preservation.

Some sort of handicapped access for at least part of the trails.

Above all – water quality. The Department of Agriculture and DEQ have to be central. If you don't have water quality no one's going to want to put their boat in the water.

Access to boats, like having boat renting facilities – to allow boat rental near waterways. Organize state trips--or publicize commercial trips.

There were some who worried about spending on trails given the state's perilous economic situation:

The state budget is in such a crunch and I feel our waterways are important but being a teacher it's hard for me. I feel that our priority should be in education. I don't want money pulled from education for park development.

I think top funding should go to schools. I know Oregon recreation is important, but we live in a small community, and they just cut \$450,000 from the schools, but they're building a bike path, to a remote area called Powers, which will cost \$440,000. I know recreation is important, but schools should be the priority. Kids are our future and where money needs to go.

While all of these things are good, in light of the current economic situation in Oregon we need to look at what is really important. When I am personally having money difficulties I don't take vacations or buy art, I wait til the resources are available. Government needs to take a message from the people that they are just overtaxed.

Look at Measure 30's defeat. We need to be sober minded and pay attention to the reality of our economy.

Importance of Trail Signage – Motorized and Non-motorized

Motorized and non-motorized trail users were asked to rate the importance of signs at different trail locations:

TABLE 20: Mean Importance of Signage ¹³⁷			
NOTE: 1 = Not that important, 3 = Very important			
	Mean Rating		
	Both User Groups (Weighted)	Motorized	Non-motorized
	N = 505	N = 192	N = 313
Trail junctions	2.7	2.6	2.8
At trailhead	2.7	2.6	2.7
Along trail	2.4	2.3	2.5
Stream crossings	2.1	2.2	2.0
Sampling error for these questions ranges from ± 3% to ± 6%			

Trail junctions and at the trailhead are ranked highest, with along the trail and at stream crossings trailing behind. The percentage selecting the highest response, “very important,” is a measure of the intensity of feeling:

TABLE 21: Importance of Signage ¹³⁸			
	Percent Very Important		
	Both User Groups (Weighted)	Motorized	Non-motorized
	N = 505	N = 192	N = 313
Trail junctions	76%	70%	78%
At trailhead	74%	73%	74%
Along trail	57%	50%	59%
Stream crossings	42%	47%	41%
Sampling error for these questions ranges from ± 2% to ± 6%			

The order is the same is in the previous table. We see that motorized trail users rank signage at stream crossings as more important than do non-motorized trail users, while non-motorized trail users rank signs along the trail as more important.

¹³⁷ This question was not asked of water users.

¹³⁸ This question was not asked of water users.

Respondent Comments on the Interview

At the end of the survey, respondents were asked if there was anything else they wished to say. The complete results of this question are listed as variable ENDING1 in Appendix C. We conclude this report with a few of the more interesting or insightful comments:

Oregon parks are special

I moved here from Iowa and I'm always amazed at quality of parks, recreation areas, the water system, the Pacific Crest Trail, the access.

Out-of-staters should pay more

I pay taxes in this state. So does the rest of my family. We use the facilities. We pay for them. I think out-of-staters should pay for them and if Oregonians get charged anything it should be nominal.

Just that the visitors from out of state need to pay more, and they need to respect our parks. I used to work for the Linn County Parks Department and I saw how they treated our parks and it wasn't nice. Heck they'd leave stoves, sleeping bags behind, new, just if they decided they didn't need them. If they had to pay more to use our parks, maybe they'd treat them better. Some people from out of state are very nice, but in my experience the out of staters need to show more respect to our parks. And the parks have gone down hill in the past 20 years. Oregon used to be a proud state and its parks, but things have gone down hill. And like I said, in my experience it was mostly with out of staters, and they should pay more to use our parks.

Parks are a social service

I feel like I've expressed my priorities through this survey. It is so important to preserve the trails that exist and to continue developing new trails – and they don't have to be fancy. But it's important for the balance and health of our community. I used to live on a 500 acre farm and the Shenandoah River in Virginia. I moved to Oregon because I feel everyone in Oregon can have that experience here through the park system and the public lands. That's a huge difference for young families no matter what their income is. I moved here as a single parent. Senior citizens told me that no matter how hard times were they could always come out to these lands. It really helps in supporting families to have access to parks, as well as other parts the social support system.

Preserve motorized rights

I just want to preserve our rights. We did several petitions to prevent these land closures on the BLM lands, so we can preserve our rights. I believe in stewardship and land use management. I'm 45 and I want to be riding when I'm 60. The club that I'm

with, we're conscientious about sound levels, use the proper sound mufflers, arresters to keep. I wouldn't mind if the permit fees went up.

Include both sides at visitor centers

I work in the forest products industry and feel the forests belong to everybody who wants to enjoy them. Your interpretive centers should include insights about how forests can be managed and not just left alone and education about what social needs are that forest management meets.

Simplify permits

Permitting – Just one aspect of going outdoors. It is getting more complicated to get permits. You have to get one for everything. It should be more convenient, credit cards over the internet, you could even pay that way and then print out your own permit at home. I am not opposed to paying for the permit; just make it simpler to get them.

Use prison labor for trail work

We really need to use prison inmates to do work. I believe that if you do not work then you should not eat. They are just sitting around and should be used to clean up trails, it would be therapeutic for them and would help with costs of maintaining trails. I'm an old fashioned person that believes in the Bible and these inmates that are of low risk should be working for their keep.

Make motorized trails more family-friendly

I think they should lean more towards a family-oriented experience. For example, the reduction of alcohol so you don't have to worry about being harassed or someone crashing into you. Having good trail markers encourages safety- and family-first kinds of motorized trails. Trail markers help not only if someone gets lost but if someone gets injured you can call 911 and give directions. As a firefighter in Portland, we get incomplete calls and so it is an important safety and time concern. The parking areas, the picnic tables all make it a better experience.

APPENDIX C: OREGON STATEWIDE TRAIL USER AND NON-MOTORIZED BOATER SURVEY METHODOLOGY

SURVEY METHODS

Introduction

The Oregon Statewide Trail User and Non-motorized Boater Survey was designed to be the most accurate and comprehensive survey of trail users in Oregon to date. Instead of using lists of known trail users (such as individuals who registered All Terrain Vehicles or snowmobiles), which tend to over represent more dedicated users, the survey was conducted through telephone screening of a random sample of Oregon households, both listed and unlisted numbers. As a result, all levels of trail usage are proportionately represented. Only households without a telephone or with no land line (only a cell phone) had no possibility of inclusion in the sample.

Through a complex series of branching questions, the screener was designed to determine if anyone in the household had used Oregon trails in the past year and to select a respondent. If anyone in the household had used a motorized trail, believed to be the smallest category, they were interviewed about that use. That is, they were selected into the sample “with certainty” as motorized trail users. If there were no motorized trail users in the household but someone had used a non-motorized watercraft, they were interviewed about that use. They were selected “with certainty” about non-motorized trail use. If neither user type was found in the household but there was a non-motorized trail user, they were interviewed about that use. Once the quota of non-motorized trail users was met, no further interviewing of that group was conducted.

Through extensive pretesting and revision, the screener was refined and shortened to meet the scientific needs of the research without confusing or angering (most) respondents. The results can be found on the trails planning website at:

http://egov.oregon.gov/OPRD/PLANS/trailsplanning_newsletters.shtml.

Methods

The survey employed a random digit dial methodology to identify Oregon residents who reported qualifying trail or non-motorized boating use in the last year. Data collection was conducted in two waves. An initial list of 9,500 telephone numbers was called to identify motorized trail users, non-motorized trail users, and non-motorized boaters. At the end of this data collection sufficient motorized trail users and non-motorized boaters were not achieved, so an additional 5,950 telephone numbers were screened in association with an unrelated survey. This additional screening resulted in quotas for trail and water users being achieved that permit a sampling error for each group of \pm 5-6% and for combined trail users of \pm 2%. The random telephone design and low sampling errors contribute to making this one of the most scientifically rigorous studies of trail users conducted to date for Oregon.

The sample report for the initial 9,500 telephone numbers provides the clearest picture of the outcome of the calling, not complicated by the supplementary screener and call-back design used to complete the research:

TABLE 1: Sample Report – Initial Screening	
	N
Total initial sample	9500
Commercial or other non-household numbers	5487
Screenable households	4013
Screened out for non-trail use or over quota	1863
Potentially eligible households	2150
Completed interviews	647

Almost 5,500 of the computer-generated random telephone numbers, about 58%, were non-residential, disconnected, faxes or modems, or otherwise ineligible to screen for trail usage. That left 4,013 numbers that could have been screened. Over 500 of these numbers were not answered after numerous attempts. Another 500 involved households with answering machines where a person did not answer the telephone. A total of 2,510 households (1,863 + 647) were actually screened, for a screener completion rate of 63%. Of these, 1,863 reported no Oregon trail use in the past year.

The second phase of interviewing provides a picture of completion outcomes for screened-in households:

TABLE 2: Sample Report – Supplementary Screening	
	N
Initially screened-in sample	215
Commercial or other non-household numbers	4
Screenable households	211
Screened out for non-trail use or over quota	41
Potentially eligible households	170
Completed interviews	124

Of the 215 households screened in using the supplementary survey, 170 were potentially eligible and 124 interviews were completed, for a questionnaire response rate of 78%. Combining these two estimates (screener response rate of 63% and questionnaire response rate of 78%), we estimate an overall response rate on the survey of 49%.

Because of the relative rarity of motorized trail users and non-motorized boaters, the order of questionnaire administration first selected motorized users with certainty if any were present in

the household. If no one qualified on this basis, the screening selected with certainty anyone reporting non-motorized boating use in the last year. If no one qualified at that point, the screening asked about non-motorized trail use. Households were screened in for the latter until the quote of about 300 was exceeded; another 228 non-motorized trail users were identified after the quota was filled and thus were not interviewed. A more complete description of the methodology used in collecting and weighting the data is contained in Appendix A of this report.

Each respondent, regardless of the usage type for which they were screened-in, was asked about their full range of motorized, non-motorized, and non-motorized boating experience. This question was then used to determine how many crossover users were in the sample. The resulting estimates are presented in the following table:

All Combinations	Percent	Number of Occupied Oregon Households
No trail usage in past year	65.3%	870,479
Non-motorized trail use only	17.3%	230,932
Non-motorized trail user and non-motorized boater	9.6%	128,273
All three	3.4%	45,964
Motorized and non-motorized	2.5%	33,302
Motorized only	1.0%	13,788
Non-motorized boater only	.5%	6,031
Motorized trail user and non-motorized boater	.4%	4,954
Total	100%	1,333,723 ¹³⁹
Combined Percentages		
Any non-motorized trail use	32.9%	438,471
Any non-motorized boater use	13.9%	185,222
Any motorized trail use	7.3%	98,007
Sampling error for this question is $\pm 2\%$. ¹⁴⁰		

The upper part of the table presents population estimates for each possible combination of the three trail usage types. About 17% of households report only non-motorized use; a further ten percent combine this with non-motorized boating. The remaining combinations have much smaller representation.

¹³⁹ Number of occupied Oregon households in 2000 Census. This and the average household size found at <http://factfinder.census.gov>.

¹⁴⁰ Sampling error reports the error introduced because a sample, rather than the entire population, is interviewed. The numbers reported here reflect a 95% confidence interval. That is, for this table (for example), we expect the figure reported will be within 2% of the true population figure 95% of the time. There are other sources of error in surveys, but they cannot be measured as precisely so are seldom discussed.

Combining the percentages presents the findings for each user type, permitting a household to be counted in one, two, or three categories. Almost a third of Oregon households have a resident with non-motorized trail use. Even the smallest usage group, motorized trail users, amounts to almost 100,000 Oregon households.

Most Oregon households, over 65%, report no trail usage in the past year. They represent a huge reservoir of potential trail use – since the average Oregon household size is 2.51, as many as 2,185,000 Oregonians do not take advantage of the state’s trails. These individuals were not interviewed, so we cannot address issues of their characteristics or views. Anecdotal reports from telephone interviewers suggest that quite a few senior citizens initially contacted in the survey felt it was ridiculous to be asking them about trail use. This suggests that planners would do well to reach out to such groups and provide opportunities for them to enjoy Oregon’s trails and waterways.

Weights

When reporting on individual trail use types, no weights are required. However, because more motorized and non-motorized water users were interviewed than their proportion in the population (so we would have enough to conduct finer-scale analyses), weights must be applied when combining user groups. Similarly, fewer non-motorized trail users were interviewed than their proportion in the population. If weights are not used when combining user groups, the resulting percentages would over-represent the views of motorized trail users and non-motorized boaters, and under-represent the views of non-motorized trail users.

Respondents selected with certainty were asked for their trail use of the usage categories they were not questioned about. For example, motorized users were asked if they also were involved in non-motorized trail use and non-motorized boating. These figures were used to determine point estimates for the number of overall trail users.

The following information was used to determine accurate proportions of trail users in the general population:

	Total Rs ¹⁴¹	No Trail Use	MTU Only	NMB Only	NMT Only	MTU and NMB	MTU and NMT	NMB and NMT	All 3
	A	B	C	D	E	F	G	H	I
1 No Trail Use in Past Year	1648	1648	0	0	0	0	0	0	0
2 Interviewed as Motorized Trail User (MTU)	136	0	25	0	0	6	46	0	59
3 Interviewed as Non-motorized Boater (NMB)	184	0	0	11	0	3	0	160	10
4 Interviewed as Non-motorized Trail User (NMT)	326	0	0	0	262	0	9	46	9
5 Over Quota NMT ¹⁴²	215	0	0	0	173		6	30	6
6 Non-response to question about other trail use ¹⁴³	16	0	1	0	2	0	2	6	3
7 Totals	2525	1648	26	11	437	9	63	243	87
8 Percentages ¹⁴⁴	100%	65.3%	1.0%	0.5%	17.3%	0.4%	2.5%	9.6%	3.4%
9 Percentages excluding non-users ¹⁴⁵	100%	N/A	3.0%	1.3%	49.9%	1.1%	7.2%	27.7%	9.9%
	Total Rs	No Trail Use	MTU Only	NMB Only	NMT Only	MTU and NMB	MTU and NMT	NMB and NMT	All 3

¹⁴¹ Numbers are from the initial sample only. This was the only sample from which accurate point estimates of usage types could be calculated. Additional screening from an unrelated survey was used to increase the numbers of motorized trail users and non-motorized boaters.

¹⁴² These 215 cases were screened in after the quota of NMT had been met, so they were not interviewed. They have been allocated proportionately to the categories based on the respondents who were interviewed.

¹⁴³ These respondents did not answer the question on other trail use. They have been allocated proportionately to the categories based on the respondents who did answer that question.

¹⁴⁴ This row generalizes to all Oregon households with telephones. For example, 65.3% of Oregon households do not have an adult who used Oregon trails in the past year.

¹⁴⁵ This row generalizes to Oregon households with at least one trail user. For example, 3.0% of trail user households in the past year were exclusively motorized trail users.

By adding different combinations of the proportions in Row 8, the total number of telephone households in Oregon that contain each type of trail user can be calculated as follows:

TABLE A2: Population Point Estimates of Trail Users									
	Total Rs	No Trail Use	MTU Only	NMB Only	NMT Only	MTU and NMB	MTU and NMT	NMB and NMT	All 3
	A	B	C	D	E	F	G	H	I
10 Row 8 percentages from above table	100%	65.3%	1.0%	0.5%	17.3%	0.4%	2.5%	9.6%	3.4%
11 Occupied Households	1,333,723	870,479	13,788	6,031	230,932	4,954	33,302	128,273	45,964
12 Any Motorized Trail Use	7.3%		1.0%			0.4%	2.5%		3.4%
13 Any Non-motorized Boat Use	13.9%			0.5%		0.4%		9.6%	3.4%
14 Any Non-motorized Trail Use	32.8%				17.3%		2.5%	9.6%	3.4%
	Total Rs	No Trail Use	MTU Only	NMB Only	NMT Only	MTU and NMB	MTU and NMTU	NMB and NMT	All 3

Using these numbers, weights were calculated as follows:

TABLE A3: Weights				
Telephone households in Oregon with...	Population Proportion	Survey Proportion	Weight	
15 ...any motorized trail use	98,007 ¹⁴⁶	.136	.255	.534
16 ...any non-motorized boat use	185,222	.257	.322	.797
17 ...any non-motorized trail use	438,471	.608	.423	1.435

¹⁴⁶ This column is the product of the number of occupied households (Table cell 11A) and the percentages of the three usage types (Tables cells 12A, 13A, and 14A).

Such weights should be applied only when the responses are combined to generalize to all trail users. When generalizing about each trail user type, no weights are necessary.

APPENDIX D: TRAIL DESIGN, MAINTENANCE AND ACCESSIBILITY PUBLICATION LIST

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
An Axe to Grind: A Practical Ax Manual	1999	Bernie Weisgerber and Brian Valchowski. USDA Forest Service and Federal Highway Administration, U.S. Department of Transportation.	A practical and detailed handbook about axes and their historic and continuing usage. Describes types and patterns of axes and adzes, with many photos and illustrations. Shows how to hang (rehandle) and sharpen axes. Describes proper ax usage for tree felling, limbing, bucking, splitting and hewing. Lists procurement sources and selected references.	http://www.fhwa.dot.gov/environment/fspubs/99232823/index.htm	Phone: 406.329.3900
Appalachian Trail Design, Construction and Maintenance - 2nd Edition	2000	William Birchard, Jr., Robert Proudman and the Appalachian Trail Conference	The second edition of the definitive handbook on trail work including standards and technical details of trail design, construction and maintenance.	No	http://www.atctrailstore.org/catalog/iteminfo.cfm?itemid=111&compid=1
ATV Utility and Gravel Trailer	1997	Brian Vachowski: Project Leader - USDA Forest Service, Technology and Development Program	The Missoula Technology and Development Center (MTDC) has construction drawings available for a rugged, steel trailer designed to be pulled behind an all-terrain vehicle. The trailer has been used on the Palouse Ranger District, Clearwater National Forest, over the past several years. It has proven invaluable for hauling gravel and supplies for trail work on their ATV trail system. It should be equally well suited for other project work like hauling supplies on fires, for fencing projects, or wherever an ATV is a safe and appropriate tool to help get the job done.	http://www.fhwa.dot.gov/environment/fspubs/97232310/index.htm	No

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
Backcountry Sanitation Manual	2001	The Appalachian Trail Conference	This 220-page manual addresses the management of human waste in the backcountry. Proper management of human waste protects hikers, the environment and trail maintainers. The manual was created in the belief that all remote recreation areas will benefit from an expanded discussion of backcountry sanitation. It also introduces a new, simpler and often safer method of composting human waste in the backcountry- the moldering privy.	http://www.appalachiantrail.org/protect/pdfs/Sanitation_Manual_rev.pdf	http://www.atctrailstore.org/
Boulder Buster - Breaking Rocks Without Explosives	1998	Bill Killroy and Jim Tour. USDA Forest Service, Technology and Development Program	Describes using the Boulder Buster rather than explosives to break rocks larger than 2 meters in diameter or rock walls in 2-meter lifts. The Boulder Buster uses a cartridge resembling a shotgun shell and a column of liquid to generate a high-pressure wave. The wave fractures the surrounding structure. The Boulder Buster does not produce flyrock, so operators can be 25 meters away when they pull a lanyard to fire the device. Because the Boulder Buster is not an explosive device, operators do not require explosives certification. No special transportation or storage regulations apply. The Boulder Buster is a commercial product made in South Africa. During Forest Service field tests, the Boulder Buster was used to break a large rock that had fallen alongside a roadway, break rocks to lower spillways on two dams, and break a rock beneath a bridge where explosives could not have been used without damaging the	http://www.fhwa.dot.gov/environment/fspubs/98672840/index.htm	No

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
Building Better Trails: Designing, Constructing and Maintaining Outstanding Trails	2002	International Biking Association	bridge. Building Better Trails is an essential resource for mountain bikers, land managers and other trail enthusiasts. The 72-page book teaches readers how to build sustainable trails by offering step-by-step instructions for trail design, construction and maintenance. The book also provides trail building resources, and includes a section on a new trend: building challenging, technical trails that are environmentally sustainable.	http://www.imba.com/resources/trail_building/trailbuilding_basics_index.html	Phone: 303.545.9011 Email: webmaster@imba.com
Building Crusher Fines Trails	2002	Lois Bachensky, USDA Forest Service on American Trails Website	How to use Crusher Fines (finely crushed compacted rock) as a trail surface material.	http://www.americantrails.org/resources/railbuilding/BuildCrushFinesOne.html	No
Camping Impact Management on the Appalachian National Scenic Trail	2003	Jeffrey Marion-The Appalachian Trail Conference	The report addresses the management of overnight use and associated impacts along the Appalachian National Scenic Trail (A.T.) This effort was initiated in response to agency and Appalachian Trail Conference (ATC) management concerns regarding the resource and social impacts of increasing overnight visitation, particularly in high use areas. Report findings are primarily based on a series of on-site investigations at 17 problem areas selected by A.T. clubs and ATC staff.	http://www.appalachiantrail.org/protect/pdfs/AT_Camping_Impacts.pdf	http://www.atctrailstore.org/catalog/iteminfo.cfm?itemid=111&compid=1

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
Cattle Guards for Off-Highway Vehicle Trails	1998	USDA Forest Service - Brian Vachowski: Project Leader	Designs for trail cattle guards suitable for trails used by ATV's, motorcycles, mountain bikes and hikers that are successfully used on U.S. Forest Service lands.	http://www.fhwa.dot.gov/environment/fspubs/98232826/index.htm	http://www.fhwa.dot.gov/environment/rec/trails/trailpub.htm
Crosscut Saw Guards	1997	George Jackson: Project Leader - USDA Forest Service, Technology and Development Program	Crosscut saws are an efficient tool for cutting timber, but they can represent a safety hazard if they are carried improperly. The Washington Office staffs in Recreation, Fire and Aviation, and Engineering asked the Missoula Technology and Development Center (MTDC) to recommend ways to safely transport crosscut saws. The primary objective is to protect personnel and pack stock from accidentally contacting the saw's cutting teeth.	http://www.fhwa.dot.gov/environment/fspubs/97232341/index.htm	No
Floating Trail Bridges and Docks	2002	Jansen Neese, Merv Erickson and Brian Vachowski - USDA Forest Service and Federal Highway Administration, U.S. Department of Transportation.	The Missoula Technology Development Center evaluates the use of floating bridges for trail crossings in very wet areas. The report includes information about floating docks, floating bridge designs, anchorage systems, and devices that allow the dock to adjust itself to varying water levels.	http://www.fhwa.dot.gov/environment/fspubs/02232812/index.htm	http://www.fhwa.dot.gov/environment/rec/trails/trailpub.htm
Florida Greenways and Trails System Design Guidelines for Unpaved and Paddling Trails.	1998	Florida Recreational Trails Council	Guidelines for the design and development of unpaved trails in the Florida Greenways and Trails System.	http://www.dep.state.fl.us/gwt/community/refguide/pdf/appende.pdf	Phone: 850.245.2052

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
Geosynthetics for Trails in Wet Areas	2000	Steve Monlux and Brian Vachowski - USDA Forest Service and Federal Highway Administration, U.S. Department of Transportation.	Geosynthetics are synthetic materials that are used with soil or rock in many types of construction. They perform three major functions: separation, reinforcement, and drainage. This report describes several types of geosynthetics; explains basic geosynthetic design and utilization concepts for trail construction in wet areas; and provides geosynthetic product information. Detailed product specifications and procurement sources are listed.	http://www.fhwa.dot.gov/environment/fspubs/00232838/index.htm	http://www.fhwa.dot.gov/environment/rec/trails/trailpub.htm
Gravel Bags for Packstock	1995	Brian Valchowski. USDA Forest Service, Technology and Development Program.	The Missoula Technology and Development Center was asked to develop plans, and fabricate and test fabric bags that could be mounted on packsaddles. MTDC worked from a design developed in the 1970's by retired Wallowa-Whitman National Forest employee Ivan Carper. Missoula smokejumper Tony Petrilli fabricated the bags for MTDC in 1994 and they were tested on a partnership turnpike construction project on the Rocky Mountain Ranger District of the Lewis and Clark National Forest that same year. MTDC also tested and evaluated some bags that closely followed the original Carper design built by the Professional Wilderness Outfitters Association (PWOA), and some off-the-shelf fruit picking bags. Included in this report are test results, recommendations, a design pattern, and some alternatives.	http://www.fhwa.dot.gov/environment/fspubs/95232840/index.htm	Phone: 406.329.3900

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
Green Trails: Best Practices for Environmentally Friendly Trails	2004	Metro Parks and Greenspaces	This publication is intended to provide guidelines for environmentally friendly or green trails that support the goals of Metro's Greenspaces Master Plan. Those goals seek to promote an interconnected system of parks, natural areas, trails and greenways for fish, wildlife and people throughout the Portland metropolitan region and still maintain biodiversity and protect water quality. The guidelines are not standards; they are recommendations to complement existing standards and guidelines adopted by local parks and watershed groups in the region.	http://www.metro-region.org/library_ps.cfm?id=5	Phone: 503.797.1850
Greenways: A Guide to Planning, Design, and Development	1993	Charles Flink, Kristine Olka and Robert Searns	A "soup-to-nuts" guide to the practical issues involved in planning and designing greenways and trails. It offers guidance on the overall process of greenway creation while detailing each step along the way. Explains topics such as land acquisition and trail design, development and maintenance, safety and liability, public relations and mapping, organizing volunteers and managing multi-user conflicts.	No	http://www.amazon.com/exec/obidos/tg/detail/-/1559631368/002-4882275-7580031?v=glance
Hand Drilling and Breaking Rock for Wilderness Trail Maintenance	1984	Dale Mrkich and Jerry Oltman - USFS Technology and Development Program	Percussive or hammer drilling is most often used to drill rock. In Forest Service trail work, gasoline-powered hammer drilling is common. Hand drilling is sometimes necessary however, because machines cannot be used. This manual describes elementary tools and techniques for hand drilling rock.	http://www.fhwa.dot.gov/environment/fspubs/84232602/index.htm	No

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
Handtools for Trail Work	Revised, 1997	William Hutcheson, Dale Mrkich and Jerry Oltman - USDA Forest Service and Federal Highway Administration, U.S. Department of Transportation.	Describes the handtools commonly used by Forest Service trail crews for sawing, chopping, grubbing, digging and tamping, brushing, pounding and hammering, lifting and hauling, peeling and shaping, sharpening, and rehandling. Includes many illustrations of the tools.	http://www.fhwa.dot.gov/environment/fspubs/88232601/index.htm	http://www.fhwa.dot.gov/environment/rec/trails/trailpub.htm
Lightly on the Land	1996	Robert Birkby, Student Conservation Association, Inc.	A 267-page comprehensive trail construction guide compiled by the Student Conservation Association (SCA) designed for trail crew leaders and crew members of SCA crews. Chapter titles include Trails, Crew Leadership, Camping with Work Crews, Safety, Tools, Crosscuts and Chain Saws; Measuring Distances, Grades, and Heights; Trail Survey and Design, Trail Construction, Trail Drainage, Trail Maintenance, Building with Rock, Felling and Bucking, Building with Timber, Bridge Construction, Revegetation and Restoration, Rigging, Knots, and History of the SCA Work Skills Program.	No	http://www.thesca.org/res_trail.cfm
Logical Lasting Launches: Design Guidance for Canoe and Kayak Launches	2004	Caroline Wolf, Student Conservation Association. National Park Service Rivers, Trails & Conservation Assistance Program.	This guide provides design guidance for developing canoe and kayak launches for a variety of access sites. Case examples, designs, and photos of launch sites are included.	http://www.nps.gov/rctca/helpfultools/ht_launch_guide.html	No

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
Managing Degraded Off-Highway Vehicle Trails in Wet, Unstable, and Sensitive Environments	2002	Kevin Meyer - National Park Service Rivers, Trails, and Conservation Assistance Program, USDA Forest Service and Federal Highway Administration, U.S. Department of Transportation.	A 48-page report describing techniques that have been used to manage off-highway vehicle trails in Alaska. The report explains why off-highway vehicle trails become degraded and suggests management options to prevent degradation. It also reports the results of test comparing different options for hardening off-highway-vehicle trails. Appendixes provide installation instructions for porous pavement panels and a list of locations where trail-hardening systems are being tested in cooperation with the National Park Service Rivers, Trails, and Conservation Assistance program.	http://www.fhwa.dot.gov/environment/fspubs/02232821/index.htm	http://www.fhwa.dot.gov/environment/rec/trails/trailpub.htm
Mechanized Trail Equipment	1996	Ralph Gonzales - USDA Forest Service. San Dimas Technology and Development Center	This 94-page report documents an effort to catalog mechanized trail maintenance and construction equipment. The publication provides information on mechanized trail equipment, specifically earthmoving and hauling machinery. Earthmoving equipment includes excavators, dozer, and trail machines with a width not exceeding 72 inches. Hauling equipment includes motorized wheelbarrows, totters, and ATVs. Specifications and line drawings or pictures are provided to give the user information about the equipment.	http://www.fhwa.dot.gov/download/hep/fspubs/pdf96231207.pdf	No
Mountain Bike Accessories For Trail Work	1998	Brian Vachowski: Project Leader - USDA Forest Service and Federal Highway Administration, U.S. Department of	It should come as no surprise that mountain bike enthusiasts who also maintain trails have seen the benefits of using mountain bikes for trail work. This case study shows how the Seward Ranger District on the Chugach National	http://www.fhwa.dot.gov/environment/fspubs/98232812/index.htm	http://www.fhwa.dot.gov/environment/rec/trails/trailpub.htm

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
		Transportation.	Forest uses mountain bikes. In addition, it describes how the Missoula Technology Center worked with the District trail crews to develop a bicycle-mounted chain saw carrier and evaluate several single-wheeled bicycle cargo trailers.		
North American Water Trails. A Guide to Establishing and Maintaining Recreational Waterways on Fresh and Salt Water. Second Edition	2000	David R. Getchell, Sr. A Publication of North American Water Trails. Inc.	The publication includes 3 sections. The first is a how-to guide covering the five steps in setting up a water trail: planning, promoting, funding, organizing, and operating. The second section has a listing and description of many of the existing North American water Trails. The third section lists resources that may prove useful to project managers.	No	NAWT RR1, Box 3358 Appleton, ME 04862
Off-Highway Motorcycle & ATV Trails Guidelines for Design, Construction, Maintenance and User Satisfaction. 2nd. Edition	1994	Joe Wernex. Published by the American Motorcyclist Association.	This book was written to aid planners in the development of trail bike trails in a mountainous forest environment. However, others have indicated that the techniques described have broad application and are useful in developing trails in many environments and for ATV recreation as well. The author's goal was to provide a tool that would help public lands managers meet their responsibility to provide high quality outdoor recreation opportunities for trail bike enthusiasts - on an equitable basis with other trail users.	http://www.nttp.net/resources/motors/WernexReport.pdf	Phone: 641.856.1900

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
Oregon Bicycle and Pedestrian Plan: An Element of the Oregon Transportation Plan	1995	Oregon Department of Transportation	The Oregon Bicycle and Pedestrian Plan offers the general principals and policies that the Oregon Department of Transportation (ODOT) follows to provide bikeways and walkways along state highways. It also provides the framework for cooperation between ODOT and local jurisdictions, and offers guidance to cities and counties for developing local bicycle and pedestrian plans.	http://www.odot.state.or.us/techserv/bikewalk/planimag/toc-imag.htm	http://www.odot.state.or.us/techserv/bikewalk/obpplanold.htm
Pedestrian Facilities Guidebook: Incorporating Pedestrians into Washington's Transportation System	1997	Otak, Inc. Sponsored by the Washington State DOT, County Road Administration Board, & the Assoc. of Washington Cities	As part of the planning process that culminated in the development of the 1994 Transportation Policy Plan for Washington State, the subcommittee responsible for creating the Pedestrian Policy Plan recommended that the Washington DOT coordinate with other state and local jurisdictions to develop a pedestrian design manual that recommends appropriate design practices for pedestrian facilities and provides common sense approaches to improving the pedestrian environment.	http://ntl.bts.gov/lib/12000/12200/12220/12220.pdf	Phone: 360.705.7258 Email: Reeves@wsdot.wa.gov
Personal Backpacks for Carrying a Chain Saw	2001	Bob Beckley: USDA Forest Service, Technology & Development Program, Missoula, Montana	Describes field tests of backpacks designed to carry chain saws. Two models were found to be satisfactory for field use: the MacKenzie "Mack" chain saw backpack manufactured by Frontline Safety Gear of Cook, MN, and the Epperson chain saw backpack manufactured by Epperson Mountaineering in Libby, MT. The main concern identified by the Missoula Technology and Development Center was the possibility that either pack	http://www.fhwa.dot.gov/environment/fspubs/01232334/lc01232334.htm	Phone: 406.329.3978

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
			would be contaminated by fuel and oil from the saw or the fuel and oil containers.		
Natural Surface Trails by Design: Physical and Human Essentials of Sustainable, Enjoyable Trails	2004	Troy Scott Parker	Explains the real keys to all types of natural surface (soil, rock, crushed stone) trails. For any trail use or location, it builds the critical foundation of a system of thought that can generate a sustainable, enjoyable trail.	No	http://www.natureshape.com/pubs/nstbd.html
Off-Highway Vehicle Trail and Road Grading Equipment	1998	Brian Vachowski and Neal Maier - USDA Forest Service and Federal Highway Administration, U.S. Department of Transportation.	Describes light-duty grading equipment that can be pulled by an all-terrain vehicle to maintain wide trails and roads. Three pieces of equipment were tested on a sandy motorcycle trail and a trailhead access road in the Francis Marion National Forest in South Carolina: a modified trail rock rake, a trail drag, and a commercial product, the Ultra Light Terrain Grader. All three pieces of equipment removed the wash boarded "whoop-de-doo" in the sandy soil. Narrower equipment would have worked better on trails. The equipment worked very well on roads and offers an affordable alternative to heavier graders for light-duty use. Other trail-grading accessories and drags for small tractors are also described.	http://www.fhwa.dot.gov/environment/fspubs/98232837/index.htm	http://www.fhwa.dot.gov/environment/rec/trails/trailpub.htm

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
Park Guidelines For Off Highway Vehicles (OHVs): A Resource Guide to Assist in the Planning, Development, Enhancement, and Operation of OHV Recreation Facilities	2002	George Fogg in association with the National Off-Highway Vehicle Conservation Council.	The 196-page document summarizes a practical approach to a multifaceted effort required to bring about a new or revised off-highway vehicle park project and keep it in good condition throughout its lifespan.	No	Phone: 800.348.6487 Email: trailhead@nohvcc.org
Planning Trails With Wildlife in Mind: A Handbook for Trail Planners	1998	Trails and Wildlife Task Force, Colorado State Parks, Hellmund Associates	A 56-page handbook for trail planners and builders to better balance the benefits of creating trails and being stewards of nature, especially wildlife.	http://www.rmc.ca.gov/projects/guidance_recipients/trailshandbook.pdf	Phone: 303.866.3437
Portland Pedestrian Design Guide	1998	City of Portland, Oregon. Office of Transportation, Engineering and Development. Pedestrian Transportation Program	The public right-of-way houses many transportation activities, including walking, bicycling, transit, freight movement, and automobile travel. Each of these functions has specific design needs and constraints. In the past, conflicts between the design needs of competing functions occasionally have produced conditions that discourage pedestrian travel. The purpose of Portland's Pedestrian Design Guide is to integrate the wide range of design criteria and practices into a coherent set of new standards and guidelines that, over time, will promote an environment conducive to walking.	http://www.trans.ci.portland.or.us/DesignReferences/Pedestrian/DesignGuide.PDF	If you would prefer to purchase a hard copy from the Office of Transportation, please send US \$15 drafted on a United States bank to: Pedestrian Coordinator, Office of Transportation. City of Portland. 1120 SW Fifth Ave. Suite 800 Portland, OR. 97204
Rail-Trail Maintenance: Preparing for the Future of Your Trail	1996	Susan Thagard, USDA Americorps. Pennsylvania Rails-to-Trails Conservancy	A 49-page study report providing trail builders with the tools to plan maintenance and management budgets and to enable them to build more cost-effective and durable trails.	http://www.trailsandgreenways.org/resources/development/manage/PA_maintenance.pdf	Phone: 877.476.9297

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
Recreational Trail Design and Construction	1997	David M. Rathke and Melvin J. Baughman	A concise and easy-to-read 28-page booklet on natural surface trails. This publication is a guide for private woodland owners, organizations, and businesses (including nature centers, youth groups, schools, conservation clubs, and resorts) that are interested in designing and constructing trails. It describes step-by-step construction methods, ways to handle trail obstacles, and recommended standards for the most common types of trails.	http://www.extensio.n.umn.edu/distribution/naturalresources/DD6371.html	Phone: 800.876.8636
Ripper Retrofit for the Sweco 480 Trail Dozer	2000	Bob Beckley: USDA Forest Service, Technology & Development Program, Missoula, Montana	Describes modifications to the ripper system for the Sweco 480 Trail Dozer. When the operator backs the dozer without lifting the ripper system, slots that individual rippers fit into become elongated, allowing the rippers to fall out. Modifications to repair this problem and prevent future problems require welding and take about 2 hours. Newer versions of the Sweco 480 Trail Dozer ripper system include this modification.	http://www.fhwa.dot.gov/environment/fspubs/00232310/index.htm	Phone: 406.329.3900
Signposts For Snow Trails	1998	Brian Vachowski: Project Leader - USDA Forest Service and Federal Highway Administration, U.S. Department of Transportation.	Describes signpost systems that work in shallow, moderate, and deep snowpacks. Traditional signposts anchored firmly in the ground work best for trails with low and moderate amounts of snow. Free-floating signposts supported only the snow around them work best in moderate to deep snowpacks. Telescoping signposts and signposts with temporary bases work for shallow, moderate, and deep snowpacks, but these systems are rarely used because they are more expensive	http://www.fhwa.dot.gov/environment/fspubs/98232806/index.htm	Phone: 406.329.3900

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
			and harder to install and maintain than traditional of free-floating signposts.		
Standard Specifications for Construction and Maintenance of Trails (Part 1: Text)	1996	USDA Forest Service - Engineering Staff	A 97-page text-only book presenting the standard specifications for construction and maintenance of trails developed for guidance of U.S. Forest Service employees, its contractors, and cooperating federal and state government agencies.	http://www.fs.fed.us/r1/helena/contracting/96_Trail_Specs_English.pdf	http://bookstore.gpo.gov/sb/sb-231.html
Standard Specifications for Construction and Maintenance of Trails (Part 2: Trail Drawings & Specifications)	1996	USDA Forest Service - Engineering Staff	Trail construction related drawings and specifications described in Part 1 (above).	http://www.fs.fed.us/ftpoot/pub/acad/dev/trails/trails.htm	http://bookstore.gpo.gov/sb/sb-231.html
Stock-Drawn Equipment for Trail Work	1996	Steve Didier and Dianne Herzberg - USDA Forest Service, Technology & Development Program, Missoula, Montana	Includes photos of stock-drawn plows and grading equipment that can be used to build and maintain trails in the backcountry. Describes the advantages and disadvantages of different types of equipment. Includes sources where the equipment can be purchased.	http://www.fhwa.dot.gov/download/hep/fspubs/962802hi.pdf	Phone: 406.329.3978
The Complete Guide to Trail Building and Maintenance, 3rd Edition	1998	Carl Demrow & David Salisbury	A 256-page classic manual for trail building. The book was developed by the Appalachian Mountain Club for workers on the Appalachian Trail, but has been widely used for natural surface trails by trailbuilders everywhere. You'll learn new techniques and be introduced to new tools, environmentally sound erosion control, and naturalizing trails with minimum impact on the backcountry.	No	http://www.engineering-shop.com/Complete_Guide_to_Trail_Building_and_Maintenance_3rd_1878239546.html

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
The Trail Assessment Handbook	1993	The Appalachian Trail Conference	The 26-page handbook describes a trail assessment process designed to analyze trail maintenance and land management needs for the Appalachian Trail to identify the most significant trail maintenance and land-management priorities and problems.	http://www.appalachiantrail.org/protect/pdfs/TA_Handbook_screen.pdf	http://www.atctrailstore.org/catalog/iteminfo.cfm?itemid=111&compid=1
Trail Bridge Catalog	2003	Merv Eriksson: Project Manager - USDA Forest Service, Technology & Development Program, Missoula, Montana	The web site is intended to help land managers and engineers select trail bridge types, decks, rail systems, abutment systems, and materials. The site is divided into five sections: Trail Bridge Types, Trail Bridge Decks, Trail Bridge Rail Systems, Trail Bridge Abutments, and Trail Bridge Materials. The Trail Bridge Types, Decks, Rail Systems, and Abutments sections contain sketches, pictures, example and/or standard drawings, and guidelines for appropriate use with the USDA Forest Service Recreation Opportunity Spectrum (ROS) classifications. Standard drawings, or example drawings, are intended for informational purposes only.	http://www.fs.fed.us/na/wit/WITPages/bridgecatalog/	No
Trail Construction and Maintenance Notebook	2000 Edition	USDA Forest Service - Technology Development Program	This notebook describes techniques used to construct and maintain trails. It is written for trail crew workers and is intended to be taken along on work projects. Numerous illustrations help explain the main points. The notebook was printed in 1996 and has been revised slightly during two reprinting. Revisions in this edition update references and reflect minor editorial changes.	http://www.fhwa.dot.gov/download/hep/fspubs/pdf00232839.pdf	http://www.fhwa.dot.gov/environment/recreational/trails/trailpub.htm

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
Trail Manual for the Florida Trail System	2001	Florida Trail Association, Inc.	The manual is to guide trail development, construction and maintenance techniques for the Florida National Scenic Trail and the Florida Trail System.	http://www.florida-trail.org/traildocs/trailmanual.pdf	Phone: 800.343.1882
Trail Shorts: A cursory look at Trail Maintenance	1996	California State Department of Parks and Recreation	A 9-page document focusing on general design and maintenance guidelines to prevent most trail deterioration and minimize maintenance costs. The document focuses on wilderness trails and is intended to be used as a reference by trail maintenance crews.	http://www.foothill.net/fta/work/trailmaint.html	No
Trail Solutions: IMBA's Guide to Building Sweet Singletrack	2004	International Biking Association. Project was supported by a grant from the Federal Highway Administration's Recreation Trails Program	The 272-page book combines cutting-edge trail building techniques with proven fundamentals in a colorful, easy-to-read format. "Trail Solutions" is an essential tool for land managers and volunteer trail builders aspiring to raise their trail systems to the next level. The book is divided into eight sections that follow the trailbuilding process from beginning to end including trail planning, tool selection, construction and maintenance. It also describes how to secure funding and support volunteers to get the job done.	No	Phone: 888.442.4622 http://www.imba.com/resources/trail_building/trail_solutions.html
Trail Traffic Counters: Update	1999	Dave Gasvoda: Project Leader. USDA Forest Service, Technology & Development Program, Missoula, Montana	This report updates a 1994 report entitled Trail Traffic Counters for Forest Service Trail Monitoring. Three types of trail counters were evaluated: active infrared, passive infrared, and seismic. The report recommends an active infrared system for most trail monitoring situations because these systems provide the most accurate counts. One	http://www.fhwa.dot.gov/environment/fspubs/99232835/index.htm	Phone: 406.329.3978

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
			disadvantage of infrared systems is that they are harder to hide from vandals than seismic systems, particularly the active infrared systems that require bright reflectors to return the beam to the sending unit. Passive infrared systems should be reserved for situations that require a small, lightweight unit that must be set up quickly. Seismic systems may be used when problems with vandalism outweigh the need for accuracy.		
Trails Design and Management Handbook	1993	Troy Parker: Pitkin County Open Space and Trails Program	The 230-page handbook was commissioned by the Pitkin County Colorado (Aspen area) Open Space and Trails Program for development of a county trail system. The handbook is designed to help produce unique trails that are uniquely suited to their sites and users. It is intended to provide recognizable design consistency between trails and to eliminate the need to start from scratch with every trail. Major sections include Trail Design Process and Guidelines, Multiple Use Hard Surface Trail Specifications, Crusher Fines Trail Specifications, and the Trail Proposal and Evaluation Process.	(Table of Contents Only) http://www.trailbuilders.org/resources/links_resources/Pitkin_Trail_Design_Intro.pdf	Pitkin County Open Space and Trails Program 530 E. Main Street, Aspen, CO 81611 Phone: 970.920.5232 or Email: tsparker@natureshape.com
Trails For the Twenty-First Century: Planning, Design, and Management Manual for Multi-Use Trails, 2nd Edition	2001	Charles Flink, Kristine Olka and Robert Searns: Rails-To Trails Conservancy	A 212-page comprehensive guidebook for planners, landscape architects, local officials, and community activities interested in creating a multi-use trail. It provides a guide through the process of creating a trail from start to finish and managing the trail for the future.	No	http://railtrails.tranguard.com/square.asp?tgs=133662:9506043&cart_id=&item_id=87

Trail Design & Maintenance Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
Trails, Bridges and Boardwalks	1994	Alan Long and Anne Todd-Bockarie - University of Florida School of Forest Resources and Conservation	This 19-page paper provides practical information for planning and developing recreational trails on forest land. It describes general designs and construction methods as well as some of the structures that may be important components of your trails, such as bridges, boardwalks, and benches. Costs are mentioned with the cautionary disclaimer that they may be highly variable depending on how you implement your recreation plans.	http://www.sfrc.ufl.edu/Extension/pubtxt/Framefor5.htm	No
Using Roundup to Treat Trail Surface Vegetation	1997	Ellen Eubanks- USDA Forest Service, Technology and Development Program.	Technical paper on using Roundup as a safe and economical way to eradicate vegetation and weeds that grow through the surfaces of trails.	http://www.fhwa.dot.gov/environment/fspubs/97231305/index.htm	Phone: 406.329.3978
Wetland Trail Design and Construction	2001	Robert Steinholtz and Brian Vachowski: USDA Forest Service in cooperation with the Federal Highway Administration, United States Department of Transportation	This 82-page manual describes materials and techniques used to construct trails in wetlands. This manual is written primarily for workers who are inexperienced in wetland trail construction, but it may also be helpful for experienced workers. Techniques suitable for wilderness settings and more developed settings are included. Drawings by the author illustrate all important points. A glossary is included, as are appendixes with material specifications.	http://www.fhwa.dot.gov/environment/fspubs/01232833/	http://www.fhwa.dot.gov/environment/rec/trails/publications.htm

Trail Accessibility Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
Designing Sidewalks and Trails for Access, Part 1, Review of Existing Guidelines and Practices	1999	U.S. Dept. of Transportation	In an effort to determine when Americans with Disabilities Act Accessibility Guidelines (ADAAG) provisions apply to sidewalks and trails, the Federal Highway Administration sponsored a project to research existing conditions on sidewalks and trails for people with disabilities. Phase I of this project reports the history of accessibility legislation; travel characteristics of people with disabilities, children, and older adults are analyzed in relation to their use of sidewalks and trails; the effects of current legislation pertaining to sidewalk and trail project planning and funding are analyzed; and current design practices used in the design of sidewalks and trails are described and analyzed in terms of accessibility, engineering, and construction.	http://www.fhwa.dot.gov/environment/sidewalks/	http://www.fhwa.dot.gov/environment/rec/trails/trailpub.htm
Designing Sidewalks and Trails for Access, Part 2, Best Practices Design Guide	2001	U.S. Dept. of Transportation	Phase II of the project focused on designing sidewalks and trails for access. It was created to provide planners, designers, and transportation engineers with a better understanding of how sidewalks and trails should be developed to promote pedestrian access for all users, including people with disabilities.	http://www.fhwa.dot.gov/environment/sidewalk2/	http://www.fhwa.dot.gov/environment/rec/trails/trailpub.htm

Trail Accessibility Publication	Year Published	Author	Description	Available On Web	To Order A Hardcopy
Soil Stabilizers On Universally Accessible Trails	2000	The Architectural and Transportation Barriers Compliance Board (Access Board)	The Americans with Disabilities Act Accessibility Guidelines state that ground and floor surfaces should be firm, stable, and slip-resistant. This publication provides field personnel with the results of soil stabilizers on universally accessible trails. The study areas were the Wood River Accessible Fishing Site and Day Use Area on the Winema National Forest and the Bell Rock Pathway on the Coconino National Forest. Seven types of trail surfacing products are discussed.	http://www.fhwa.dot.gov/environment/fspubs/00231202/lc00231202.htm	http://www.fhwa.dot.gov/environment/rec/trails/trailpub.htm
The Final Report on the Regulatory Negotiations Committee on Accessibility Guidelines for Outdoor Developed Areas	1999	National Center on Accessibility	Proposes accessibility guidelines under the Americans with Disabilities Act for Trails, outdoor recreation access routes, beach access routes, and picnic and camping facilities.	http://www.access-board.gov/outdoor/outdoor-rec-rpt.htm	Phone: (800) 872-2253 Email: info@access-board.gov
Universal Access to Outdoor Recreation: A Design Guide	1993	Federal Highway Administration, U.S. Department of Transportation and U.S.D.A. Forest Service	This award-winning book provides universal design concepts and guidelines for outdoor environment, establishing a framework for determining the appropriate level of access in outdoor sites. It presents detailed design guidelines for the systems and elements necessary for ensuring accessibility to recreational trails, campsites, picnic areas, group meeting areas, and more. Examples demonstrate how the guidelines can be applied in typical outdoor settings to achieve a range of recreational opportunities for individuals of varying abilities.	No	http://www.amazon.com/exec/obidos/tg/detail/-/0944661254/104-8615295-4367951?v=glance
What is an Accessible Trail?	2002	Project Play and Learning in Adaptable Environments (PLAE) Inc.	A technical assistance paper for developing accessible trails.	http://www.ncaonline.org/monographs/8-accessible-trails.shtml	Phone: (812) 856-4422

APPENDIX E: POTENTIAL TRAIL FUNDING SOURCES IN OREGON

FUNDING SOURCE	PROGRAM NAME	WEB ADDRESS	USES						APPLICANTS						
			Plan	Program	Develop	Acquire	Education	Equipment	Non Profit	School	City	County	State	Federal	Other
American Canoe Assoc.	Club Fostered Stewardship	http://www.acanet.org/conservation/cfs.htm			X	X									Clubs
American Hiking Society	National Trails Endowment	www.americanhiking.org			X	X									
Americorps		http://www.americorps.org/joining/direct/direct_or.html			X			X		X	X	X	X		
Avista Foundation	Avista Foundation Grants	http://www.avistafoundation.org/application.asp			X				X						
Barnes & Nobles	Affiliates Program	www.barnesandnoble.com		X					X						
Bikes Belong Coalition	Bikes Belong Grants Program	http://bikesbelong.org/site/page.cfm?PageID=21			X				X		X	X	X		
Boeing Charitable Foundation	Civic and Environmental Contributions	http://www.boeing.com/company/offices/aboutus/community/charitable.htm	X	X	X	X		X	X	X					
Center for Disease Control (CDC)	Preventive Health & Health Services Block Grant Program	http://www.cdc.gov/nccdphp/aag/aag_blockgrant.htm		X	X						X	X	X		
Coors Brewing Company	Coors Pure Water 2000 Grants	http://www.coors.com/community/philanthropy.asp			X	X									
Eastman Kodak Company	Kodak American Greenways Program	www.conservationsfund.org	X							X	X	X	X		
Federal Dept. of Health &	Healthy People 2010	www.health.gov/healthypeople	X	X					X		X	X			

FUNDING SOURCE	PROGRAM NAME	WEB ADDRESS	USES						APPLICANTS						
			Plan	Program	Develop	Acquire	Education	Equipment	Non Profit	School	City	County	State	Federal	Other
Human Services	Implementation Grants														
Federal Highway Admin.	Recreational Trails Program National Program	www.fhwa.dot.gov/environment/rectrail.htm			X	X				X		X	X	X	X
Ford Family Foundation	Rural Civic and Community Enhancement Program	http://www.tfff.org/main/guidelines.html#a			X					X					
Honda Motor Company	American Honda Foundation	http://www.hondacorporate.com/community/index.html?subsection=foundation		X						X					
Kongsgaard Goldman Foundation	Environmental Protection and Conservation Program	http://www.kongsgaard-goldman.org/program.html	X		X					X					
M.J. Murdock Charitable Trust	Programs to Strengthen the Contemporary American Family	http://www.murdock-trust.org/		X						X					Universities
Metro	Parks & Greenspaces Grants Program	www.metro-region.org								X	X	X	X		
Meyer Memorial Trust	General Purpose Grants	http://www.mmt.org/		X	X			X		X	X	X	X	X	X
National Endowment for the Arts	Challenge America Fast Track Grants	www.arts.gov		X						X					

FUNDING SOURCE	PROGRAM NAME	WEB ADDRESS	USES						APPLICANTS						
			Plan	Program	Develop	Acquire	Education	Equipment	Non Profit	School	City	County	State	Federal	Other
National Fish & Wildlife Foundation		www.nfwf.org								X	X	X	X	X	X
National Park Service	Challenge Cost-Share Program (CCSP)	http://www.nps.gov/chal/sp/jchalapp.htm		X	X			X							
National Park Service	River Trails & Conservation Assistance Program	http://www.nps.gov/ccso/rtca/application.html	X	X						X		X	X	X	X
National Park Service	Disposal of Federal Surplus Real Property for Parks and Recreation and Historic Monuments	http://www.cfda.gov/public/viewprog.asp?progid=471					X		X			X	X	X	
National Tree Trust	Multiple Programs	www.nationaltreetrust.org		X	X					X	X	X	X	X	X
New England Foundation for the Arts	Art and Community Landscapes Program	http://www.nefa.org/grantprog/acl/	Trail side Art						X		X	X	X	X	
Nike - Community Investment	Community Investment Program	http://www.nike.com/nikebiz/nikebiz.jhtml?page=26&item=giving		X						X					
Oregon Dept. of Trans.	Transportation Enhancement Program	http://www.odot.state.or.us/techserv/engineer/pdu													

FUNDING SOURCE	PROGRAM NAME	WEB ADDRESS	USES						APPLICANTS						
			Plan	Program	Develop	Acquire	Education	Equipment	Non Profit	School	City	County	State	Federal	Other
Oregon Dept. of Trans. / Oregon Dept. of Land Conservation & Development	Transportation and Growth Management Program	http://www.lcd.state.or.us/tgm/grants.htm	X								X	X			CO Gs, METRO
Oregon Economic and Community Development Dept.	Needs and Issues Inventory	http://www.econ.state.or.us/needs_issue.htm			X				X		X	X			
Oregon Parks & Recreation Dept.	ATV Fund	http://atv.prd.state.or.us/grant	X	X	X	X	X	X	X		X	X	X	X	
Oregon Parks & Recreation Dept.	Recreation Trails Program	www.prd.state.or.us/grants-rectrails.php			X	X	X	X	X		X	X	X	X	X
Oregon Parks & Recreation Dept.	Land & Water Conservation Fund	www.prd.state.or.us/grants_lwcf.php			X	X					X	X	X		X
Oregon Parks & Recreation Dept.	Local Government Grant Programs	www.prd.state.or.us/grants-localgov.php			X	X					X	X	X		X
Oregon Watershed Enhancement Board	Small Grant Program	http://www.oweb.state.or.us/SmallGrant/smallgrant.shtml			X				X		X	X	X	X	
Patagonia	Environmental Grants Program	www.patagonia.com	X	X					X		X	X			
Polaris Industries	Trail Safety and Grants	http://www.polarisindustries.com		X					X				X	X	
Power Bar	Direct impact on Rivers and Trails (DIRT)	www.powerbar.com		X											

FUNDING SOURCE	PROGRAM NAME	WEB ADDRESS	USES						APPLICANTS						
			Plan	Program	Develop	Acquire	Education	Equipment	Non Profit	School	City	County	State	Federal	Other
	Program														
Recreation Equipment Inc. (REI)	Recreation and Conservation Grants	www.rei.com		X						X					
Robert Wood Johnson Foundation		www.rwjf.org													
Rockefeller Family Fund		www.rfund.org	X	X	X										
SOLV	Project Oregon	http://www.solve.org/programs/project_oregon.asp	X	X	X				X	X	X	X	X	X	
Surdna Foundation		www.surdna.org		X	X					X		X	X	X	
The Collins Foundation		http://www.collinsfoundation.org/			X			X		X					
The Conservation Alliance		http://www.conservationalliance.com/grants.m			X	X				X					
The Hugh & Jane Ferguson Foundation	Foundation Grant Fund	http://fdncenter.org/grantmaker/ferguson/guide.html	X		X					X					
The Kresge Foundation	Bricks & Mortar Program	http://www.kresge.org/programs/index.htm		X	X					X	X	X	X	X	X
The Mountaineers Foundation		www.mountaineersfoundation.org						X	X	X	X				X
The Oregon Community Foundation	Oregon Historic Trails Fund	http://www.ocf1.org/grant_programs/grant_programs_fr.htm		X	X	X		X		X		X	X	X	X
The Oregon Community Foundation	Community Grants Fund	http://www.ocf1.org/grant_programs/community_grant		X	X			X		X					

FUNDING SOURCE	PROGRAM NAME	WEB ADDRESS	USES						APPLICANTS						
			Plan	Program	Develop	Acquire	Education	Equipment	Non Profit	School	City	County	State	Federal	Other
		fr.htm													
The Trust for Public Land		http://www.tpl.org/tier2_sa.cfm?folder_id=1825								X	X	X	x	x	
Tom's of Maine/National Park Foundation	River Conservation Grants	http://www.tomsomaine.com/toms/community/rivers2004/frameset_overview.asp			X	X	X		X						
Tread Lightly!	Restoration For Recreation	http://www.treadlightly.org/restore.mv		X					X	X	X	X	X	X	X
U.S. Dept. of Agriculture	The Conservation Reserve Program	www.fsa.usda.gov													
U.S. Dept. of Commerce Economic Development Administration	Various Grant Programs	http://www.eda.gov/InvestmentsGrants/Pgmguide.xml	X		X						X	X			
U.S. Dept. of Health & Human Services	Steps to a Healthier U.S. Initiative (STEPS)	http://www.healthierus.gov/steps/	X	X				X		X	X				Tribes
U.S. Dept. of Transportation	Transportation & Community & System Preservation Pilot Program	http://www.fhwa.dot.gov/tcsp/	X		X						X	X	X		
U.S. Fish & Wildlife Service	Partnership for Wildlife	http://federalaid.fws.gov/pw/partwld.html			X								X		
U.S. Fish & Wildlife Service	Jobs in the Woods Program	http://pacific.fws.gov							X		X	X	X		

FUNDING SOURCE	PROGRAM NAME	WEB ADDRESS	USES						APPLICANTS						
			Plan	Program	Develop	Acquire	Education	Equipment	Non Profit	School	City	County	State	Federal	Other
U.S. Forest Service	Cooperative Programs - Rural Community Assistance: Economic Recovery Program	http://www.fs.fed.us/r6/coop/Oregon%20State%20Coordinators			X					X		X	X	X	
U.S. Forest Service	Cooperative Programs - Rural Development Program	http://www.fs.fed.us/r6/coop/Oregon%20State%20Coordinators			X					X		X	X	X	
U.S. Forest Service	Urban & Community Forestry Program	http://www.fs.fed.us/ucf/			X					X		X	X	X	
Wal-Mart Foundation		www.walmartfoundation.org								X	X	X	X	X	X
Wild Bird Unlimited	Pathway to Nature Conservation Fund	www.pathwaystonature.com/index.htm			X										X

APPENDIX F: MOTORIZED TRAIL BENEFITS BIBLIOGRAPHY

Benefits of Motorized Trails Bibliography

Publications

Bruns, D. (2001). The Net Benefits Approach to Planning and Managing Recreation Use. Booklet presented at the 2002 National OHV Program Managers Conference.

Cordell, H.K., Hawks, L., Clemmons, R., English, D., and Bergstrom, J. (1991). Economic Effects of the Oregon Dunes National Recreation Area on Local Economies. Oregon Dunes National Recreation Area CUSTOMER Final Report. Southeastern Forest Experiment Station, USDA Forest Service, Athens, GA.

English, D., Burton, C., Menard, J., and Jensen, K. (2001). Estimated Economic Impact of Off-Highway Vehicles. University of Tennessee Agri-Industry and Analysis Group, Department of Agriculture.

English, D., Burton, C., Menard, J., and Jensen, K. (2001). Estimated Economic Impact of Off-Highway Vehicle Special Events. University of Tennessee Agri-Industry and Analysis Group, Department of Agriculture.

Fogg, G.E. (2002). Park Guidelines for Off-Highway Vehicles. A Resource Guide to Assist in the Planning, Development, Enhancement, and Operation of OHV Recreational Facilities. National Off-Highway Vehicle Conservation Council.

Frost, S.R. (2000). 2000 OHV User Survey. Idaho Department of Parks and Recreation.

Hazen, S. (2001). Economic Contribution of Off-Highway Vehicle Use in Colorado. Colorado Off-Highway Coalition. 25 pages.

Johnson, R., Leahy, J. (1999). The 1999 Oregon Off-Highway Vehicle User Survey. Department of Forest Resources. Oregon State University.

Lundquist, E.J. (1995). Demographics and Contributions of the Off-Highway Motorcycling Community. Proceedings of the Fourth International Outdoor Recreation and Tourism Trend Symposium and the 1995 National Recreation Planning Conference. May 1995, p. 301.

McElvany, N. (1995). Snowmobiling in Vermont: An Economic Impact Study and Snowmobile User Survey. Johnson, VT: Johnson State College and Montpelier, VT: Vermont Association of Snow Travelers.

Reiling, S.D., Kotchen, M.J., and Bennett, R.L. (1997). The Economic Impact of Snowmobiling in Maine. Proceedings of the 1997 Northeastern Recreation Research Symposium. April 6-8, 1997. Bottom Landing, N.Y. USDA Forest Service, Northeast Forest Experiment Station. GTR-NE-241.

State of California (1994). A 1993-1994 Report: Off-Highway Vehicle Recreation's Three Billion Dollar Economic Impact in California and a Profile of OHV Users: A Family Affair. State of California, Department of Parks and Recreation. Sacramento, CA.

Stynes, D., Nelson, C., and Lynch, J. (1998). State and Regional Economic Impacts of Snowmobiling in Michigan. Final Study Report. Michigan State University, East Lansing, MI.

Publications Available on the Internet

Alberta Off-Highway Vehicle Association Presentation to Sustainable Resource Development Standing Policy Committee. August 14, 2002.
http://www.altasnowmobile.ab.ca/news/land_closures/bighorn/Big_HornAug_14_AOHVA.pdf

California Archaeological Site Stewardship Program Newsletter. Volume 1, Number 3, July 2002. New Alliance—Off Highway Vehicle Users Join CASSP.
<http://www.cassp.org/newsletter/v1n3.pdf>

California State Park's Off-Road PALs Program. A unique partnership between California State Parks, OHV recreation areas and the California Police Activities League to provide urban youth with positive life-changing experiences.
http://ohv.parks.ca.gov/default.asp?page_id=1162

Economic and Demographic Profile of Wisconsin's ATV Users: Results of an Economic Survey Conducted Between June-October 2003. Wisconsin Department of Tourism Research. March 2004. http://www.nohvis.com/watva/WI_ATV_Econ03Rpt_fullReport.pdf

Estimated Economic Impacts of Off-Highway Vehicle Special Events (Industry Brief). English, B., Menard, J., and Jensen, K. Department of Agricultural Economics. University of Tennessee.
<http://www.state.tn.us/environment/ohv/ohvimpacts.pdf>

Federation of Off-Highway Vehicles Australia: Motorcycling Provides A Unique High.
<http://www.fohva.org.au/news/uniquehigh.htm>

Golden Partnership Agreements Highlight Spectacular Multiple-Use Trails. American Trails.
<http://www.americantrails.org/resources/fedland/BLMgoldTrails.html>

National Off-Highway Vehicle Conservation Council: Listing of OHV Economic Impact Studies.
http://www.nohvcc.org/html/ohv_impact.htm

OHV Groups "Take Pride In America" Blue Ribbon Magazine
<http://www.sharetrails.org/magazine.cfm?story=234>

OHV Trail Development As a Tool For Environmental Stewardship and Economic Growth.
<http://www.korr.org/pnp/800release.html>

Position in Support of Public Lands. The Benefits of Off-Highway Motorcycling. American Motorcycle Association <http://www.amadirectlink.com/legisltn/positions/lands.asp>

The Economic Importance of Off-Highway Vehicle Recreation: Economic Data on Off-Highway Vehicle Recreation for the State of Arizona and for Each Arizona County. http://www.gf.state.az.us/pdfs/w_c/OHV_Report.pdf

The Impact of Spending by ATV/Trail Bike Travel Parties on New Hampshire's Economy During July 2002 to June 2003. The Granite State All-Terrain Vehicle Association. Feb. 2004. <http://www.americantrails.org/resources/economics/NHeconOHV.pdf>

Volunteer and Youth Development: Outdoor Recreation as a Motivational Tool for Youth. Dana Bell, Project Coordinator. National Off-Highway Vehicle Conservation Council. <http://www.americantrails.org/resources/volunteer/YouthMotivate.html>

APPENDIX G: NON-MOTORIZED TRAIL BENEFITS BIBLIOGRAPHY

Benefits of Non-motorized Trails Bibliography

Publications

Bichis-Lupas, M. and Moisey, R. (2001). A Benefit Segmentation of Rail-Trail Users: Implications for Marketing by Local Communities. *Journal of Park and Recreation Administration*, 19(3), pp. 78-92.

Brownson, R., Housemann, R., Brown, D., Jackson-Thompson, A., King, B. and Salas, J. (2000). Promoting Physical Activity in Rural Communities: Walking Trail Access, Use and Effects. *American Journal of Preventive Medicine* (18) 3, pp. 235-241.

Gitelson, R., Guadagnolo, F. and Moore, R. (1988). Economic Impact Analysis of a Community-Sponsored Ten-Kilometer Road Race. *Journal of Parks and Recreation Administration*, 6(4).

Crompton, J. (2000). The Impact of Parks and Open Space on Property Values and the Property Tax Base. Ashburn, VA. National Recreation and Parks Association.

Crompton, J. (2001). Perceptions of How the Presence of Greenway Trails Affects the Value of Proximate Properties. *Journal of Park and Recreation Administration*, 19(3), pp. 114-132.

Crompton, J. (2001). The impact of parks on property values: A review of the empirical evidence. *Journal of Leisure Research*, 33(1), pp. 1-31.

Crompton, J., Love, L., and More, T. (1997). An Empirical Study of the Role of Recreation, Parks, and Open Space in Companies' (Re) Location Decisions. *Journal of Park and Recreation Administration*, 15(1), pp. 37-58.

Equestrian Land Conservation Resource. Equestrian Economic Impact Analysis: How Your Community Benefits. Order online at: <http://www.elcr.org/publist.html>

Federal Highway Administration (1992). Transportation Potential and Other Benefits of Off-Road Bicycle and Pedestrian Facilities. U.S. Department of Transportation. Case Study No. 7. Publication No. FHWA-PD-92-040. Order at: <http://www.fhwa.dot.gov/environment/bikeped/nbws-ord.htm>

Federal Highway Administration (1992). Benefits of Bicycling and Walking to Health. U.S. Department of Transportation. Case Study No. 14. Publication No. FHWA-PD-93-025. Order at: <http://www.fhwa.dot.gov/environment/bikeped/nbws-ord.htm>

Feeney, S.(1997). The Mohawk-Hudson Hike-Bike Trail and Its Impact on Adjoining Residential property. Schenectady, NY: Schenectady County Department of Planning.

Frauman, E. and Cunningham, P. (2001). Using a Means-End Approach to Understand the Factors that Influence Greenway Use. *Journal of Park and Recreation Administration*, 19(3), Pp. 93-113.

Haigood, T., and Crompton, J. (1998). The Role of Recreation Amenities in Retiree Location Decisions. *Journal of Park and Recreation Administration*, 16(1).

Kent, M., Gilbertson, D. and Hunt, C. (1997). The Educational Value of the Rural Trail: A Short Walk in Lancashire. *Journal of Geography in Higher Education*, 21(3), pp. 349-362.

Lee, B., and Shafer, S. (2002). The Dynamic Nature of Leisure Experience: An Application of Affect Control Theory. *Journal of Leisure Research*, 34(3), pp. 290-310.

Little, C.E. (1991). *Greenways for America*. Baltimore: The Johns Hopkins University Press.

Moore, R., Gitelson, R, and Graefe, A. (1994). The Economic Impacts of Rail-Trails. *Journal of Parks and Recreation Administration*, 12(2).

Moore, R. and Barthlow, K. (1998). *The Economic Impacts and Uses of Long-Distance Trails: Featuring a Case Study of the Overmountain Victory National Historic Trail, Washington, D.C.* National Park Service.

Moore, R. and Ross, D. (1998). *Trails and Recreational Greenways: Corridors of Benefits*. *Parks and Recreation*, 33(1), pp. 68-79.

Murphy, M. (1992). *The Impact of Brush Creek Trail on Property Values and Crime*. Sonoma State University: Environmental Studies and Planning Department.

National Park Service Rivers, Trails and Conservation Assistance Program (1992). *The Impacts of Rail-Trails, A Study of Users and Nearby Property Owners From Three Trails*. For sale by the U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328, ISBN 0-16-041677-9.

National Park Service (1990). *Trails For All Americans: The Report of the National Trails Agenda Project*. Prepared through a Cooperative Agreement between American Trails and the U.S. Department of the Interior, National Park Service.

Renner, J. (1994). *Making a Case for the Economic Benefits of Historic and Heritage Tourism*. Paper presented at the 12th. National trails Symposium, Anchorage, AS, September 28 - October 1, 1994.

Shafer, C., Lee, B., and Turner, S. (2000). A Tale of Three Greenway Trails: User Perceptions Related to Quality of Life. *Landscape and Urban Planning: An International Journal*, 49, pp. 163-178.

Shafer, C., Scott, D., and Mixon, J. (2000). A Greenway Classification system: Defining the Function and Character of Greenways in Urban Areas. *Journal of Park and Recreation Administration*, 18(2), pp. 88-106.

Siderelis, C. and Moore, R. (1995). Outdoor Recreation Benefits of Rails-Trails. *Journal of Leisure Research*, 27, pp. 344-359.

Swan, L. (1991). Preliminary Economic Impact Analysis: Three Alternative Uses of the Oregon, California, and Eastern Railway Company Right-of-Way Between Klamath Falls and Bly, Oregon. Klamath Falls, OR: USDA Forest Service, Winema National Forest, Pacific Northwest Region.

Teddler, L. (1995). Do Greenways Make Good Neighbors? Evidence From a Survey of Adjacent Residents in Cary, North Carolina. Chapel Hill, NC: Center for Urban and Regional Studies, University of North Carolina.

Turco, D. and Kelsey, C. (1993). Measuring the Economics of Special Events. *Parks and Recreation*, (28)12, pp. 33-37.

Publications Available on the Internet

A Guide To Transportation Enhancements: Enhancing America's Communities. Nov. 2002. National Transportation Clearinghouse.

<http://www.enhancements.org/misc/TEGuide2002.pdf>

A Healthy Active Oregon: The Statewide Physical Activity Plan. Oregon Coalition for Promoting Physical Activity. February 2003.

<http://www.dhs.state.or.us/publichealth/hpcdp/physicalactivityandnutrition/paplan.pdf>

A Step in the Right Direction. The Health Benefits of Hiking and Trails. American Hiking Society. http://www.americanhiking.org/news/pdfs/health_ben.pdf

ACES: Active Community Environments Initiative. National Center for Chronic Disease Prevention and Health Promotion. <http://www.cdc.gov/nccdphp/dnpa/aces.htm>

Active Communities. How Trails Benefit Your Neighborhood. American Hiking Society.

http://www.americanhiking.org/news/pdfs/active_com.pdf

Benefits of Greenways: A Pennsylvania Study. (2002). Pennsylvania Greenways Partnership Commission. <http://www.pagreenways.org/toolbox/Benefits.pdf>

Benefits of Trails and Greenways. Pathways to Nature and Kinship. James Swan. Presented at the National Trails Symposium. September 21 - 24, 2000.

<http://www.americantrails.org/resources/benefits/NatureKinBene.html>

Benefits of Trails and Greenways. Ten Reasons to Consider a Trail or Greenway in Your Next Project. American Trails.

<http://www.americantrails.org/resources/benefits/10reasons.html>

Benefits of Trails and Greenways. Trails and Greenways Clearinghouse.

<http://www.americantrails.org/resources/benefits/BenefitsGrnwy.html>

Benefits of Trails and Greenways. Unplugged and Reconnected: Working Toward A New Mentality For Trails. By Robert Searns. American Trails.

<http://www.americantrails.org/resources/benefits/unpluggedSearns.html>

Benefits of Trails and Greenways: Anchorage Trail System Adds To Quality of Life. Julie Madden. <http://www.americantrails.org/resources/benefits/GrnwyAnchorage.html>

Benefits of Trails and Greenways: Artful Ways: Enhancing Trails and Greenways With Art and Artists. Charles Tracy. American Trails.

<http://www.americantrails.org/resources/benefits/ArtfulWays.html>

Benefits of Trails and Greenways Fact Sheet. Trails and Greenways Clearinghouse.

http://www.trailsandgreenways.org/resources/benefits/topics/tgc_benefits.pdf

Benefits of Trails and Greenways. Health Programs and Trails. American Trails.

<http://www.americantrails.org/resources/benefits/HealthTwoArtic.html>

Benefits of Trails and Greenways. Health-Based Benefits of Parks, Trails and Open Space. American Trails. <http://www.americantrails.org/resources/benefits/HealthGrnwy.html>

Benefits of Trails and Greenways. More News and Research on Trails and Health. American Trails. <http://www.americantrails.org/resources/benefits/HealthNews3.html>

Benefits of Trails and Greenways: Outdoor Recreation As A Motivational Tool For Youth. Mary Midkiff. American Trails.

<http://www.americantrails.org/resources/benefits/HorsesGiveBene.html>

Benefits of Trails. Rails-to-Trails Conservancy.

<http://www.railtrails.org/benefits/recreation/default.asp>

Benefits of Walking. Pedestrian and Bicycle Information Center.

<http://www.walkinginfo.org/pp/benefits/printerversion.htm>

Bicycle Tourism In Maine: Economic Impacts and Marketing Recommendations. Executive Summary. April 2001. Maine Department of Transportation.

<http://www.maine.gov/mdot/opt/pdf/biketourismexecsumm.pdf>

Case Studies: Trails and Greenways Clearinghouse.

Virginia Civil War Trails:

<http://www.trailsandgreenways.org/resources/development/casestud/VACivilWarTrails.pdf>

Silver Comet Trail (GA):

<http://www.trailsandgreenways.org/resources/development/casestud/SilverComet.pdf>

Misphillion River Greenway (DE):

<http://www.trailsandgreenways.org/resources/development/casestud/misphillionRiverGreenway.pdf>

Great Allegheny Passage (PA, MD):

<http://www.trailsandgreenways.org/resources/development/casestud/GreatAlleghenyPassage.pdf>

Mineral Belt Trail (CO):

<http://www.trailsandgreenways.org/resources/development/casestud/MineralBeltTrail.pdf>

Greenway Trail (TN):

<http://www.trailsandgreenways.org/resources/development/casestud/GreenwayTrail.pdf>

Community Benefits. The Social and Economic Benefits of Transportation Enhancements. National Transportation Clearinghouse. <http://www.enhancements.org/misc/benefits.pdf>

Community Benefits of Open Space. John Crompton.

http://www.tpl.org/content_documents/tx_H-GBenefits.pdf

Communities by Design: Influencing Your Communities Quality of Life. The American Institute of Architects. <http://www.aia.org/gov/CommByDesign.pdf> - <http://www.aia.org>

Connectivity: Reconnecting People and Places. Rails-to-Trails Conservancy.

<http://www.railtrails.org/benefits/connectivity/default.asp>

Creating Walkable Communities: A Guide for Local Governments - Mid-America Regional Council. http://www.bikewalk.org/assets/pdf/Creating_Walkable_Communities.pdf

Economic Benefits, Making Open Space. Leger, M. GORP.

http://gorp.away.com/gorp/features/trusts/econ_ben.htm

Economic Benefits of Trails and Greenways. Rails To Trails Conservancy.

http://www.trailsandgreenways.org/resources/benefits/topics/tgc_economic.pdf

Economic Impacts of Protecting Rivers, Trails and Greenway Corridors. Rivers Trails and Conservation Assistance, National Park Service. 1995, Fourth Edition (Revised).

http://www.nps.gov/pwro/rtca/econ_all.pdf

Chapter 7: Corporate Relocation and Retention: <http://www.nps.gov/pwro/rtca/crppte.htm>

Economic Impacts of Trails: Forest Recreation's Growing Impact. American Trails.

<http://www.americantrails.org/resources/economics/EconForestRec.html>

Enhancing The Environment With Trails and Greenways. Trails and Greenways Clearinghouse.

http://www.trailsandgreenways.org/resources/benefits/topics/tgc_conenv.pdf

Estimating the Economic Benefits of Bicycling and Bicycling Facilities: An Interpretive Review and Proposed Methods (2004). Krizek, K. University of Minnesota.
<http://www.enhancements.org/trb/trb2004/TRB2004-000070.pdf>

Evaluation of the Burke-Gilman Trail's Effect on Property Values and Crime. Seattle Engineering Department. May 1987. <http://www.massbike.org/bikeways/wayside/westapp4.htm>

Green Infrastructure: Smart Conservation For The 21st Century. Benedict, M., and McMahon, E. (2001). The Conservation Fund. Sprawl Watch Clearinghouse Monograph Series.
<http://www.sprawlwatch.org/greeninfrastructure.pdf>

Growing Demand for Safe Walking and Bicycling. The Perspective of the Pedestrian and Bicycle Information Center. A Four-Year Report. Jan. 2003.
<http://www.pedbikeinfo.org/pdf/fouryearreport.pdf>

Health and Wellness Benefits. Rails To Trails Conservancy.
http://www.trailsandgreenways.org/resources/benefits/topics/tgc_health.pdf

Healthy Communities/Healthy Economies. The Trust for Public Lands.
http://www.tpl.org/tier3_cd.cfm?content_item_id=1339&folder_id=829

Historic Preservation and Community Identity. Rails To Trails Conservancy.
http://www.trailsandgreenways.org/resources/benefits/topics/tgc_historic.pdf

How Land Use and Transportation Systems Impact Public Health. A Literature Review of the Relationship Between Physical Activity and Built Form. Frank, L., Engelke, P., Schmid, T., and Killingsworth, R. (Working Document). ACES: Active Community Environments Initiative Working Paper #1. pp. 147. <http://www.cdc.gov/nccdphp/dnpa/pdf/aces-workingpaper1.pdf>

How Land Use and Transportation Systems Impact Public Health: An Annotated Bibliography. Frank, L., Engelke, P., and Hourigan (Working Document). ACES: Active Community Environments Initiative Working Paper #2. pp. 63.
<http://www.cdc.gov/nccdphp/dnpa/pdf/aces-workingpaper2.pdf>

Link Between Health and Sprawl Makes "Smart" Growth Look Even Smarter. Active Living By Design 3/1/04.
http://www.activelivingbydesign.org/news/?fuseaction=press_detail&subject=general&category=Land%20Use&press_id=15905

Measuring the Health Effects of Sprawl. A National Analysis of Physical Activity, Obesity and Chronic Disease. McCann, B. and Ewing, R. (2003). Smart Growth America. Surface Transportation Policy Project. pp. 48.
<http://www.smartgrowthamerica.org/report/HealthSprawl8.03.pdf>

Mountain Biking at Ski Resorts - An overview.
http://www.imba.com/resources/bike_management/ski_resorts_overview.html

Mountain Biking Tourism Success Stories. International Mountain Bicycling Association.
http://www.imba.com/resources/organizing/tourism_success.html

More News and Research on Trails and Health. American Trails.
<http://www.americantrails.org/resources/benefits/HealthNews3.html>

National Partnership Promotes Health and Recreation. National Center for Chronic Disease Prevention and Health Promotion.
<http://www.cdc.gov/nccdphp/dnpa/physical/partnership.htm>

Obesity and The Environment. Initiatives of the National Institute of Environmental Health Sciences. <http://www.niehs.nih.gov/drcpt/beoconf/factsht.pdf>

Omaha Recreational Trails: Their Effect on Property Values and Public Safety. Greer, D. (2000). Partial Funding Provided by Challenge Cost Share Grant Program Rivers and Trails Conservation Assistance, National Park Service.
<http://www.americantrails.org/resources/adjacent/OmahaStudy.html>

Oregon State University Bicycle Tourism Evaluation Proposal.
http://www.odot.state.or.us/tddresearch/05_Multimodal/BicycleTourismOSUProposal.pdf

Physical Activity and Health. A Report of The Surgeon General. U.S. Department of Health and Human Services. Centers for Disease Control and Prevention. National Center For Chronic Disease Prevention and Health Promotion. 1996. pp. 300.
<http://www.cdc.gov/nccdphp/sgr/pdf/sgrfull.pdf> - <http://www>

Planning Healthier Suburbs, Where Cars Sit Idle and People Get Moving. American Trails.
<http://www.americantrails.org/resources/health/SuburbBrody.html>

Policy Prescriptions for Healthier Communities. Pollard, T. (2003). American Journal of Health Promotion, September/October 18(1), pp. 109-113.
http://www.activelivingbydesign.org/resources/ajhppolicyprescriptions_pollard.pdf

Preserving Historic and Cultural Resources. Trails and Greenway Clearinghouse.
<http://digilander.libero.it/greenways/pdf/5%5B1%5D.pdf>

Promoting Physical Activity Through Trails. National Center for Chronic Disease Prevention and Health Promotion. <http://www.cdc.gov/nccdphp/dnpa/physical/trails.htm>

Property Values and Landowner Concerns. The B&O Netliner.
http://www.rcdi.org/trailissues/concerns_prop_values.html

Rail Trails and Safe Communities: The Experience On 372 Trails. Tracy, T. and Morris, H. (1998). Rails to Trails Conservancy. <http://www.enhancements.org/rtcdocs/safecomm.pdf>

Rail Trails And Special Events: Community and Economic Benefits. (2001). Nelson, C., Vogt, C., Lynch, J., and Stynes, D. Paper presented at the 2001 Northeast Recreation Research Symposium, April 1-3, 2001, Bolton Landing, NY. <http://www.prr.msu.edu/trails/nerrfinal.htm>

Relationship Between Urban Sprawl and Physical Activity, Obesity, and Morbidity. American Ewing, R., Smid, T., Killingsworth, R., Zlot, A., and Raudenbush, S. (2003). Journal of Health Promotion. September/October 18(1). Pp. 47-57. <http://www.smartgrowthamerica.org/report/JournalArticle.pdf>

Safe Routes To School: A National Movement in Need of Federal Support. American Bikes. [http://www.americabikes.org/images/resource/saferouts/SRTS Fact Sheet.pdf](http://www.americabikes.org/images/resource/saferouts/SRTS_Fact_Sheet.pdf)

Spiritual Pilgrimages and Sacred Places: Applying Feng Sui To Trails and Greenways. Presented at the National Trails Symposium. November 16, 1998. <http://www.americantrails.org/resources/planning/SpiritualPilgrimPlan.html>

Study Links Health to Neighborhood Design. National Public Radio. All Things Considered Audio File. <http://www.npr.org/features/feature.php?wfld=1415707>

Ten Reasons to Consider a Trail or Greenway in Your Next Project. American Trails. <http://www.americantrails.org/resources/benefits/10reasons.html>

The Benefits That Trails Provide to Communities. San Diego County Strategic Plan. <http://www.americantrails.org/resources/benefits/SDCountyPlan.pdf>

The Challenges in Health: Getting America Moving Again. National Center for Bicycling and Walking. http://www.bikewalk.org/challenge/challenge_health.htm

The Economic and Social Benefits of Off-Road Bicycling and Pedestrian Facilities. (1995). NBPC Technical Brief. National Bicycle and Pedestrian Clearinghouse. Technical Assistance Series, Number 2, September 1995. http://www.imba.com/resources/science/econsoc_benefits.html

The Economic Benefits of Parks and Open Space: How Land Conservation Helps Communities Grow Smart and Protect the Bottom Line. The Trust for Public Lands. http://www.tpl.org/tier3_cd.cfm?content_item_id=1195&folder_id=727

The Economic Benefits of Trails Fact Sheet. Feb. 2004. American Hiking Society. http://www.americanhiking.org/news/pdfs/econ_ben.pdf

The Economic Benefits of Trails: Trail Monitor 1. Go for Green, The Active Living and Environment Program. <http://www.lin.ca/lin/resource/html/sp0039.pdf>

The Economic Benefits of Bicycle and Pedestrian-Based Tourism. National Center for Bicycling and Walking. http://www.bikewalk.org/assets/Reports/economic_impact.htm

The Economic Benefits of Mountain Biking at One of its Meccas: An Application of the Travel Cost Method to Mountain Biking in Moab, Utah. Fix, P. and Loomis, J., Colorado State University. http://www.imba.com/resources/science/economic_moab.html

The Economic Benefits of Parks and Open Space. (1999). How Land Conservation Helps Communities Grow Smart and Protect the Bottom Line. Lerner, S. and Poole, W. Trust For Public Land. <http://safety.fhwa.dot.gov/fourthlevel/pdf/econbenz.pdf>

The Economic Cost of Physical Inactivity in Michigan: Executive Summary. Michigan Fitness Foundation. <http://www.michiganfitness.org/indexpagedownloads/CostofInactivity.pdf>

The Economic Impacts and Uses of Long-Distance Trails: A Case Study of the Overmountain Victory National Historic Trail (1998) Moore, R. and Barthlow, K. Prepared for United States Department of the Interior National Park Service. <http://ntl.bts.gov/lib/12000/12200/12275/12275.pdf>

The Importance of Physical Activity. National Center for Chronic Disease Prevention and Health Promotion. <http://www.cdc.gov/nccdphp/dnpa/physical/importance/index.htm>

The Environmental Benefits of Bicycling and Walking. National Bicycling and Walking Study (1993). U.S. Dept. of Transportation. Federal Highway Administration. Case Study No. 15. Publication No. FHWA-DD-93-015. <http://www.americantrails.org/pdf/BikePedBen.pdf>

The Property Value Effects of the South Ridgeline Trail in Eugene, OR. Jensen, D., and Durham, J. (2003). http://economics.uoregon.edu/honors/2003/Ridgeline_paper.pdf

The Social, Health and Heritage Benefits of Trails. Trail Monitor 2. Go For Green, The Active Living and Environment Program. <http://www.americantrails.org/pdf/BikePedBen.pdf>

Thinking Green: A Guide to the Benefits and Costs of Greenways and Trails. (1998). Florida Department of Environmental Protection, Office of Greenways and Trails. <http://www.dep.state.fl.us/gwt/publications/thinkgreen.pdf>

Tips From IMBA on Developing Mountain Biking Tourism. International Mountain Bicycling Association. http://www.imba.com/resources/bike_management/tourism.html

Traffic Calming, Auto-Restricted Zones and Other Traffic Management Techniques - Their Effects on Bicycling and Pedestrians. Case Study No. 19. National Bicycling and Walking Study. U.S. Department of Transportation. Federal Highway Administration. <http://www.bikewalk.org/assets/pdf/CASE19.PDF>

Trail Effects on Neighborhoods: Home Value, Safety, Quality of Life. Webel, S. American Trails. <http://www.americantrails.org/resources/adjacent/sumadjacent.html>

Trails Across Time... Trails Across Adversity: Re-Thinking The Benefits of Trails and Greenways: Opinions by Robert Searns. American Trails.

<http://www.americantrails.org/resources/benefits/RethinkingSearns.html>

Trails and Greenways: Advancing the Smart Growth Agenda. Rails-to-Trails Conservancy. 2002. <http://www.enhancements.org/rctdocs/tgandsg.pdf>

Trails and Greenways For Livable Communities. Trails and Greenways Clearinghouse.

http://www.trailsandgreenways.org/resources/benefits/topics/tgc_fs_livable.pdf

Trails For Health: Promoting Healthy Lifestyles and Environments (Brochure). U.S. Department of Health and Human Services.

<http://www.americantrails.org/resources/benefits/TrailsHealth.pdf>

Twenty-Five Communities Begin Projects to Promote Active Living. American Trails.

<http://www.americantrails.org/resources/health/ActiveLivGrant03.html>

Walk Which Way? How Health and Fitness Professionals Can Use Pedometers to Achieve Current Physical Activity Recommendations. LeMasurier, G. American College of Sports Medicine. Health and Fitness Journal. January/February 2004.

<http://www.acsm-healthfitness.org/pt/re/acsm/pdfhandler.00135124-200401000-00006.pdf;jsessionid=AoEB45bRsey8FelMOOG9F54LjHxnSYLe9pSgl71z1lwGM25uzUsVI-1534462964>

What Can "Birding Economics" Bring To Oregon Communities? Oregon Cascades Birding Trail.

<http://www.oregonbirdingtrails.org/economics.htm>

APPENDIX H: WATER TRAIL BENEFITS BIBLIOGRAPHY

Benefits of Water Trails Bibliography

Publications

Anderson, A., Hewitt, L., & Marcouiller, D. (2001). Canoeing and Angling in Southwestern Wisconsin: A look at recreation and community change over time. Center for Community Economic Development, University of Wisconsin- Extension.

Bowker, J.M., English, D.B.K. & Donovan, J.A. (1996). Toward a Value for Guided Rafting on Southern Rivers. *Journal of Agriculture and Applied Economics*, 28(2), pp. 423-432.

Carlson, B., Propst, D., Stynes, D., and Jackson, R. (1995). Economic Impact of Recreation on the Upper Mississippi River System, Technical Report EL 95-16. U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, MS.

Colby, B.G., Leones, J., Mullahy-Koenig, C., & Ryan, L. (1994). River Recreation and the Economy of Northern New Mexico. Tucson, AZ.: University of Arizona, Department of Agriculture and Resource Economics.

Cordell, H.K., Bergstrom, J.C., Ashley, G.A., & Karish J. (1990). Economic Effects of River Recreation on Local Economics. *Water Resources Bulletin*, 26(1), pp. 53-60.

English, D.B.K., & Bowker J.M. (1996). Economic Impacts of Guided Whitewater Rafting: A Study of Five Rivers. *Water Resources Bulletin*, 32(6), pp. 1319-1328.

Moore, R.L., & Siderelis, C. (2003). Use and Economic Importance of the West Branch of the Farmingham River. Department of Parks, Recreation and Tourism Management. North Carolina State University, Raleigh, N.C.

Northeast Natural Resource and National Wildlife Federation. (1997). *Wet, Wild, and Profitable: A Report on the Economic Value of Water-Based Recreation in Vermont*. Montpelier, Vermont.

Oregon Rivers Council. (1992). *The Economic Imperative of Protecting Riverine Habitat in the Pacific Northwest*. Report No. V.

Sanders, L.D., Walsh, R.G., & McKean, J.R. (1991). Comparable Estimates of the Recreational Value of Rivers. *Water Resources Research*, 27(7), pp. 1387-1394.

Thigpen, J. (2001). North Carolina Coastal Plain Paddle Trails Initiative: The State of North Carolina Coastal Paddling Survey. North Carolina Sea Grant, North Carolina State University, Department of Parks, Recreation and Tourism Management.

Tillinghast, B., Rasnford, K., Gangemi, J., & English, D.B. K. (1998). What's a River Worth? *Journal of the America Whitewater*, 38(6).

Web, C. (1998). *Liquid Assets: West Virginia's Whitewater Rafting*. Hemispheres. Greensboro, NC: Pace Communications, Inc. April (3).

Welle, P.G., & Baer, N.W. (1997). Users, Attitudes, and Values of Recreation Participants on the Mississippi Headwaters. *Journal of Applied Recreation Research*, 22(2), pp. 123-156.

Publications Available on the Internet

Benefits of Water Trails. Alliance for the Chesapeake Bay.

<http://www.acb-online.org/project.cfm?vid=98>

Case Studies of Water Trail Impacts on Rural Communities. NPS Rivers, Trails and Conservation Assistance Program. Lindsay Johnson.

<http://www.nps.gov/ncrc/programs/rtca/helpfultools/wtimpacts.pdf>

Clean Water Enforcement. American Canoe Association. <http://www.acanet.org/consERVE-cleanwater.htm>

Club Fostered Stewardship Program. American Canoe Association.

<http://www.acanet.org/consERVE-cfs.htm>

Economic Benefits of Conserved Rivers: An Annotated Bibliography. National Park Service Rivers, Trails and Conservation Assistance Program.

<http://www.nps.gov/ncrc/programs/rtca/helpfultools/fulabib.pdf>

Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors: A Resource Book (1995). National Park Service: Rivers and Trails and Conservation Assistance Program. Fourth Edition Revised. http://www.nps.gov/pwro/rtca/econ_all.pdf

New Study Quantifies Economic Benefits of Protecting Farmington River. American Rivers.

<http://www.amrivers.org/index.php?module=HyperContent&func=display&cid=611>

Principals of North American Water Trails, Inc. North American Water Trails, Inc.

<http://www.bayaccess.org/nawt.html>

Taking A Second Look: Communities and Dam Removal. Green Fire Productions.

http://www.greenmedia.org/programs/second_look.html

Use and Economic Importance of the West Branch of the Farmingham River. American Rivers and the National Park Service.

Part 1: http://www.amrivers.org/doc_repository/FinalFarmingtonReportA.pdf

Part 2: http://www.amrivers.org/doc_repository/FinalFarmingtonReport2B.pdf

Using Economics as a River Conservation Tool. River Network.

http://www.rivernetnetwork.org/library/index.cfm?doc_id=162

Water Trails: Ribbons of Discovery. National Park Service Rivers, Trails and Conservation Assistance Program.

http://www.nps.gov/ncrc/programs/rtca/whatwedo/recent_innovations/wwd_ri_wtrtrail.html

What are the Benefits of Water Trails? Open Lands Project.

<http://www.openlands.org/watertrails.asp?pgid=106>

Wild and Scenic Chattooga River: An Economic Asset to GA, NC, SC. American Rivers.

<http://www.amrivers.org/index.php?module=HyperContent&func=display&cid=673>

Willamette Legacy. Green Fire Productions.

<http://www.greenmedia.org/programs/willamette.html>

Wisconsin Water Trails: Basic Concepts.

<http://www.uwsp.edu/cnr/uwexplakes/publications/watertrails/concepts.htm>

Water Trail Brochures

Lower Columbia River Water Trail

Lower Columbia River Estuary Partnership

Available from the Lower Columbia River Estuary Partnership

Phone: (503) 226-1565

Email: lcrep@lcrep.org

Why Water Trails?

North American Water Trails, Inc.

Available from North American Water Trails, Inc.

PO Box 53329

Washington, D.C. 20009-9329

APPENDIX I: LIST OF REGIONAL MOTORIZED TRAIL ISSUE COMMENTS

REGIONAL MOTORIZED TRAIL ISSUE COMMENTS

NORTHWEST REGION (Portland) 5/21/03

(Northwest Region includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lincoln, Benton and Lane Counties)

Public Recreation Provider Session (Portland)

(Daytime Session)

Attendance: 21 people attended the meeting including representation from:

Oregon Parks & Recreation Department	City of Aurora
Bureau of Land Management	City of Gresham
U.S. Forest Service	City of Hubbard
Oregon Department of Forestry	City of Oregon City
METRO	City of Portland
Tualatin Hills P&R Dist.	City of Salem
Oregon Historic Trails Advisory Council	City of Tigard
Clackamas County	City of Woodburn
Tillamook County	
Oregon Recreational Trails Advisory Council	

Motorized Trail Issues

1. There is a need to better manage for trail-related environmental impacts and resource protection through careful selection of riding area locations, planning, design and public education (14 dots).
2. There is a need for trail-user education including programs such as Leave-No-Trace and Tread Lightly and education regarding riding regulation, shared use and information resources currently available (11 dots).
3. There are a growing number of OHV enthusiasts in the Willamette Valley—but few close-to-home riding opportunities available. As a result, these people are traveling considerable distances to use existing trails. There is a need to develop high-use OHV riding areas near major population centers in the region (6 dots).
4. There is a need for adequate and consistent information resources including signs, maps, brochures, websites, and a central statewide website to access such information in a single location (7 dots).
5. There is a need for natural and cultural interpretation at riding areas in the region (5 dots).
6. There is a need for challenging off-road riding areas in the region designed to accommodate a variety of equipment types and skill levels—especially for 4-Wheel Drive vehicles (4 dots).
7. The advantage of a statewide trails plan and system is that smaller communities have any opportunity for recognition and participation (2 dots).

8. In coastal areas of the region, the biggest issue is OHV noise. The statewide noise limit at riding areas in Oregon is currently 99 db, but on the Oregon Dunes its 92 db. This reduction has made a huge difference in how motorized recreation is looked at by non-motorized recreationists (1 dot).
9. There is a growing need to address the issue of drinking and OHV driving. This issue should be addressed through management and adopting appropriate regulations and enforcement in order to change current behavior at riding areas (0 dots).
10. There is a need to simplify the complexity of the user fee and permit requirements for recreational use within the region (0 dots).
11. There is a need for connectivity of trail systems in the region (0 dots).
12. There is a need to develop "Best Management Practices" for trails including environmental and code compliance and trail designs that are compatible with the natural environment (0 dots).
13. There is a need to develop linkage/partnerships with the Tourism Council to promote our trail resources, interpret our natural and cultural history, and promote trails as an Oregon tourism attraction. Because of its scenic beauty and weather, Oregon should own summer tourism. There is a need to develop a central clearinghouse for trail opportunities including ordinance maps (0 dots).

General Public Session (Portland)
(Evening Session)

Attendance: 15 people attended the meeting.

Motorized Trail Issues

1. There is a need for new trails within the region including loops and one-way trails (8 dots).
2. Developing additional trails disperses use and reduces impacts (3 dots).
3. Motorized trails should not be closed simply because they are not in managed OHV areas—especially dual sport bike trails in remote settings (3 dots).
4. There is a need to address mix-use trail problems (e.g. motorized/non-motorized, motorcycle/4X4) such as safety and trail impacts (3 dots).
5. There is a need for mapping of existing trails (recognized by agencies) within the region (3 dots).
6. There is a need for maintenance and rehabilitation of trails (e.g. upgrading of trail bridges) within the region. This could be accomplished by making trail maintenance and rehabilitation a higher priority for the ATV grant fund (2 dots).
7. There is a need for additional staffing and "Best Management Practices" to satisfy a growing demand for special events within the region (2 dots).

8. There is a need for better OHV "sound" management including better enforcement, user education and studies regarding sound reduction and impacts on wildlife. Sound study findings could be used to reduce noise levels and as a tool to open more areas to riding and keep sensitive areas open for OHV use (2 dots).
9. There is a need for "Best Management Practices" to repair trails after logging, riding area site selection, sound, safety and reducing user conflicts between motorized and non-motorized trail users (1 dot).
10. There is a need for better and more consistent methods for estimating visitor use at managed OHV areas. There is also a need to allocate funds for developing accurate OHV use information at high-use locations in the state (1 dot).
11. There is a need to develop environmental monitoring standards and provide funding for environmental assessments (including environmental impact statements) to avoid negative court decisions that could close riding areas (1 dot).
12. Training safety facilities are important for motorized use in the Portland area (1 dot).
12. There is a need for safety training and education for youth within the region (0 dots).
13. There is a need for signing consistency between agencies and riding areas (0 dots).
14. There is an increasing amount of use of ATV's by families (including children) within the region (0 dots).
15. There is a need to bring back the Back Country Discovery Route (0 dots).
16. There is a need for agencies and users/volunteers to work together for trail planning, mapping and maintenance (0 dots).

NORTHWEST REGION (Lincoln City) 5/20/03

(Northwest Region includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lincoln, Benton and Lane Counties)

Public Recreation Provider Session (Lincoln City) (Daytime Session)

Attendance: 7 people attended the meeting including representation from:

- Oregon Parks & Recreation Department
- Bureau of Land Management
- Oregon Department of Forestry
- City of Newport
- Tillamook County

Motorized Trail Issues

A. There is a need to better understand the capacity/limits of motorized areas in the region to better protect natural resources, trail resources and facilities, quality of riding experience, adjacent property and ensure user safety. In addition, we need to better address riding capacity issues at a region level rather than at a local level. Decisions to limit riding at one area will simply displace riders to other areas (5 dots).

B. There is a need for additional law enforcement in motorized riding areas in the region. The current level of law enforcement is not adequate to properly protect trail resources and facilities (4 dots).

C. There is a need for better trail development and management coordination between agencies and private landowners due to the region's checkerboard land ownership. Trail connections between riding areas will help to better utilize existing trail systems and reduce the level of road riding within the region. In addition, closure of motorized trails on private lands are resulting in more riding pressure on public lands within the region (3 dots).

D. There is a substantial increase in off-road 4-wheel drive vehicle use in the region. According to recreation providers, this use has resulted in trail damage and resource impacts. As a result, there is a need for trails specifically designed for high-challenge 4-wheel drive use. Such trails should be designed for a wide range of vehicles types (from Hum-Vees to Suzuki Samarai) and accommodate a range of vehicle widths and driving capabilities (2 dots).

E. There is a need for more maintenance on existing motorized trails within the region as a result of increasing use levels (2 dots).

F. There is a need for increased promotion of safety-related information (permits, licensing, training, how to avoid user conflicts) and more safety training facilities, instructors, and more user-friendly training schedules (times and locations) (2 dots).

G. There is a need to disburse an increasing number of motorized users from the Willamette Valley through the development of more remote staging areas (with a varied range of improvements), additional trail systems, and better maps and signage on existing trails (1 dot).

H. There is overcrowding at many developed riding areas in the region. The result of such overcrowding is spillover and resource damage/impact to adjacent lands (both public and private) surrounding the riding areas (1 dot).

I. There are a growing number of out-of-state riders in the region coming from areas such as Southwest Washington as a result of riding area closures in such out-of-state areas (0 dots).

J. Motorized recreation requires greater levels of staffing to maintain order and protect the resource and quality of rider experience. Staffing increases are needed to address an increasing amount of lawlessness (e.g., drinking and driving, partying behavior and public nudity) at riding areas in recent years. We must proactively address this situation in order to ensure the safety of riders at OHV areas within the region (0 dots).

K. Trail planning and development should focus on the type of rider experience provided at riding areas within the region. Land managers should strive to design trails providing a balance between resource protection and level of challenge provided. Based on their topography and environmental factors, riding areas should become more challenge-specific riding destinations (some areas should provide extremely challenging riding opportunities while others not as challenging opportunities). Currently,

too many trail systems have been dummed down to provide a broader spectrum of riding opportunities. In such cases, riders tend to get bored and begin to create more challenging riding opportunities on their own. Trail systems use should become more self-selective—based on the trail systems level of challenge and the riders abilities. Finally, there is a need to provide user information that better conveys the trails level of difficulty to allow riders a better ability to make informed decisions on where to ride. This includes a need for a more descriptive trail rating system than the current easy, more difficult and most difficult trail ratings (0 dots).

L. Motorized regulation compliance is poor among hunters using off-road vehicles during the hunting season. Problems include off-trail use, not purchasing a riding permit and improper securing of weapons (0 dots).

M. There is a need for additional children's play areas at riding areas within the region (0 dots).

N. It is important to note that some riders prefer OHV areas without a trail map available. Such riders like the idea of not knowing what to expect when they get to the area. Trail maps also encourages more use of riding areas (0 dots).

O. People are now demanding a more diverse offering of outdoor recreational opportunities during their overnight camping trips including activities on both terrestrial and water trails. If a destination area doesn't have something for them to do, they will go elsewhere (0 dots).

P. There is considerable confusion among trail users in the region regarding trail access pass requirements (e.g. USFS, BLM, NPS, OPRD, ODF) (0 dots).

Q. There is a need for emergency response training to ensure that the necessary skills and knowledge are in place to properly respond to trail-related emergency situations (0 dots).

R. There is a need to make the trail inventory a living document/resource. As new trails are designated they should be added to the inventory. The long-term objective should be to keep the inventory as up-to-date as possible (0 dots).

General Public Session (Lincoln City) (Evening Session)

Attendance: 9 people attended the meeting.

Motorized Trail Issues

ZZ. There is a need for more day-use riding opportunities on the west side of the Cascades that are close enough to home to be considered day trips (5 dots).

AAA. There is a need for quality information regarding regulation (impact of non-compliance), level of difficulty (guidelines, definitions and standards), riding/route maps, and consistent signing across agencies (4 dots).

BBB. There is a need for increased levels of law enforcement in the region (4 dots).

CCC. There is a need to consider the capacity of riding areas and incentives to disperse use (3 dots).

DDD. There is a need for increased levels of user education including trail etiquette, leave no trace, tread lightly and local riding rules and regulations (2 dots).

EEE. Given the limited public land resources in the region, managers need to consider multiple use areas, work with users to address user conflicts, and educate both trail users and planners on methods to more effectively share limited trail resources (2 dots).

FFF. There is a need for a wider variety of challenge opportunities for a variety of users including pit runs and boulder crawls (1 dot).

GGG. Trail difficulty level ratings should be coordinated/designated at the state level to create more consistency across riding areas (1 dot).

HHH. There is a need for OPRD to provide education regarding the ATV grant funding program's funding opportunities and riding regulations across the state (1 dot).

III. 4-Wheel driving and ATV/Motorcycle riding may not be compatible trail uses in the region (0 dots).

JJJ. Regarding comment III, what was the gist of this problem? Were they concerned with collisions? Would regulation take care of this perceived problem (on-line comment).

KKK. It is important to note that user conflicts and use conflicts are not the same thing (0 dots).

LLL. Unfortunately in the state of Oregon, the population is on the west side of the Cascades and the best riding opportunities are on the east side of the state (0 dots).

MMM. There is a need to explore recreation opportunities on private timberlands and work with private landowners for access. Some keys to success for securing use on private lands are user education (respect for property) and the purchase of recreational easements (0 dots).

NNN. Poor management and overuse has resulted in closure of many local riding areas in the region (both public and private, but, mostly private clubs) (0 dots).

OOO. There is a need for regional motorized trail planning including the need for camping, overnight accommodations, as well as riding areas (0 dots).

PPP. There is a need to consider reuse of roads on federal lands for recreation purposes (0 dots).

QQQ. There is a need to maintain access to beaches for all users. There is concern that ATV and equestrian use of the beaches is threatened (0 dots).

RRR. There is a need to better manage trails for fire safety (0 dots).

NORTHWEST REGION (Eugene) 5/22/03

(Northwest Region includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lincoln, Benton and Lane Counties)

Public Recreation Provider Session (Eugene) (Daytime Session)

Attendance: 14 people attended the meeting including representation from:

Oregon Parks & Recreation Dept.	Willamalane Park & Recreation Dist.
Bureau of Land Management	City of Corvallis
Lane Council of Governments	City of Eugene
Port of Siuslaw	
Siuslaw Watershed Council	

Motorized Trail Issues

- A. There is a need to complete gaps in the trail system (2 dots).
- B. There is a need to better manage access/egress to riding areas and better connect with users and share riding information. There are opportunities for agencies to work with vendors to provide information, education and provide incentives to support proper area management (2 dots).
- C. There is a need for management of unauthorized trails, new technologies (e.g. geocaching) and new activities not on designated trails and recreation areas (2 dots).
- D. There is a need to explore options to generate trail user-related revenue (2 dots).
- E. There is a need for regional coordination and information sharing between agencies for trail planning and coordinating for funding. There is a need for a regional planning process and design and construction standards for use in the region (2 dots).
- F. There is a need for more trails near population centers/urban areas in the region. Adding additional trails could help to solve many local issues such as transportation, need for exercise and user conflicts (2 dots).
- G. There is a need for more 4-Wheel Drive opportunities in a variety of trail/road types. Regional stakeholder meetings could be used to identify the types of riding opportunities 4-Wheel Drive enthusiasts prefer. Power line right-of-ways are good areas for developing such riding opportunities (1 dot).
- H. There is a need for more trails near population centers/urban areas within the region (1 dot).
- I. There is a need for properly sized staging areas with adequate support facilities within the region (1 dot).
- J. There is an opportunity for seasonal closures and other management techniques to protect resources (1 dot).

K. There is a need for more guidance for youth involved with motorized recreation in the region. Currently, many youth are exhibiting destructive riding behavior resulting in resource damage, injuries, and other dangerous scenarios. As a result, there is a strong need for education designed to develop an appreciation and respect for the natural resources. Such an educational effort should involve incentive opportunities, allow youth to develop a sense of riding area ownership and actively engage the youth audience. There is also a need to better provide the types of riding opportunities that youth prefer (1 dot).

L. There are opportunities for increasing public recreation on private lands (e.g. timber company lands) in the region (1 dot).

M. There is a need to manage not only the trail, but the landscape around trails to minimize erosion and movement of invasive species (1 dot).

N. The prioritization of trail development projects should be done at a regional level using a peer review process. At the local level, projects should be developed using groups such as community solutions teams to get a broader perspective on what other governmental agencies are doing which might affect trail development (1 dots).

O. There is a demand for challenge trail opportunities such as play areas and "trial" trail areas and mountain bike areas (0 dots).

P. There is a need for additional trail development/construction funds (0 dots).

Q. As the fees for recreational use grow, there is a growing need/opportunity for the private sector to get involved in providing trail facilities and opportunities (0 dots).

R. There are opportunities for seasonal closures and other management techniques to protect resources in the region (0 dots).

S. There is a need to use trails as vehicles of education and interpretation related to issues such as resource protection and appreciation, understanding of natural systems and sustainability (0 dots).

T. Trails are a key economic development tool within the region. Policy makers and planners should keep this in mind with respect to state planning, leadership, and in making resource allocation decisions (0 dots).

U. There is a need to be creative in terms of partnerships and funding (0 dots).

V. There is a need for well designed riding opportunities that take into consideration user needs and balancing those needs with clear objectives and existing resources (0 dots).

W. There is a need to ensure that the public has accurate information on motorized riding opportunities within the region (0 dots).

X. There is a need to properly plan for competitive/organized trail events. Such events must be matched with those trail resources which are designed to handle such use. Many trails are not designed to handle such intensive trail use (0 dots).

Y. Regarding comment X, I would agree that organized events take a specialized area. Some areas seem to be overused for this type of thing causing damage that never seems to bounce back (on-line comment).

Z. Liability is a deterrent to private-sector provision of motorized riding opportunities in Oregon. Currently, if a private-landowner charges a fee for recreational use they can be held liable for damages and injuries occurring on their lands (0 dots).

AA. There is a need for additional law enforcement in the region. The fire season may be a good model for the level of enforcement that is needed (0 dots).

General Public Session (Eugene)
(Evening Session)

Attendance: 19 people attended the meeting.

Motorized Trail Issues

TTTT. There is a need to address the noise issue on trails within the region. Trail planners should carefully consider compatibility (associated with noise) during the development of multi-use trails. There is also a need for greater tolerance between user groups on multi-use trails (9 dots).

UUUU. There is an opportunity for recreation use of roads scheduled for abandonment (6 dots).

VVVV. Regarding comment UUUU, this is a wonderful opportunity that should not slip by. These abandoned roads make excellent trails. Most are wide, well planned, and have adequate drainage (on-line comment).

WWWW. There is need for more trails close to urban areas in the region (5 dots).

XXXX. Regarding comment WWWW, this is true. While we realize that being too close is not good, having access to areas where travel is not a limiting factor is important. For example when kids and families ride, they are often tired after an hour or so. Driving three hours one way (six round trip) to ride an hour is not a good way of keeping people in our sport. Soon they are riding on illegal lands, or on their own property, which is not popular with neighbors! I am lucky enough to live on enough land that I can ride a little when I like. But I know my neighbors don't enjoy it. It is just not worth it for me to pack up and go a long ways to ride for a little bit with my grandson (on-line comment).

YYYY. There is a need to address environmental impacts including wildlife, need for good planning and design, capacity issues, soil issues and the value in study of impacts (5 dots).

ZZZZ. There is an opportunity to work with private landowners (timber companies) to allow motorized recreational use (5 dots).

AAAAA. Multi-use trails are a great resource if users respect each other (3 dots).

BBBBB. There is a need for additional user education that targets new users (including noise, and trail etiquette) (3 dots).

CCCCC. There is a need for loop trail systems on a variety of terrain (2 dots).

DDDDD. There is a need for good information resources including where to ride, regulations, good signage, mapping, and clear designation (e.g., type, class, etc.) (2 dots).

EEEE. Trail closures are causing over use of designated areas (2 dots).

FFFF. There is a need for a better level-of-difficulty classification system and dissemination of such information to allow users to make informed choices about where to ride (2 dots).

GGGG. There is a need for technical play areas within the region (2 dots).

HHHH. There is a need for more active trail management by the federal agencies (2 dots).

IIII. There is a regional BLM recreational opportunity at Horton (2 dots).

JJJJ. There is a need for adequate sanitary facilities at resting/stopping areas (2 dots).

KKKK. There is a need for a central location (website) where users can go for information on trip planning (2 dots).

LLLL. There is a need for more multiple-use trailheads in the region (1 dot).

MMMM. There is a need for more challenging riding opportunities within the region (1 dot).

NNNN. There is a need to make sure that trails not regularly maintained are not lost (1 dot).

OOOO. There is a need to make greater use of volunteers for trail maintenance because agencies do not have sufficient resources (1 dot).

PPPP. The current law enforcement techniques used at riding areas within the region cause users to avoid contact with law enforcement. There is a need for a more interactive and less threatening approach and courtesy sound checks (1 dot).

QQQQ. There is a need to promote Leave No Trace and Tread Lightly programs in the region (1 dot).

RRRR. There is a need to focus on connecting existing trail systems within the region (1 dot).

SSSS. There is a need for trailheads with adequate facilities such as proper accommodations for trailers (1 dot).

TTTT. There is a need to consider equipment in planning and design of riding areas (0 dots).

UUUU. Use the term "sound" instead of "noise" (0 dots).

VVVV. There is a need to use close-to-home day use riding areas as training areas (0 dots).

SOUTHWEST REGION (Bandon) 4/17/03

(Southwest Region includes Coos, Curry, Josephine, Jackson and Douglas Counties)

Public Recreation Provider Session (Bandon)

(Daytime Session)

Attendance: 12 people participated in the workshop including representation from:

Oregon Parks & Recreation Department
U.S. Forest Service
Bureau of Land Management
Coos County
City of Powers

Motorized Trail Issues

A. There is a lot of confusion over the requirement that motorized vehicles be street legal in order to legally operate on ocean beaches. The current regulations regarding motorized use of beaches are not clear, and as a result, people are not well informed about ATV use on beaches. A potential solution would be to identify those beach locations where ATV use is appropriate based on environmental concerns and the potential for conflict with other users (9 dots).

B. There is a need for increased user education and information related to riding regulations and restrictions and to get this information to users (4 dots).

C. OHV vendors and manufacturers need to take responsibility and play a role in providing riding areas and facilities within the region. Such businesses should also take a larger role in user education, safety training, and resource stewardship. They also need to be more careful about airing advertisements showing responsible OHV use—and not people driving through riverbeds and wetlands (3 dots).

D. There is a need for education, enforcement and site planning to proactively address the issue of noise and its impact on other users and adjacent landowners (3 dots).

E. There is a need for consistency in signing between agencies so there is a common set of signs as you travel across jurisdictions. There needs to be a similar regulatory and informational signing message at all riding areas across the state (3 dots).

F. There is a need for additional funding for law enforcement and emergency response in the region (2 dots).

G. There is a need to keep motorized users in designated riding areas (1 dot).

H. There is a need to design trails that can meet the needs of both motorized and non-motorized activities (1 dot).

I. There is a need for additional developed camping areas and more primitive camping opportunities for OHV users within the region (1 dot).

J. There is a need for increased flexibility in the ATV grant program related to distribution of grant dollars. Because of the rather rigid structure (revolving schedule where one year the funding goes to

law enforcement, the next year development grants, and so forth) agencies typically have to wait several years for their grant proposals to be heard (1 dot).

K. There is a need to better manage trail use according to seasonal variations (0 dots).

L. There is a need for a statewide review and evaluation of current OHV noise regulations. The ultimate product should be a consistent statewide standard for noise (0 dots).

M. There is a need for statewide regulations for OHV safety and training dealing with ATV and motorcycle riding safety issues such as helmets and riding double (0 dots).

N. There is a need for additional funding for trail maintenance within the region. There always seems to be money available for trail development—but not for routine day-to-day trail maintenance (0 dots).

O. There is a need for readily accessible funding for both trail planning and environmental assessment work on trails on state and federal lands (0 dots).

P. There is a need a need for good trail design and maintenance to proactively address resource damage occurring on trails within the region (0 dots).

Q. There is a need for more coordination between agencies in regional trail planning and marketing to provide the correct mix of facilities and more cost-effectively market trail information to the public. There is a need for a good one-stop location for marketing trail opportunities in the region (0 dots).

R. Many existing trail-related facilities are old (both in location and use) and have not been modified to represent current needs. Times have changed but the facilities haven't changed with them—such as tent camping facilities including room for one car and one tent and RV campsites not large enough for modern vehicles (0 dots).

S. There is a need for consistency in sign standards such as level of difficulty symbols to allow users with enough information to avoid getting in over their level of experience. All agencies should use the same types of trail markers and standardized regulation signs and jurisdictional boundary signs (0 dots).

General Public Session (Bandon)

(Evening Session)

Attendance: 6 people attended the meeting.

Motorized Trail Issues

VV. There is a need to increase motorized trail and trailhead capacity within the region (5 dots).

WW. There is a need to find ways to take advantage of private timberlands for developing motorized recreation opportunities within the region (4 dots).

XX. Regarding comment WW, MRA has executed a memorandum of understanding with the Boise Corporation that allows use on their private lands. This might be an example of how this may work (on-line comment).

YY. There is a need for managers with motorized recreation experience in the region and training and education programs to develop such expertise (2 dots).

ZZ. There is a need to consider strategies such as state initiatives and technical assistance programs to develop motorized trail opportunities on rail corridors within the region (2 dots).

AAA. There is a need for more multiple use trails (motorized and non-motorized) within the region—especially motorized/equestrian trails (1 dot).

BBB. The state needs to be more involved in working with private landowners to overcoming their resistance (primarily over liability) to allowing public recreation on private lands within the region (1 dot).

CCC. Regarding comment BBB, education of the landowners is the answer. The Recreational Trails Act of 1971 provides that no liability is incurred if the landowner does not charge for recreational use of his land (on-line comment).

DDD. There is a need for more research on the relationship between motorized trail use and fires in wild land areas. We need to find out if the current practice of closing areas to motorized trail use is justifiable. Managing agencies should consider strategies such as the use of volunteers for fire monitoring and permit entry for reducing fire risk in motorized riding areas (1 dot).

EEE. More motorized trails will disperse use and reduce user conflict (1 dot).

FFF. There is a need to recognize the economic benefits of trails such as the importance of trails in business location, quality of life, and where people want to live (1 dot).

GGG. There is a need for more developed/managed OHV riding areas in the region (0 dots).

HHH. There is a need for consistent statewide noise standards. The manufacturing technology now exists to accommodate a lowering of noise standards (0 dots).

III. There is a need for motorized riding opportunities on privately owned properties not subject to complex regulation (0 dots).

JJJ. There is a need for greater tolerance, shared use, and good practices (education, information, and signage) on trails within the region (0 dots).

KKK. There is a need for motorized trail connectivity within the region. Connecting trails is an effective way to increase capacity and provide more long-range riding opportunities (0 dots).

LLL. There is a need to work with clubs and volunteers for the provision of trail maintenance and user education in the region (0 dots).

MMM. There is a need for consistent and effective directional signage within the region (0 dots).

SOUTHWEST REGION (Grants Pass) 4/16/03

(Southwest Region includes Coos, Curry, Josephine, Jackson and Douglas Counties)

Public Recreation Provider Session (Grants Pass)

(Daytime Session)

Attendance: 6 people participated in the workshop including representation from:

Oregon Parks & Recreation Department
U.S. Forest Service
City of Rogue River
City of Ashland

Motorized Trail Issues

A. There is a need to provide managed motorized areas within the region to better protect natural resources and reduce the number of neighbor complaints. Many impacts are the result of enthusiasts riding in areas not appropriate for motorized use. Managed areas will also provide safer riding opportunities (8 dots).

B. Regarding comment A, these comments are somewhat correct. More management of OHV use is needed. And many impacts are a result of OHV use in inappropriate areas. However, OHV use should be restricted to applicable roads and certain areas that can handle the OHV impacts such as abandoned gravel pits. I am sure that you are quite aware of the problems with OHV hangouts such as the Dunes of California. Consider what we are dealing with before constructing more trails for OHV use. And please send me any information that you make available to the public regarding future trail construction or designation. In southern Oregon, it would be unwise to designate trails for OHV use when the trail was not constructed for that use. Roads are properly constructed for that use (on-line comment).

C. There is a need for noise management standards and enforcement of those standards. Vendors should be involved in the process of educating users regarding compliance with noise standards (4 dots).

D. There is a need for improved safety training in the region (1 dot).

E. There is a need to provide good information (signing, displays, brochures, electronic) on trail opportunities to potential visitors during trip planning so they are not disappointed by a lack of opportunities after arrival. It is more effective to tell people where to go rather than later telling them where not to go for trail opportunities. It seems like agencies are not keeping up with the technology in relation to providing good information; perhaps it stems from an older generation of managers that do not have the skills themselves or the ability to acquire the skills because of time and funding constraints. Riding maps should be provided at the point of purchase by vendors (1 dot).

F. There is a need for information on what to do and who to contact when enthusiasts observe and wish to report a violation of area regulations to management agency personnel (1 dot).

G. Regarding comment F, this reminds me of what is needed—more law enforcement with the ability to levy stiff penalties to the OHV users engaging in illegal behavior. Illegal behavior and user conflicts are commonplace in southern Oregon (on-line comment).

H. There is a need for coordination and communication between public agencies (federal, state, and local agencies) regarding trail planning, funding and design and to facilitate the identification of multi-jurisdictional priorities. Communication within and between public agencies is difficult without a knowledgeable spokesperson on the subject. Motorized use on and off roads is an issue internally that is not well articulated in some agencies, which then becomes a major problem for the public when they hear the same information. Consolidation has been suggested in the past as a way of bridging this problem by creating a SW Oregon Motorized Recreation Center of Excellence. Such a center would act as a "clearing house" for planning and implementation of summer and winter motorized recreation trails and uses. This would combine several agency specialists into one center to manage this growing activity. We should also consider establishing a shared interagency statewide goal to develop trail connectivity throughout the state (1 dot).

I. Regarding comment H, we tried to get this moving and had a good organizational meeting in Butte Falls with Private and with BLM and Forest Service. Everyone seemed to think it would be a great idea, but with the transfer of a key individual, it appears that the idea is now dead. MRA is going to try to get the agencies together again and see if we can't all work towards some regional planning and cooperation as to use of equipment and personnel. There are some good people down here, but there are also some obstructionists. Nothing ventured, nothing gained. A nice letter from OPRD suggesting the benefits of this cooperation might give us enough of a boost to get this back on line (on-line comment).

J. Regarding comment H, if organized OHV groups want a "clearing house" for planning and implementation for motorized recreation they can create it. No state dollars should be wasted on this concept. Organized OHV groups already receive millions in tax dollars to spend on OHV use. This is a radical idea that should be rejected. We need less motorized use in the backcountry, not more. OHV's continue to create user conflict in the backcountry. That is the issue you should be addressing (on-line comment).

K. There is a need for ethics education (0 dots).

General Public Session (Grants Pass)
(Evening Session)

Attendance: 7 people attended the meeting.

Motorized Trail Issues

HH. Need to designate trails/areas for motorized use including trails currently used in that manner (4 dots).

II. Regarding comment I, many of the motorized trails in use in Southern Oregon are not designated for that use. The use is historical, but without designation, trails can be lost. Old logging roads make great trails. We could also use coordination between private landowners and public land managers (on-line comment).

JJ. Regarding comment II, in southern Oregon most trails that are currently in use were never designed to be used for motorized vehicles. These trails were illegally constructed and thus have many problems. We have a greater need for restoration of degradation from motorized vehicles in this area. OHV's should be restricted to roads. Roads are designated to take the abuse that OHV's dish out. The BLM is

currently undergoing a planning process for OHV use on roughly 12,000 acres outside of Grants Pass, thus, no need exists for the state to designate more areas for motorized use (on-line comment).

KK. Need for group camping areas (10-15 vehicle) for tents and tent trailers (3 dots).

LL. Need for loop trails and trails with destinations. Trail development should not include dead end trails (2 dots).

MM. Regarding comment LL, trail development should NOT exclude dead end trails. What if a trail could go to a great overlook or scenic vista? Should we not go there because it's a dead end? I think not! Loops are great but why should we limit ourselves to any kind of trail that might fill a need? Let's keep an open mind (on-line comment).

NN. Need for "Tread Lightly" environmental education (2 dots).

OO. Need to develop motorized trail opportunities between Highway 97 and Gearhart (2 dots).

PP. Regarding comment OO, the entire Winema National Forest has lots of opportunities. Connect it to the Freemont National Forest and we could have loops of up to 100 miles on nice single track for Class III (motorcycles). I've been over that area most of my life and it just needs some tender loving care and a decent layout (on-line comment).

QQ. Need for better coordination between agencies on trail planning and development (1 dot).

RR. Regarding comment QQ, if the forests that border each other and the BLM that is often in between could just coordinate their systems, we would benefit tremendously. You know my goal is a seamless interagency coordinated trail system statewide (on-line comment).

SS. Need for increased enforcement during the hunting season and on 3-day weekends (1 dot).

TT. There is a need for updated maps showing which roads are open or closed to OHV use (1 dot).

UU. Regarding comment TT, I suppose that the best we could get would be a map that was made just for motorized recreation. This map would cross all boundaries and would be color-coded to represent the various users and difficulty. I would guess that it would need to be regional for maybe 6 areas. Maps should not end at jurisdictional boundaries. These maps would need GPS coordinates, etc. Utopia would be an automatic annually updated map that we could buy (on-line comment).

VV. Need for regulatory information at trailheads in the region (0 dots).

WW. An increase in designated riding areas will reduce the need for open riding areas in the region (0 dots).

XX. There is a need for improved safety training opportunities within the region including greater scheduling flexibility, classes making participation fun and enjoyable and the construction of training facilities (0 dots).

YY. There is a need for better cooperation between user groups and land managers (0 dots).

ZZ. There is a need for trails providing a variety of challenge and scenic opportunities (0 dots).

- AAA. There is a need for more trail signage (0 dots).
- BBB. There is a need for signing consistency between different riding areas within the region (0 dots).
- CCC. Need for trailheads and related facilities (0 dots).
- DDD. Need for maps not divided by jurisdictional boundaries (0 dots).
- EEE. Need for appropriate signing when crossing into areas with different regulations (0 dots).
- FFF. Need for multiple-use trail tolerance and user-conflict education (0 dots).
- GGG. Need for contact information at riding areas on who to contact to address a maintenance issue (0 dots).
- HHH. Regarding comment GGG, if we could get the maps I have mentioned, the margins could contain tread lightly tips, various regulations, signing, phone numbers to call, and any other information that we need to address (on-line comment).
- III. Need to separate non-compatible motorized and non-motorized uses where appropriate (0 dots).

NORTH CENTRAL REGION (Bend) 4/3/03

(North central Region includes Wasco, Sherman, Gilliam, Morrow, Umatilla, Jefferson, Wheeler, Deschutes and Crook Counties)

Public Recreation Provider Session (Bend) (Daytime Session)

Attendance: 11 people attended the meeting including representation from:
 Oregon Parks & Recreation Department
 Bureau of Land Management
 Bend Metro Parks & Recreation District
 City of Sisters

Motorized Trail Issues

- A. There is a need for more Class III (four-wheel drive jeeps, pickups, SUVs) riding opportunities in the region. This includes a wide variety Class III riding opportunities—particularly technical riding areas (3 dots).
- B. There is a need for more winter Class I (ATV) and Class III (motorcycle) riding opportunities in the region (2 dots).
- C. There is a need for more winter snow park capacity in the region due to a great influx of people from the Willamette Valley and Washington state coming into the region on winter weekends. Currently, snow parks across the region are full to overflowing each winter weekend (2 dots).

D. There is a need for designated OHV riding areas in urban interface areas in the region. Currently, you can purchase an ATV for \$0 down and \$60 a month. As a result, the user base is increasing rapidly. People are looking for riding opportunities where they can simply take off from their back yards (2 dots).

E. There is a need for better interagency coordination between cities, counties and state and federal agencies in providing motorized recreational opportunities in the region (2 dots).

F. There is a need for facility development at current OHV and snowmobile riding areas in the region. Such facilities should include restrooms, signage, and adequate parking to accommodate today's larger recreational vehicles (2 dots).

G. There are an increasing number of conflicts between motorized enthusiasts and private landowners in urban interface areas in the region. Enthusiasts are increasingly riding out of their back yards and their neighbors are complaining about increasing levels of noise and resource damage. As a result, there is a need for better management of motorized use on public lands within the urban interface to address this situation (1 dot).

H. There is a need to better educate OHV enthusiasts on regulation compliance and to inform them which areas are open or closed for riding within the region (1 dot).

I. There is a need for better OHV and snowmobile safety training including a more user-friendly class schedule with more classes at more locations across the region (1 dot).

J. There is a need for more OHV law enforcement within the region. Currently, there are too few enforcement personnel on the ground spread out too thin. Aerial patrolling would be extremely helpful in OHV enforcement within the region (1 dot).

K. There is a need for more snowmobile trails within the region—especially connecting trails creating long- distance riding opportunities (1 dot).

L. There is a need for greater consistency with regulations and law enforcement across OHV riding areas within the region (0 dots).

M. There is a need to better educate dealers and shops about OHV rules, regulations and riding opportunities within the region (0 dots).

General Public Session (Bend)
(Evening Session)

Attendance: 48 people attended the meeting.

Motorized Trail Issues

II. Utilize snow park areas for OHV use during summer months (such as currently occurring at Edison). Bandit Springs is an example of a snow park area with potential to accommodate more summer OHV capacity. Snow park areas may require additional parking and restroom facilities to accommodate such use (11 dots).

JJ. Maintain OHV use in Cline Butte and Kelsey (9 dots).

KK. Agencies should not close/eliminate OHV trails within the region as a result of resource damage. Rather, OHV trails should be either repaired or rerouted to minimize resource damage (4 dots).

LL. There is a need for larger snow park and OHV parking areas within the region (3 dots).

MM. There is a need for increased education and enforcement of current noise regulations within the region (3 dots).

NN. There is a need to keep backcountry dirt roads open for OHV use within the region (2 dots).

OO. There is a need for better and consistent OHV riding information (maps, signs, brochures) regarding shared-use backcountry dirt roads within the region (2 dots).

PP. There is a need for motorized trail connectivity between areas of concentrated use to provide long-distance riding opportunities in the region (2 dots).

QQ. There is a need for consistent enforcement of OHV use on backcountry dirt roads within the region (1 dot).

RR. There is a need for more overnight snow parks within the region (1 dot).

SS. There is a need for more OHV riding maps showing riders where to go and when areas are open for riding within the region (1 dot).

TT. There is a need for USFS and BLM staff in the region to be better educated in OHV management (1 dot).

UU. There is a need for a better OHV safety education program within the region. Enthusiasts need to be better informed on who needs training and where to go to get safety training (1 dot).

VV. There is an increasing need within the region for more OHV riding opportunities to accommodate a growing number of OHV enthusiasts. But rather than creating more riding opportunities, agencies are closing more and more trails to OHV use (1 dot).

WW. There is a need for an increased OHV law enforcement presence within the region (0 dots).

XX. There are an increasing number of conflicts between hunters and OHV enthusiasts within the region. As a result, there is a need for more scientific information related to OHV use on wildlife (0 dots).

YY. There is a need for better management of user-created trails within the region. As a result, there is a need to recognize the importance of small riding area maintenance and regulation. A potential solution would be to promote an adopt-a-trail concept (0 dots).

SOUTH CENTRAL REGION (Klamath Falls) 4/15/03

(South central Region includes Klamath and Lake Counties)

Public Recreation Provider Session (Klamath Falls)

(Daytime Session)

Attendance: 6 people attended the meeting including representation from:

Oregon Parks & Recreation Department

U.S. Forest Service

Klamath Rails to Trails

Jackson County Roads/Parks

Motorized Trail Issues

A. There is a need for more designated motorized areas to accommodate increasing numbers of OHV enthusiasts in the region. Unfortunately, the current trend is for closing existing riding opportunities within the region (6 dots).

B. Regarding comment A, while it is true that areas open to OHV's have been closed, I challenge the person making this comment to show the data proving the assertion that the current trend is for closing existing riding opportunities within the region. Typically, when an area is closed off it is due to the heavy environmental degradation that OHV use causes. I will provide you with citations soon. It is time to put OHV's back where they belong, on roads. Only roads are designed to handle OHV use. If a smaller road or trail were engineered and constructed for OHV use, then that would work as well. That is rarely the case.

C. There is a need for quality motorized information resources such as maps, signs and regulatory information within the region (4 dots).

D. There is an increasing amount of user conflict between motorized and non-motorized trail users creating a need for additional law enforcement on trails within the region (3 dots).

E. There is a need for "Tread Lightly" education, especially for new riders and for hunters using OHVs during the hunting season (2 dot).

F. There is a need for statewide and regional OHV trail maps (1 dot).

G. The Backcountry Discovery Route was a very successful prototype of the type of riding opportunity that people are looking for in the region. Such routes provide a great opportunity for a variety of motorized users and economic benefits for communities along such routes (1 dot).

H. Trail facilities are attracting the development of temporary homeless camps. There is a need for a statewide trail strategy on how to properly address the homeless issue (0 dots).

I. There is a need for motorcycle and ATV play and challenge areas including climbing and jump facilities (0 dots).

J. Regarding comment I, I do like the concept of confining the intense degradation that OHV's cause to a specific area. I like the idea of using abandoned rock quarries. If they are not available and a new facility is needed, I suggest placing it somewhere close to town rather than placing it in a more rural location where noise pollution and user conflicts will ruin the rural experience. Downtown Klamath Falls would be an ideal location to have a "play and challenge area." I would support that concept (on-line comment).

K. There is a problem with the large number of temporary road closures during the hunting season (0 dots).

L. Regarding comment K, the temporary closure aspect is the problem. These roads should stay closed throughout the year. Public land has far too many roads and we should work to obliterate or decommission more roads. Exercise would do all Americans good. Dragging or packing your buck out of the woods helps add to the hunting experience. That is how I like to do it. I do not need a road to be opened when I go hunting. If some of these hunters tried "walking" when they were hunting, they would discover how easy and in fact, invigorating it is (on-line comment).

General Public Session (Klamath Falls) (Evening Session)

Attendance: 6 people attended the meeting.

Motorized Trail Issues

YY. There is a need for interagency cooperation for development of a seamless long-range trail system across jurisdictional boundaries (5 dots).

ZZ. There is a need for increased management (safety, environmental, and regulatory) of OHV riding areas within the region (4 dots).

WW. There is a need for good information on motorized riding opportunities in the region including current information on closures and trail conditions (such as information available for motorized opportunities in central Oregon) (2 dots).

XX. There is a need for close-to-home motorized riding opportunities in the region (1 dot).

YY. Many motorized riding areas in the region (e.g. Prospect) are closed for much of the year due to snow and fire conditions. There is a strong need to keep such riding areas open for longer periods over the course of the year (1 dot).

ZZ. Regarding comment YY—this comment is misguided. Prospect's trails are closed part of the year for numerous reasons including wildlife concerns (Elk) and yes indeed fire concerns. I think OHV users should be confined to roads. If they used roads, especially major system roads, they would not be shut down due to the concerns that restrict them now. Prospect needs to adhere to its soil standards and guidelines and not trouble itself with more OHV use (web-based comment).

AAA. There is a need for a better balance in how we develop, manage and fund motorized riding areas in the region. There is also a need for a wider variety of riding opportunities (1 dot).

BBB. There is a need to make motorized management decisions based on sound scientific information (1 dot).

CCC. Regarding comment BBB, which begs the question...just what science is the State relying on when considering additional motorized recreation trails (on-line comment)?

DDD. There are opportunities for shared multi-use trails/facilities such as winter snowmobile trails used by motorized and non-motorized users during the summer months (1 dot).

EEE. There is a need to prepare policy and management structures to accommodate personal mobility devices (Segways). We need to address the question of what trails will they be allowed on or restricted from use (0 dots).

FFF. There is a need for adequately sized snow parks with sufficient trailhead facility development (0 dots).

GGG. There is a need for new locations for trail grooming equipment and facilities (0 dots).

HHH. There is a concern that designation of motorized areas with rules and regulations results in a loss of riding opportunities within the region (0 dots).

NORTHEAST REGION (Union) 4/1/03

(Northeast Region includes Wallowa, Union, Grant and Baker Counties)

Public Recreation Provider Session (Union) (Daytime Session)

Attendance: 11 people attended the meeting including representation from:

Oregon Parks & Recreation Department
U.S. Forest Service
Bureau of Land Management
Morrow County
City of La Grande

Motorized Trail Issues

A. There is a need for standardized trail signage to provide consistency and continuity between riding areas in the region. Resource managers should be use a common set of trail signing, information and regulation standards (6 dots).

B. The state and ATV Allocation Committee need to better define the funding priorities for the allocation of ATV Grant Program funding dollars. Funding should be based on stated priorities so all grant applications are evaluated in a more objective manner. For example, although there have been implicit long-term guarantees in terms of maintenance funding, there is no stated grant program commitment to fund the maintenance of existing trail systems. As a result, agencies are sometimes hesitant to propose new trail development projects (6 dots).

C. The current ATV Allocation Committee focus is on funding ATV trails for trail riders. It is important to emphasize that trail riders are a single user segment of the overall ATV riding community. Other substantial user segments include those using ATVs for hunting and road and meadow riders. Since all ATV user groups are financially supporting the ATV program through permit purchases, we have a commitment to better serve the entire ATV riding community—not just the trail riders (6 dots).

D. There is a need for additional motorized camping areas and related facilities (staging areas, restrooms and amenities) to minimize damage to existing riding areas within the region. Such motorized development should be separate from other non-motorized facilities. For example, the current mixed-use facilities in areas such as Honeyman Memorial State Park are not large enough or constructed properly to withstand increasing motorized use levels. The overall camping and staging area design should enable users to easily recognize the different riding opportunities available at the OHV area. The design should also incorporate loops, fencing and signing to minimize environmental damage. In addition to camping and staging areas, there is also a need for play areas, short trail riding opportunities for children and longer trail riding opportunities for adults. (6 dots).

E. There is a need for better coordination among agencies in the development and distribution of OHV information (including maps and brochures) to the riding public. It is critical that vendors provide such OHV riding information with each ATV sticker purchased. We should also develop a one-stop website for OHV riding information within the region using a standardized interagency GIS mapping format (4 dots).

F. We need to emphasize that motorized recreation (in both winter and summer) is a vital contributor to the economies of a number of small rural communities within the region (2 dots).

G. Need for better coordination with the Oregon Department of Fish and Wildlife (ODFW) over riding areas and use of OHV's. There is growing level of conflict between OHV users and hunters during the hunting season. As such, there is a need to better education hunters on existing OHV rules and regulations. A suggestion was made that when hunter purchase a tag from ODFW, that in addition to hunting regulations, they also receive information about OHV rules and regulations (2 dots).

H. We need to be able to provide safety training for motorized users on prearranged schedule throughout the year. Such a prearranged schedule is needed to ensure that the riding public has the adequate lead-time necessary to take advantage of available training opportunities (1 dot).

I. There is a need for increased Law Enforcement and Emergency Response as motorized use continues to grow in the region (1 dot).

J. There is a need for signage providing recognizable wilderness area boundaries and other jurisdictional boundaries during the winter months. This need is associated with an increase in high marking on south side of the Eagle Cap Wilderness Area due to the increased power and mobility of snow machines. It's very hard for snowmobilers to use maps to identify actual boundaries on the ground (1 dot).

K. There is a need for additional snowparks in the Northeastern corner of the region (1 dot).

L. There is a need for additional scientific research and documentation regarding the impacts of motorized use on wildlife (e.g., the Starkey study) and on soil disturbance. Such information will help to

address a marked division between motorized users and other recreationists regarding the true impacts associated with motorized use. Each group brings their own set of biases to the table in the absence of sound scientific documentation. In order to make sound motorized management decisions, we need impact information based on sound science (1 dot).

M. There needs to be some assurance that agencies will continue to provide OHV riding opportunities for the long-term. We must not lose funding for riding areas or management planning (1 dot).

N. A growing number of Oregonians have made the investment of \$6,000 or more for an ATV. These people are going to find a place to ride—one way or another. As riding areas are closing, more and more people are beginning to ride in unauthorized areas such as our scenic corridors. Impact damage in such unauthorized areas will continue to increase as more designated OHV riding areas are closed. Resource managers must proactively address this problem by doing a better job in providing information on which single-lane roads and trails are currently open for ATV use and to get that information out to the riding public (1 dot).

O. The ATV Grant Program is the primary funding source for providing and maintaining motorized trail opportunities in the state. The U.S. Forest Service has very little money available for OHV maintenance. As a result, the stability of the ATV Grant Program is of critical importance to the future of the sport in the state of Oregon (0 dots).

P. There is great potential within the region to develop a regional trail system through the connection of existing trails. Such connectivity would satisfy a need for long-distance riding opportunities (0 dots).

Q. There is a need to better plan for separation of uses (motorized, and non-motorized and hunting) to ensure that all recreationists are getting the type of experience that they want. Such separation of uses is of particular need in high-use areas (0 dots).

R. The upcoming federal competitive sourcing process has the potential to reduce the amount of trail maintenance that will be completed on USFS and BLM trails in years to come. The planning effort should investigate what affect competitive sourcing may have on overall trail maintenance, volunteer recruiting, and the ability to qualify for federal and state grant monies for trail maintenance (0 dots).

S. There is a need to consider interagency coordination and sharing of OHV trail heavy equipment to more efficiently use such expensive equipment (0 dots).

General Public Session (Union)
(Evening Session)

Attendance: 22 people attended the meeting.

Motorized Trail Issues

OO. There is a need for more motorized trails throughout the region. Especially in the Baker, Pine, and Wallowa Valley Ranger Districts (5 dots).

PP. Need for better communication between motorized groups and the U.S. Forest Service. The USFS should designate a motorized contact staff member to facilitate such communication (3 dots).

QQ. Motorized riding opportunities within the region are greatly affected by the closing or limiting of rider access by the Oregon Department of Fish & Wildlife and Native American Tribes for wildlife protection purposes (e.g. elk, lynx, trout) (2 dots).

RR. There is a need for more challenging riding opportunities within the region. Existing trails are becoming wider and easier as with increasing levels of motorized trail management (1 dot).

SS. There is a need for additional motorized camping areas with family oriented riding facilities including open play areas for children and easy trails/loops (Virtue Flats is a good example) (1 dot).

TT. There is a need for motorized maps including trails and gravel roads designated for OHV use within the region. Federal agencies are hesitant to provide such information because of potential use increases (0 dots).

UU. There is potential to share OHV trails with other non-motorized users within the region (0 dots).

VV. There is a strong need to improve the OHV safety program in the region. Needed improvements include making it easier to train instructors, providing more incentives to instructors to remain in the program, and improved class scheduling (0 dots).

WW. There is a need to provide law enforcement officers with an easier method of identifying ATV riders from greater distances (e.g. license plate numbers) (0 dots).

XX. There is a need for a Tri-Forest (Wallowa-Whitman, Umatilla, and Malheur National Forest) Motorized Recreation Plan (0 dots).

YY. There is a need for standardized trail regulations to provide consistency and continuity between riding areas in the region. Trail regulations should be included on agency websites, maps, signage and hunter regulation materials (0 dots).

SOUTHEAST REGION (Burns) 4/2/03

(Southeast Region includes Harney and Malheur Counties)

Public Recreation Provider Session (Burns)

(Daytime Session)

Attendance: 5 people attended the meeting including representation from:

Oregon Parks & Recreation Department
Bureau of Land Management
City of Burns

Motorized Trail Issues

A. There is a lack of developed motorized riding areas and facilities within the region. As a result, there is a need for designated and managed OHV areas for ATVs and motorcycles to proactively address growing levels of resource degradation associated with off-road motorized use within the region (6 dots).

B. There is a need for better coordination and communication between land managers, user groups, ATV and motorcycle dealers and manufacturers in getting riding information (areas open and closed for motorized use) out to motorized enthusiasts. Such information would help take away the riders excuse that they had no source of riding information when found riding in restricted areas. ATV dealers should provide such riding information with the purchase of an ATV or motorcycle (2 dots).

C. There may be local resistance to developing motorized riding opportunities and encouraging more visitors to the region. A typical comment heard is that things are nice and quiet out here — and we want to keep it that way. As a result, recreation providers need to educate communities about the economic benefits associated with motorized trail development (2 dots).

D. The region's public land base represents a great opportunity for development of a motorized trails network for ATVs and motorcycles. Such trails could also help to attract races and competitions to the region (1 dot).

E. Most of the appealing riding areas within the region are restricted to motorized use as wilderness study areas (1 dot).

F. The open qualities/characteristics of the region (topography, vegetative cover and geography) make it harder to channel motorized users onto existing trails. Currently, agencies do not have sufficient funding for putting necessary enforcement personnel in place. As a result, resource managers are hesitant to develop new designated riding areas requiring even more agency presence, enforcement and funding. This set of circumstances makes it difficult to discuss new motorized trail development opportunities/projects with resource managers (0 dots).

G. There is a lack of adequate snowmobile trail management within the region. As a result, there is a need for more organized and maintained snowmobile trails to satisfy a growing user base (0 dots).

H. There is great interest and potential within the region to develop designated riding areas as a potential economic development strategy (0 dots).

I. There are a large number of out-of-state motorized enthusiasts currently recreating within the region (from Idaho cities such as Boise and Treasure Valley). As a result, it will be important to capture their needs and opinions in the statewide trails planning process. Potential alternatives are including a sample of people from Boise and Treasure Valley in the user survey and holding an issues workshop in Boise. A contact list could be developed including user groups such as the Basque, Snowmobile, and ATV clubs from those communities (0 dots).

General Public Session (Burns) (Evening Session)

Attendance: 5 people attended the meeting.

Motorized Trail Issues

FF. There is a need for multi-use winter shelters and larger snow-parking areas within the region. Shelters should be rustic and designed for the appropriate level of use expected—not overbuilt (5 dots).

GG. There is a need to consider OHV use of roads proposed for closure or abandonment and to review recreational use on roads previously closed or abandoned (4 dots).

HH. There is a need for safety information and training for young adults (over 15 years of age) who are beginning to ride snowmobiles in the region (3 dots).

II. There is a need to address safety concerns with snowmobile trail/ road interchanges and other snowmobile facility siting and design. Facility designers should consider the expanded facilities required to handle modern RVs pulling snowmobile trailers (3 dots).

JJ. There is a need to provide additional funding for law enforcement at high-use riding areas within the region (0 dots).

KK. There is a need for consistent directional and regulatory signage on snowmobile and ATV trails within the region (0 dots).

LL. Fire closures are greatly diminishing the availability of motorized riding opportunities within the region (0 dots).

MM. Land managers should keep in mind that the resource impacts associated with snowmobile use are considerably less than those impacts associated with other trail uses (0 dots).

NN. There is a need for more communication between land managers and motorized user groups within the region (0 dots).

APPENDIX J: LIST OF REGIONAL NON-MOTORIZED TRAIL ISSUE COMMENTS

REGIONAL NON-MOTORIZED TRAIL ISSUE COMMENTS

NORTHWEST REGION (Portland) 5/21/03

(Northwest Region includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lincoln, Benton and Lane Counties)

Public Recreation Provider Session (Portland)

(Daytime Session)

Attendance: 21 people attended the meeting including representation from:

Oregon Parks & Recreation Department	City of Aurora
Bureau of Land Management	City of Gresham
U.S. Forest Service	City of Hubbard
Oregon Department of Forestry	City of Oregon City
METRO	City of Portland
Tualatin Hills P&R Dist.	City of Salem
Oregon Historic Trails Advisory Council	City of Tigard
Clackamas County	City of Woodburn
Tillamook County	
Oregon Recreational Trails Advisory Council	

Non-motorized Trail Issues

1. There is a need for funding for local trails planning within the region (8 dots).
2. There is a need for connectivity of trail systems in the region (8 dots).
3. There is a need for more urban trails in close proximity to where people live (7 dots).
4. There is a need for an inventory of available trail development opportunities such as railroad right-of-ways, utility corridors, unused right-of-ways, and feasibility studies to determine corridor usability (4 dots).
5. There is a need for better coordination between agencies/organizations such as ODOT, railroads, ports, utility companies, land trusts/conservancies and the health community to develop trail opportunities in the region (4 dots).
6. There is a need to examine the carrying capacity of non-motorized trails including urban, rural, and wilderness use standards and level of service standards for urban trail systems (3 dots).
7. There is a need for information regarding the economic and health-related benefits of recreation. The information should be packaged in an easy to use manner including summary bullet points, literature review summaries and bibliography listings for those wanting more information on a given topic. The materials should be designed to assist trail in overcoming resistance to trail development projects (3 dots).

8. There is a need for a toolbox designed to assist trail planners in building partnerships with developers, take better advantage of trail development opportunities, bring together urban and park planners and address recreational liability statutes (2 dots).
9. There is a need for trail maintenance and rehabilitation in the region (1 dot).
10. There is a need to use condemnation to acquire trail right-of-ways for essential trail systems (1 dot).
11. There is a need for trail development funding (1 dot).
12. There is a need to develop "Best Management Practices" for trails including environmental and code compliance and trail designs that are compatible with the natural environment (1 dot).
13. There is a need for balance between habitat and wildlife, water quality and human demand in trail design and planning. Endangered species protection/requirements are currently placing a great burden on trail planners—particularly on federal lands in the region (1 dot).
14. Trail development creates a trespass issue with adjacent landowners (1 dot).
15. There is a need for training in trail design, maintenance and planning (1 dot).
16. There is a need to ensure that trails are safe and secure from theft, vandalism and other crimes. To accomplish this, there is a need for coordination between federal, state, county and local law enforcement efforts. Safety concerns should also be included in trail planning, management, site selection and design (1 dot).
17. There is a need for Leave-No-Trace Guidelines for front country trail use and an accompanying educational program (1 dot).
18. There is a need to better manage for trail-related environmental impacts and resource protection through selection of proper trail area locations, planning, design and public education (0 dots).
19. There is a need for trail acquisition funding (0 dots).
20. There is a need to consider rail with trail opportunities in the region. There are a lot of rail lines that are still in use, but receive little train traffic (0 dots).
21. There is a need for adequate trailheads and associated facilities such as parking and restrooms (0 dots).
22. There is a need to better manage the process of providing accessible trails in the region. The management effort should an inventory of existing trails, what trails are currently accessible and what improvements are needed, how to properly address new technologies and the need to provide challenging trails for people with disabilities (0 dots).
23. There is a need to address new trail uses and technologies (such as geocaching) through management, information and education (0 dots).
24. There is a need to address user conflicts associated with new uses and special events (0 dots).

25. There is a need for better management of dogs and other pets on trails to address security, threats and impacts. SCORP survey results have shown that approximately 40% of people running and walking for exercise and walking for pleasure bring a dog with them while using recreational trails (0 dots).

26. There is a need to protect Historic Trail Corridors within the region and the historic character of these corridors. Protection of these corridors may at times conflict with ADA requirements and other uses (e.g. motorized uses) (0 dots).

27. There is a need to simplify the current complexity of the user fee and permit requirements for recreational use within the region (0 dots).

28. There is a need to proactively address the effects of technology changes on trail management (e.g. Segway) (0 dots).

29. There is a need for additional birding trails within the region (0 dots).

30. There is a need to develop linkage/partnerships with the Tourism Council to promote our trail resources, interpret our natural and cultural history, and promote trails as an Oregon tourism attraction. Because of its scenic beauty and weather, Oregon should own summer tourism. There is a need to develop a central clearinghouse for trail opportunities including ordinance maps (0 dots).

31. The advantage of a statewide trails plan and system is that smaller communities have any opportunity for recognition and participation (0 dots).

General Public Session (Portland) (Evening Session)

Attendance: 15 people attended the meeting.

Non-motorized Trail Issues

1. There is a need for maintenance of existing trails in the region. We are currently losing some trail resources through lack of maintenance (e.g. Wygant Trail and Chetwok Loop). There are also safety issues associated with the lack of trail maintenance (3 dots).

2. There is a need for more trails for all user types. These additional trails would help to solve many conflicts and damage cause by overuse and help to disburse use (2 dots).

3. There is a need for education associated with multi-use conflicts, regulations, Leave-No-Trace, Tread Lightly and the presence of animals and bikes (2 dots).

4. There is a need for trail connection within the region including connecting population areas, parks and open space and public facilities. There is also a need for an interconnected statewide trail system with direct OPRD administrative involvement. Key components would include the Lower Columbia River Water Trail, Corvallis to the Sea, Portland to Coast Greenway, Rogue River Trail connection to the coast and a new Oregon Trail (2 dots).

5. There is a need for more long-distance and day-use Llama trails within the region—particularly in the Willamette Valley. Such trails provide low-impact backcountry opportunity for an aging population. These trails would help to satisfy a rapid growth in Llama ownership and use on trails (1 dot).
6. There are multi-use trail development opportunities in the Columbia River Gorge (1 dot).
7. There is a need for increased funding for trail acquisition, maintenance, development, planning, environmental assessment and volunteer coordination within the region (1 dot).
8. There is a need to develop new mountain biking opportunities in the region. Part of this process could involve reevaluating mountain biking access on existing trails (1 dot).
9. There may be a need for separation of certain trail uses to provide more challenging trail opportunities (1 dot).
10. There are trail development opportunities in the Coast Range (1 dot).
11. There is a need to look for opportunities on private lands (primarily timber company lands) and to work with and help private landowners accommodate public recreation use. Part of the solution could involve the use of user assistance as stewards for monitoring use (1 dot).
12. There is a need to make completion of the Oregon Coast Trail a higher priority based on the number of visitors drawn to the trail. Additional work would include adding public access, landscape protection, maintenance, connections with existing and future trails, interpretation, and developing/implementing a pilot long-distance hiker program including user permits, facilities and services (1 dot).
13. There is a need to reevaluate trails closed to equestrian use such as the 600 Trail on Mt. Hood, the Gorge Loop and the Coast (1 dot).
13. There is a need for new long-distance trail facilities such as trail shelters and stock facilities (0 dots).
14. There is a need for well-designed multi-use trails and user conflict education (0 dots).
15. There is a need for low elevation trails constructed for all season use (0 dots).
16. Rock is not a preferred trail surface for mountain bikers and may be a problem for Llamas (safety concerns) (0 dots).
17. There is a need for good information resources such as maps, signage/kiosks, and user education (0 dots).
18. There are opportunities on trails for interpretation of nature, culture and history (0 dots).
19. Llamas and equestrians may have different needs, impacts, etc. (0 dots).

NORTHWEST REGION (Lincoln City) 5/20/03

(Northwest Region includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lincoln, Benton and Lane Counties)

Public Recreation Provider Session (Lincoln City)

(Daytime Session)

Attendance: 7 people attended the meeting including representation from:

Oregon Parks & Recreation Department
Bureau of Land Management
Oregon Department of Forestry
City of Newport
Tillamook County

Non-motorized Trail Issues

S. There is a need for a state administered funding source for non-motorized trail development that is similar to the ATV grant fund program that taps user contributions and is not dependent on federal funding. A suggestion included allocating a certain portion of the state lottery funds for trail construction projects. The funding source should include a reduced applicant match and a simplified application process to assist small communities access grant funding dollars (5 dots).

T. There is a need for trail connectivity within the region providing access from urban to rural trails, connections between public facilities, parks and open space and connections from state and regional trails to community trails. Finally, connections should be made from long-distance state and regional trails to community facilities such as overnight lodging and dining establishments (4 dots).

U. There is a need for increased security at trailhead parking areas within the region (3 dots).

V. There is a need for educational programs addressing the issue of user conflicts on multiple-use trails and how to successfully use the shared trail resources without creating conflicts with other trail users (2 dots).

W. There is a need for more maintenance funding for existing trails within the region due to increasing use levels and declining maintenance budgets (2 dots).

X. There is a need to better utilize volunteer/user groups for conducting trail maintenance within the region (e.g. using programs such as adopt-at-trail). Providers pointed out that it takes a high amount of front-end staff time to adequately prepare volunteers for successful maintenance work (1 dot).

Y. There is a need for a trail connection between the Willamette Valley and the coast (e.g. cooperation from Oregon Department of Transportation, railroad right-of-ways, etc.) (1 dot).

Z. There is a need to address the construction of unauthorized trails within the region (1 dot).

AA. There is a need for a centralized source of recreational trail information at the statewide level (1 dot).

BB. There is a need for increased promotion of safety-related information and training (e.g. Leave-No-Trace) and more safety training facilities, instructors, and more user-friendly training schedules (times and locations) (0 dots).

CC. There is a need for better trail development and management coordination between agencies and private landowners due to the region's checkerboard land ownership. Trail connections will help to better utilize existing trail systems (0 dots).

DD. In high rain areas, there is a need to harden trails to properly accommodate equestrian use. The other option would be to limit equestrian trail use to seasonal use (0 dots).

EE. There is a tendency to promote use of trails such as the Oregon Coast Trail before providing all the necessary trail information and trail amenities such as adequate camping facilities (0 dots).

FF. There is a need for trail informational guides, brochures and maps—particularly for large groups using trails within the region (0 dots).

GG. There is a need to provide an adequate variety of challenge opportunities to meet the needs of experienced trail users and to accommodate new technological advances in trail-related equipment. Managers should take great care to strike a proper balance between what types of trail uses to accommodate and what uses are inappropriate to accommodate. Managers should not attempt to satisfy the needs for all extreme sports currently popular. To address this issue in a proactive manner, managing agencies should have a management plan in place to properly address long-term trail sustainability and emerging technologies (0 dots).

HH. There is a need for a funding source for community trail planning within the region—particularly for small communities. Such communities are currently struggling with setting trail project priorities and the formal public input process. Currently, there are extremely limited resources for conducting community trail planning efforts (0 dots).

II. People are now looking for a more diverse offering of outdoor recreational opportunities during their overnight camping trips including activities on both terrestrial and water trails. If a destination area doesn't have something for them to do, they will go elsewhere (0 dots).

JJ. There is considerable confusion among trail users in the region regarding trail access pass requirements (e.g. USFS, BLM, NPS, OPRD, ODF) (0 dots).

KK. There is a need for emergency response training to ensure that the necessary skills and knowledge are in place to properly respond to trail-related emergency situations (0 dots).

LL. There is a need to make the trail inventory a living document/resource. As new trails are designated they should be added to the inventory. The long-term objective should be to keep the inventory as up-to-date as possible (0 dots).

General Public Session (Lincoln City)
(Evening Session)

Attendance: 9 people attended the meeting.

SSS. There is a need to maintain access to beaches for all users. There is concern that equestrian and ATV use of the beaches is threatened (7 dots).

TTT. There is a need for quality/consistent standards on trail planning, design, maintenance, and construction (4 dots).

UUU. As non-motorized trail use continues to grow in the region, there is a need to identify ways to allow users to pay for their trail-related facilities and services in a similar way as motorized users are paying the costs associated with new areas and maintaining riding areas. Such a funding system needs to ensure that it is equitable and affordable for people for all people (4 dots).

VVV. There is a need for quality information regarding regulation (impact of non-compliance), level of difficulty (guidelines, definitions and standards), route maps, and consistent signing across agencies (3 dots).

WWW. Mountain bike use can be incompatible with other trail uses and separate riding areas are needed within the region (2 dots).

XXX. There is a need to explore recreation opportunities on private timberlands and work with private landowners for access. Some keys to success for securing use on private lands are user education (respect for property) and the purchase of recreational easements (2 dots).

YYY. It is important to note that user conflicts and use conflicts are not the same thing (2 dots).

ZZZ. There is a need to consider the capacity of trail systems and incentives to disperse use (1 dot).

AAAA. Trail difficulty level ratings should be coordinated/designated at the state level to create more consistency across riding areas (1 dot).

BBBB. Trail construction is extremely labor intensive (1 dot).

CCCC. There is a need to make trails safe from crime and, in some cases, wildlife (e.g. mountain lions) (0 dots).

DDDD. There is a need to design trails that are more compatible with nature (0 dots).

EEEE. There is a need for regional motorized trail planning including the need for camping, overnight accommodations, as well as riding areas (0 dots).

FFFF. There is a need to consider reuse of roads on federal lands for recreation purposes (0 dots).

GGGG. I recently completed serving as chairman of the Bay Ocean Task Force. The task force was a well-chosen panel of citizens tasked with making recommendations to the commissioners of Tillamook County, endeavoring to resolve user conflicts on the Bay Ocean spit at Tillamook Bay. We were also tasked with re-zoning considerations. The task force had been formed by the Tillamook County

Commissioners in response to a small but very vocal group of people that wanted to restrict or remove various recreational user groups from the spit. Bay Ocean property is composed of a combination of owners, state (beaches), federal, county, and private lands. The task force completed its one-year term, sent its recommendations on to the commissioners and has been dissolved. As a task force we took input from government, citizens and specialists. We also looked at what worked and what didn't work at Oregon State Parks, Oregon Department of Forestry, U.S. Forest service and other such entities. We used input from the Oregon State Parks surveys too. We presented the commissioners with some specific recommendations that we based on our general discovery of how to handle the conflicts. Our recommendations were to not remove or restrict any of the traditional users of the spit (this included hunting, equestrian use, U.S. Military survival school). Conflicts and protection of habitat were to be handled through education and not more regulations. We actually recommended to relax part of one ordinance and to not further restrict zoning. Education as the key would be accomplished through utilization of user groups such as is successfully now used in the state parks and forestry. One ODF manager I spoke with said they could not possibly handle the habitat or user conflict in the Tillamook Forest without cooperation and educational work from the various user groups. My recommendation to you on trails is to not look to removals, restrictions, or new regulations but to the opposite philosophy of making more trails and opportunities available for all the user groups through education and increased use of organized user groups and their volunteers (on-line comment).

NORTHWEST REGION (Eugene) 5/22/03

(Northwest Region includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lincoln, Benton and Lane Counties)

Public Recreation Provider Session (Eugene)

(Daytime Session)

Attendance: 14 people attended the meeting including representation from:

Oregon Parks & Recreation Dept.

Willamalane Park & Recreation Dist.

Bureau of Land Management

City of Corvallis

Lane Council of Governments

City of Eugene

Port of Siuslaw

Siuslaw Watershed Council

Non-motorized Trail Issues

BB. There is a need for funds for acquisition of fee title, easements and land exchanges (5 dots).

CC. There are opportunities to engage private conservancies, foundations and land trust organizations as partners and providers in trail planning, development, management and maintenance. Such groups should also be involved in regional and statewide trails planning efforts (4 dots).

DD. There is a need for additional funding for trail and trail corridor maintenance (3 dots).

EE. There is a need for interpretation/education opportunities on trails including historical, cultural and natural themes. There are also opportunities to engage school-age children and others in trail-related interpretation/ education through service learning and other learning opportunities (2 dots).

FF. Recreational trails are a key economic development opportunity within the region. Policy makers and planners should consider this in state planning and resource allocation (2 dots).

GG. There is a demand for more accessible nature-based trails and a uniform rating system for describing trail accessibility information to the public (2 dots).

HH. There is a need for more trails near population centers/urban areas in the region. Adding additional trails could help to solve many local issues such as transportation, need for exercise and user conflicts (2 dots).

II. There are opportunities for increasing public recreation on private lands (e.g. timber company lands) in the region (2 dots).

JJ. There is a need to address conflicts on multiple use trails through design, site selection, planning and education (2 dots).

KK. There is a need for connectivity in trail systems (completing gaps in the trails systems) and connecting local/regional parks and open space (1 dot).

LL. There is a need for regional coordination and information sharing between agencies for trail planning and coordinating for funding. There is a need for a regional planning process and design and construction standards for use in the region (1 dot).

MM. There is a need for additional trail development/construction funds (1 dot).

NN. There is a need to manage not only the trail, but the landscape around trails to minimize erosion and movement of invasive species (0 dots).

OO. There is a need for more equestrian trails near population centers/urban areas in the region (0 dots).

PP. Regarding comment OO, I am handicapped. I broke my leg very badly in a "non-horse" accident. I can no longer walk or hike for any long distance or over rough terrain. My horses, on the other hand, can. They can take me where I cannot go on my own. One of my favorite local rides is Elijah Bristow State Park. Recently, a sign was posted there saying the park would close to us from October through May. This is the only "handicap accessible" place I have found locally where I am able to ride on my own. There have been "erosion issues" and "downstream fish" issues raised by the park ranger to try and justify these closures. I have ridden there in October and November...and even after a long summer of use, I have not seen evidence that the park, river, or trails have suffered at all from the use of the equestrian trails. As for the "downstream fish" issue, that is ridiculous!! We are not causing any uproarious event in the river!! The state officials should be looking to their own for that type of damage...like the after effects of the work done at Cougar Reservoir. the McKenzie River was BROWN for over a year downstream from there. That probably impacted the rivers fish population...I know it ruined the fishing for a good long time. Elijah Bristow was endowed to the state of Oregon as an EQUESTRIAN park. Year round...and should remain that way. Much of the maintenance of the trails and other areas of the park are taken care of by local equestrian groups. We riders need MORE parks, MORE trails, and MORE consideration for those of us who are not physically capable of enjoying them without our 4-legged companions. Please try to consider the REAL impact the closure of the park for 6 months of the year on my life, and the lives of others like me. I am inclined to believe that the decision

was made by "one" when it should have been considered by "many." One or two officials do not voice the view of the public...and true "owners" of State Lands (on-line comment).

QQ. Regarding comment OO, as trail riding opportunities shrink, our organization is trying mightily to make horse traffic as responsible as possible and contribute man-hours, tools and when possible, materials to maintain and improve trails and campsites so that we are not squeezed out of the recreation picture altogether. Horse owners spend a good deal of money in Lane County on supplies and equipment and should be welcome on established horse friendly trails and camps (on-line comment).

RR. Regarding comment OO, we are very concerned about the recent closure sign placed at Elijah Bristow State Park, stating horses will be prohibited from the park during the winter. This park is an EQUESTRIAN Park and one of the few places where we can regularly ride all year. Our OET chapter has work parties there to help maintain the trails. Why has this arbitrary decision been made without prior public input and notification (on-line comment)?

SS. There are opportunities for seasonal closures and other management techniques to protect resources (0 dots).

TT. There is a need for public land managers to develop clear objectives related to trail management intentions and to articulate those objectives simply and clearly. These objectives must be carried through planning and implementation. Finally, there is also a need to take a regional view on how to best provide trail opportunities (0 dots).

UU. There is a need for management of unauthorized trails, new technologies (e.g. geocaching) and new activities not on designated trails and recreation areas (0 dot).

VV. There is a need to use recreational trails as vehicles of education and interpretation related to issues such as resource protection and appreciation, understanding of natural systems and sustainability (0 dots).

WW. There is a need for more safety/security at trailheads—particularly trailhead parking lots (0 dots).

XX. There is a need to be creative in terms of partnerships and funding (0 dots).

YY. There is a need to address impacts associated with competitive/organized trail events. Such events must be matched with those trail resources designed for such a use. Many trails are not designed to handle such intensive use (0 dots).

ZZ. There is a need to explore options to generate revenues associated with trail use (0 dots).

AAA. Liability is a deterrent to private-sector provision of trail opportunities in Oregon. If you charge a fee for recreational use you can be held liable for injuries/damages occurring on private lands (0 dots).

BBB. The prioritization of trail development projects should be done at a regional level using a peer review process. At the local level, projects should be developed using groups such as community solutions teams to get a broader perspective on what other governmental agencies are doing which might affect trail development (0 dots).

CCC. There is a need for consistent/uniform signage and a way to develop multi-agency information coordination (0 dots).

DDD. There is a need for more safety/security at trailheads—particularly trailhead parking lots (0 dots).

EEE. There is a need for information resource coordination including maps, regulations, signage and providing trail users with information to make informed decisions (0 dots).

FFF. As the fees for outdoor recreation use grow, there is a growing need/opportunity for the private sector to get involved in providing trail facilities and opportunities in the region (0 dots).

GGG. There is a need for an informational clearinghouse for trail design, maintenance, interpretation and accessibility (0 dots).

HHH. There is a need for additional trail enforcement (0 dots).

III. There is a need to address conflicts on multiple-use trails through design, site selection, planning and education (0 dots).

JJJ. There is a need for additional law enforcement in the region (0 dots).

KKK. There is a need for a universal recreation pass system within the region. The current fee and pass system, where each agency requires their own payment, is extremely confusing to the public (0 dots).

LLL. There is a need for public land managers to develop clear objectives related to trail management intentions and to articulate those objectives simply and clearly. These objectives must be carried through planning and implementation. Finally, there is also a need to take a regional view on how to best provide trail opportunities (0 dots).

MMM. There is a need to understand and capitalize on transportation and recreation projects through better coordination in planning, project development and funding (0 dots).

NNN. There is a need for coordination at the state level that matches funds with projects. OPRD administers a variety of grant funding programs (LWCF, local, ATV, and RTP). Applicants often have a difficult time deciding which pot of money to go after for their project. OPRD should provide guidance at the statewide level to match projects with dollars so that everyone has the best chance to succeed in getting funding. OPRD should also provide information about the timing, content and requirements of the grant programs and to allow applicants to better understand grant funding priorities (0 dots).

OOO. There is a need for historical, cultural and natural interpretation/education opportunities on trails. There are also opportunities to engage school-age children in trail-related interpretation (service learning and other types of learning opportunities) (0 dots).

PPP. There is a need to understand and capitalize on transportation and recreation projects through better coordination in planning, project development and funding (0 dots).

QQQ. There is a demand for challenge trail opportunities such as "trial" trail areas and mountain bike areas (0 dots).

General Public Session (Eugene)

(Evening Session)

Attendance: 19 people attended the meeting.

Non-motorized Trail Issues

WWWWW. There is a need to make greater use/coordination of volunteers for trail maintenance because agencies do not have sufficient resources (8 dots).

YYYYY. There is a need to make sure that trails not regularly maintained are not lost and grandfather in older/existing trails (6 dots).

ZZZZZ. There is need for more trails close to urban areas (5 dots).

AAAAA. There is a need to address environmental impacts including wildlife, need for good planning and design, capacity issues, soil issues and the value in study of impacts (5 dots).

BBBBB. There is an opportunity to work with private landowners (timber companies) to allow recreational use (5 dots).

CCCCC. There is an opportunity for recreation use of roads scheduled for abandonment (4 dots).

DDDDD. There is a need for additional user education (including noise, and trail etiquette) that targets new users (3 dots).

EEEEEE. There is a need for a central website location where users can go for information on trip planning including information such as current trail condition, GIS and mapping (3 dots).

FFFFFF. There is a need for loop trail systems on a variety of terrain (2 dots).

GGGGG. There is a need to focus on connecting existing trail systems in the region. This should be done through gap analysis and cooperative multi-agency planning efforts (2 dots).

HHHHHH. Multi-use trails are a great resource if users respect each other (1 dot).

IIIII. There is a need to address the noise issue on trails within the region. Trails planners should carefully consider compatibility (associated with noise) during the development of multi-use trails. There is also a need for greater tolerance between user groups on multi-use trails (1 dot).

JJJJJ. There is a need for good information resources including where to ride, regulations, good signage, mapping, and clear designation (e.g., type, class, etc.) (1 dot).

KKKKK. There is a need to promote Leave No Trace and Tread Lightly programs in the region (1 dot).

LLLLL. There is a need for trailheads with adequate facilities such as proper accommodations for trailers (1 dot).

MMMMM. There is a need for more active trail management by the federal agencies (1 dot).

NNNNN. There is a need for more multiple-use trailheads in the region (1 dot).

OOOOOO. There is a need to investigate the future of trail use fees in the region. Potential strategies include direct trail use fees, out of state fees, and direct use of fees for trail maintenance (1 dot).

PPPPPP. There is a need for adequate sanitary facilities at resting/stopping areas (1 dot).

QQQQQQ. There is a need for education for dog owners so that dogs are not banned from trails in the region (1 dot).

RRRRRR. There is a need for more accessible trail opportunities in the region (0 dots).

SSSSSS. I would like to add my feelings about the newly posted sign at Elijah Bristow Park restricting horses from October to May. I was under the impression this park was donated for equestrian use. It is also one of the handicap accessible parks. I have just moved my horses 25 miles to be able to ride the park more often. It is so disheartening that we equestrians are being further and further restricted. We spent a lot of money to care and enjoy our horses. What is it about them that is so awful? I have never been a political person, but my voting will certainly be influenced by such decisions. It used to be if you were plain, hard-working folks you could at least go camping for entertainment. Now with fees and restrictions, it is becoming increasingly difficult to share good, clean family fun with our kids (on-line comment)!

SOUTHWEST REGION (Bandon) 4/17/03

(Southwest Region includes Coos, Curry, Josephine, Jackson and Douglas Counties)

Public Recreation Provider Session (Bandon)

(Daytime Session)

Attendance: 12 people participated in the workshop including representation from:

Oregon Parks & Recreation Department

U.S. Forest Service

Bureau of Land Management

Coos County

City of Powers

Non-motorized Trail Issues

T. There is a need for additional funding for trail maintenance within the region. There always seems to be money available for trail development—but not for routine day-to-day trail maintenance (7 dots).

U. Resources are limited for trail maintenance, but providers are constantly being asked to develop additional trails. As a result, trail maintenance should be a high grant funding priority. There should also be a grant evaluation criteria stating that if an agency does not have a history of properly maintaining existing trails, they should not receive funding for new trail development projects. More priority should be given to maintaining what we currently have before adding additional trail facilities. In addition, we should share information on successful trail projects, maintenance examples, and officially recognizing agencies with exemplary trail maintenance programs (7 dots).

V. There is a need for readily accessible funding for both trail planning and environmental assessment work on trails on state and federal lands. For example, if a federal agency is asked to develop an equestrian trail on land which they manage which requires an environmental assessment, they will have to put in a year or two of time up front before even beginning to put a trail on the ground. If adequate staff-time is not available for such work, the trail will not be developed (4 dots).

W. There is a need for good trail design and maintenance to proactively address resource damage occurring on trails within the region. As a result, there is a need for good maintenance resources and access to construction and maintenance information. Such resources are currently available, but simply need to be housed in a central statewide location. But at the core of the maintenance problem—it all comes down to funding. We end up shortcutting some of the process to stay within limited construction and maintenance budgets (3 dots).

X. There is a need for trails adjacent to major travel corridors and near population centers in the region. People are stressed for time and not willing to drive 2 hours to get to backcountry trail opportunities. For example, if a trail is adjacent to Highway 101 the trail is going to get more use (3 dots).

Y. There is a need for more coordination between agencies in regional trail planning and marketing to provide the correct mix of facilities and more cost-effectively market trail information to the public. There is a need for a good one-stop location for marketing trail opportunities in the region (2 dots).

Z. There is a need to address user conflicts through trail design and making sure there are adequate opportunities for all users (e.g. if a trail is closed for mountain biking use, the another place should be provided) (1 dot).

AA. There is a need for increased/adequate trailhead parking, staging areas for trails (including good spacing for equestrians) and signage for allowed use, level of difficulty, distance, and adequate directional signage (1 dot).

BB. There is a need for connectivity in trail systems connecting local resources with county, state, and federal trails and communities within the region (1 dot).

CC. There is a need for more universally accessible trail options to better serve an aging population base which is still very active. Accessible trail opportunities should be available at the community level and in the wild land interface. In addition, there is a need for technical assistance and funding for complying with Americans with Disabilities Act (ADA) requirements (1 dot).

DD. Many existing trail-related facilities are old (both in location and use) and have not been modified to represent current needs. Times have changed but the facilities haven't changed with them—such as tent camping facilities including room for one car and one tent and RV campsites not large enough for modern vehicles (0 dots).

EE. There is a need for consistency in sign standards such as level of difficulty symbols to allow users with enough information to avoid getting in over their level of experience. All agencies should use the same types of trail markers and standardized regulation signs and jurisdictional boundary signs (0 dots).

FF. There is a need for training in the design, management, and maintenance of trails. Training should be done in an interagency fashion as a collaborative effort (e.g. the National Trails Training Partnership) to improve networking and partnership opportunities (0 dots).

GG. There is a need for additional long-distance hiking opportunities in the region. Currently, most trails are only a mile or two in length and many users are looking for longer hiking experiences (0 dots).

HH. There is a need for additional trails along waterways in the region (0 dots).

II. There is a need for adequate trip planning resources such as maps and regional trail information on a central web location with links to other sites (0 dots).

JJ. There is a need for good information on where hikers can and cannot camp on long-distance trails within the region such as the Coastal Trail (0 dots).

KK. There is a need for creating partnerships within the region to assist with getting trails information out to tourists and selling trails as an economic development strategy. Recreation providers should partner with the tourism industry, trade associations, and user groups/clubs to multiply their efforts (0 dots).

General Public Session (Bandon) (Evening Session)

Attendance: 6 people attended the meeting.

Non-motorized Trail Issues

NNN. More trails will disperse use and reduce user conflict (5 dots).

OOO. There is a need to consider strategies such as state initiatives and technical assistance programs to develop trail opportunities on rail corridors within the region (3 dots).

PPP. There is a need to increase trail and trailhead capacity within the region (2 dots).

QQQ. There is a need for more multiple use trails (motorized and non-motorized) within the region (1 dots).

RRR. There is a need for greater tolerance, shared use, and good practices (education, information, and signage) on trails within the region (1 dots).

SSS. There is a need for trail connectivity within the region. Connecting trails is an effective way to increase capacity and provide more long-range riding opportunities (1 dots).

TTT. There is a need to work with clubs and volunteers for the provision of trail maintenance and user education within the region (1 dots).

UUU. Trails are needed close to where people live (1 dot).

VVV. There is a need to recognize the economic benefits of trails such as the importance of trails in business location, quality of life, and where people want to live (1 dot).

WWW. Smaller Oregon communities need outside technical assistance to develop trail opportunities (1 dot).

XXX. There is a need for consistent and effective directional signage (0 dots).

SOUTHWEST REGION (Grants Pass) 4/16/03

(Southwest Region includes Coos, Curry, Josephine, Jackson and Douglas Counties)

Public Recreation Provider Session (Grants Pass) (Daytime Session)

Attendance: 6 people participated in the workshop including representation from:

Oregon Parks & Recreation Department
U.S. Forest Service
City of Rogue River
City of Ashland

Non-motorized Trail Issues

L. There is a strong need for trail connectivity within the region. In Ashland, connectivity includes making trail connections within the urban area and to trails in adjacent public lands. There are also opportunities in the region to connect communities with nearby parks and open spaces (Gold Hill, Bear Creek Greenway, Rogue River, Valley of the Rogue) and to connect land-based trails with water trails. Connecting communities to outlying trails also creates opportunities for both local community recreation (no need to drive to outlying trails) and park connections to communities as recreation destinations. A trail connection is nearly complete between the Bear Creek Greenway and the Pacific Crest Trail that will serve as a major conduit between urban and forest settings. But, this in itself does not address the growing number of unmanaged trails in the interface on privately owned and public lands. Management needs to occur that develops sustainable trails in appropriate locations that are desirable while at the same time decommissioning trails in inappropriate locations that are not sustainable. The issue of unmanaged trails is directly affecting rare plants, introduction of evasive species, and to a lesser degree, water quality from soil erosion (5 dots).

M. Regarding comment L, OPRD staff members have proposed research of the Rails with Trails program for the Rogue Valley. Ashland already has used this method for part of their bike trail. By working out an agreement with the railroad we could connect the north and south sections of the valley via this conduit. Spur trails could be developed off this trail to connect to the other hiking/biking trails throughout the area. The City of Rogue River is currently researching this possibility. This could provide a firebreak alongside the rail bed, which is currently bladed off by small dozers in some stretches for just this purpose. OPRD proposes a spur trail to its current River's Edge Hiking Trail. We would entertain the idea of a hiker/biker camp area within the campground. The rail trail would be able to provide a safe corridor that could be signed and maintained by local county, state and federal agencies. This could be a win/win for all concerned with the usual property owner concerns needing active consideration. Ideally, there would be a countywide bicycle/hiker rule enforcement patrol (on-line comment).

N. There is a need for funding and technical assistance for easements, permitting fee title, and acquisition for trail projects. Population growth in the Ashland area has resulted in increased demand for trails. Population growth has also increased the cost of land acquisition and easements and reduced the supply of available land acquisition opportunities. A trail counter set up on a National

Forest System Trail north of Ashland in 1999 had 12,033 hits. In 2002, that same counter registered 18,466 hits. Trail easements have been difficult to obtain throughout the urban interface. Property owners are not agreeing to easements because of perceived property devaluation, liability and risk of fire (5 dots).

O. There is a need for a variety of trail types (hardened to natural surfaces) within the region. If we are going to have an extensive regional trail system, we realistically cannot afford to pave it all (3 dots).

P. There is a need to look at trail design as a means of managing use to reduce user conflict and trail erosion. Proper trail design can be a more cost-effective trail management strategy than regulation. There is a need for separate designated areas for use by downhill mountain bikers (mountain bike parks). The more extreme mountain bikers are often incompatible with other trail uses. Downhill mountain biking is also resulting in extreme erosion problems on watersheds within the region. But, we should keep in mind that "extreme riders" look for the "knarliest" route possible, which then attracts them to trails (managed or unmanaged) not suited for their use. Even off road (bushwackers) use by downhill mountain bikers is growing rapidly. Braided trails are becoming an issue as riders develop side trails along the main routes. Separating uses is a difficult option to reduce user conflict. Dogs are even an issue within the hiker community (2 dots).

Q. Regarding comment P, we need a statewide trail etiquette and ethics brochure and sign program. This would be able to proactively state the reasons why domestic pets are allowed while leashed or are not allowed at all on specific trails. There is a need for a statewide hiking/biking trail map similar to the statewide ATV map currently available (on-line comment).

R. There is a need for coordination and communication between public agencies (federal, state, and local agencies) regarding trail planning, funding and design and to facilitate the identification of multi-jurisdictional priorities. We should also consider establishing a shared interagency statewide goal to develop trail connectivity throughout the state. Communication is more important now than ever between agencies and the public. It is critical that the public be involved in trail development, design, and maintenance to preserve the long-term viability of a trail. Lesser-used trails are being abandoned to divert energy and resources to higher use areas, resulting in the loss of some recreation experiences. As agencies reorganize to be in line with reduced budgets, they should look at opportunities to combine services. Agency stability needs to happen as quickly as possible because the public is not being served with good information, nor can agencies be responsive with mounting workloads and uncertain futures (1 dot).

S. There are considerable economic benefits associated with developing trail connectivity within the region. There are many active people in Ashland who own or work in bike shops who are keenly aware of the importance of trails in the area. Their bike shops are dependent on good trail systems. The Ashland Chamber of Commerce is also very interested in the trail systems and are quite interested in information that can be prepared and cleanly displayed (0 dots).

T. Trails provide a safe alternative route for bicycle and pedestrian commuting within the region (0 dots).

U. There are several local trail development opportunities on land and water at and around Rogue River (0 dots).

V. There is a need to provide good information on trail opportunities to potential visitors during trip planning so they are not disappointed by a lack of opportunities after arrival. It is more effective to tell people where to go rather than later telling them where not to go for trail opportunities (0 dots).

W. There is a need for trail ethics information, especially on multi-use trails (0 dots).

X. There is an increasing amount of vandalism occurring at trailheads (0 dots).

Y. There appears to be an increasing need for regional and "local" tourist information. Several area long-time residents are unaware of opportunities existing in the present parks/trails system (on-line comment).

General Public Session (Grants Pass) (Evening Session)

Attendance: 7 people attended the meeting.

Non-motorized Trail Issues

JJJ. Need for trailheads and related facilities (4 dots).

KKK. Need for trailside camping areas in remote locations only accessible by non-motorized means (foot, horse and mountain bike) (4 dots).

LLL. Need for better coordination between agencies on trail planning and development (2 dots).

MMM. Need for connectivity within urban and rural areas of the region (2 dots).

NNN. Need for appropriate signing when crossing into areas with different regulations (2 dots).

OOO. Need for contact information at riding areas on who to contact to address a maintenance issue (2 dots).

PPP. There is a need for signing consistency between different areas within the region (1 dot).

QQQ. Need for multiple-use trail tolerance and user-conflict education (1 dot).

RRR. Regarding comment QQQ, I have often felt that conflict is created by management when they say that there may be conflict. I was riding a multiple-use trail in Montana and asked the ranger about conflicts on his system. He told me that he made it very clear that if someone complained about multiple use too hard he would ban the complaining group. He told me that he had not had a complaint in several years and that everyone seemed to get on just fine (on-line comment).

SSS. Need for more trail signage within the region (0 dots).

TTT. Need for more snow parks (0 dots).

UUU. Need for maps not divided by jurisdictional boundaries (0 dots).

WV. Need to separate non-compatible motorized and non-motorized uses where appropriate (0 dots).

NORTHCENTRAL REGION (Bend) 4/3/03

(North central Region includes Wasco, Sherman, Gilliam, Morrow, Umatilla, Jefferson, Wheeler, Deschutes and Crook Counties)

Public Recreation Provider Session (Bend)

(Daytime Session)

Attendance: 11 people attended the meeting including representation from:

Oregon Parks & Recreation Department
Bureau of Land Management
Bend Metro Parks & Recreation District
City of Sisters

Non-motorized Trail Issues

N. There is a need to develop and extend a regional trails system within the region. To properly plan such a system, there is a need for a region-wide, multi-jurisdictional trail planning entity (like the Deschutes Bike and Pedestrian Committee) to facilitate regional and urban trail system planning. Such a group would work with private landowners, irrigation districts and public agencies (federal, state and local) to coordinate the trails planning process and facilitate idea sharing and the communication process. Finally, there is a need for a shared vision between local, state and federal recreation providers for trails planning within the region to identify trail development priorities. Such an overall vision is essential in order to see trails projects through to completion (6 dots).

O. The region contains a number of historic travel corridors (Native American and early Anglo-settlement) that could potentially provide great recreation trail development opportunities (including potential rail-to-trail projects). The unique history associated with these travel corridors would provide an incredible interpretive theme for drawing users (5 dots).

P. There is a need to develop urban trail systems to connect urban parks and open space including connections to recreational opportunities on outlying public lands (4 dots).

Q. Trails are not always seen as top priorities in relation to other community needs. As a result, recreation providers must work together to make a stronger case that trails are important to communities and provide a broad range of social and economic benefits to communities and are deserving of a higher position on the city/county political agenda. (3 dots).

R. There is a need for flexible funding to accommodate trail projects crossing multiple jurisdictional (city, county, state, federal) boundaries. The statewide trails plan should include an up-to-date inventory of trail funding resources available for trail development projects in the state. The list should also include the specific types of projects funded by the grant program (1 dot).

S. There is a need for a central OPRD contact to provide trail planners across the state with technical assistance (1 dot).

T. There is a need for a consistent set of trail design standards for use within the region (1 dot).

U. There is a need for additional funding for building trails and trail-related facilities such as parking areas, trailheads and signage. In order to provide the necessary incentive for new trail development projects, there must also be funding provided for trail maintenance and enforcement assistance. Finally, there is a need for funding for maps and brochures to market these trails after completion (0 dots).

V. There is a need to educate trail users (especially those riding mountain bikes and ATVs) to control resource damage associated with increasing use in urban interface areas within the region (0 dots).

W. There is a need for a central database or statewide GIS system including all Local Transportation System Plans and current inventories of existing and proposed trails so that trail planners and local public officials are better aware of the current status of trails planning within their jurisdiction. The trails planning information should be easily accessible such as on an internet site (0 dots).

General Public Session (Bend) (Evening Session)

Attendance: 48 people attended the meeting.

Non-motorized Trail Issues

ZZ. There is a need for trail access opportunities that do not require user fees or permits. Such trail opportunities should include minimal levels of improvement (8 dots).

AAA. There is a need for more non-commercial groomed cross-country ski trails within the region (8 dots).

BBB. There is a need for more equestrian camps and day-use trailheads within the region (7 dots).

CCC. There is a need for more snow parks and related facilities within the region (6 dots).

DDD. There is a need for additional funding for maintenance and trail development within the region (6 dots).

EEE. Regarding comment DDD, I agree with the above comment. For example we would like to see a looped trail developed within our community that would be about 2 miles long through our greenbelt area. It would provide opportunities for joggers, walkers, bike riders, and those interested in scenic vistas, history and nature as it goes through an area abundant in bird and wildlife. There doesn't seem to be much funding for such trails for small communities like ours (on-line comment).

FFF. There is a need for increased multi-use non-motorized trail connectivity (local, regional and state trail networks) within the region (5 dots).

GGG. There is a need for more urban trails within the region. Such trails contribute to the disbursement of recreational use in urban areas (5 dots).

HHH. There is a need for public education and planning for people of different age and cultural groups to reduce user conflicts on multi-use trails within the region (4 dots).

III. There is a need for more designated target shooting areas and firearm education so that target shooting does not occur in public-use trail areas (3 dots).

JJJ. There is a need for more off-leash dog trail opportunities within the region (3 dots).

KKK. There is a need for incentives/programs to encourage volunteer trail maintenance and construction projects within the region. Recreation providers should make better use of the special skills of trail volunteers and to provide more training/certification opportunities for volunteers (3 dots).

LLL. There is a need to coordinate summer and winter trails for multiple uses (2 dots).

MMM. There is a need for trail use in a variety of settings (urban to wilderness) within the region. Care should be taken to develop facilities based on actual user need (e.g. need for less developed facilities in certain areas of the region) (1 dot).

NNN. There is a need for larger parking areas for multi-use trailheads which accommodate equestrian or snowmobile use. Separate facilities for equestrian and snowmobile use should be considered where appropriate (1 dot).

OOO. Allow leashed dogs on all trails within the region (1 dot).

PPP. There is a need for more separate use trails to reduce the number of user conflicts occurring on multiple-use trails within the region (1 dot).

SOUTHCENTRAL REGION (Klamath Falls) 4/15/03

(South central Region includes Klamath and Lake Counties)

Public Recreation Provider Session (Klamath Falls) (Daytime Session)

Attendance: 6 people attended the meeting including representation from:

Oregon Parks & Recreation Department

U.S. Forest Service

Klamath Rails to Trails

Jackson County Roads/Parks

Non-motorized Trail Issues

M. There is a need for statewide trail design and construction standards—particularly at roadway crossings. Current guidelines are being interpreted broadly and in a number of ways. For example, if you are dealing with multiple agencies on a trails project you get 3 or 4 applications on how to design trail roadway crossings. There is a need for specific statutes that support appropriate construction and crosswalk standards at multi-use roadway crossings (2 dots).

N. There is a need for additional funding for trail staffing, equipment, maintenance, development, law enforcement and education. As trail use increases, hard evidence is needed to justify staffing increases

for public agencies. Towards this end, there is a need for better documentation of the need for and benefits of trails to aid in making the case for appropriate funding increases to groups such as the state legislature (2 dots).

O. There is a need for increased law enforcement including code compliance officers, trail stewards and related visitor and educational information (2 dots).

P. There is a need for more trailheads suited to equestrian use. Proper site planning should include examining location in relation to other users groups, as well as providing the necessary space to handle modern equipment (2 dots).

Q. There is a need for dedicated funding for trail operation and maintenance. Potential funding sources include taxes on the purchase of recreational equipment or franchise fees (utility fees) on trail corridors (2 dot).

R. There is a need for trail planning assistance (technical and financial) for multi-jurisdictional trail and trail system development. In the past, recreation providers have lived within a self-contained park unit philosophy. Such a management philosophy is not suited to the large-scale trail development projects currently being proposed and developed (1 dot).

S. There is a need to develop consistent policy and management approaches for addressing the use of motorized equipment use (e.g. Segways) on non-motorized trails (1 dot).

T. There is a need to recognize the various purposes of multiple-use trails such as commuting and recreation (1 dot).

U. There is a need for additional opportunities for both multi-use and dedicated-use trails. For example, some trails are simply not safe to have mountain bikers coming downhill towards other trail users (1 dot).

V. Enforcement on trails is difficult due to distances and variety of trail settings (from urban to wilderness) (1 dot).

W. There is a need for trail connectivity both within the urban area and to outlying public lands (1 dot).

X. There is a need for a more developed bicycle transportation system including connections to the existing recreational systems. The end goal is to develop a seamless connection between on-street bikeways and urban trail systems. Urban trails need to be considered as an important component of the urban transportation system (1 dot).

Y. As trail use continues to increase, lack of adequate trail funding will create increasing public provider liability exposure. To proactively address this situation, recreation providers must have additional funding for maintenance staffing, equipment, bridges, and fencing expenses (1 dot).

Z. There is a need to identify and develop more trailheads along trails and trail-related facilities such as campgrounds, restrooms, signage and potable water (1 dot).

AA. There is a need for information resources such as maps and brochures (0 dots).

BB. There is a need for additional mountain biking opportunities in a variety of settings—from flat trails to more technical riding opportunities (0 dots).

CC. There is a need to address potential user conflicts between equestrians and mountain bikers—especially on trails close to urban areas (0 dots).

DD. There is a need for standardized trail signing within the region (including design assistance, regulatory information and distance standards) (0 dots).

EE. There is a need for greater accountability for management of the 1% Bicycle Bill Fund (0 dots).

FF. There is a need to address the special challenge of providing emergency response on trails within the region. Trails have no specific address or location information necessary to identify the location of the injured party (0 dots).

GG. There is a need for increased levels of training, recruitment and resources for trail volunteers (0 dots).

HH. There is a need for technical assistance in navigating the NEPA process required for qualifying for federal trail funding (0 dots).

II. There is a need for addressing a growing number of user conflicts on multiple-use trails within the region (0 dots).

General Public Session (Klamath Falls)
(Evening Session)

Attendance: 6 people attended the meeting.

Non-motorized Trail Issues

III. There is a need for better education/information on the sharing of multi-use trails within the region (e.g. multi-use coalition) (8 dots).

JJJ. There is a need for policies/assistance on properly handling the homeless on trails and trail related facilities within the region. There is a need to consider policies related to law enforcement, need to view trails as a family place and a community resource, and impacts on the availability of trail facilities (e.g. locked restrooms) (3 dots).

KKK. There are opportunities for sharing/multiple-use of trail facilities within the region (e.g. snowmobile, summer motorized, non-motorized- fire season closures) (3 dots).

LLL. There is a need for connectivity of trails systems within the region linking parks, public facilities and communities. There is also an opportunity to build connections between urban and wilderness trails (2 dots).

MMM. There is a need to prepare policy and management structures to accommodate personal mobility devices (Segways). We need to address the question of what trails will they be allowed on or restricted from use (1 dot).

NNN. There is a need to recognize that trails are an economic opportunity for communities because of their contribution of the overall quality of life (1 dot).

OOO. There is a need for trail etiquette information such as leave no trace, tread lightly, tolerance, respect and stewardship information (0 dots).

PPP. Urban trails need to be considered as an important component of the urban transportation system (0 dots).

QQQ. There is a need for a web site containing information on where existing trail opportunities are available within the region (0 dots).

RRR. There is a need for more diverse use (motorized and non-motorized) trails within the region (0 dots).

NORTHEAST REGION (Union) 4/1/03

(Northeast Region includes Wallowa, Union, Grant and Baker Counties)

Public Recreation Provider Session (Union) (Daytime Session)

Attendance: 11 people attended the meeting including representation from:

- Oregon Parks & Recreation Department
- U.S. Forest Service
- Bureau of Land Management
- Morrow County
- City of La Grande

Non-motorized Trail Issues

T. There is a need to secure long-term funding for non-motorized trail maintenance within the region. This issue is especially relevant with U.S. Forest Service trail maintenance. Currently, the agency is charged a burden assessment for every trails grant that they apply for—19.5% of the total grant request which goes directly to cover paperwork expenses. As a result, all U.S. Forest Service trail maintenance money within the region goes directly to cover burden assessment associated with motorized trail grants. Since OPRD administered grant programs do not pay for overhead expenses, there is literally no money left for non-motorized trail maintenance and law enforcement on Forest Service lands within the region (8 dots).

U. There is a need to minimize off-trail resource impacts associated with non-motorized trail use within the region. For example, trail users often take short cuts on switch back trail sections. Educational and interpretive programs can play an important role in reducing such impacts (7 dots).

V. There is a need for connectivity between community trail systems, greenways, outlying state parks and forestlands within the region. There are many opportunities to develop loops bridging the gap between urban and rural areas potentially providing economic opportunities for local communities within the region. Potential projects included connecting Clyde Holiday State Park and Mt. Vernon and

a Snake River Breaks Trail from Farewell Bend State Park up the Snake River to connect to the Hells Canyon Wilderness Area (6 dots).

W. There is a need to address equestrian/mountain biker/hiker user conflicts on non-motorized trails within the region (4 dots).

X. Northeastern Oregon contains an incredible resource-base for developing mountain biking opportunities. There is a need to identify and market mountain biking opportunities within the region. We should also strive to connect those mountain biking opportunities to communities where appropriate (4 dots).

Y. There are a different set of users for urban and wild land trails within the region. For example, large numbers of people who live in La Grande (particularly women and ethnic minorities) do not feel comfortable going out on a Forest Service gravel road or using maps to following existing non-motorized trails on federal lands. As a result, there is a need for well-marked day-use trails within the region to satisfy these types of urban residents. Interpretive features could also help to educate urban residents to encourage their use of wild land trails (3 dots).

Z. There is a need for good design standards for non-motorized trails within the region (0 dots).

AA. There is a need for non-motorized trail signing standards within the region (0 dots).

BB. At this time, we are providing a trail s for a traditional set of linear activities on wild lands within the region. There is a need to identify any new opportunities that people may wish to participate in, but current facilities and resources do not accommodate at this time. Perhaps the trails survey could be used to identify such latent trail demand (0 dots).

CC. There is a need for development of long-distance trails within the region. Unfortunately multiple ownership and easements barriers are difficult to overcome, and will limit the ability of federal agencies (USFS and BLM) to take a leadership role in developing long-distance trail opportunities in the region. Local communities will have to take a stronger lead in developing such trail opportunities. It would be helpful if the statewide trails plan could identify tools to use in working with private landowner to develop trail access across private lands (0 dots).

DD. There is an opportunity to purchase irrigation ditch corridors within the region for development of multi-use trails (0 dots).

General Public Session (Union)
(Evening Session)

Attendance: 22 people attended the meeting.

Non-motorized Trail Issues

ZZ. Need to maintain our existing inventory of non-motorized trails within the region (11 dots).

AAA. Need for improved trail head facilities including separate facilities for stock and other users (9 dots).

BBB. Need for greater cooperation between state and federal agencies in providing trail opportunities within the region (8 dots).

CCC. Need for more close-to-home trail opportunities—especially for children (4 dots).

DDD. Need to evaluate road closures/access easements for trail use. This evaluation process should include public input and agency review (2 dots).

EEE. Need for safety and leave-no-trace education to reduce conflicts between user groups (2 dots).

FFF. Need for connecting existing trails to form long-distance trails and trail loops (1 dot).

GGG. Need to develop additional trail opportunities within the region (1 dot).

HHH. Need for better follow through on trail development projects from planning to project implementation (1 dot).

SOUTHEAST REGION (Burns) 4/2/03

(Southeast Region includes Harney and Malheur Counties)

Public Recreation Provider Session (Burns)

(Daytime Session)

Attendance: 5 people attended the meeting including representation from:

Oregon Parks & Recreation Department
Bureau of Land Management
City of Burns

Non-motorized Trail Issues

J. There are a lack of non-motorized trails within the region (4 dots).

K. There is a lack of good information on existing non-motorized trail opportunities within the region (3 dots).

L. There is potential for urban area trail development within the region (e.g., trail from Clyde Holliday to Mt. Vernon). Such trails can serve a broad spectrum of users (youth to elderly) and others who can't or do not wish to get out to existing rural trails (2 dots).

M. There is potential to designate existing two-track roads (with little motorized use) for non-motorized trail use within the region—particularly for mountain bike use. All that will need to be done is simply to market these opportunities to the mountain bikers (1 dot).

N. There may be local resistance to developing non-motorized trail opportunities and encouraging more visitors to the region. A typical comment heard is that things are nice and quiet out here — and we want to keep it that way. As a result, recreation providers need to educate communities about the social and economic benefits associated with non-motorized trail development (1 dot).

O. Outside interest groups (from places like Boise, Bend and Portland) may strongly resist the development of new non-motorized trails on public lands within the region (in areas such as Steens Mountain) (1 dot).

P. There are a lot of untapped resources for developing non-motorized trails within Harney County (0 dots).

Q. There is an opportunity to develop non-motorized trails in remote settings within the region (0 dots).

R. There is a need to market existing regional non-motorized trail opportunities (0 dots).

S. There is great interest and potential within the region to develop non-motorized trails as a potential economic development strategy (0 dots).

T. Harney County does not have the amount of developed non-motorized trails and support facilities that exist in other counties in the state (0 dots).

General Public Session (Burns)
(Evening Session)

Attendance: 5 people attended the meeting.

Non-motorized Trail Issues

OO. There is a need to consider non-motorized use of roads proposed for closure or abandonment and to review recreational use on roads previously closed or abandoned (6 dots).

PP. There is a need to educate non-motorized trail users on user-conflict resolution techniques such as yielding requirements included in multiple use trail courtesy guidelines. It would also be beneficial to get user groups to come together to work out user-conflict issues (4 dots).

QQ. There is a need for trailside warming shelters to be used by all user groups (3 dots).

RR. There is a need for non-motorized trail connectivity connecting communities, parks and community trails with the outlying federal trails (2 dots).

SS. There is a need for non-motorized trail signing (0 dots).

APPENDIX K: LIST OF REGIONAL WATER TRAIL ISSUE COMMENTS

REGIONAL WATER TRAIL ISSUE COMMENTS

NORTHWEST REGION (Portland) 5/21/03

(Northwest Region includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lincoln, Benton and Lane Counties)

Public Recreation Provider Session (Portland)

(Daytime Session)

Attendance: 21 people attended the meeting including representation from:

Oregon Parks & Recreation Department	City of Aurora
Bureau of Land Management	City of Gresham
U.S. Forest Service	City of Hubbard
Oregon Department of Forestry	City of Oregon City
METRO	City of Portland
Tualatin Hills P&R Dist.	City of Salem
Oregon Historic Trails Advisory Council	City of Tigard
Clackamas County	City of Woodburn
Tillamook County	
Oregon Recreational Trails Advisory Council	

Water Trail Issues

1. There is a need for more public water access in the region (13 dots).
2. There is a need for a designated funding source for non-motorized watercraft facility development. Currently, there are motorized and non-motorized terrestrial trail grant programs and a motorized watercraft facility grant program, but no resources specifically designated for non-motorized watercraft facility development. As a result, there is a need to explore funding opportunities/sources such as a boater registration fee—although such a proposal would be extremely controversial (7 dots).
3. There is a need to develop linkage/partnerships with the Tourism Council to promote our trail resources, interpret our natural and cultural history, and promote trails as an Oregon tourism attraction. Because of its scenic beauty and weather, Oregon should own summer tourism. There is a need to develop a central clearinghouse for trail opportunities including ordinance maps (6 dots).
4. The increase in non-motorized boating is having an impact on existing recreational facilities such as day-use and overnight parking at put-in and take-out areas and creating issues associated with safety and security, lack of fee payment and other management issues (5 dots).
6. There is a need for information resource standards including signage, way finding and maps/guides (4 dots).

5. It is often difficult to get support from land managers for developing non-motorized boating facilities and paddling opportunities where paddlers do not have to be exposed to motorized boat wakes (3 dots).
7. There is a need for proper facility development for water trails including adequate restroom facilities (3 dots).
9. There is a need for technical expertise and resources for water trail planning and development within the region (3 dots).
8. There is a need for coordination with local law enforcement in order to assure that they are informed of the need for safety and rescue expertise (2 dots).
10. The advantage of a statewide trails plan and system is that smaller communities have any opportunity for recognition and participation (1 dot).
11. There is a need to better manage for trail-related environmental impacts and resource protection through careful selection of trail area locations, planning, design and public education (1 dots).
12. There is a need to simplify the complexity of the user fee and permit requirements for recreational use within the region (0 dots).
13. Water trail development should take into consideration the management of the fishery resource (0 dots).
14. There is a need for case study information regarding successful water trail development projects (0 dots).
15. There are safety and health issues associated with bridges, sewer pipes and other waterway obstructions (0 dots).
16. There is a need to identify water trail opportunities and routes within the region (0 dots).

General Public Session (Portland)
(Evening Session)

Attendance: 15 people attended the meeting.

Water Trail Issues

1. There is a need for a Willamette River Water Trail that ties into history, culture and connects people to the past. There are also opportunities for natural resource interpretation (plants and animals) along the trail. Needed land based facilities include water access, parking, launch sites, restrooms, access to existing camping and campsite development along the river (2 dots).
2. There is a need for overnight camping facilities on the Lower Columbia River Water Trail. Until such facilities are available, long-distance paddlers on this water trail should be able to access (by reservation only) State Park day-use areas for camping (1-hour before sunset to 1-hour after sunrise) to

accommodate long-distance paddlers by utilizing existing day use facilities. Each site should have a self-contained volunteer on hand to manage overnight use (2 dots).

3. There are opportunities to develop additional overnight camping facilities on the North Shore of Government Island. There are also potential interpretive opportunities on the island including the site where the Lewis and Clark Expedition camped in 1805 and in-water petroglyphs around Fishers Landing (1 dot).

4. There is a need for maps and information about existing water trails in the region (0 dots).

5. There is a need for cooperation between local communities and water trail organizations to develop plans and funding opportunities in the region (0 dots).

6. There is a need for grant funding for water trails on a par with motorized and non-motorized trail grant programs (0 dots).

7. There is a need for an outreach program to communicate to farmers that water trail interpretation is all about appreciating their way of life and culture and sharing that culture with the greater community (0 dots).

8. There is a need for educational guidelines for respecting individual (and corporate where applicable) landowner rights/properties along water trails (0 dots).

NORTHWEST REGION (Lincoln City) 5/20/03

(Northwest Region includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lincoln, Benton and Lane Counties)

Public Recreation Provider Session (Lincoln City)

(Daytime Session)

Attendance: 7 people attended the meeting including representation from:

Oregon Parks & Recreation Department
Bureau of Land Management
Oregon Department of Forestry
City of Newport
Tillamook County

Water Trail Issues

MM. There is a need for increased promotion of safety-related information (permits, licensing, training), outreach programs, and more safety training facilities, instructors, and more user-friendly training schedules (times and locations). Cautionary messages should be displayed at water access points including information related to river classification and understanding changing water conditions. Special safety considerations in the region include the fact that coastal rivers rise and fall very quickly with rain events and that changing tide and wind conditions must be considered before paddling in coastal areas. Finally, there is a need for education related to commercial traffic on the Columbia River (7 dots).

NN. There is a need for increased coordination and communication between agencies such as the BPA and ODOT to properly address jurisdictional and easement issues associated with developing public water access and parking facilities in the region (5 dots).

OO. There is a need to proactively address potential conflicts between private landowners and paddlers in the region. As a result, water trails should include a sufficient number of publicly accessible take-out points at reasonable intervals and to clearly indicate which shoreline areas are open for public use and which are not (e.g. similar to highway rest areas) (4 dots).

PP. There is a need to make the trail inventory a living document/resource. As new trails are designated they should be added to the inventory. The long-term objective should be to keep the inventory as up-to-date as possible (2 dots).

QQ. There is a need for better information on paddling opportunities on coastal areas in the region (1 dot).

RR. There is a need for emergency response training to ensure that the necessary skills and knowledge are in place to properly respond to trail-related emergency situations (1 dots).

SS. People are now looking for a more diverse offering of outdoor recreational opportunities during their overnight camping trips including activities on both terrestrial and water trails. If a destination area doesn't have something for them to do, they will go elsewhere (1 dots).

TT. There is a need for water trails planning assistance in the region—particularly along the Nehalem and the Wilson Rivers (0 dots).

UU. A growing number of canoers and kayakers are using the rivers in the Tillamook State Forest (0 dots).

VV. Canoers and kayakers can be a difficult to engage in the public input process of recreational planning (0 dots).

WW. There is an opportunity to use scuba diving access facilities for non-motorized boater access along coastal areas in the region (0 dots).

XX. There appears to be a growing demand for guided sea kayaking tours on coastal areas of the region (0 dots).

YY. Steep creeking is gaining popularity in the region (0 dots).

General Public Session (Lincoln City)

(Evening Session)

Attendance: 9 people attended the meeting.

Water Trail Issues

HHHH. There is a need to consider reuse of roads on federal lands for recreation purposes (7 dots).

IIII. There is a need to consider the capacity of riding areas and incentives to disperse use (6 dots).

JJJJ. There is a need for quality information regarding regulation (impacts of non-compliance), level of difficulty (guidelines, definitions and standards), route maps, and consistent signing across agencies (4 dots).

KKKK. There is a need to maintain access to beaches for all users (3 dots).

LLLL. There is a need for increased public access to waterways in the region (3 dots).

MMMM. There is a need to properly address the navigability issue and clearly define to users where they can and cannot exit their watercraft (2 dots).

NNNN. There is a need to maintain water quality and other environmental factors potentially affected by water trail development/use (2 dots).

OOOO. There is a need to properly survey rivers/bays to identify future water trail opportunities within the region. There are 5 major rivers in Lincoln County alone, with great estuary, white water and flat-water water trail development opportunities (1 dot).

PPPP. There is a need to explore recreation opportunities on private timberlands and work with private landowners for access. Some keys to success for securing use on private lands are user education (respect for property) and the purchase of recreational easements (0 dots).

NORTHWEST REGION (Eugene) 5/22/03

(Northwest Region includes Clatsop, Columbia, Multnomah, Hood River, Tillamook, Washington, Yamhill, Clackamas, Polk, Marion, Linn, Lincoln, Benton and Lane Counties)

Public Recreation Provider Session (Eugene)

(Daytime Session)

Attendance: 14 people attended the meeting including representation from:

Oregon Parks & Recreation Dept.

Willamalane Park & Recreation Dist.

Bureau of Land Management

City of Corvallis

Lane Council of Governments

City of Eugene

Port of Siuslaw

Siuslaw Watershed Council

Water Trail Issues

RRR. Trails are a key economic development tool within the region. Policy makers and planners should keep this in mind with respect to state planning, leadership, and in making resource allocation decisions. There are opportunities for collaboration with local chambers of commerce and the tourism industry regarding water trail marketing. For example, whitewater users are interested in more full-service "family" packaged trips (4 dots).

SSS. There is a need for access to waterways within the region. There are also opportunities to work with private landowners regarding waterway access (3 dots).

TTT. There is a need for clarification on navigability issues relating to water trail management and design. There is an ongoing conflict between the navigability, recreation use, environmental protection and public safety (2 dots).

UUU. There is a need to manage not only the trail, but the landscape around trails to minimize erosion and movement of invasive species (2 dots).

VVV. There is a need to design water trails to accommodate specific types of uses (non-motorized) and the natural character of the waterway. The water trails toolbox needs to be expanded to address these non-motorized types of uses (2 dots).

WWW. There is a need for more safety/security at trailheads and parking lots within the region (2 dots).

XXX. There is a need for regional coordination and information sharing between agencies for trail planning and coordinating for funding. There is a need to develop a regional trails planning process including design and construction standards (2 dots).

YYY. There is a need for coordination at the state level that matches funds with projects. OPRD administers a variety of grant funding programs (LWCF, local, ATV, and RTP). Applicants often have a difficult time deciding which pot of money to go after for their project. OPRD should provide guidance at the statewide level to match projects with dollars so that everyone has the best chance to succeed in getting grant dollars. OPRD should also provide information about the timing, content and requirements of the grant programs and to allow applicants to better understand grant funding priorities (1 dot).

ZZZ. There is a need to use water trails as vehicles for the education and interpretation of issues such as protection and appreciation of the resource and understanding of natural systems and sustainability (1 dot).

AAAA. There is a need for funding for water trail planning and development (1 dot).

BBBB. There is a need for user information regarding where to go for paddling opportunities, regulations and to market paddling opportunities (0 dots).

CCCC. Water trail development leads to impacts on shorelines and waterways associated with adjacent properties. There is a need for guidance to assist with access design that is compatible with the natural environment and does not conflict with motorized users. It is difficult to manage where people access waterways due to changing shoreline conditions. Users typically end up accessing at a point where the river allows access at a particular point in time (0 dots).

DDDD. There is a need for case study information showing successful development projects both inside the state and in the U.S. (0 dots).

EEEE. There is a need for a water trails advocacy organization within the state (0 dots).

FFFF. There is a need for integrated trail system planning to accommodate the shuttling of vehicles and how to handle emergency situations (0 dots).

GGGG. There is a need for a hierarchy of water trail opportunities depending on the amount and types of use (e.g. family/single kayaker). As a result, there is a need for varied levels of improvements and services associated with specific situations (0 dots).

HHHH. There are opportunities for vendors and services associated with water trail development such as guided trips and shuttles (0 dots).

IIII. There is a need for information resources coordination including maps, regulations, signage and providing trail users with information to make informed decisions (0 dots).

JJJJ. As the fees for outdoor recreation use grow, there is a growing need/opportunity for the private sector to get involved in providing trail facilities and opportunities in the region (0 dots).

KKKK. There is a need to address conflicts on multiple-use trails through design, site selection, planning and education (0 dots).

LLLL. There is a need to understand and capitalize on transportation and recreation projects through better coordination in planning, project development and funding (0 dots).

MMMM. There is a need for historical, cultural and natural interpretation/education opportunities on trails. There are also opportunities to engage school-age children in trail-related interpretation (service learning and other types of learning opportunities) (0 dots).

NNNN. There is an opportunity for shared use of scuba diving/ snorkeling and non-motorized boater access facilities in the region (0 dots).

OOOO. There is a need to be creative in terms of partnerships and funding (0 dots).

PPPP. There is a need to address impacts associated with competitive/organized trail events. Such events must be matched with those trail resources designed for such a use. Many trails are not designed to handle such intensive use (0 dots).

QQQQ. There is a need to explore options to generate revenues associated with trail use (0 dots).

RRRR. Liability is a deterrent to private-sector provision of trail opportunities in Oregon. If you charge a fee for recreational use you can be held liable for injuries/damages occurring on private lands (0 dots).

SSSS. The prioritization of trail development projects should be done at a regional level using a peer review process. At the local level, projects should be developed using groups such as community solutions teams to get a broader perspective on what other governmental agencies are doing which might affect trail development (0 dots).

General Public Session (Eugene)
(Evening Session)

Attendance: 19 people attended the meeting.

Water Trail Issues

TTTTTT. There is a need for additional/adequate public access (access/egress/stopping points) on waterways within the region (9 dots).

UUUUUU. There is a need for maintenance/upgrades of existing facilities to be a higher funding priority (6 dots).

VVVVVV. There is a need for a funding source (similar to motorized watercraft) for constructing non-motorized boating facilities (5 dots).

WWWWWW. There is a need for a central website location where users can go for information on trip planning including information such as current trail condition, GIS and mapping (5 dots).

XXXXXX. There is need for more trails close to urban areas (4 dots).

YYYYYY. There is a need to make greater use/coordination of volunteers for trail maintenance because agencies do not have sufficient resources (4 dots).

ZZZZZZ. There has been a loss of some water access points in the region to closure (3 dots).

AAAAAA. Technical changes cause different trail needs (3 dots).

BBBBBB. There is a need for adequate sanitary facilities at resting/stopping areas (3 dots).

CCCCCC. There is a need to address environmental impacts including wildlife, need for good planning and design, capacity issues, soil issues and the value in study of impacts (3 dots).

DDDDDD. There are opportunities to work with private landowners to allow recreational access/easements within the region (3 dot).

EEEEEE. There is a need to make sure that trails not regularly maintained are not lost (2 dots).

FFFFFF. There is a need for a central location where users can go for information on trip planning (2 dots).

GGGGGG. There is a need for enforcement and education involving trespass on private property (2 dots).

HHHHHH. There is a need to address the noise issue on trails within the region. Trails planners should carefully consider compatibility (associated with noise) during the development of multi-use trails. There is also a need for greater tolerance between user groups on multi-use trails (1 dot).

IIIIII. There is a need for trailheads with adequate facilities such as proper accommodations for trailers (1 dot).

JJJJJJ. There is a need for additional user education (including noise, and trail etiquette) that targets new users (1 dot).

KKKKKK. There is a need for more active trail management by the federal agencies (1 dot).

SOUTHWEST REGION (Bandon) 4/17/03

(Southwest Region includes Coos, Curry, Josephine, Jackson and Douglas Counties)

Public Recreation Provider Session (Bandon)

(Daytime Session)

Attendance: 12 people participated in the workshop including representation from:

Oregon Parks & Recreation Department

U.S. Forest Service

Bureau of Land Management

Coos County

City of Powers

Water Trail Issues

LL. There is a need for a funding source for non-motorized water trail facility development within the region (8 dots).

MM. There is a need to consider potential conflicts between an increasing number of non-motorized boaters and motorized boaters associated with sharing water-based resources and waterways within the region (6 dots).

NN. There is a need to address safety issues associated with water trail development including user education programs, vendor/rental training courses requiring equipment renters to show competency to operate equipment, and user information on what and where educational opportunities are available (5 dots).

OO. The sport of paddling provides quiet access to wildlife in ways that can have negative impacts on birds and marine mammals. As a result, there needs to be more information available on how to reduce impacts such as provided by programs like Leave No Trace and Tread Lightly to develop an appropriate user ethic. There is a need for consistent, quality information, which is simple to understand and includes a distinct regional flavor (e.g. need for different information on the coast as opposed to information needed in an area such as Bend). There is a tendency for groups such as Leave No Trace and Tread Lightly to lose touch with the simplicity of their original message as they become more sophisticated and business oriented in packaging and marketing their products (3 dots).

PP. There is a need to consider the potential conflicts between an increasing number of people using public waterways and adjacent landowners over the question of ownership of the waterways. Landowners will eventually attempt to get legislation passed to get boaters off the water (3 dots).

QQ. There is a need for more public access to waterways and public places to stop along paddling routes so they are not getting out in someone's front yard (2 dots).

RR. There is a need for overnight facilities such as large car camping opportunities and overnight paddle trip landings and campsites along water trail routes (2 dots).

SS. There is a need to consider the impacts that water trail development will have on the natural environment in sensitive areas such as the South Slough National Estuarine Research Reserve (0 dots).

TT. There is a need to develop facilities specifically designed for non-motorized boaters such as ramps for kayaks or canoes (0 dots).

UU. There is a need to work with existing funding agencies such as the Marine Board to provide non-motorized facilities as a way to address demand and conflicts on existing motorized facilities (0 dots).

General Public Session (Bandon)
(Evening Session)

Attendance: 6 people attended the meeting.

Water Trail Issues

YYY. There is a need for additional access to waterways (public land or access on private land) and launch/landing facilities (7 dots).

ZZZ. Motorized boating facilities need to be adapted to accommodate non-motorized watercraft (4 dots).

AAAA. There is a need to identify and designate water trail routes and provide good information for trip planning and navigation. There is also a need for a web-based repository for accessing water trail information (4 dots).

BBBB. There is a need to recognize the economic benefits of trails such as the importance of trails in business location, quality of life, and where people want to live (2 dot).

CCCC. There is a need for water trails in close proximity to where people live (1 dot).

DDDD. There is a need for water trails in a variety of setting types (urban to wilderness, flat water to white-water) (0 dots).

SOUTHWEST REGION (Grants Pass) 4/16/03

(Southwest Region includes Coos, Curry, Josephine, Jackson and Douglas Counties)

Public Recreation Provider Session (Grants Pass)
(Daytime Session)

Attendance: 6 people participated in the workshop including representation from:

Oregon Parks & Recreation Department
U.S. Forest Service
City of Rogue River
City of Ashland

Water Trail Issues

Z. There is a need for identification and promotion of water trail opportunities within the region (5 dots).

AA. There is a need for information related to the class of waterway, conditions and regulations on water trails within the region (4 dots).

BB. There is a need for designated areas along water trails to allow paddlers to get out of their boats. Such areas should be included on maps and brochures with a listing of on-shore facilities available (2 dots).

CC. The publication "Fishing in Oregon" should be used as an information source during the inventory of existing water trails within the region (1 dot).

DD. Threatened and Endangered Species impacts will need to be evaluated in planning water trails within the region (1 dot).

EE. Seasonal water flows will impact when water trails will be usable over the course of the year (0 dots).

FF. There is a need for safety education and training within the region (0 dots).

GG. There are opportunities to connect land-based trails with water trails within the region (0 dots).

General Public Session (Grants Pass)
(Evening Session)

Attendance: 7 people attended the meeting.

Water Trail Issues

WWW. There is a need for additional funding for non-motorized/small craft boating facilities within the region (5 dots).

XXX. There is a need for water-based camping facilities within the region (4 dots).

YYY. There is a need for paddling education, training opportunities and outreach programs for inexperienced paddlers within the region (3 dots).

ZZZ. There is a need for water trail facility development and maps showing put-in and take-out locations (3 dots).

AAAA. The water trail planning process should include the involvement of private-sector businesses such as equipment rental shops (2 dots).

BBBB. There is a need to categorized water trails according to level-of-difficulty (1 dot).

CCCC. There is a need to provide seasonal water change information for water trails within the region. In many situations difficulty classifications will vary with water flow rates and the regulation of water flow through reservoir systems (0 dots).

NORTHCENTRAL REGION (Bend) 4/3/03

(North central Region includes Wasco, Sherman, Gilliam, Morrow, Umatilla, Jefferson, Wheeler, Deschutes and Crook Counties)

Public Recreation Provider Session (Bend) (Daytime Session)

Attendance: 11 people attended the meeting including representation from:
Oregon Parks & Recreation Department
Bureau of Land Management
Bend Metro Parks & Recreation District
City of Sisters

Water Trail Issues

X. There is a need to establish some sort of classification schema to address such things as level of difficulty (using the International Scale of River Difficulty) setting type (e.g. ROS setting), services and improvements for use in marketing water trails within the region. The statewide water trails inventory should gather such classification information during the data collection process (4 dots).

Y. There is a need for user education including leave-no-trace practices (e.g. sanitation & litter), respect for private property rights and respect for impacts on the resource (3 dots).

Z. There is a need for additional water trail facilities including water access, restrooms, overnight facilities, potable water, and portage facilities in the region (2 dots).

AA. There is a need to properly balance the natural/environmental aspects with increasing recreational use on waterways in the region (2 dots).

BB. There is a need to develop a monitoring system methodology to help identify when a permit system might become necessary to ensure that the user experience doesn't degrade to unacceptable levels. Such a system should determine the limits to acceptable change including factors such as resource capacity, social impacts and carrying capacity. The methodology should also allow for the establishment of baseline monitoring measurements to establish a clear picture of the condition of a river at a certain point in time (1 dot).

CC. Regarding comment BB, the river systems should be studied to ensure adequate assessment of resource capacity. River corridors with properly developed access points should be designated for high traffic use and be marketed as such. This will take pressure off of the less developed areas that will be affected by limiting entry on a high-capacity river system (on-line comment).

DD. There are many opportunities to develop water trails on central Oregon lakes and reservoirs (0 dots).

EE. Private landowners should be given an opportunity to provide services (food, lodging, etc.) along water trails in the region (0 dots).

FF. Private property trespassing concerns should be heard and incorporated into the local water trail development planning process (0 dots).

GG. There is a need for an application/permit/reservation system on heavily used waterways within the region to ensure a high-quality user experience (0 dots).

HH. Regarding comment GG, river systems with a high level of use should be studied to see if the use is adversely impacting the resource. If the river system has adequate infrastructure in place to handle the traffic, then use should be encouraged on the river to keep the users from shifting to other less used rivers that do offer a more pristine experience. We can't make every high-use river the Middle Fork of the Salmon, or all of our low-traffic rivers will be permanently degraded by displaced river traffic. The users will move to other rivers when they can't get the permit they want, thereby clogging the less developed rivers

General Public Session (Bend)
(Evening Session)

Attendance: 48 people attended the meeting.

Water Trail Issues

QQQ. There is a need for improved in-stream flow/water levels for recreational use of waterways within the region. There is a need to recognize the economic benefits of recreational use of water. For example, reservoirs receive much more recreational boating use (and inflow of tourism dollars) when there is a sufficient water level for such use (4 dots).

RRR. There is a need to identify water trail (resource) impacts associated with rapid growth of water-based recreation in the region. Such impact will need to be properly addressed through site improvements such as launch sites, restroom facilities, campgrounds and ADA accessibility (4 dots).

SSS. There is a need for close-to-home water trail development in urban settings within the region. Such projects will require a coordinated public/private planning effort to ensure that the necessary water access and support facilities are identified and developed (3 dots).

TTT. There is a need to accommodate the needs of both guided and non-guided travel groups during water trail planning and development (2 dots).

UUU. There is a need to develop whitewater parks/play areas, training and instructional areas in the region (2 dots).

VVV. There is a need to properly publicize and communicate the development of water trails and their appropriate uses within the region (1 dot).

WWW. There is a need to establish guidelines (e.g. Memorandums of Understanding) that will assist agencies in making multi-jurisdictional decisions and to ensure that water trail development goals, objectives and strategies are implemented (1 dot).

XXX. The water trail development process must consider the special needs of all user groups (e.g. canoers, kayakers, rafters, etc.) and ensure that the planning and decision-making processes are equally open to all user groups (0 dots).

YYY. Water trail rules of use should emphasize a proper respect for private property/navigability issues to ensure long-term access to the resource (0 dots).

ZZZ. There is a need to research and evaluate water trail development processes used in other states for application in Oregon water trail projects (0 dots).

AAAA. We need to recognize that paddling competitions, paddle tests and other water-related events are a valid use of public lands (0 dots).

BBBB. There is a need to consider the development of an Oregon Coastal Water Trail (0 dots).

SOUTHCENTRAL REGION (Klamath Falls) 4/15/03

(South central Region includes Klamath and Lake Counties)

Public Recreation Provider Session (Klamath Falls)

(Daytime Session)

Attendance: 6 people attended the meeting including representation from:

Oregon Parks & Recreation Department

U.S. Forest Service

Klamath Rails to Trails

Jackson County Roads/Parks

Water Trail Issues

JJ. There is a need for a funding source for water trail development within the region. The Marine Board funds are primarily for motorized boating facility development with limited funding for non-motorized boat facilities (5 dots).

KK. There is a need for maps and information to promote paddling opportunities within the region (4 dots).

LL. There is a need to better define the public use status of waterways within the region. The definition should include a description of navigability, which waterways are designated as navigable and specific public use restrictions on non-navigable waterways within the region (3 dots).

MM. There is a need for safety/user ability standards (such as the International Scale of River Difficulty) to identify the level of expertise needed for using water trails within the region (2 dots).

NN. Education and interpretation should be a major component of water trail development within the region (2 dots).

OO. There are many water trail development opportunities within the region—the problem is inadequate public access (1 dot).

PP. Existing water trail opportunities need to be identified and promoted (1 dot).

QQ. The current Division of State Land permit process for development of water-based facilities on navigable waters can be very prohibitive. The application process can take up to 2 years in duration for new development projects—by that time the biennium is over and all the funds have been used elsewhere (0 dots).

RR. There are many exciting water trail development opportunities on marshes and lakes within the region (0 dots).

SS. There is a need for public/private areas along water trails to provide paddlers with an opportunity to get out of their boats (0 dots).

TT. There is a need to resolve jurisdiction issues such as on Reservation Lands (0 dots).

UU. There is a need for standards for structures crossing waterways (e.g. bridges and power lines) (0 dots).

VV. Water trail development will need to address Threatened and Endangered species impacts (0 dots).

WW. There is a need to consider navigation needs and other issues associated with GPS technology in water trail development (0 dots).

XX. There will be additional user conflict issues between motorized and non-motorized boaters associated with water trail development (0 dots).

General Public Session (Klamath Falls)

(Evening Session)

Attendance: 6 people attended the meeting.

Water Trail Issues

SSS. There is a need for adequate public properties along water trails to reduce conflicts with private-land owners (8 dots).

TTT. There is a need for public access on some waterways (e.g. Applegate) and information on points of water access (8 dots).

UUU. Due to seasonal water variation, there is a need to provide good seasonal use information for water trails within the region (1 dot).

VVV. There is already a good base of water-related industry and users within the region (0 dots).

NORTHEAST REGION (Union) 4/1/03

(Northeast Region includes Wallowa, Union, Grant and Baker Counties)

Public Recreation Provider Session (Union)

(Daytime Session)

Attendance: 11 people attended the meeting including representation from:

Oregon Parks & Recreation Department

U.S. Forest Service

Bureau of Land Management

Morrow County

City of La Grande

Water Trail Issues

EE. There is a strong need for a non-motorized boater education program providing information on how to properly launch and use a non-motorized watercraft, safety training for running rivers (e.g., what they will need and what to expect), how to comply with existing federal and state regulations, and so forth. Simply providing information at launch area kiosks and in brochures is not adequately preparing people for dangerous conditions they may encounter during their river trip. In addition, search and rescue efforts on isolated river stretches are often very difficult, time consuming and costly. To proactively address this problem, we need to educate people before getting on the water (13 dots).

FF. There is a need for central information source for interested non-motorized boaters to access regarding flat water and whitewater paddling opportunities within the region (such as the OPRD website). The site could include information such as access locations and other trip information (10 dots).

GG. We should consider the potential for conflict between an increasing number of non-motorized watercraft using current facilities developed and paid for by motorized boaters. Non-motorized boaters often take much more time to clear the boat ramp area than motorized boaters (4 dots).

HH. There are a large number of range fences crossing waterways in Northeastern Oregon posing a potential risk to paddlers on these waterways (3 dots).

II. There is a need for guide brochures for paddling rivers in the region. River Guides typically include information such as put in and take out locations, route maps, campsite and day-use locations and public and private land ownership boundaries. Such information will assist paddlers to make the right river use decisions on their trip. River guides can also be used as a marketing tool for drawing paddlers to the particular water route (1 dot).

JJ. There is a need for overflow parking facilities when launch site parking is full (1 dot).

KK. There is a need for boat launch hosts at major launch and landing areas within the region to provide necessary safety information at the time of departure (1 dot).

LL. Paddling opportunities in this part of the state are very seasonal due to seasonal flow rate cycles. As a result, we need to provide information regarding the times of the year with adequate water levels for paddling (0 dots).

MM. Current water access facilities within the region are minimal and in need of maintenance (0 dots).

NN. There is a need for a water trails toolbox for water trails planning within the region (0 dots).

General Public Session (Union)
(Evening Session)

Attendance: 22 people attended the meeting.

Water Trail Issues

No issues generated.

SOUTHEAST REGION (Burns) 4/2/03

(Southeast Region includes Harney and Malheur Counties)

Public Recreation Provider Session (Burns)
(Daytime Session)

Attendance: 5 people attended the meeting including representation from:

Oregon Parks & Recreation Department

Bureau of Land Management

City of Burns

Water Trail Issues

U. There are a number of flat-water paddling opportunities within the region (e.g. Lake Owyhee) that could be developed as water trails (3 dots).

V. There may be local resistance (e.g. range fences and adjacent property ownership issues) to developing water trail opportunities and encouraging more visitors to the region. A typical comment heard is that things are nice and quiet out here — and we want to keep it that way. As a result, recreation providers need to educate communities about the economic benefits associated with water trail development (2 dots).

W. There are water trail development opportunities on the Malheur National Wildlife Refuge and connections to irrigation canals (2 dots).

X. There is a need for more developed water trails within the region (1 dot).

Y. There is an opportunity to develop water trails in remote settings within the region (1 dot).

Z. There is a need for additional water access facilities, marketing and interpretive information related to water trail development within the region (1 dot).

AA. There are some great low-water long-distance paddling opportunities on the Owyhee River (e.g. from Rome to Birch Creek) that could be easily accessed by canoers and kayakers with sufficient paddling experience (1 dot).

BB. There is a concern that increased non-motorized boater use could contribute to the spread of noxious weeds on moving water within the region (1 dot).

CC. There is great interest and potential within the region to develop water trails as a potential economic development strategy (0 dots).

DD. There are a large number of out-of-state non-motorized boaters currently recreating within the region (from Idaho cities such as Boise and Treasure Valley). As a result, it will be important to capture their needs and opinions in the statewide trails planning process. Potential alternatives are including a sample of people from Boise and Treasure Valley in the user survey and holding an issues workshop in Boise (0 dots).

EE. Wilderness limitations on the Owyhee River will restrict new water trail facility development between existing put-in and take out facilities (0 dots).

General Public Session (Burns)

(Evening Session)

Attendance: 5 people attended the meeting.

Water Trail Issues

No issues generated.