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Wilderness Protection Environmental Assessment

Mt. Hood National Forest



**Wilderness Protection
Environmental Assessment
for
Modification of Standards and Guidelines
and Management Actions
Relating to the Use of the Mt. Hood,
Salmon-Huckleberry and Hatfield
Wildernesses,
Mt. Hood Land and Resource
Management Plan, Amendment #13**

**Mt. Hood National Forest
Clackamas and Hood River Counties, Oregon
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Chapter I

Introduction, Purpose and Needs, and Management Direction

Introduction

This document is a revised environmental assessment (EA) that looks at alternative ways to manage recreation use and protect wilderness values in the Mt. Hood, Salmon-Huckleberry and Hatfield Wilderness Areas on the Mt. Hood National Forest. This document also proposes to modify the wilderness standards and guidelines in the Mt. Hood National Forest Land and Resource Management Plan (1990). Most of the standards and guideline amendments relate to recreational use, but a few of them update management direction in other resource areas.

The Mt. Hood National Forest began a “Limits of Acceptable Change” (LAC) planning process in 1994, to inventory existing wilderness conditions, determine future wilderness conditions, and develop management actions that would bring wilderness conditions into compliance with Forest Plan standards and desired future conditions. The LAC process is the recommended tool for wilderness planning in the Forest Service. The LAC planning process recognizes the inevitable impacts that occur as a result of human use. This EA analyzes the question how much wilderness use is too much, by evaluating how much impacts or change in wilderness conditions is too much. This document, appendices, and associated analysis files summarize the findings of the Limits of Acceptable Change planning process for the Mt. Hood, Salmon-Huckleberry, and Hatfield Wildernesses.

In December of 1998, the Forest issued the first LAC Wilderness Protection EA for public comment and received nearly 600 written comments on the three alternatives presented. Over 500 people came to public meetings and gave comment. This revised EA incorporates much of the public comments into an additional alternative, Alternative #4, and revises alternatives proposed in the original EA.

LAC EA Content Summary

Chapter I

Introduction

This is a brief description of the three wildernesses being studied, and their importance and unique features, or “niche”, in the local and regional context.

Purpose and Need

This section outlines the primary purposes (goals) and needs for management action within the three wildernesses.

Existing Management Direction

These policies and regulations are the guidance managers use when taking actions in these wildernesses. They include the direction in the Forest Plan and Regional Plans, Forest Service manual, and Code of Federal Regulations

Chapter II

Summary of Original Proposed Action

This chapter begins by summarizing the (original) proposed action (Alternative #2) from the first LAC EA. It is important to note that the original proposed action is not the currently preferred alternative.

Issues

The public has been extensively involved both before, and after publication of the first LAC EA, in identifying concerns about, and conflicts between, proposed management goals and actions. This section outlines the primary concerns expressed by the public about having use to wilderness limited or restricted as outlined in the original proposed action and their concern for protecting biophysical wilderness resources.

Alternatives to the Proposed Action, Including the New Alternative #4

The purposes outlined in Chapter I of preserving natural conditions, providing opportunities for solitude and providing primitive and unconfined recreation, cannot all three be simultaneously and fully achieved. To some extent they are mutually exclusive. The more people recreating in a wilderness location, the less opportunity those people will experience solitude and the more likely some physical resource conditions may be impacted. Management efforts to limit resource impacts can limit unconfined recreation. All four of the alternatives considered in this document represent different compromises that may be made between the goals of preserving wilderness recreation access, protecting natural conditions, and providing opportunities for solitude and unconfined recreation. This section summarizes the alternatives to the (original) proposed action, including the new alternative (Alternative #4), developed as a result of public comments, research recommendations, and additional analysis.

Chapter III

Affected Environment and Current Research Findings

This chapter describes existing wilderness conditions more specifically. It explains some of the wilderness research findings, to put into context, the scope of the problems, or lack of problems, in the three wildernesses. This section includes:

- ◆ National and local wilderness use trends.
- ◆ Research findings on solitude, and impacts from camping and day use.
- ◆ Forest Plan social standards and standards for campsite and day use area impacts.
- ◆ Current inventoried wilderness conditions for social conditions, campsite and day use impacts.
- ◆ Strategies and management actions that could be taken, and their effectiveness.

Chapter IV

Environmental Effects

This chapter outlines the consequences of implementing each of the alternatives. It discusses how the different recreation management strategies will affect recreational visitor use, soil and water, vegetation, fish and wildlife habitat, noxious weeds, and rare, sensitive, threatened, or endangered plant and animal species.

Chapter V

Consultation With Others

This section describes the public participation process. It lists the other state and local agencies, outdoor groups, and other public that were involved in scoping, gave input before or after the initial Wilderness EA, or participated in workshops.

Local and Regional Wilderness Recreation Context

Local

Figure 1.1 is an area map of the three wildernesses and the surrounding area. The Salmon-Huckleberry, Hatfield, and Mt. Hood Wildernesses are all within one to one and a half-hour travel time from the Portland-metro area, making them attractive for day-hiking or short weekend overnight trips. Some of the day hikers are not seeking a wilderness experience per se, but a beautiful forested setting, a riverside trail, a mountain lake, a cascading waterfall, alpine wildflowers, an easy family hike, or all of the above. There is very little National Forest land within this proximity that is not wilderness, closed to public entry (Bull Run Watershed), or managed for timber or more developed recreation. The Badger Creek Wilderness and Bull of the Woods Wilderness located on the Mt. Hood, and several wildernesses on the Gifford Pinchot National Forest also offer wilderness recreation opportunities, but are generally two hours or more drive from the Portland-metro area. There are miles of non-wilderness trails on the Forest that provide outstanding opportunities for solitude. However, these trails are also generally two hours or more from the Portland-metro area and they usually traverse multiple use lands with roads, harvest units, campgrounds and other evidence of human use. There are forested recreation trails off National Forest lands within two hours of the Portland-metro area including the Tillamook State Forest and assorted smaller state, regional, county and city parks. For those not looking for a wilderness experience per se, some of these trail options offer scenic day hiking opportunities. Better marketing of these areas to the public could help reduce use pressures on wilderness lands.

Unique Recreational Features of Each Wilderness

Salmon Huckleberry Wilderness

This 44,600-acre wilderness is located east of Sandy and south of Rhododendron. Mostly rugged and steep second growth forests are found there, with old growth along some drainages of the Salmon River and Eagle Creek. It has a relatively sparse trail system, compared to the other two wildernesses. There are at least two unique features of this wilderness. The trail along the Salmon River, through low elevation, old growth forests, is very popular for day hikers and to a much lesser extent, campers. The second unique feature of the Salmon-Huckleberry is the outstanding opportunities for solitude and primitive wilderness character found in most of the rest of the wilderness, especially considering its proximity to Portland. Campsite conditions, while still a problem in some areas, have improved since the late 70's, according to anecdotal information from wilderness rangers during that era. Presumably, this trend is due to the decrease in overnight camping and the natural restoration processes in low elevation west side forests.

Hatfield Wilderness

This 39,000 acre wilderness is located within the Columbia River Gorge, south of Cascade Locks. Similar to the Salmon-Huckleberry, it has steep second growth forests, with patches of old growth in some areas. It has a denser trail system throughout the wilderness than the Salmon-Huckleberry, but like it, many of these trails are steep and/or long, and therefore lightly used, especially by day-hikers. The Hatfield Wilderness is unusual in that it offers a much more primitive experience than can be found on most of the other Columbia Gorge trails. Another unique feature is the Eagle Creek Trail, which has very high use where it begins out of wilderness. The trail is cut into the side of a basalt cliff with narrow tread and a steep drop for much of the way. Use on the portion of Eagle Creek within wilderness is high compared to most of the rest of the wilderness with a higher percentage of overnight use. Wahtum Lake is a popular spot located on the edge of the wilderness and easily accessible. Rainy and North Lakes are also popular destinations.

Mt. Hood Wilderness

The Mt. Hood Wilderness at 47,100 acres has extremely diverse vegetation types from alpine to low elevation old growth. The wilderness is densely trailed compared to the other two wildernesses. Many of the trails are much more scenic, shorter, and/or easier than found in the other two wildernesses, hence their popularity with day hikers, especially families and beginner hikers. The large areas of alpine habitat below Mt. Hood's snowline are unique to the Forest and very popular with hikers.

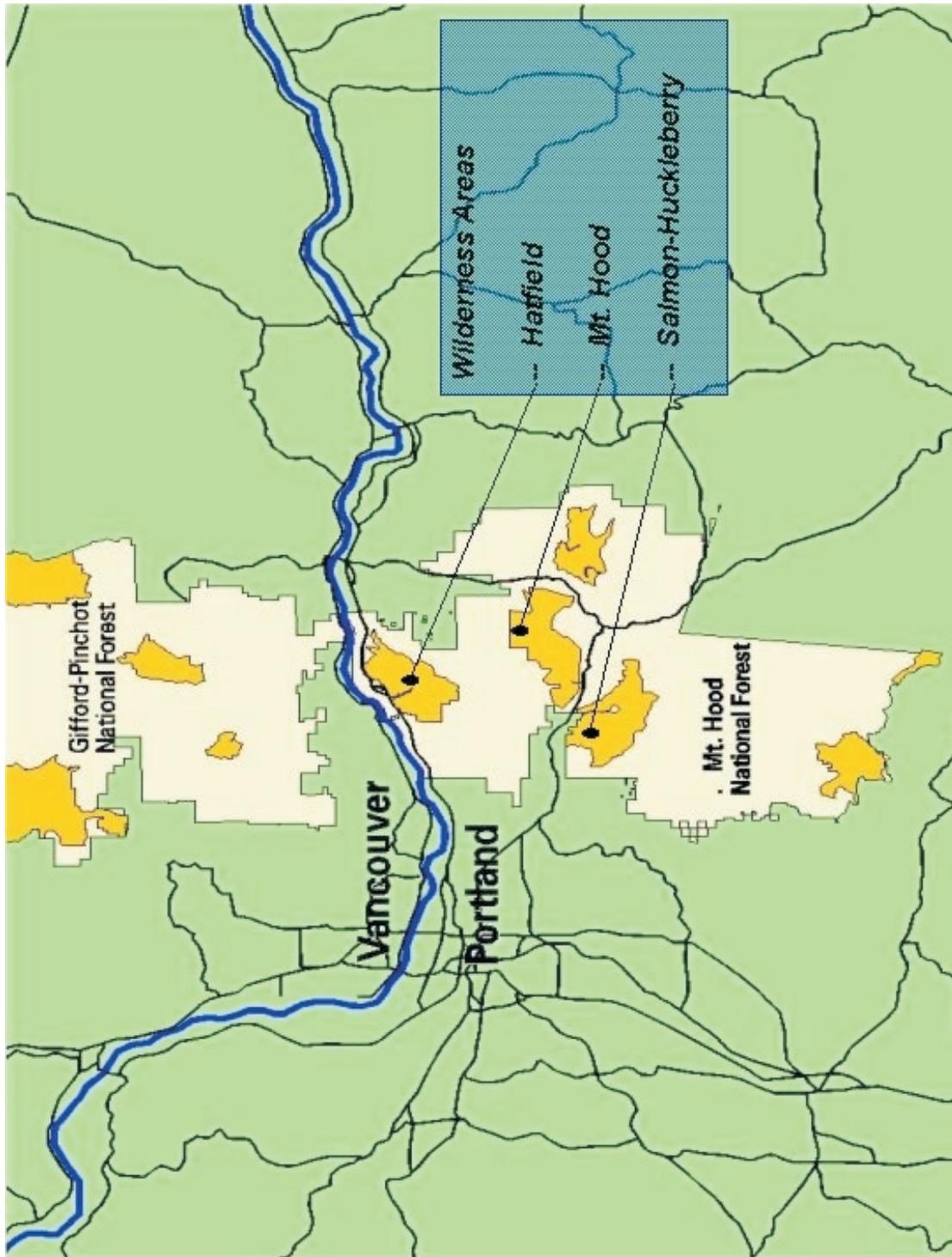
The upper reaches of Mt. Hood offer snow and ice climbing opportunities, not found elsewhere on the Forest. Similar opportunities on the upper flanks of Mt. Adams and Mt. St. Helen to the north and Mt. Jefferson and Three Sisters to the south are three to four hours or more drive from the Portland-metro area. The south side route on Mt. Hood provides a comparatively easy climb to the summit, hence its unofficial title as the second most climbed, glaciated peak in the world.

Regional Context

Regionally, these wildernesses are smaller compared to many other Northwest wildernesses, with visitors' trip duration being generally shorter. Nation-wide, wilderness visitors' trips are shorter than ten years ago. People seeking multi-day or week long wilderness treks usually seek larger, more remote wildernesses. The Mt. Hood and the popular destinations in the Salmon-Huckleberry and Hatfield Wilderness fill a regional niche for the tourists and out of town visitors that come to the Portland-metro area and visit city sights, waterfalls in the Columbia Gorge, and Timberline Lodge on Mt. Hood. If they go hiking, they generally head to a trail in one of the three wildernesses. There is an extensive marketing campaign by regional and county tourism groups that sell advertisements with Mt. Hood and other scenic and popular wilderness destinations.

Climbing on Mt. Hood is very important regionally. The mountain offers a range of climbing opportunities: from a relatively easy one-day summit, to highly challenging technical climbs. Many persons who climb the south side of Mt. Hood are not avid climbers and do not attempt it again. Others may start as beginners climbing on the south side (or similar) route, but then go on to attempt other Cascade peaks and more difficult routes on Mt. Hood. While data is not available to substantiate it, it is probable that Mt. Hood's climbers are from a much larger Regional area than the average trail day hiker who is most likely from the Portland-metro area. All of the major Cascade peaks are within wilderness, are within National Park boundaries and/or have access restrictions. Chapter III presents a table with the current status of climbing restrictions on the most commonly climbed Cascade peaks. Many peak managers are considering restrictions on use levels if they area not already in place. Almost all peaks have a similar situation to Mt Hood, in that, the majority of the climbers attempt the summit via the easiest route, while the more difficult routes are considerably less crowded.

Figure 1.1 Portland-Metro Area, Mt. Hood National Forest and Wilderness Areas Studied in This EA



Purposes and Needs

The purposes and needs for management action are:

Purpose #1

Manage the Mt. Hood, Salmon-Huckleberry, and Hatfield Wildernesses “for the use and enjoyment” by visitors and keep them “unimpaired for future use and enjoyment as wilderness” as directed in the Wilderness Act.

Need

Most of the popular National Forest trails within one and a half hours of the Portland-metro area are located in these three wildernesses, hence the high proportion of day use. There is a need to provide recreational wilderness hiking and climbing opportunities for the increasing Portland-metro population and other visitors, both in and out of wilderness. There is a public need to have access to wilderness as unrestricted and unfettered as possible.

Purpose #2

Provide and protect existing and future “opportunities for solitude or primitive and unconfined recreation” in the Mt. Hood, Salmon-Huckleberry and Hatfield Wildernesses.

Need

There is a need to manage recreational use within wilderness so that as populations and wilderness visitation increase, visitors can continue to find “outstanding opportunities for solitude or primitive and unconfined recreation” as defined in the Wilderness Act when they seek it.

Purpose #3

Protect vegetative, soil, water quality and other resource conditions at campsites and day use destinations, within the three wildernesses. Restore wilderness conditions where these resources are currently impacted. Implement a widespread wilderness user education program with interested partners to prevent further resource damage from occurring.

Need

Campsites and high use destinations where day hikers congregate or linger, such as lakes, show signs of resource impacts that exceed the standards (limits) in the Forest Plan. Most of the campsites were established in the 70's and early 80's when overnight use was much higher than it is now. There are more campsites than needed to meet the current demand for overnight use. There are large areas of bare ground in campsites, and sites too close to streams and lakes. Some sections of trail are eroded or have multiple travel lanes due to poor trail location and/or hikers detouring around muddy sections. There is a need to restore these impacted areas to acceptable wilderness conditions, and implement educational and management actions and policies that prevent or minimize future resource impacts. Closing and restoring unnecessary sites or sites in fragile areas would require additional, more site-specific National Environmental Policy Act (NEPA) analysis if they propose ground disturbing activities. In areas where overnight use or prolonged day use does not exceed the planned area capacity, educating wilderness users, modifying their behavior, requiring camping in designated sites, and enforcing regulations are the most effective approaches to preventing further resource damage. In areas where overnight use or prolonged day use is approaching the planned area capacity, then limiting use is the most effective approach to preventing further resource damage. Many outdoors groups and wilderness users are interested in participating in site restoration projects and wilderness education efforts and there is a need to partner with these groups to accomplish agency goals.

Purpose #4

Establish more site specific and enforceable standards (limits) for better protection of social and resource conditions in the three wildernesses, than currently exists in the Mt. Hood Forest Plan.

Need

There is a need to have general campsite condition standards (limits) that provide adequate protection to resources, are realistic and enforceable on the ground, and do not cause more resource problems than they solve. Forest Plan standards for campsite size and distance from water are in some cases more restrictive than needed to protect resources, or unrealistic to enforce. Enforcing a 200-foot camping setback from water, and closing all sites within this distance, could increase the number of campsites and the area impacted due to lack of compliance. This is because new sites would become established beyond the 200 foot zone, and people would continue to use areas close to the water during the day. In addition, some users would probably camp within the 200 foot zone overnight if wilderness rangers were not present to ensure compliance. Campsites should be kept reasonably small to preserve their wilderness character, but size limits on at least some sites should be able to accommodate the maximum group of twelve people.

Purpose #5

Establish a better way of defining carrying capacities for the three wildernesses.

Need

There is a need to establish carrying capacities for particular destinations within wilderness, rather than a total carrying capacity for the entire wilderness. The current method of establishing a wilderness wide carrying capacity assumes use is spread out evenly over the entire wilderness when in fact it tends to concentrate in high use areas. Carrying capacities need to be based on the number of established designated sites available, and on the number of groups that can use an area without exceeding social and biophysical resource standards.

Purpose #6

Revise the desired Wilderness Recreation Spectrum (WRS) allocations.

Need

Each wilderness trail corridor was assigned a Wilderness Recreation Spectrum (WRS) allocation (Primitive and Semi-primitive) in the Mt. Hood Forest Plan. These allocations determine how each trail should be managed including the level of recreation use, and the amount of acceptable resource impacts. WRS allocations in the Forest Plan were based on informal staff assessments of existing conditions. No field data was collected. Extensive field data was gathered in 1994-95 for this LAC process. There is a need to use this field data when considering revisions to Forest Plan WRS allocations. In most areas, the data showed that existing wilderness conditions were more pristine than the WRS class they were assigned. In those cases, conditions could degrade somewhat before corrective management action was needed. In a few cases, the field data helped determine that an area should probably be managed for semi-primitive conditions rather than primitive conditions.

Purpose #7

Provide a balance of outfitter-guide opportunities based on public demand and need.

Need

No standards exist for allocating the percentage of overall recreation use that is dedicated to outfitter guiding services. Commercial and institutional guiding activities are appropriate in wilderness, only if an Outfitter-Guide Needs Assessment has proved them necessary. The Needs Assessment was completed prior to this planning process. It demonstrated that there is a need for services that teach people outdoor skills related to safety, or resource protection i.e. mountain climbing, ice climbing, and leave no trace camping. A standard needs to be developed so there is an appropriate mix of outfitter-guide and general public recreation within the wilderness.

Purpose #8

Update standards and guidelines to reflect current policy and direction for fire management in wilderness.

Need

Some of the standards and guidelines for fire in wilderness are not consistent with current technology, policy and direction. Revised standards need to be developed to reflect changes in policy, guide suppression efforts, and assist in preparation of a fire management plan for these wildernesses.

Purpose #9

Make minor revisions to Forest Plan standards and guidelines regarding noxious weeds, pets, fish and wildlife, fish stocking, wood cutting, and special forest products collection.

Need

Resource specialists reviewed the existing wilderness standards and guidelines not associated with recreation use, to ensure that they were consistent with changes in management direction, and additional information, that has come about in the ten years since the Forest Plan was published. The proposed changes for other resource standards and guideline appear in the appendix of this document and are considered minor.

Existing Management Direction

Management direction for the three wildernesses can be found in the Forest Plan, (Mt. Hood Land and Resource Management Plan -1990), in the Northwest Forest Plan (The Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl, in the Code of Federal Regulations (CFR293.2) and in Forest Service Manual Direction (FSM 2323.11-2323.14, 2320.6).

Mt. Hood Forest Plan Direction

The Forest Plan has general goals and goals specific to each Wilderness Recreation Spectrum (WRS) allocations. Standards and guidelines are also specific to each WRS class and are presented in Appendix B of this document.

General Goal

Promote, perpetuate and preserve the wilderness character of the land; protect watershed and wildlife habitat; preserve scenic and historic resources; and promote scientific research, primitive recreation, solitude, physical and mental challenge, and inspiration.

Semi-Primitive Trailed Zone Goals

Provide a predominantly unmodified natural area of moderate to large size where concentrations of recreational users are typically low, but evidence of human use is visible.

Primitive Trailed Zone Goals

Provide an essentially unmodified environment where the concentration of recreational users is low and evidence of human use is minimal.

Northwest Forest Plan Direction

The Northwest Forest Plan allocated wildernesses to “Congressionally Reserved Areas”. Key watersheds and riparian reserves (areas around streams and lakes) were an overlapping allocation with specific goals, standards and guidelines.

Congressionally Reserved Areas

Management of these lands should follow the Forest Plan and the Wilderness Act. Standards and guidelines for key watersheds and riparian reserves should be applied where they would provide greater benefits to late-successional forest related species unless it would be contrary to legislative or regulatory language or intent.

Riparian Reserves

Applicable direction for riparian reserves within wilderness is to ensure that any management actions achieve Aquatic Conservation Strategy Objectives (ACS objectives). ACS objectives are listed in the Analysis Files.

Applicable Code of Federal Regulations Direction

CFR Part 219.18

Forest planning shall ... provide for limiting and distributing visitor use of specific areas in accord with periodic estimates of the maximum levels of use that allow natural processes to operate freely and that do not impair the values for which wilderness areas were created ...

CFR Part 261.16

Prohibits motor vehicles, motorboats, motorized equipment, bicycles, hang gliders, aircraft landings, and dropping or picking up of materials or people by aircraft.

CFR Part 293.2

National Forest Wilderness shall be administered to meet the public purposes of recreational, scenic, scientific, educational, conservation, and historical uses. ... Wilderness resources shall be managed to promote, perpetuate, and where necessary restore the wilderness character of the land and its specific values of solitude, physical and mental challenge, scientific study, inspiration, and primitive recreation. To that end:

- ◆ Natural ecological succession will be allowed to operate freely to the extent feasible.
- ◆ Wilderness will be made available for human use to the optimum extent consistent with the maintenance of primitive conditions.
- ◆ In resolving conflicts in resource use, wilderness values will be dominant to the extent not limited by the Wilderness Act, subsequent legislation, or the regulations in this part.

Forest Service Manual Direction for Recreation Management in Wilderness (FSM 2320)

FSM 2323.11 Recreation Management Objectives Within Wilderness

- ◆ Provide, consistent with management of the areas as wilderness, opportunities for public use, enjoyment, and understanding of the wilderness, through experiences that depend upon a wilderness setting.
- ◆ Provide outstanding opportunities for solitude or a primitive and unconfined type of recreation.
- ◆ Protect wilderness character by minimizing recreation-related impacts.

FSM 2323.12 Recreation Management Policies Within Wilderness

- ◆ Maximize visitor freedom within the wilderness. Minimize direct controls and restrictions. Apply controls only when they are essential for protection of the wilderness resource and after indirect measures have failed.
- ◆ Use information, interpretation, and education as the primary tools for management of wilderness visitors.
- ◆ Manage for recreation activities that are dependent on the wilderness environment so that a minimum of adaptations within wilderness is necessary to accommodate recreation.
- ◆ Consistent with management as wilderness, permit outfitter/guide operations where they are necessary to help segments of the public use and enjoy wilderness areas for recreational or other wilderness purposes.

Chapter II

(Original) Proposed Action and Alternatives to the Proposed Action

Introduction

Alternatives presented in this chapter are made up of five components: wilderness zone allocations, standards that will apply to those zones, management actions to be implemented, monitoring to be done, and how carrying capacity will be established.

WRS Allocations and Forest Plan Standards

All of the action alternatives would amend the Forest Plan by making revisions to WRS allocations and Forest Plan standards. WRS zones vary by how they manage the resources and wilderness character. Each alternative in this Chapter has a map showing WRS zone allocations. In addition, Table 2.1 summarizes WRS acreage by alternative. Descriptions of WRS zones appear in the Appendix of this document. Within each of the WRS zones, there is a set of Forest Plan standards that apply. These standards represent the “limits” in the Limits of Acceptable Change process. They represent the departure from one goal (for example preserving natural conditions) that has been judged acceptable to avoid compromising another goal entirely (providing for wilderness recreation). Once conditions approach a standard or limit of acceptable change, it would be necessary to take immediate corrective management action. The major standard changes proposed, are summarized in this chapter. A complete listing of proposed standard revisions by alternative appears in the Appendix.

Management Actions, Monitoring and Carrying Capacities

Alternatives vary by what actions would be taken on the ground, how much monitoring would be done, and how they establish carrying capacities for use in areas. Management actions by alternative vary by how they would manage visitor use, restore impacted sites, involve the public in implementation, and market areas outside of wilderness. Actions tend to be either “reactive” or “preventative”. For example, campsite restoration is reactive to get conditions into compliance with the standards. Visitor education is a preventative action that could forestall the need for more restrictive reactions. Wilderness monitoring is a very important preventative action that can tell us how effective our management actions really are, whether or not we are fixing or just moving a problem, and identify problems that may be developing in time to correct them before they reach costly proportions. The 1994-5 monitoring effort was the most extensive conducted to date. Funds for management actions and monitoring are limited and a balance must be made between the two.

(Original) Proposed Action and Alternatives to the Proposed Action

Developing partnerships with interested groups, outside the agency, is the most effective way to accomplish more project work and project monitoring and increase the public's support of wilderness management. Most of the proposed management actions could be implemented without additional analysis. Ground disturbing activities like campsite restoration, would require additional NEPA analysis. Implementation of an alternative would likely be a mix of implementing some actions immediately, and other actions once a site-specific restoration plan is done for a particular destination.

This Chapter will describe the (original) Proposed Action – Alternative #2, from the first Wilderness Protection EA. Following that, are the public issues and advisory group recommendations made in response to Alternative #2. The chapter then describes the other three alternatives including the new alternative (#4). The four alternatives differ by how much priority they place on limiting use, restoring impacted sites, educating visitors, reconstructing trails, and developing and marketing non-wilderness recreation opportunities. The last part of this chapter has alternative comparison charts. These compare how each of the alternatives responds to the purposes and needs from Chapter I, and the public issues in this chapter.

Alternative #2 – The (Original) Proposed Action

Alternative Objective

Alternative #2 was the proposed action in the first Wilderness Protection LAC EA. Its primary goal would be to manage for solitude and primitive wilderness character in all areas of wilderness, during most of the season, including weekends. A secondary goal would develop (to the extent there are funds to do so), and market non-wilderness day hike trail opportunities for hikers displaced by wilderness use limits. Restoration of impacted sites under this alternative would be implemented once goals one and two are reached, and if there were additional funds to do so.

Management Zone Allocations and Forest Plan Standards

WRS Allocations

Alternative #2 would add a Primitive Untrailed zone to a majority of the acreage within the three wildernesses, to reflect their lack of system trails or other signs of human improvements. Primitive Untrailed zones tend to be steep forested and rocky areas or glaciers on the upper flanks of Mt. Hood, that offer extreme challenge and risk to a hiker or climber traveling through them. Most of the Primitive trail corridors identified in the Forest Plan remain as Primitive in this alternative. A few of the trail corridors identified as Semi-Primitive in the Forest Plan were, after an evaluation of LAC data, found to meet the standards for Primitive and so were changed to Primitive in Alternative #2 to maintain the desired character. Similarly, a few trails identified as Primitive in the Forest Plan were changed to Semi-Primitive in this alternative to reflect past use trends and desired conditions.

Forest Plan Standards Revisions

Some of the Forest Plan standards were tightened, while a few were modified to be more realistically achievable. Forest Plan standards for Primitive Untrailed would be reduced to encounter no more than one other group per day off trail and to encounter no group larger than 6 people. The social encounter standard for Primitive and Semi-Primitive zone was tightened to be met 80% of all weekends and holidays and 95% of the time on weekdays. Dogs would now be included in the 12-heartbeat group size standard. Camping setbacks would be decreased along streams (to 100 ft.) and increased along lakeshores (to 300 ft.) and designated sites could be established within these zones. Permissible vegetation loss was increased at designated sites to reflect the amount of repetitive use they would likely receive. Minor changes to other resource wilderness standards would also be made under this Alternative and appear in the Appendix.

Management Actions, Monitoring, and Carrying Capacities

Alternative #2 would require a limited use permit system (LUPS) for all day hikers, overnight users and outfitter-guides, in order to comply with the proposed Forest Plan standards. Meeting the encounter standard of six (Primitive) and ten (Semi-Primitive) other groups per day would be the most binding standard and would therefore set the carrying capacity for different areas. The carrying capacity would be set at the number of groups that could be on a trail or at a destination, and not encounter more than six or ten (depending on the zone) other groups in a day. The minimum carrying capacity would generally be seven or eleven groups per day (depending on the zone). However, individual trails could have fewer groups per day where multiple trails reach a common destination. The encounters at the destination would be the limiting factor and the available permits would have to be split among the multiple trails. The LUPS would initially be set at the minimum capacity and increased incrementally after extensive monitoring by wilderness rangers to determine how many group permits could be issued without exceeding the encounter standard. Factors such as no-shows, length of trip, time and pace of travel, and one way trails would all affect the number of permits that could be issued and still comply with the encounter standards for each area. The maximum carrying capacity by trail and destination would be established once these factors are taken into consideration for each area. Administration, enforcement, and monitoring of the LUPS would take a majority of the time and budget initially.

Once the LUPS was successfully in place, management emphasis in Alternative #2 would be to market non-wilderness alternatives, both on and off National Forest lands, to serve the unmet day hiking demand displaced from wilderness. Forest staff would meet with park and forest managers from other agencies and local governments to find out what destinations are suitable wilderness recreation alternatives, what destinations meet user needs, and how to market those to forest visitors. In addition, trail construction projects on Mt. Hood National Forest within 1.5 hours of the Portland-metro area, and outside of wilderness would be submitted to the regional budget coordinators for proposed funding. Once these trails were constructed, they might serve as alternates to wilderness destinations.

Leave no trace and other wilderness education efforts would be done with Rangers as part of their wilderness permit system enforcement. Restoration of impacted sites would be accomplished once the permit system was in place and administrative and enforcement costs were covered for the year. Priorities would be in the semi-primitive areas first, and then primitive areas. Partnerships with outdoor groups would be developed to help implement and monitor restoration projects. Restoration plans would be developed for each destination area. Plans would include identification of designated campsites and day use sites, and a network of user trails for the area. It would also identify which other sites or areas would be closed and restored, and how that would be accomplished.

Public Issues With The Original Proposed Action

The Wilderness Protection EA made public in December of 1998, was mailed or given to nearly 700 people. Over 500 people attended public meetings to discuss the EA with Forest Service staff and give comments. Nearly 600 letters containing more than 3,700 separate comments were received on the document. Below is a summary of the original issues surrounding the proposed action, modified to incorporate the most common comments on the original EA. A complete public comment analysis appears in the Appendix of this document.

Most members of the public had the following issues with proposed wilderness use restrictions:

Issue #1 - Use Restrictions Are Not Necessary to Provide Solitude

Don't Expect Solitude, Can and Do Find Solitude

The two most frequent points made by the public on the original Wilderness Protection EA were that they do not expect to have solitude at high use areas and that they can find solitude if that is what they desire. They accept seeing other people at a popular destination. Encounters with other groups are usually a positive experience for them. Many hikers and climbers find solitude by going off the trail, going mid-week and off-season, or by going to alternative areas with low use. Many people commenting had not experienced crowded conditions at popular destinations and suggested that the proposed restrictions were out of proportion to the perceived problem.

Interpretation of Wilderness Act and Definition of Solitude

The Wilderness Act states “provide outstanding opportunities for solitude or (emphasis added) a primitive and unconfined recreation”. Some people disagreed with the interpretation of the Wilderness Act language. They pointed out that “or” does not mean “and”. These people assert that the Wilderness Act does not say that wilderness be managed for solitude at all places, all the time. Some people said the concept of solitude was very subjective with no clear definition and that the encounter standards for solitude were arbitrary.

Historic Use Levels

Many comments said use on south-side route, Ramona Falls, Eagle Creek, and other use areas have always been high and should have been recognized in the wilderness designation.

Issue #2 - Wilderness Use Restrictions Will Result in Undesirable Effects

Decreased Spontaneity

Day hikes are usually spontaneous and happen around weather predictions. Many hikers and climbers felt that restricting access or requiring reservations would decrease their spontaneity. Plans for climbing Mt. Hood (or canceling plans) tend to be more spontaneous, based on when good weather is predicted.

Displacement to Low Use Areas

Some people agreed with wilderness researchers and pointed out that if recreation use is limited in popular areas to achieve solitude standards or control resource impacts; the remaining use could be displaced to less used, and more pristine areas, resulting in increased resource impacts and reduced opportunities for solitude in those areas.

Search and Rescue

Climbers and some organizations expressed concern that displacement as a result of limiting use, could result in more search and rescue operations if climbers climb in marginal weather conditions because they felt compelled to climb during the time for which they had a limited permit. In addition, climbers may try more advanced climb routes than they have technical experience for, because permits for the easier route were all reserved. Similarly, beginner hikers may attempt more difficult hiking trails than they are prepared for, or hike in less favorable weather. The resulting potential increase in search and rescues poses risks of injury or death for climbers, hikers and/or rescuers.

Loss of Support for Wilderness

Some commenters felt that restricting access to wilderness would reduce public support for wilderness. The more people who visit and enjoy wilderness, results in more people who learn about, appreciate and support efforts of wilderness protection, and additional wilderness designation. They also expressed concerns about loss of support for the Forest Service as a public agency.

Effects on Families and Affordability

People thought that high use areas are good family hiking alternatives that allow access to people (kids, elderly, beginners, etc.) who may be unable to hike the less used trails which are often more challenging trails. They assert that these areas provide a low cost recreational alternative for everyone. They were worried that permits might cost too much for families. Because of this, people believed that restrictions would limit wilderness access to those physically fit enough to hike the less used trails or to those who can afford a permit.

Cost of Administration and Enforcement

Some EA commenters felt that the cost of administration and enforcement of a limited use permit system would be very high and would come at the expense of trail maintenance and other benefits, in the face of declining Forest Service budgets. They also expressed concern that a permit system would turn Rangers into wilderness police.

Ease and Fairness of Obtaining a Permit

Some hikers felt that it would be inconvenient to go somewhere and get a permit before entering wilderness. They feared that locals might be favored or have a competitive edge at getting a permit. Many were concerned about the escalating costs and hassles of obtaining a permit to hike on National Forest lands given the Trail Park Pass now required.

Issue #3 – There Should Be More Emphasis on Wilderness Education and Resource Protection

Increase Education

The third most common comment made on the original EA was to emphasize wilderness education to reduce or prevent resource impacts in wilderness, and encourage people to go to other less used areas rather than restricting use. Suggestions included more signing, outreach with user groups and schools, and use of volunteers at trailheads and popular destinations. Many also encouraged using organized groups to educate wilderness users.

Protect Resources

Many people felt the focus should be on protecting the physical and biological resources in wilderness. They wanted to help implement restoration projects in impacted areas. Some comments supported wilderness use restriction if they were needed to protect physical and/or biological resources.

Increase Trail Maintenance

Some hikers stressed that the Forest Service should focus on maintaining trails better and using more volunteers for trail maintenance rather than restricting use.

Regulate Camping

Some comments agreed with regulating overnight camping using designated campsites, campfire restrictions, and other rules in order to prevent resource impacts, but did not agree with regulating day use.

Issues Raised Outside the Scope of This Document

Some of the issues raised by the public commenting on the original Wilderness Protection EA were outside the scope of the analysis in this document. Below are the most frequent comments and a brief explanation for why they are outside the scope of the analysis.

Logging, Ski Area Development, and Other Extractive Uses

Many people pointed out that the Forest Service has allowed timber harvest, including clear-cutting, road construction, grazing, ski area development, mining and other extractive uses in much of the forest, in roadless areas, and adjacent to wilderness. They thought that these uses impact riparian areas, sensitive meadows, alpine plants, water quality, and wildlife habitat much more than hikers and should be stopped before hiker restrictions are implemented.

Response

A variety of laws and policy apply to National Forests. The Forest Plan and subsequent management direction identify how particular areas are to be managed under all these laws and policies. This planning document focuses on recreation use in three wildernesses and analyzes a variety of alternative wilderness management strategies for these lands. Wilderness law and policy are the primary basis for the Forest Plan direction evaluated here. Timber harvest levels, grazing, ski area development and mining are not permitted in these wildernesses under existing law and policy. Analyzing these activities on lands not designated as wilderness is outside the scope of the decision to be made.

Increase Wilderness

The Forest Service should increase the amount of designated wilderness to address the issue of too many people in wilderness. It would give people more places to go and leave fewer people in the crowded areas.

Response

Only congress can designate additional wilderness, although the Forest Service can make recommendations for new wilderness. Additional wilderness designation would not significantly affect the issues and problems under consideration in this decision. Areas available for consideration as new wilderness do not have the same scenic characteristics and established popularity as do the existing wildernesses. Because they usually have few, if any, developed hiking trails, a large investment would be needed to make these areas attractive alternatives to existing wilderness. In addition, a much broader array of issues than are addressed with this decision, would have to be addressed in order to consider recommendations for new wilderness. The purpose and need for this decision is to address issues and problems which require action at this time. For all of these reasons, new wilderness recommendations are considered outside the scope of this document.

As an alternative to new wilderness recommendations, there may be areas that can help meet future recreation demand currently being met primarily in wilderness. The Forest Service is currently considering administrative actions, different from wilderness designation, for some roadless areas. In October 1999, the President directed the Forest Service to begin a national dialogue about the future of roadless areas that are inventoried in Appendix C of Forest Plans. The Forest Service placed a notice in the Federal Register, initiating a public rulemaking process to propose the protection of these remaining roadless areas. To assist in determining the scope and content of the proposed rule, the Forest Service will prepare an environmental impact statement (EIS). This national EIS will have extensive public involvement in deciding the future management of these roadless areas.

Increase Trails

Construct more trails both in and out of wilderness to give people more options and reduce the number of people on the existing trails. Make more existing trails into loop trails (requiring some new construction) to reduce encounters. Convert old roads to trails. Open up closed and/or abandoned trails. Construct more multi-user trails.

Response

Many EA comments made specific trail recommendations. Some of the suggestions such as encouraging one-way traffic on an existing loop trail can be done without much trouble or analysis. New trail construction within wilderness, is generally discouraged by existing management direction, unless it corrects an existing problem that has a greater wilderness impact than new trail construction would have on wilderness qualities. As described in the local context section earlier, there are many trails within the three wildernesses that have very little use, so there is not an overall trail shortage. Creating new trails in popular wilderness destinations, to new spots that may become popular, or to areas outside wilderness, requires more thorough site-specific NEPA analysis than can be done in this document. This document may analyze general management actions such as emphasizing more trail construction outside of wilderness, but each project would require a separate site-specific analysis to be implemented.

Advisory Committee Recommendations

Following publication of the original Wilderness Protection EA document, the Mt. Hood Forest Supervisor asked the Willamette Province Advisory Committee (PAC) to review the proposal and make formal recommendations. The PAC group is a chartered advisory group, developed to review Forest management actions and their compatibility with the President's Forest Plan. Following are the PAC recommendations.

- ◆ A system for limiting day use or climbing on Mt. Hood is not warranted at this time or in the near future.
- ◆ The Forest Service should acknowledge historically high use areas that may have exceeded wilderness standards prior to their inclusion in the wilderness system. Consistent with the policy of resource non-degradation, solitude should not be used as the primary criterion for regulating use in designated high-use areas.
- ◆ Protection of sensitive natural, cultural, and historic sites within wilderness should be high priority of the Forest Service.
- ◆ Consistent with protection of sensitive natural, cultural, and historic sites, the Forest Service should develop and encourage use in areas outside the wilderness system in order to accommodate demand for a comparable experience.
- ◆ Any regulations aimed at resource protection and restoration should start with the least restrictive measures.
- ◆ The Forest Service should develop and implement educational and information materials designed to reduce impact to natural resources and reduce the number of human encounters within wilderness areas. Priority should be placed on high use areas.
- ◆ The Forest Service should develop a strategy that incorporates and encourages education, interpretation, partnerships, and volunteerism to share the responsibility in protecting wilderness character among all users.
- ◆ Restoration of resource damage to sites should be a high priority of the Forest Service, especially in impacted, high use areas.
- ◆ With increasing population and demand for wilderness experiences, the Mt. Hood National Forest should identify additional roadless areas to recommend for wilderness designation.

Alternatives to the Proposed Action

Alternative #1 – No Action

This alternative is required by law and is helpful to compare how action alternatives would change the existing conditions. The No Action alternative would make no changes from the existing management situation. Forest Plan direction and standards and guidelines would remain unchanged. Current wilderness management would continue to focus on wilderness rangers patrolling high use areas and educating wilderness visitors on low impact and leave no trace ethics.

Alternative # 3 – South-Side Exception

Alternative #3 is identical to the Proposed Action (Alternative #2), except that it would manage for approximately current use on the south-side climbing route of Mt. Hood under a separate south-side WRS zone allocation. It would also allocate a few more trail corridors to Semi-Primitive WRS class rather than to the Primitive zone. This would be done to allow slightly more use on these trails to meet recreation demand. The number of permits issued on those trails would be based on not encountering more than ten groups per day, rather than the six encounters required in a Primitive class allocation. All other WRS allocations, Forest Plan standards, management actions, monitoring, and carrying capacities would be as described in Alternative #2 – (Original) Proposed Action.

Factors Leading to the Development of a New Alternative

More than 600 letters were received on the original Wilderness EA. Most of the comments expressed concerns about limiting recreation use in the wildernesses. Recent planning efforts on the Mt. Baker Snoqualmie and Gifford Pinchot National Forests outside of Seattle and Vancouver, have elicited similar concerns for limiting use in popular wilderness destinations. As a result, some key individuals, with the backing of several Northwest hiking, climbing and equestrian groups, have encouraged Congressional representatives (Senator Slade Gorton) to take action. In both 1998, and 1999, reports from the Appropriations Committee attached to the Appropriations Bill, expressed concern about the Forest Service's social standards. They directed the Forest Service to consider on-the-ground impacts such as trampled vegetation, human waste, uncontrolled fire pits, and soil erosion, with a view to protecting the resources and mitigating damage, in addition to considering protection of opportunities for solitude.

Wilderness researchers have been compiling years of wilderness social and resource impact studies. They have recently concluded that in some cases, limiting use to popular destinations could cause more social and resource impacts to surrounding primitive parts of the wilderness, as a result of displacement. These impacts would not come with a corresponding improvement in the popular areas. The degradation of the primitive areas from displacement would occur with relatively small increases of displaced use and in most instances take decades or longer to recover, if use was reduced. More information on these findings is found in the next Chapter. The combination of wilderness research findings, Congressional concerns, and public sentiment, led to additional analysis by a team of National Wilderness managers and researchers. The public responses received on the original EA and the findings and recommendations of this National team, all of which can be found in the Appendix of this document, helped shape the development of Alternative #4 – The New Alternative.

Alternative #4 – New Alternative

Alternative Objective

The primary goals of Alternative #4 would be to maintain the primitive social and physical resource character found in most parts of the wilderness while providing a range of opportunities for solitude or primitive and unconfined recreation. Priority one under Alternative #4, would be to restore and protect the majority of the wilderness acreage that has outstanding primitive character. Priority two of Alternative #4 would be to manage use at popular destinations to preserve and protect their biophysical resource conditions within acceptable limits of wilderness character. The third priority of Alternative #4 is to develop and market recreational hiking opportunities on lands outside of wilderness, both on and off National Forest lands to accommodate increasing recreation demand.

Management Zone Allocations and Forest Plan Standards

Primitive Untrailed

Alternative #4 would add the Primitive Untrailed Zone similar to other alternatives. In Primitive Untrailed areas (the majority of wilderness acreage), there would be an expectation of not encountering any more than one other group per day off trail. Maximum group size for cross-country off-trail travel would be six people. Campers in Primitive Untrailed areas should utilize leave no trace principles so that campsites are not visible after use. There should also not be other occupied campsites within visible or audible range in Primitive Untrailed areas.

Primitive Trailed

Alternative #4 would manage Primitive Trailed areas to stricter social standards than the current Forest Plan, to preserve their existing pristine character. In primitive areas, the social encounter standard would be revised to eliminate a weekend loophole (see Purpose and Need). The maximum amount of acceptable vegetation loss in Primitive Trailed campsites (campsite size limits) would increase to 500 ft² in undesignated sites, 1,000 ft² in designated sites and 1,500ft² in designated group sites. While this represents an increase in existing campsite standards for the primitive areas, the rationale is that the amount of space a group utilizes to camp, is a function of their size, equipment and behavior – and not the zone designation where their campsite is located. Experience in other wildernesses has shown that where campfires are allowed, groups generally require larger camp areas. These standards are limits and not desirable targets. Desirable camp sizes for individual areas (in most cases less than these maximum standards) would be identified in the site-specific restoration plans based on the terrain, type of use including campfires, and

vegetation found at each area. Dogs would now be included in the 12-heartbeat group size standard.

Use Management Areas

Alternative #4 would rezone the semi-primitive areas and some other trail corridors to a new WRS class: “Use Management Areas” (UMA’s). UMA’s would be managed to provide for the protection and perpetuation of essentially natural biophysical conditions. Wilderness resources would be protected from unacceptable change, and visitors (mostly day users) would be made aware of the purpose of wilderness management. Although UMA’s would comprise a small percentage of the wilderness area, they would likely be where the majority of use occurs. UMA boundaries would not be expanded into Primitive Trailed and Untrailed Areas in the future to accommodate increased recreation demand. UMA’s would have more on-site controls and enforced regulations (designated campsites on durable locations, campfire restrictions, site closures, signing, personal contacts with wilderness rangers or public stewards, leave no trace messages, etc.). Forest Plan standards for campsite sizes in UMA’s would be identical to Primitive Trailed above: 500 ft² in undesignated sites, 1000 ft² in designated sites and 1500 ft² in designated group sites. Individual site-management plans would identify desirable site sizes (usually smaller than maximums), based on terrain, type of use and vegetation. The intent is to designate some sites for smaller groups (1-6 people) and some sites for larger groups (6-12 people) to ensure that smaller sites do not become larger over time due to large group use. Similar to primitive trailed areas, dogs and horses would be included in the 12-heartbeat group size standard.

UMA Destinations versus Dispersed Trail Corridors

UMA’s have two components:

- ◆ use destinations where many people hike to, and either camp or spend at least two hours recreating at the site; and
- ◆ dispersed use trail corridors where many people hike.

but there is either no single destination or gathering place, or people stop for just a short time and move on.

Use destinations, such as lake basins, usually have a cluster of camping and day use sites, a system of user trails, and the typical impacts found in areas of concentrated use. Because of the extended time day users spend at these locations, they can cause resource impacts similar to overnight campers (trampled vegetation, human waste concentrations, etc.). Dispersed use trail corridors usually have few visible impacts directly attributable to the amount of use they receive. Impacts are usually a function of a few individual users' behavior or trail conditions (user paths off the main trail to access a stream or a scenic vista, multi-trails where users detoured a muddy trail section, etc.). Generally, the more people that visit a use destination, the more biophysical resource impacts there are at the site. In contrast, there is much less of a correlation between the amount of use and biophysical resource impacts along dispersed trail hiking and climbing corridors. Alternative #4 would manage these two UMA components based on those differences.

Management Actions (Site-Specific Prescriptions and Monitoring)

In Primitive Trailed and Untrailed Areas

Rehabilitating any existing, and preventing future resource impacts in Primitive Trailed and Untrailed areas would be the first priority for wilderness managers under Alternative #4. Site-specific management prescriptions would be developed for all existing campsites within Primitive and Primitive Untrailed Areas. The prescriptions would:

- ◆ Document which of those campsites exceed (revised) Forest Plan standards;
- ◆ Prioritize the sites that have problems and need fixing, and the sites that need to be closed and rehabilitated, and how that would occur;
- ◆ Designate campsites if needed in sensitive or fragile areas and set a limit for the number of campsites that occur in individual primitive zones; and
- ◆ Define a monitoring protocol and schedule.

In order to prevent the degradation of these areas, wilderness monitoring would focus on these low use areas first, in order to assess a developing problem or trend, (increased use, less solitude, more campsites, etc.). The intent would be to take corrective management action before the problem became established rather than after resource impacts have occurred and become difficult or impossible to correct in the short-term.

In Use Management Areas

Management within UMA's in Alternative #4 would rely heavily on formal partnerships with interested outdoor groups and individuals to act as "Wilderness Stewards" of these areas. The role of Wilderness Stewards would be to educate the wilderness visitors (both on-site and off-site) to minimize social and resource impacts, to help with implementation of restoration projects, and to help monitor impacted and restored sites to identify developing problems.

Site-specific restoration and management prescriptions would be developed for all existing camping and day use sites within UMA's. Prescriptions in UMA's would:

- ◆ Define whether the site is within a destination area, or along a travel corridor. Prescriptions would map "Destination Area Boundaries" for a group of sites for the purposes of establishing carrying capacities.
- ◆ Document how the site meets or exceeds (revised) Forest Plan standards.
- ◆ Develop site-specific standards that are equal to, or less than, standards listed above and assign site capacity (small versus large group), based on terrain, vegetation, elevation, etc.
- ◆ Identify if the site is to be closed and restored, left as is, or repaired and improved. Prescriptions would describe how restoration or repairs would be done, and prioritize the site work.
- ◆ Identify whether the site is to be a "designated site" or not. All sites within destination area boundaries, which are not scheduled for closure, would become designated sites. All campsites located in UMA travel corridors, not scheduled for closure, and that do not meet proposed Forest Plan standards for setbacks from trails, water, and other sites, would be designated. Sites along UMA travel corridors, not scheduled for closure, that meet Forest Plan standards could be designated if necessary for resource protection, but otherwise could remain as an existing, open, (undesignated) site.
- ◆ Establish "Destination Area" carrying capacities based on the number of designated camping and day use sites within the "Destination Area Boundary". The carrying capacity would be defined as the number of "Groups at One Time" (GAOT's) that could occupy all designated camping and day use sites within the destination area boundary.

(Original) Proposed Action and Alternatives to the Proposed Action

- ◆ Describe regulations that apply to the area, necessary signing, key site protection messages for visitors, and other needed public information for the area (brochure, site maps, etc.).
- ◆ Define a monitoring protocol and schedule.

Actions to be Taken if Standards or Carrying Capacity are Approached or Exceeded

Preventative actions such as on and off site wilderness education and enforcement of area regulations would be ongoing efforts to help reduce visitors' impact. Actions taken in response to a developing problem would depend on what and where the problem is, and the cause and scope of the problem. If monitoring indicated that due to user behavior, resource conditions in a particular area were getting worse, but still within the standards for the area, then education, designing natural barriers, and enforcement would be done to modify visitor behavior and prevent further degradation. See Behavior Modification example below.

User Behavior Modification Example

A site prescription for a popular campsite allows three designated user trails from the site: one going to the main trail, one going into the woods, and one going down to the stream. Wilderness stewards notice visitors are not using the established user trail to get to the stream. Stewards try to educate the visitors by explaining the importance of using an existing walkway, and how easy multiple trails get established with relatively little, repeated use. The problem persists and is reported to wilderness rangers who work with the stewards to evaluate why the designated use trail is not being used. If the designated user trail is muddy and slippery, then drainage improvements would be made to correct the problem. They find the problem is not with the designated trail design, but with user behavior, so stewards and wilderness staff put fallen logs, slash, rocks, and other "natural barriers" on the alternate trails to "direct" the visitor to use the established stream access trail. That appears to correct the problem. If that action were not successful, then warning notices from law enforcement personnel, signing, or site closure would be considered.

Potential Triggers for Limiting Use in the Future

If problems were a function of too many groups using an area and that use was beginning to cause unacceptable social or resource impacts, then actions would be taken to reduce use. The intent of Alternative #4 is to take action before the limit of acceptable change (standard) is reached, not after it is reached. Actions could include moving the trailhead to extend travel time to the problem area, or implementing a limited use permit system for the problem area. A limited use permit system is the more likely remedy. There are three situations that could result in management actions to limit use in this alternative.

- ◆ All the designated sites at a UMA destination area boundary are full or nearly full during the peak season (carrying capacity exceeded);
- ◆ Biophysical standards (limits) are being approached in either Primitive Areas or Use Management Areas because there are too many groups using the area; or
- ◆ Social standards in Primitive Areas are being approached because of too many groups using the area.

Potential Limited Use Destinations in the Near Future

There are only two destination areas (Burnt Lake and Wahtum Lake) that would probably require use limits to be implemented as soon as site prescriptions are done to finalize carrying capacity (number of designated sites). Weekend day use and camping at these lake basins is already at, or exceeding, probable carrying capacity and resource problems are attributable to the number of groups visiting. Other destination areas within UMA's that receive high destination day use (visitors spend two or more hours at the site) and have relatively high overnight use, would be more likely to require use limits in the future, especially as visitation increases. While backpacking was more popular in the 1970's and early 80's, overnight use is currently only 15% of the total use in the three wildernesses. Most of the existing day use is on the UMA trail corridors rather than the in the UMA destination areas, and would therefore, not likely be limited under Alternative #4. However, use patterns change and backpacking could become more popular again in the future. This alternative identifies the triggers that could necessitate use limits in the future. Examples of how the above triggers might come about within a UMA destination, and a Primitive Trailed area are described below.

UMA Use Limits Example

Managers develop site prescriptions for a lake basin in a UMA, and define a destination area boundary around the basin. Within that boundary there are currently 12 sites (3 day use sites and 9 campsites). Site prescriptions call for two campsites that are poorly located in wet areas with unacceptable impacts, to be closed and rehabilitated. Site prescriptions identify a dry and durable area where a new campsite can be established, and minor improvements (brush clearing and drainage) are made to designate this site. These actions result in 8 campsites and 3 day use sites within the destination site area boundary and establish a carrying capacity of 11 Groups At One Time (GAOT's) with no more than 8 of them camping overnight. In the past, an average of six campsites are occupied at one time. A three day summer weekend with good weather results in 10 groups coming to the lake basin to camp. The wilderness stewards direct the last two of the 10 groups to campsites outside the destination area boundary for the weekend. Over the summer, the stewards document that 7 of the campsites were occupied on 2/3 of the weekends, and all sites were occupied on 1/3 of the summer weekends. Several groups had to be redirected to outside the destination area boundary when all the sites were full. Wilderness managers determine use at the lake basin has approached or reached the carrying capacity. If wilderness stewards were not on-site, it is likely that the extra groups would occupy previously rehabilitated sites, or establish new sites causing additional long-term resource impacts. Wilderness managers implement a limited use permit system for the destination that allows no more than 11 groups at one time to visit the area. Day users must occupy campsites for extended use, once the day use sites are occupied. The permit system may be applied to weekends only and is done to prevent unacceptable biophysical resource impacts at this popular destination. Wilderness managers increase monitoring of likely alternative displacement destinations when permit quota is filled.

Primitive Trail Example

A hiker along a scenic Primitive Trail zone has usually encountered no more than three or four other groups on a summer day. In late spring, a popular outdoor magazine does a story on a newly discovered and challenging rock wall located just off the trail. Wilderness rangers patrolling the trail see more rock climbers using the trail and try to encourage the climbers to use other popular routes outside of wilderness. Rangers begin monitoring encounters and determine that a group now encounters an average of eight other groups along the trail, and use appears to be increasing. In addition, multiple user trails are beginning to form to and around the rock wall and climbers are waiting at the bottom. The climbers generally leave no trace, so sanitation and litter are not a problem. Because this is a Primitive trail zone, there is an emphasis on protecting social as well as resource conditions. Use increased sharply as a result of the article and word of mouth. Wilderness managers consider moving the trailhead, but the rock wall is still within a two-hour walk. Wilderness managers implement a limited use permit system that allows for seven groups

per day, which would result in no more than six encounters with other groups. Wilderness Rangers construct a short access trail to the rock wall and improve two user trails at the bottom of the wall. They install natural barriers along the other user trails that were beginning to form, to funnel use onto the designed trails. A brochure is made available at Information Centers, outdoor stores, the Forest web site, and the trailhead encouraging use at alternative areas, explaining the permit system, and the need to stay on designated trails to protect vegetation. When the permit quota is full for the day, climbers generally head to unlimited use areas outside of wilderness and are not displaced to alternate wilderness locations.

As can be seen from these examples, management actions would depend on the individual problems and the most appropriate solution for that particular area, keeping in mind the potential displacement of the problems if an action is taken. If an action was planned that could displace use within wilderness, then likely displacement destinations would be identified and monitored to ensure that use is still within standards in those locations.

Dispersed Trail Corridors Within UMA's

UMA trail corridors would not have established carrying capacities at this time, other than the de-facto capacities created by available parking at the trailhead. Use along a particular trail may be controlled if the trail accesses a UMA destination that has a limited use permit system in effect. If dispersed use trail corridors began to show signs of increased resource impacts in the future, management actions to control and correct these impacts would be taken, including user education, regulations, trail reconstruction or relocation, or if necessary, limiting use.

Additional Research and Administrative Studies

Alternative #4 would implement additional visitor use studies to assess user preferences and tolerance for social conditions, including crowding along trails in UMA's. Research studies in generally larger, more remote wildernesses have indicated that people prefer social encounters of fewer than six to ten other groups along a wilderness trail. While this information is useful, it would be helpful to have studies that focus on the predominant users of these wildernesses. Visitor studies would be tailored separately for day hikers, overnight users, and climbers and take into consideration the proximity of these wildernesses to the Portland-metro area.

Visitor studies would evaluate the social conditions visitors recognize as unique to wilderness in contrast with other wildland settings. It is important to assess the range of visitors' preferences for social conditions along trails: their preferred experience, their acceptable experience, and their upper tolerance. Visitors need to identify this range of social conditions with the knowledge and acceptance that their use may be limited to the area, to achieve those social conditions. Wilderness visitors will likely vary in their preferences and tolerances for social conditions along trails. These studies would aid future management decisions. Wilderness managers could decide to manage popular trail use at the desired, the acceptable, or the tolerable social conditions. They could decide to manage use on popular trails for the overall average, the majority or for a range of use levels. If visitor studies indicated support for limiting use along popular hiking trails based on crowded social conditions, then wilderness managers would conduct additional environmental analysis and public involvement before making a proposal.

Marketing Non-wilderness Recreation Opportunities

Alternative #4 would also increase marketing of day hiking opportunities both on and off the Mt. Hood National Forest, but within 1.5 hours of the Portland-metro areas. Forest publications would be revised to encourage use outside of wilderness, and to remove sections that encourage use of Primitive areas within these Wildernesses. Forest recreation managers would also meet with park and forest managers from other local governments and agencies to help jointly market non-wilderness day hiking alternatives off National Forest lands. Recreation staff would also submit funding proposals for constructing trails to scenic day hike destinations on the Forest closest to the metropolitan area and outside of designated wilderness.

Alternatives Considered But Dropped From Further Study

Reclassification of South Side Classic Climb Route

The total number of people climbing Mt. Hood has increased in the last 100 years. However, on late spring and early summer weekends with good climbing weather, the number of people climbing the south side route has not changed greatly from the early 1900's. Historic photos portray the climbing clubs and organized groups that frequently sponsored large group climbs back then. These days, when good climbing weather is forecast on a weekend, it is not unusual to have 300-400 climbers strung out below the summit with bottlenecks usually occurring around the Hogsback. The conditions look similar to the historic photos, although today's climbers are individual small groups of climbers and not an organized large-scale club climb as depicted in old photos. The extended line of climbers found when there is favorable climbing weather, makes it difficult to distinguish between individual groups, but the situation greatly exceeds the inter-group encounter standards currently in the Forest Plan.

Recreationists have widely varying attitudes about what constitutes solitude, but most would agree that the climbing conditions on the south side climb in good weather, do not give climbers a solitude experience. Some users question whether or not the south-side climb route and other high use destinations in the Mt. Hood Wilderness should have been included in the wilderness boundary given the historically high use of the area. Their suggested alternative to accepting the established use along the south-side climb would be for the Forest Service to recommend that Congress remove the south side climb corridor from designated wilderness. The Forest Service would then allocate the area to "Primitive Recreation" or a similar management designation. This new designation would have most of the same protection as wilderness (no roads, ski area development, mining, logging, etc.) but would allow greater latitude for heavy use. Other wilderness advocates, do not support any loss of wilderness acreage, until Congress designates other unroaded areas, being considered for wilderness. Some feel that reclassification of congressionally designated wilderness, to another Forest Service Primitive management allocation, should only be considered after other options have been attempted.

Reclassification of portions of wilderness is outside the scope of this document because it would require Congressional action. This alternative was considered, but dropped from further study.

Figure 2.1 Existing WRS Class Allocations – Mt. Hood Wilderness

Mt. Hood National Forest
Mt. Hood Wilderness
Existing Wilderness Recreation
Opportunity Spectrum

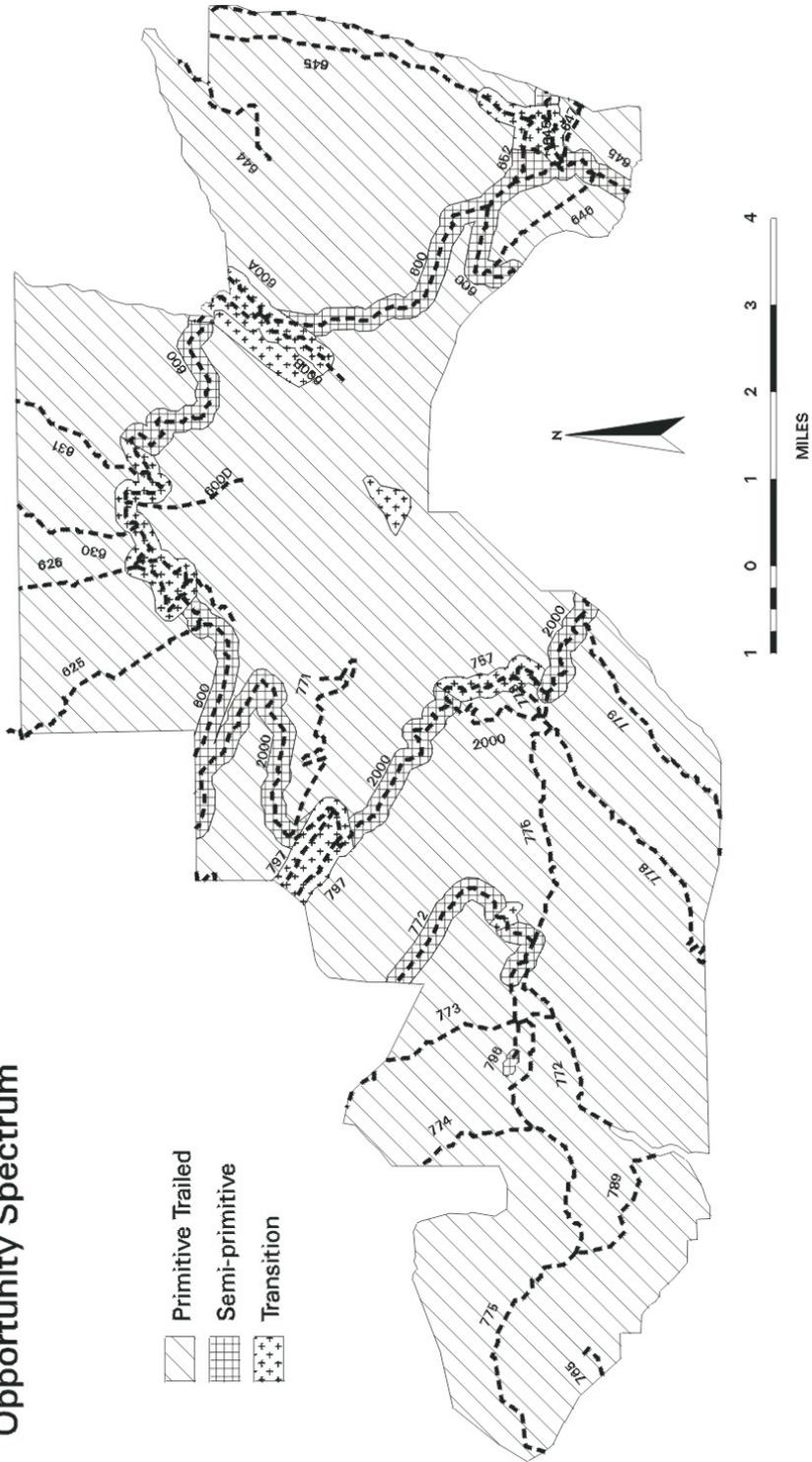


Figure 2.2 WRS Class Allocations Alternative 2 – Mt. Hood Wilderness

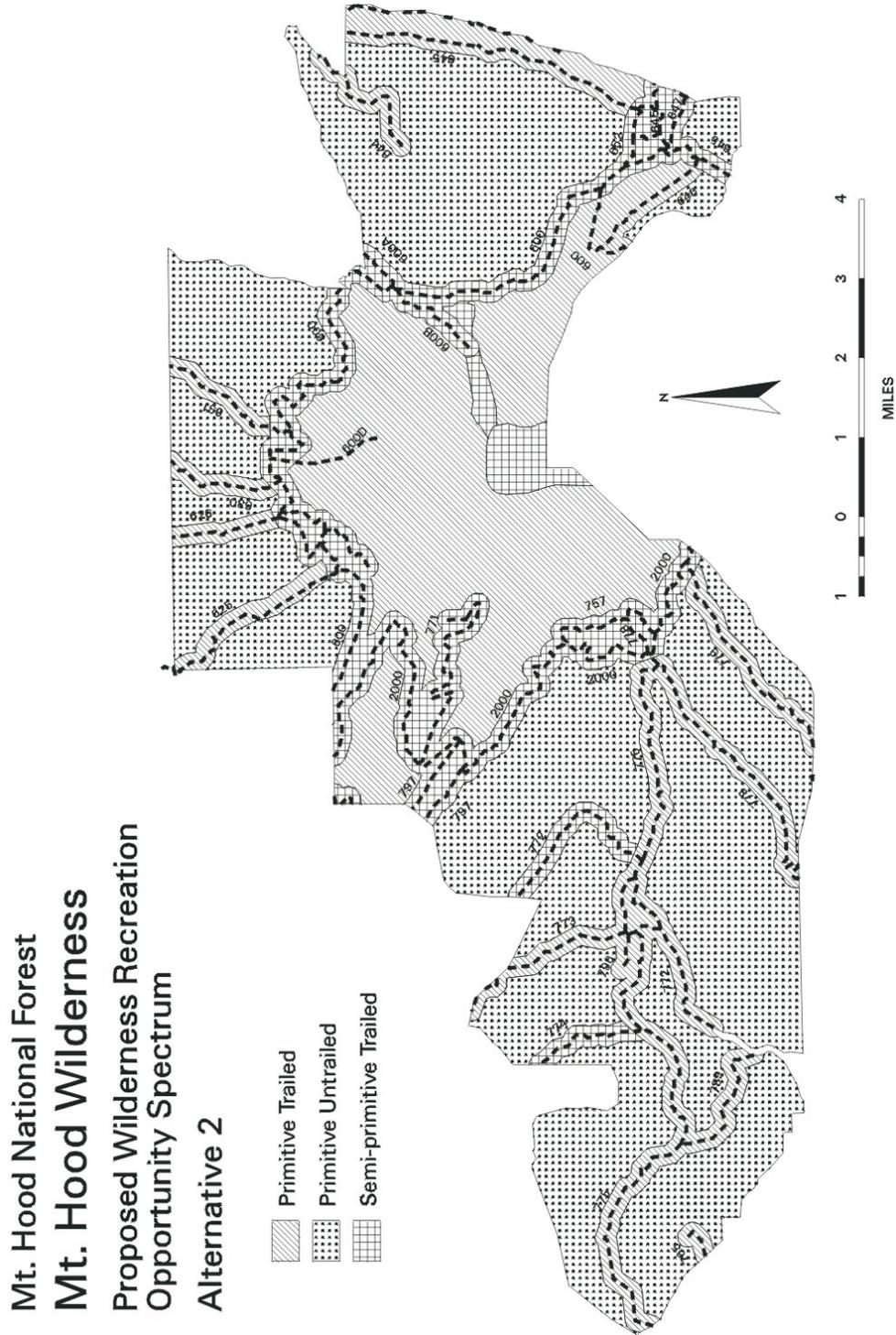


Figure 2.3 WRS Class Allocations Alternative 3 – Mt. Hood Wilderness

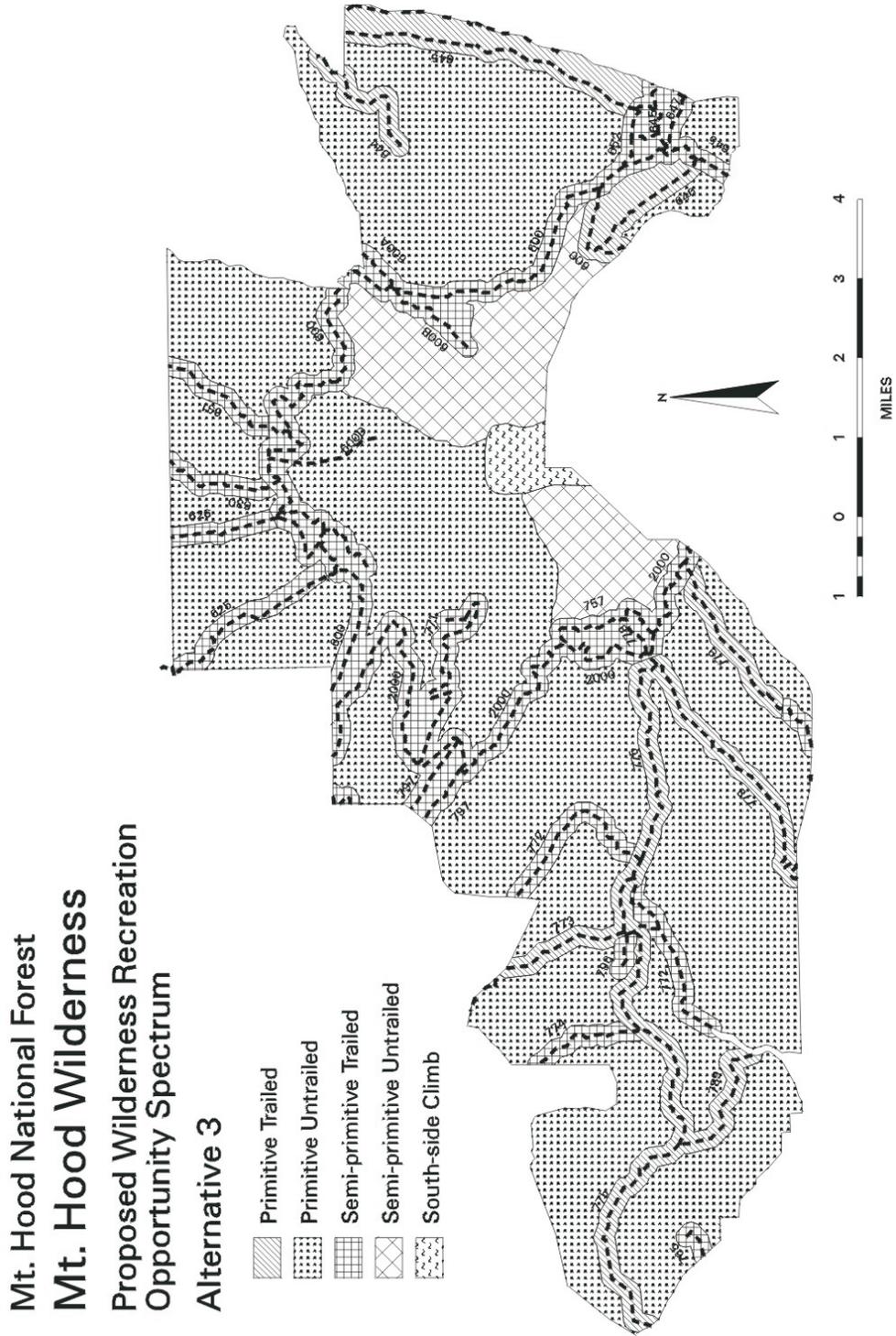


Figure 2.4 WRS Class Allocations Alternative 4 – Mt. Hood Wilderness

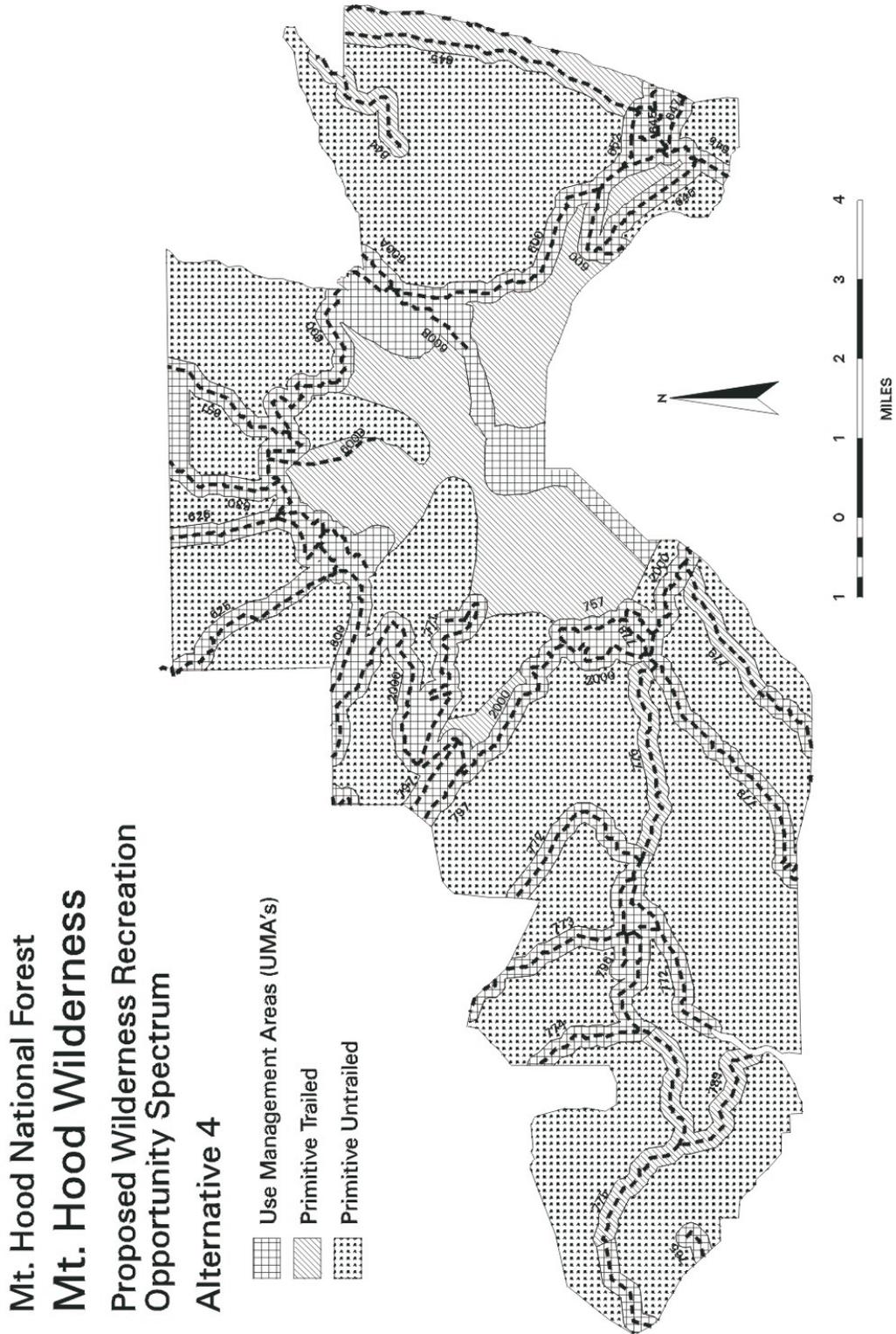


Figure 2.5 Existing WRS Class Allocations – Salmon-Huckleberry Wilderness

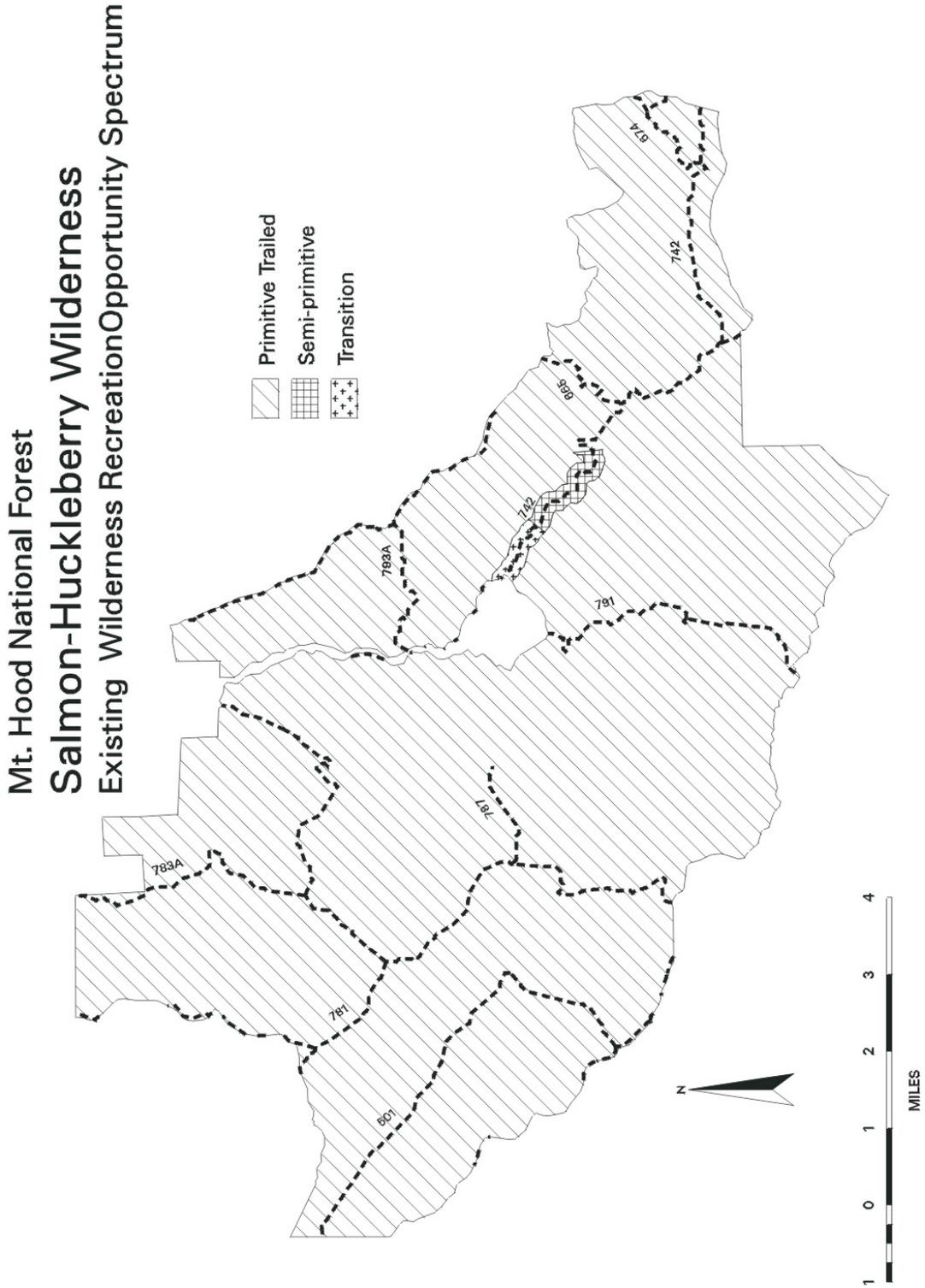


Figure 2.6 WRS Class Allocations Alternatives 2 & 3 – Salmon-Huckleberry Wilderness

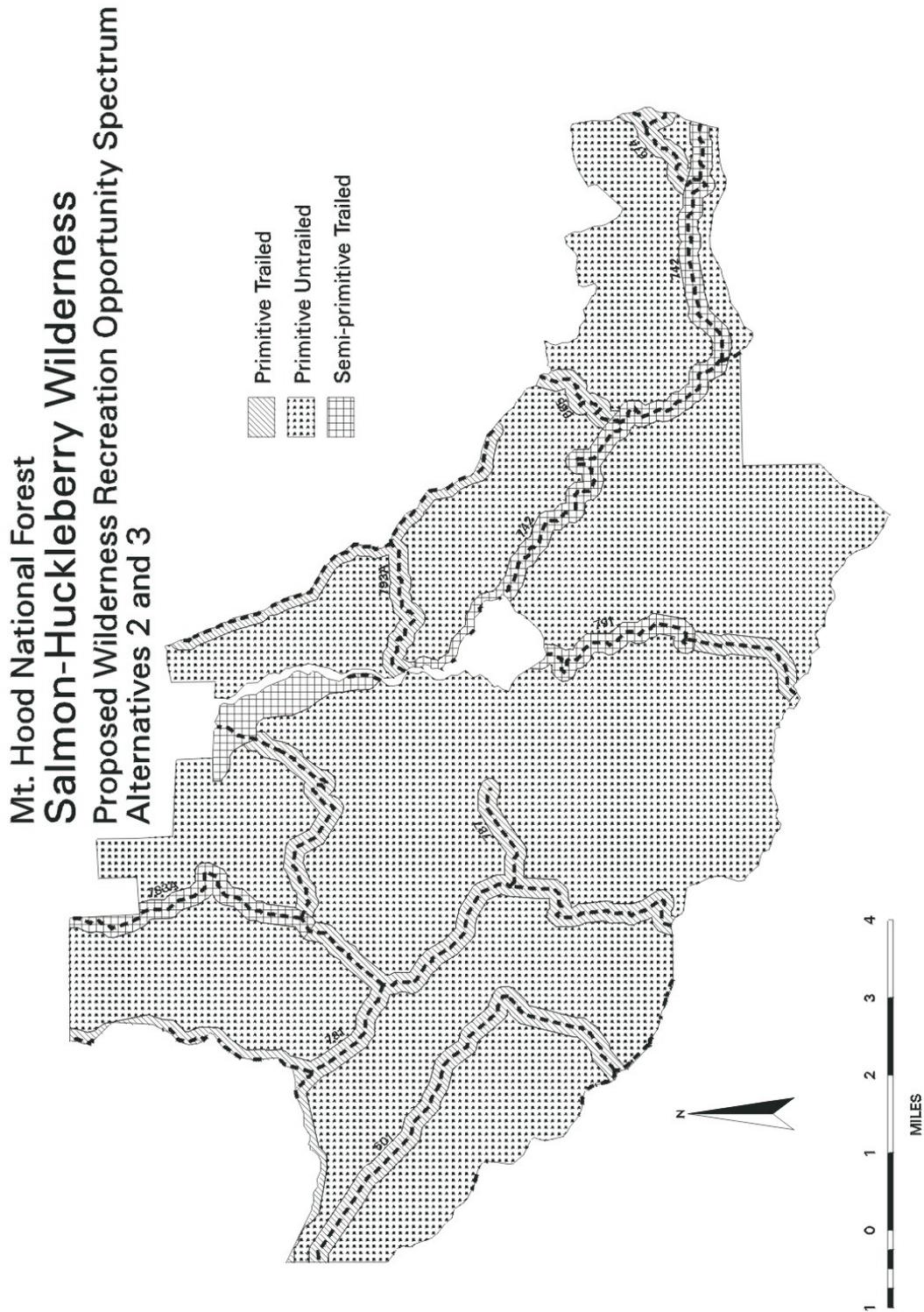


Figure 2.7 WRS Class Allocations Alternative 4 – Salmon-Huckleberry Wilderness

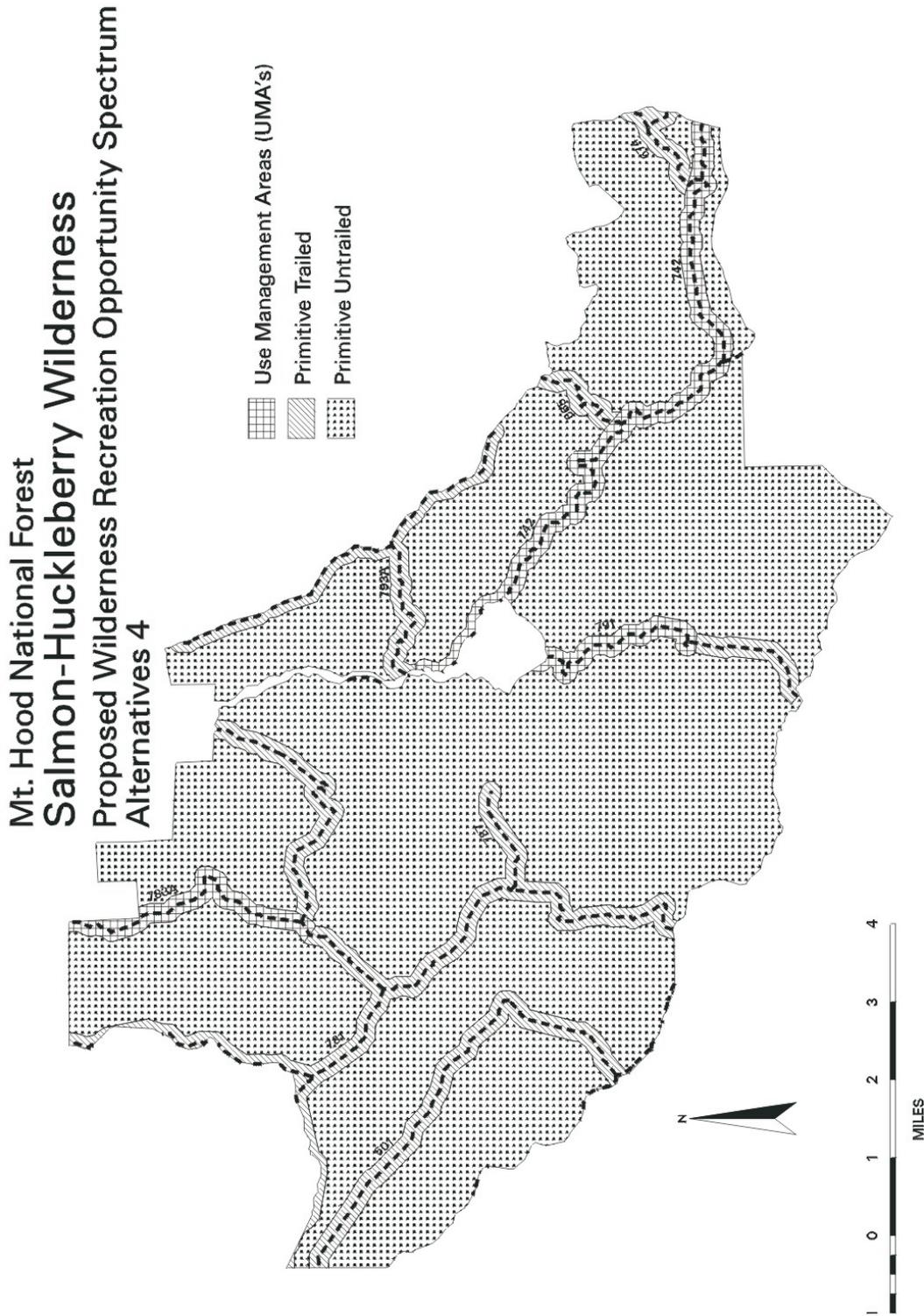


Figure 2.8 Existing WRS Class Allocations – Hatfield Wilderness

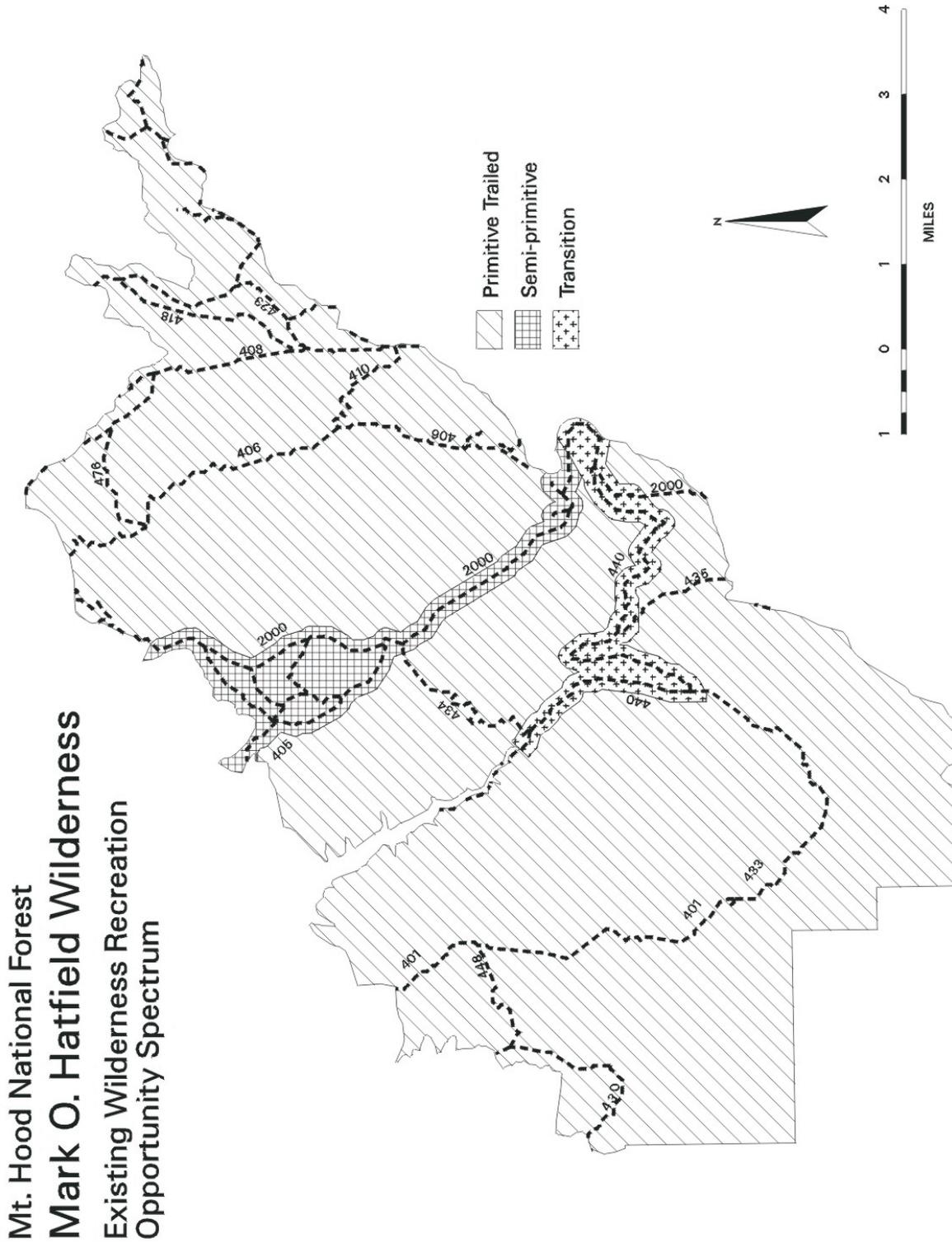


Figure 2.9 WRS Class Allocations Alternatives 2 & 3 – Hatfield Wilderness

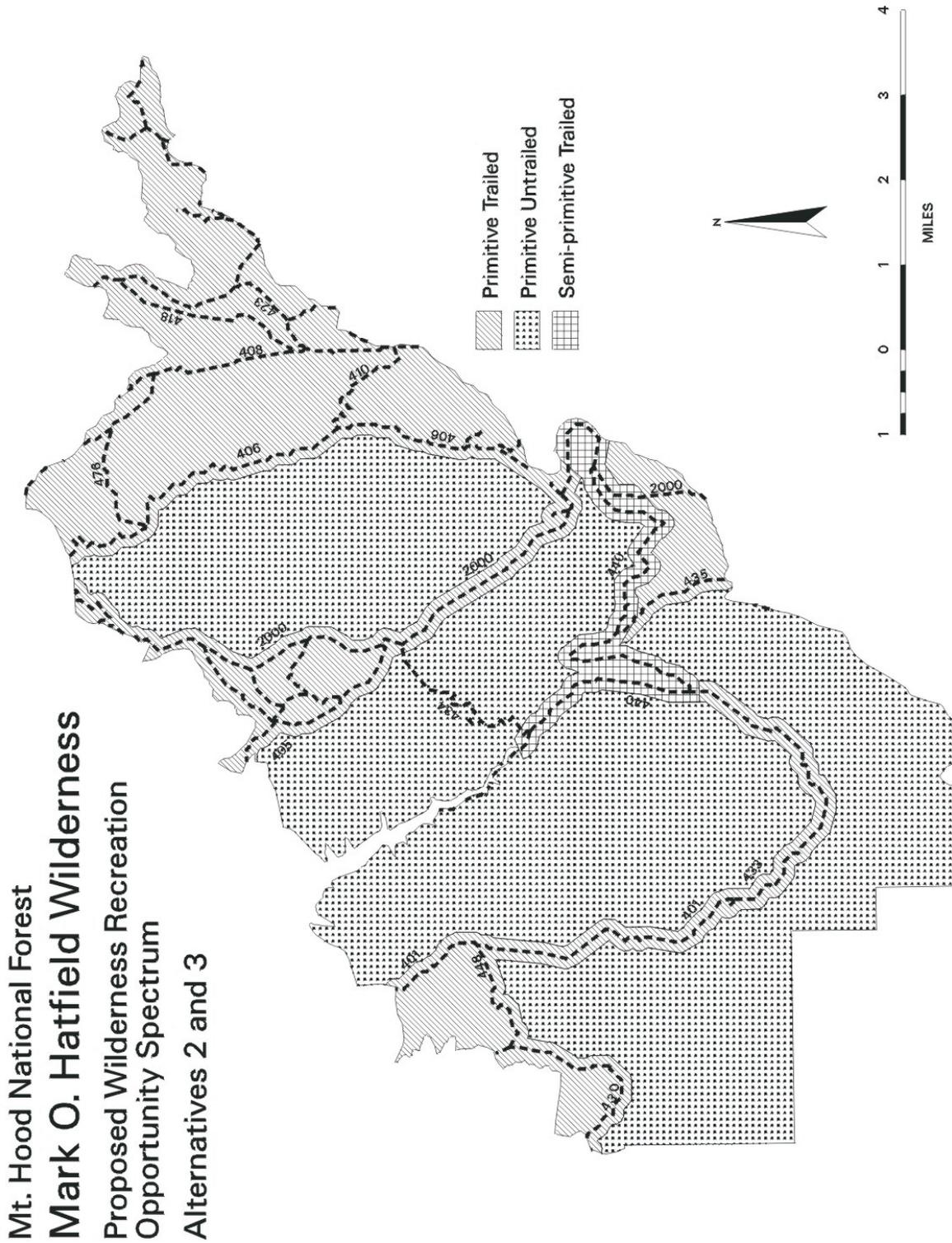


Figure 2.10 WRS Class Allocations Alternative 4 – Hatfield Wilderness

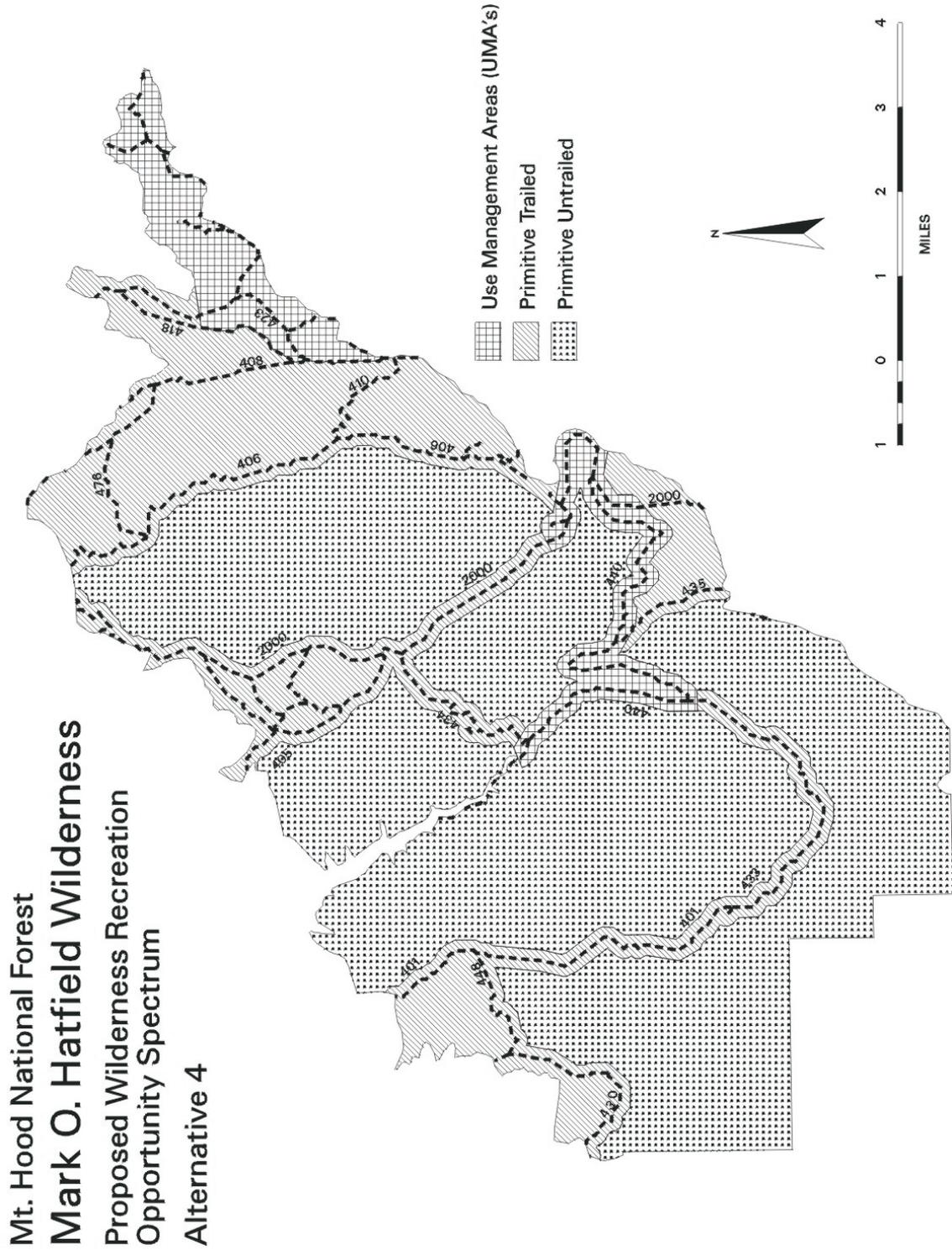


Table 2.1 Acreages of Wilderness Recreation Spectrum Allocations by Alternative

WRS Class	Alternatives			
	Alt #1 No Action	Alt #2 Proposed Action	Alt #3 South Side Alternative	Alt #4 New Alternative
Mt Hood Wilderness				
Primitive Untrailed		23,698	29,083	26,649
Primitive Trailed	40,767	15,834	4,926	8,360
Semi-Primitive Trailed	3,506	6,911	7,995	
Semi-Primitive Untrailed			3,975	
Transition – SPT	2,170			
South-Side			464	
Use Management Area				11,434
Salmon-Huckleberry				
Primitive Untrailed		37,553		38,048
Primitive Trailed	45,169	4,956		5,042
Semi-Primitive Trailed	239	3,038		
Transition – SPT	139			
Use Management Area				2,457
Hatfield Wilderness				
Primitive Untrailed		25,775		11,505
Primitive Trailed	36,855	13,110		25,443
Semi-Primitive Trailed	2,028	1,418		
Transition – SPT	1,420			
Use Management Area				3,355
Total Wilderness WRS Acreages				
Primitive Untrailed		87,026	92,411	76,202
Primitive Trailed	122,791	33,900	22,992	39,005
Semi-Primitive Trailed	5,773	11,367	12,451	
Semi-Primitive Untrailed			3,975	
Transition – SPT	3,729			
South-Side			464	
Use Management Area				17,086

Table 2.2 Alternative Responsiveness to Purposes and Needs

Purpose/Need	Alternatives			
	Alt #1 No Action	Alt #2 Proposed Action	Alt #3 South Side Alternative	Alt #4 New Alternative
1) Manage the three wildernesses for the use and enjoyment as wilderness and keep them unimpaired for future use and enjoyment as wilderness	A substantial number of people using the wildernesses. Some resource impacts are occurring.	Fewer people use the area under this alternative. Some improvement in resource conditions in high use areas. Likely increase in resource impacts in areas with currently low use.	More people are able to use south side climb route. Fewer SAR operations, fewer people on other climb routes.	At least current numbers of visitors are able to use the wildernesses. Improvement in overall resource conditions in wilderness.
2) Provide and protect existing and future opportunities for solitude or primitive and unconfined recreation.	Opportunities for solitude and for primitive and unconfined recreation exist for large numbers of people. Solitude not available on every acre.	Limited use permit system reduces use and provides opportunities for solitude in all areas on weekends and holidays as well as weekdays. Lower numbers of people. Recreation experience has more controls.	Same as Alternative #2 but allows for slightly more use in some areas and nearly existing use on south side climb.	Opportunities for solitude or primitive and unconfined recreation is maintained and preserved for future generations. Solitude not available on every acre. Recreation experience has more controls in UMA's.
3) Protect resource conditions at campsites and high use destinations.	No, resource conditions may deteriorate in some areas.	Restoration and restoration funding is a lower priority in this alternative. To the extent that it occurs, resource conditions will be improved with designated campsites, fewer sites, site restoration, user education, and fewer visitors. Would see some displaced use impacts in low use areas, up to social and resource standards.		Focus on education, site restoration, and ability to enforce protective measures would improve resource conditions in all parts of wilderness.
4) Establish more site-specific and measurable standards for campsites.	No, existing campsite standards will continue.	Yes, more site specific, measurable and enforceable standards for campsite conditions.		
5) Establish a better way of defining carrying capacity.	No, current RVD method over estimates capacity.	Yes, wilderness use is limited by social encounters, which is the most binding standard at this time, on use capacity.		Carrying capacity determined site-specifically based on mix of social and resource conditions.
6) Revise the desired WRS allocations and descriptions.	No revisions to existing allocations.	WRS allocations reflect field data collection and conditions at time of designation. More protection for untrailed areas, which comprise most of wilderness.	Same as Alternative #2, except WRS allocation for South Side Climb reflects historic use levels, proximity to ski area. Some other allocations allow for higher use in some areas.	WRS allocation of Use Management Areas added for popular trails and destinations. Most of wildernesses in untrailed WRS allocation.

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(Original) Proposed Action and Alternatives to the Proposed Action

Wilderness Protection

Purpose/Need	Alternatives			
	Alt #1 No Action	Alt #2 Proposed Action	Alt #3 South Side Alternative	Alt #4 New Alternative
7) Allocate outfitter-guide use	No, makes no specific allocation for outfitter-guides.	Allocates 30% of total use capacity on South Side Climb and Eliot Glacier to outfitter-guide use. Allocates up to 10% in other areas, if use is within social standard, and Needs Analysis supports use.		
8) Update standards and guidelines for fire	No, not consistent with current direction.	Management ignited prescribed fire with management plan allowed to prepare area for natural fires. Resource Advisor used. Wilderness values considered in suppression efforts.		
9) Make minor revisions to other resource standards and guidelines in wilderness.	Makes no changes.	Makes minor wording changes to wilderness standards and guidelines dealing with fish, fish stocking, wildlife, downed wood, pets, special forest products, and noxious weeds to reflect updates in management direction or new information in the last decade.		

Table 2.3 Responsiveness of Alternatives to Issues

Issue	Alternatives			
	Alt #1 No Action	Alt #2 Proposed Action	Alt #3 South Side Alt.	Alt#4 New Alt.
1) Wilderness user restrictions are not necessary to provide solitude. Many users don't expect solitude in popular areas and/or they can find solitude if that is the experience they are seeking.	No limited permit system in place. Visitors able to chose destination and time without restrictions. Most of wilderness provides outstanding opportunities for solitude. Fewer opportunities in most popular and desirable locations.	Limited use permit system would be implemented to provide outstanding opportunities for solitude in the most popular, scenic areas within the three wildernesses, during the busiest part of the recreational season.	Same as Alt #2 - Proposed Action, with the exception that the South Side would provide few opportunities for solitude on the best climbing days.	Limited use permit system may be implemented in a few popular destinations due to resource impact concerns or in low use areas to protect solitude opportunities if visitation rises significantly. Visitors able to chose destination and time without restrictions in most cases. Most of wilderness acreage managed for outstanding opportunities for solitude.
2) Wilderness user restrictions would result in undesirable effects such as: *Decreased spontaneity, added planning and expense, and difficulty in getting a permit fairly. * Displacement of Wilderness Use - from high use areas to low use areas, with associated increase in resource impacts to, and less solitude in, low use areas.	Since there is no permit system, there is no effect on spontaneity, planning, expense etc. Some displacements of users seeking solitude from the more popular destinations to weekdays, or other low use areas.	Limited use permit system needed to achieve social standards for solitude result in loss of spontaneity, and added planning and expense, especially for day hikers. Permit system would be designed to allow for reservations and same day permit allotments. Displacement of significant number of users from popular destinations, especially in Mt. Hood. Anticipated use would be displaced mostly to other less used areas of wilderness up to permitted standards. These areas would see fewer opportunities for solitude and increased resource impacts.	Same as Alt #2 – Proposed Action, with exception that climbers on the South Side would usually be able to get a permit because Alt #3 allows for higher capacity. Similar to Alt #2 - Proposed Action, except some trails would allow slightly higher use capacity with associated less displacement to other areas.	No significant decrease in spontaneity. Potential for additional planning and expense in a few individual areas where use is limited to protect resources. Plenty of alternative wilderness destinations available to avoid additional planning and expense. Little or no displacement of use to more pristine areas. Limits to use concentrate on a few popular destinations with alternative popular destinations available and unrestricted. If use in a Primitive zone approaches social or resource standards, access may be limited, but would likely displace few groups overall.

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(Original) Proposed Action and Alternatives to the Proposed Action

Issue	Alternatives			
	Alt #1 No Action	Alt #2 Proposed Action	Alt #3 South Side Alt.	Alt#4 New Alt.
<p>* Potential for increased search and rescues if a permit system displaces climbers from south side to more technical north side routes, or results in climbers continuing in marginal weather because of limited permits.</p> <p>* Cost of administration and enforcement of a Limited Use Permit System would come at the expense of trail maintenance and wilderness education.</p>	<p>No change in situation. Use has not significantly increased or decreased since wilderness designation in 1964. Use is not expected to greatly increase over time on south side climb.</p> <p>Currently some expense with a self-issued permit at some trailheads. Might be discontinued in future.</p>	<p>Limiting South Side climb could displace users to more technical North Side climbs. Climbers could try to climb in marginal conditions due to limited opportunities, possibly resulting in more search and rescue missions, injuries or death to climbers and/or rescuers.</p> <p>Cost of permit system would need to be covered with Forest wilderness budget and offset as possible, with charging fees for permits. Large-scale permit systems are costly to implement and enforce and would reduce the amount of funds available to spend on trail maintenance, education and site restoration.</p>	<p>Higher encounters on South Side Climb should not displace climbers, especially novice climbers to more technical North Side routes.</p> <p>Limited use permit system only needed where resource concerns, or social standards in primitive areas, trigger limits. Small-scale permit system has less expense than Alt 2 or 3. Fee may still be required to help offset costs.</p>	<p>No displacement of current use expected from the South Side. A limited permit system may be implemented on a more technical route in primitive areas if use approaches social standards. Primitive climbing routes would be managed to offer solitude, challenge and risk.</p>
<p>*Loss of support for wilderness, and effects to families, beginner hikers, those with limited mobility, or low-income users.</p>	<p>No effects on wilderness support, families, beginner hikers, those with limited mobility, or low income.</p>	<p>Potential loss of wilderness support when many visitors are unable to get a permit to their desired destinations. There could be enhanced appreciation of wilderness values for those who get permits to desirable locations and see only a handful of other groups. Families, beginner hikers, and those who favor flatter, less challenging trails may have few options once allotted permits are issued for these most popular areas. Permit fees would not disproportionately affect low-income users.</p>	<p>Increased emphasis on education and on-site stewardship may enhance wilderness support. Families, beginners, and those with low income should have adequate alternative wilderness hiking options even if a few destinations have limits.</p>	
<p>* Ease and Fairness of Obtaining a Permit</p>	<p>Self-issuing permits may be continued with no effect on ease or fairness of use.</p>	<p>A limited use permit system would be designed to be as easy and accessible and fair as possible. There would be multiple permit pick-up points, ability to obtain permits through the mail or Internet, and a combination of reserve-in-advance and same-day permits available.</p>	<p>Limited use permit system in a few individual areas would be similar to Alt #2, except that there might not be as many permit issuing and pick-up point locations if that option greatly increases the cost of issuing a relatively small amount of permits.</p>	

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(Original) Proposed Action and Alternatives to the Proposed Action

Issue	Alternatives			
	Alt #1 No Action	Alt #2 Proposed Action	Alt #3 South Side Alt.	Alt#4 New Alt.
3) There should be more emphasis placed on wilderness education and resource protection including trail maintenance and camping regulations.	Some ongoing wilderness education at trailheads, on permits and limited Ranger contact would continue. Wilderness trail maintenance and existing camping regulations would continue.	The cost and staffing required to implement a limited use permit system would reduce the amount of funds and people available to implement wilderness education, site restoration and trail maintenance. Camping regulations could be implemented as part of permit system. Partners and volunteers have generally indicated less willingness help wilderness staff with education and resource protection under a limited use permit system.		Primary focus is on wilderness education and on-site stewardship in popular areas, and protection and restoration of low use primitive areas. Partners and volunteers conduct wilderness education outreach, trail maintenance, and help implement restoration projects. Limited use in a few destinations would not greatly impact accomplishing education and resource protection actions.

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Chapter III

Affected Environment and Research Findings

Affected Environment and Research Findings

This chapter will describe the existing use and resource impacts in the three wildernesses. It will also present research findings on recreation use trends, visitor surveys on solitude and encounters, campsite and trail impacts, and the effectiveness of a series of management actions.

National and Local Wilderness Recreation Use Trends

Collection of wilderness recreation use data for the various wilderness management agencies has been variable. In some cases, the use data has been based on observation or “best guesses”. In many cases, permits or trail counters were not used. In addition, some wildernesses only measured over night use and not day use. Given the quality of the available data, some conclusions can still be reached. Recreation use of the National Wilderness Preservation System has steadily increased since passage of the Wilderness Act in 1964. People are recreating in designated wilderness more than ever. Although the size of the wilderness system has greatly increased since 1964, many wildernesses are also more heavily used than ever. Most wildernesses had very high use in the 1970’s and early 1980’s, especially overnight use. Many wildernesses saw visitation decline through the 1980’s and then begin another surge. Use increased during the early 1990’s in virtually every wilderness. At least one-half of all designated wildernesses experienced their highest levels of use during the 1990’s. Some of the remaining areas saw increases in use, but have not (yet) topped the levels in the late 1970’s and early 1980’s. (Cole, 1996) The percent of day hikers also increased in many wildernesses.

Local Wilderness Recreation Use Trends

The Hatfield and Salmon-Huckleberry were designated as federal Wildernesses in 1984. There are no records of use for the years prior to designation and only sketchy data available prior to the LAC data collection effort. Mt. Hood became wilderness with the passage of the Wilderness Act in 1964 and expanded in 1984. Some data is available for the Mt. Hood Wilderness, mostly from the west side of the mountain. Permits were required of all visitors during the late 1970's and early 1980's. Wilderness rangers patrolled the area, checking compliance with the permit requirement. The data was corrected for non-compliance but it is unknown how often permit boxes were vandalized or empty or how long the permit season was at that time. Despite these potential problems with the 1980 data set, it seems indisputable that use has increased dramatically in the Mt. Hood from 1980 to 1995. As shown in Figure 3.1, the total number of groups increased 87% while the total number of people increased about 58% during this time. These changes are consistent with changes seen in Mt. Jefferson, Mt. Washington, and Three Sisters Wildernesses (Shelby and Hall, 1992). The discrepancy between the increases in numbers of groups and numbers of people is probably the result of a trend to smaller group sizes today.

Currently, nearly 85% of the use on all the popular trails is day use. Data from the 1970's and early 1980's is not available for the percentage of day versus overnight use. However, anecdotal accounts indicate that these areas were popular destinations for overnight camping, especially when backpacking increased nation-wide in the 70's and 80's. Many of the campsites that were inventoried in the LAC process were probably created and used often during this period. We can assume that day use has increased and overnight use has probably decreased in these wildernesses.

Climbing Trends on Cascade Peaks

Table 3.1 displays the status of climbing restrictions on popularly climbed Cascade peaks based on informal surveys of peak managers.

Figure 3.1: Group Use of Mt. Hood Wilderness 1980-1995

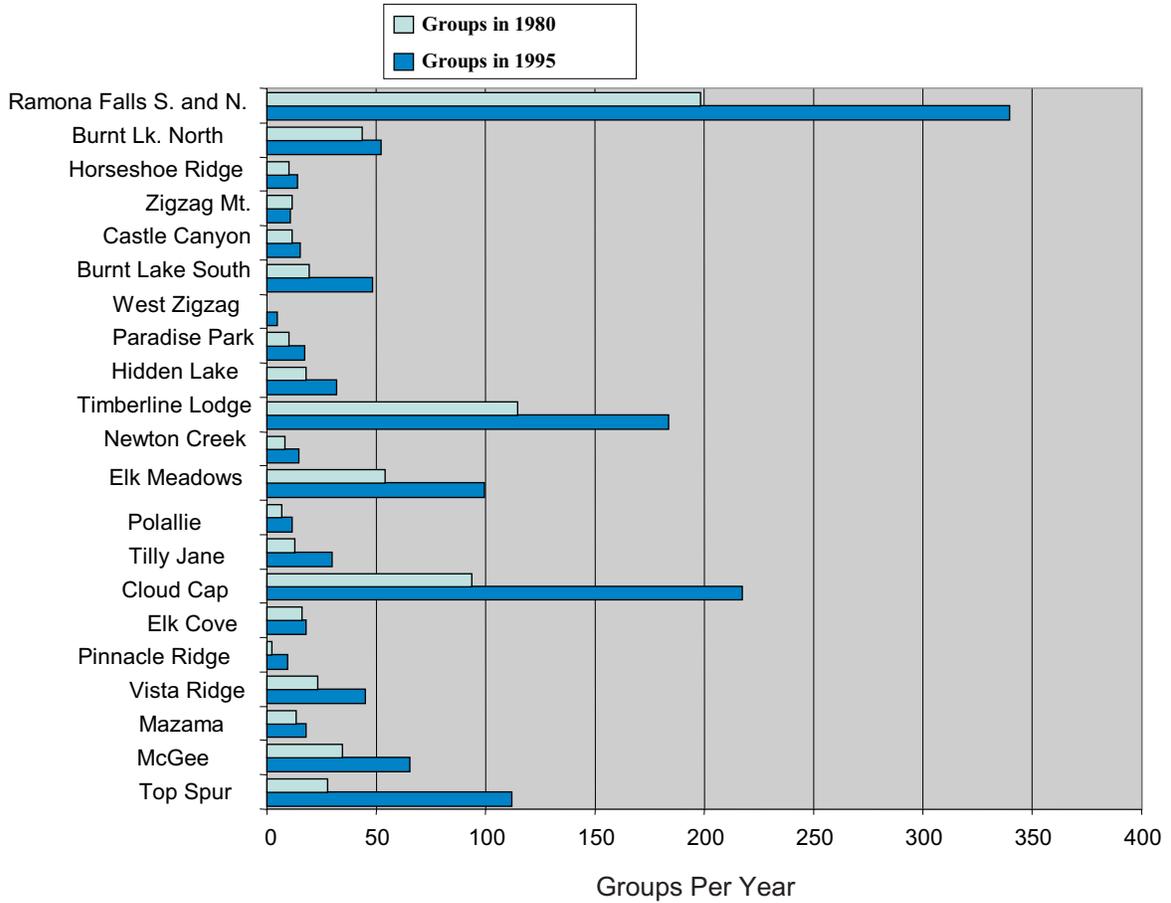


Table 3.1 Climbing Restrictions on Cascade Peaks as of December 1999

Peak	Permit System	Mandatory	Fee	Programs Fee Supports	Use Limits	Limiting Factors	How use is limited
Mt. Hood	Yes	Yes	No	N/A	No		Not limited
Mt. Adams	Yes	Yes	\$15	Cascade volcanoes	In future	Biophysical at base camp	Limited to existing use levels by trailhead.
Mt. Rainier	Yes	Yes	\$15	Waste mgt. Ranger program	Yes	Resource protection at high camps	Number limits at high camps. No new camps can be established on other routes.
Mt Jefferson	Yes	Yes	No	N/A	No	Camps in some areas	Not Limited
Three Sisters	Yes	Yes	No	N/A	No	Camps in some areas	Not Limited
Mt. Shasta	Yes	Yes	\$15	Ranger Program	No		Not Limited
Mt. Lassen	Over-night only	Yes	Entry	Park Operations	No	Designated Camps	Not Limited
North Cascades	Yes	Yes	No	N/A	Yes	Resource and Social	Numbers of groups limited by zones
Mt Baker	No	N/A	Trail Park	Trail Maintenance	No	Insufficient funding to issue and administer new guiding permits.	Public not limited. outfitter-guides are limited to 1995 level of permits
Mt. St. Helens	Yes	Yes	\$15	Climber services and facilities.	Yes	Resource and Social	100 per day for mountain

Research Findings on Solitude

The Wilderness Act of 1964 includes “outstanding opportunities for solitude or a primitive and unconfined recreation” among the list of characteristics that define a wilderness. Agreeing on how to determine whether adequate opportunities for solitude exist, is much more challenging to managers and wilderness recreationists. The following analysis focuses on the legislation’s intent regarding opportunities for solitude. The dictionary defines solitude as being alone, or in a secluded place. However, very few people travel alone in wilderness. There is ongoing debate about how to measure solitude, including: visitor satisfaction with their experience; perceived crowding; actual trail and campsite encounters with other groups; amount of conflict between groups; and degree of privacy achieved.

Studies on visitor experiences and relative crowding have had conflicting results (Graefe et al. 1984; Stankey and Manning 1986). Much of the inconsistency comes from visitors hypothetical preferences, verses their actual experiences. Many recreationists would prefer to have few other encounters with other groups in wilderness (Stankey, 1973). However, when they actually experience higher group encounters, it does not always adversely affect their wilderness experience. Visitors’ point of reference and trip expectations can also affect their solitude experience (Manning 1985). Those who value getting away from others tended to feel more crowded than those who valued being part of a group when exposed to similar use levels (Shelby, 1976; Shelby and Nielsen, 1975; Shelby and Heberlein, 1986). Recreationists reported increased crowding not only when they encountered more visitors, but also when the number of encounters exceeded their expectations or preferences (Shelby et al. 1983). If a hiker expects to see only one or two other groups on an extended hike, and they encounter four or five groups, his or her solitude may have been denied. Conversely, where use levels are relatively high, visitors may consider the opportunities for solitude to be acceptable, because they have the expectation of seeing more people (Watson 1995).

The location of encounters and the type of encounters are also important factors in visitors’ wilderness experience (Manning 1985; Stankey & Schreyer 1987). Encounters at campsites, especially having several parties camped within sight or sound, have more impact on visitors than encounters along a trail. A small group encountering several large groups, or a backpacking group encountering a group of equestrians appears to affect some visitor’s experience of solitude (Stankey 1973). There seems to be less perception of crowding when like groups are using an area.

There is also the tendency for social preferences to change with time or location. Following are questions that need to be addressed when considering social standards.

- ◆ Should the benchmark for encounters be on what visitors thought in 1964 or at designation, or should they be based on current preferences? What if visitor preferences are even more tolerant of crowding in 20 years as population and recreation use increases? Should standards be increased then?
- ◆ Should encounter standards for a wilderness located next to a large urban population be based on visitor expectation studies done in larger more remote wildernesses or on preferences in the individual wilderness? Should day use encounters be treated the same as overnight encounters?
- ◆ Will the folks who stop using an area because it was “too crowded” for them, be surveyed on what their preferences are? How do you include the people displaced from an area in a survey? How do you handle the wide variation in visitor tolerance for crowding?
- ◆ Should social standards be based on visitors’ desired preferences or their acceptable tolerance levels, especially given the likely outcome that their own use might be limited?
- ◆ Should opportunities for solitude, or primitive and unconfined recreation be managed on a regional basis with the most solitude, or primitive recreation being provided in the wildernesses with the least access? Should each individual wilderness provide a range of opportunities for solitude? Should the most easily accessible, scenic, spectacular and popular wilderness destinations provide solitude, even on summer weekends?

Given the various factors affecting people’s perceptions of acceptable social experiences in wilderness (personal preferences or tolerances, trip expectations, location of encounter and type of group encounter) it is difficult to develop quantifiable social standards. Studies done at different times and at various locations have come up with different results. There is no consensus from the research to answer the above questions.

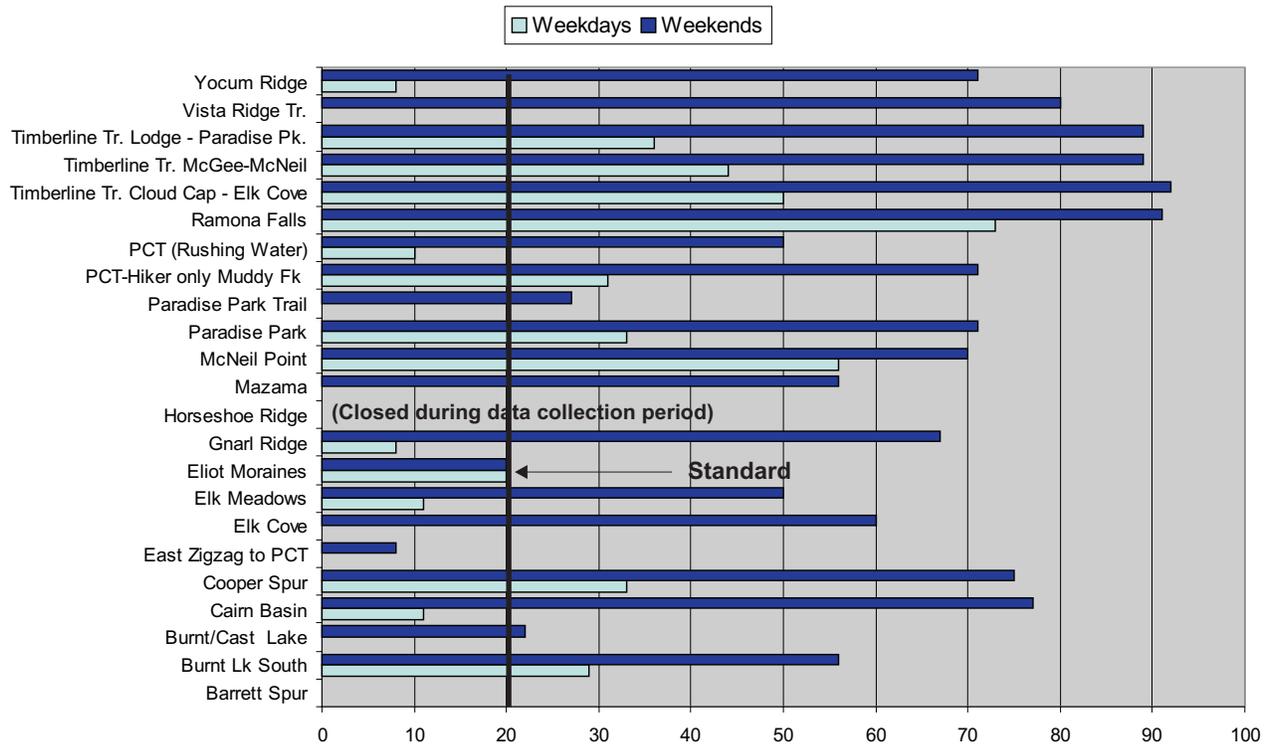
Mt. Hood Forest Plan Social Standards

The Mt. Hood Forest Plan (1990) established social standards based on default standards that had been developed for the Pacific Northwest Region. These Regional social standards were in place until February 1998 and served by default, as Forest Plan standards where Forests had not developed wilderness specific social standards. The Forest had the ability to adopt stricter standards than the Regional ones if warranted, but had less freedom to adopt social standards that allowed more use than the regional social standards. The Regional standards were based on general research findings from the 1970's and 80's that showed visitors preferred to see fewer than six to ten other groups in wilderness. The Forest Plan social standards were based on encounters with other groups along trails and in campsites and are as follows:

- ◆ Encounters with other groups shall be limited to no more than ten groups per day in semi-primitive areas, and no more than six groups per day in primitive areas, during 80 percent of the primary recreational use season.
- ◆ No more than two other campsites in semi-primitive areas and one other campsite in primitive areas shall be visible or continuously audible from any other site.

Nearly all of the Pacific Northwest Forests have similar encounter standards. And nearly all of the wildernesses in this region located near a large metro area and with popular wilderness destinations, have routinely exceeded those standards. Table 3.2 below shows on average, how often encounter standards are exceeded by trail.

Figure 3.2 Percent of Time Encounter Standards are Exceeded – Mt. Hood Wilderness



**Figure 3.3 Percent of Time Encounter Standards are Exceeded –
Salmon-Huckleberry Wilderness**

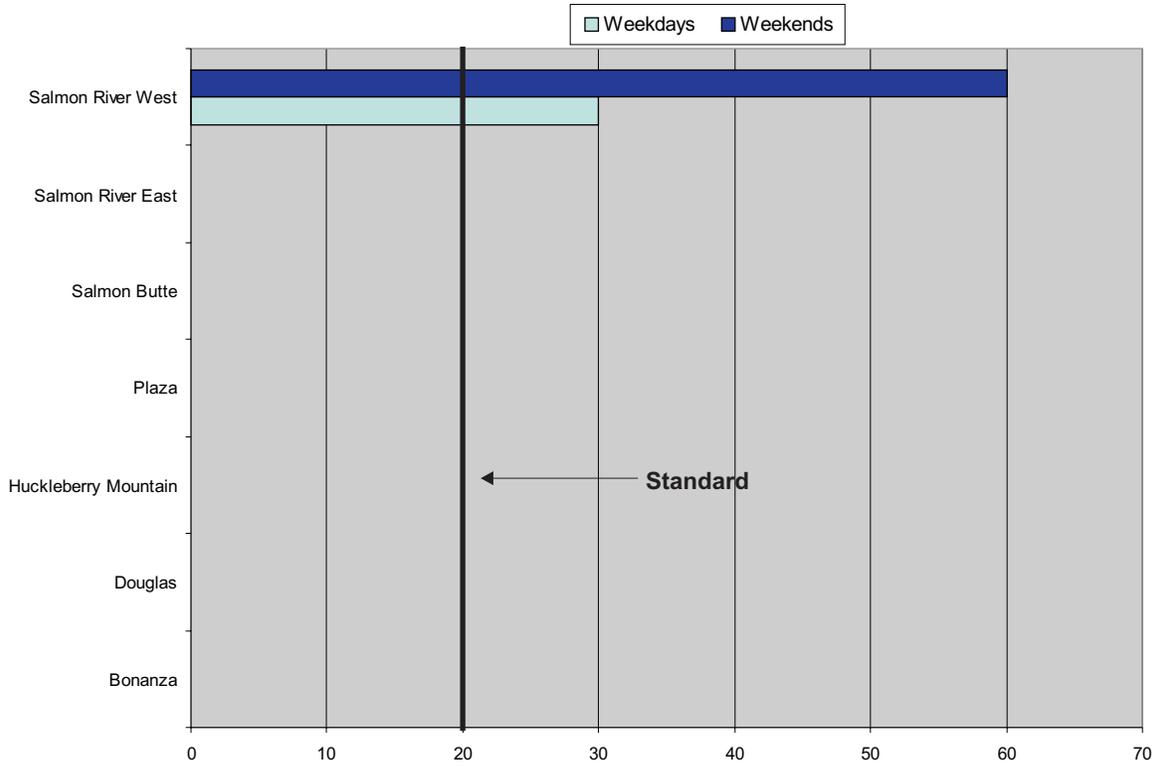
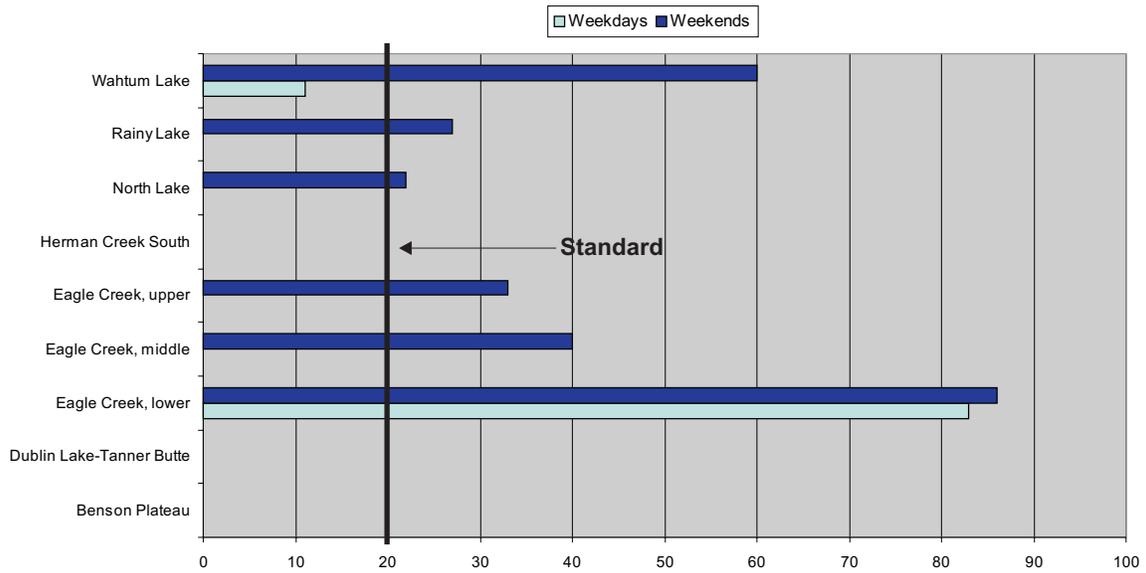


Figure 3.4 Percent of Time Encounter Standards are Exceeded – Hatfield Wilderness



Encounter Levels on Mt. Hood, Salmon-Huckleberry and Hatfield

The results in Figures 3.2, 3.3 and 3.4 indicate the percent of time group encounters exceeded the six or ten groups. The Forest Plan requires that the standard be met 80% of the time. There are several ways to interpret the standard. The (good weather) weekends comprise approximately 20 % of the total use season, so conceptually if the weekend column was excluded and only the weekdays were considered, there would not be a problem on at least a few areas. It could also be interpreted to mean that on any given day, whether weekday or weekend, the standard should not be exceeded 80% of the time.

As can be seen, most of the trails within the Salmon-Huckleberry and Hatfield Wilderness have very little use with the exception of Salmon River, Eagle Creek and Wahtum Lake. A majority of the trails within the Mt. Hood Wilderness have high day use, especially on weekends. However, the trails that do not have high use tend to have very low use. Few trails have “moderate” use.

Much of the public response on the original EA indicated that visitors were not expecting solitude at these high use areas and their experience was not adversely impacted by the encounters. They also said that they could find solitude (presumably in these low use areas) if that was the experience they were seeking.

Camping Experience on Mt. Hood, Salmon-Huckleberry and Hatfield

There appears to be no problem in meeting social standards for overnight use at campsites in nearly all locations except for lakeshore sites on the best weekends. In these locations, due to the number and proximity of the campsites, there tends to be noise and at times, conflict between more noisy campers, and those seeking a quiet evening. The high amount of day use at the lakeshores adds to the problem.

Research Findings on Vegetation and Soil Impacts from Recreation Use

Recreational use of wilderness has the potential to erode soils, damage or eliminate vegetation, and modify the site’s productivity. Below is a discussion of research findings on impacts from trail use, and camping.

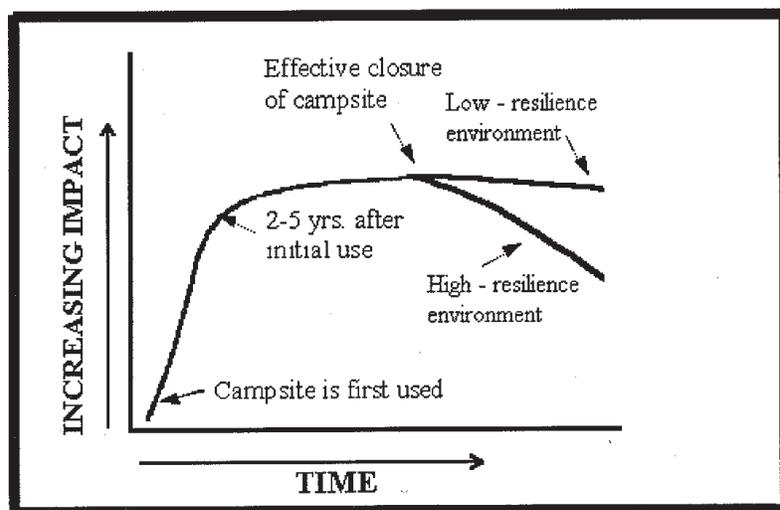
Trail Deterioration

The majority of the impact that occur along trails is a result of deterioration of the tread usually through erosion or the development of muddy stretches; and development of undesired trails, such as multiple trails in meadows or networks of informal trails in popular destination areas. These impacts are usually a result of the trail's location, design and maintenance. Some locations (wet meadows) and some trail designs (steep grades) invite deterioration. Certain trail designs (water bars and switch backs can mitigate the impacts in a poorly located trail (Cole, Petersen, Lucas 1987). Trail use, especially by stock, at times when soils are saturated can have much more impacts than during dry conditions. Braided trails are created when hikers try to avoid muddy stretches, or go around snow-covered sections of trail. The amount of use a trail receives has much less bearing on trail deterioration than trail location, design, maintenance, user behavior, type of user, and timing of use.

Individual Campsite Impacts

Campsites, viewpoints, and other destination areas can have ground cover vegetation trampled and standing trees scarred or cut down. Mineral soil may be exposed, compacted, and/or eroded away, once the vegetation layer and organic soil horizons are removed. Research on these impacts began in the 1940's, focusing first on stock use, and has gradually increased when backpacking increased in popularity in the 1970's (Cole 1994). David Cole, a wilderness researcher with the Aldo Leopold Wilderness Research Institute modeled the typical "life history" of a campsite shown in Figure 3.5.

Figure 3.5 The "Life History" of a Typical Campsite, Showing the Development, Dynamic Equilibrium, and Recovery Phases



Impact usually occurs rapidly after a previously undisturbed site is used as a campsite. Near maximum levels of impact occur within the first few years the site is repeatedly used. Loss of vegetation cover occurs rapidly, while mineral soil and exposure occurs more slowly. Once a site is established and continues to be used in a stable manner, impacts level off. Individual parameters vary by where a site is located. Low elevation west side forests have more litter contribution and less exposed mineral soil on a given site than a sub alpine site where the organic material is being eroded faster than forest litter can replace it. Some parameters, like tree damage, worsen over time, because they are irreparable. Once a campsite is effectively closed to camping, recovery can begin. The rate of recovery is always much slower than the rate of previous deterioration. Recovery rates again, vary by vegetation type and location, and by which parameter is being measured. Forest litter may be replaced in a few years, but vegetation cover takes longer. Given the same environmental setting, more highly impacted sites will take longer to recover. Evidence suggests that recovery rates for different environments have more variability than deterioration rates for those areas. As can be seen from the graph, once sites become established, there is little benefit to “limiting use to prevent resource impacts,” at the site, unless use can be totally eliminated and the site can be closed and restored. Without some strategy for site management, use restrictions alone, would require severe reductions in use to effectively begin recovery processes and then they would be slow. And the manager must then assess where the displaced use would go and what impacts would occur as a result.

Large-scale Campsite Impacts

Campsite impacts tend to be highly localized. The vast majority of wilderness land is rarely visited and therefore virtually undisturbed by recreational use. This suggests that campsite impacts may compromise visitor experiences, due to conspicuous evidence of human impact, more so than wilderness landscapes (McEwen and Cole 1997, Cole 1990). In many wilderness areas where they have been monitoring trends, there has been an increase in the number of campsites becoming established over time. Such proliferation often occurs because sites deteriorate rapidly and recover slowly, there is usually little management control over where visitors camp, and because old educational efforts emphasized dispersing use in wilderness rather than camping in established sites, rather than solely because use is increasing. Where use is being limited, there is a potential for the overflow use to displace to other less used locations, with new sites becoming established over time. There have also been past efforts to “rotate” areas out of use temporarily, in the hopes they will recover naturally. These places usually do not recover quickly and are joined by the new sites that become established outside of the rested areas. Lack of management, use displacement, rotation of areas, and relocation of areas, all tend to create cumulative impacts on the landscape. All these factors indicate that managers may best protect resources on the larger scale by protecting the less used areas and removing any signs of campsite use before a site becomes established. In the high use

areas, where the number of acceptable campsites is sufficient to accommodate demand, managers might best limit impacts by site management strategies such as requiring visitors to stay in designated campsites (Cole 1993; Cole & Krumpel 1992; Cole & Ranz 1983; Cole & Benedict 1983).

Inventoried Resource Conditions of Recreation Use Sites Within Mt. Hood, Salmon-Huckleberry and Hatfield Wildernesses

Trail Trends

System trails were not inventoried as part of the LAC process in the three wildernesses. In most places, they get routine condition surveys and more intensive evaluations when they are proposed for reconstruction. Many of the trails within the Mt. Hood, and the Salmon River trail have been reconstructed in the last five years. While funds for trail maintenance have dropped in the last ten years, the wilderness system trails are still being maintained to standard in most places. Most of the problem areas are, as research outlined above states, a function of poor trail location or design, rather than a function of the number of people walking on them. Trail reconstruction considers the inadequacies and where possible, fixes them or relocates short portions of the trail to correct problems. “User created” trails branching off system trails and networked around campsite areas were inventoried as part of the LAC process. These trails are not considered “system trails” and so they are not considered for trail reconstruction. User trails, can cause resource impacts because they are poorly located and not usually maintained. Occasionally, work crews have tried to either close, relocate or harden user trails within wilderness, but it has not been a priority. There is a need in popular areas, to design some logical trails that access the various campsites, a water source, and possible toilet areas to avoid multiple trails from becoming established randomly around the landscape.

Campsite and Use Area Inventories

All sites within the three wildernesses that experienced recreational use were inventoried as part of the LAC process, even those that had very little impact. Wilderness rangers recorded impacts created by recreational use including: vegetation loss, damage to trees, and exposure of mineral soil. They also recorded the sites proximity to water, trails, and other campsites. Table 3.5 describes existing Forest Plan biophysical standards for campsites and destinations. Table 3.6 shows the results of the extensive resource inventories. Some information on the table is tied to the existing Forest Plan standards. Other condition information shown will be beneficial in identifying problem areas, management actions and restoration plans.

Table 3.2 Existing Mt. Hood Forest Plan Site Standards for Biophysical Resources in Wilderness

Standard	Recreation Opportunity Class	
	Semi-Primitive	Primitive
Ground vegetation may be flattened or show wear and tear but is not permanently injured and able to recover in two seasons.		Yes
Percent of exposed mineral soil without a duff layer present in campsite area.	< 75%	< 25%
Amount of ground cover loss at any one site.	< 400 ft ²	< 200 ft ²
Percent of tree roots exposed at destination locations.	< 25%	< 10%
Set backs from lakes, streams, trails, meadows, and Key interest features.	> 200 ft where physically possible	> 200 ft. Where physically possible
Number of other campsites visible or continuously audible.	< 2	< 1

Table 3.3 Biophysical Conditions of Recreation Sites for Mt. Hood, Salmon-Huckleberry, and Hatfield Wildernesses: Compliance with Forest Plan Standards and Other Condition Information

Wilderness Protection

	Mt. Hood	Salmon-Huckleberry	Hatfield
Number of campsites inventoried	344	28	128
Standard or Indicator			
Percent of sites within:			
200' of trails	61%	82%	80%
100' of trails ¹	46%	62%	60%
Percent of sites with less than 50% vegetated screening between site and trail	39%	39%	61%
Percent of sites within:			
200' of water	74%	47%	74%
100' of water	56%	47%	66%
Percent of sites within:			
200' of other campsites	74%	59%	74%
100' of other campsites	56%	59%	66%
Percent of sites with more than 2 other sites visible ²	26%	0%	24%
Percentage of sites below 4000 ft. elevation ³	19%	95%	90%
Percent of sites with total camp area (visible impact):			
< 500 ft2	55%	55%	56%
>500 ft2 and < 1000 ft2	22%	15%	27%
>1000 ft2 and < 2000 ft2	15%	15%	12%
> 2000 ft2	8%	15%	5%
Percent of sites > 500 ft2 of bare core area ⁴	22%	28%	24%
Percent of sites >1000 ft2 of bare core area	10%	20%	7%
Percent of sites with greater than 70% vegetation loss ⁵	70%	82%	73%
Percent of sites with greater than:			
0% mineral soil exposed	39%	26%	63%
25% mineral soil exposed	35%	38%	17%
75% mineral soil exposed	16%	8%	6%
Percent of sites with:			
no trees felled	64%	33%	44%
zero to 3 trees felled	84%	66%	78%
4 or more trees felled	16%	33%	22%
Percent of sites with less than 10% tree roots exposed	96%	95%	96%
Percent of sites with:			
no campfire scars	60%	59%	52%
one campfire scar	32%	27%	41%
more than one campfire scars	6%	14%	8%

¹ The setback from trails and water is 200'. This table illustrates that, and also indicates how many are within 100' to better illustrate the problem.

² The standard for sites with primitive zones is being visible or audible to one site. So more sites may be exceeding the standard than shown here.

³ Sites lower than 4000 ft in elevation are much more resilient to impact.

⁴ The Forest Plan standard is for <400 and <200 (primitive areas) of ground cover loss at any one site. Bare core area includes all areas with less than 1% vegetation cover.

⁵ Most of these sites are smaller than 400 ft2.

Campsite Densities

Campsite densities is defined as the number of campsites occupying campable space in an area. Most impacted sites are in the Mt. Hood Wilderness where 344 campsites were identified. Only 28 campsites were in the Salmon-Huckleberry and 128 sites in the Hatfield Wilderness. Most sites are in clusters at destinations. Although Paradise Park has 63 sites, they are relatively well distributed over a large area. Concentrations of sites at Ramona Falls (24), Elk Cove (23), Burnt Lake (20), Cairn Basin (20), Cast Lake (13), and Elk Meadows (13) although consisting of fewer sites overall, have higher densities than at Paradise Park because the suitable area for camping is smaller. Some of the popular climbing sites (South Climb and Snowdome) have quite a few sites, but they tend to be small alpine sites used primarily as bivouac sites by climbers, with few impacts. The majority of sites in the Hatfield Wilderness are located at Wahtum Lake (35) and 7.5 Mile Camp on the Eagle Creek Trail (20). Clustered sites at this wilderness are a function of the steep heavily vegetated slopes with few flat spots to camp. Most of the sites in the Salmon-Huckleberry are along the Salmon River trail (18).

One of the biggest resource issues with campsites in most places of these wildernesses, especially the Mt. Hood, is that there are far more campsites than needed to meet the overnight camping demand. There were 2000 overnight groups in the Mt. Hood Wilderness. Assuming conservatively that use is spread over 16 weekends in summer, it would result in an average of 125 groups per weekend. Even assuming one third of the sites inventoried are lightly used and difficult to find, there are still nearly twice as many sites as the average need. Although some of these sites have become newly established in the last ten years, many of the sites date back to the 1970's and 80's when backpacking was a fad and overnight use was much higher. Now that nearly 85% of visitors are day users, many of the existing overnight campsites are not needed and should be closed and restored.

Campsite Conditions

Proximity to Trails and Water

Many of the campsites exceed existing Forest Plan standards. They are too close to lake-shores and streams, trails, and other campsites. In the Salmon-Huckleberry and Hatfield Wilderness, topography and vegetation effectively limit visitors' ability to move away from trails. Although most sites in these areas tend to be close to trails, the sites in Salmon-Huckleberry tend to have some degree of vegetative or topographic screening whereas the sites in the Columbia are more visible along the trail (69% with less than 50% screening). Although few sites directly border water, more than half of the sites in the three wildernesses are within 100 feet of a water source. In the Salmon-Huckleberry and Hatfield Wildernesses, this again tends to be a function of topography. The only flat places to camp are near water. And the sites that are not close to water are on a ridge top well away from water. The Mt. Hood has more variable topography. The number of sites close to water is probably more a function of historical use and visitor preference than the inability to find a flat site further in most areas.

Proximity to Other Sites

More than half of the sites are within 100 feet of another site. A quarter of the sites in the Mt. Hood and Hatfield have more than two other sites visible. The Salmon-Huckleberry had no sites with more than two sites visible, presumably because of the few total number of sites.

Campsite Elevation Zones

The Hatfield and Salmon-Huckleberry Wilderness are almost entirely low elevation, with longer growing seasons, high rainfall, relatively productive soils, and lush vegetation. While these sites may deteriorate just as rapidly as high elevation sites, they are much more resilient and recover much more rapidly when they are closed (see high-resilience line in Figure 2.1). Forest Service recreation employees who worked along the Salmon River and the Eagle Creek (Hatfield) trails in the late 1970's and early 80's, report that the areas have much fewer campsite impacts now. Less than 20% of the Mt. Hood Wilderness is below 4000 feet. Half of it is between 5000-6000 feet. And most of the rest of it is over 6000 feet. These sub alpine and alpine environments have very short growing seasons, and in some seasons are under snow 10 months of the year. They have thin soils with low productivity and sparse vegetation. Impacts on these sites take decades or longer to recover naturally (see low resilience line in Figure 2.1).

Vegetation Impacts

Campsite inventory information for the amount of impacted area, bare soil, ground cover loss, and tree damage were not always measured or reported with the indicators in the Forest Plan, because other indicators will be more helpful at assessing the problems present. For example, there is not a Forest Plan standard that deals with the total campsite area. A campsite may be quite large with smaller patches of bare ground and with fairly good ground cover. While many of the campsites are relatively small, nearly a quarter of them in all three wildernesses are greater than 1000 ft² in size, with almost ten percent of them larger than 2000 ft². Similarly, ten percent of the sites had “bare core area” (loss of vegetation, exposed mineral soil that has been compacted and/or eroded) greater than 1000ft². These sites will be fairly slow to recover.

While less than 25% of the campsites have more than 500 ft² of lost ground cover, indicating most of our sites are smaller, it does not tell the whole picture. In three quarters of the campsites, there is loss of at least 75% of the vegetation at the site. This is probably attributable to the fact that most of our sites are in forested settings where forb and shrub species are highly susceptible to trampling. At these sites, most vegetation is rapidly lost, and there is generally a clearly defined boundary to the site. Sites located in sedge or grass meadows, tend to retain a higher proportion of their vegetation cover because species in these areas tend to be more resistant to trampling.

Soils Impacts

Impacts to soils tend to develop more slowly than impacts to vegetation because the vegetation can shield the soil to some extent from trampling, raindrops, heat and evaporation. Rangers assessed soil impacts by measuring “percent of mineral soil increase” to get an indication of how much mineral soil had been exposed compared to natural levels (Cole 1990). Determining mineral soil impacts in forested areas with thick humus layers is somewhat problematic for Rangers because it is difficult for them to identify organic soils versus mineral soil. Sites in the Hatfield were least likely to show soil impacts with two thirds having no mineral soil exposed. In contrast only 39% of the Mt. Hood sites and 26% of the Salmon-Huckleberry sites met that criteria. The Mt. Hood sites are higher elevation with little soil development and few organic inputs, so that subsurface mineral soils are easily exposed. It is unclear why the Salmon-Huckleberry Wilderness has exposed mineral soil rates similar to the Mt. Hoods when it has vegetation conditions similar to the Hatfield’s. Perhaps it can be attributed to the fact that with only 28 sites and most of those concentrated along the Salmon River Trail corridor, those sites get heavier and more repeated use than the Hatfield. Organic soil horizon losses were usually concentrated in the middle of the sites.

Tree Damage and Root Exposure

The Mt. Hood Wilderness had relatively few sites with felled trees (64% with none and 20% with less than 3). Felling of trees was slightly more prevalent in the Hatfield and Salmon-Huckleberry Wildernesses with 22% and 34% of the sites respectively having more than 4 trees felled at or around a site. Tree scarring rates were similar to tree felling rates with the Salmon-Huckleberry having old signs of bad scarring on many of the historic Salmon River sites. About two thirds of the sites in the Mt. Hood and Hatfield had no exposed tree roots, compared to only one third of the Salmon-Huckleberry site.

Fire Rings and Fire Scars

Wilderness Rangers have routinely eliminated multiple fire rings in campsites for several years. In most locations, fires are allowed, and one ring is usually left. Interestingly, nearly two-thirds of the sites in Mt. Hood had no fire rings or fire scars. Many of these sites are sub alpine or alpine sites with little wood. About half of the sites in the Hatfield and Columbia had no fire rings or fire scars. Most of the rest had only one ring or scar.

Summary of Conditions for the Three Wildernesses

When comparing against the existing Forest Plan standards, the number of encounters in high use areas is the greatest problem in the three wildernesses. Second, is the proximity of many sites to trails, water and other campsites given the setback standards. Third is the size of bare ground and lack of ground vegetation in some campsites. Although not a Forest Plan standard, the number of existing campsites is excessive given the demand, and the total camp area (showing some sign of trampled vegetation) is larger than needed. Trail damage is present in some areas. High elevation trails and equestrian trails in low elevations tend to have the largest problems if they have not been maintained well, or reconstructed recently. Tree damage, exposed roots and fire scars are a relatively small problem.

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Chapter IV

Effects of Implementing the Alternatives

Effects of Alternatives

The following section describes the potential effects to social and biophysical resources and recreation opportunities of implementing the alternatives. The effects of implementing alternatives are compared to the No Action/Current Management Alternative (#1). The effects are focused on how the alternatives respond to the purpose, needs and issues outlined in Chapter I and II. It also includes required effects summaries such as threatened and endangered species. Additional information on effects can be found in the appendices and analysis files.

Effects on Recreation Opportunities and Wilderness Carrying Capacity

Alternative #1 – No Action/Current Management

Opportunities for Solitude or Primitive and Unconfined Recreation

Alternative #1 would continue the current management and not limit wilderness use. Currently, visitor use exceeds Forest Plan standards for solitude of six to ten encounters on nearly all summer weekends (when it's not raining), in most of the Mt. Hood Wilderness, and in popular trails within the Salmon-Huckleberry and Hatfield Wilderness. Limited opportunities for solitude are also an occasional problem at campsites, especially in lake basins. While limited opportunities exist on good weather weekends at popular destinations, Alternative #1 would still make available a primitive and unconfined recreation experience to a large number of people. Those who seek solitude could find it, in less used areas of the wildernesses, on weekdays, and during poor weather. The wilderness recreation experience would remain unconfined with few management regulations, no designated campsites, or limits on use. People could continue to be spontaneous as to the time, date, and destination of their visit, an important factor given Northwest weather.

Wilderness Carrying Capacity

The existing Forest Plan measures the Wilderness Carrying Capacity by Recreation Visitor Days (i.e. the number of 12 hour visitor slots occupied per year) and specifies a total carrying capacity for the entire wilderness. Existing wilderness use does not exceed the identified Forest Plan carrying capacity under the No Action alternative, even though standards for encounters, and many biophysical conditions are exceeded. This is due to the fact that the use is concentrated into the more popular areas. With increasing future use, carrying capacities stated in the Forest Plan could be exceeded.

Potential Use Displacement

Because the No Action alternative would not limit use, there would be no additional use displacement as a result of implementing this alternative. Currently, there is a user determined level of “use displacement” that takes place when people choose to hike mid-week or hike more obscure trails to avoid crowds on weekends or at popular destinations and therefore seek better opportunities for solitude. This user determined level of displacement could increase in the future, as use levels grow as a result of Portland-metro area growth. People may seek more opportunities to “get away from it all” and avoid high use destinations or weekend travel crowding.

Climbing Opportunities

Under the No Change Alternative, climbing would be allowed to continue at current rates. Numbers of climbers on the South side route on a peak season weekend, during good weather, has not changed significantly since designation as a wilderness. Numbers of climbers on other routes have declined since the first half of the century, but have had a slight increase in the last 20 years. Although climbers would not experience solitude on the South Side climb on a weekend in May, there is still an element of challenge and risk to most of the participants, and a great deal of freedom over choice of a time to climb. Solitude is available on most other routes and on the south side climb outside the popular climbing season.

Limits to Use

Although current management does not limit use with a permit system, use is somewhat limited by the capacity of trail head parking, placement of trailheads, road and trail maintenance, and decisions on building any additional trails. Any future decisions relating to access and travel management would be made with the current standards in mind.

Alternative #2 (Original) Proposed Action

Opportunities for Solitude or Primitive and Unconfined Recreation

The Proposed Action would bring opportunities for solitude to the most popular destinations with a Limited Use Permit System (LUPS). Wilderness visitors could expect to encounter no more than six to ten other groups on most trails and destinations. Designated campsites at popular overnight destinations would provide opportunities for solitude, as the sites would be spaced to reduce visibility to other campsites. Other social benefits including reduced user conflicts and personal inspiration would also be realized under this alternative. Visitors displaced from more popular destinations could cause reduced opportunities for solitude at the more remote and currently less used areas. Although a degree of solitude would be realized, visitors could not be as spontaneous about their trip, and may not be able to visit the destination they desire at the time they prefer. The limited use permit system, represents an off-site confinement in recreation. While designated sites, campfire restrictions, and management presence proposed under this alternative would result in on-site confinements to recreation opportunities. An opportunity to choose any area to camp would still be available away from popular destinations.

Wilderness Carrying Capacity

Total carrying capacity for each wilderness would now be based on the amount of people that could be in the wilderness along trails and at key destinations without exceeding associated encounter standards for those areas. This is because compliance with the encounter standards is more binding than other proposed standards. In some cases, trails that reach a common destination would have carrying capacities below that of the encounter standard, because the limiting factor is the destination. For example, if only 11 groups can get a permit to a lake that is accessed by two different trails, the eleven groups would be split between the two access trails, resulting in fewer encounters along the trail. Tables 4.1 through 4.5 show expected carrying capacities for an average weekend day in the three wildernesses. These tables represent a “worse case scenario” and assume that the trails could have either seven groups (for areas with an encounter standard of six other groups per day), or eleven groups (ten encounters). Carrying capacity was determined using seven or eleven groups per day multiplied by the average group size for a particular location from past data collection.

Current average group size could increase in the future as people who cannot get a permit to a limited area, join up with another party that does have a permit, and has room in their group. The maximum size of groups would be 12 heartbeats. If average group size increases as a result of a LUPS, the carrying capacities shown in the tables could be increased while still meeting encounter standards as long as other resource standards were not exceeded. Carrying capacity for the season could also grow if more people hiked mid-week. The other major factor that could increase the worse case scenario capacity numbers in these tables is timing of use. Some people hike early and leave early, while others get a late start. Wilderness rangers would monitor routes and issue more permits to reflect this pattern as long as the average encounter standards were not exceeded.

Potential Use Displacement

The Proposed Action would implement a LUPS, designate campsites in popular areas, and refine the intent of the encounter standard to protect opportunities for solitude during peak use times. Potential use displacement is probably the most important adverse effect of this alternative because it has the potential to change both social and resource conditions. As stated in the above paragraph, there could be a slight increase in average group sizes as small groups partner up to obtain a permit - whether it is to actually get a permit, or just to be more cost effective. So while the number of groups encountered along the trail is within standard and reduced from current levels, users could “displace” themselves into larger groups than exist now. The total number of people encountered along a trail would still be less than under the No Action in popular areas.

Once available permits for popular trails and destinations are all issued, hikers could be displaced and start asking for permits in alternate locations. As can be seen in Table 4.1, if existing use patterns remain the same, over 560 Mt. Hood Wilderness hikers could be displaced on an average summer weekend day, most of them on Ramona Falls Trail (168). All those locations with a negative number in column 5 will most likely fill up first, as they are most in demand. Hikers would then consider those locations with a surplus (+ sign in column 5). These are the existing low use areas that currently have few encounters now, but could have permits issued up to six to ten encounters. The Mt. Hood Wilderness has only a few “surplus” areas totaling 56 people. That means that over 500 people will need to be displaced to other areas - most likely to the low use areas in the Salmon-Huckleberry and Hatfield Wilderness where there is a large surplus (except for the Eagle Creek Trail in the Hatfield, and on Salmon River Trail in the Salmon-Huckleberry.)

A few of the trails in these locations are less scenic or more of a challenging hike, but still can be done or partially done, on a day hike. Many of the “surplus” locations are much steeper, and longer trails and do not offer as many scenic vistas. Hikers that get displaced to these areas would have less opportunity for solitude than exists on these trails now, but would still be within the Forest Plan solitude standards for wilderness. Hikers in these areas may currently encounter one or two other groups if that. Under the proposed action, they may encounter up to six or ten other groups, as allowed under the encounter standards.

Table 4.5 shows the estimated displacement for an entire season. Interpolation and several assumptions need to be made to estimate season capacities. For that reason, the daily displacement figures in Table 4.1 through 4.4 are more accurate at portraying an average situation on the weekend. Displacement effects on climbing routes are described in a separate section below. Increased resource impacts to low use areas from displaced use are described in the resource conditions effects section.

It is possible and hopeful that some of the use may be displaced to areas outside of wilderness. However, there are few existing areas and trails outside of wilderness, close enough to Portland for day use and that offer similar scenic and recreational opportunity and/or that are not already at or over capacity on weekends. Residents coming from Hood River or hikers unable to get a permit for Eagle Creek or Wahtum Lake are more likely to have non-wilderness day hiking opportunities than those in the Highway 26 corridor. Once the limited use permit system was up and running in this alternative, managers would start improved marketing of non-wilderness recreation opportunities, both on and off National Forest lands. That could reduce the displacement problem within wilderness somewhat.

It is also possible that some hikers, who do not get a permit for their preferred popular destination, might choose to hike mid-week instead, or stay home altogether. Moving use from weekends to mid-week could result in limits being reached in some high use areas that are already near capacity during mid-week. It is difficult to determine how many wilderness visitors have the flexibility to hike mid-week. The majority of the working population works Monday through Friday, but with the advent of flexible time schedules, work at home, telecommuting and other trends, there may be more opportunity for mid-week hikes. In other areas where limits have been placed on backpacking trips or river trips, use tended to move to mid-week. This is probably because those entering the wilderness for a multi-day river or backpacking trip, usually plan well ahead of time. It is less likely for those spontaneous weekend day hikers. It is impossible to predict how much of the projected weekend use might be displaced to mid-week or off-season. For the purposes of this analysis, we have assumed that folks do not have this flexibility. Those who desire to hike a popular trail on a weekend will attempt to find an alternative wilderness destination to hike if permits are unavailable to their preferred destination.

The estimated number of displaced hikers and climbers in the tables do not take into consideration a potential shift of use outside of wilderness or to mid-week use within wilderness. Conversely, they also do not account for increased use levels projected as the Portland-metro area grows.

Climbing Opportunities

Under the proposed action, use would be limited by a permit system to a maximum of 10 encounters per day on the South Side route, six encounters on all other routes. This action would be done to reduce encounters only, as resource impacts from the climbing use is negligible. Encounters on the summit would vary greatly, depending on the timing of climbing parties on the various routes. Most climbers ascending the mountain's more technical routes usually descend the mountain via the easier south side. Wilderness managers would need to test and monitor how the number of permits issued is related to summit and south-side decent group encounters, and adapt permit numbers as necessary. At this point, it is assumed that 10 encounters would mean 11 groups, as groups will pass one another climbing or descending. Obviously, this is a large reduction from current use levels on the south side route.

It is expected that nearly 200 climbers would be displaced from the easiest route on the mountain, on an average weekend day. Those displaced could choose to climb midweek, or choose a more technical route. Those choosing a more technical route may not be sufficiently skilled. Climbers could also choose to attempt the climb on poor weather days, or not turn back when the weather began closing in on them, because of the difficulty in obtaining a permit if they miss their day. Climbers would lose some freedom on when to plan and execute climbs. This is particularly significant in the Northwest, where a maritime influenced weather pattern often causes last minute plan changes. The result of the above-mentioned factors, could be a greater number of search and rescue missions to recover lost or injured climbers who "push the envelope", with associated risks to both the climber and the rescuer. Search and rescue operations also adversely affect the solitude experience for other climbers on the mountain.

Climbers displaced to more remote and less used climbing routes would adversely affect the existing social conditions in those locations. Only the Coe Glacier is rated primitive untrailed, and would be restricted to one encounter, or two groups per day. Other routes could support at least seven groups and still meet standards. This represents an increase over existing use levels. Use on these other routes could be restricted more, if climbers plan to descend via the south side.

It is not likely that South Side climbers would be displaced to Mt. Adams, or Mt. St. Helens, as those peaks also have, or are instituting, limited use permits. Mt. Jefferson and Mt. Rainier are significantly more challenging than Mt. Hood, Mt. Adams, and Mt. St. Helens, and would likely receive few of the displaced climbers.

Alternative #3 - South Side Climb Exception

Opportunities for Solitude or Primitive and Unconfined Recreation

Alternative #3 would have effects very similar to Alternative #2 with the following exception. A handful of trails would have a potential for slightly higher group encounters (ten encounters instead of six in Alternative #2) along the trail and in campsites because this alternative allows for slightly more displacement capacity in these areas.

Wilderness Carrying Capacity

The same general trend for solitude opportunities above would exist for carrying capacities. Overall Mt. Hood Wilderness Carrying Capacity would be greater as a result of the south side climb and the handful of trails allocated to ten encounters instead of six. The hiking trails portion of this capacity amounts to about 45 more people per weekend day in the Mt. Hood than in Alternative #2. Capacity on the north side climb routes would be slightly reduced as a result of the more restrictive WRS allocations.

Potential Use Displacement

Displacement would be similar to Alternative #2, except for the capacity to handle slightly more displaced use in the areas that were allocated to Semi-primitive (six encounters) rather than Primitive (ten encounters). These trails were selected because they were more likely to be substitute candidates to accommodate displacement from filled trail choices because of their location, day hiking compatibility, topography and scenic opportunities. As shown in Table 4.1, there would be slightly less displacement and more surpluses (net displacement of 461 people on an average weekend day in the Mt. Hood

Climbing Opportunities

With use levels on the South Side Climb permitted near current maximums, novice climbers would continue to use the route in large numbers. The number of climbers on routes that currently experience very low use would be rated Primitive Untrailed, and the use capped at one encounter. All routes from Luetholds Couliour around to Cathedral Ridge would be rated Primitive Untrailed and limited to one encounter. The remaining routes (Sunshine, Cooper Spur, Wyeast) would be limited to six encounters per day. This would help to ensure that outstanding opportunities for solitude remain on the less frequented sides of the mountain.

With little or no displacement occurring to more technical routes, the number of SAR missions is not predicted to increase significantly in the near future over existing levels.

Alternative #4 - New Alternative

Opportunities for Solitude or Primitive and Unconfined Recreation

The new alternative would maintain and protect existing opportunities for solitude or primitive and unconfined recreation that generally exist in low use areas and most other areas mid-week and outside the peak season. UMA trail corridors would continue to have fewer opportunities for solitude due to crowding during peak season weekends. A few UMA destination areas (lake destinations especially) would likely limit use once carrying capacity is reached, because the number of groups trying to use a relatively small location, would create unacceptable resource impacts. While these few limited use areas would affect visitor freedom, there should be plenty of suitable and unrestricted alternative destinations within the same wilderness. Spontaneous and more flexible recreation opportunities would remain available to a large number of visitors, who would not have to plan as far ahead for hikes, climbs and camping could easily change plans based on weather conditions. Designated sites, campfire restrictions, and frequent management presence could be considered a reduction in the “unconfined” recreation opportunities. An opportunity to choose any area to camp would still be available in some areas within UMA’s and most areas outside of UMA zones.

Wilderness Carrying Capacity

In Alternative #4, carrying capacity would be determined for individual UMA destinations, but not for the wilderness as a whole. Site-specific management prescriptions would evaluate all existing day and overnight use sites at the destination area and determine if they are to be kept as is, improvements or repairs made, or closed and restored. All sites remaining open within the destination area boundary would be designated. The number of designated campsites and day use sites in the area would determine the carrying capacity for the UMA destination. The number of sites designated for the destination would be based on site-specific resource objectives including, protecting key wildlife and riparian habitat, minimizing impacts to soil and vegetation, and meeting social standards for sight and sound between sites. The number of designated sites in an area would not be increased in the future to accommodate more demand. Alternative #4 would not establish carrying capacities along trails in UMA's. As a part of this alternative, research and administrative studies would be done to clarify visitor preferences in regards to solitude experiences, especially those of day hikers in proximity to a large metropolitan area. This information would aid future decisions regarding carrying capacities along popular day hiking trails.

Carrying capacities in primitive trailed and untrailed areas would be more similar to Alternative #2 i.e. based on the number of groups that could use an area and not exceed social standards for encounters with other groups. Currently, these areas are well below carrying capacity, so Alternative #4 could accommodate use increases in these areas, and still be within the proposed standards and the primitive trail's carrying capacity.

Potential Use Displacement

Some displacement could occur in popular destinations like Burnt Lake and Wahtum Lake, where use could be limited in the next few years. Those seeking a lakeshore experience would most likely visit lakes outside the wilderness. Others would most likely be displaced to other UMA areas of the wilderness.

Climbing Opportunities

Abundant climbing opportunities would remain on the South Side. Most other more remote and challenging climbing routes would be managed for encounter levels similar to the other alternatives, varying from 10 down to 1. This would result in preserving the routes with outstanding opportunities for solitude, in that condition. Currently, these climbing routes have low use and are below carrying capacity. If use increased to the level that social standards for encounters were approached, use could be limited with a permit system in these areas. Because use limits on the south-side routes are not being proposed, search and rescue operations would most likely remain close to current levels.

Limits to Use

Under implementation of Alternative #4, use would only likely be limited in a couple of destinations in the next 2-3 years, once site-specific management prescriptions are prepared. As mentioned in the other paragraphs above, future use in Use Management Areas could be limited if the carrying capacity established in the prescriptions was exceeded. These use limits would be implemented to avoid unacceptable biophysical resource impacts. Use could also be limited in primitive trailed and untrailed areas if visitation was approaching either social encounter or biophysical resource standards. Alternative #4 could accommodate current weekend use within the wildernesses overall. Use could increase midweek in the Mt. Hood, and in most parts of the Hatfield and Salmon-Huckleberry Wildernesses on weekends and still meet the social and biophysical standards.

Table 4.1 Estimated Carrying Capacity and Displacement Calculated by Destination-Mt Hood Wilderness

Destination	Trailhead	Existing Weekend Use in Persons Per Day PPD	Alt #2 Proposed Action Estimated Capacity PPD	Alt #2 Number of People Displaced or Surplus Capacity	Alt #3 Estimated Capacity PPD	Alt #3 Number of People Displaced or Surplus Capacity	Alt #4 Estimated Capacity PPD	Alt #4 Number of People Displaced or Surplus Capacity
Barrett Spur	Cloud Cap	10	19	+9	30	+20	10	-0
Burnt Lake	Burnt Lk South	38	16	-22	25	-13	30	-8
Burnt Lake	Burnt Lk North	48	31	-17	31	-17	35	-13
Cast Lake	Cast Creek	0	20	+20	31	+31	31	+31
Cairn Basin	Vista Ridge	28	11	-17	11	-17	28	-0
	Mazama	8	12	+4	12	+4	12	+4
Castle Canyon	Castle Canyon	10	16	+6	25	+15	16	+6
Cooper Spur	Cloud Cap	51	30	-21	30	-21	100	+49
East Zigzag	East Zigzag	7	14	+7	14	+7	14	+7
Elk Cove	Cloud Cap	58	19	-39	19	-39	58	-0
	Elk Cove Tr	12	7	-5	7	-5	12	-0
Elk Meadows	Elk Meadows (2)	54	24	-30	24	-30	54	-0
Eliot Moraines	Cloud Cap	30	30	0	30	0	30	-0
Gnarl Ridge	Newton Cr	11	14	+3	14	+3	11	-0
	Elk Meadows	15	12	-3	12	-3	15	-0
Hidden Lake	Hidden Lk	23	17	-6	17	-6	23	-0
Horseshoe	Horseshoe R.	8	15	+7	15	+7	25	+17
	Mazama	4	4	0	7	+3	4	-0
McNeil Point	McGee Cr	50	5	-45	7	-43	50	-0
	Top Spur	50	7	-43	7	-43	50	-0
Paradise Park	Paradise Pk.	10	6	-4	6	-4	10	-0
	Timberline L.	70	16	-54	16	-54	70	-0
Muddy Fk	Top Spur	11	7	-4	7	-4	11	-0
Ramona Falls	Ramona S.	190	22	-168	22	-168	190	-0
	Ramona N.	71	6	-65	6	-65	71	-0
Yocum Ridge	Ramona S.	20	6	-14	6	-14	20	-0
	Top Spur	10	5	-5	5	-5	10	-0
Subtotals for Trail Hiking (Climbing and Glacier Totals on Next Page)		Existing Use = 897	Carrying Capacity = 391	Displaced= 562 Surplus= 56 Net Displ. = 506	Carrying Capacity = 436	Displaced =551 Surplus= 90 Net Displ. = 461	Carrying Capacity = 990	Displaced= 21 Surplus= 114 Net Surpl. = 93

Table 4.2 Estimated Carrying Capacity and Displacement by Destination for an Average Weekend Day by Alternative - Mt. Hood Wilderness Climbing Routes, and Total Mt. Hood Wilderness Capacity and Displacement

Destination	Trailhead	Existing Weekend Use in Persons Per Day PPD	Alt #2 Proposed Action Estimated Capacity PPD	Alt # 2 Number of People Displaced or Surplus Capacity	Alt #3 Estimated Capacity PPD	Alt # 3 Number of People Displaced or Surplus Capacity	Alt #4 Estimated Capacity PPD	Alt # 4 Number of People Displaced or Surplus Capacity
Glaciers and Snowfields								
Eliot	Cloud Cap	10	30	+ 20	30	+ 20	30	+20
Snowdome	Cloud Cap	10	30	+ 20	30	+ 20	20	+10
Coe	Cloud Cap	1	6	+ 5	6	+ 4	6	+5
Zigzag	Timberline L.	18	25	+ 7	25	+ 7	25	+7
Sandy	Timberline L.	1	18	+ 17	5	+ 4	6	+5
Reid	Various	1	18	+ 17	5	+ 4	20	+19
Climbs								
South Side	Timberline L.	215	25	- 190	185	- 30	215	0
Cooper Spur	Cloud Cap	2	30	+ 28	30	+ 28	20	+18
Sunshine	Cloud Cap	2	30	+ 28	30	+ 28	20	+18
Leutholds Coul.	Timberline L.	10	25	+ 15	25	+ 15	20	+10
Wy'east	Mt Hood Mdws.	5	7	+ 2	25	+ 20	7	+2
Other Climbs	Various	2	3	+ 1	8	+ 6	3	+1
Subtotals for Climbing		Existing Use = 277	Carrying Capacity = 247	Displaced= 190 Surplus= 160 Net Displ.= 190 ¹	Carrying Capacity = 404	Displaced = 30 Surplus= 156 Net Surpl = 126 ¹	Carrying Capacity = 392	Displaced = 0 Surplus= 115 Net Surpl = 115
Wilderness Totals* Hiking & Climbing		Total Use = 1,174	Total Carrying Capacity = 638	Total Displaced = 752 Total Surplus = 56 Net Displaced = 696	Total Carrying Capacity = 840	Total Displaced = 581 Total Surplus = 246 Net Displaced = 491	Total Carrying Capacity = 1276	Total Displaced = 21 Total Surplus = 229 Net Surplus = 208

¹ The surplus slots can go to people that are displaced in most hiking trail situations. However, not many climbers displaced from the South Side would use the other routes due to their difficulty. Therefore, all climbers displaced from the South Side are shown as displaced from the Wilderness

* The net Wilderness displacement shown reflects the assumption that displaced hikers will not choose to climb.

Table 4.3 Estimated Carrying Capacity and Displacement by Destination for an Average Weekend Day for Alternative #2 and #3 – Salmon-Huckleberry Wilderness

Trailhead	Existing Weekend Use in Persons Per Day PPD	Alt #2 Proposed Action Estimated Capacity PPD	Alt # 2 Number of People Displaced or Surplus Capacity	Alt #3 Estimated Capacity PPD	Alt # 3 Number of People Displaced or Surplus Capacity	Alt # 4 Estimated Capacity PPD	Alt # 4 Number of People Displaced or Surplus Capacity
Salmon River West	35	28	-7	28	-7	50	+15
Eagle Creek	6	18	+12	18	+12	18	+12
Douglas	5	13	+8	13	+8	13	+8
Boulder Ridge	6	21	+15	21	+15	21	+15
Bonanza	3	16	+13	16	+13	16	+13
Green Canyon Way	4	15	+11	15	+11	15	+11
Salmon Butte	9	22	+13	22	+13	22	+13
Green Canyon East	0	10	+10	10	+10	10	+10
Kinzel Lake	0	15	+15	15	+15	15	+15
Fir Tree	1	17	+16	17	+16	17	+16
Salmon River East	7	20	+13	20	+13	20	+13
Linney Creek	1	20	+19	20	+19	20	+19
Salmon Butte South	0	11	+11	11	+11	11	+11
Plaza Lake	1	13	+12	13	+12	13	+12
Plaza South	2	13	+11	13	+11	13	+11
Eagle Creek Cutoff	1	13	+12	13	+12	13	+12
Totals for Wilderness	Existing Use = 81	Carrying Capacity = 265	Displaced = 7 Surplus = 191 Net Surpl. = 184	Carrying Capacity = 265	Displaced = 7 Surplus = 191 Net Surpl. = 184	Carrying Capacity = 287	Displaced = 0 Surplus = 206 Net Surpl. = 206

Effects of Implementing the Alternatives

Table 4.4 Estimated Carrying Capacity and Displacement by Destination for an Average Weekend Day for alternatives # 2, #3 and #4. – Hatfield Wilderness.

Wilderness Protection

Destination	Trailhead	Existing Weekend use in Persons Per Day PPD	Alt. #2 proposed Action Estimated Capacity PPD	Alt. #2 Number of People Displaced or Surpl Capacity	Alt. #3 Estimated Capacity PPD	Alt #3 Number of People Displaced or Surpl Capacity	Alt #4 Estimated Capacity PPD	Alt #4 Number of People Displaced or Surpl Capacity
7 ½ Mile Camp & Tunnel Falls	Eagle Creek	45	35	-10	35	-10	50	+5
Wahtum Lake	Eagle Creek	2	16	+14	16	+14	16	+14
	Wahtum	13	13	0	13	+0	13	+0
Rainy Lake	Rainy Lake	4	17	+13	26	+22	26	+22
Bear Lake	North Lake	3	18	+15	28	+25	28	+25
Warren Lake	Warren Lake	6	17	+11	26	+20	26	+20
North Lake	North Lake	2	20	+18	20	+18	20	+18
	Wyeth N	1	4	+3	5	+4	5	+4
Indian Springs		1	15	+14	15	+14	15	+14
PCT South		1	14	+13	22	+21	22	+21
Chindere Gar.		0	21	+21	21	+21	21	+21
Herman Cutoff		0	15	+15	15	+15	15	+15
Gorton Creek S.		0	11	+11	11	+11	11	+11
Wyeth South		4	20	+16	20	+16	20	+16
Mt. Defiance W		0	39	+39	39	+39	39	+39
Mt. Defiance E		1	16	+15	16	+15	16	+15
Mt. Defiance N		7	15	+8	15	+8	15	+8
Gorton Creek		0	10	+10	10	+10	10	+10
Nick-Eaton		2	14	+12	14	+12	14	+12
Herman Creek		9	18	+9	18	+9	18	+9
PCT-North		3	14	+11	22	+19	22	+19
Ruckel Creek		3	14	+11	14	+11	14	+11
Ruckel Ridge		3	14	+11	14	+11	14	+11
Tanner Butte		8	17	+9	17	+9	17	+9
Tanner Creek		2	14	+12	14	+12	14	+12
Moffett Creek		0	7	+7	7	+7	7	+7
Totals for Wilderness		Existig Use = 120	Carrying Capacity = 428	Displaced = 10; Surplus = 318; Net Surplus = 308	Carrying Capacity = 473	Displaced = 10 Surplus = 363 Net Surpl = 353	Carrying Capacity = 488	Displaced= 0 Surplus = 368 Net Surpl = 368

Table 4.5 Total Wilderness Capacities, Displaced Use, and Surplus Capacities, by Alternative

	Alt #1	Alt #2	Alt #3	Alt#4
Mt. Hood Wilderness				
Est. Season Capacity Hiking		14,076	15,696	36,000+
Est. Season Capacity Climbing		4,446	7,272	8,000+
Total Est. Season Capacity		18,522	22,968	44,000+
Existing Use Hiking	35,262			Note: Under Alternative #4 it is only possible to estimate minimum carrying capacity at this time, because it is dependent on user behavior, resource conditions, and finalization of site-specific management prescriptions. It is believed the wilderness could accommodate at least the current number of users.
Existing Use Climbing	6,436			
Total Existing Use	41,698			
Displaced Hiking Use		20,232	19,836	
Displaced Climbing Use		3,420	540	
Total Displaced Use		23,652	20,376	
Surplus Hiking Capacity		2,016	3,240	
Surplus Climbing Capacity		2,880 ¹	2,826	
Total Surplus Capacity		4,896	6,066	
<p>¹ There is no surplus climbing available on the south side. All surplus is on the more difficult routes making it unlikely that they can be used by the displaced climbers.</p>				
Salmon-Huckleberry Wilderness				
Estimated Season Capacity		7020	7020	7,000+
Existing Use	6546			
Total Displaced Use		2231 ²	2231 ²	0
Total Surplus Capacity		474	474	
<p>² The Salmon River West Trail seasonal capacity is 840. Actual use was 3,071 resulting in a displacement of 2,231 people over the season.</p>				
Hatfield Wilderness				
Estimated Season Capacity		15,048	17,027	12,000+
Existing Use	11,635			
Total Displaced Use		4109 ³	4109 ³	0
Total Surplus Capacity		3,413	5,392	
<p>³ Eagle Creek seasonal capacity is 1,260. Actual use was 4,903 resulting in a displacement of 3,643. Wahtum Lake seasonal capacity is 1,044. Use was 1,500 resulting in a displacement of 466. Total displacement for these two locations is 4,109 in both alternatives. In Alternative #3, North and Rainy Lakes have additional capacity.</p>				

Alternative Effects on Resource Conditions at Recreation Sites

Alternative #1 – No Action/Current Management

Campsites

As has been pointed out in the results of the 1994-5 inventory, many of the campsites in the three wildernesses do not meet the Forest Plan Standards and Guidelines. In short, the campsites are too close to lakes, streams, trails or other sites, too large, and too numerous. As mentioned in Chapter 3, anecdotal information indicates that while problems continue, conditions at some campsites, especially those at low elevation, have improved since the 1970's and 80's. This improvement can be attributed to a number of factors including a decrease in overnight use, restrictions on camping in meadows and education efforts of wilderness rangers, on the Mt. Hood NF and in many other places. Low use areas within the wilderness are generally in good condition because they tend to be in the lower elevation areas (outside of sub-alpine areas) where vegetation usually recovers quicker in the moist environment.

In some of the popular areas, there has been an increase in the overall number of sites, so sites present in the 70's may look better now, but the additional sites create more overall impacts. Many existing campsites are only used once or twice a season, yet the effects can persist for many years. Like the Paradise Park example mentioned in Chapter 3, this results in many more campsites in an area than is actually necessary at any given point in time. Campsite impacts tend to be especially a problem around Burnt Lake and Wahtum Lake. At Wahtum Lake, several campsites were designated away from the lake in the 1980's. Visitors use these sites when rangers are present, but migrate closer to the lakeshore when they are not present. The designated camps at Wahtum are uneven, have no views, are small, and are closer to each other than Forest Plan Standards, perhaps accounting for the non-compliance.

Wilderness staffing has been reduced in the last few years due to budget cuts, and crews have been involved in trail repairs from the 1996 floods on the north side of Mt. Hood. With less Ranger presence, campers have again begun to encroach on the edges of meadows, and camp closer to streams. Under Alternative #1, the existing standards in the Forest Plan would continue to be difficult or unrealistic to enforce in some areas. An example is that the present Forest Plan standard for bare ground in semi-primitive sites (400 ft.²) is too small for larger groups. More wilderness Ranger presence than is currently

funded, would be necessary to gain compliance with camping setbacks from water, trails, and other sites.

It is difficult to predict how current management would carry out into the future. Demand for wilderness camping could increase in the future, despite the aging of the baby-boomers. State recreation trend reports show wilderness camping as an increasing use in the next 10 years. They also report people are taking more short trips (long weekends) away from home, making it likely that the three wildernesses are an attractive option for these types of short trips. With constant wilderness ranger presence, campers would probably continue to follow the rules, but may continue to create more sites. If wilderness ranger staffing were cut further, there would be increased impacts. It is likely that much of the increased use will be funneled towards the popular areas, but campers wanting less crowded conditions, may seek out the low use areas and have a proportionately greater impact in those sites.

Wildlife habitat is degraded by some of the camping patterns present at destinations, particularly when camps surround lakes and meadows. It can be expected that this situation could stay the same under current management, or worsen if funding does not allow wilderness ranger presence, or camping demand increases.

Day Use Impacts

Resource impacts at popular day use destinations like lakes and waterfalls are similar to those found in the popular overnight sites and are a function of user behavior, user numbers, use frequency and site ecology. Impacts include bare and compacted shoreline, user trails, litter, fire rings, tree damage, litter, and human waste. Resource impacts from dispersed trail corridor use (like day hiking to view wildflowers along the Timberline Trail) are generally the result of inadequate trail maintenance, and/or poor trail design and location and hiker behavior rather than a direct result of the number of people hiking over them. Trail impacts from hiker behavior can include multiple trail routes (braided trails); trail widening, cutting switchbacks, littering and poor sanitation practices. While impacts from behavior can be mitigated with user education and Ranger presence, it is generally true that the more people you have in an area, the more “behavior problems” you could expect to see. Day use hiking is expected to increase in the next decade at an even greater rate than overnight wilderness camping. The effects of this trend would be most visible in the popular destination points like lakeshores and waterfalls.

Alternative #2 – (Original) Proposed Action

Campsites

Under the proposed action, all campsites at popular destinations would be designated. With reduced use under a permit system, fewer campsites would be needed, but in order to ensure success of rehabilitated sites, control is necessary to prevent establishment or reopening of restored sites. The designated campsite program would probably make pamphlets available at trailheads, with aerial photos indicating the location of a variety of available designated campsites and minimum impact camping messages included. Campsites would be located so as to maximize visitor solitude, views, and comfort, and minimize erosion, wildlife disturbance, and long-term vegetation loss. Most of the existing unnecessary campsites would be restored as funding allows. The use of designated campsites would greatly reduce the total number of campsites in the three wildernesses. Criteria for campsite placement would be developed by Interdisciplinary Teams, and fitted to each unique area. Sites within low use areas would not be designated initially. Displacement impacts may cause a future need for designated sites in some low use areas (see below). There is a concern about the level of restrictions and management control in an area that is supposed to be unfettered and provide maximum personal risk and challenge. Users generally accept management controls in high use areas to reduce impacts. They may not accept this level of management in traditionally low use areas.

Alternative #2 would allow some designated campsites to be larger and some sites to be closer to streams than current standards allow. This would not worsen conditions on the ground, as these large sites and sites close to water already exist. It would mean that restoration of these existing sites would allow for more realistic objectives. For example, if group size limit is 12 people, there would be allowance for at least some sites to accommodate that size of a group. Restoration plans for an existing campsite, designated for large groups, that currently has 2,000 square feet of bare ground, would be to reduce it to 1,500 (for large groups) or 1,000 square feet, rather than an unrealistic 400 square feet. The reasoning behind this is, if sites are attractive and meet their need, campers would tend to use them with less education and enforcement, freeing up more time for crews to do site restoration work and trail maintenance. If some sites exist that are large enough to accommodate a few large groups at each destination, then they will not occupy smaller sites and make them larger. Alternative #2 would also reduce the distance that designated campsites may be located from streams from 200 to 100 feet. Some sites located between 100 and 200 feet from water, are acceptable because they do not pose a concern for water quality. These sites may drain away from the water, be on rock, or otherwise be preferable to a site located farther from a stream on a side hill because of erosion and inter-site visibility factors. Interdisciplinary teams reviewed this standard, and would be involved in choosing locations for designated campsites.

Day Use Impacts

Similar to campsite effects described above, day use resource impacts at both point destinations and along trail corridors could be mitigated with user education of low impact techniques, Ranger presence, hardening of some areas, natural barriers to prevent access and user trails from becoming established, and protection of restored areas. Under Alternative #2, implementation of the permit system and marketing of non-wilderness recreation opportunities are higher priorities than these mitigating actions. To the extent that there is funding to accomplish these, combined with the reduced use in the high use areas (fewer behavior problems to monitor and correct), there could be an improvement in resource conditions in these high use areas. The more successful that Rangers were at controlling undesirable behaviors and restoring impacted areas, the more improvement would occur in these areas. Again, the low use areas could see increased impacts (up to standards) due to displacement.

Displacement Impacts

Alternative #2 - Proposed Action would greatly reduce day use in many areas, reduce overnight use at some destinations and allow some increases in the low use areas (from current levels to six encounters). When low use areas receive displaced use, there would be increased resource impacts. The impacts generally should not exceed the Forest Plan resource standards proposed under Alternative #2, but would represent a degradation of current conditions. Use could be additionally limited in these areas if resource impacts exceeded standards. Although management efforts would try to prevent increased resource impacts from displaced use in low use areas, these areas are scattered over most of two wildernesses and part of a third. Given the traditional budget levels, there would likely not be funds and staffing to cover all these areas, even if the high use areas were ignored. The first priority would be to monitor and enforce use restrictions in all the high use areas. What coverage could be funded in the low use areas would be focused where the greatest displacement is most likely to happen. With this approach, resource conditions could improve at the high use areas, but there could be more impacts (and standards exceeded) at the low use areas, if management presence is insufficient to prevent it.

Alternative #3 – South Side Exception

The effects of Alternative #3 would be similar to Alternative #2 except that there could be more resource impacts in the low use areas that are allowed ten encounters in this alternative instead of six.

Alternative #4 – New Alternative

Campsites

As described in the alternative description in Chapter 2, site-specific management prescriptions would be prepared for each existing camping and day use site, based on the particular resource considerations and use needs of the area. Alternative #4 would designate campsites at popular destinations and in other areas where needed. Alternative #4 may designate more existing campsites than Alternative #2 or #3 in some areas, because of the higher use levels under the new alternative. Campsites with unacceptable impacts, or not needed for existing use, would be closed and rehabilitated. Because this alternative would make education and restoration a top funding priority and because it would implement a wilderness steward program, there should be an improvement in resource conditions at campsites. Wilderness stewards would help wilderness rangers with low impact camping compliance and restoration project implementation projects. The less restrictive standards on sight and sound between camps would allow grouping of sites into more resilient areas, or areas that have less effect on wildlife habitat. For example, it would be easier to locate all the campsites at a destination on one side of a meadow or lake (where they may currently be dispersed around the entire area). Resource impacts at campsites within primitive zones would be a high priority for restoration in this alternative. The provision for limiting use in the future if carrying capacity is approached in destination UMA's, or standards are exceeded in other areas, would ensure that resource conditions are protected even if demand increases.

Day Use

Resource impacts related to day use would be reduced as a result of designated sites at destinations, site improvements such as designed user trails and natural barriers, and an emphasis on leave no trace user education. Multiple non-system trails created by users to off-trail destinations is one of the larger problems associated with day use. Under this alternative, a single trail would be designed and improved if needed, and the other trails would be closed and restored with natural barriers placed to funnel the use. Education would encourage users to stay on the designated trail. Day use at destinations would be controlled where necessary to stay within carrying capacity and not create additional day use sites and impacts from future use increases. Primitive zones would continue to have few impacts from day use since displacement from popular destinations would not occur in these areas as a result of widespread use limits. In addition, protection of resource conditions in primitive zones is the first priority of Alternative #4.

Displacement Impacts

Much less displacement would occur with this alternative than Alternatives #2 and #3. If a particular destination reaches its carrying capacity and use there is limited, it would likely displace to similar popular destinations. This displacement would not have the exponential increase in impacts associated with comparable use increases in the primitive areas (see Chapter 3).

Alternative Effects on Overall Wilderness Conditions

Wilderness should be managed to protect both social and biophysical resource conditions. As stated in the purpose and need for action and management direction in Chapter 1, recreation demand must be balanced against social and biophysical resource impacts. The alternatives approach this balance in different ways with different results. This section will attempt to describe overall differences in wilderness protection among the alternatives.

Alternative #1 – No Action/Current Management

The No Action alternative would make no changes to Forest Plan standards or take management actions to change wilderness conditions. Existing conditions within the more recently designated wildernesses (Salmon-Huckleberry, Hatfield and part of the Mt. Hood) are, that social conditions are more crowded in the historically popular areas, and biophysical conditions are better in some areas, and worse than others since the time these areas were designated. The low use areas have not changed significantly in either their social or resource conditions.

Alternative #2 (Original) Proposed Action And Alternative #3 – South Side Exception

Both of these alternatives would manage a majority of the wilderness acreage to a stricter set of standards than currently exists. Proposals to limit use would improve social conditions (solitude opportunities) in most areas where they currently are not found on peak weekends. Although some biophysical resource standards would be “relaxed” slightly in these alternatives, designated sites, restoration, user education and reduced use would result in improved resource conditions in semi-primitive zones. Despite these efforts, primitive zones receiving displaced use would probably have increased impacts over existing levels.

Alternative #4 – New Alternative

Similar to Alternative #2 and #3, Alternative #4 would manage a majority of the acreage within wilderness to stricter standards than currently exist. Alternative #4 would not change overall current social conditions in most parts of the wilderness but would maintain solitude opportunities where they currently exist. Some biophysical resource standards would be “relaxed” slightly in these alternatives. The increase in the acceptable limits should be more enforceable on the ground thereby reducing problems created by non-compliance. With the assistance of wilderness stewards and partnerships with outdoor organizations and others, this alternative would improve biophysical resource conditions in both primitive and UMA zones throughout all wildernesses over time.

Alternative Effects on Wilderness Education and Partnership Efforts

General Discussion

This discussion centers on the effects of various strategies of implementing education and partnership programs. Environmental Education and Partnerships are important tools, but managers must make decisions based on the social and biophysical resource conditions in the wildernesses. Little research has been done on the actual “on the ground” effectiveness of environmental education and volunteer involvement. One destructive individual can have more impact on an area than 100 users practicing leave no trace. In addition, some users are well aware of leave no trace concepts, but still choose to camp close to water, have a campfire, or otherwise not modify their behavior to mitigate impacts. One research paper, (Hungerford, 1990), identifies the major variables that influence positive environmental behavior. The major variables are shown in the following table.

Table 4.6 Major Variables That Influence Positive Environmental Behavior

Entry Level Variables	Ownership Variables	Empowerment Variables
Environmental sensitivity	In-depth knowledge of issues	Knowledge of and skill in using environmental strategies.
	Personal investment in issues and the environment	Locus of control
		Intention to act

(Adapted from Hungerford, 1990.)

This research concludes that while imparting “leave-no-trace” messages is important, people must understand and support wilderness protection or they are unlikely to change their behavior. Anecdotal evidence suggests a correlation between Wilderness Ranger presence and positive visitor behavior, as evidenced by the success in moving campers out of meadows in the 1970’s in the Mt. Hood Wilderness during a time of heavy ranger presence. Campers are again beginning to encroach on meadows now that there is much lower ranger presence.

The potential success of each alternative is predicted using the above information as a basis, as well as the comments and feelings expressed by the participants in the LAC meetings and responses to the first EA.

Alternative #1 – No Action/Current Management

Current management focuses education and information efforts on wilderness entry boards, information on the back of self issue permits, and limited wilderness ranger contact with public. Some outreach occurs with organized recreation groups on leave-no-trace behavior, and regulations.

Volunteer activities include occasional work parties for restoration projects; partners in trail maintenance, and individual volunteers on trail crews and as wilderness guards. Activities with volunteers have declined in recent years due to reductions in funding and staff on the forest. Wilderness project work with volunteers has tended to promote ownership and compliance with leave no trace practices.

While wilderness rangers still make numerous visitor contacts and off-site education efforts to impart low impact ethics, visitors continue to disregard many standards on location and size of campsites as evidenced by resource conditions at camping and day use sites. Using this as a measure, it could be concluded that existing education and partnership activities are only partially effective in influencing behavior.

Few of the major variables listed in the table are currently present. However, LAC workshops, and public involvement in the Environmental Analysis have increased knowledge about the issues, a variable listed under ownership variables.

Alternatives #2 and #3 – (Original) Proposed Action and South Side Exception

These two alternatives would focus more resources on implementing and enforcing a limited use permit system. User education under this alternative would be done similar to Alternative #1, with Ranger contacts (while checking for permit compliance), and messages on permits and trailhead boards. It is possible that the number of wilderness rangers could decrease in order to pay for in house administration of the limited use permit system. Fewer persons would need to be contacted and educated in the areas that currently receive high use, due to the limited use permit system. However, displacement would spread the reduced number of visitors to a much larger area (low use areas), requiring additional wilderness rangers to make educational contacts and permit compliance checks. While rangers could focus public contact in the low use areas, given budget limitations it is probable that wilderness rangers could only patrol and impart wilderness messages on a limited number of wilderness trails.

Utilizing volunteers more for wilderness education could be done under this alternative, especially once the permit system was in place for a period of time and gained more public acceptance. Initial hostility to the proposed use limits, particularly those based on social standards, would likely reduce the number of volunteers available to help with patrol and projects. Perhaps they might soften their position after a few years.

Few, if any, of the major variables listed in table 4.6 are incorporated into this alternative. While debate over use limits has increased knowledge of social issues, variables of personal investment in the issues, and locus of control would still be lacking under this alternative. It is possible that over time, visitors would come to accept and support a limited use permit system as they have in other areas where overnight or river use was limited. However, there is currently little public support for the limits proposed in the original 1998 EA.

Alternative #4 – New Alternative

Alternative #4 would focus energies and limited budgets on wilderness restoration and user education and thereby encourage more volunteer support and assistance in wilderness protection. Wilderness stewards would greatly increase wilderness field presence and play a major role in minimizing UMA resource impacts by educating visitors, encouraging voluntary compliance, monitoring developing problems, and assisting in restoration efforts. This would free up wilderness rangers to increase monitoring in primitive areas (high priority), oversee restoration projects, and deal with law enforcement issues where necessary. User education messages would be tailored based on the site-specific management prescriptions for particular problems in the area. Wilderness education would be done both on and off site and would include efforts to make users aware of why wilderness protection and leave no trace practices are important for their continued enjoyment of wilderness, and to reduce the need for use limits.

It is predicted this alternative would have more positive effects on social and biophysical resource conditions because it would incorporate more of the major variables listed above. The debate as a result of the wilderness planning process has increased visitors' knowledge of social and biophysical resource issues. Many people commenting on the original EA indicated they could support more education, restoration, and use limits in individual areas if needed for resource protection. Education efforts that explain the need for leave no trace practices, to reduce the need for future use limits in an area, should increase the amount of personal investment in the issues. Locus of control would be integrated in this alternative because the alternative responds to the majority of comments received on the first EA (see issues, and response to comments sections). On and off-site wilderness education should increase visitors' knowledge and skills. And on-site management or steward presence should increase visitors' intention to comply with leave no trace practices and area regulations.

Alternative Effects to Outfitter-Guides

Alternative #1 – No Action/Current Management

There are a number of outfitter-guide services operating on the mountain, principally for South Side climbs, and training on the Eliot Glacier. Approximately 10% of the parties and 30% of the use on the South Side climb are guided. The Forest Service considers non-profit guiding operations the same as for-profit ventures for purposes of special use permitting. Non-profit groups tend to have larger overall group sizes (closer to the twelve-heartbeat limit) than for-profit guiding operations. On the Eliot Glacier the Forest Plan allows up to 30 to be in one group, and permits have been issued for that number for ice climbing and crevasse rescue classes. The Eliot Glacier is unique in its proximity to a trailhead, which makes it desirable as a classroom. There are no suitable glaciers available outside of wilderness, within reasonable distance to a trailhead, and as relatively safe as Eliot is. It is difficult to say whether or not guided operations interfere with non-guided recreational users experience, due to the large numbers of persons on the South Side Climb, and the Eliot Glacier.

Many people would never experience mountain climbing if it were not for guided services. They either lack the time, the equipment, the skill and confidence, or all of the above, to attempt climbs on their own. For others, guided climbs are an excellent introduction to a lifetime of mountaineering, and an opportunity to learn good etiquette and self rescue skills, which could reduce Search and Rescue (SAR) missions.

Under an appeal agreement on an outfitter-guide EA for the Badger Wilderness, a Limits of Acceptable Change Process (LAC) is required to be completed before any new Guide Permits are issued for any wilderness on the Mt. Hood National Forest. As current permits expire, they have been renewed on a year-by-year basis. No new guides have been issued a permit. Few guiding opportunities are permitted on North Side climbs, though a number of inquiries for new permits have been received. Requests for guiding permits in the rest of the wilderness have also been frequent.

If Alternative #1 is selected, current management would continue, and one could infer that current management would mean a continuation of the no new outfitter-guide permits policy. A continuation of this policy could impact those outfitter-guide businesses that would like a special use permit within the wilderness, but are unable to get one. It might benefit those existing outfitter-guides under permit by limiting the competition for customers.

Alternative #2 – (Original) Proposed Action

Under Alternative #2, thirty percent of the 11 available parties on the South Side could be guided per day. Thirty percent of the 11 parties on Eliot Glacier could be guided per day. Ten percent of other activities in the three wildernesses could be guided. All activities would need to be evaluated in a final Outfitter-Guide Needs Assessment which would further describe the need for services, the public demand, the existing supply and interest levels of outfitter-guide companies and the effects of limited guide opportunities. The existing Needs Assessment only shows a need for climbing (summit and ice) to be guided.

This alternative would result in a significant reduction in the number of guided climbers on the south side, and the size of groups on the Eliot Glacier (a maximum of 12, down from 30). It is likely a prospectus would need to be issued for guided climbing activities, as the demand by outfitters would exceed supply. Even if existing permittees were successful at getting a special use permit under a prospectus, the reduction in available customers could prove to be marginal or unprofitable to maintain an outfitter-guide business. Those climbers who do get to climb with a guide would experience a reduction in crowding on the south side route.

Alternative #3 – South Side Exception

The major difference under this alternative would be the number of climbing parties permitted on the South Side Climb. Thirty percent of 30 parties could be guided. While a prospectus would still be issued, there would be more opportunity to fill guides' requests for permits.

Alternative #4 – New Alternative

Under this alternative 30 percent of climbs on the south side climbs and ice climbs to Elliot Glacier could be guided. Ten percent of other climbing could be guided, with the exception of Coe Glacier and Sandy Glacier, where no guiding is proposed.

This allocation should provide ample opportunities for those who desire a guided experience and for guides to maintain a profitable business.

Alternative Effects on Fire in Wilderness

Alternative #1 – No Action/Current Management

This alternative would make no changes to the Forest Plan fire standard and guidelines. The standards in this alternative would continue to be inconsistent with fire management policies within wilderness.

New natural fire starts would be aggressively suppressed to minimize the area burned. Adverse effects of suppression efforts may not be rehabilitated, and a resource advisor might not be available to the Incident Management Team to ensure wilderness values are protected. Management ignitions could not be used to control the spread of noxious weeds.

Alternatives #2, #3, and #4 (Original) Proposed Action, South Side Exception, and New Alternative

The current Standards and Guidelines for fire in the Forest Plan do not reflect the latest management policy for managing fire within wilderness. All three of the action alternatives would revise fire management standards for wilderness to reflect updated wilderness fire philosophy.

Under the Standards and Guidelines proposed for both of these alternatives, the wilderness as a resource would be considered when evaluating suppression tactics. A wilderness resource advisor working with the Incident Command Team on the fire would ensure that wilderness values are considered when suppression tactics are developed, to avoid long term and irreversible resource impacts in wilderness where possible. The resource advisor would also assist in developing and implementing restoration plans, for repairing the unavoidable impacts caused by suppression tactics, to as natural a condition as possible. Development of wilderness fire management plans would be required to manage natural ignitions or management ignitions within wilderness. Preparation of these plans could give managers another tool for restoring wilderness condition within these three wildernesses. The order of priority for development of wilderness fire management plans, would be the Hatfield, the Salmon-Huckleberry, and the Mt. Hood Wilderness. Incorporation of these standards would result in more protection to biophysical resources in wilderness as a result of fire suppression, and a possible return of fire to the natural wilderness eco-system.

Alternative Effects on Noxious Weeds

Only one noxious weed (diffuse knapweed) has been located and eradicated from within the Mt. Hood Wilderness. Scotch broom, Tansy ragwort, Canada thistle, and St. Johnswort have all been noted in the formerly private (and previously logged) Cheeny Creek drainage of the Salmon-Huckleberry Wilderness. Canada thistle, bull thistle and St. Johnswort have all been incidentally noted in the Hatfield Wilderness. Noxious weeds occur along roads and trails around the edges of all three wildernesses. Without preventative action, these populations are set up to penetrate the wilderness via the many trail and road corridors, which have high human use and canine and equestrian use.

Alternative #1 – No Action/Current Management

Under alternative #1, there is a great potential for weeds to move into the wilderness from outside areas including weed-infested trailheads. The lack of existing wilderness standards and guidelines for the prevention and early treatment of noxious weeds contributes to this potential. Vectors for seed movement include recreational livestock, camping equipment, and hikers themselves. In addition, current standards and guidelines are weak regarding the use of pack animal feed that may be infested with noxious weed seeds. Stock use is not high in any of the three wildernesses, but because equestrians can travel farther than the average hiker in a day, they are more likely to penetrate to the more primitive parts of the wilderness. Many organized equestrian groups promote leave no trace and low impact camping ethics. However, the potential for weed infested feed exists and could introduce noxious weeds to remote sections of the wilderness where they would be difficult to control.

Alternatives #2, #3, and #4 (Original) Proposed Action, South Side Exception, and New Alternative

All of the action alternatives would strongly encourage the use of pelletized feed or certified weed-free feed by equestrians within wilderness to reduce the potential for noxious weed infestations in wilderness. All alternatives would monitor trailheads leading into the wilderness and take preventative actions to actively reduce the spread of noxious weeds before they become too large to manage without the use of herbicides. Prevention activities would include posting educational material at trailheads, using clean trail building and maintenance equipment, and training wilderness guards to recognize, monitor and educate the public about noxious weeds. Early treatment would include monitoring trails and trailheads for new populations of noxious weeds, eradicating small populations when found, and creating management plans for areas with larger infestations. Unlike many areas where noxious weed containment is the only management option, eradication would be the goal in these wilderness areas because the populations are still small.

Using pelletized feed or certified weed-free forage would reduce the potential for weed movement into the wilderness. The process of creating pellets may destroy over 99% of weed seeds present in alfalfa hay or grain (Cash et al., in press). If regular feed such as hay were to be brought into the wilderness, the potential for seed dispersal even after passing through the animal is much higher than with mechanically altered feed. As worded, the phrase “shall encourage” puts the responsibility for using pelletized feed upon the recreationist with livestock. This amendment would emphasize the education of pack animal owners on “doing their share” to prevent the spread of noxious weeds while in the wilderness rather than restricting their options.

Alternative Effects on Rare and Sensitive Plants

Eight sensitive plants have been found within the three wildernesses. Another twenty-one species have potential habitat and are suspected to grow within these wildernesses. The Biological Evaluation found in the Analysis File has a complete description of these plants and their habitat.

Alternative #1 – No Action/Current Management

Alternative #1 can be equated with existing management and therefore existing conditions. The only known effect to vegetation is the trampling and potential for vegetation loss at and around campsites and day use areas. Under this alternative the degradation of vegetation would continue to occur at heavily used areas such as Paradise Park, Cairn Basin, Elk Cove, Burnt Lake, Ramona Falls, Wahtum Lake, Eagle Creek and Salmon River (Hall 1996). When damage occurs in high sub-alpine/alpine zones, recovery may take a long time due to harsh environmental conditions. Loss of vegetation in riparian zones has the potential to impact local water quality due to soil erosion.

Camping and hiking along the Timberline Trail in the Mt. Hood Wilderness are impacting individual plants of Brewer's reedgrass, a sensitive plant. This use is not threatening the viability of the species. Lack of a prescribed natural fire management plan (and therefore the opportunity for fire to be reintroduced into the wildernesses) could reduce the habitat for ground cedar, a sensitive plant. There are no other impacts to sensitive plants or Northwest Forest Plan Survey and Manage Species under this alternative.

Alternative #2 – (Original) Proposed Action

By redefining the number of encounters per WRS class and reducing campsite numbers, less damage should occur to vegetation at campsites and day use areas. Designated camping sites near streams and lakes would also better protect riparian vegetation. Setting more measurable vegetation standards and guidelines would allow wilderness guards to better monitor loss of vegetation and decide when restoration should occur.

In Alternative #2, encounters would be reduced which would equate to fewer people and therefore less trampling of Brewer's reedgrass. Additional protection for this species would be afforded under this alternative because camping in meadows would be prohibited in Semi-primitive Trailed and Untrailed areas where the majority of Brewer's reedgrass habitat is located. However, because disturbance to its habitat around the mountain would still be occurring, this alternative may impact individuals or habitat, but would not cause a trend towards federal listing. The effects to ground cedar are similar to Alternative #1 because prescribed natural fire plans are not yet completed. No other impacts would occur to Regional Forester's sensitive plant species or to Northwest Forest Plan Survey and Manage Species under this alternative.

Alternative #3 – South Side Exception

The proposed standards and guidelines for sensitive plants in Alternatives #3 are the same as those in Alternative #2. However a number of heavily-use areas in the Mt. Hood Wilderness and Hatfield Wilderness have slightly less restrictive WRS allocations than in Alternatives #1 or #2 to accommodate current and future use levels. Also, some lightly used areas are placed in a more restrictive WRS allocation. Overall, the effects to vegetation at campsites would be closer to Alternative #2 than Alternative #1, because campsite standards and guidelines are more restrictive in Alternatives #2 and #3. The South Side Classic Climb Route is devoid of plants and therefore its designation as a separate WRS allocation with increased encounters would not be a vegetation issue.

Alternative #4 – New Alternative

Overall effects to rare and sensitive plants should be very similar to alternative # 2. Although more day use would be allowed under alternative #4, little additional trampling should occur outside of trails and use areas. It is possible that under this alternative, more attention could be given to site restoration, noxious plant identification and control, and rare and sensitive plant identification if less resources area allocated to managing a permit system.

Alternative Effects to Threatened, Endangered, and Sensitive (TES) Fish and Wildlife Species

Tables 4.7 and 4.8 show the species habitat found within the three wildernesses and the effects to Threatened, endangered, and sensitive (TES) wildlife and aquatic species by alternative. None of the action alternatives would have an impact on TES species populations. Some species may have individuals impacted. Complete Biological Evaluations appear in the Analysis Files for this document.

The major drainages within the three wildernesses are the Salmon River, Zigzag River and upper Sandy River (Sandy watershed), Eagle Creek (Clackamas watershed), headwater streams of the East, Middle, and West Fork of the Hood River, Tanner Creek, Herman, and Eagle Creek, (Columbia River tributaries).

Fish species present within these three wildernesses include rainbow trout, Lower Columbia steelhead trout, Bull trout, Coastal cutthroat trout, Redband trout, sculpin, and brook trout (introduced species). Steelhead and bull trout are listed under the Endangered Species Act. Coastal cutthroat are proposed for federal listing. Habitat exists for downstream (outside of wilderness) populations of Lower Columbia Chinook salmon (federally threatened), and Coho salmon (candidate for federal listing). Redband trout are currently on the Oregon State and Regional Forester's sensitive species list.

Other aquatic species with sensitive status include the Cascades Apatanian caddisfly, Mt. Hood Farulan caddisfly, One-Sot Rhyacophilan caddisfly and the Mt. Hood Primitive brachycentrid caddisfly. All three wildernesses contain the necessary habitat for these species, which are high elevation (4000'+) seeps and small streams that are non-glacial in origin. Except for several surveys on the south and east sloped of Mt. Hood where these species were located, little is known of their distribution or population size and health.

From recent stream and lake surveys within wilderness, the majority of aquatic systems did not seem noticeably impacted by recreational use. Water samples taken were a "one-shot-in-time" effort that will need to be duplicated to analyze for trends in water quality. Use along most of the streams in the wilderness is naturally restricted due to the steep topography of most of these streamside areas.

Table 4.7 - Effects of Alternatives on Threatened, Endangered, and Sensitive Wildlife Species

Species	Habitat Present	Alt. #1 No Action	Alt. #2 and #3	Alt # 4
Peregrine Falcon (Protective mgt. Actions may be taken if a new nest site is found.)	Yes	No impact	No impact	No impact
Bald Eagle	Yes	No impact	No impact	No impact
Spotted Owl	Yes	No impact	No impact	No impact
Copes Giant Salamander	Yes	No impact.	No impact	No impact
Larch Mt. Salamander	Yes	No impact	No impact	No impact
Red-legged Frog	Yes	May impact individuals/habitat. No loss of pop. viability.	Beneficial effect	May impact individuals/habitat. No loss of pop. viability
Painted Turtle	No	N/A	N/A	N/A
Northwestern Pond Turtle	No	N/A	N/A	N/A
Common Loon	Yes	May impact individuals/habitat. No loss of pop. viability.	May impact individuals/habitat. No loss of pop. viability.	May impact individuals/habitat. No loss of pop. viability
Ferruginous Hawk	No	N/A	N/A	N/A
Greater Sandhill Crane	No	N/A	N/A	N/A
Harlequin Duck	Yes	May impact individuals/habitat. No loss of pop. viability.	Beneficial effect	May impact individuals/habitat. No loss of pop. viability
Black Rosy Finch	No	N/A	N/A	N/A
Western Big-eared Bat	No	N/A	N/A	N/A
White-footed Vole	No	N/A	N/A	N/A
Wolverine (Protective mgt. actions may be taken if a new den site is found.)	Yes	May impact individuals/habitat. No loss of pop. viability	May impact individuals/habitat. No loss of pop. viability	May impact individuals/habitat. No loss of pop. viability
Spotted Frog	Yes	May impact individuals/habitat. No loss of pop. viability	Beneficial effect	May impact individuals/habitat. No loss of pop. viability
Lynx	Yes	No effect	No effect	No effect

Table 4.8 – Threatened, proposed Threatened, and Forest Service Region 6 Sensitive Species known or suspected to occur within the Mt Hood, Salmon- Huckleberry, and Mark O. Hatfield Wildernesses. Blanks in columns indicate the species is not believed to reside within watersheds inside the wilderness boundary.

Species	Status	Known or Suspected Presence		
		Mt Hood Wilderness	Salmon-Huckleberry Wilderness	Hatfield Wilderness
Lower Columbia River Steelhead	Threatened	Suspected	Known	Known
Lower Columbia River Chinook Salmon	Threatened			
Bull Trout	Threatened	Known		
Costal Cutthroat Trout	Proposed Threatened	Known	Known	
Coho Salmon	Candidate			
Redband Trout	Sensitive			Suspected
Mt. Hood Farulan caddisfly	Sensitive	Known		
Mt. Hood Primitive brachycentrid caddisfly	Sensitive	Known		
Cascades Apatanian	Sensitive	Known		
One-Spot Rhyacophilan caddisfly	Sensitive	Known		

Alternative #1 – No Action/Current Management

Effects to aquatic species stem from two main sources. Direct impacts occur from hiking on, in and around seeps, streams and wet areas, and indirect impacts can occur from eroding/compacted soils causing increased sedimentation and added nutrients from campsites/trails close to water.

Currently, from 47 to 66 percent of campsites are within 100' of water. There is little evidence of stock use within the wildernesses; with 90% of campsites having no manure present within the campsite areas. About 1/4 to 1/3 of total campsites had relatively small (<100 square feet) bare core area, defined as heavily-impacted areas where vegetation is lost or changes in soil structure has occurred. Ten percent had bare core areas larger than 1000 square feet (Hall 1996).

Sediment and nutrient input, as well as potential for damage to wetland areas and seeps remain moderate within this alternative. As use is projected to increase, damage probably would be commensurate with increased use. Lakes are popular areas for campers and will likely suffer more damage than streams. Increased sediment into lakes could alter lake ecosystem and will have some effect to stocked fish and other aquatic organisms when sediment levels elevate.

Effects to wildlife species are mainly “disturbance” oriented and would continue at current levels, or increase with increasing use. Some species are displaced from popular destinations, mostly around meadows and lakes.

There are no requirements for rehabilitation of fire suppression activities within the wilderness in this alternative. Potential for sediment input or chronic sediment sources will remain in this alternative.

Alternatives #2, #3, and #4 (Original) Proposed Action, South Side Exception, and New Alternative

Aquatic Species

Standards and guides that deal with uses that could potentially impact aquatic species include the following:

- ◆ No camping within sight of system trail, within 100' of streams, or within 300' of lakes, unless in designated campsite. No camping outside of designated sites within a 1/4-mile of area boundary.
- ◆ The loss of ground vegetation at any undesignated site will not exceed 500 square feet or 1% of any acre. Loss of ground vegetation shall not exceed 1000 square feet at any designated site (1,500 at a few large group sites).
- ◆ Adverse impacts from suppression efforts will be rehabilitated to as natural a condition as possible.

These standards and guides are designed to minimize impacts to resources and to meet Aquatic Conservation Strategy objectives. The more popular lakeside campsites would be designated sites only, with dispersed sites at least 300 feet away. These standards and guidelines are more enforceable and more likely to protect water quality than the No Action alternative. Restoration of unnecessary sites and increased management controls would improve fish and aquatic species habitat over existing conditions in the long term (>5 years). Risk of erosion and sedimentation into aquatic habitat is decreased with these alternatives. The amount of improvement would be dependent on the success in gaining compliance with use restrictions and restoring existing disturbed sites. The modification of Forest Plan standards and guidelines would result in no irretrievable or irreversible commitment of aquatic resources. No take of threatened or proposed threatened species would occur and none of the alternatives would result in a jeopardy determination. Aquatic Conservation Objectives would be met because existing conditions would improve over time. The proposed changes to standards and guidelines and management actions would have No Effect on any threatened or proposed threatened fish species and there would be No Impact on any USDA Forest Service, Region Six sensitive species.

Wildlife Species

Under Alternatives #2 and #3, it is possible that visitors would be displaced from popular areas to areas currently receiving little use. This could increase disturbance in these more pristine areas, while maintaining some level of use in popular areas. Alternative #4 would slow or stop increases of use in more primitive areas and sustain good habitat.

All action alternative would have beneficial effects through managing use at destinations by restricting camping and day use to areas selected by an interdisciplinary team, which includes a wildlife biologist.

Alternative Effects to Heritage Resources

Alternative #1 – No Action/Current Management

Currently, in the wilderness standards and guidelines for heritage resources, the Forest Plan refers to Forest wide standards and guidelines that say:

“National Register or eligible historic buildings shall be maintained.”
(FW-624)

Forest Service manual provides more specific policies for managing heritage resources within wilderness. Under this alternative, the existing wording for the standard and guideline would remain.

Access by American Indians to traditional use areas within wilderness would remain unchanged. In accordance with consultation under the 1995 Programmatic Agreement between the Pacific Northwest Region of the Forest Service, the Oregon State Historic Preservation Office, and the Advisory Council on Historic Preservation, this proposed action is a “non-undertaking”.

Alternatives #2, #3, and #4 (Original) Proposed Action, South Side Exception, and New Alternative

Under Alternatives #2, #3, and #4, the Forest Plan standard and guideline that would apply to the Mt. Hood, Salmon-Huckleberry, and Hatfield Wildernesses would be as follows:

“Management direction for National Register or eligible historic buildings within the Mt. Hood, Salmon-Huckleberry, and Hatfield Wildernesses is subject to compliance with section 106 of the National Historic Preservation Act and 36 CFR 800.”

This wording would eliminate the restrictive “shall” for these three wildernesses and allow decision makers to take into consideration wilderness values. In theory, it would allow an adverse effect on historic properties if it were decided that wilderness values outweighed heritage values.

Access by American Indians to traditional use areas within wilderness would remain unchanged. In accordance with consultation under the 1995 Programmatic Agreement between the Pacific Northwest Region of the Forest Service, the Oregon State Historic Preservation Office, and the Advisory Council on Historic Preservation, this proposed action is a “non-undertaking”.

Alternative Effects to Wetlands and Floodplains

Alternatives #1, #2, #3, and #4: No Action, (Original) Proposed Action, South Side Exception, and New Alternative

Executive Orders 11990 and 11988 require that all environmental analyses assess the project impacts and mitigation on wetlands and floodplains. None of the alternatives would have any long or short-term effects to wetlands and floodplains in any of the alternatives. All restoration projects that involve ground disturbing activities would undergo separate NEPA analysis. Restoration work that might occur within wetlands or floodplains is designed to improve or protect wetlands and floodplains. The degree of improvements or protection would be assessed in the site-specific NEPA analysis for that restoration project.

Alternative Effects on Environmental Justice to Women, Minority and Low Income Populations

Alternatives #1, #2, #3, and #4 - No Action, (Original) Proposed Action, South Side Exception, and New Alternative

Wilderness use trend studies have focused on visitors' age, gender, education level, income, occupation, whether they are from an urban or rural area, and their past wilderness experience. No studies were found that focused on trends in minority population's use of wilderness. Research has shown that in the last 20 years, wilderness use by women has increased. Wilderness users in general have above-average education levels and income. (Watson, Cole and Roggenback 1995) (Roggenback and Lucas 1987) (Lucas 1985). Income levels of wilderness visitors, which are typical of most outdoor recreationists, are likely a function of their higher than average education and/or professional occupational status. Variation in income across wilderness areas is high with the average income of the area surrounding the wilderness being an important factor. There is no specific data on income of users to the three wilderness areas being studied.

Minority populations are increasing in the Portland-metro area, in other towns in the surrounding area, and in the west as a whole.

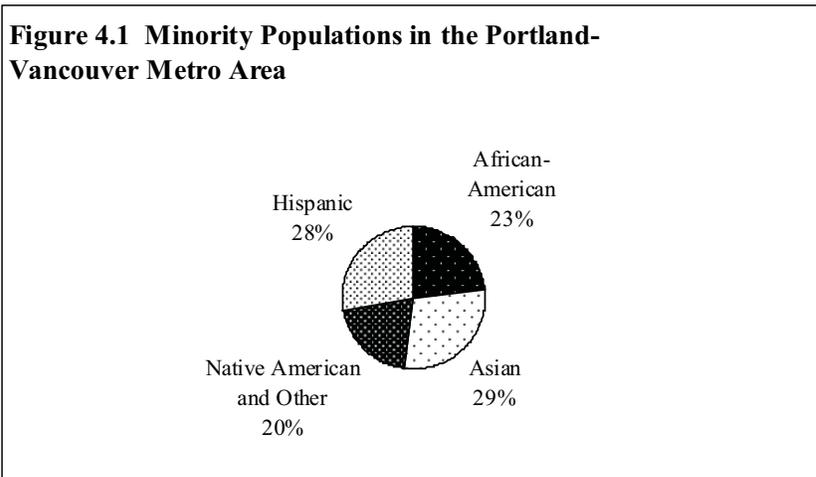


Figure 4.1 shows the percentage of minority populations for the Portland-Vancouver metro area. The percentage within individual counties surrounding the wildernesses are approximately similar with the exception that a much higher percentage of Hispanics reside in Hood River county and a large Native American population is located on and around the Warm Springs Confederated Tribes Reservation. Anecdotal trend information from Wilderness Rangers indicates an increase in wilderness users from former Soviet block countries but no discernible trend in visitation by minority populations. Native Americans visit these wildernesses for their traditional uses. A variety of minorities visit the wilderness to pick huckleberries and mushrooms for personal consumption.

Environmental justice is addressed in Executive Order 12898 and ensures that Forest Service programs, policies, and activities affecting human health or the environment do not exclude minorities and low-income groups from participation in, or the benefits of, programs or activities based on race or economic status. None of the alternatives would disproportionately affect use of the wilderness by women, minorities, or groups with low income. Alternatives #2 and #3 would restrict use in all areas. Alternative #1 would not restrict use at all and Alternative #4 would restrict use only in individual areas. In any alternative that restricts use, everyone would have an equal opportunity for obtaining a wilderness permit.

There would be a fee for obtaining a permit, however the fee would be the same for everyone and would be relatively inexpensive compared to other recreational activities. The fee would not have a disproportionate effect on individuals with a low income.

Alternative Effects on Local Economies, Tourism and Recreation Based Businesses

Alternatives #1 No Action

Because this alternative would not change existing use patterns, it would have no impact on local economies, tourism, and recreation based businesses, with the possible exception of outfitter-guides as outlined in a previous section.

Alternatives #2 and #3 - (Original) Proposed Action and South Side Exception

These alternatives would reduce the use of these three wildernesses by as much as half, as outlined earlier in the Chapter. Many of the visitors to wilderness patronize local businesses for groceries and recreation equipment. Day hikers from outside the metro area often stay in privately run lodging around the mountain, including Forest Service campgrounds. Visitors unable to get a permit for their desired destination would probably try to find other wilderness hiking alternatives and if that was not possible, they would probably visit non-wilderness destinations. Those unable to get a desired wilderness permit and who are lodging around the mountain, generally have more non-wilderness day hiking options than those driving further from the Portland-metro area. Customers who are unable to get a permit for their favorite place, and are unhappy about it, could affect local tourism and recreation-based businesses. Those users could choose an alternative recreational outing like a hike in the Columbia River Gorge, or a day at the zoo. Or they could choose to stay home.

Alternative #4 - New Alternative

This alternative would not greatly change the current use levels of the wilderness. A few individual areas may have use restrictions, but there should be adequate alternative areas to meet current demand. Therefore, there should be no effect to local tourism and recreation-based businesses.

Alternative Effects on Recreational Fisheries

Executive Order 12962 was designed to conserve, restore and enhance aquatic systems to provide for increased recreational fishing opportunities. The order requires federal agencies to:

- ◆ Identify and restore recreational fishing opportunities limited by degraded habitat and water quality;
- ◆ Provide access and promote awareness of recreational fishing opportunities;
- ◆ Stimulate angler participation in conservation and restoration; and
- ◆ Evaluate and document effects of federal actions on aquatic systems and recreational fisheries.

The Forest Service is responsible for managing aquatic habitat and recreational fishing associated access and developments. The Oregon Department of Fish and Wildlife is responsible for fish and aquatic populations, including fish stocking programs. Funding for fish stocking has decreased over time and as a result, no wilderness lakes have been stocked recently. There are natural populations of fish and recreational fishing in wilderness streams and lakes.

Alternative #1 – No Action/Current Management

This alternative would have no effect on recreational fisheries as a whole. The lack of restoration and designated sites could continue to cause site-specific small-scale impacts to water quality and riparian habitat from sedimentation and poor hygiene practices. However, the level of impacts is not great enough to impact fish and aquatic populations in these drainages.

Alternatives # 2 and #3 – (Original) Proposed Action and South-Side Exception

These alternatives would improve water quality and riparian habitat to the extent that sites can be designated and the remaining sites restored and impacts corrected. Access to recreational fishing opportunities would be decreased in order to meet social and resource concerns under the limited use permit system. The individual experience and possibly the catch rate of the person fishing could be improved with fewer people at the popular fishing destinations.

Alternative # 4 – New Alternative

This alternative would improve water quality and riparian habitat similar to Alternatives #2 and #3, but with likely more success, since more emphasis and funding would be available for these activities under this alternative. Recreational fishing at lakes could be slightly reduced from current levels, but not to the extent of reductions under Alternatives #2 and #3. Lake destinations are a high priority for developing site management prescriptions and determining the number of designated sites for the area. In all likelihood, the number of designated sites (carrying capacity) would be somewhat less than the current peak summer weekend use levels at these popular destinations, requiring that use to the area be limited through a permit system. While this could limit the total number of recreational anglers at these destinations, it may improve their overall experience and angling success with slightly fewer people and improved habitat. It is possible to involve anglers in site restoration activities. Stream fishing should not be affected under this alternative.

Chapter V

Consultation With Others

Consultation With Others

LAC Process

The Limits of Acceptable Change (LAC) planning process began with data collection in 1994. Dr. Troy Hall, (Ph.D. in Recreation Management and specializing in Wilderness Research) was hired by the Forest to develop LAC data collection protocol, train wilderness rangers, help collect data and compile it into a final report. She has done the same process for the Willamette, Deschutes, and several Northwest Region Forests. Her findings were compiled into the Mt. Hood Wilderness Report, 1997 and are part of the Analysis File.

IDT Team Participation

An interdisciplinary team of resource specialists in recreation, fish, wildlife, botany, heritage resources, hydrology, and fire management conducted the planning process. Because there are not many ground disturbing activities, consultation with US Fish and Wildlife and National Marine Fisheries was not necessary. Biological evaluations for threatened, endangered, and sensitive fish, wildlife, and plant species were documented. They appear in the Analysis Files along with a List of Preparers.

Public Participation

The LAC process had extensive public participation. Articles in the newspaper, notices in the Sprouts Forest newsletter and personal letters sent to over 250 people invited participation in the Workshops and the LAC planning process. Wilderness Workshops were conducted over an eighteen-month period and newsletters describing the workshop topics and findings were compiled. Wilderness Workshops helped develop the content of alternatives considered in this document. The LAC mailing list included many who could not commit to the workshops but wanted to get the newsletters.

A Wilderness Protection Environmental Assessment was released in November of 1998 and accompanied by 3 public meetings and substantial press coverage. Over 600 letters and oral comments were received. Appendix C contains the summary of public comments and agency response to comments.

Other Groups and Tribes

The LAC mailing list includes outfitter-guides on the Forest, Tribal representatives, and major national wilderness and recreation organization groups such as the Wilderness Society and Wilderness Watch. Local and regional recreation groups such as Mazamas, Mountain Rescue groups and Oregon Equestrian Trails participated in the workshops.

The Willamette Province Advisory Committee made an intensive review of the original proposed action and gave extensive comments on the proposal which are documented in Chapter II of this EA.

Media

In addition to the Forest Sprouts mailing list, an informational Forest newsletter “Mountain Views” had an article on the solitude issue and the LAC planning process that was mailed to over 1000 people. Media contacts about the planning process were made with Terry Richards of the Oregonian who covered it in the Outdoors section and included similar planning processes on other Forests also being conducted. Peter Sleeth of the Oregonian also did extensive articles on the Mt. Hood’s proposal, the regional context, and the issues surrounding solitude. Contacts were also made with the local media in Sandy, the Mt. Hood area, and Hood River.

Other Government Agencies

In March 1997, and again in November, 1999, a four day workshop was held on recreation use and management within wilderness. Western Wilderness managers and Wilderness researchers from Forest Service, National Park Service, Bureau of Land Management, and other agencies attended the workshop. Mt. Hood National Forest wilderness LAC planners attended both sessions, discussing the initial EA at the first workshop, and presenting Alternative #4 as a case study, at the second workshop. Many of these wilderness managers have similar issues, some of who are on adjacent forests to the Mt. Hood. They also met with the Wilderness managers of the Cascade peaks including Mt. Shasta, Rainier, Baker, Adams, Jefferson, and St. Helens to discuss a need for a regional approach to climbing issues. The LAC planners had many discussions with Wilderness Researchers, including David Cole from the Aldo Leopold Wilderness Research Institute and staff from the Arthur Carhart Wilderness Training Center.

National Wilderness Managers

The Pacific Northwest Regional Wilderness Manager met with other Regional Wilderness Managers and Wilderness researchers in summer of 1998 to discuss the recreation use and solitude issues. Out of those meetings, they developed strategies for use on a National level. They then presented those strategies to national wilderness organization representatives for their concurrence. LAC planners met with the Regional Wilderness manager after those meetings.

Other Key Contacts

Wilderness issues and alternatives described in this document were also discussed with the Oregon Governor's office, and federal legislative representatives. Also contacted were local and regional representatives from Metro, City of Portland, and assorted Forest key contacts.

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Appendix A

Proposed Wilderness Recreation Spectrum (WRS) Class Descriptions

Proposed Wilderness Recreation Spectrum (WRS) Class Descriptions

Proposed Wilderness Recreation Spectrum (WRS) Class Descriptions

WRS Class	Area Characteristics	Social Conditions	Managerial Controls
<p>Primitive Un-Trailed (Alts. #2, #3, #4)</p>	<p>Area is characterized by essentially unmodified natural environment. Concentration of users is very low and evidence of human use is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. No facilities are present. Natural terrain and the absence of trails provide for dispersion of users. Visitors are encouraged to avoid using a previously occupied site and to leave no trace of their use.</p>	<p>High opportunity for exploring and experiencing considerable isolation, solitude, and self-reliance through application of primitive recreation skills in an environment that offers a high degree of challenge and risk.</p>	<p>Management control necessary to protect the ecological/social elements evident outside the Wilderness and at trailheads and boundary portals. Formal regulations, orders, and/or permits may be necessary to achieve management objectives. Education programs shall be initiated to inform users about what to expect and how to use the area for optimum benefit of all. Information Service actions are designed to help meet management objectives rather than to promote use.</p> <p>There is a rare presence of Wilderness Rangers, and technicians engaged in monitoring or project work. Management personnel shall conform to party size limitations, established social and ecological element standards, and where feasible work is scheduled for low-use periods. No signing is present.</p>
<p>Primitive Trailed (Alts. #1, #2, #3, #4)</p>	<p>Area is characterized by essentially unmodified natural environment. Concentration of users is low and evidence of human use is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Only essential facilities for resource protection and safety are used and are constructed of native or natural appearing materials. No facilities for comfort or convenience of the user are provided (ex. trail bridges). Visitors are encouraged to disperse to desirable existing sites to minimize contacts with other groups.</p>	<p>Opportunity for exploring and experiencing considerable isolation, solitude, and self-reliance through application of primitive recreation skills in an environment that offers a high degree of challenge and risk. Contact with other visitors occurs primarily nearer trailheads, and at zone boundaries</p>	<p>Minimal management control necessary to protect ecological and social elements is evident outside the Wilderness and at trailheads and boundary portals. Formal regulations, orders, and/or permits may be necessary to achieve management objectives. Education programs shall be initiated to inform users about what to expect and how to use the area for optimum benefit of all. Information Service actions are designed to help meet management objectives rather than to promote use.</p> <p>There is a minimal presence of Wilderness Rangers, technicians engaged in monitoring or project work, and trail crews. Management personnel shall conform to party size limitations, established social and ecological element standards, and where feasible work should be scheduled for low-use periods. Trail may be maintained infrequently, with the objective of preventing resource damage, and facility degradation from occurring, rather than user convenience.</p>

Proposed Wilderness Recreation Spectrum (WRS) Class Descriptions

Wilderness Protection

WRS Class	Area Characteristics	Social Conditions	Managerial Controls
<p>Primitive Trailed (Alts. #1, #2, #3, #4) (cont)</p>			<p>Provide minimum signing necessary to protect Wilderness resources. Visitor takes primary responsibility for personal safety. No more than one sign with a maximum of two route indicators to be placed at trail junctions. No signing will be present at junctions that are obvious, and not confusing. Distances shall not be provided. Geographic features may be labeled on maps but shall not be signed. Signing must be the minimum needed and primarily for resource protection. No destination signing is present.</p>
<p>Semi-Primitive Un-Trailed (Alts. #2, #3)</p>	<p>Area is characterized by predominately unmodified natural environment of moderate 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. No facilities are provided</p>	<p>Moderate opportunities for exploring and experiencing isolation (from the sights and sounds of people); independence; closeness to nature; tranquility and self-reliance through the application of no trace and primitive skills in a natural environment that offers a moderate to high degree of challenge and risk.</p>	<p>Minimal management control necessary to protect ecological and social elements evident outside the Wilderness and at trailheads and boundary portals. Formal regulations, orders, and/or permits may be necessary to achieve management objectives. Education programs shall be initiated to inform users about what to expect and how to use the area for optimum benefit of all. Information Service actions are designed to help meet management objectives rather than to promote use.</p> <p>There is a minimal presence of Wilderness Rangers, technicians engaged in monitoring or project work, and trail crews. Management personnel shall conform to party size limitations, established social and ecological element standards, and where feasible work should be scheduled for low-use periods.</p> <p>Signing is limited to that absolutely necessary for the protection of the wilderness resource.</p>
<p>Semi-Primitive Trailed (Alts. #1, #2, #3)</p>	<p>Area is characterized by predominately unmodified natural environment of moderate 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. Facilities are only provided for the protection of wilderness resource values rather than visitor comfort or convenience.</p>	<p>Moderate opportunities for exploring and experiencing isolation (from the sights and sounds of people); independence; closeness to nature; tranquility and self-reliance through the application of no trace and primitive skills in a natural environment that offers a moderate degree of challenge and risk.</p>	<p>Minimal management control necessary to protect ecological/social elements evident outside the Wilderness and at trailheads and boundary portals. Formal regulations, orders, and/or permits may be necessary to achieve management objectives. Education programs shall be initiated to inform users about what to expect and how to use the area for optimum benefit of all. Information Service actions are designed to help meet management objectives rather than to promote use.</p>

Proposed Wilderness Recreation Spectrum (WRS) Class Descriptions

WRS Class	Area Characteristics	Social Conditions	Managerial Controls
<p>Semi-Primitive Trailed (Alts. #1, #2, #3) (cont)</p>	<p>Materials should be natural or natural appearing.</p>		<p>There is a moderate presence of Wilderness Rangers, technicians engaged in monitoring or project work, and trail crews. Management personnel shall conform to party size limitations, established social and ecological element standards. Trails may be maintained infrequently, with the objective of preventing resource damage, and facility degradation from occurring, rather than user convenience.</p> <p>Provide minimum signing necessary to protect Wilderness resources. Visitor takes primary responsibility for personal safety. No more than one sign with a maximum of two route indicators to be placed at trail junctions. No signing will be present at junctions that are obvious, and not confusing. Distances shall not be provided. Geographic features may be labeled on maps but shall not be signed.</p> <p>Signing must be the minimum needed and primarily for resource protection. Destination signing is not permitted.</p>
<p>South-Side Climb (Alt. #3)</p>	<p>Area is characterized by predominately unmodified natural environment of moderate size. Concentration of users is moderate at times. Boundary and portal management is present, but kept to the minimum to protect wilderness standards. Facilities are not provided. The sights and sounds of developed areas near the wilderness are present, unless masked by weather. Opportunities for solitude are present mostly during midweek, during poor weather, and off-season.</p>	<p>Opportunity to experience moderate to high degree of risk and physical challenge. Opportunity for solitude during weekdays and in poor weather. Other users with similar objectives are usually present within sight or sound.</p>	<p>Minimal management control necessary to protect ecological/social elements evident outside the Wilderness and at trailheads and boundary portals. Formal regulations, orders, and/or permits may be necessary to achieve management objectives. Education programs shall be initiated to inform users about what to expect and how to use the area for optimum benefit of all. Information Service actions are designed to help meet management objectives rather than to promote use.</p> <p>There is a moderate presence of Climbing Rangers engaged in monitoring or information roles. Management personnel shall conform to party size limitations, established social and ecological element standards.</p> <p>Visitor takes primary responsibility for personal safety. Geographic features may be labeled on maps but shall not be signed.</p>

Proposed Wilderness Recreation Spectrum (WRS) Class Descriptions

Wilderness Protection

WRS Class	Area Characteristics	Social Conditions	Managerial Controls
<p>Use Management Area (UMA) (Alt. #4)</p>	<p>A predominately natural environment defined by trail corridors and use destinations characterizes the area.</p> <p>Concentration of users is high on weekends and sunny weekdays during peak season. A trail system directs visitors to desired destinations.</p> <p>There are no developed sites within the wilderness. Facilities such as bridges necessary for user safety or biophysical resource protection may be present.</p> <p>Designated camping and day use areas exist at destinations and along some travel corridors.</p>	<p>Other users are often encountered during trail travel and at day use destinations, but solitude can be experienced while camping or short distances away from trails. Opportunities for solitude also exist early and late season, on most weekdays, and during poor weather.</p> <p>A degree of challenge and risk exists due to minimal signing, and some glacial stream crossings. For many visitors, the experience is very challenging. Other visitors who also frequent more primitive areas, are present seeking scenic vistas, or social experiences with their party.</p>	<p>Management emphasis is to provide for the protection and perpetuation of essentially natural biophysical conditions inside wilderness boundaries. Human use is characterized by large numbers of day users traveling corridors to scenic destinations.</p> <p>Management activities are integrated so that the biophysical wilderness resources are protected from unacceptable change, and day users are made aware of the purpose of wilderness management.</p> <p>Opportunities to make official visitor contacts are frequent. Volunteer Stewards are used to help communicate Leave No Trace messages, and protective measures specific to each destination area.</p> <p>Visitors are directed to recreate in a choice of designated campsites and day use areas selected to protect resources, and provide the greatest degree of solitude possible. A network of "user" trails is designed and managed to funnel travel in these locations, and avoid a proliferation of user paths. The number of designated campsites and day use areas at destinations establishes carrying capacity limits on overnight and day use. Overnight and/or day use is limited at these destinations when carrying capacity is approached.</p>

Appendix B

Proposed Standards and Guidelines Revisions to the Forest Plan

Proposed Standards and Guidelines Revisions to the Forest Plan

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
A. Dispersed Recreation			
<p>1. Permanent structures or facilities shall not be allowed unless determined to be historically significant, essential to preserve a national historic site, or otherwise authorized by provision of the Wilderness Act (1964), Oregon Wilderness Act (1984) or other legislation.</p>	<p>1. No change</p>		
<p>2. Toilets of a primitive type shall be provided only for the protection of wilderness values and where there is a hazard to health and safety.</p>	<p>2. No Change</p>		
B. Wilderness Coordination and Use Administration			
<p>1. The Limits of Acceptable Change Process (LAC) System shall be implemented for validating existing wilderness carrying capacities for each Wilderness during the first decade of implementation of this Plan. Recreational use should not exceed the estimated existing carrying capacities (measured in recreation visitor days, RVD's). Hatfield = 29,827, Salmon-Huck = 33,352, Mt. Hood = 36,118.</p>	<p>1. RVD's will not be used as a means for measuring carrying capacity. Carrying capacity will be established for individual travel zones and will be based on the number of groups that can use the wilderness without exceeding the social and biophysical standards listed below.</p>	<p>1. RVD's will not be used as a means for measuring carrying capacity. Carrying capacity will be established for individual wilderness destinations and will be based on the number of groups that can be accommodated in designated camping and day use sites without exceeding social and biophysical standards listed below.</p>	
<p>2. All management activities shall meet the following LAC standards by Wilderness Resource Spectrum (WRS) class:</p>	<p>2. All management activities shall meet the following LAC standards by Wilderness Resource Spectrum (WRS) class:</p>		

Proposed Standards and Guidelines Revisions to the Forest Plan

Wilderness Protection

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
Semi- Primitive and Transition WRS Biophysical Standards	Semi-Primitive Trailed and Untrailed WRS Biophysical Standards		Use Management Area WRS Biophysical Standards
a) Exposed mineral soil without a duff layer may be present on 75% of the area around a campsite as well as at key interest points.	a) Delete		a) Delete
b) Loss of ground cover shall not exceed 400 square feet at any one site or 1% of any acre.	b) Loss of ground vegetation shall not exceed more than 400 square feet at any undesignated campsite, or exceed 1% per acre. Loss of ground vegetation should not exceed 1000 square feet at any designated site. A campsite is defined as the tent pad(s), fire ring, "lounging area", and other disturbed ground associated with a camp area.		b) Loss of ground vegetation shall not exceed more than 500 square feet at any undesignated camping or day use site. Loss of ground vegetation should not exceed 1000 square feet at any small group designated site and 1500 square feet at any large group site. A campsite is defined as the tent pad(s), fire ring, "lounging area", and other disturbed ground associated with a camp area. These figures represent maximums. Individual site management prescriptions should set smaller limits for loss of ground vegetation wherever possible based on terrain, vegetation, and type of use.
c) Tree roots may be exposed on 25 percent of the trees at destination locations.	c) Delete		c) Delete
d) Some improvements such as fire rings, firewood stashes, or log or stone seats may occur as long as they are in keeping with the setting.	d) No change		d) Some improvements such as fire rings, or log or stone seats may occur as long as they are primitive in appearance and have minimal resource impacts. Improvements should be designed to concentrate use on a durable surface and prevent the spread of impacts.

Proposed Standards and Guidelines Revisions to the Forest Plan

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
<p>e) Campsites shall, where physically possible, be separated from other campsites and set back 200 ft. from lakes, streams, trails, meadows, and key interest features to minimize the degree of disturbance to the natural ecosystem.</p>	<p>e) No camping should occur within sight of system trails. Camping shall not occur within 100 feet of streams, or within 300 feet of lakes or within listed areas, unless in a designated campsite. Camping shall not occur within 1/4 mile of designated site area boundaries. In the Mt. Hood Wilderness, listed areas include: Elk Meadows, Eden Park, Wy'east Basin Ramona Falls and Cairn Basin. In the Hatfield Wilderness, listed areas include Wahtum Lake and Eagle Creek. Other areas may be added if standards are being exceeded.</p>		<p>e) Camping or vegetation disturbing day use outside of a designated site, shall not occur within a UMA destination area boundary. Destination areas include Burnt Lake, Cast Lake, Ramona Falls, Muddy Fork Crossing, McNeil Point, Cairn Basin, Eden Park, Wy'east Basin, Elk Cove, Elk Meadows, Hidden Lake, and Paradise Park in the Mt. Hood Wilderness. They include Wahtum Lake, Rainy Lake, North Lake, Bear Lake, Warren Lake, and Eagle Creek in the Hatfield Wilderness and the Salmon River in the Salmon-Huckleberry Wilderness. Other areas may be added if standards are being approached or if the area has fragile vegetation or is a sensitive wildlife habitat area. Camping outside of a designated campsite within a UMA trail corridor shall not occur within 100 feet of streams, or within 300 feet of lakes.</p>
			<p>f) Designated sites should have no more than three user trails leading to or from the site.</p>
	<p>f) No camping is allowed in meadows.</p>		<p>g) No camping shall occur in meadows unless in a designated site.</p>
			<p>h) Solid human waste shall not be visible on climbing routes or in other recreation use areas.</p>
			<p>i) Individual site management prescriptions shall be developed for all existing day use and campsites within UMA destination areas and UMA trail corridors.</p>

Proposed Standards and Guidelines Revisions to the Forest Plan

Wilderness Protection

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
Semi-Primitive and Transition WRS Social Standards	Semi-Primitive Trailed and Untrailed WRS Social Standards		Use Management Area WRS Social Standards
a) Encounters with other groups shall be limited to no more than 10 groups per day during 80 percent of the primary recreational use season.	a) Encounters with groups will be limited to no more than 10 encounters per day during 80% of weekend days and holidays, and 95% of week days; from May 15 to October 15 for hiking areas, and from April 15 to July 4 on climbing routes.		a) Delete.
b) No more than 2 other campsites shall be visible or continuously audible from any other site.	b) No more than one other campsite should be visible, and audible (at normal voice level) from any campsite.		b) Campsites should be separated where possible, to provide screening from all other campsites, and to make no more than one other group's site audible (at normal voice level) from any campsite. Exceptions may be made where site management prescriptions recommend grouping sites to meet other resource objectives such as wildlife habitat protection.
c) Group size should not exceed 12 in any combination of people and recreational livestock.	c) Group size shall not exceed 12 heartbeats in any combination of people, and domesticated animals.		c) Group size shall not exceed 12 heartbeats in any combination of people, and domesticated animals.
d) Groups exceeding 12 shall be allowed only under a permit. The maximum group size under permit shall not exceed 30 in any combination of people and recreational livestock.	d) No permits will be issued for groups larger than 12.		d) No permits will be issued for groups larger than 12.
Primitive Trailed WRS Biophysical Standards	Primitive Trailed WRS Biophysical Standards		Primitive Trailed WRS Biophysical Standards
a) Ground vegetation may be flattened or show some wear and tear but should not be permanently injured, and should be able to recover in two growing seasons.	a) delete		a) delete

Proposed Standards and Guidelines Revisions to the Forest Plan

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
<p>b) The loss of ground cover at heavily-used recreational sites shall not exceed 200 square feet at any one site or 0.5 percent of any acre.</p>	<p>b) Loss of ground vegetation shall not exceed more than 200 square feet at any undesignated campsite, or exceed 0.5% per acre. Loss of ground vegetation should not exceed 600 square feet at any designated site. A campsite is defined as the tent pad(s), fire ring, "lounging area", and other disturbed ground associated with a camp area.</p>		<p>b) Loss of ground vegetation shall not exceed more than 500 square feet at any undesignated campsite. Loss of ground vegetation should not exceed 1000 square feet at any small group designated site and 1500 square feet at any large group designated site. A campsite is defined as the tent pad(s), fire ring, "lounging area", and other disturbed ground associated with a camp area. These figures represent maximums. Individual site management prescriptions may set smaller limits for loss of ground vegetation wherever possible based on terrain, vegetation, and type of use.</p>
<p>c) Exposed mineral soil without a duff layer may be present, but shall not exceed 25 percent of a particular site.</p>	<p>c) No Change</p>		<p>c) Delete</p>
<p>d) Camping sites may be easily recognized from short distances but shall blend in with the natural setting from a distance.</p>	<p>d) No Change</p>		<p>d) No Change</p>
<p>e) Tree roots may be exposed on 10 percent of the trees at destination locations. Campsites shall be separated from other campsites and should, where physically possible, be set back 200 feet from lakes, streams, trails, meadows and key interest features to minimize the degree of disturbance to the natural ecosystem, and reduce social encounters at campsites.</p>	<p>e) No camping within sight of system trails, within 100 feet of streams, or within 300 feet of lakes or listed areas, unless in a designated campsite. In the Mt Hood listed areas are described on the Wilderness map. In the Hatfield areas are any campsites named on the wilderness map (i.e. Cedar Swamp, Rainey, Tanner Springs, Big Cedar Springs, Noble, Casey, and Ridge).</p>		<p>e) Camping should not occur within sight of system trails where physically possible. Camping should not occur within 100 feet of streams, or within 300 feet of lakes or listed areas, unless in a designated campsite. In the Hatfield Wilderness, camping shall not occur outside designated sites at the following areas: Cedar Swamp, Tanner Springs, Big Cedar Springs, Noble, Casey, and Ridge.</p>
			<p>f) No camping shall occur in meadows.</p>
			<p>g) Campsites should have no more than three user trails leading to or from the site.</p>

Proposed Standards and Guidelines Revisions to the Forest Plan

Wilderness Protection

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
			h) Solid human waste shall not be visible on climbing routes or in other recreation use areas.
			i) Individual site management prescriptions shall be developed for all existing day use and campsites within Primitive trailed zones.
Primitive Trailed WRS Social Standards	Primitive Trailed WRS Social Standards		Primitive Trailed WRS Social Standards
a) Encounters with other groups shall be limited to no more than 6 groups per day during 80 percent of the primary recreational use season.	a) Encounters with groups will be limited to no more than 6 encounters per day during 80% of weekend days and holidays, and 100% of week days from May 15 to October 15.		a) Encounters with groups will be limited to no more than 6 encounters per day during 80% of weekend days and holidays, and 95% of week days; from May 15 to October 15 for hiking areas, and from April 15 to October 15 on climbing routes.
b) No more than 1 other campsite shall be visible, or continuously audible, from any other site.	b) No campsites shall be visible, and no more than one campsite audible (at normal voice level) from any campsite.		b) No campsites shall be visible, and no more than one campsite audible (at normal voice level) from any campsite.
c) Group size should not exceed 12 in any combination of people and recreational livestock.	c) Group size shall not exceed 12 heartbeats in any combination of people and domesticated animals.		c) Group size shall not exceed 12 heartbeats in any combination of people and domesticated animals.
d) Groups exceeding 12 shall be allowed only under a permit. The maximum group size under permit shall not exceed 30 in any combination of people and recreational livestock.	d) No permits will be issued for groups larger than 12.		d) No permits will be issued for groups larger than 12.
No Allocation for Primitive Untrailed in the Forest Plan	Primitive Untrailed WRS Biophysical Standards		
	a) Campsites shall not be noticeable from a distance, and blend with the natural surroundings.		
	b) Camping shall not occur within 100 feet of streams, or within 200 feet of lakes.		
	Social Standards		
	a) Encounters with groups will be limited to no more than 1 encounter per day during 80% of weekend days and holidays, and 95 % of week days from April 15 to October 15.		
	b) No campsites shall be visible or audible (at normal voice level) from any campsite.		
	c) Group size shall not exceed 6 heartbeats in any combination of people and domesticated animals.		
	d) No permits will be issued for groups larger than 6.		
	e) No Special Use Permits will be issued for ice climbing.		

Proposed Standards and Guidelines Revisions to the Forest Plan

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
No Allocation for South side Classic Climb Route in the Forest Plan	South side Climb Route is managed as Semi-Primitive Trailed (see previous sections).	South side Classic Climb Route WRS Biophysical Standards	South side Climb Route is managed as UMA (see previous sections).
		a) Human waste shall not be visible.	
		Social Standards	
		a) Encounters with groups will be limited to no more than 30 encounters per day during 80% of weekend days and holidays, and no more than 10 groups during 80% of week days from April 15 to July 4.	
		b) Group size shall not exceed 12.	
		c) No permits will be issued for groups larger than 12.	
Wilderness Coordination and Use Admin. (Continued)	Wilderness Coordination and Use Admin. (Continued)		Wilderness Coordination and Use Admin. (Continued)
3. If the carrying capacity validation indicates that use levels for a particular Wilderness, or a specific area within a Wilderness have exceeded the estimated carrying capacity as established through the Limits of Acceptable Change, the following corrective actions shall be taken subject to approval by the Forest Supervisor (see Forest Plan Appendix B for examples):	3. If Social or Resource Standards are not met, the following corrective actions should be taken, in order of priority.		3. If monitoring indicates a trend of increased use or resource impacts for a particular area, management actions shall be taken to keep conditions from exceeding biophysical and social standards and the destination's carrying capacity. Actions shall be based on the degree of the problem, the rate of deterioration, and the responsiveness of the problem to management actions. Management actions that restrict activities or access shall be implemented under the authority of the Code of Federal Regulations. Examples of management actions and their applications follows:

Proposed Standards and Guidelines Revisions to the Forest Plan

Wilderness Protection

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
<p>a. The First Action shall be public information and site restoration.</p>	<p>a. The First Action shall be public information and education.</p>		<p>a. Education of visitors shall be emphasized in areas that currently have, or are beginning to have resource impacts so that existing impacts can be successfully rehabilitated, and beginning impacts can be stemmed before restoration is necessary. Education efforts shall emphasize leave no trace concepts and non-wilderness recreation alternatives. Education is generally undertaken with other management actions such as site design, natural barriers, and signing if necessary.</p>
<p>b. The Second Action shall be use of regulations i.e. if the first action is unsuccessful, restrict recreational activities by regulation.</p>	<p>b. No Change</p>		<p>b. Regulations to restrict or control particular activities such as building campfires, or hiking with dogs shall be implemented where monitoring indicates resource standards are being approached, or problems exist.</p>
<p>c. The Third Action shall be to restrict number of users. If the first and second actions are unsuccessful, restrict numbers of visitors to carrying capacity level.</p>	<p>c. No Change</p>		<p>c. Individual sites or parts of a destination, may be closed to public access for rehabilitation and restoration activities. Restoration (either natural or management implemented) should be implemented along with other actions, to ensure that user behavior is modified enough to eliminate repeated restoration activities at the same location.</p>

Proposed Standards and Guidelines Revisions to the Forest Plan

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
d. The Fourth Action shall be to close the area to all users. If the first, second, and third actions are unsuccessful, close the area to all recreational use until the area is rehabilitated and restored to wilderness conditions.	d. No Change		d. Use shall be limited where social or biophysical resource standards are being approached or are currently exceeded and where limiting use is needed to correct, or prevent further, resource impacts. Use shall be limited where UMA carrying capacities, established in site management prescriptions, are being approached or are exceeded at the time the prescription is finalized.
	e. If resource standards are not being met, site restoration shall occur.		
4. Each Wilderness shall be managed as a single unit regardless of administrative boundaries.	4. No Change		
5. Where conflicting uses occur, preference shall be given to those uses which:	5. No Change		
a. Are most dependent upon the wilderness environment and cannot be accommodated elsewhere.			
b. Least affect the wilderness environment.			
6. Pre-existing or historical uses of wilderness, which are authorized by wilderness legislation, shall adhere to the original conditions of the legislation.	6. No Change		
7. Scientific studies, research, and educational programs may occur within wilderness provided they do not degrade wilderness values.	7. No Change		
8. Grazing of recreational livestock, such as saddle horses, pack stock and llamas, may occur. Use of pelletized feed should be encouraged. Stock shall be tethered, where physically possible, at least 200 feet from lakes, streams, travel routes, and key interest areas, and out of sight of camp areas.	8. Grazing of recreational livestock, such as saddle horses, pack stock and llamas, may occur. To prevent the introduction of noxious weeds, use of pelletized feed and careful grooming shall be encouraged. Stock shall be tethered, where physically possible, at least 200 feet from streams, lakes, travel routes, and key interest areas, and out of sight of camp areas. When horses are grazed in meadows, they should be hobbled, not tied to a stake, to prevent concentrated trampling.		

Proposed Standards and Guidelines Revisions to the Forest Plan

Wilderness Protection

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
9. The use of motorized or mechanized equipment, except small battery-powered, hand-held devices such as cameras, shavers, or flashlights, shall be prohibited unless authorized by the Forest Service. Wheelchairs may be permitted.	9. No Change		
10. Pets shall be under reliable voice control or should be under physical restraint while in the Wilderness, and may be prohibited in some areas.	10. Pets may be required to be under physical restraint (leashed) while in some parts of the Wilderness, and may be prohibited in some areas.		
11. Trails may be constructed, reconstructed, and/or relocated in accordance with WRS objectives. a. Trails shall be maintained in a manner consistent with the WRS objectives, and to meet minimum requirements for health and safety. b. In Primitive Trailed WRS zones only the minimum trail system necessary to protect resources, provide for visitor safety, and to disperse users shall be provided.	11. No Change		
12. Signing within wilderness shall not be provided for environmental interpretation.	12. No Change		
13. Directional signing may occur.	13. No Change		
14. Temporary regulatory or informational signs may be used in situations where control of excessive resource damage is needed and other corrective actions have been unsuccessful.	14. Regulatory and informational signing may be used where needed to meet standards and prevent resource impacts.		

Proposed Standards and Guidelines Revisions to the Forest Plan

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
C. Visual Resource Management			
1. All management activities within the wilderness boundary shall meet the Preservation visual quality objectives as viewed from within wilderness.	1. No Change		
D. Cultural Resource Management			
1. See Forest wide Cultural Resource Management Standards and Guidelines.	1. Management direction for National Register or eligible historic buildings within the designated wilderness areas is subject to compliance with section 106 of the National Historic Act and 36 CFR 800.		
E. Wildlife and Fisheries 1. Fishing and hunting should be permitted per Oregon State Regulations. Wildlife control measures may be applied in coordination with Oregon Department of Fish and Wildlife (ODFW). Predator-prey relationships should be allowed to play their natural role within the ecosystem.	E. Wildlife and Fisheries 1. No Change		
2. Natural ecological processes, including natural infestations of insects should be allowed to operate freely.	2. No Change		
3. Wildlife and fish indigenous to the area immediately prior to designation as Wilderness, should be maintained. Preservation of threatened, endangered and sensitive (T, E &S) species shall be emphasized. T&E recovery and enhancement activities may occur.	3. Wildlife and fish indigenous to the area should be maintained. Preservation of threatened, endangered and sensitive (T, E &S) species and their habitats shall be emphasized. T&E recovery and enhancement activities may occur.		
4. Improvements and activities necessary for wildlife and fisheries management may be permitted and maintained. Work should be performed with non-motorized equipment.	4. No Change		
5. Reestablishment of native species or establishment of T&E species should be permitted.	5. No Change		

Proposed Standards and Guidelines Revisions to the Forest Plan

Wilderness Protection

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
6. Barren lakes may be considered for fish stocking after mutual agreement (i.e. between ODFW and Forest Service) that scientific and wilderness values are not affected.	6. Lakes and streams that were naturally fishless after wilderness designation, should not be considered for fish stocking.		
7. Stocking of fishing waters may be permitted where this practice is of record prior to wilderness designation. Aerial stocking may be permitted.	7. Stocking of fishing waters should be coordinated with State fish management objectives, such that ecological and wilderness values are not detrimentally affected. Aerial stocking may be permitted.		
			8. UMA destination site prescriptions developed for establishing carrying capacities, designated sites, site closures and restoration plans should incorporate objectives to minimize conflicts between recreational users and fish and wildlife.
F. Range Management			
1. Commercial livestock grazing may be permitted on any grazing allotment where a grazing permit was in existence at the time of wilderness designation and there is documentation of grazing use immediately prior to wilderness designation. See A3 Research Natural Area Standard and Guidelines.	1. No Change		
2. Vacant grazing allotments should be phased out.	2. No Change		
3. Commercial livestock range improvements e.g. fencing, shall be prohibited.	3. No Change		
G. Vegetation Management			
1. Timber harvesting and commercial gathering of forest products shall not be permitted. Vegetation management activities shall protect or enhance wilderness values.	1. No Change		
2. Live trees may be cut for administrative purposes, e.g. trail bridge construction.	2. No Change		

Proposed Standards and Guidelines Revisions to the Forest Plan

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
3. Wood fires and/or firewood gathering may be prohibited in areas where impacts from firewood gathering are degrading wilderness values.			3. Cutting down trees or snags for firewood or campfires shall be prohibited. Use of downed woody material for firewood or campfires may be restricted in order to maintain habitat for a variety of species as well as to maintain the soil resource.
4. Areas that do not meet WRS bare ground and vegetative cover criteria (see B.2, above) shall be revegetated.	4. No Change		
a. Only native local species shall be used for site revegetation.			
b. Areas to be revegetated may be closed to public use until vegetation is re-established. Temporary signing or fencing may be used.			
c. Revegetation work should be achieved in a manner that best fits the needs of the individual site. Work should be accomplished by the use of any or all of the following practices: <ul style="list-style-type: none"> • Visitor use may be restricted or eliminated on a temporary basis to allow natural revegetation to occur. • Fertilizer and growth hormones may be used on a limited basis. 			
5. Pesticide use shall be prohibited.	5. No Change		
6. Introduction of non-native plant species should not occur.	6. No Change		
			7. Edible plants and mushrooms shall only be collected for personal consumption while in the wilderness.
H. Soil, Water, and Air Quality			
1. Acceleration of soil displacement and erosion resulting from human activity should not occur.	1. No Change		
2. Natural plant establishment and growth due to soil compaction should not be impaired except at designated camps, administrative sites, and on trails.			2. Natural plant establishment and growth should not be impaired, due to soil compaction, except at designated camps, administrative sites, and on trails.

Proposed Standards and Guidelines Revisions to the Forest Plan

Wilderness Protection

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
3. Natural water quality of streams and lakes shall not be degraded by human activity.	3. No Change		
4. Natural stream and riparian ecological processes shall be allowed to operate freely.	4. No Change		
5. Pre-existing water impoundments, diversions, and other structures may be maintained at a level consistent with enabling Wilderness legislation.	5. No Change		
6. Air quality related values existing in Class I Wilderness shall be protected consistent with the Clean Air Act (1977).	6. No Change		
7. See Forest wide Air Quality Standards and Guidelines for Class II Wilderness.	7. No Change		
I. Minerals Management			
1. Wilderness shall be withdrawn from mineral entry and mineral leasing. Valid existing rights to conduct mineral related activities should be permitted. Limited prospecting may occur. (36 CFR 228).	1. No Change		
2. Mineral operations in wilderness shall be conducted to preserve wilderness character of the lands involved with the legal rights of claimants and lessees (1872 Mining Law).	2. No Change		
J. Geology			
1. Natural geologic processes shall be allowed to operate freely.	1. No Change		

Proposed Standards and Guidelines Revisions to the Forest Plan

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
K. Lands and Special Uses			
1. Special uses, permits, licenses, easements, patent applications, and rights-of-way applications for uses shall not be approved, or reissued, except for those consistent with the Wilderness Act (1964 and 1984) and/or CFR.	1. No Change		
2. Special use permits may be issued for outfitter-guide type activities.	2. No Change		
3. When recreational carrying capacities are reached or exceeded, public recreational use should be favored over commercial use, unless commercial use can best achieve wilderness management objectives. Commercial use shall not be permitted in heavy recreational use areas if commercial use is found to have an adverse effect on wilderness experience of other recreational users.	3. Commercial Outfitting and Guiding use will be allowed to occur for up to 30% of the use on the south side climb and Elliot Glacier, and up to 10% of the use in other areas when use is within social and resource standards and when the Outfitter-Guide Needs Analysis supports use.		
4. Contests, races, promotions, or fund raisers of any kind shall be prohibited, i.e. including foot races, competitive trail rides, survival contests, and other similar activities.	4. No Change		
5. Special uses that do not meet Management Area management directions (i.e. non-conforming) shall be terminated.	5. No Change		
6. Military training exercises should not be permitted.	6. No Change		
L. Transportation Systems/Facilities; Travel and Access Management			
1. Roads shall not be constructed.	1. No Change		
2. Existing roads and wheel tracks (except those specifically authorized by Wilderness legislation) shall be blocked, stabilized, and returned to a natural condition.	2. No Change		
3. Off-road vehicle use shall be prohibited.	3. No Change		

Introduction, Purpose and Needs, and Management Direction

Alternative #1 Existing Standard	Alternative #2 Proposed Action	Alternative 3 South-side Exception	Alternative 4 New Alternative
4. Possessing or using a hand glider, paraglider, or bicycle shall be prohibited.	4. No Change		
5. Landing of aircraft or dropping or picking up of any material, supplies, or person from aircraft, shall be prohibited unless specifically authorized by the Forest Service.	5. No Change		
M. Fire Prevention and Suppression			
1. Preference shall be given to those suppression methods and strategies resulting in the least practicable area burned, commensurate with cost-effectiveness, and have the least effect on wilderness values.	1. Suppression strategies shall result in the least impact on wilderness resource values, and least cost commensurate with resource values and strategy selected.		
2. Human-caused wildfires shall be suppressed.	2. All wildfires will receive the appropriate suppression response with regards to the policy and direction in place.		
	3. Adverse impacts from suppression efforts will be rehabilitated to as natural a condition as possible. Rehabilitation will include visual impacts of firelines, spike camps, helispots and damage to trails.		
	4. A resource advisor shall be available to the Incident Command Team to assist in development of suppression strategies and tactics and planning for rehabilitation of fire suppression effects.		
	5. Consider activating a burned area emergency rehabilitation team to assess potential need for fire effects rehabilitation.		
N. Prescribed Fire			
1. Prescribed fire may occur.	1. Prescribed Fire, both natural and management ignited may occur, consistent with policy and direction.		
2. Naturally occurring ignitions should be managed as prescribed fire unless declared a wildfire.	2. Upon approval of a wilderness prescribed natural fire plan, naturally occurring ignitions may be managed as prescribed fire until declared a wildfire.		
3. Management ignited prescribed fires should be considered where analysis has shown that the wilderness ecosystem has been significantly altered from its natural state due to fire exclusion, and the probability of natural ignitions returning to the area to its natural state is low.	3. Management ignitions may be used where needed to restore and maintain vegetation structure to within the range of natural variation, including the control of noxious weeds.		
O. Integrated Pest Management			
1. Insect or plant disease outbreaks may be controlled only to prevent unacceptable damage to resources on adjacent lands or an unnatural loss to the wilderness resource due to exotic pests.	1. No Change		

Appendix C

Response to Comments

Wilderness Protection EA Comment Analysis

Analysis Process

Three public open-house meetings were held after release of the original Environmental Assessment. A court recorder was present at the meetings to take public testimony from individuals. Paper and pencils were also available to submit written comments at the meetings. Many citizens wrote letters to the Forest after the meetings. Over 600 letters (including testimony) were received on the EA. There were more than 3800 comments within these 600 letters. A team of people reviewed the letters and categorized the comments. Nearly 98% of the letters were not supportive of use limits proposed in the original EA.

Following are brief descriptions of the many comment categories and how this document responds to the comment category. Not every sentiment in a category was mentioned by the writer, or the writer used entirely different words with a similar meaning. Comments were lumped and interpreted as accurately as possible to maintain the intent of the writer. Some of the categories had overlap and the comment was coded to the closest category. More than one person reviewed each letter to ensure consistency in coding comments.

In most cases the reader is referred to the document to show how comments were addressed in the document. In some cases the comments are outside the scope of the document, or express a personal opinion about the proposal. Although some of these are responded to as “outside the scope of this document”, a response is provided to most as a means to carry on the discussion regarding these three wildernesses.

Comment Categories and Responses

Comments That Were in the Non-Supportive Letters, in Order of Frequency of Occurrence

1. Don't Expect Solitude - When I visit high use areas like the south side, Ramona Falls, Eagle Creek, etc., I do not expect to have solitude. I do not object to passing people on a trail or seeing other people when I get to a popular destination. Encounters with other groups are usually a positive experience for me. Because these areas are so close to an urban population, there should not be an expectation of having solitude in the popular areas. These should be managed as urban wildernesses. People should not expect to go to the high use areas and not see more people.

Response - Many people expressed this opinion in letters and at the public meetings and workshops. Alternative 4 is the alternative that provides for areas of higher use in the areas where it now occurs. This new alternative was introduced as a result of public comment and research findings on effective management strategies in high use areas. Under this alternative use could be limited in individual Use Management Area destinations based on resource impacts, not social encounters. See chapter II, Introduction, Public Issues with the Original Proposed Action, Alternative 4 and chapter IV, Effects on Recreation Opportunities and Wilderness Carrying Capacity, Alt 4.

2. Can Find Solitude - A hiker or climber can/should find solitude if that is what they are seeking; by going off the trail, going to low use areas, or going mid-week and off-season.

Response - Alternative 4 addresses this comment. Low use areas are high priority restoration areas, and would receive monitoring and be subject to limitation if use exceeds social standards. In this way Alternative 4 would continue to provide areas of solitude for those who seek it. Also see response above to comment number one. See Chapter II, Introduction, Public Issues with the Original Proposed Action, Alternative 4 and Chapter IV, Effects on Recreation Opportunities and Wilderness Carrying Capacity, Alt. 4.

3. Increase Education - Emphasize wilderness education to reduce resource impacts in wilderness, and encourage people to go to other less used areas. Suggested examples of increased education included more signing, outreach with user groups and schools, and use of volunteers at trailheads and in high use areas. Some also encouraged using organized groups to educate wilderness users.

Response - Education is incorporated to some extent in every alternative. Alternative 4 emphasizes education and volunteers as tools in influencing user behavior to minimize impacts to resources. With Alternatives Two and Three education is still used, but may not receive the same emphasis due to limited funding, and the amount of resources spent on a limited use permit system. See Chapter II, Alternative 4, Use Management Areas and Table 2.3, and Chapter IV, Alternative Effects on Wilderness Education and Partnership Efforts.

4. Public Lands/Rights - These are public lands that should remain open to all users at all times. We have a right to recreate in these areas and should not be restricted. I pay my taxes so that I can recreate on these lands. This is a typically bureaucratic response.

Response - Wildernesses were created as a place for this and future generations to seek solitude and experience challenge and risk. Wilderness destinations can reach their carrying capacity as a result of crowding. One approach to assuring that the intent of Congress is carried out is to restrict the number of users. The Four Alternatives reflect a range of how, where, and why restrictions on entry might occur. It is inevitable that restrictions on use could occur in some areas as population increases occur to prevent unacceptable resource impacts. Limited entry is in use in many National Parks, and some National Forests at this time. There are many areas of the Forest outside of wilderness that would continue to be unrestricted and accessible to the public. See Chapter I, Purpose and Need and Existing Management Direction.

5. Don't Agree with the Problem -I have hiked these trails on weekends and have not encountered very many people or seen resource impacts. The use and impact data is flawed. The proposed solution (use limits) is out of proportion to the actual problem.

Response – Different people have varying tolerance or awareness of use levels or trail crowding. In addition, the use levels are highly dependent on time of use (weekends), weather, and destination. The data on numbers of users, encounters, and campsites is based on two seasons of data collection in 1994 and 1995. Numbers of users are derived from permits. There was 82% compliance to the permit system by users, based on over 4,200 groups contacted in the Wildernesses. When use numbers are corrected for non-compliance and tested at the 95% confidence interval, use numbers are found to be accurate to within +/- 2.8% for the Mt Hood Wilderness.

All heavily used areas were surveyed for encounters by Wilderness Rangers, a minimum of 10 separate four-hour periods for weekends, and ten separate periods for week days in each travel zone. Travel Zones were established to reflect major travel routes and destinations. A sampling of lower-use areas was surveyed to

verify assumptions about use levels. The encounter levels presented in the EA represent the average of all data. Rainy weekends were very low. Warm summer weekend afternoons were very high. There is very little resource damage along travel corridors. Most disturbances caused by visitors occur at campsites and other destinations. It is entirely possible that visitors to an individual trail on one or two occasions did not see the “average” use conditions outlined in the document. The original proposed action was intended to get into compliance with the 6 to 10 encounters per day standard. This standard many felt was too restrictive. Alternative #4 attempts to address those perceptions including the intent to conduct visitor studies on social crowding perceptions in areas close to urban populations and high day use. See Chapter III, Tables 3.5 & 3.6, and Chapter IV, Tables 4.1-4.5, as well as the Analysis File for more detailed information on how data was collected, and the data results.

6. Protect resources - Protect the physical and biological resources in wilderness. Restore impacted areas. Some suggested using volunteers to help restore impacted areas.

Response - Protection and restoration of resources is one of the main focuses of the Environmental Assessment. The three action alternatives have different approaches to protection and restoration. The limited funds available are allocated by different priorities in each alternative. Alternative 4 places a greater emphasis on using volunteers to assist in restoration.

See Chapter I, Purpose and Need, Existing Management Direction, Forest Service Manual Direction, Chapter II, Table 2.2 & 2.3, Chapter III, Research Findings on Vegetation and Soil Impacts from Recreation Use, Tables 3.2 & 3.3, Strategies Developed by Researchers and Managers for Solving Wilderness Problems, and Chapter IV, Alternative Effects on Resource Conditions, Alternative Effects on Plants and Alternative Effects on T,E&S Species.

7. Ski Areas/Development - The Forest Service allows ski areas and lodges to be developed on Mt. Hood and impact riparian areas, sensitive meadows, and alpine plants. How can they allow the ski area operators to have such a large amount of people and impact and then turn around and restrict a few hikers to the wilderness trails? The south side of Mt. Hood offers no solitude – not because of the crowds but because of all the ski area facilities, crowds and operations.

Response - Ski Area development occurs on areas designated for Developed Winter Recreation in the Mt. Hood Forest Plan. In some cases these areas are adjacent to, and in the same type of environments as the wilderness. Activities on the two areas cannot be directly compared because they are intended to serve different uses. Activities on National Forest lands outside of the three wildernesses

are not within the scope of this document. The influence of adjacent activities on the south side of Mt. Hood is recognized in the Wilderness Recreation Spectrum description in Alternative 3. Wildernesses were established adjacent to many existing uses and land designations and must coexist with some activities that cause disturbances within the wilderness. Ski areas are relied upon to accommodate visitors who do not seek a true wilderness experience, as well as higher densities of users, thereby relieving some pressure on wilderness. See Chapter I, Existing Management Directions and Purpose and Need.

8. Decreased Spontaneity - Most day hikes and some overnight trips are not usually planned in advance. They are spontaneous and usually happen around the weather predictions. Restricting access or requiring reservations will decrease my spontaneity. Climbing Mt. Hood should only be done when good weather is predicted.

Response - This issue is addressed in several places in the EA. The No Action Alternative, and Alternative 4 allow for spontaneous decisions regarding timing and destinations in wilderness visits. Alternative 3 also addresses allowing more climbers on the South Side Route, so climbs can be done in better conditions. Individual climbers are still responsible for determining when and where they climb. This is an important element of the challenge and risk involved in wilderness trips. See Chapter II, Alternatives 1-4, Tables 2.3, and Chapter IV, Effects on Recreation Opportunities and Wilderness Carrying Capacity.

9. Increased Search and Rescue - Displacing climbers or hikers from the south side route, or easier trails, to the north side routes, or more difficult trails will result in increased search and rescues, and possible injury or fatalities to climbers and hikers. Increased search and rescues may also occur as a result of the climbers or hikers going in less favorable weather conditions because they could not get a permit. There is safety in numbers – more people to respond in an emergency situation.

Response - Alternatives Three and Four consider these issues and eliminate or reduce the potential displacement. It is questionable if more climbers on a route contribute to a quicker emergency response or greater safety. At times the crowded conditions on the South Side may themselves be a safety concern. Climbers may self regulate, as evidenced by the number of climbers on a good climbing day during the climbing season on the South Side not significantly rising since Wilderness designation. See Chapter II, Alternatives 3 &4, and Table 2.3.

10. Outside Wilderness Act - These restrictions are not consistent with the Wilderness Act. The Wilderness Act states “provide outstanding opportunities for solitude OR a primitive and unconfined recreation”. “Or” does not mean “and”. The Wilderness Act does not say that wilderness be managed for solitude at all places, all the time. Some

recommended that the Act be reworded or loosened to ensure recreational access to wilderness. A limited use permit system is inconsistent and incompatible with primitive and unconfined recreation.

Response - The Alternatives in the EA reflect some tradeoffs between solitude on every acre at all times, and an unconfined primitive recreation experience. This subject has been the focus of a national debate the last few years, and public land stewards, especially near large population centers, are striving to find the best solution for this and future generations. Any changes to the Wilderness Act are outside the scope of this document. See Chapter I, Existing Management Direction and Chapter III, Research Findings on Solitude.

11. Decreased Support for Wilderness - Restricting access to wilderness will reduce support for wilderness areas. The more people who are able to visit and enjoy the wildernesses, the more they will learn about, appreciate and support efforts of wilderness protection, and additional wilderness designation. Some indicated they or others would not support volunteer efforts to maintain or reconstruct trails and other areas because why work on a trail you cannot use.

Response - These comments were noted in the issues section, and reflected in some of the discussion in Chapter IV. The wildernesses offer a variety of benefits to the public. Alternatives #2 and #3, would limit access to the most popular areas, but provide more solitude to those with permits. Alternative #4 would allow continued access to most of the popular areas but could implement a use limit to a destination if resource impacts become unacceptable. It would emphasize wilderness education of visitors by wilderness stewards to try and prevent resource impacts and the need for use limits. Restricting access is not usually popular, especially with more spontaneous day users. However, limits may be necessary in some locations in order to prevent unacceptable resource impacts. See Chapter II, Public Issues with the Original Action, Issue #2, and Alternative 4.

12. Definition of solitude - Solitude is a very subjective thing with no clear definition. The standard for encounters is arbitrary. Solitude means being alone. Don't agree that six or ten encounters are solitude.

Response - Chapter III contains discussion about recent research findings on solitude. Existing social standards for solitude are based on a compilation of research data done in other wildernesses. Generally, the standards were based on backpacking visitors in more remote wildernesses and represent visitors' preferences. Alternative #4, proposes to conduct surveys among users of these wildernesses to help determine what factors are important in their experience of solitude for general day hiking close to an urban center. Surveys would evaluate

visitor preferences and tolerance levels and would also evaluate responses with the assumption that use (including themselves) could be limited. See Chapter II, Table 2.3, Chapter III, Research Findings on Solitude, and Chapter IV, Effects on Recreation Opportunities and Wilderness Carrying Capacity.

13. Displacement - Limiting people in high use areas will displace them to low use areas and result in more people (and less solitude) and/or more physical resource damage to those areas that are presently in good condition and offer outstanding opportunities for solitude. It may also result in larger group sizes.

Response - This comment is noted in the issues and discussed in Chapter II, Alternative #4, Table 2.3, Chapter III, Chapter IV – Effects of alternatives on resource conditions, and Tables 4.1-4.5.

14. Cost of Enforcement - If funds are already limited, why propose something so expensive to enforce? Focus limited funds on restoration, trail maintenance, and/or education - not planning and restrictions. It will be impossible to enforce limits and will turn Rangers into wilderness police.

Response - The alternatives reflect a range of funding priorities, and all assume that the Forest will have a limited budget and workforce to implement any decision made. While a limited use permit system proposed in Alternatives #2 and #3, is costly to implement and enforce, it is the only viable way of getting into compliance with Forest Plan social standards. And costs decrease over time once the permit system flaws are worked out, and the public gets used to the system. Alternative #4, would be more responsive to this comment and focus limited funds on restoration, education, and trail maintenance. See Chapter II, Table 2.3.

15. Family Recreation/ Low Cost/ Limits to Elite - Use in the popular areas is high because they are good family hiking alternatives that allow access to people who cannot hike the more challenging trails (kids etc.) These areas provide a low cost recreational alternative for families and others who cannot afford more costly recreation. Restrictions would limit access to the wilderness to the elite.

Response - It is true people would be displaced by Alternatives Two or Three. It is possible that those who cannot hike challenging trails would be displaced in greater numbers than others. Any permit system implemented would allow an equal chance for anyone to get a permit. Persons who did receive a permit for less challenging trails would have an experience with greater solitude on a trail that would otherwise be crowded. Alternative 4 would restrict fewer people and maintain more access to popular areas. See Chapter II, Public Issues with Original Action, Issue #2,

Alternative 4, and Chapter IV, Effects on Recreation Opportunities and Wilderness Carrying Capacity.

16. Logging - The Forest Service has allowed timber harvest including clear cutting in much of the Forest and in roadless areas. Timber harvesting and the associated road building are much more impact on the Forest more than hikers impact the wilderness. Some writers named specific recent or current timber sales such as Eagle, Salmonberry, Enola, etc. Some also mentioned grazing and mining.

Response - Timber harvest, and road construction occur on lands designated for timber management in the Forest Plan. Activities on lands outside of wilderness are not within the scope of this document. The standards and guidelines for wilderness are more restrictive than those for lands on which timber harvest occurs. Impacts to resources are considered in accordance with the established standards for each area. Also see response to comment number 7. There are no grazing or mining activities within the three wildernesses considered by this document.

Also see Chapter I, Purpose and Need and Existing Management Direction.

17. Increase trails - Construct more trails to give people more options and reduce the number of people on the existing trails. Make more existing trails into loop trails (requiring some new construction) to reduce encounters. Convert old roads to trails. Open up closed and/or abandoned trails. Make more multi-user trails.

Response - Increasing the number of trails, and creating more loop trails could reduce encounters only to the extent that people use the new trails. Approximately 264 miles of trails exist already within the three wildernesses. Most of the existing use is concentrated on a relatively small portion of this mileage and the remaining trails have little use. If new trails have similar characteristics as the high use trails (shorter day use hikes, through old growth, waterfalls, alpine meadows, or other scenic vistas, and along relatively flatter grades), then use could be displaced to new trails assuming money is available for construction. At current funding levels it is difficult at best to keep the existing trails maintained to standard. Forest Service policy allows only the use of primitive tools when performing maintenance or construction in the wilderness (no chainsaws or other motorized equipment). Any trails added to the system would make the task of maintenance more difficult. Regional management direction is to avoid constructing new trails within wilderness unless necessary. Due to the trail maintenance backlog, reconstructing existing trails receives higher priority than building new trails in most cases

Although adding trails miles in the wilderness would reduce the number of encounters on trails, it would also greatly reduce the solitude in the areas in which

new trails were constructed. The vast majority of visitation occurs on or immediately adjacent to trails within the 3 wildernesses (with the exception of climbing on Mt. Hood). By going off-trail a visitor is unlikely to encounter anyone. This point is recognized in the strategy embodied in Alternative 4. Many areas of the three wildernesses are designated Primitive Untraveled to identify them for outstanding opportunities for solitude. There are also many miles of trails in the three wildernesses that currently receive very low use.

Types of uses allowed on a trail are determined by compatibility with other uses, ability of the trail to withstand the use, and the environments through which the trail passes. An attempt at balancing uses forest-wide has been made. Several more trails and facilities are being reopened or re-constructed on the forest to help meet the demand for horse trails. Any analysis to revise the types of uses allowed on a trail should be done looking at both wilderness and non-wilderness trails so that there is balance across the forest. This type of analysis was outside the scope of this wilderness specific analysis.

Converting roads to trails, allowing more types of uses on trails, and reopening abandoned trails is also considered in the Forest Access and Travel Management Strategy. Funds for trail maintenance forest wide are constrained and any additions to the system are only made with careful consideration. Roads converted to trails require the same or more maintenance than other trails. Decisions regarding specific trails or roads would need to be done under separate analysis and should clearly serve a recreation need on the Forest so that construction and maintenance costs are funneled to projects the public support and will use. Also see Chapter II, Issues Raised but Outside the Scope of this Document, Increase Trails.

18. Increase trail maintenance - Focus on maintaining trails better and not restricting use. Use more volunteers for trail maintenance.

Response - Alternative 4 focuses more resources on trail maintenance and the use of volunteers. Currently many groups and individuals participate in trail maintenance activities. The Mt Hood National Forest strives to mesh the abilities and commitment level of each group with the tasks needed on the ground. Organizations that can make an ongoing commitment are what is needed to maximize the volunteer effort. The more trained leaders in other groups like the Mazamas and the Pacific Crest Trail Association have, the more effective the volunteer effort would be. Groups willing to hike in several miles and camp out and work for a few days are needed also. See Chapter II, Table 2.3.

19. Regulate camping - Regulate overnight camping use, as that is where your resource impacts are located. Do not regulate day use. Comments included support for designated sites, campfire restrictions, and other regulations developed for resource protection. Some people felt that a limited use permit system was appropriate for overnight use only.

Response - All three action-alternatives employ the use of designated campsites to reduce impacts from overnight use. Campfires may be restricted in some areas. Very little overnight use occurs in comparison to day use. It is felt that overnight use would only need to be restricted in some areas at this time under Alternative 4. Alternatives two and three would restrict overnight use through a limited use permit system in all areas. See Chapter II, Table 2.2, Chapter III, Research Findings On Vegetation and Soil Impacts from Recreational Use, Inventoried Resource Conditions, Table 3.5-3.6, Campsite Conditions, Summary of Conditions, and Chapter IV, Alternative Effects on Resource Conditions.

20. Increase wilderness - The Forest Service should increase the amount of designated wilderness to address the issue of too many people in wilderness. It would give people more places to go and leave fewer people in the crowded areas. Suggestions included increasing the size of the existing wildernesses, making existing roadless areas wilderness, and ripping up roads in logged areas (or roads to trails) and make them wilderness areas. Some indicated that the Forest Service's past failure to identify and designate more wildernesses has led to the current restrictive proposal.

Response – Nearly all of the Salmon-Huckleberry and Hatfield Wilderness designated as wilderness in 1984, currently receive very little use compared with the Mt. Hood Wilderness, so their existence has not solved the resource or potential crowding problems that currently exist in the Mt. Hood Wilderness. Additional analysis must be done to evaluate areas outside of wilderness, and their future potential for helping to meet increasing recreation demand as the Portland-metro area grows. The Forest Service makes recommendations for wilderness to Congress. Congress designates wilderness by law. Potential wilderness additions or primitive area designations that could help address the increasing recreation demand, should have opportunities and characteristics similar to the Mt. Hood if possible. This larger scale additional analysis is outside the scope of this environmental assessment. It will be started as part of the Forest Plan revisions in the next five years. See the discussion in “Issues raised outside the scope of this document” in chapter II of the EA.

21. Historic Use Levels - Use on south-side route, Ramona Falls, Eagle Creek, and other use areas have always been high and should have been recognized in the Wilderness designation. These areas met wilderness criteria at the time of designation and not much has changed since then, so why the sudden need to limit people?

Response – High use was present in some areas of all three wildernesses at the time of their designation, but no mention of special provisions for high use was made in the enabling legislation. When areas are designated wilderness they do not have to be in a condition that meets wilderness standards, but are intended to move toward a wilderness character over time. The addition of alternative 4 to the range of alternatives is responsive to this group of comments.

Also see Chapter I, Existing Management Direction, and Chapter II, Alternative 4.

22. Direct Users - Direct users to other trails outside of wilderness or to lower use areas, or encourage them to go mid-week. Methods to direct users included, visitor information centers, signs on trailhead boards, Internet updates, Rangers or volunteers at trailheads.

Response – Directing users to other areas is a key component of Alternative 4, however as is mentioned in Chapter 1 in the local and regional context section, few opportunities of a similar character are available nearby. Many of the methods of directing use that were suggested are already in use. The Forest’s strategy has been to inform people of crowding, and not direct them to popular destinations in wilderness unless they ask. Existing privately published guidebooks are a significant tool that is utilized by trail users which adds to making some wilderness sites more popular. *Under Alternative 4 that strategy would change, and people would not be directed to areas where there is currently opportunities for solitude. See Chapter II, Alternative 2, Alternative 4, and Chapter IV, Effect on Recreation Opportunities and Wilderness Carrying Capacity.*

23. Limit recommendations - Limit use on weekends only, and/or in high use areas only. Restrict only the south side climb. There was a variety of specific recommendations for how, where, or when to limit use.

Response – The Alternatives show a range of limited use possibilities. The range is expanded with the incorporation of Alternative 4. Specific on how a limited use permit system would be implemented, would be developed once a decision was made to do one, and with additional public input about how it should be modeled. See Chapter II, Alternatives 2-4.

24. Climbing has no resource impacts - Climbing takes place on snow and ice and has no impacts to vegetation or other physical resources.

Response – It is true that climbing has few effects to physical resources, however some do occur from human waste, and high elevation camping. Human waste is the major concern and can be eliminated through use of the blue bag program currently in place on the South Side. Restrictions outlined in some of the alternatives are

driven by the social standards, not physical impacts. See Chapter II, Alternatives 1-4, Chapter IV, Effects on Recreation Opportunities and Wilderness Carrying Capacity.

25. Increase Rangers Presence - Put more Wilderness Rangers on the popular trails and in the popular destinations to help educate the visitors on low impact techniques, enforce the rules, and/or better manage the problem areas.

Response – A limited number of Wilderness Rangers have been available with the funding levels in the last decade. Funding levels are not projected to increase. The Alternatives vary in emphasis areas for the available funding. Alternatives two and three prioritize enforcing a limited use permit system. Alternative 4 emphasizes user education, including on-site Ranger contacts with FS personnel and volunteers. Wilderness Ranger presence has proved to be an effective tool in these three wildernesses. See Chapter II, Tables 2.2 and 2.3.

26. Decreased FS support - The Forest Service is reducing the support for its continued existence as an agency by proposing restrictions to hikers in wilderness. Many people are not supportive of clear cutting, ski area developments, trail park fees, etc. and now you plan to restrict the people who have the least amount of impact on the Forest. This could result in increased vandalism and other attacks on the Forest Service.

Response – It is noted in the EA that the original Proposed Action could alienate and disenfranchise wilderness users and supporters. Alternative 4 is responsive to this issue.

See Chapter II, Public Issues with the Original Proposed Action, Issue #2.

27. Permit Implementation Concerns - These comments raised issues about permit implementation such as making it fair for all to get a permit, when and where permits would be accessible, etc.

Response – All limited use permit systems are difficult and costly to implement. The difficulty would be even greater for these three wildernesses that receive primarily day use and have multiple entry points. Permit systems that limit use in particular areas of a wilderness have proven to be more successful in the Northwest. Any permit system would be designed to be as fair and convenient as possible. See Chapter II, Public Issues with the Original Proposed Action, Issue #2, and Chapter IV, Effects on Recreation Opportunities and Wilderness Carrying Capacity.

28. Do Support TPP - These comments expressed support for the trail park passes or for charging a fee to use the wilderness, but not for limiting use. Most people only supported them if the fees came back to be used in the wilderness for trail maintenance, reconstruction, and/or site restoration.

Response – Proceeds from the trail park pass program currently in place on the Mt. Hood National Forest support trail maintenance. It is possible that the nature of the trail park pass program could be changed under the authority of the Fee Demonstration program to include authorization for funding site restoration. The trail park program is outside the scope of this document. The trail park program is not intended to discourage use, but to supplement funding and improve maintenance on trails and trailheads.

29. Don't support TPP - These comments did not support the trail park pass or any charge for using wilderness. Many cited increasing costs to use the Forest (camping, etc.). Others expressed concern that the once a fee was established, it would become more expensive over time.

Response – The trail park pass program involves trails both inside and outside the wilderness. Congress established the Fee Demonstration Program to institute user funding to increase funding for recreation programs. See #28.

30. User behavior - It is not the number of people who visit, it is the behavior of those people that causes the impacts. There can be a large group of people using leave not trace and other wilderness use ethics with little impact to me or the wilderness, whereas one or two people who behave obnoxiously - littering, yelling, using radios or cell phones, cutting trees, and tearing up the fragile eco-system.

Response – It is true that user behavior may have a greater effect on resource condition and social experience than numbers of users. Education plays a key role in responding to this. Each of the alternatives has varying level of emphasis on education. These points are discussed in Chapter IV, under effects on recreation opportunities and effects on resource conditions.

Also see Chapter II, Public Issues with Original Proposed Action, Issue #3 and Table 2.3,

Chapter III Strategies Developed by Researchers for Solving Wilderness Problems and Chapter IV Effects on Recreation Opportunities and Wilderness Carrying Capacity.

31. Flawed Data or Conclusions - The wilderness recreation use data and/or resource impacts data is flawed. There are problems with the method of data collection and/or with the assumptions and/or conclusions. Not enough data was collected to make a statistically sound sample. Missing data was interpolated.

Response – See response to number five. Interpolation of missing data is a necessary and accepted practice, and is taken into account when calculating statistical validity of the data. The Recreation Use Report in the Analysis File (Hall, 1996) documents both the data collection process and results.

32. Support Researcher’s Strategy - Support the approach being proposed by Wilderness researchers that allows high use to continue within certain physical resource constraints while protecting low use areas for their pristine condition and outstanding opportunities for solitude, and recommends developing additional recreational opportunities outside of wilderness.

Response – This research is incorporated into Alternative 4.

33. Spiritual/Wellness - My visits to Wilderness have spiritual or religious significance to me. I go to wilderness to improve my health and well-being. Particular areas in these wildernesses are very special to me and I want to visit them.

Response – Wilderness means many things to many different people. The alternatives look at ways of preserving the wild character of these lands while providing different levels of visitation. The tradeoffs involved in this are discussed in effects on recreation opportunities in chapter four.

Chapter IV, Effects on Recreation Opportunities and Wilderness Carrying Capacity.

34. One-way trail etc. - These comments centered on specific suggestions to existing trails to reduce encounters. Make trails like Ramona Falls one-way trails to reduce the number of encounters with other groups. Establish official passing lanes on the climbing route and a separate decent route on the south side. Stratify trails by use; high, medium, and low.

Response – One-way trail strategies could be implemented in some cases, but are not specifically noted as a strategy in the document. No proposal exists to direct climbers. It is felt that climbers need to be able to make decisions on route selection based on the experience and physical condition of their group and weather and snow pack conditions. One way trail travel would likely be something that is encouraged where it is possible and appropriate, but not mandatory, in order to provide for some freedom of movement and the inevitable exceptions that arise

(like hikers traveling through on the Pacific Crest Trail and Timberline Trail in the case of Ramona Falls.

35. Public Involvement Process – Some expressed critical comments about the format of the public involvement meetings. Others expressed compliments about them. Some said the public had not been involved in the development of the alternatives. Others said that they had participated in workshops several years ago, but that the alternatives did not represent their input at those meetings.

Response – The public involvement process began in 1994 with the LAC workshops. Some of the input was not incorporated into an alternative because it conflicted with agency direction that existed at that time. Comments at workshops, and letters received after the 1998 EA was released, were incorporated into Alternative 4, when agency direction had changed. Public opinion following the 1998 EA reflected that expressed in the LAC workshops several years earlier.

36. Don't Support O/G Use - There should be no set aside for outfitter-guide use especially when everyone else is limited. They should have the same access or restrictions as everyone else. Some implied that commercial use by these groups should not be allowed. Some wanted non-profit organizations such as the Mazamas to not be defined as an outfitter-guide.

Response – An outfitter-guide needs assessment was done to evaluate what wilderness recreation activities could be done by most persons without unreasonable expense or experience needed to accomplish. Activities must also be compatible with land management activities. The needs assessment determined that most beginning climbers sought outfitter-guided instruction before they ventured into the wilderness on a climb and that this was a legitimate need in the wilderness. A percentage of use, which relates to current demand in an unrestricted environment, is allocated to outfitter-guides in the alternatives. The same restrictions on group size, etc. would apply to outfitter-guides. The alternatives differ in the areas and amount of outfitter-guide use that is allowed in each WRS class (see chapter two and the standards and guidelines). Non-profit organizations are included in the outfitter-guide category according to national Forest Service policy. Outfitter-guides also help educate clients about leave-no-trace and other wilderness ethics. See Chapter I, Forest Service Manual Direction, and Chapter IV, Effect to Outfitter-Guides

37. Move trailheads - Close some trail access roads and move trailheads of popular trails further back from the destination to increase the distance and reduce the number of people going there. Some made specific trail head suggestions.

Response – Chapter III and the Analysis File discusses trailhead relocation as a means for reducing use. In most cases, trailheads would need to be moved at least two miles in order to significantly reduce day use. That would make the trail destination inaccessible to those who could not cover the longer distance, leaving few outside wilderness opportunities within day use proximity to Portland. Trailhead relocation could be considered in Alternative #4, as one of the site specific solutions to a particular problem. Reduced road maintenance budgets on the Forest may also drive the need for trailhead relocations. See Chapter II, Alternative 4, Management Actions, Monitoring and Carrying Capacity and Appendix.

38. Restrict equestrians - Horses and other livestock have more resource impacts than hikers. They should be banned on all/some trails.

Response – Equestrian trails are constructed to a higher standard than hiker only trails. Horses can be harder on trails, especially in wet conditions. Many equestrian groups are strong advocates for educating riders to avoid sensitive trails during very wet conditions. See Response to comment 17. Changing the types of use on trails should consider areas both in and out of wilderness.

39. Rotate trails and areas - Close trails or areas that need fixing and restoring for a period of time, and then reopen them.

Response – Rotation is not proposed in the EA. Chapter III and the Analysis File, discusses some of the problems that can be cause by rotating trails or campsites. In many cases, it has resulted in more overall impacts since the closed areas did not recover well. Recovery occurs better in low elevation sites, but only where use can be totally restricted which is difficult to achieve in some cases. Recovery in high elevations takes decades or longer. If trails were left alone, brush would grow and erosion damage would occur. Designating campsites is the strategy proposed to reduce the amount of resource impacts in all three action alternatives. See Chapter III, Research Findings on Vegetation and Soil Impacts from Recreation Use and Inventoried Resource Conditions Within Mt Hood, Salmon-Huckleberry and Hatfield Wildernesses.

40. Install toilets - Resource impacts can be reduced by installing pit/vault toilets in high-use areas. Some made suggestions for particular areas.

Response – Toilets are only installed in wilderness as a last resort. Toilets are permanent structures and create problems with waste removal, cleaning, etc. If leave-no-trace education efforts fail to correct human waste problems, limits on use

would most likely be implemented prior to installing toilets. See Chapter II, Tables 2.2 & 2.3.

41. Restrict Dogs - These comments recommended banning dogs, or requiring that they all be leashed, or that dogs were the problem - not people. Some suggested owners should be required to clean up their droppings, or get a permit to take a dog into wilderness.

Response – Dogs are required to be under control at all times, and leashes may be required in some areas. A management action that may be taken under any alternative in the EA is prohibiting dogs in certain areas with a Code of Federal Regulations (CFR) restriction (regulation). No specific area restrictions are proposed in this EA. One proposed change is to include dogs in the “12 heartbeats” in the maximum group size limitation. See Chapter II, Alternative 2, Forest Plan Standards Revisions.

42. Develop more recreation opportunities outside of Wilderness – More non-wilderness trails and recreation areas should be developed outside of wilderness to take the pressure off of these wildernesses and eliminate the need for restricting use.

Response – Increasing opportunities outside of wilderness is one of the strategies noted in Alternative 4. Actual development of trails and recreation opportunities is not specifically analyzed in this EA and would need to be a combined effort of many land managers, including city, county, state and federal. See Chapter II, Introduction, Alternative 2, Management Actions, Monitoring and Carrying Capacity, Alternative 3, Alternative 4, Management Actions, Monitoring and Carrying Capacity.

43. Declassify - These comments recommended taking certain high use areas out of the wilderness because they always had high use and should never have been included or because the impact of surrounding uses like ski areas, eliminate wilderness character. Areas mentioned include South side of Mt. Hood, Ramona Falls, Cloud Cap, etc. Some recommended that they be reclassified to something that would protect them from development but allow unrestricted recreation.

Response – This is outside the scope of this document because it would require Congressional action. See Chapter II, Alternatives considered, but dropped from further consideration.

44. Focus on recreation - Focus management and FS budgets on expanding recreation opportunities and wilderness recreation. Convince Congress to spend more money on recreation. Make the public aware of the wilderness budget situation to get support.

Response – Budgets and Agency-wide management focus are outside the scope of this document. Budget allocations are public information and are decided by Congress on an annual basis. The focus in the last few years has been on using partnerships to expand recreation opportunities because budgets for facility construction have continued to decline.

45. Do not support Group Size - Do not agree with a limitation on group size. Some wanted smaller groups than 12. Others felt there should be exceptions for organized groups.

Response – A group size of 12 is the most common maximum used in wilderness areas throughout the nation. By staying with a maximum group size of 12, uniformity and continuity with other wilderness areas would be maintained. All groups in the Primitive Untrailed areas are proposed to be restricted to a maximum of 6 to preserve solitude. Although groups of up to 30 are currently allowed in some areas under permit, a maximum group size of 12 in all areas (except 6 in Alternative 4 Primitive Untrailed), is proposed in each of the action alternatives to help preserve solitude. The average group size in the wildernesses is currently less than 3, with only 1% of the groups larger than 10 persons. See Chapter III, Research Findings on Solitude and Mt Hood Forest Plan social Standards.

46. Open more trails to equestrians - It is unfair to restrict use on all trails but only have some trails open to equestrians. All trails should have equal access for use by equestrians. If solitude is the concern that is prompting the restrictions, then trail closures for horses should be a moot point.

Response – See response to comment 17 and 38.

47. Range of Alternatives is too narrow - Alternative 1 is unacceptable and Alternative 2 and 3 are relatively similar. There should have been a larger range of options on which the public could comment.

Response – The 1998 EA reflected the regional policy in place at the time of planning. The range of alternatives in this document incorporates research findings, as well as comments from the 1998 EA in the range of alternatives. See Chapter II, Alternatives 1 – 4.

48. Support Group Size - I support a limit on group size. Large groups are more likely to adversely impact resources and/or adversely affect my experience.

Response – This observation is supported by research on users in other wilderness areas. See Chapter III, Research Findings on Solitude.

49. Don't/can't ban permanent climbing aids - The Chief of the Forest Service instituted a moratorium on bans for permanent climbing aids like fixed anchors. The EA proposes this action in Alternative 3. Some were unclear whether or not the ban on permanent climbing aids included fixed anchors or not.

Response – The wording on permanent aids in Alternative 3 was intended to ban devices like fixed ropes, and not anchors that might be used for belay when no other safe options exist. Most climbing routes are either on snow or ice, or in areas of incompetent rock, where placement of a permanent anchor would not be practical. Remnants of fixed ropes placed in the early part of last century can still be seen on the Cooper Spur Route. In response to these comments, this standard was removed from the alternatives. A ban on fixed ropes within wilderness could be implemented administratively if needed.

50. Snowmobilers and dirt bikes are more impacting - These uses are far more impacting than hikers and yet they are not being restricted.

Response – Motorized equipment is not allowed in wilderness. See Chapter I, Existing Management Direction, Applicable Code of Federal Regulations Direction.

51. South side is the descent route for most climbers - The EA failed to address that fact that despite what route climbers use for the ascent, most of them utilize the south side climb route for the descent. There was no mention of how the use limits might be affected given this oversight.

Response – It is true that many climbing parties descend via the south side route and most climbing routes lead to the summit. The potential encounters were not counted in capacity calculations for several reasons. The capacity numbers were based on a worse case scenario already, without the additional complexities of trying to figure in how long people would climb or hike, when they would summit, how long they would stay there, which direction they might be traveling etc. It is not possible to predict the time of arrival at the summit from various routes, and if groups are descending, it is less likely they would encounter (pass) one another. It was not accounted for in the original EA, or in the numbers put forth in this document. An exception was made to limit use on individual routes and accept that encounters at the summit or on the decent route would exceed the standard. The encounter standard allows for some deviation.

52. Ensure more accurate coverage by media - These comments expressed concern about the accuracy of the media coverage and asked that the Forest try to get better coverage.

Response – The Forest Public Affairs Office and the Wilderness staff attempt to get accurate media coverage by issuing press releases, giving interviews, and providing back ground material.

53. Implement blue bag program - A blue bag program should be mandatory on the mountain climbing routes. One suggested its use in the rest of the wilderness hiking trails too.

Response – The blue bag program could be made mandatory at any time with a regulation. Currently the only climbing route with a human waste problem is the south side and since the implementation of the blue bag program, the problem has been greatly reduced through voluntary compliance. It is possible that some type of a blue bag system would be incorporated on popular hiking trails, but the current strategy is to use leave-no-trace tactics. See Chapter II, Table 2.

54. Inconsistent trails policies - The FS has abandoned and closed trails in the past or constructed new trails in wilderness and now you are proposing to reduce access to the remaining wilderness trails because they are too crowded. This is inconsistent.

Response – In the three wildernesses in this analysis, no new trails have been constructed since their designation as wilderness. Some trails have been reconstructed or relocated, and some have been abandoned. Limitations proposed on trails are to provide solitude. There are many trails within all three wildernesses that receive low use, due to the type of environment they pass through, or steepness of the grade. It is likely that these low use trails would only receive higher use if people were displaced from more popular trails and forced to use them. It is also likely that any new trails constructed in alpine meadows would soon be overcrowded. See Chapter IV, Effect on Recreation Opportunities and Wilderness Carrying Capacity

55. Make zero population growth part of plan- - The Forest Service should make zero population control or other population controls part of the plan.

Response – This is outside the scope of this document.

56. Monitor and review results of implementation– Monitoring should be a key part of the plan to ensure objectives are being met.

Response – Monitoring is part of each of the action alternatives. Priorities of what to monitor vary within the alternatives. See Chapter II, Alternatives 2-4.

57. Question how trail park funds are being spent– These people questioned whether or not trail park fees were being used to maintain trails or not.

Response – See responses to Comments 28 and 29. Eighty percent of the funds collected are to “hit the ground”. On the Mt Hood National Forest this means that funds are expended on actual trail maintenance, parking improvements, signs and bridges. The remainder of the funds go to the vendor and to cover administrative costs of the program.

58. Require locators, gear review and/or charge for rescues- Require climbers to have an MLU. Conduct a gear review similar to other locations. Charge for search and rescues.

Response – Requiring locators and gear reviews are good ideas that may be implemented as management actions. They were not specifically addressed in this plan. Gear review would be costly and may require a charge. Search and Rescue charges are also outside the scope of this document. Search and Rescue operations are conducted by County Sheriffs with assistance from volunteer rescue groups and occasionally the military.

59. Research source of noxious weeds more- We need more research to prove noxious weeds are introduced by horse manure. Noxious weeds are transported in a number of methods such a clothes, wind, cars, and wildlife. There was agreement and disagreement with the requirement to use pelletized feed for stock. One comment suggested noxious weeds should be pulled at trailheads.

Response – It is true that noxious weeds are introduced by many means, as evidenced by their presence in areas closed to horses. Horse manure is one source that has been identified. We plan to advise visitors of the many ways noxious weeds can be spread in education programs. Noxious weeds are eradicated wherever possible by a variety of means, including pulling and biological agents, in cooperation with County Agencies. Yearly plans are made on each Ranger district for noxious weed control.

60. Should not be a FONSI - Do an EIS- The proposal is so controversial that it requires an EIS.

Response – No decision has been made at this point in the process. It is therefore premature to assume a finding of no significant impact or not. The alternatives in this EA are considered minor amendments to the existing Land and Resource Management Plan for the Mt. Hood National Forest, which is an EIS. The determination of significance is the responsibility of the deciding Line Officer, in

this case the Forest Supervisor, and will be determined after the comment period for this EA.

61. Change encounter standard to be people not groups- Large groups sometimes split up. My wilderness experience is more affected by seeing ten large groups than 20 small groups.

Response – This has been done in some areas and has merit in some areas where there are frequently large groups or so many small groups close together that they tend to merge. The strategy was not incorporated into the alternative standards, because data collected was based on groups and it would have been difficult to compare among alternatives. The strategy may be considered if a limited use permit system were adopted i.e. permits available for a total number of people rather than total number of groups.

62. Do not consider declassification- Do not remove the South Side climb corridor from wilderness designation.

Response – This option was dropped from further consideration. See Chapter II.

63. Eliminate commercial flights and military training missions over wilderness- The Forest Service should ban low flying commercial and military planes over wilderness.

Response – Admittedly noise from these activities does cause disruption to many visitors. Flight rules are established by the Federal Aviation Administration (FAA), and are not within the scope of this document. The FAA has issued a 2,000 ft above ground level noise advisory for wilderness areas. Military flights are conducted according to Memorandums of Understanding. More information on overflights of wilderness can be found in the July 1992 publication Potential Impacts of Aircraft Overflights of National Forest Land, prepared pursuant to Public Law 100-91, National Park Overflights act of 1987.

64. Fewer non-profit organized training climbs and hikes- Restricting use in these wildernesses will adversely impact organized groups and their ability to educate the public and teach the public basic climbing and other skills. It will also reduce their ability to organize recreational hikes.

Response – See effects to Outfitter-Guides in Chapter IV and response to Comment 36. Proposed limits in Alternative #2 and #3, were developed to address social conditions. Alternative #4 is more responsive to this comment.

65. Impacts to state tourism and mountaineering businesses- The document did not indicate the potential impacts to tourism and mountaineering businesses. These businesses will be greatly impacted by the proposals.

Response – See effects on local economies near the end of Chapter IV. Alternative #4 was developed to mitigate these impacts.

66. No glaciated peaks outside of wilderness in NW- There are no other options for climbers. All glaciated Cascade peaks are within wilderness, currently restricted and/or within a National Park.

Response – See Chapter III, Existing condition, and Chapter I, Regional Context.

67. Review and/or rebuild the shelters in Mt. Hood Wilderness- The shelters were constructed prior to wilderness designation. These structures should be identified and reviewed for possible historic designation. There should be leeway for the Forest Service to maintain them as protection for people who find themselves in trouble.

Response – See Chapter IV, Effects on Heritage Resource section. The new standards proposed with the action alternatives would allow managers to assess whether or not structures would be maintained. Some work has been completed toward review of the structures for historic designation, but is not complete. Determination of eligibility and the future disposition of the structure are not within the scope of this document.

68. Support O/G Use - I support a percentage of the use being allocated to outfitter-guides. It allows people who could not otherwise use the wilderness or climb Mt. Hood to experience it.

Response – All alternatives allocate a portion of use to guided activities that qualify under the outfitter-guide needs assessment.

69. Designate more forest area to primitive recreation- Similar to developing more recreation opportunities outside of wilderness.

Response – See response to comment 20.

70. Develop site-specific solutions to each trails' problems- This is a one size fits all solution. Why must there be limits everywhere when there are only problems in some areas. Develop a plan that solves the problems specific to each area.

Response – Alternative 4 addresses the specific resource concerns in each area and establishes limits to protect resources in all areas, and social conditions specifically in Primitive areas. It would develop site-specific solutions tailored to individual problems in each area.

71. Disagree with wording on Mazamas in EA- The document implied that the Mazamas historically had large groups climbing since the early 1900's and that they continue. The Mazamas have limited themselves to the 12-person limit for many years and prior to being asked.

Response – The authors acknowledge and apologize that this interpretation could have been made based on fuzzy sentence structure. There was no intention to imply that Mazamas do not support and comply with group size limitations. The Mazamas were used as an example in several places because of their long-term active interest and positive influence in Mt Hood recreation. Different climbing clubs historically organized large group climbs before group size regulations took affect. While organized groups do tend to have a larger group size than other hikers and climbers, they usually are in compliance with group size limits. See response to number 61 also.

72. Don't regard Mazamas and similar groups as O/G -These groups should not be considered outfitter-guides because they are non-profit.

Response – Forest Service manual direction documents the criteria for whether or not a group or activity is considered outfitter-guided and a special use permit required. It does not distinguish between for profit and non-profit groups. Nationwide many user groups are attempting to modify the criteria, but modification of the policy is not within the scope of this document. Also see response to comment group 36.

73. Don't treat south side different than rest of wilderness. The south side should not get special treatment. It should be treated like the rest of the wilderness.

Response - This EA explores various approaches to managing the South Side Climbing area. See Chapter II, Alternatives.

74. Don't use a concessionaire for permits. Contractors or concessionaires should not collect wilderness permits fees.

Response – This document does not evaluate specifics of how a permit system might be implemented. Contractor or concession sales are methods that could be used to enable permits to be more available to the public. If a permit system was

implemented, additional public input would be sought to determine what approach would be most widely acceptable, economical, and efficient.

75. Inconsistent hiking/climbing permit system in EA - The proposed permit season in Alternative 2 is May 15 to October 15. In Alternative 3 it mentions the permit season for the south side climb is April 15 to July 15.

Response – In the 1998 EA the primary use season on the South Side WRS only, was designated April 15 to July 4 to match with the heavy use period. This was done because this is the only area of the Wilderness that receives heavy use before May on typical years. Not indicating the same season for this area in the Proposed Action was an oversight. In this EA the primary use season (season in which use restrictions apply) for all climbing activities for all alternatives is April 15 to October 15.

76. Modify trailheads. There are a number of trails I would like to hike but the roads to the trailheads are so bad I'm afraid of damaging my car. Making alternative trails easier to access would spread people around and reduce impacts.

Response – See response to number 36. It is not likely that road maintenance funding will increase in the foreseeable future. Some roads may be reconstructed. Improving road conditions was not explored as an option in this document because any road funding decisions would need to consider the effects on the total transportation system.

77. Put litter sacks at trailheads. The population needs to be educated to carry out everything that is carried in and litter sacks should be at every trailhead. Trail Park fees should be applied as necessary to trailhead refuse containers, “pack it out” signs, and litter cleanup.

Response – Leave-no-Trace education is part of every alternative. See Chapter IV, Effects on Environmental Education. Pack-it-in/pack-it-out policy applies to trails, and most trailheads. Generally trash service is not provided in an effort to reduce expenses. The amount of litter found in most areas has been greatly reduced, and currently does not pose a significant problem in almost all areas of the wildernesses studied.

78. Restrict cell phones, GPS's etc. Cell phones, GPS, and electronic devices reduce the sense of solitude and challenge. “Opportunities for...a primitive and unconfined type of recreation” should prohibit the possession of such devices.

Response – Cell phones, GPS’s and other small handheld electronic devices are allowed in wilderness by national FS policy. These devices can help reduce the number of search and rescue operations and their duration. They also have the potential to disturb others experiences. These devices also give some a false sense of security. Policies for these and other similar devices are best established at the national level for consistency.

79. Restrict hunting. Target practice is an acoustic violation to the Mt. Hood Wilderness especially at the Lolo Pass Road shooting gallery and there should be no hunting in wilderness areas.

Response –While target practice is a legitimate use of National Forest Lands, it is not encouraged in wilderness. The shooting area near Lolo Pass has been closed. Hunting during legal seasons is a valid use of wilderness.

80. Accommodate through hikers with existing PCTA permit. Long distance hikers on the Pacific Crest Trail currently may obtain one permit good for multiple National Forests and Parks. PCT through hikers should be exempt from additional permits or restrictions.

Response – PCT through hikers would be accommodated, including allowing a larger size group if they have valid permits for other wilderness areas on the trip.

81. An EIS must do a comprehensive analysis and protection plan for the Mt. Hood National Forest. This comment recommended an Environmental Impact Statement to analyze opportunities for high quality wild land recreation, water, and habitat protection on the Mt. Hood National Forest.

Response – See response to number 60. The Mt Hood Land and Resource Management Plan (Forest Plan) is further amended by the Northwest Forest Plan; also an EIS. Also see answer to number 69.

82. Analyze logging and road building to identify where these activities reduce opportunities for primitive recreation and if these developments increase pressure on wilderness by humans and wildlife.

Response – See responses to comments 7, 16, and 20. Activities outside of wilderness are analyzed in the Forest Plan, as well as individual project analyses. Effects on all intended uses of each land allocation are determined for planned activities. Effects from activities on lands outside of the three wildernesses are outside the scope of this document.

83. Analyze recreation supply/demand on entire Forest. This comment recommended an EIS analyzing recreational uses and needs on the Forest in relationship to existing and potential Wilderness Areas.

Response – See response 81 above. The scope of this document is limited to the three wilderness areas identified. These three wilderness areas are indeed part of a larger picture. The next time this larger picture will be looked at in its full scope is when the Mt Hood National Forest Land Management Plan is revised. This revision process will likely not start for a few more years. See Chapter 1, Introduction and Purpose and Need.

84. Ask organized groups to lobby Congress for more funds. Enlist groups such as the American Alpine Club, Access Fund, Mazamas, and the Sierra Club to lobby Congress for more funds.

Response – Groups like those mentioned above can lobby Congress if they so choose. It is not appropriate for the Forest Service to enlist groups to lobby.

85. Base carrying capacity on certain standards. Any action must be deferred until data can be collected and reviewed to determine the wilderness carrying capacity solitude, physical impacts, and a safe recreational activity.

Response – Data has been collected on campsite conditions, use types and levels and encounters. Carrying capacity for each of the alternatives is also addressed. Solitude opportunities and resource impacts were evaluated under all alternatives Also see response to number 6, Chapter II, Introduction, Alternative 2 – Management Action, Monitoring and Carrying Capacities, Alternative 3, Alternative 4 – Management Zone Allocations and Forest Plan Standards, Management Actions, Monitoring and Carrying Capacities, Chapter III, Affected Environment and Research Findings, Chapter IV, Effects on Recreation Opportunities and Wilderness Carrying Capacity, Table 4.1-4.5, Effects on Resource Conditions, Effects on Plants, Effects on Threatened, and Endangered and Sensitive Wildlife Species, and Recreation Report (Hall 1996) in Analysis File.

86. Concerned about trailhead security. This comment asks the Forest Service to focus on trailhead security (plus education, and improvements) instead of a permit and quota system.

Response – This analysis focused on activities and resource conditions within the three wildernesses. This is out of the scope of this document.

87. Conduct more land swaps for recreation. Federal and state lands are too far away from populated areas. Agencies should exchange lands with private owners to acquire lands nearer to population centers.

Response – See comment 20. This is out of the scope of this document.

88. Connect primitive/wild areas with corridor trails. This comment suggested building a system of motor-free trails connecting wilderness areas, primitive areas, and into all corners of the Forest to create a Forest-wide long distance trail complex. This would relieve the demand on popular wilderness sections.

Response – See comment numbers 17 (build more trails) and 83 (analyze recreation supply/demand on entire forest). More trails outside of wilderness is one of the strategies addressed in the document. It is outside the scope of this document to make specific decisions on activity outside of the wilderness. Some trails on the forest already fit the concept identified in the above comment and could be marketed. The trail system of the Forest is analyzed in the Mt Hood National Forest Land Management Plan. See Chapter I, Introduction, Chapter II, Alternative II, Management Actions, Monitoring and Carrying Capacities, Alternative III, and Alternative IV, Management Actions and Monitoring and Carrying Capacities.

89. Consider amendments to the Forest Plan to offer interim protection to unprotected wild-lands.

Response – The scope of this document only addresses the management of land in the three wilderness areas. See Chapter I, Introduction and Purpose and Need, and Chapter II, Issues Outside the Scope of this Document.

90. Continue voluntary use permit. Currently there is a voluntary permit system and we recommend that continue. A permit system that limits numbers would require enforcement taking scarce resources away from trail maintenance, etc.

Response – The four alternatives give a range of permit options. Alternative 1 would leave things basically as they are now. Alternatives two and three would require a limited use system. Alternative 4 would require limited use permits in some selected areas and would have the current self-issuing permits elsewhere. See Chapter II, Alternative 1-4, Table 2.3 and Chapter IV, Effect on Recreation Opportunities and Wilderness Carrying Capacity.

91. Create Advisory boards. Create citizen advisory boards to advise Forest managers on an ongoing basis to encourage more acceptances on the part of the public when difficult choices need to be made.

Response – The Limits of Acceptable Change process was begun in 1994 and involved several public workshops including field trips. In 1999, three public workshops were held after the initial LAC Wilderness Protection EA was issued. Over 500 people participated in these and 600 written comments were received. In addition, the Willamette Province Advisory Committee was asked to review the original Wilderness Protection EA and they provided us with recommendations. All these efforts drove the addition of alternative 4. See Chapter I, Introduction, Chapter II, Public Issues with the Original Proposed Action, Advisory Committee Recommendations, and Chapter V, Consultation with Others.

92. Decision being driven by special interests. Special interest groups such as Wilderness Watch, Wilderness Society, Sierra Club, and Outfitter-Guides are promoting their personal agendas for wilderness restrictions through the Forest Service.

Response – Every individual or group who participates by identifying issues or concerns is placing personal values into the arena. The Forest Service then considers those comments in the context of the management direction and the purpose and need identified in the document. See Chapter I, Introduction, Purpose and Need and Existing Management Direction.

93. Designate O/G climb area & other recommendations. Commercial instruction should be available to people interested in technical climbing. Such instruction must take place on suitable terrain. This letter suggests areas of suitable terrain should be designated, outfitter-guides will share these areas, and these designated instruction areas should be exempt from solitude restrictions.

Response – All of the alternatives allow for Outfitter-Guide opportunities. The number of opportunities varies by alternative. No specific areas are proposed for Outfitter-Guides, but Guiding is restricted or excluded in certain areas under the action alternatives in order to provide outstanding opportunities for solitude. See Chapter II, Alternative descriptions, and Table 2.2 as well as Chapter IV, Effects to Outfitter/Guides and Effect to Climbing Opportunities.

94. Displacement to low use areas will jeopardize use of those areas by certain wildlife species including wolverine. Restricting human use in heavily used areas will increase usage in areas where human use is currently light which may jeopardize use of those areas by certain wildlife species.

Response – Alternative 4 considers this potential impact and works to keep use low in areas where human use is currently light. See Chapter IV, Effects to Threatened, Endangered and Sensitive (TES) Species for an evaluation of effects by alternative,

or the Appendix for more detailed information in the Wildlife Biological Evaluation.

95. Don't agree with 30 on Cooper. This letter asks why the capacity for Cooper Spur and Sunshine climbing routes is greater than South Side. The writer feels 30 people on Cooper Spur route is too many and unsafe.

Response – The numbers referred to in this comment apply to alternatives two and three. The number was generated by estimating 10 encounters at the average party size for each route. The average party size on Cooper's Spur and Sunshine are larger than those on the South Side, hence, similar number of groups may be allowed but the total number of people could be larger. It is true that 30 persons on these routes may be more than would be safe. These numbers were proposed as social capacities, and climbers still need to evaluate each climb based on their own judgment. If Alternative 2 is selected and climbing demand is shifted to the Cooper Spur and Sunshine routes, a lower number of groups may be permitted, based on safety issues, and group size. Current use is low enough on these routes it does not pose this problem on most days. See Chapter 4, Effects on Recreation Opportunities and Wilderness Carrying Capacity.

96. Don't support ban on horse picketing. Picketing is a very low impact form of livestock restraint.

Response – This document does not address “a ban on horse picketing” in this document. It does talk about hobbling verses staking in given locations, but not an all-encompassing ban. There are times and locations when picketing is not the preferred low impact method. Leave No Trace practices are a part of each of the alternatives and good educational material on when to hobble, highline or picket is addressed in this information.

97. Eliminate climbing bottlenecks from organized groups. Organized groups such as the Mazamas, Mountaineers, or guided groups should not be allowed to use areas such as the bergshrund above the hogsback on South side climb to teach basics of belaying and rope work. This impacts other climbers too much and such teaching should occur elsewhere.

Response – Groups that operate under a special use permit (Outfitter/guides) have a plan that outlines where given activities are to occur. The bulk of teaching does occur elsewhere. Some nonprofit organizations are able to operate without a special use permit and their activities are not regulated anymore that a private group. Clearly teaching in an area like the bergshrund above the hogsback is not the most considerate thing to do when other climbers are on the route.

98. Encourage compliance as a tradeoff to limits. Publicize restrictions such as social trail closures and campfire prohibitions as a means to avoid limiting hiker numbers. Publicize these kinds of tradeoffs in press releases and with signing at trailheads to gain public support and compliance.

Response – Alternative 4 is focused more on physical resource impact and educating the public while the other action alternatives focus more on the social encounters. Alternative #4 is closest to what is described in the above comments. However, it could involve some limits in selected areas. See Chapter II, Alternative 4, Tables 2.2-2.3.

99. Evaluate alternatives to wilderness to meet demand for non-motorized, primitive recreation.

Response – See response to comment #20. The scope of this document is limited to actions taken within the three wilderness areas. Alternatives 2,3 &4 all propose promoting more recreational opportunities outside of wilderness. See comment number 17 (increase trails) and 83 (analyze recreation supply/demand). Also see Chapter II, Alternatives 2-4, and Chapter IV, Effects of Recreation Opportunities and Wilderness Carrying Capacity.

100. Expand wilderness areas to unprotected areas before limiting use to high use areas.

Response – See response to comment #20. See discussion in “Issues raised outside the scope of this document” in Chapter II of the EA.

101. Fish stocking recommendations. This comment disagrees with leaving lakes and streams, which were naturally fishless at the time of wilderness designation as fishless.

Response – The Forest Service is responsible for managing aquatic habitat and recreational fishing associated access and developments. The Oregon Dept of Fish and Wildlife is responsible for fish and aquatic populations, including fish stocking. The no action alternative is the alternative that allows barren lakes to be considered for stocking. The other three alternatives recommend they should remain un-stocked. See Chapter IV, Alternative Effects on Recreational Fisheries, and Appendix A, Standards and Guidelines, E. Wildlife and Fisheries, #6 & 7.

102. Give free Trail Park pass to those who pass a wild exam. This comment suggests offering discounts or free passes to hikers who complete a wilderness-training course. Include trail maintenance as part of the course.

Response – This is outside the scope of this document.

103. Identify, maintain and protect existing trails from logging, and other impacts.

Response – Logging is not permitted in federally designated wilderness areas. In addition, each trail that was identified in the Mt Hood National Forest Land Management Plan (LMP) has a visual standard that gives it a specific level of view-shed protection. This document does not propose to change this component of the LMP. *See Chapter I, Purpose and Need, Existing Management Direction*

104. Implement a seasonal horse restriction if needed, not total closure. If trail conditions at certain times of the year are sensitive to equestrian impacts then they should be closed seasonally rather than year round.

Response – See response to comment #17 and #38, and Chapter III, Research Findings on Vegetation and Soil Impact From Recreation Use, Trail Deterioration.

105. Improve access roads to low use trails to encourage use of under-used trails.

Response – Improving access or leaving access roads in a more primitive condition can be tools to either encourage or not encourage additional use at a particular trail – depending on the management objectives. Alternatives that limit use in high use areas, may improve access to some lower used trailheads if possible to allow some alternatives to full quota destinations. Alternative #4 that seeks to maintain primitive character of low use trailheads, so would not improve access for the purpose of making it easier for more people to access the trailhead. Note: Some roads get improved for reasons other than wilderness access. Improving or removing directional trailhead signing can also be used to either encourage or not encourage more use at a destination.

See Chapter II, Alternatives 1-4, Maps and Tables 2.2-2.3, Chapter III, and Chapter IV, Effects on Recreation Opportunities and Wilderness Carrying Capacity.

106. Include LAC data on resource impacts. The EA provides no information on the environmental impacts of hikers and equestrians. Why aren't figures from the LAC analysis presented?

Response – Refer to the following section of the document to find this information: Chapter III, Research Findings on Vegetation and Soil Impact from Recreation Use, Inventoried Resource Conditions Within Mt Hood, Salmon-Huckleberry and Hatfield Wildernesses, Tables 3.2 and 3.3, Campsite Conditions, and the Recreation report (Hall, 1996) in the Analysis File.

107. Inconsistent rule enforcement and interpretation. I have encountered many people on the trails. The contacts I remember the most are those contacts with the Forest Service. What makes these encounters memorable was the inconsistency of the rangers' interpretations of the "rules".

Response –Official regulations, known as CFR's, regarding use within a specific wilderness are posted at the trailheads or at the wilderness boundary. The rules are based upon national policy, as well as specific standards and guidelines in the Forest Plan. The standards and guidelines proposed by alternative are in the appendix of this document. As is stated in purpose and need number 4 in Chapter I, some of the specific regulations in these three wildernesses are difficult or unrealistic to enforce, and have the potential of causing more resource problems than they solve.

Wilderness Rangers are trained in the recognition of violations and law enforcement. They are also empowered to use their own discretion as to enforcement in most cases, considering the experience and knowledge of the hiker, the seriousness of the offence, and their personal safety. An attempt is made to make every encounter a positive one, and favor education over enforcement. Regulations do vary on different wilderness areas. If a visitor experiences what they feel is inconsistent interpretation in the same wilderness, they should express their concern to that wilderness guard. If the guard does not give the visitor a reasonable response, they should ask the wilderness guard for the name of a wilderness manager to contact.

108. Increase fees to O/G, large groups, snowmobiles and timber industries. I am against the institution of fees but if fees must be instituted then start with those who have the highest impact. Consider the inequity of a full-sized van full of people paying the same fee to park as one individual must pay.

Response – This is outside the scope of this document. Fees are assessed to Outfitter-Guides based on the type of permit and volume of use, and are separate from trail park fees. Snowmobiles and logging are not permitted uses within the wilderness.

109. Increase public awareness of budgets. Increase the public awareness of decreases in the budget for maintenance of trails and wilderness management.

Response – This is outside the scope of this document. Forest Service budget information is open for public review. Explanations of the trail park pass program have included explanations about reduced budgets.

110. Install a surveillance system to monitor use of trails.

Response –Trail counters that tell us the volume of use a trail is getting have been used in some areas and may be used in the future. A surveillance system similar to those in use as security systems in private business is not practical, due to weather, the number of trails, and the cost of such a system.

111. Inventory and analyze backcountry and primitive recreation opportunities outside of wilderness.

Response – See Response to Comment #20. Utilizing recreational opportunities outside of wilderness is a strategy addressed in this document. The Mt Hood National Forest Land Management Plan did summarize the recreation opportunities on the Mt Hood National Forest in 1990. This plan will begin revision in a few years and will look at the big picture again. See Chapter I, Existing Management Direction, Chapter II, Alternatives 2-4 and Issues Raised but Outside the Scope of this Document.

112. Limit grazing also. This EA is inadequate because it lacks an analysis of the detrimental effects of grazing and fails to recommend restrictions or prohibitions of grazing within these Wilderness areas.

Response - No grazing occurs in any of the wilderness areas addressed in this document.

113. Past FS mismanagement has led to this problem. Once the Forest Service had many resources to manage but too few lands were protected and preserved as wilderness.

Response - This concern is beyond the scope of this document. See Chapter I, Purpose and Need and Existing Management Direction.

114. Primary goal of plan should be protection of wildlife habitat for species that require relative solitude.

Response - Existing Management Direction in the Mt Hood National Forest Land Management Plan includes protection of wildlife habitat. The purposes and needs identified in this document do not include consideration for species that require relative solitude above and beyond those standards and guidelines, which already exist. A biological evaluation on effects each of the four alternatives would have on Threatened, Endangered and Sensitive Wildlife Species is included in this document. See Chapter I, Purpose and Need and Existing Management Direction

and Chapter IV, Effect of Alternatives on Threatened, Endangered and Sensitive Wildlife Species, Appendix B – Standards and Guidelines, and the analysis file.

115. Primitive Untrailed WROS is inappropriate. This comment notes that under the preferred alternative about two-thirds of wilderness would be reclassified to primitive untrailed. In effect under this category a hiker can only encounter one other group or the area is out of compliance. Such a classification makes no sense in light of predicted increases of use over current heavy use.

Response- The Primitive Untrailed WROS classification is added for the very reason that demand for wilderness is predicted to increase. The Wilderness Act directs the Forest Service to manage these wilderness areas in such a way as provide for and protect “outstanding opportunities for solitude or primitive and unconfined recreation”. The Primitive Untrailed areas play a key role in insuring that this opportunity can be provided. Wilderness also has a role beyond that of providing recreational opportunities and protecting untrailed areas provide the important areas of refuge for wildlife sensitive to humans. See Chapter I, Existing Management Direction and Purpose and Need.

116. Protect wilderness and wild areas adjacent to wilderness from increasing use of motorized equipment and helicopters.

Response - Only primitive travel is permitted in federally designated wilderness areas. Recreational use of motorized equipment is not permitted. Administrative use of motorized equipment or aircraft (chainsaws for clearing logs across the trails or helicopter use for a rescue for example) is rarely used and requires site-specific permission from the Forest Supervisor or Regional Forester. Areas outside of the three wildernesses are outside the scope of this document, however effects to wilderness are considered in any actions taken on lands adjacent to wilderness. See Chapter I, Existing Management Direction.

117. Pursue partnership funding for recreation. There is a strong constituency for wilderness site restoration yet this resource goes largely untapped.

Response - The four alternatives have a range of the role that partnerships would be involved. Alternative 4 involves the most intensive use of partners. See Chapter II, Alternatives 1-4, and Chapter IV, Alternative Effects on Wilderness Education and Partnership Efforts.

118. Questions what will be done with Summit encounters. What would be done about encounters at the summit of Mt. Hood where you have so many routes coming together?

Response – See Response to Comment #51..

117. Recommend actions for more research. The Forest Service should proceed no further toward rationing wilderness access until it objectively can document public support and scientific justification for such a move.

Response - Alternative #4, was developed in response to the concern expressed by the public to the original proposed action limiting use and incorporated the most recent wilderness research. Objectives of meeting social standards in Alternatives #2, #3, and within primitive zones in Alternative #4, are based on existing social science research on hikers preferences for encounters with other groups in wilderness. From the feedback on the first EA, it is obvious that most of those responding would prefer to have more encounters on trails than this research indicates, if it meant that their use could be restricted. This could be a result of the predominantly day use of these wildernesses. It is also likely that the social surveys done to develop a six to ten encounter range may not have evaluated responses assuming use could be limited based on responses. Alternative #4 proposes additional visitor use analysis to assess preferences and tolerances of users to these wildernesses. All wilderness standards, both social and biophysical, are human placed limits of acceptable change of wilderness conditions. See Chapter II, Alternative 2, Public Issues with the Original Proposed Action and Alternatives 4, Chapter III, Affected Environment and Research Findings and Chapter IV, Effects on Recreation Opportunities and Wilderness Carrying Capacity.

118. Require a permit system with an exam to educate. This comment suggests a permit system like the present system but including an exam that serves to educate the users to the rules/regulations of the Wilderness and the reasoning behind those stipulations.

Response - Education is a focal point in some of the alternatives. The current self-issuing permit asks the visitor to confirm that they have read the regulation on the back of the permit. No exam format, either self-test or agency administered, was addressed in the document. Ideas for expanded education efforts include self-administered leave no trace “quizzes” in brochure and web-site formats.

119. Require pelletized feed.

Response – All alternatives encourage use of pelletized feed. Code of Federal Regulations have been implemented to require the use of pelletized feed, based on the favorable response during LAC and in other public meetings. See Chapter II, Alternatives 2-4, Table 2.2, Chapter IV, Effects on Noxious Weeds, and Appendix B.

120. Reveal impacts to unprotected wilderness areas from restricting wilderness access.

Response – The EA has documented the potential displacement effects of low use primitive areas within the three wildernesses. It has also indicated potential displacement targets outside of wilderness. Most of the displacement is expected to occur within the existing wildernesses. See Chapter II, Purpose and Need.

121. Review roads policy and road mgt. decisions to determine potential impact to wilderness.

Response – Road policy is beyond the scope of this document. A road management framework for the Forest is contained in the Forest Access and Travel Management Plan. Individual road management decisions involving construction, closure, or decommissioning are assessed on a project level basis. Both processes consider impacts to wilderness, as well as many other factors.

122. Set LAC for erosion. Some erosion caused by humans should be expected and tolerated. To insure our perspective we should compare erosion from human use to that caused by nature. Nature by itself dramatically causes more erosion than humans. Whether human caused erosion is critical is questionable and should be objectively assessed.

Response – Large amounts of sediment do enter watercourses as the result of natural events. Most of these events however, are in a storm cycle and high waters cleanse the spawning gravels of silt, and move sediment through pools down to stream deltas. The type of erosion resulting from vegetation loss and soil compaction from recreation use occurs year round. This damage represents a very small percentage of the overall wilderness riparian acreage and is within the range of natural variability. While this damage does not cause impacts on a watershed scale, they adversely affect riparian and aquatic habitat, and water quality on a micro-site scale. They also have aesthetic impacts to visitors who prefer to see relatively natural settings within wilderness. The proposed standards in the alternatives propose an acceptable limit of bare ground, etc. See Chapter III, Affected Environment and Research Findings.

123. Tax other extractive industries. Instead of taxing recreationists assess a user tax on consumptive private business such as timber, grazing, fishing, and mining.

Response – See responses to comments #7 and #16. This is beyond the scope of this document. See Chapter I, Purpose and Need.

124. The Act is more flexible than regional standards direct. The drafters of the Act appear to have had more common sense than those who put the Forest Service wilderness planning model and standards in place at the regional and national level.

Response – Modifying National and Regional Forest Service policy is beyond the scope of this document. This document only addresses three local wilderness areas. Since the release of the original Wilderness Protection EA, much discussion has taken place about the issue that this comment notes. Some of the Regional standards have expired since the release of the original document. In addition, national wilderness staff have documented an analysis that incorporates the most recent wilderness research, existing management direction, and public input on the issue of recreational use within wildernesses. This document presents a wider range of alternatives than the original EA did. The new alternative 4 allows for more flexibility based on among other things, the new wilderness analysis done at the national level. See Chapter I Existing Management Direction, and Chapter II, alternative 4.

125. The EA fails to identify trails and alternative opportunities for solitude for those displaced.

Response – Both the previous EA and this EA outline the amount of use displaced on popular areas and the amount of surplus capacity (or alternative opportunities) on the low use wilderness trails and climbing routes. The EA also discusses the limitations of some of these more challenging wilderness trails. The EA also acknowledges that there are few National Forest, non-wilderness opportunities for day hikers and mentions non-wilderness opportunities off National Forest lands. See Chapter II, Public Issues with the Original Proposed Action, and Chapter IV, Effects on Recreation Opportunities and Wilderness Carrying Capacity.

126. Use Internet and web pages more for education and information. Focus the web page on details to help people make better decisions about where and when they should hike to achieve their wilderness objectives.

Response - Education and marketing efforts under all the action alternatives would expand the use of the Forest web site to help encourage use of areas outside of wilderness, educate user about leave no trace, while meeting visitors recreation needs. See Chapter II, Alternatives 2-4, and Chapter IV, Effects on Recreation Opportunities and Wilderness Carrying Capacity.

127. Use limits not needed for safety on climbing routes. The South Side climb has ample, open terrain for a large number of climbers. Only near the top above the Hog's Back is there a delay and this delay does not impose a safety threat.

Response – Use limits proposed in the original EA were not based on safety issues. They were based on social standards. It is unlikely that the Forest would propose a use limit based on safety as it could be assumed that use levels within that range were “safe”. Climbing can be risky at all times regardless of the number of users on the route if climbers are unprepared, unskilled, or not taking standard safety precautions. It is true that climbers tired of waiting for bottlenecks like the Hog’s Back to clear, can sometimes engage in risky climbing behavior. Each climber is responsible for their own behavior given the conditions on the route. Increasing education, comments from peers on the route or increased patrol could reduce this behavior. If this risky behavior rose to problematic levels in the future, the Forest could ask the climbing community to assess whether or not a certain period of waiting results in increased risky behavior and then try to manage at that level in the future. Additional analysis would be done before those actions were taken.

128. Use limits will lead to increased conflicts between users. If you limit use and don’t provide added space for people to go, the more you confine user groups, and create conflicts between the different groups like hikers, mountain bikers, motorcycles, and horses.

Response – There are few mountain bike, motorcycle or equestrian trails outside of wilderness, on National Forest land, and within a day hike distance of the Portland-metro area. However, there are more of these type of trails off National Forest lands within a day hike distance. User conflicts could occur, as a result of limited use in Alternatives #2 and #3 because use could increase on those areas outside of wilderness that allow mountain bikes and motorcycles. User conflicts could also occur where use along a trail remains high as social crowding can increase conflicts. All of the action alternatives involve requesting funding for future development of alternatives outside of wilderness. See Chapter IV, Effects of Recreational Opportunities and Wilderness Carrying Capacity.

129. Wilderness Act is not easily translated to standards and regulations. I understand the difficulty of legislating poetic and prosaic language, which is the defining language of the Wilderness Act. To be successful, managers should listen carefully to the poets and current users and then exercise much wisdom and a lot of flexibility.

Response - Alternative #4 allows for more flexibility than Alternatives #2 and #3. See Chapter II, Alternative 4.

130. Review opportunities for suitability of non-motorized recreation.

Response - See comment number 83 as it is very similar in scope.

Comments Supportive of the Proposed Action

131. Necessary for Resource Protection - I have seen the abuse that has been inflicted as a result of the large number of users and restricting access is the only way to fix and restore impacted areas.

Response – Use limits proposed in the original EA (Alternatives #2 and #3, were primarily based on social standards in the Forest Plan but are most responsive to this comment. User behavior is a more of a contributing factor to resource impacts than use levels. However, the greater the use levels, the more impactful behavior could be expected. Many of the resource impacts documented in the process were inflicted in the past, when overnight use was much higher, and knowledge of leave no trace practices much lower. Successful restoration of impacted areas require more than just reducing use levels. It requires complete and permanent closure of the site (occasional use can greatly set back recovery rates). High elevation sites can take decades or more to recover. Low elevation sites require less time. Natural restoration takes much longer. Site preparation (scarification of compacted soils) and planting species adapted to the site can increase recovery rates. Alternative #4 focuses on user education and site restoration. See Chapter II Description of Alternatives, Research findings on Vegetation and Soil from Recreation use in Chapter III, and Effects to Resources in Chapter IV.

132. Crowds - I support the recommendations because I have experienced crowds in the wilderness and it adversely affects my experience. I would prefer to see fewer people even if it means I cannot always get a permit when and where I want to go.

Response – Alternative #2 the original proposed action, best responds to this comment. See Chapter II Description of Alternatives and Chapter IV Effects on Solitude and Carrying Capacity.

133. Consistent with Act - Your recommendations are consistent with the Wilderness Act. Wilderness was designated for much more than just human use and recreation. Humans should be subordinate to wilderness.

Response – All action alternatives in this EA were designed to be consistent with the Wilderness Act.

134. Solitude is Important - Solitude is an important part of my wilderness experience.

Response – Outstanding opportunities for solitude are provided in different ways with each action Alternative in this EA. See Research findings on Solitude in

Chapter III, and Effects on Recreation Opportunities and Carrying Capacity in Chapter section IV.

135. Increasing populations - As our population increases, it will inevitably be necessary to restrict use in wilderness.

Response - Limits to use are proposed with each action Alternative. Alternatives two and three focus on social standards, and Alternative 4 focuses on resource standards and individual site carrying capacities for setting limits on use. See descriptions of alternatives two, three and four in Chapter II, and Effects on Recreation Opportunities and Carrying Capacity in Chapter section IV.

135. Ban snow-cat rides to top of Palmer. Any change to climbing regulations must include the total elimination of the snow cat shuttle service. Mechanized transport is contrary to any legitimate climbing ethic, promotes overcrowding, and is noisy. By reducing the elevation gain the shuttle effectively makes the South Side climb a “Disneyland” attraction.

Response – Mechanized transport outside of wilderness is an appropriate use in an area dedicated to developed winter recreation. The shuttle service is covered under the Timberline Special Use Permit, not in this EA.

136. Comparison with Other Uses – This comment compared use restrictions with restrictions on timber harvest, grazing, etc. as necessary to protect the resources.

Response – This comment supports the strategy in the original proposed action, alternative #2.

137. Don’t support designated sites. I believe that designated campsites are illegal in wilderness. Designating sites reduces spontaneity and the unconfined recreation experience essential to Wilderness recreation. If use levels are controlled, such heavy-handed measures will mitigate the impacts of too many users and/or inappropriate use.

Response – Designated sites were identified as the most appropriate management action to address resource impacts from campsites. See Research Findings on Vegetation and Soil from Recreation use in Chapter III, and Effects to Resources in Chapter IV. The majority of people in LAC workshops supported designated sites, and claimed it did not detract from their unconfined recreation experience. Only 15% of the use in these wildernesses is overnight use. Use restrictions proposed in Alternatives #2 and #3 would not reduce overnight camping greatly, if campers were more likely to get limited use permits ahead of time. Designated sites are only

used in areas where there is concentrated use, or resource concerns exist. The majority of the wilderness remains open to camping in all of the alternatives.

138. Editing comments on EA. Several letters suggested citing additional text from the Wilderness Act, as well as rewording purpose and needs statements.

Response – Purpose and Needs statements are reworded in this EA. No additional text from the Wilderness Act is cited.

139. Needed for safety reasons (south side). It is dangerous to be on the South Side climb on those days when there are 3-400 people climbing because you need to get to the summit and back down early in the day. I support restricting numbers to provide for safety but not numbers as low as proposed in the EA.

Response – The Forest has not regulated use for reasons of safety and does not propose to do so in this EA. Climbing safety needs to be assessed by each party based on conditions, their experience, and other parties on the route.

140. Close and rehabilitate all campsites within 200’ of water. All the research I have seen indicates a minimum filter of 200 feet is needed between campsites, stock holding areas, and water. If a campsite can’t be located at least 200 feet from water then it should be closed and rehabilitated. I do not believe you should abandon the 200 feet setback requirement for campsite location.

Response – The existing Forest Plan standards require a set back of 200 feet where physically possible. The proposed changes to standards would either designate campsites within 100 feet if they are on durable surfaces or could be improved to mitigate resource impacts, or close and rehabilitate them. Camping would not be permitted within 100 feet of streams and 300 feet of lakes unless in a designated site. Required set backs across the country vary from 100 to 200 feet, usually depending on vegetation and terrain. Much of the terrain in these wildernesses is steeply incised drainages, where the only reasonably flat ground to camp on exists within 200 feet of water. Leave no trace messages will continue to advocate 200-foot setbacks where it is physically possible and low impact camping techniques to reduce impacts within that zone. See discussion in campsite conditions in Chapter III, and Effects on Resource Conditions in chapter IV, and the analysis file. The changes to setbacks proposed in the EA were reviewed and effects assessed by the Interdisciplinary Team, which included hydrologists and fisheries biologists.

141. Comparison with Other Areas - These comments made comparisons with other areas including National Parks where restrictions were acceptable and/or improved the visitors' experiences. Some suggested patterning the restrictions after specific areas.

Response – These comments support the use limits proposed by Alternatives #2 and #3 in the EA. The recommendations will be reviewed to see if specifics are applicable if a limited use permit system is implemented.

142. Consider solitude as a wilderness resource too. The wilderness act refers to the “resource of wilderness”. That wilderness resource includes social and physical characteristics and often the two are inseparable.

Response – The document describes where social and biophysical resource conditions overlap and where they tend to be more independent of each other. See Research findings on Solitude in Chapter III, and Effects on Recreation Opportunities and Carrying Capacity and resource effects in Chapter section IV.

143. Develop specific standards and monitoring for low use areas. Reducing use in some areas may displace users and their impacts to other parts of the Wilderness. Standards and monitoring of current low-use areas are therefore required to ensure non-degradation including bare soil, damaged vegetation, braided trails, and number of encounters.

Response – The action alternatives describe different approaches and emphasis with regards to monitoring low use areas. Alternatives #2 and #3, place a lower priority on monitoring primitive areas. Alternative #4 places a high priority on monitoring primitive zones. See alternative descriptions in chapter II, and Standards and Guidelines section. Standards and emphasis on monitoring vary by alternative.

144. Did not include standard for impacts to wildlife. I was at the public workshops and one issue that received general support was the need for a standard to measure impact on wildlife and wildlife habitat. There is no standard in this EA to evaluate wilderness use impacts on wildlife.

Response – Comments on this subject at the workshops were suggestions to set use limits based on wildlife. The problems that occur with this approach are numerous, the largest being which wildlife? Slugs and wolverines have much different assumed tolerances for humans. These differences presumably vary by time of year and by individuals. Wildlife tolerance of humans probably also vary by user behavior including noise and pets. Wildlife with the least tolerance, have probably already displaced out of the popular areas, or avoid trail corridors making it

difficult to assess their behavior or reactions based on different levels of humans. It is not possible to say that 24 people on the trail are acceptable, and 32 people are not acceptable levels for “wildlife”. Instead, the action alternatives try to protect wildlife habitat. Standards that measure impacts to wildlife are contained in the Forest Plan in the Forest Wide Standards and Guidelines section, as well as the Northwest Forest Plan. Standards specific to wilderness are contained in the standards and guidelines section of this EA. Certain wildlife are also protected under the Endangered Species Act. A standard was added in Alternative #4 to ensure that prescriptions developed for establishing carrying capacities, designated sites, site closures and restoration plans incorporate objectives to minimize conflicts between recreational users and fish and wildlife.

145. Disagrees there will be loss of public support. Limited entry systems in the High Sierra Wildernesses, CA, many national parks, and popular wild and scenic rivers haven’t diminished support for those programs. It seems once a program is up and running smoothly public support remains strong.

Response – The majority of respondents to the proposed action indicated they would not support limited entry. See Public Issues with the Proposed Alternative section in Chapter II. The view that the system may be accepted and supported over time is expressed in Chapter IV in Effects to Recreation Opportunities and Carrying Capacity section. Many of the locations with limited use permits are backpacking or river running destinations that require planning lead-time, which may account for the increased support. Few areas have day use limited permit systems in place, and of the ones that do; there are many alternative day hiking destinations outside permitted areas.

146. EA does not make a compelling need for outfitter-guide. Given that non-commercial demand greatly exceeds total supply, it’s difficult to contemplate any need for commercial services in these Wildernesses. The Wilderness Act does not speak to a need to provide opportunities for commercial enterprises. Under no condition should commercial interests be granted a fixed allocation of use.

Response – The need for a particular type of guiding activity is determined in the Mt Hood Outfitter-Guide Needs Analysis, not in this document. See Effects to Outfitter-Guides in Chapter IV. Outfitter-Guides are not granted a fixed allocation under the proposals, instead a maximum percentage of total use per alternative is proposed.

147. Incorporate suggested standards for exposed mineral soil. A standard limiting bare soil exposure to a maximum of 300 feet per destination area needs to be developed. Your proposal of 1000 square foot of bare ground is too large. 400 square

feet is only unrealistic if you allow party sizes too large for the campsite's physical resources.

Response – The proposed sizes for campsites are maximums. Individual site prescriptions in designated sites would have size limits identified, based on the terrain, type of use, etc. with the objective of minimizing site size. Only a few sites in each destination would be designated as group sites to accommodate larger groups, which are the exception in these three wildernesses. See Alternative Effects on Resource Conditions in Chapter IV.

148. Maintain Recreation Visitor Days (RVD's) as measurement and use People Per Day (PPD). Wilderness use historically has been reported in Recreation Visitor Days (RVDs). This reporting should be continued to maintain consistency with historical measurements. Person's Per Day (PPD) can also be used to define and report capacity and use. PPD figures can be converted to RVD's by formula.

Response – RVD's may still be used to report wilderness use, regardless of how capacity is defined. RVD's would not be the measurement for setting capacity. See purpose and Need number five in Chapter I, and Effects on Recreation Opportunities and Carrying Capacity section in Chapter IV.

149. Meet all standards 100% of the time. Due to the mandatory permit you will have complete control over use, therefore, you should plan to meet encounter standards 100% of the time.

Response – The goal under Alternatives #2 and #3 would be to meet standards 80% of weekends and 95% of weekdays. There are many challenges in determining how many permits can be issued for a destination, and stay within the standards, especially where there are multiple trails to certain areas, high day use, and people who go early, leave early, go late and leave late. For example, the EA portrayed a worse case scenario that if the encounter standard for primitive zones was 6 groups per day, then 7 group permits would be issued. If the permit system were implemented, the intent would be to issue as many permits as possible within standards. This would require an iterative evaluation process and monitoring. Wilderness staff would monitor average encounter rates based on 7 permits per day, 8 permits, 9 permits, etc. until the maximum number of permits could be issued while still staying within the 6 encounter standard. Because of the complexities, and the intent to issue as many permits within the social standards as possible, it is likely that in some places, at some times, encounter standards would be exceeded slightly. As a result, it is more realistic to expect that the permit system would operate at something less than perfect levels. See Standards and Guidelines section.

150. People can go elsewhere - Wilderness users can go to more developed recreation areas outside of wilderness if they don't want to be limited.

Response – As discussed in the EA, much of the land base within a day hike distance to the Portland-metro area is either within the Bull Run Watershed, or one of the three wildernesses. All of the action alternatives would increase marketing of non-wilderness recreation opportunities. See Local and Regional Context section in Chapter I, and Effects on Recreation Opportunities and Carrying Capacity section in Chapter IV.

151. Precedence - To not manage this area for wilderness values including solitude could set precedence for not managing recreation problems in other wilderness areas.

Response – The area is managed for wilderness values including solitude, under each of the action alternatives. Solitude is protected in a different manner with each action alternative. See Effects on Recreation Opportunities and Carrying Capacity section in Chapter IV.

152. Insufficient analysis for the fire standards. Develop a fire plan. These comments support moving toward low-impact fire suppression tactics and preparing a fire management plan. The fire management plan should accommodate natural ignition allowing fire to play its natural role, but management-ignited fires should not be allowed.

Response – The Standards proposed for fire in this EA would allow a fire management plan to be developed without having to amend the Forest Plan again. The decision to use management ignition would only be done after careful analysis. Forest Service direction for management ignition is that it only be used in wilderness where necessary to prepare an area to support natural ignition. An example would be an under burn near a wilderness boundary so that a natural ignition would be less likely to escape to non-wilderness lands.

153. Reduce group size where needed. If group sizes increase to the maximum allowed then overall use might not decline. Group size standards need to be reduced and a standard for total number of encounters with individuals as well as groups needs to be included.

Response – This possibility is discussed in Effects on Recreation Opportunities and Carrying Capacity section in Chapter IV. It is unlikely that group sizes could grow to the point of existing use levels under a limited use permit system. However, even if many groups were approaching 12 heartbeats, this would still be within the wilderness standard for group encounters. The group size standard of 12 heartbeats

is smaller than many other wildernesses. There is not a proposal to set a total individual encounter limit as well as a total group limit under Alternative #2 or #3.

154. Reduce impacted campsite size limits. Large patches of bare ground are generally an indication of inappropriate stock use, too-large group sizes, or just simply too many users to that a site never gets rest. Impacts should not persist from year to year.

Response – Research indicates that most impacts occur with relatively little repeated use over several years. Bare ground can result from a variety of situations, and may persist for a long time, especially at higher elevations. It is actually less impactful overall to accept some permanent bare ground in some sites, rather than try to rest them and impact new ground. If group size limit is 12 heartbeats, there needs to be at least some sites that can accommodate that size group, with the corresponding larger areas of bare ground. See Research Findings on Vegetation and Soil Impacts from Recreation Use in Chapter III and Alternative Effects on Resource Conditions in Chapter IV.

155. Require, don't encourage pelletized feed (certified weed-seed free). Stock users must be required to use pelletized feed, and should be encouraged to feed pelletized feed for several days before entering the Wilderness to prevent weeds from being brought into the Wilderness in stock manure.

Response – All action alternatives would encourage use of pelletized feed. A Code of Federal Regulations have already been implemented to require it. See response to comment number 119. Pelletized feed may not be weed seed free, but it is better utilized by stock, so less is left at a site. Certified weed free feed may not be currently available in Oregon, but may be in the future.

156. Restore wilderness values where they are lacking. You are not required to allow the use and impact that existed at time of wilderness classification. Policy requires you keep it at least as wild and requires restoration of wilderness values where necessary.

Response – The three action alternatives propose different ways to retain and restore wilderness values. In the analysis, effects to the wilderness as a whole from management of recreation and other factors are considered. The desired future condition of the wildernesses is defined by the Wilderness Recreation Spectrum descriptions and Standards and Guidelines, and the land allocated to each WRS in the maps in Chapter II. Chapter IV describes overall wilderness character and conditions. Also see Research findings on Solitude in Chapter III and Effects on Recreation Opportunities and Carrying Capacity section in Chapter IV.

157. Allow exceptions of use limits for groups such as scouts.

Response – The only exception proposed to group size limits is PCT through-travelers that have a valid permit from other forests for a larger group size (very rare). All other groups are limited to 12 heartbeats in UMA's and Primitive Trailed Zones, and to 6 heartbeats in Primitive Untrailed. Large groups can have correspondingly larger impacts as the EA documents. Wilderness education efforts towards groups such as Scouts should stress leave no trace, low impact camping, and explain the potential resource impacts of traveling in large groups in wilderness. There is plenty of opportunity for multiple small groups (for example 3 groups of 6) to travel and camp separately and still meet group objectives for the outing. If group objectives cannot be met this way, then the groups should consider visiting sites outside of wilderness, perhaps in a campground, or other site that could accommodate a large group without resource impacts.

158. Close the mountain to climbing on unsafe days.

Response – The determination of climbing safety is left up to the individual party, as a part of the challenge and risk associated with wilderness.

159. Designating sacrifice areas is a researcher's political judgment that the public will not accept the level of restrictions necessary to bring high-use areas into compliance with traditional Wilderness management standards.

Response – No sacrifice areas are being designated. Areas with higher use would be designated Use Management Areas in Alternative #4, and Semi-primitive Trailed in Alternatives #2 and #3, and would retain wilderness values as defined in the Wilderness Recreation Spectrum description and Standards and Guidelines in the appendix. The research being referred to, was based on the increased biophysical resource impacts created in primitive areas as a result of displacement of use from more popular destinations being limited for social impacts. See Chapter I, Purpose and Need, Chapter II Description of alternatives, Chapter III in its entirety, Chapter IV, social and resource effects, Appendices for Standards and Guidelines, Wilderness Recreation Spectrum Descriptions, and National Strategy briefing papers.

160. Develop standards for both campsites and travel ways. To ensure the non-degradation policy for wilderness is met specific standards and monitoring of current low-use areas are needed to deal with bare soil, damaged vegetation, braided trails, and number of encounters at both campsites and travel ways.

Response – No biophysical standards for travel ways (system trails) are proposed in this document. As is discussed in Research Findings on Vegetation and Soil Impacts from Recreation Use in Chapter III, impacts to vegetation and soil on travel ways is generally the result of problems in trail location, or maintenance. There are extensive standards for trail construction and maintenance in Forest Service Manuals and Handbooks so it is felt there is no need to develop more standards at this time. A Standard for the number of user trails associated with a camp or day use site has been added to the standards with this EA. There are standards for encounters, bare soil, and damage to vegetation associated with low-use areas in all of the alternatives in the Standard and Guidelines section of this EA in the analysis file.

161. Did not include issues of solitude advocates. The EA failed to document solitude issues raised at the public workshops by wilderness resource advocates.

Response – The purpose and need for action emphasize the need to provide and protect solitude. The original proposed action (Alternative #2) was designed to incorporate most of the solitude comments at the public workshop. The issues outlined after the description of Alternative #2, are issues with the proposed action.

162. Disagree that limiting users needs to be balanced against reducing physical impacts. We do not believe the discussion under the heading “Ongoing Wilderness Research Findings on Use and Impacts” is accurate, presented in context, or consistent with the Wilderness Act. It incorrectly separates social and resource impacts as though social characteristics are inferior and are not a part of the wilderness resource. It assumes the social value of Wilderness increases with the number of users. We suggest that the quality of a wilderness experience is inversely related to the number of other users encountered. It isn’t a matter of trading off social values against soil, vegetation, wildlife or other physical impacts as much as reducing use may be a win-win for all resources.

Response – The social aspect of a wilderness experience is discussed in the 1998 EA and this EA. Social and resource aspects of wilderness are considered in the development of all alternatives. The effects to social aspects are discussed in Effects on Recreation Opportunities and Wilderness Carrying Capacity in Chapter IV.

163. Disagree with hardening of sites for more use. Once you start hardening wilderness you violate the letter and intent of the Wilderness Act.

Response – Hardening is a term that could be misinterpreted. The intent is to make site improvements that would correct problems, mitigate resource impacts, and make a site or trail more durable to existing use. Improving drainage or user trails,

installing check dams, rock steps, or natural barriers, are examples of improvements that could be done within the WRS setting. Designated campsites are proposed in some areas under all action alternatives. The intent would be to designate existing durable campsites that do not have ongoing resource problems. Where that is not possible, “hardening” or site improvements may be done to protect streams and lakes from erosion and contain soil compaction and loss of vegetation to as small an area as possible by providing a comfortable and serviceable campsite. See Research Findings on Vegetation and Soil Impacts from Recreation Use in Chapter III and Alternative Effects on Resource Conditions in Chapter IV.

164. Distinguish between horse and hiker impacts. The EA does not distinguish between stock and hiker impacts. Where damage to soils and vegetation requires management actions the relative difference in impacts between users needs to be taken into account. Equestrian use on trails is a problem in dry weather if dusty conditions have developed as feet, wind and water easily move powdery soil.

Response – It is true that the EA makes little distinction between stock and hiker impacts. The impacts of each type of use permitted on a trail is considered in the Access and Travel Management Plan. Horses are not permitted on some of the trails in these three wildernesses due to potential resource problems and user conflicts. No additional restrictions to horses are proposed.

165. Don’t leave solitude only in areas no one wants to go. While nobody can reasonably expect absolute solitude at all times anywhere in these Wildernesses, providing outstanding opportunities for solitude wherever physical conditions allow must be a management goal. Those seeking solitude should not be relegated to less desirable locations.

Response – This EA discusses this comment in Effects on Recreation Opportunities and Wilderness Carrying Capacity in Chapter IV and in Research Finding on Solitude in Chapter III. Under all alternatives it is possible to experience solitude in almost all areas of the wilderness on weekdays as shown in tables 3.2-3.4, as well as early and late season. Alternatives #2 and #3, provide for more solitude at popular destinations at more times than the other two alternatives.

166. Eliminate fish stocking. If fish stocking occurs in these Wildernesses it should be stopped. Fish stocking impacts native biota and stocked waters can become an attractant.

Response – Fish stocking is discussed in Chapter IV in the Effects on Recreational Fisheries section. Proposed changes to Standards and Guidelines for fish stocking appear in the appendix. The State of Oregon is responsible for fish population

management, including stocking. The role of the Forest Service is to provide fish habitat. Forest staff can make recommendations to State biologists concerning stocking policies, which is what is proposed in the standards and guidelines.

167. Link use levels to impacts. You have allowed people to believe that social indicators and physical indicators are separate. They are not. The same people that impact solitude create the physical damage. The more people you have in a wilderness the more soil compaction, vegetation destruction, and wildlife displacement, trail erosion, and water pollution.

Response – This topic is discussed in Alternative Effects on Resource Conditions in Chapter IV and Research Findings on Vegetation and Soil Impacts from Recreation Use in Chapter III. This EA documents that relationships between physical resource impacts and use levels are more complex than stated above. While there are correlations between use levels and impacts, the amount of resource impact is greatly influenced by the behavior of visitors and type of use. Day use trail hiking is generally much less impactful than overnight camping or destination day use.

168. Protect and restore primitive recreation opportunities outside of Wilderness. This can reduce some of the recreation pressures on Wilderness so that it may provide all of the values that it has been set aside to protect.

Response – See response to comment #20. Issues Raised Outside the Scope of this Document in Chapter II.

169. Providing opportunities outside of wilderness and protecting low use areas is independent of and irrelevant to reducing use in high use areas. This comment refers to the discussion under the heading “Ongoing Wilderness Research Findings on Use and Impacts”. Providing opportunities outside wilderness and protecting low use areas inside wilderness will not be effective in reducing use of high-use wilderness areas. Research findings are inaccurate and not consistent with Wilderness Act because it incorrectly separates social and resource impacts as if one were inferior or not part of the other.

Response – One more restrictive management option than Alternative #2, could have considered large reductions in use in popular areas, followed by intensive site restoration, no increases in visitation in low use areas, and development of new recreation opportunities outside of wilderness. Such an alternative would have reduced recreation use in these wildernesses by 75% or more. Realistically, budgets are not available to implement this scenario and there is little public support for it. Recreational use and enjoyment of the wildernesses is intended within the Wilderness Act in such a manner that must keep wilderness unimpaired for future

use and enjoyment as wilderness, and the wilderness character preserved and protected. Large reductions in use to popular areas within wilderness, can and has resulted in that use being displaced to other areas within wilderness, with associated increased impacts to the displaced areas and little improvement in resource conditions to the popular areas. This cause and effect has been seen and documented in the wilderness research. The wilderness recreation strategy attempts to prevent degradation of primitive areas, provide and plan for meeting future increases in recreation demand outside of wilderness, and protect high use areas from unacceptable levels of biophysical resource impacts.

170. Remove regulatory and information signs. Signs have a trammeling effect on wilderness. They should only be used as a temporary aid to resolving specific local problems.

Response – It is likely that the amount of regulatory signs would increase if any of the action alternatives is implemented. Forest Service policy is to have the minimum amount of signing in wilderness. Many directional and distance information signs have been removed in recent years. New trailhead boards have been installed in these three wildernesses to provide a place for information and quality maps. It is likely additional signs or posts would be needed to indicate designated camps, areas undergoing restoration, and closed areas. The amount of signing desired in each WRS is discussed in Wilderness Recreation Spectrum descriptions in the appendix.

171. Restrict use outside of wilderness too - These comments suggested use restrictions be applied outside of wilderness including ski areas, and Hwy 26. Some suggested mass-transit on Hwy 26.

Response – See comments #7, and #16. These ideas are outside the scope of this document.

172. Start with a pilot program and expand. Perhaps one way to forge a compromise is to identify an area where the user over load is the worst and propose a pilot “use rationing” program in only that area.

Response – Alternative #2 and #3 would implement use restrictions for the entire wilderness. Alternative #4 proposed use limits in only a couple of areas initially.

173. Support WROS changes. The proposed WRS changes appear reasonable. The primitive untrailed class is a good addition.

No response.

Appendix D

Wilderness Recreation Strategy Analysis

Key Points

Wilderness Recreation Strategy

Forest Service wilderness managers and line officers need to change their thinking on providing opportunities for solitude on every acre of wilderness and consider managing wilderness sites more intensively than has been done in the past. Facilitating this change in thinking will require specific direction, funding, and oversight.

Problem Statement

- ◆ Attempts are being made to limit recreation use in some high use destinations in wilderness. In some cases, proposals reduce use by up to 90 % of current levels.
- ◆ When use limits are implemented in high use areas, visitors are displaced to the more pristine and sensitive areas that have received very low use in the past, resulting in degradation of the most pristine areas.
- ◆ Decisions to limit use are based partially on social standards in forest plans that attempt to maximize opportunities for solitude on every acre of wilderness.
- ◆ The public is generally not supportive of use limits that are based on social standards alone.
- ◆ Lack of public support has resulted in numerous congressional inquiries and related language in the Congressional budget advice.

Proposed Actions (to be implemented simultaneously)

- ◆ Create and/or market opportunities for high quality wildland recreation experiences outside wilderness on and off National Forest lands .
- ◆ Commit enough resources and protection to low use wilderness lands to ensure non-degradation of their outstanding opportunities for solitude and near pristine conditions.

- ◆ Manage high use destinations as sources of inspiration and connection with wilderness and implement management actions to minimize and contain impacts to the resource.

Implementation

- ◆ This strategy will be tested through a pilot program. Pilot wilderness units will be selected based on criteria that is detailed in the enclosed “Pilot Program Proposal.”
- ◆ Pilot units will receive \$50,000-1 00,000 per year for two years beginning in FY 2000. This money will be held from the wilderness management (NFWM) budget.
- ◆ Expected outcomes of the pilot tests are detailed in the enclosed “Pilot Program Proposal.”
- ◆ This strategy does not require a change in current policy.

Wilderness Recreation Strategy

Problem Statement

The Forest Service has evolved a long-standing wilderness management paradigm that opportunities for solitude are mandated by the 1964 Wilderness Act, and that every wilderness visitor can expect to be able to experience solitude, even in the most spectacular and easily reached parts of a wilderness. This desire to provide outstanding opportunities for solitude on every acre of every wilderness is reflected in the social standards developed for most wilderness areas in forest plans. The need to comply with these social standards is driving proposals to limit recreational access to high use destinations. Two primary problems have been identified: 1) Much of the public is critical of use limits based on social standards alone, in high use destinations areas, and 2) When use limits are implemented in high use areas, visitors are displaced to the more pristine and sensitive areas that have received very low use in the past.

Background

Many, if not most, high use portions of wilderness are out of compliance with the social and biophysical standards in forest plans, and have been since implementation of the plans. The degree to which the social standards have been exceeded is of particular concern.

There has been a general lack of public support for limiting use in order to bring high use areas into compliance with social standards. This lack of support is due, in part, to the drastic use reductions that have been proposed, in some cases reductions of up to 50-75 percent of current use levels. Another factor may be that people visiting these high use areas are tolerant of seeing many other visitors. They will accept less than their ideal for wilderness, rather than be told they can't go to the areas at all.

In 1997, Ira Spring, a prominent wilderness advocate and guidebook author from Seattle, contacted his U.S. Senator, Slade Gorton, to complain about the Forest Service's proposal to limit use in the Alpine Lakes Wilderness. Use limits were proposed to bring high use destinations into compliance with social and biophysical standards in the Alpine Lakes Wilderness Plan. In a few high use areas, some biophysical conditions such as litter, proliferation of social trails, and the size of some lakeshore sites, have actually improved over the years, due to successful site management. However, social indicators show consistent increase, moving further out of compliance with forest plan standards.

In response to Mr. Spring's concern, Slade Gorton, Chair of the Senate Appropriations Committee, added committee report language to the FY 1998 Interior Appropriations Bill stating the committee's concern over the Forest Service's "attempt to control the concept of solitude in wilderness within our National Forests." The committee expressed concerns that social standards are "subjective and artificially set numbers of allowable encounters per day between human beings." They strongly recommended "that the Forest Service consider the on-the-ground impacts such as trampled vegetation, human waste, uncontrolled fire pits, and soil erosion, with a view to protecting the resource and mitigating damage."

Added to public and congressional reactions are research findings by FS wilderness research scientists, David Cole and Alan Watson of the Aldo Leopold Wilderness Research Institute, which conclude that the benefits from reducing use to protect solitude at high use areas may not justify the costs in terms of denying people access to the wilderness that they love. For example, in some high use destinations, a 70% cut in use (affecting literally thousands of people a season) would result in encountering another group every 6 minutes instead of every 3 minutes. Managers are hard pressed to conclude that this gain is worth the cost. Recent research has also confirmed that many of the people visiting high use areas feel that wilderness is extremely important to them and they would normally seek out very pristine wilderness. These "experienced" wilderness visitors indicate that their visits to the high use areas are valuable and enjoyable to them. They go to high use areas knowing and accepting that they will not find outstanding opportunities for solitude. They often do not support limits to use at these areas to reduce crowding, because they feel there is so much else to gain from the experience.

Within the FS, experienced and respected wilderness managers and line officers have voiced heart-felt reservations about social standards that seem to put the agency in the position of determining, for visitors, when they have had a quality wilderness experience. In addition, there have been unanticipated adverse affects to pristine wilderness from some management actions. For example, in some places that have implemented use limits or other restrictions, displacement of visitors from high use areas to lightly used areas has occurred, either within the same wilderness or to other wilderness areas that were not experiencing high use. This (along with growing recreation use in general) has resulted in new impacts to previously lightly used areas.

Proposed Actions

National and regional wilderness program leaders realized that a close look at the strategies being used or proposed to manage recreation use in wilderness was needed. They concluded that change was needed in how wilderness recreation use is managed. Alternatives considered are detailed in the enclosed document entitled “New Directions For Recreation Management in Wilderness” by David Cole. The following is a detailed account of the selected course of action.

Proposed Action #1

Create and/or market opportunities for high quality wildland recreation experiences outside wilderness and off National Forest lands.

Implementation

- ◆ Complete inventory of backcountry recreation opportunities outside Wilderness.
- ◆ Maintain existing trails; strongly reconsider closing any existing trails outside wilderness.
- ◆ In Forest plan revisions, evaluate potential alternative locations than wilderness to help meet the demand for non-motorized recreation.
- ◆ Analyze backcountry opportunities when reviewing road policy and road management decisions.
- ◆ Review all semi-primitive backcountry opportunities for suitability of motorized versus non-motorized recreation.
- ◆ Explore ideas, with partners, for marketing backcountry recreation opportunities outside National Forest boundaries, i.e. State and County Parks.

Proposed Action #2

Make it a priority to ‘commit enough resources and protection to low use wilderness lands to ensure nondegradation of their outstanding opportunities for solitude and near pristine conditions.

Implementation

- ◆ Develop standards where they don’t already exist.
- ◆ Establish base line inventory needs and monitor trends.
- ◆ Assure protection of lightly used areas before placing use restrictions at high use areas if the restrictions have the potential of displacing the use.

Proposed Action #3

Manage high use destinations as sources of inspiration and connection with wilderness and implement management actions to minimize and contain impacts to the resource.

Implementation

- ◆ Accept current level of visitation in some destinations that are currently heavily used, if the cost to the visitor of decreasing use is very high and the benefit to the visitor is not significant.
- ◆ Develop standards where they don’t already exist. Monitor conditions so that wilderness character and conditions are not unacceptably degraded.
- ◆ Designate and delineate high use destinations so they do not increase in number or size over time. Continue existing management activities and use limits where already established.
- ◆ Increase stewardship presence to emphasize information, education, inspiration, and connection with wilderness.
- ◆ Focus intensive site management on restoration of damaged sites and confinement of impacts, not with the goal of allowing for increased use.
- ◆ Pursue partnerships with wilderness support organizations to explore new approaches for management of high use areas and to seek assistance with stewardship presence.

Pilot Program Proposal

The national and regional wilderness program leaders agree that successful implementation of this strategy requires testing and demonstration proving it can be put in place on the ground, that all three proposed actions can be simultaneously implemented, and that they will have the intended effects. Through these trials, we will encourage wilderness managers to work closely with recreation and other specialists to improve opportunities for backcountry recreation outside wilderness. This will serve to foster relationships with other partners, such as State and County park officials, Chambers of Commerce, Tourism Bureaus and local communities.

We must show that we can successfully balance protection of wilderness character in the high use areas with visitor use and intensive site management. We must show that we can identify and research successful new social standards for high use destinations. We must show that we embrace the importance of the most pristine parts of wilderness by taking aggressive action to protect them. And we must show the public that we are responding to their concerns.

In short, the strategy requires changing our approach to managing recreation in wilderness. In the past, we have seldom worked with partners to improve opportunities outside wilderness. We have employed intensive site management techniques only on a very limited basis and we have not aggressively protected the most pristine areas. Facilitating change will require specific direction, funding, oversight, and assistance. In order to assure that the strategy is understood, that its challenges are addressed, and that successful experiences are shared, the following pilot program is proposed.

Implementation

Regional Wilderness Recreation Pilots

Wilderness pilots will be selected based on the following criteria:

- ◆ Realistic opportunities for providing a backcountry-type recreation experience outside wilderness.
- ◆ Ability to implement all three of the proposed actions.
- ◆ Demonstrated partnerships for work accomplishments and support of program.

- ◆ Limited entry quotas in place or being strongly considered.
- ◆ Diversity in use levels exist within the wilderness; not all high use.
- ◆ Use trends are known.
- ◆ Population growth influences exist.
- ◆ Demonstrated support from local line officers.
- ◆ Demonstrated ability to leverage money, generate revenue or resources, i.e.: fee demo, dedicated appropriated funds, partnerships, CNTR, IO% funds.
- ◆ Field presence has been maintained through budget fluctuations.
- ◆ Planning status can accommodate new direction, i.e.: either currently revising forest plan or prepared to amend forest plan.
- ◆ Willingness to document and report on successes and failures with implementation.
- ◆ Base line data has been collected.
- ◆ Applicability to other wilderness areas; i.e.: how unique is this situation?
- ◆ Local public support exists for implementation of this strategy.

Pilot proposals will be reviewed by the Chief's Wilderness Field Advisory Group (CWFAG) and the recommended selections presented to national wilderness program leaders for approval. The selected units will present a two-year program of work, for implementation, to the CYVTAG. A representative from the CFWAG, the regional wilderness program leader for the representative region, and members of the wilderness recreation strategy task force will provide oversight, advice and consultation to each selected unit.

At the completion of the two years, the unit will be required to complete a final report, detailing implementation actions, critiquing what went right and wrong, and providing recommendations for other units implementing the strategy in the future. A summary of the successes, failures, recommendations and future actions will be produced.

A portion of the wilderness management (NFWM) budget will be held for fiscal years 2000 and 2001 to provide targeted funding for pilot units. Funding would be based on

submitted proposals, \$50,000 to \$100,000 per unit, estimated \$1,000,000 for each of the two fiscal years.

Questions and Answers

Does the Wilderness Act require us to provide solitude on every acre?

The Wilderness Act defines wilderness as an area that provides “outstanding opportunities for solitude or a primitive and unconfined type of recreation...” P.L. 88-577 Sec.2(c)(2). The Act does not state that on every acre of wilderness you will find solitude, though it is assumed that every wilderness should provide solitude on most of its acreage. Agency policy directs managers to balance “use and enjoyment” with “preserving natural conditions” and “opportunities for solitude”. The wilderness recreation strategy attempts to satisfy a wide diversity of legitimate experiences in Wilderness.

How does this relate to the Forest Service Wilderness Model (FSM 2320.6), often referred to as the non-degradation policy?

In areas where we are accommodating high levels of recreational use, we are also committing to protecting these areas from further degradation. Appropriate management may include prominent management presence within high use areas, clearly delineating the boundaries of popular campsites and viewpoints and making them more durable, and very active site restoration programs. The overall intent of establishing a few high use areas and protecting low use areas, is to ensure non-degradation of the vast majority of the wilderness system which is currently still in a relatively pristine condition.

Does this mean we will be creating sacrifice areas? Will there be any social standards in high use areas?

No, the strategy does not create sacrifice areas. There is no intent in this strategy to accept so much use that the wilderness resource is degraded. There will still be an upper limit to the amount of use at high use areas. Upper limits of high use areas will, however, be defined more by what visitors will accept in exchange for access to wilderness than by the ideal desired for pristine wilderness. Accepting high use in areas where such use is established will prevent a spillover of use that occurs when use in high use areas is reduced, causing displacement or dispersal of use to otherwise low use areas. By managing recreation use intensively, impacts will be delineated and confined and other areas restored to a more natural condition.

Will use be allowed to grow in currently high use areas?

The strategy allows management to consider higher levels of use in popular destinations. But there are still limits to both total use and the extent of high use areas. The goal is to protect and maintain areas of low use, while achieving a diversity of settings that allow for a range of use levels as appropriate.

How will we prevent the high use areas from expanding in size and number?

High use destinations must be clearly delineated so they do not increase in size and number over time. Similarly, low use areas must be delineated and standards and use limits applied to prevent the slow creeping of degradation over time.

Is the proposal to create more opportunities outside currently designated wilderness going to add more acres to the wilderness preservation system ?

No. Only Congress can add areas to the National wilderness Preservation System. Areas offering high quality recreation alternatives to wilderness may be more appropriate in this capacity than for designation as wilderness. This strategy encourages activities that are not dependent on a wilderness setting to take place in similar settings that are not designated as wilderness.

Does this mean motorized recreation will be restricted in non-wilderness lands?

Not necessarily. Non-wilderness lands can and should be maintained for multiple use, motorized and non-motorized; those uses can be managed so that they co-exist. In addition, non-motorized areas can be maintained for a variety of activities, such as mountain biking, hiking, and backpacking with the capability of being more developed than wilderness. These are decisions that must be made in the forest plan, with public involvement, in the context of competing needs.

Are we creating conflict with recreation and other management activities (timber, grazing, etc.) or conflicts with wildlife habitat needs on lands outside wilderness?

Encouraging or increasing the recreational use in lands that are managed for timber, grazing, wildlife habitat, etc., is not, categorically, incompatible. Management will still be required to look at the cumulative effects of actions and ensure that trade-offs in competing needs are evaluated and conflicts between uses are minimized.

How are we going to afford this?

The 1995 RPA Program, the Chief's Natural Resources Agenda, other assessments that look to the future, show consensus that the recreation values of national forests are becoming more and more important. Budget trends have already begun in favor of recreation management. In addition, innovations such as visitor fees, tightly linked to increased visitor satisfaction, offer new ways to fund recreation management, particularly for high use destinations in wilderness. This allows for more appropriated funds to be available to protect pristine wilderness. This strategy must also continue the existing emphasis on partnerships and volunteers if it is going to be successful.

Does this trigger forest plan revisions, amendments?

Not necessarily. At the forest plan level, there should be enough flexibility in direction to allow for management that distinguishes between differing use levels within a wilderness. Most wilderness areas have multiple prescriptions, where the wilderness has been zoned to allow for varying levels of use and conditions. In cases where land management plans contain only one prescription for wilderness, with standards and guidelines that apply homogeneously across the entire wilderness, an amendment may be necessary. Forest plan standards that preclude accepting more use within high use areas may also need to be revised, particularly if public sentiment supports higher use levels. Likewise, forest plans that do not clearly delineate high use areas and provide for protection of pristine wilderness, may also have to be amended. Site specific NEPA analysis may also be needed for management actions that implement this programmatic plan direction.

Forest plan revisions offer managers an opportunity to clearly define high and low use areas within wilderness with management area boundaries and prescriptions, as well as standards and guidelines. Revisions also allow management to consider direction for non-wilderness, semi-primitive areas that provide alternatives to wilderness that meet the expectations of visitors who do not necessarily desire a wilderness environment.

Will there be a conflict with high use areas and other wilderness values (fire, frogs, wildlife, etc.)?

There will still be the need to ensure that the wilderness resources are being protected. This strategy does not require that recreation become the dominant wilderness use, it merely allows for use to be high in some areas if it is compatible with these other resources.

How does this tie into the Chief's Natural Resource Agenda?

This strategy provides the following opportunities within the Chief's Natural Resource Agenda:

Watershed Health and Restoration

The most pristine watersheds will be protected. Protection of pristine areas and intensive management of recreation effects at high use destinations will:

- ◆ Move trails and people out of riparian and away from lakeshores
- ◆ Correct human waste problems
- ◆ Reduce and restore vegetation loss due to recreation use
- ◆ Emphasize use of 10% Roads and Trails Funds, NFSI, etc., for restoration projects in wilderness

Sustainable Forest Ecosystem Management

The strategy will ensure sustainable, long-term availability of quality wilderness opportunities to the most people. The landscape role of wilderness will be stabilized, including preservation of pristine conditions. The strategy will contribute to sustaining the quality of life for local and regional communities, it will enhance the appeal and sense of place of communities adjacent to wilderness. The strategy is responsive to increasing demand for recreation while still protecting the wilderness resource. The strategy emphasizes working with other public land managers and with private land managers to better address growing recreation demand. Implementation of the strategy will include monitoring that is more effective at tracking trends across all wilderness values. This is an adaptive response, crafted from the lessons we have learned from past management actions

National Forest Roads

Both roads and trails are considered part of the National Forest transportation system. An emphasis is placed on road management decisions that preserve a high quality wilderness resource and experience. The priority for trail construction and maintenance should be on alternatives to wilderness. Elimination of unneeded roads will be coupled with recognition that restoration of an area's unroaded character produces high value recreation opportunities which can help meet the demand for primitive recreation. A priority will be placed on opportunities for converting roads to trails. The emphasis on avoiding new road construction in currently roadless areas will be coupled with consideration of the need for these areas to help meet the demand for primitive recreation

Recreation

Pristine areas will be protected as unique wilderness opportunities. More non-wilderness recreation opportunities will be protected and their quality will be increased. The improvement in both wilderness and non-wilderness primitive recreation opportunities will enhance community livability. A wide diversity of opportunities is provided. High use areas will serve as sources of inspiration and connection with wilderness.

New Directions for Recreation Management in Wilderness

By David Cole, Aldo Leopold Wilderness Research Institute

The following proposed actions constitute a strategic plan the Forest Service intends to implement in order to better protect wilderness in perpetuity.

Proposed Actions

- ◆ We will create more opportunities for high quality wildland recreation experiences on National Forest lands outside wilderness.
- ◆ We will make it our first priority to commit enough resources and protection to low-use wilderness lands to ensure non-degradation of their outstanding opportunities for solitude and near pristine conditions.
- ◆ We will manage high-density wilderness locations within acceptable levels of resource impact as sources of inspiration and connection with wilderness.

Rationale For Proposed Actions

Background

Recent studies have identified several trends that convince us of the need to strengthen and alter our recreation management strategies for the wilderness system. First, there is strong evidence that recreation use of wilderness is increasing. For example, in National Park Service backcountry, where use statistics are most reliable, overnight visitation has been increasing at an annual rate of about 10% in the 1990s (Cole 1996). Experienced observers believe that day use of wilderness is increasing even more rapidly than overnight use. Moreover, recent studies of outdoor recreation participation rates report that hiking and backpacking are the second and third fastest growing types of human-powered outdoor recreation (Cordell et al. 1997). For example, the number of Americans that backpack increased more than 70% between 1982 and 1994 and the number of Americans that hiked increased more than 90%. With participation rates increasing even faster than the U.S.

population, demand for wildland recreation experiences should continue to increase substantially into the future.

Problems resulting from increasing demand for wildland recreation experiences are aggravated by a dwindling supply of places that offer these experiences outside the wilderness system. Ever since passage of the Wilderness Act, scientists and managers have stressed the importance of providing high quality wildland experiences on lands outside wilderness (e.g. Lucas 1965). Such lands are needed to relieve some of the demand for recreation in wilderness. In addition, such lands could be managed with a greater emphasis on active management to optimize recreation experiences. Unfortunately, these calls for action have seldom been heeded. In contrast to the advice of early Wilderness proponents, such as Bob Marshall, that we need several classes of wilderness and primeval land designations, most public nonroaded wildlands are either being roaded or designated as wilderness. The current wilderness system is already twice the maximum size envisioned by Wilderness advocates at the time the Wilderness Act was passed, such as Howard Zahniser. As a result, in much of the country, there are few lands outside wilderness capable of providing high quality wildland experiences.

A second disturbing trend is the slow degradation of the Wilderness lands that remain close to the wilderness ideal of offering outstanding opportunities for solitude and being virtually unaffected by recreation use. Studies of recreation impacts on campsites have found that conditions on long established

campsites in heavily used wilderness destinations have been relatively stable over the past 10-20 years (Cole and Hall 1992). However, the number of impacted campsites has increased dramatically, particularly in lightly used wilderness (Cole 1993). Many remote wilderness watersheds with scarcely a blackened rock 20 years ago have numerous impacted campsites today. Although not as well documented, anecdotal evidence also suggests a similar degradation of visitor experiences in low use wilderness. Opportunities for the extremely low encounter rates that most visitors prefer (Stankey 1973) are diminishing.

Ironically, one of the principle causes of the degradation of low use wilderness is the well-intentioned attempt to reduce recreation impacts in high-use locations in wilderness. In attempts to reduce use of popular locations, wilderness visitors have been encouraged to select trailheads and destinations that are infrequently used. Increasingly, use limits have been implemented in attempts to manage high-use locations. The result is often increased use of locations without use limits, often more lightly used wilderness. Lightly-used locations are highly vulnerable to being adversely impacted by even small increases in recreation use (Cole 1997), because at low use levels, slight increases in frequency of use can cause dramatic increases in impact and slight increases in encounter frequency can cause dramatic reductions in solitude (Stankey 1973).

From these studies, it is clear that management programs over the past few decades have not succeeded at preventing substantial degradation of the low-use wilderness lands that are closest to the wilderness ideal. Moreover, it is clear that low-use wilderness lands are highly vulnerable to further degradation—much more so than the high-use wilderness locations that have received most management attention. With the advantage of hindsight, we also recognize that some of the management actions that have been taken in high-use places have directly contributed to the degradation of conditions in low-use wilderness.

Finally, several recent studies have been conducted in the popular, high-use wilderness destinations that have been the primary focus of wilderness management activities. Problems in these places are obvious. By wilderness standards, these places are often crowded and the impacts of recreation use are substantial. However, the ecological integrity of even these most popular places is not seriously compromised (aside from the displacement of sensitive wildlife), especially where management programs attempt to confine use and restore impacted sites (Cole et al. 1997). Moreover, the experiences most of these places offer, while far from the wilderness ideal, are still high quality experiences, characterized by solitude, primitiveness, and unconfinedness — the words the Wilderness Act uses to describe the experiences wilderness should provide. Most wilderness visitors, even the most highly experienced, do not support efforts to keep all wilderness locations from being heavily used. Most support the idea of limits IF overuse occurs but most do not feel that even a place like Snow Lake (Alpine Lakes Wilderness, WA), where another group is encountered every 3 minutes on popular weekends, is over-used enough to require use limits (Cole et al. 1997).

Options

In attempting to deal with increasing demand for high quality wildland recreation experiences, one option is to increase the supply of lands that offer these experiences. However, as was noted above, opportunities for wildland recreation experiences are diminishing outside wilderness as roadless non-wilderness lands are either roaded or designated as wilderness. Thus we recommend trying to reverse this trend by doing whatever we can to create more high quality wildland recreation opportunities outside wilderness lands.

This effort may not be successful and, even if we do succeed, effects may not be immediate. Therefore, we must supplement this policy with one of four alternative management strategies. The first option is to attempt to maintain all wilderness lands in a near-pristine condition and to keep use densities at the very low levels necessary to provide the social setting that most wilderness visitors prefer. This option is clearly responsive to the idealized image of wilderness conditions described in the Wilderness Act. However, it abdicates land managers responsibility for attempting to meet the publics demand for wildland recreation experiences. It also is at odds with the management preferences of

most wilderness visitors. As demand increases in the future, this option will result in wilderness recreationists being denied access with increasing frequency. However, when they gain access, experience quality will be very high. It is unclear how wilderness supporters who do not visit wilderness feel about this option.

The second strategic option is to allow unlimited wilderness use everywhere. Management could attempt to mitigate the impacts of increasing use through visitor education, intensive site management and on-site behavioral restriction. This is currently the most common management regime in the wilderness system. The National Park Service, however, has already moved to limit use in most of the wildernesses they manage. The other agencies that manage wilderness have a few very popular wildernesses with use limits. The benefit of this option is lack of regulation and freedom of access. The costs are the inevitable loss of near-pristine conditions and low-user-density experiences across much of the wilderness system. In addition, highly popular wilderness locations will continue to be highly impacted—both ecologically and socially.

The final two options represent alternative means of compromising between the goal of preserving near-ideal wilderness conditions (which is maximized in option one) and the goal of unlimited access (which is maximized in option two). The third strategic option is to deal with problems in popular wilderness locations by diverting use from high-use locations to low use wilderness. This option's strategy is to sacrifice conditions in low-use wilderness so that high-use places are not excessively impaired. The result is a narrowing of the spectrum of conditions in wilderness, so that most wilderness will be moderately impacted and moderately crowded. This is the approach currently in place in the wildernesses that have implemented use limits either (1) only in popular locations or (2) throughout the wilderness, but without use limits being extremely low in much of the wilderness. This is particularly common in National Park Service wilderness. The benefits of this option would accrue from a reduction of problems in popular places. However, research suggests that these benefits (reduced impacts, increased solitude) may not be that substantial (Cole et al. 1997). Moreover, the costs are the substantial degradation of conditions in low use wilderness, the places that still are close to the wilderness ideal.

The fourth strategic option—the alternative compromise—would maintain a broad spectrum of conditions in wilderness. High levels of visitation would be permitted in some locations to provide for the demand for access to wildland experiences. At the same time, most wilderness lands would be protected in their current low use condition. The benefits of this approach would be maintenance of most of the wilderness system close to the low use ideal envisioned in the Wilderness Act, while being somewhat responsive to (1) increasing demand for wildland experiences and (2) the preferences of onsite visitors. The costs of this approach are (1) acceptance of less than ideal conditions in some high-density wilderness locations and (2) the probable need to restrict access to much of the wilderness system — the low use lands that experience increased use. In addition, this strategy

requires some sort of zoning, an approach that has been recommended for many decades (Wagar 1964, Haas et al 1987), has been adopted in recent wilderness planning frameworks (Stankey et al. 1985), but is still controversial.

Selected Course of Action

We conclude that the best of the available courses of action is to pursue increasing opportunities for high quality wildland recreation experiences outside wilderness, while simultaneously trying to maintain a broad spectrum of conditions in wilderness (strategic option four above). This would entail aggressive protection of low use wilderness along with allowing a high density social setting in certain popular wilderness locations. This approach is responsive to both non-degradation of the vast majority of the wilderness system as well as visitors preferences for management of high-use destinations. We recognize that this decision involves a compromise, both for those concerned with regulation of wilderness and those concerned with the preservation of low-density social settings and near-pristine biophysical settings. Those who are concerned with regulation will not like the need to regulate recreation use of wilderness lands that are still relatively lightly used. Those who are concerned with preservation of near ideal wilderness settings will not like the need to accommodate substantial recreation use in some popular locations. However, we believe this option is the best means of reconciling long-term protection of wilderness character with responsibility for increasing wildland recreation demand. Moreover, the more successful we are in creating opportunities outside wilderness, the less need there will be for either regulating use of low-use wilderness or permitting high-density conditions in popular wilderness locations.

Implementation Details of the Action Items

1. We will create more opportunities for high quality wildland recreation experiences on National Forest lands outside wilderness.

Increasing demand and decreasing supply will challenge wilderness managers. It is not clear why the call for creating high quality wildland recreation opportunities outside wilderness has never been heeded before. Apparently there is little public or political interest in unroaded, non-wilderness lands, despite their perceived importance to scientists and managers. So perhaps our resolution to work to create more opportunities will not be successful. Nevertheless, we must increase our efforts to create recreation settings on lands outside wilderness that offer opportunities for high quality wildland experiences. These lands might best be termed backcountry . They should generally be unroaded, although a few old closed roads may not diminish the sense of a wildland experience. Scenic quality is a major consideration as well. The current moratorium on roads in roadless areas provides one opportunity to do this. Once high quality opportunities are created, they most

be advertised. In addition, semiprimitive recreation opportunities should be advertised in order to divert recreationists not interested in wilderness elsewhere.

2. We will make it our first priority to commit enough resources and protection to low-use wilderness lands to ensure non-degradation of their outstanding opportunities for solitude and near pristine conditions.

The majority of wilderness lands that are still close to the wilderness ideal of providing a low density social setting and near-pristine biophysical setting must be made a higher priority than they currently are. These low-use wilderness lands must receive a larger proportion of management resources and attention, either by increasing total resources available for wilderness recreation management or by shifting some resources from high-use wilderness locations. Even more important, the protection of low use wilderness lands must be ensured BEFORE we institute management programs in high-use locations that might displace use and impact to low-use lands. These lands must no longer be considered adequately protected simply because hardly anyone ever goes into them. Also, they should no longer be considered places that can be sacrificed in our attempts to deal with problems in popular portions of wilderness.

Management attention and financial resources are needed for several purposes. Most important, standards need to be developed for these lands that will ensure the preservation of low-density experiences and low levels of recreation impact. Standards should address encounter levels and appropriate levels of impact for campsites and user-built trails at a minimum. Low encounter level standards may also be effective in minimizing such impacts as wildlife disturbance and effects on water quality. These low-use lands need to be regularly visited and their condition must be monitored to make certain that standards are not being violated. If recreation use of these lands continues to increase, it is likely to be necessary to limit use to many of these wildernesses.

The two major changes required for implementation are (1) obtaining additional resources or diverting resources to these lands, which typically have been largely ignored in the past and (2) preparing to potentially implement use limits across much of the wilderness system. Access-oriented publics are likely to vehemently oppose the implementation of use limits in places that receive relatively little use. In addition, we suggest that regulations intended for high-use places, with the potential to displace use, be postponed until these low-use places receive adequate protection.

3. We will manage high density wilderness locations within acceptable levels of resource impact as sources of inspiration and connection with wilderness.

On a small proportion of wilderness lands, particularly those destinations that are already heavily used, high levels of visitation will be permitted. These places are needed to absorb much of the demand for wildland recreation experiences. In addition, they will provide opportunities for initial exposure to wilderness, for the inspiration that wilderness provides and to increase public educational opportunities. Despite high visitation, they will be managed to provide high quality experiences and acceptably low levels of resource impact. Visitor experiences will stress access to and immersion in natural, undeveloped landscapes and opportunities for solitude, contemplation and reflection that are outstanding in relation to everyday life. Resource impacts will be confined spatially so that the impacted portion of even these high density locations is negligible.

These high density locations need to be designated as such, so that they do not constantly increase in area over time. In addition, standards need to be developed for these locations, so that their wilderness character is not unacceptably degraded. Both social and ecological conditions are important. Encounter levels—while high—should not be so high that substantial conflict results. Appropriate visitor behavior is also important. Resource impact standards should focus particularly on the spatial extent of impact.

Management actions should emphasize information, education, confinement of impact, and restoration of damaged sites. This will require substantial resources, resources that may be needed in the near-term to establish necessary protected management in low-use wilderness. One option is to pursue volunteer groups that might work cooperatively with agency personnel on education, patrol, site management and restoration.

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