# Recreation and Visitor Services

## Key Points

- Alternative D would provide the largest number of acres allocated as Recreation Management Areas.
- Alternative D would also provide the largest number and acres of Recreation Management Areas in closest proximity to the 12 study communities in the planning area.
- Alternative A would reduce managed recreation opportunities as compared to the No Action alternative.
- The Proposed RMP would provide more acres allocated as Recreation Management Areas than Alternatives A, B and C, and less acres then Alternative D.

## Issue 1

*How would the alternatives affect the types and levels of BLM-provided recreation opportunities across western Oregon?*

### Summary of Analytical Methods

Management actions and allowable use decisions would affect recreation and visitor services. Direct effects on recreation are those that allow, restrict, or prohibit recreation opportunities, including both the opportunity for access (e.g., public closure) and opportunity to engage in specific activities (e.g., camping, recreational target shooting, and riding OHVs). Indirect effects are those that alter the physical, social, or operational components of recreation setting characteristics. Effects on settings can either be the achievement of a desired recreation setting characteristic or the unwanted shift in recreation setting characteristics.

The BLM does not specifically manage for recreation setting characteristics in areas where the BLM has not designated Recreation Management Areas (RMAs), although lands not designated as RMAs do still provide intrinsic recreational values and opportunities. The indicator typically used to describe the effect on lands not designated as RMAs, is the availability of opportunities as described by either acreage restrictions or limiting of recreation-specific activities.

For areas managed as Special Recreation Management Areas (SRMA), the BLM used both availability of recreation opportunities and changes to physical, social, and operational components of recreation setting characteristics as indicators of effects. For areas managed as Extensive Recreation Management Areas (ERMA), the BLM considered both availability of activity opportunities and changes to recreation setting characteristics.

The Planning Criteria provides more detailed information on analytical assumptions, methods and techniques, and geographic and temporal scales, which is incorporated here by reference (USDI BLM 2014b, pp. 109–114).

#### Recreation Management Areas

The BLM evaluated the effects of the alternatives and the Proposed RMP on recreation opportunities and outcomes by comparing how they would (1) designate RMAs by type; (2) potentially change recreation setting characteristics; (3) affect the availability of recreation opportunities and the extent to which they meet anticipated recreation demand in the planning area; and (4) restrict available recreation-specific

activities. This analysis includes recreation management strategies and effects from management for other program areas on recreation resources under each of the alternatives and the Proposed RMP.

## Recreation Opportunities and Restrictions

The BLM manages, allows, and restricts specific recreation activities within RMAs in order to create and sustain high-quality recreation opportunities, achieve desired recreation conditions including recreation setting characteristics, and protect public health and safety from potential conflicts between recreationists. The BLM considered the extent to which managed, allowable, and restricted recreation activities occur among the alternatives and the Proposed RMP.

## Recreation Setting Characteristics

Visitors seek a diverse range of setting-dependent outdoor recreation opportunities. They choose different areas in which to recreate based upon the qualities and conditions of the area as well as a desired set of recreation experiences and benefits. The BLM identifies desired recreation setting characteristics for RMAs to complement the desired recreation opportunities and activities within those RMAs.

The BLM categorizes the type of recreation setting characteristic desired in a particular area through its Recreation Setting Classification System. The BLM bases the Recreation Setting Classification System on a combination of physical, social, and operational components. Physical components include characteristics of remoteness, naturalness, and visitor facilities. Social components include characteristics of contacts, group size, and evidence of use. Operational components include characteristics of access, visitor services, and management controls.

### *Remoteness and Naturalness Characteristics*

With the exception of the characteristics of remoteness and naturalness, the BLM discusses effects on all the recreation setting characteristics through analysis of RMAs, recreation opportunities, and recreation demand. The BLM has focused the discussion of effects remoteness and naturalness on how the alternatives and the Proposed RMP would change the existing recreation opportunity spectrum for these characteristics.

The recreation opportunity spectrum framework describes the mix of possible outdoor recreation settings that produce recreation experiences. The recreation opportunity spectrum is divided into six classes ranging from primitive to urban (**Figure 3-120**). The classes are named only to help describe a recreation setting spectrum for recreation management. For example, the 'primitive' class is not exclusive to Wilderness, Wilderness Study Areas, or lands with wilderness characteristics and may be used elsewhere.

**Figure 3-120.** Recreation opportunity spectrum classes

'Remoteness' is defined by an area's proximity to human modifications associated with roads or trails. The BLM identified the recreation opportunity spectrum class for remoteness by using its functional road classification system to assign road types by recreation opportunity spectrum class and identifying distance criteria. The distance criteria used account for the project area's topography, vegetation, and road type. Road types consist of arterial, collector, local, and resource roads (USDI BLM 1996b, updated 2002). **Table 3-121** shows the criteria for defining the recreation opportunity spectrum class for remoteness.

**Table 3-121.** Distance criteria for establishing recreation opportunity spectrum class by remoteness

| Recreation Opportunity Spectrum Class | Distance Criteria |
|---|---|
| Primitive | Greater than 1 mile from any class of road, excluding those that are permanently closed or decommissioned |
| Backcountry | 0.25 to 1 mile from any class of road, excluding those that are permanently closed or decommissioned |
| Middle Country | Within 0.25 mile of local* or resource† roads |
| Front Country | Within 0.25 mile of collector‡ roads |
| Rural | Within 0.25 mile of arterial roads or highways |
| Urban | Within 0.25 mile of arterial roads or highways |

* **Local roads.** Roads that normally serve smaller areas than collector roads, accommodate fewer uses, have lower traffic volumes, and connect with collector roads or State and County road systems.
† **Resource roads.** Roads that provide point access to public lands, typically exist for a single use, carry very low traffic volumes, and connect with local or collector roads.
‡ **Collector roads.** Roads that primarily provide access to large blocks of public land, accommodate multiple uses, have BLM's highest traffic volumes, and connect with State and County road systems.

The BLM used the total amount of roads—including new road construction projected to occur under the alternatives and the Proposed RMP over the next 10 years—to classify recreation opportunity spectrum classes for remoteness. This analysis does not consider the proximity of non-BLM roads located on adjacent lands, since they do not aid in the comparison of the alternatives and the Proposed RMP.

'Naturalness' is defined by the level of an area's influence by human modifications other than roads and trails. Human modifications can include areas of development, utilities, rights-of-way, livestock structures, fences, habitat treatments, or landscape alternations. Naturalness considers the presence of human modifications and how these modifications may, or may not, affect the visitor's experience. Management considerations in this planning process would predominately influence landscape alternations through forest and habitat management actions. As such, the BLM's analysis of naturalness uses forest structural stage classes as a proxy to measure changes in recreation opportunity spectrum classes for naturalness. **Figure 3-121** shows a visual representation of forest structural stage classifications for naturalness for the five recreation opportunity spectrum classes with forest stand proxies.

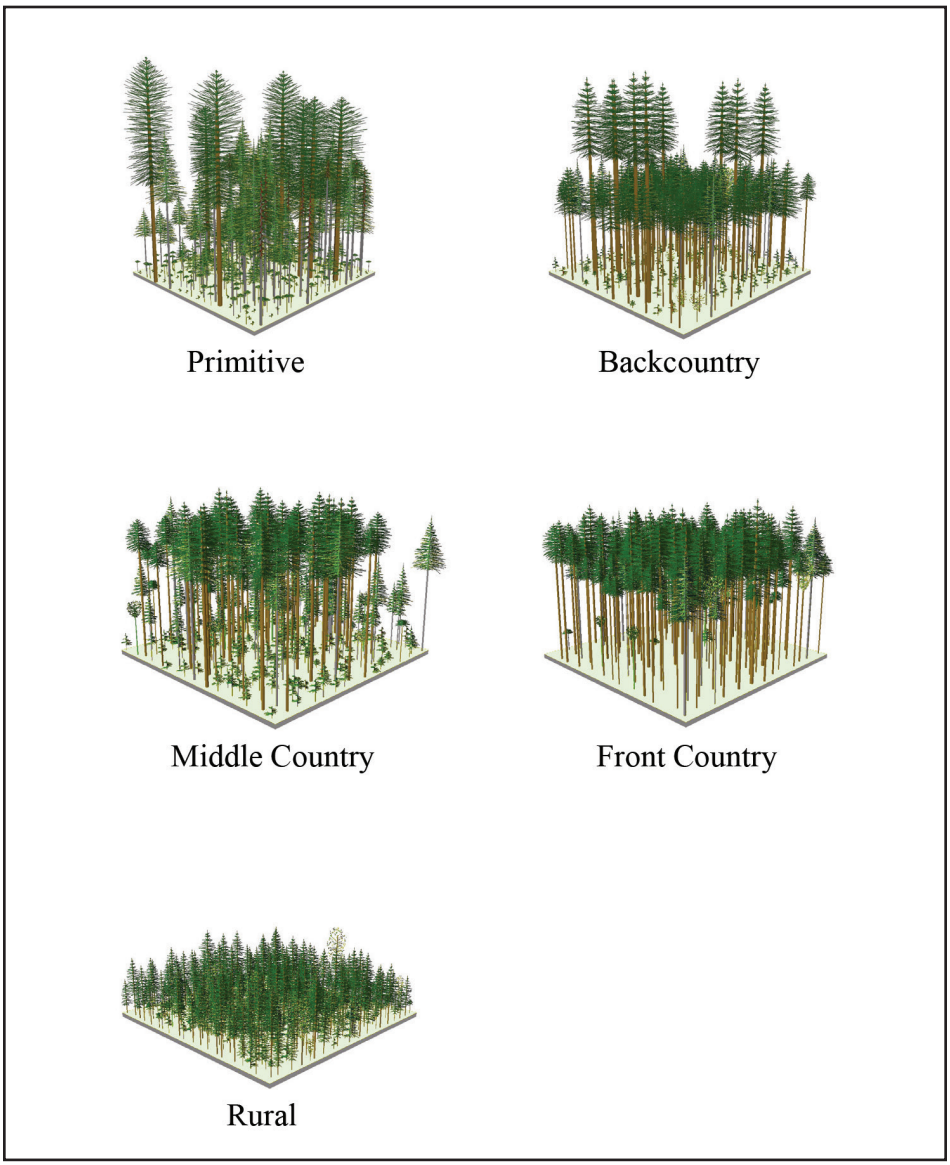


**Figure 3-121.** Stand visualizations for recreational setting classifications

**Table 3-122** contains the levels of human modification and forest structural stage classes used as proxies by recreation opportunity spectrum class for naturalness.

**Table 3-122.** Level of human modification and forest structural stage class proxies by recreation opportunity spectrum class for naturalness

| Recreation Opportunity Spectrum Class | Level of Human Modification and BLM Forest Structural Stage Class Proxies |
|---|---|
| Primitive | • Undisturbed natural landscape<br>• Structurally-complex with Existing Old or Very Old Forest |
| Backcountry | • Natural-appearing landscape having modifications not readily noticeable<br>• Mature Single- or Multi-layered Canopy |
| Middle Country | • Natural-appearing landscape having modifications that do not overpower natural features<br>• Young High Density with Structural Legacies, or Young Low Density with or without Structural Legacies |
| Front Country | • Partially modified landscape with more noticeable modifications<br>• Young High Density without Structural Legacies |
| Rural | • Substantially modified natural landscape<br>• Stand Establishment with or without Structural Legacies |
| Urban | • Urbanized developments dominate the landscape |

The BLM used the amount of timber harvest by type and acres that would occur over the next 10 years to analyze the effects to recreation opportunity spectrum classes for naturalness. For example, timber harvest that involves thinning dense, young stands would shift the naturalness of an area from the Front Country to the Middle Country setting. In contrast, the regeneration harvesting of older stands would modify the naturalness of an area from Primitive to Rural. These actions would influence the distribution of recreation for visitors who prefer these different settings.

## Background

The BLM's Recreation and Visitor Services Program manages recreation resources and visitor services to offer the largest benefits possible to individuals and communities and to enable communities to achieve their own desired social, economic, and environmental outcomes. The BLM manages recreation resources and visitor services primarily through designation of RMAs and their associated managed recreation activities, opportunities, and recreation setting characteristics. The BLM policy direction on designation of RMAs was revised in 2011 (USDI BLM 2011), and included changes to the designation process of RMAs. Current RMAs within the planning area were established under the previous policy direction (1981).

In previous planning efforts, SRMAs were established in accordance with the 1981 BLM policy on BLM-administered lands that were experiencing heavy recreation use or where the BLM planned on making large investments in staff, funding, facilities, or time. All remaining BLM-administered lands were designated as ERMAs, regardless of whether recreation occurred or was a management objective.

Under the new policy, the BLM only designates SRMAs where it recognizes recreation management as the predominant land use plan focus and where the BLM intends to manage and provide specific recreation opportunities and recreation setting characteristics on a long-term basis. In addition, ERMAs are administrative units that require specific management consideration in order to address recreation use or demand, but where recreation management is commensurate and considered in context with the management of other resources and resource uses. BLM-administered lands that do not meet these policy definitions are not identified for recreation or visitor services management.

A majority of the BLM-administered lands in western Oregon are intermingled with private lands. Legal public access is often not available where private lands surround BLM-administered lands. In such cases, reciprocal right-of-way agreements, easements, and unsecured access rights across adjacent private lands all have a determining effect on public access, which, in turn, influence visitor use. This lack of comprehensive legal public access constrains the BLM's ability to manage for recreational opportunities on a substantial portion of its lands in western Oregon. See the Trails and Travel Management section in this chapter for further discussion about public access within the planning area.

## Affected Environment

BLM-administered lands in western Oregon offer diverse opportunities for a variety of outdoor recreation activities and related benefits. Typical recreation activities on BLM-administered lands include camping, hiking, horseback riding, mountain biking, public motorized vehicle use, and picnicking.

### Recreation Management Areas

The BLM currently manages 29 SRMAs in western Oregon that total 201,258 acres, accounting for 8 percent of BLM-administered lands within the planning area. These 29 SRMAs include landscapes that generally encompass more lands than the BLM required for development of recreation sites and services, and, as such, it is extremely difficult to compare number and acres of currently designated SRMAs to actual acres of recreation sites, trails, or other recreation facilities. Under the 1995 RMPs, the BLM identified BLM-administered lands not delineated as a SRMA as ERMAs. In ERMAs, current management consists primarily of providing basic information and access. Dispersed recreation occurs in ERMAs, and visitors have the freedom of recreational choice with minimal regulatory constraints. Recreation issues or management concerns are apparent in ERMAs throughout the planning area where limited recreation management is present. These issues are most apparent in ERMAs within the rural-urban interface where increased recreation activities (including off-highway vehicle use and recreational target shooting) have led to social and natural resource impacts. The BLM currently manages 14 ERMAs in western Oregon totaling 2,277,604 acres, accounting for 92 percent of BLM-administered lands within the planning area.

### Recreation Opportunities and Restrictions

Current SRMA and ERMA designations are consistent with 1981 BLM policy, which was the applicable policy at the time of the 1995 RMPs. Under this policy, the BLM identified SRMAs where BLM-administered lands were experiencing heavy recreation use or where the BLM planned to make large investments in staff, funding, facilities, or time. All remaining BLM-administered lands were designated as an ERMA, regardless of whether recreation occurred or was a management objective. Because of this difference, the 1995 RMPs did not designate recreational opportunities or restrictions to lands identified as ERMAs and, therefore, there are no recreational opportunities or restrictions identified for ERMAs. As such, current managed recreation opportunities and restrictions only apply to the acres designated as SRMAs within the planning area (**Table 3-123**). Because the currently designated 29 SRMAs generally encompass more lands than actual acres of recreation sites, trails, or other recreation facilities, the identification of total SRMA acres where recreation opportunities are managed and allowed or restricted is equally difficult to compare to current BLM recreation management within the planning area. For example, the BLM does not actively manage for overnight camping outside of the portion of a SRMA that contains the developed campground and associated recreation facilities. As such, the calculations of managed and allowed or restricted acres of recreation opportunities are likely overestimates of current management.

**Table 3-123.** Current SRMA acres of managed and allowed, and restricted recreation opportunities within the decision area

| Recreation Opportunities | Managed and Allowed (Acres) | Restricted (Acres) |
|---|---|---|
| Horseback Riding | 199,008 | 2,250 |
| Hiking | 201,258 | - |
| Mountain Bicycling | 188,169 | 13,089 |
| Public Motorized Use | 170,127 | 31,131 |
| Overnight Camping | 194,952 | 6,306 |
| Recreational Target Shooting | 172,819 | 28,439 |

Note: The BLM can manage, allow, and restrict more than one opportunity within the same RMA, so totals of opportunities exceed total acreage.

### Recreation Setting Characteristics

BLM-administered lands within the planning area currently provide a mix of remoteness and naturalness recreation opportunity spectrum classes that provide a variety of recreational opportunities and experiences for visitors (**Table 3-124**). The BLM currently only manages remoteness and naturalness characteristics in SRMAs, and does so under management commensurate with other resource considerations.

**Table 3-124.** Current acres of BLM-managed lands by remoteness and naturalness recreation opportunity spectrum classes

| Recreation Setting Characteristic | Recreation Opportunity Spectrum Class | | | | | |
|---|---|---|---|---|---|---|
| | Primitive (Acres) | Back Country (Acres) | Middle Country (Acres) | Front Country (Acres) | Rural (Acres) | Urban (Acres) |
| Remoteness | 5,919 | 527,206 | 1,024,296 | 794,109 | 146,454 | |
| Naturalness | 588,776 | 516,118 | 178,922 | 443,170 | 435,232 | - |

## Environmental Consequences

Defining adverse or beneficial effects is often subjective for the purposes of recreation and visitor services. A management action may be adverse to one individual or user group, while beneficial to another individual or user group. Therefore, the BLM does not use the terms adverse or beneficial in this analysis without defining the recreation-specific user group.

### Recreation Management Areas

The BLM manages recreation resources and visitor services primarily through designation of RMAs and their associated managed recreation activities, opportunities, and recreation setting characteristics. The acreage and spatial distribution of RMA types varies under the No Action alternative, Alternatives A, B, C, and D, and the Proposed RMP; thus, varying the provision of BLM-managed recreation opportunities. During the development of the 1995 RMPs, the BLM identified the locations of the current SRMAs in accordance with the 1981 BLM policy on BLM-administered lands that were experiencing heavy recreation use or where the BLM planned to make large investments in staff, funding, facilities, or time. All remaining BLM-administered lands were designated as ERMAs, regardless of whether recreation occurred or was a management objective. The No Action alternative would manage SRMAs and ERMAs

under the guidance of the 1995 RMPs as written, although this would be inconsistent with current BLM policy. The fundamental differences between previous and new BLM policy guidance for both identification of SRMAs and ERMAs and their management create a difficulty in being able to compare RMAs from the No Action alternative to the action alternatives and the Proposed RMP. For the purposes of providing a comparison of the action alternatives and the Proposed RMP, Alternative B represents an approximate continuation of the current recreation opportunities, but consistent with current definitions and policy for RMAs.

#### *No Action Alternative*

Under the No Action alternative, western Oregon BLM districts would continue to manage the 29 SRMAs totaling 201,258 acres and 14 ERMAs totaling 2,277,604 acres under the direction set forth in the 1995 RMPs and related amendments. While the No Action alternative maintains the designation of the largest acres of SRMAs and ERMAs of all the action alternatives and the Proposed RMP, their management would be greatly different and the representation of large acres does not correlate to a large acreage of protected recreation resources or provided recreation management.

Where current recreation management objectives and direction do not provide adequate management for emerging recreation trends and increased visitation, recreational users of all types would likely have substantial but localized negative recreation experiences. Recreation management on BLM-administered lands would continue under previous policy guidance to be commensurate with the management of other resources and resource uses in SRMAs, which could allow other land management actions to result in undesired changes to managed recreation sites and associated recreation setting characteristics, managed activities, and recreation opportunities. Over time, recreation opportunities would be lost where recreation conflicts with other resource uses including forest management, incompatible recreation activities, and lands and realty actions.

#### *Alternative A*

Under Alternative A, the BLM would designate 141 SRMAs totaling 20,065 acres (**Table 3-125**). Alternative A would designate SRMAs where existing developed recreation sites or facilities currently exist within the planning area, and recreation would be recognized as the predominant land management focus within the SRMAs. The BLM would not designate ERMAs within the planning area (**Table 3-126**). In effect, Alternative A places an emphasis on the management and protection of developed recreation facilities on BLM-administered lands, which would protect recreation opportunities on less than 1 percent of the planning area.

**Table 3-125.** Acres of designated Special Recreation Management Areas

| District/ Field Office | Alt. A (Acres) | Alt. B (Acres) | Alt. C (Acres) | Alt. D (Acres) | PRMP (Acres) |
|---|---|---|---|---|---|
| Coos Bay | 468 | 468 | 468 | 1,600 | 1,661 |
| Eugene | 104 | 95 | 241 | 8,645 | 240 |
| Klamath Falls | 612 | 2,691 | 7,451 | 23,873 | 3,306 |
| Medford | 17,199 | 19,782 | 46,155 | 48,235 | 51,164 |
| Roseburg | 167 | 165 | 2,413 | 2,413 | 2,412 |
| Salem | 1,515 | 1,771 | 2,318 | 1,927 | 11,947 |
| **Totals** | **20,065** | **24,972** | **59,046** | **86,693** | **70,730** |

**Table 3-126.** Acres of designated Extensive Recreation Management Areas

| District/ Field Office | Alt. A (Acres) | Alt. B (Acres) | Alt. C (Acres) | Alt. D (Acres) | PRMP (Acres) |
|---|---|---|---|---|---|
| Coos Bay | - | 6,146 | 14,790 | 19,758 | 21,881 |
| Eugene | - | 20,416 | 23,971 | 26,323 | 23,899 |
| Klamath Falls | - | 66,779 | 89,842 | 192,262 | 89,337 |
| Medford | - | 12,283 | 135,837 | 219,169 | 193,651 |
| Roseburg | - | 6,819 | 39,083 | 40,502 | 18,483 |
| Salem | - | 26,877 | 54,248 | 82,444 | 73,061 |
| **Totals** | **-** | **139,320** | **357,771** | **580,458** | **420,311** |

When compared to Alternatives B, C, and D, and the Proposed RMP, Alternative A would designate the fewest acres for recreation management and fewest acres of SRMAs. Alternative A would not provide for recreation management outside of established SRMAs. This would result in little to no management for recreation resources, opportunities, or recreation setting characteristics for intensively visited areas, such as motorized and non-motorized trails, that exist outside of these SRMAs. The BLM would reactively manage these areas where recreational use resulted in unwanted effects to other resources, and reactive management would be subject to the objectives of the landscape and could result in on-the-ground management not in favor of continued recreational use. Existing trails and other non-facility recreation features would deteriorate over time and could be removed from the landscape in favor of other resource uses.

The BLM's lack of proactive management of public visitation to high use areas outside of SRMAs in Alternative A would create management issues. These include continued private property trespass, public motorized vehicle incursion, and route proliferation. The BLM expects visitation within the decision area to increase, elevating these issues and leading to the continued decline in both recreation settings and environmental resources as the BLM could not provide or manage for additional recreation opportunities.

Under this alternative, the BLM would provide sufficient management direction to preserve the desired physical recreation setting characteristics within SRMAs. These restrictions would restrict or prohibit the type of development that would affect these settings and shift the setting characteristics to an undesirable setting. This alternative provides the fewest opportunities for managed recreation compared to Alternatives B, C, and D, or the Proposed RMP.

#### *Alternative B*

Alternative B would designate 134 SRMAs totaling 24,972 acres and 75 ERMAs totaling 139,320 acres. Alternative B would designate SRMAs at currently developed recreation facilities and on lands where there are both unique recreation opportunities and where SRMA designation would not conflict with sustained-yield timber harvest. This alternative would designate ERMAs where the BLM has developed and managed recreation areas, primarily where the BLM has authorized motorized and non-motorized trails, and where the BLM currently manages dispersed recreation activities. Alternative B would place an emphasis on the management and protection of recreation opportunities on approximately 6 percent of the decision area and would allocate less than 1 percent of the decision area as a SRMA to protect the management and protection of recreation opportunities as the primary land use focus.

Under this alternative, the BLM would provide sufficient management direction to preserve the desired physical recreation setting characteristics within both SRMAs and ERMAs. These restrictions would

restrict or prohibit the type of development that would affect these settings and shift the setting characteristics to an undesirable setting.

When compared with Alternative A, Alternative B would provide for the protection of the majority of existing recreation opportunities, visitor activities, experiences, and outcomes that are currently available to visitors of BLM-administered lands within the planning area. Compared to the No Action alternative, Alternative B would continue to manage recreation opportunities consistent with current levels, but consistent with current definitions and policy for RMAs. Alternative B would also establish allowable use activities and restrictions within ERMAs. Limiting incompatible activities and adequately managing anticipated increases in visitor use (see Issue 2) would lead to the long-term protection of desired targeted recreation setting characteristics. Alternative B provides more managed recreational opportunities than Alternative A, but less than Alternatives C and D, and the Proposed RMP.

#### *Alternative C*

Alternative C would designate 139 SRMAs totaling 59,046 acres and 119 ERMAs totaling 357,771 acres. Alternative C would designate SRMAs at currently developed recreation facilities, and on lands where designation does not conflict with sustained-yield timber harvest. This alternative would designate ERMAs where the BLM has developed and currently manages recreation activities outside of developed facilities, primarily where the BLM has authorized motorized and non-motorized trails, and where the BLM currently manages dispersed recreation activities. Alternative C would also designate SRMAs and ERMAs where the BLM is seeking to address activity-specific recreation demand scarcity. Alternative C places an emphasis on the management and protection of recreation opportunities on approximately 16 percent of the decision area. Alternative C would allocate 2 percent of the decision area as an SRMA to provide the management and protection of recreation opportunities as the primary land use focus.

Compared to Alternatives A and B, Alternative C would allocate approximately three times as many acres as SRMAs. Alternative C would allocate more acres as ERMA when compared to Alternatives A and B, and less when compared with Alternative D. Under this alternative, the BLM would provide sufficient management direction to preserve the desired physical recreation setting characteristics within both SRMAs and ERMAs. These restrictions would restrict or prohibit the type of development that would affect these settings and shift the setting characteristics to an undesirable setting. The BLM assumed that increased visitor use (see Issue 2) would result from the increased protection of unique recreation settings and the establishment of recreation outcome objectives over RMA levels in Alternatives A and B, but this would be less than the protections in Alternative D and the Proposed RMP.

#### *Alternative D*

Alternative D would designate 141 SRMAs totaling 86,693 acres and 143 ERMAs totaling 580,458 acres. Alternative D builds off the RMA designations in Alternatives A, B, and C. Alternative D includes designation of SRMAs at currently developed recreation facilities, and on lands where designation does not conflict with sustained-yield timber harvest. Alternative D would include designation of ERMAs on all lands within the decision area where existing recreation use is occurring and the BLM has legal public access. In addition, the BLM would designate RMAs where known historic recreation use has occurred; and where the BLM seeks to address activity-specific demands. The BLM would designate these to the maximum extent possible without precluding sustained-yield timber harvest.

Alternative D would allocate the largest number of acres as RMAs as when compared to Alternatives A, B, and C. Alternative D places an emphasis on the management and protection of recreation opportunities on approximately 27 percent of the decision area. Alternative D allocates 3 percent of the decision area as a SRMA providing the management and protection of recreation opportunities as the primary land use

focus. The BLM would provide sufficient management direction to preserve the desired physical recreation setting characteristics within both SRMAs and ERMAs. These restrictions would restrict or prohibit the type of development that would affect these settings and shift the setting characteristics to an undesirable setting. The BLM assumed that Alternative D would have the largest increase in visitor use (see Issue 2) from the increased protection of unique recreation settings and the establishment of recreation outcome objectives when compared to Alternatives A, B, and C, and the Proposed RMP.

#### *Proposed RMP*

The Proposed RMP would designate a total of 491,042 acres as Recreation Management Areas. This includes 116 SRMAs totaling 70,730 acres and 132 ERMAs totaling 420,312 acres. The Proposed RMP builds upon the RMA designations that were established across the range of the action alternatives. Specifically, the Proposed RMP uses SRMAs and ERMAs identified in Alternative C as a baseline, refining them to address resource consistency with the Proposed RMP land use allocations and resource management needs, and to incorporate unique opportunities for activity-specific demands within the planning area. A listing of SRMAs and ERMAs by district, RMA type, and associated acreage for the action alternatives and the Proposed RMP can be found in **Appendix O**.

When compared with Alternatives A, B, and C, the Proposed RMP would provide for the protection of the majority of existing recreation opportunities, visitor activities, experiences, and outcomes that are currently available to visitors of BLM-administered lands within the planning area. The Proposed RMP would also establish additional RMAs across the planning area to account for increased recreation use levels and the protection of unique settings and activity specific recreation opportunities. The total acres designated to recreation management under the Proposed RMP are higher when compared to Alternatives A, B, and C, but less than Alternative D.

The BLM assumed that increased visitor use (see Issue 2) would result from the protection of these unique recreation settings and the establishment of recreation outcome objectives on the 491,042 acres. Compared to Alternatives A, B, and C, the Proposed RMP would establish a greater amount of activity-specific recreation restrictions by establishing allowable use activities within both SRMAs and ERMAs. Limiting incompatible activities and adequately managing anticipated increases in visitor use would lead to the long-term protection of desired targeted recreation setting characteristics and recreation outcomes.

## Recreation Opportunities and Restrictions

The BLM manages for or allows specific recreation activities within RMAs in order to create and sustain high-quality recreation opportunities, to achieve desired recreation conditions, or to protect recreation setting characteristics. Managing for, or allowing, specific recreation activities within SRMAs and ERMAs ensures that investments in recreation facilities are as efficient and effective as possible, and help to provide for public safety. Many SRMAs and ERMAs, are managed for specific recreational uses or opportunities, but allow other recreational uses that do not present conflicts for the primary recreational opportunities the BLM manages at the site.

**Table 3-127** identifies the acres by alternative and the Proposed RMP within SRMAs and ERMAs where the BLM manages and allows each type of activity.

**Table 3-127.** RMA acres of managed and allowed recreation opportunities within the decision area

| Recreation Opportunities | No Action (Acres)* | Alt. A (Acres) | Alt. B (Acres) | Alt. C (Acres) | Alt. D (Acres) | PRMP (Acres) |
|---|---|---|---|---|---|---|
| Horseback Riding | 199,008 | 19,017 | 155,480 | 367,402 | 603,530 | 459,939 |
| Hiking | 201,258 | 20,065 | 162,796 | 381,671 | 625,203 | 489,884 |
| Mountain Bicycling | 188,169 | 18,817 | 150,494 | 359,326 | 591,748 | 406,134 |
| Public Motorized Use | 170,127 | 2,551 | 104,148 | 329,594 | 561,685 | 452,728 |
| Overnight Camping | 194,952 | 19,235 | 146,301 | 356,611 | 600,539 | 458,652 |
| Recreational Target Shooting | 172,819 | 1,829 | 122,627 | 350,409 | 531,687 | 326,289 |

Note: The BLM can manage for and allow more than one opportunity within the same RMA, so totals of managed and allowed opportunities exceed total acreage.
* Because the currently designated 29 SRMAs generally encompass more lands than actual acres of recreation sites, trails, or other recreation facilities, the identification of total SRMA acres where recreation opportunities are managed and allowed is equally difficult to compare to current BLM recreation management within the planning area or compare against the action alternatives and the Proposed RMP.

Under the action alternatives, the acres where the BLM would manage for specific recreation activities increase progressively from Alternatives A–D. The acres targeted for specific recreation activities under the No Action alternative are larger than Alternative A and less than those acres identified in Alternative B. The acres targeted for specific recreation activities under the Proposed RMP are larger than Alternative C and less than those acres identified in Alternative D.

For all areas, the BLM considered the potential for increases or decreases in conflict between recreationists from recreation management actions, opportunities, and restrictions. Recreational conflict occurs when incompatible activities take place in the same area, or when certain types of recreational use could result in unwanted impacts to other resources. Certain activities interfere with the experience expectations of other recreational users (Marcouiller *et al.* 2008). For example, a hiker with the expectation of a quiet experience that encounters an OHV on a trail might consider the encounter as a conflict. The presence of an OHV interferes with the expectation of a quiet outing. Conflict among recreational users is generally asymmetrical; that is, one user might perceive there is a conflict while another user might not perceive there is a conflict (Jackson and Wong 1982). The BLM manages these potential conflicts by applying restrictions on certain recreation activities. In some cases, this results in seasonal restrictions, but can also result in prohibition of the recreational activity within the SRMA or ERMA if necessary. Restrictions of certain activities would preclude the opportunities for these activities on BLM-administered lands. **Table 3-128** identifies the acres by alternative and the Proposed RMP within SRMAs and ERMAs where activity-specific recreation restrictions occur.

**Table 3-128.** RMA acres of restricted recreation opportunities within the decision area

| Recreation Opportunities | No Action (Acres)* | Alt. A (Acres) | Alt. B (Acres) | Alt. C (Acres) | Alt. D (Acres) | PRMP (Acres) |
|---|---|---|---|---|---|---|
| Horseback Riding | 2,250 | 1,048 | 8,828 | 49,414 | 63,620 | 31,102 |
| Hiking | - | - | 1,511† | 35,144 (2,924†) | 41,907 (2,924†) | 1,157† |
| Mountain Bicycling | 13,089 | 1,248 | 13,814 | 57,490 | 75,402 | 84,907 |
| Public Motorized Use | 31,131 | 17,514 | 60,144 | 87,223 | 105,466 | 38,313 |
| Overnight Camping | 6,306 | 829 | 18,006 | 60,205 | 66,611 | 32,389 |
| Recreational Target Shooting | 28,439 | 18,236 | 41,681 | 66,407 | 135,464 | 164,752 |

* Because the currently designated 29 SRMAs generally encompass more lands than actual acres of recreation sites, trails, or other recreation facilities, the identification of total SRMA acres where recreation opportunities are restricted is equally difficult to compare to current BLM recreation management within the planning area or compare against the action alternatives and the Proposed RMP.

† Acres of the total shown for restricted hiking acres would have seasonal restrictions applied to the trail systems. All other acre restrictions would prohibit or otherwise set conditions for year-round hiking.

Note: The BLM can restrict more than one opportunity within the same RMA, so totals of restricted opportunities exceed total acreage.

Under the No Action alternative, all action alternatives, and the Proposed RMP, the BLM would restrict recreation opportunities at levels shown in **Table 3-128** to protect resources, reduce recreation conflicts, and provide for public safety. Under the action alternatives, the acres where specific recreation activities the BLM would manage for or allow increase progressively in Alternatives A–D. The acres targeted for specific recreation activities under the No Action alternative are larger than Alternative A and less than those acres identified in Alternative B. The acres targeted for specific recreation activities under the Proposed RMP vary in their comparative levels to the action alternatives depending on the recreation opportunity.

## Recreation Setting Characteristics

As explained in the Analytical Methods section, the BLM has focused the discussion of effects to recreation setting characteristics to the discussion of remoteness and naturalness and how the alternatives and the Proposed RMP would change the existing recreation opportunity spectrum for these recreation setting characteristics.

Timber management actions that require new road construction would affect the recreation opportunity spectrum class for the remoteness of an area. Increasing the amount or improving the type of access into an area can change distance zones, thus changing the recreation opportunity class, and lead to higher levels of certain types of use. New road construction for timber harvest under each alternative and the Proposed RMP would only require small increases in additional local and resource roads. The BLM anticipates changes to remoteness recreation opportunity spectrum classes from estimated road construction would be localized and minor when considered at the planning-area scale. However, these minor changes cannot be modeled or shown because new road construction is only projected numerically and not mapped spatially. So even though estimated miles of new road construction may be calculated, there is no way to determine where new construction would occur and if it would increase or decrease acres in a given recreation opportunity spectrum class for remoteness.

Under all alternatives and the Proposed RMP, there would be localized effects to the variety of recreational opportunities that exist on BLM-administered lands when considering recreation opportunity

spectrum classes for remoteness. The BLM used forest structural stage classes as a proxy (**Table 3-122**) to measure changes in recreation opportunity spectrum classes for naturalness for all classes excepting urban, which would not contain forested components and would not change based upon BLM management.

**Table 3-129** shows the acres of BLM-administered lands in each of the five classes of recreation opportunity spectrum for naturalness.

**Table 3-129.** Acres of BLM-administered lands by Recreation Opportunity Spectrum Classes for naturalness

| Alternative/ Proposed RMP | Recreation Opportunity Spectrum Class | | | | |
|---|---|---|---|---|---|
| | Primitive (Acres) | Back Country (Acres) | Middle Country (Acres) | Front Country (Acres) | Rural (Acres) |
| No Action | 649,799 | 692,016 | 161,105 | 389,069 | 270,236 |
| Alt. A | 627,043 | 623,388 | 156,681 | 396,966 | 357,621 |
| Alt. B | 621,105 | 617,535 | 161,534 | 427,101 | 334,424 |
| Alt. C | 590,837 | 566,186 | 149,499 | 414,083 | 441,094 |
| Alt. D | 629,097 | 659,078 | 162,275 | 398,293 | 312,956 |
| PRMP | 616,678 | 612,852 | 164,791 | 425,527 | 341,851 |

Although some localized effects would occur within each of these five recreation opportunity spectrum classes, none of the changes would be measurable enough to influence visitor use patterns that are associated with any single recreation activity within the decision area. As a result, all alternatives and the Proposed RMP would continue to maintain a mix of naturalness recreation opportunity spectrum classes that provide a variety of recreational opportunities and experiences for visitors. These minor changes in naturalness recreation opportunity spectrum classes for each alternative and the Proposed RMP cannot be modeled or shown because timber harvest is only projected numerically and not mapped spatially. So even though estimated acres of timber harvest may be calculated, there is no way to determine where harvest would occur and if it would increase or decrease acres in a given recreation opportunity spectrum class for remoteness.

## Effects from the Management of Other Resources

The management of other resources would affect recreation and visitor services. Forest management, lands and realty actions, special designations, and mineral resource development would have both short-term and long-term effects to localized recreation opportunities. Some land management actions, such as timber harvest and wildland fire and fuels management, would change landscapes, or result in temporary closures within and surrounding RMAs. Other land management actions, such as protections of ESA-listed species or sensitive resources, would not alter the landscapes, but could result in changes to access or even result in interpretive educational opportunities. Other actions, such as special area designations like Wild and Scenic rivers or National Trails, would usually identify those areas as valuable for a variety of recreation activities, and result in benefits to the focus recreation opportunities, which typically include low-impact opportunities such as wildlife viewing or hiking.

Land management decisions associated with the issuance of a right-of-way could result in permanent changes to recreation opportunities within the planning area. Construction of new roads or development on lands adjacent to BLM-administered lands can change the physical recreation setting characteristics of naturalness and remoteness, or effect developed recreation sites and trails, depending on the location of roads or development.

The BLM designates right-of-way avoidance or exclusion areas to protect resources from these types of unwanted actions. See the Lands and Realty section in this chapter for further explanation of rights-of-way, and avoidance and exclusion areas. All alternatives and the Proposed RMP result in some protections to RMAs from right-of-way exclusion or avoidance (**Table 3-130**). Alternatives C and D, and the Proposed RMP would have the most acres in both right-of-way avoidance areas and right-of-way exclusion areas.

**Table 3-130.** Right-of-way avoidance areas and right-of-way exclusion areas within RMAs

| Alternative/ Proposed RMP | ROW Avoidance Area (Acres) | ROW Exclusion Area (Acres) |
|---|---|---|
| No Action | 8,207 | 1,321 |
| Alt. A | 18,543 | 7,075 |
| Alt. B | 38,731 | 14,754 |
| Alt. C | 416,617 | 17,010 |
| Alt. D | 666,862 | 12,140 |
| PRMP | 390,080 | 100,892 |

# Issue 2

*How would the alternatives affect the types and levels of BLM-provided recreation supply and demand across western Oregon?*

## Summary of Analytical Methods

This analysis considered the effect of the alternatives and the Proposed RMP on recreation supply and demand specific to motorized and non-motorized trail use. See the Socioeconomics section of this chapter for discussions on the overall and more general recreation supply and demand within the planning area. The BLM estimated recreation demand by considering the estimated number of visitors projected to participate in a particular recreation opportunity over the next 10 years and beyond. The BLM measured recreation demand in two ways: (1) total number of visitors per year, and (2) total number of participants by 13 primary recreation activity categories. Because a single visitor usually participates in more than one activity, the number of participants is generally higher than the number of actual visitors. Since visitor use patterns are difficult to estimate and dependent on many factors beyond the scope of management (e.g., recreation trends and economy) only qualitative language is used to describe anticipated effects on visitation.

This recreation demand assessment considers the market area or 'visitation range' where the majority of the current or potential visitors are likely to reside. The BLM selected 12 population centers within the planning area to serve as study communities for this analysis. The BLM conducted a recreation demand analysis throughout the planning area in 2013–2014.[86] This analysis focused on proximity to user populations as well as both scarcity and demand for recreation opportunities. A number of factors influence the demand for outdoor recreation in western Oregon. This analysis examined recreation context, supply, and demand drivers, and is incorporated here by reference (ECONorthwest, April 2015).

[86] ECONorthwest, an economics, planning, and financial consulting firm, conducted the recreation demand analysis under contract from the BLM.

Since visitor use patterns are difficult to estimate and are dependent on many factors beyond the scope of management, such as recreational trends and the economy, the BLM only used qualitative language to describe anticipated effects on visitation.

The Planning Criteria provides more detailed information on analytical assumptions, methods and techniques, and geographic and temporal scales, which is incorporated here by reference (USDI BLM 2014b, pp. 109–114).

## Background

BLM-administered lands are not the sole provider of recreational settings and opportunities in western Oregon, and many additional opportunities exist on other Federal, State, and County lands throughout the planning area. Other recreation-tourism markets also affect the amount of use on BLM-administered lands. An estimated 18 percent of all outdoor recreation participation in western Oregon occurs on BLM-administered lands (USDI BLM 2014a). For comparison purposes, BLM-administered lands account for 12 percent of all lands within the planning area. Recreation visitors to the planning area come from three primary sources: national and international locations, major metropolitan areas, and local communities.

As part of its 2010 revision of the Resources Planning Act Assessment, the U.S. Forest Service developed national projections of participation for 17 outdoor recreation activities through 2060 (Bowker *et al.* 2012). These projections take into account various scenarios of climate change based on the Intergovernmental Panel on Climate Change (IPCC) scenarios, population and income growth, and land use change. The BLM applied these projections to each of the 13 relevant BLM recreation categories, using the base scenario (A1B, corresponding to mid-range population growth and the highest average personal and household income level of the 3 IPCC scenarios). These participation trends are consistent with those observed over the last few decades in Oregon (Hall *et al.* 2009).

**Table 3-131** and **Figure 3-122** provide the current level of participation for the 13 primary recreation activities on BLM-administered lands in western Oregon, the annual rate of change to participation for each activity (based on statewide trends), and their projected levels by the year 2060.

**Table 3-131.** Current and projected levels of participation by recreation activity within the planning area from 2012 to 2060

| BLM Recreation Categories | Current Number of Participants (2012) | Projected Number of Participants (By End of Decade) | | | | |
|---|---|---|---|---|---|---|
| | | 2020 | 2030 | 2040 | 2050 | 2060 |
| Wildlife Viewing, Interpretation, and Nature Study | 2,564,574 | 2,810,926 | 3,149,289 | 3,456,865 | 3,751,811 | 4,056,276 |
| Driving for Pleasure (Along Designated BLM Roadways) | 1,959,729 | 2,140,696 | 2,388,704 | 2,610,605 | 2,819,454 | 3,033,896 |
| Camping and Picnicking | 1,273,349 | 1,389,106 | 1,548,035 | 1,689,978 | 1,822,216 | 1,956,881 |
| Non-motorized Travel (Hiking, Biking, and Horseback Riding) | 1,211,201 | 1,334,041 | 1,499,867 | 1,666,874 | 1,841,117 | 2,031,541 |
| Hunting (Big Game, Upland Game, and Migratory Game Birds) | 1,063,709 | 1,111,142 | 1,159,767 | 1,197,012 | 1,232,188 | 1,270,468 |
| Motorized Off-highway Vehicle Travel | 826,256 | 887,031 | 955,996 | 1,035,266 | 1,128,804 | 1,238,989 |
| Fishing | 598,420 | 645,558 | 706,223 | 760,591 | 814,388 | 872,763 |
| Specialized Non-motorized Activities and Events | 458,870 | 501,333 | 559,264 | 612,440 | 663,431 | 716,455 |
| Swimming and Other Water-based Activities | 424,376 | 467,997 | 526,296 | 583,388 | 640,883 | 701,192 |
| Non-motorized Boating | 224,876 | 242,296 | 262,362 | 286,958 | 315,870 | 349,744 |
| Motorized Boating | 97,622 | 107,563 | 119,936 | 133,508 | 149,019 | 167,485 |
| Non-motorized Winter Activities | 50,444 | 56,687 | 64,711 | 73,679 | 84,205 | 97,138 |
| Snowmobile and other Motorized Winter Activities | 6,903 | 7,428 | 7,998 | 8,734 | 9,629 | 10,697 |
| **Total All Activities** | **10,760,329** | **11,701,804** | **12,948,448** | **14,115,898** | **15,273,015** | **16,503,525** |

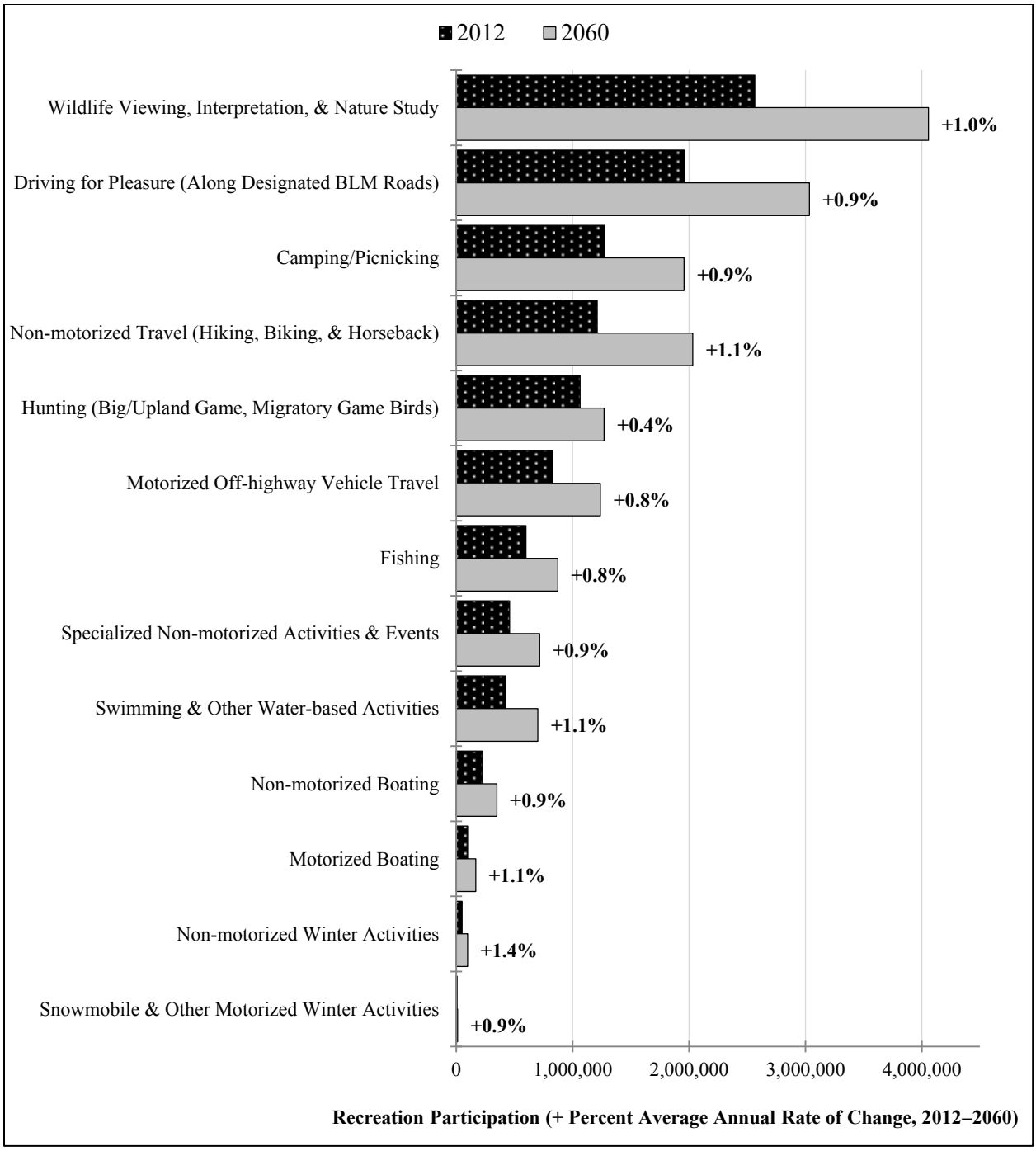


**Figure 3-122**. Projected levels of change by recreation activity within the planning area from 2012–2060

The BLM evaluated activity-specific recreation demand for 12 population centers within the planning area, achieving a wide spatial coverage and capturing a majority of the area's population (**Figure 3-123**). **Table 3-132** provides a summary of 2,262 responses to the 2012–2013 interactive BLM website that solicited public input from the 12 selected study communities. Results show community level and activity specific recreation demand preferences for 16 distinct recreation activities across the 12 population centers in western Oregon.

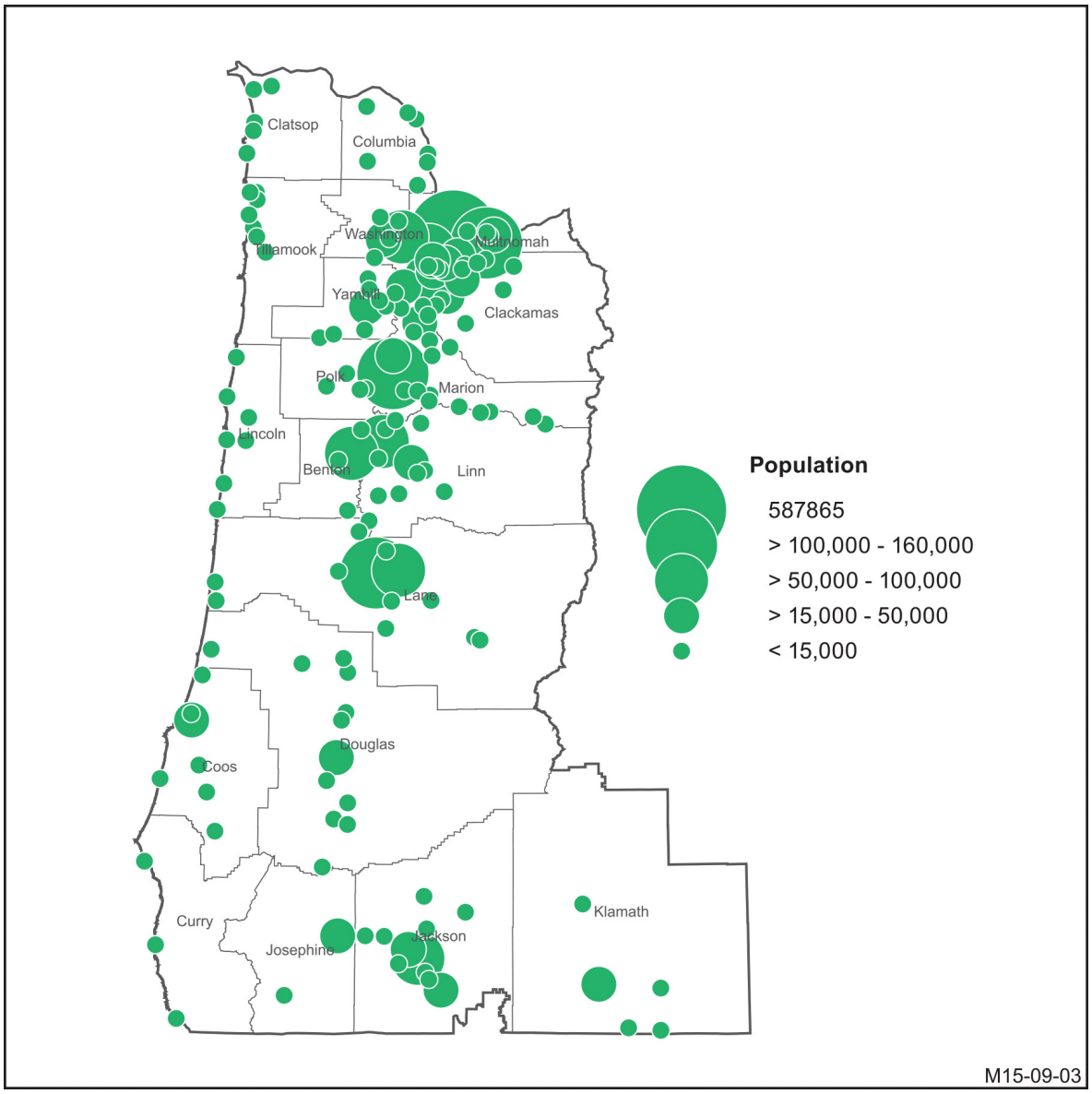


**Figure 3-123.** Population centers within the planning area

**Table 3-132.** Activity-specific recreation demand for western Oregon communities

| Recreation Activity | Percentage of Activities in Each Community | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coos Bay | Corvallis | Eugene | Grants Pass | McMinnville | Medford | Newberg | Portland | Roseburg | Salem | Sandy | Tillamook |
| Nature Viewing | 4% | 3% | 6% | 2% | 7% | 3% | 4% | 2% | 3% | 3% | 2% | 3% |
| Non-motorized Trails | 6% | 5% | 6% | 11% | 4% | 12% | 4% | 5% | 5% | 8% | 6% | 5% |
| Water Trail | - | 1% | - | - | - | - | - | 1% | - | - | 1% | 1% |
| Hiking | 2% | 6% | 6% | 9% | 7% | 8% | 2% | 1% | 6% | 5% | 6% | 4% |
| Mountain Biking | 17% | 34% | 29% | 17% | 18% | 16% | 21% | 37% | 14% | 23% | 27% | 19% |
| Horseback Riding | 1% | 3% | 5% | 7% | 4% | 3% | 4% | 3% | 4% | 7% | 5% | 3% |
| Motorized OHV Travel | 48% | 19% | 25% | 29% | 28% | 31% | 29% | 21% | 43% | 26% | 30% | 25% |
| Hunting-Fishing | 4% | 6% | 9% | 3% | 5% | 2% | 5% | 4% | 6% | 7% | 4% | 7% |
| Camping-Picnicking | 2% | 2% | 3% | 3% | 7% | 2% | 4% | 2% | 2% | 5% | 2% | 2% |
| Hang Gliding-Paragliding | 10% | 8% | 4% | 10% | 11% | 11% | 20% | 13% | 4% | 4% | 6% | 22% |
| Recreational Target Shooting | 2% | 5% | 2% | 1% | 2% | 1% | 4% | 4% | 1% | 7% | 4% | 2% |
| Gold Panning-Dredging | 2% | 1% | 1% | 2% | 1% | 2% | 1% | 1% | 2% | 2% | 1% | 1% |
| River Recreation | 1% | 2% | 1% | 3% | 4% | 1% | 2% | 2% | 2% | - | 2% | 2% |
| Rock Hounding | 1% | 4% | 1% | 1% | 1% | 1% | - | 2% | 1% | 1% | 1% | 2% |
| Rock Climbing | - | 1% | 1% | 1% | - | 1% | - | 1% | 6% | - | 2% | - |
| Winter Activities | - | - | 1% | 1% | 1% | 6% | - | 1% | 1% | 2% | 1% | 2% |

## Affected Environment

Applying travel time distances from the 12 study communities in western Oregon (**Figure 3-124**) reveals the portions of BLM-administered lands that can be accessed relatively easily for recreational activities.

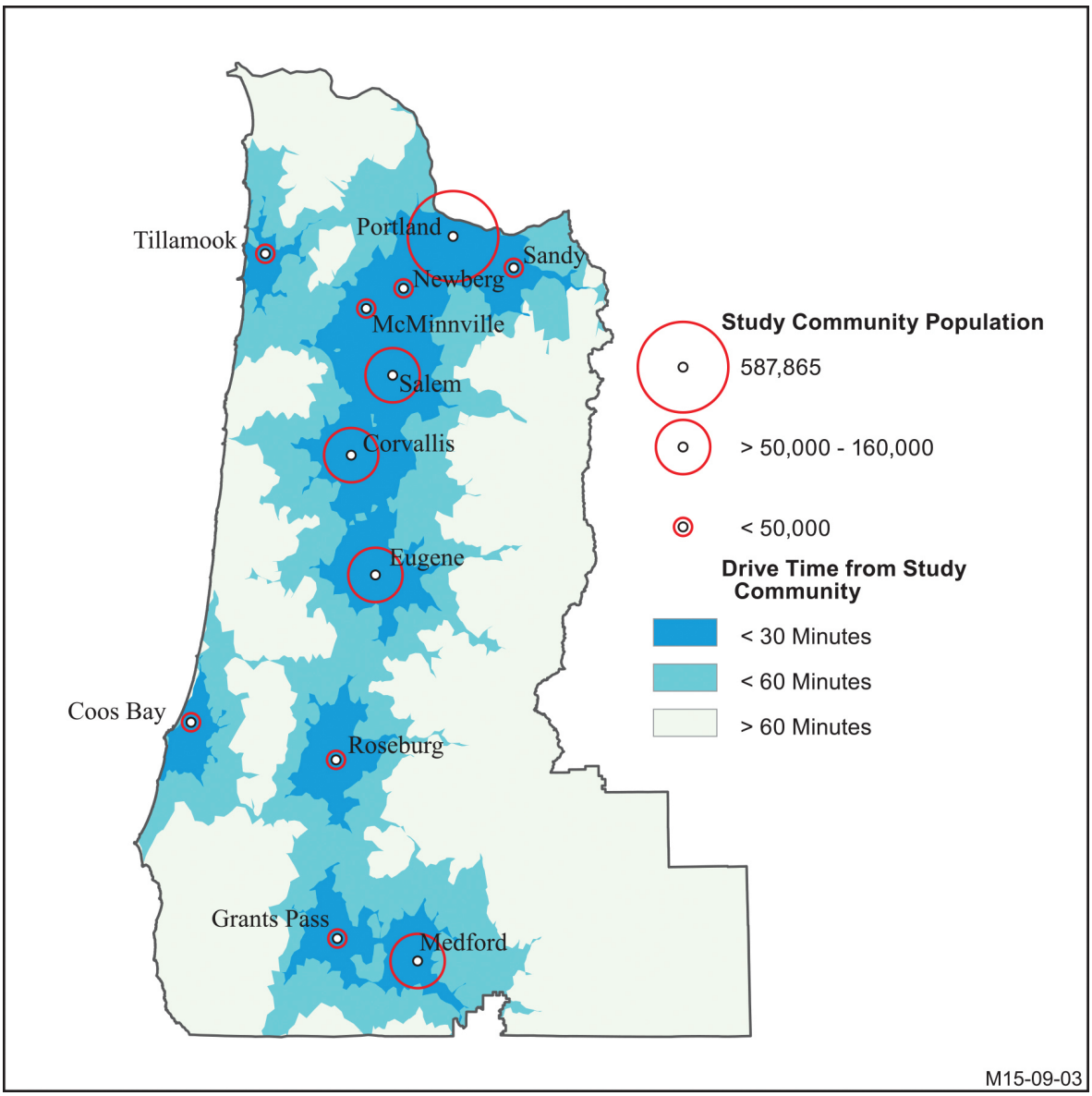


**Figure 3-124.** Thirty- and sixty-minute driving times from the 12 western Oregon study communities and population center size

Population centers and access tend to drive demand for outdoor recreation opportunities. The northern Willamette Valley is the most heavily populated portion of the region, dominated by the Portland Metro Area (**Figure 3-125**). Recreation opportunities within proximity to these population centers experience the most demand, and consequently have the potential to provide the most value, when they provide the types of recreation of interest. While access is often quite difficult through rugged and mountainous areas, the majority of BLM-administered lands within the planning area are within 50 miles of one of the 12 population centers the BLM has used as a study community (**Figure 3-124**).

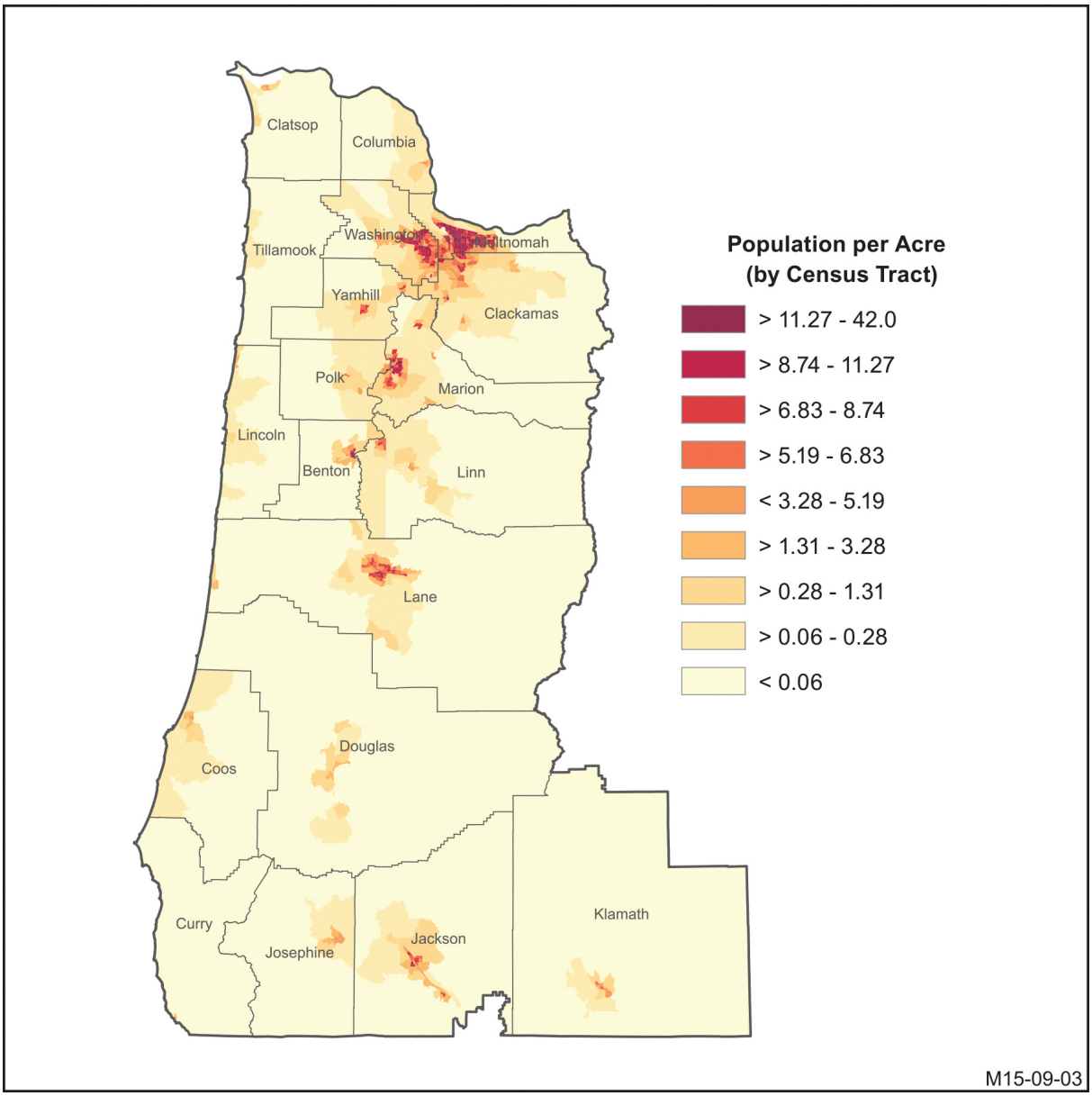


**Figure 3-125.** Western Oregon population density

## Motorized and Non-Motorized Supply and Demand

Self-reported participation on the BLM's interactive mapping site revealed differences in outdoor recreation as a function of both supply opportunities and demand preferences. Currently, trail use accounts for 69 percent of the identified demand within the planning area (**Table 3-132**). Among respondents, motorized trail use is slightly greater than non-motorized trail use in the Coos Bay and Roseburg communities, while the opposite holds true for respondents in the rest of the study communities.

### *Hiking Trails*

The availability of all identifiable non-motorized hiking trails (BLM and non-BLM) within a 30-minute and 60-minute drive of the study communities varies, with Sandy having the most trail miles available within both the 30-minute and 60-minute driving distances (**Table 3-133** and **Table 3-134**) Based on the

available trail data, accessible hiking trails are generally scarcer for Coos Bay and Tillamook than the other communities are when looking at a 60-minute driving distance.

**Table 3-133.** Supply and demand for hiking trails within a 30-minute driving distance from study communities

| Community | Community Participation Rate | Local User Population | Trail Miles | Trail Miles Per User |
|---|---|---|---|---|
| Coos Bay | 40% | 21,353 | 51 | 0.0024 |
| Corvallis | 54% | 108,473 | 300 | 0.0028 |
| Eugene | 47% | 160,078 | 73 | 0.0005 |
| Grants Pass | 46% | 55,592 | 345 | 0.0062 |
| McMinnville | 46% | 56,994 | 30 | 0.0005 |
| Medford | 47% | 85,002 | 437 | 0.0051 |
| Newberg | 46% | 236,095 | 187 | 0.0008 |
| Portland | 55% | 773,649 | 298 | 0.0004 |
| Roseburg | 41% | 39,120 | 66 | 0.0017 |
| Salem | 50% | 213,239 | 326 | 0.0015 |
| Sandy | 45% | 177,305 | 1,528 | 0.0086 |
| Tillamook | 34% | 8,366 | 111 | 0.0133 |
| **1st Quartile** | **44%** | **51,474** | **72** | **0.0007** |
| **Median** | **46%** | **96,737** | **242** | **0.0020** |
| **2nd Quartile** | **48%** | **186,289** | **330** | **0.0054** |

**Table 3-134.** Supply and demand for hiking trails within a 60-minute driving distance from study communities

| Community | Community Participation Rate | Local User Population | Trail Miles | Trail Miles Per User |
|---|---|---|---|---|
| Coos Bay | 40% | 32,674 | 157 | 0.0048 |
| Corvallis | 54% | 498,958 | 443 | 0.0009 |
| Eugene | 47% | 305,863 | 846 | 0.0028 |
| Grants Pass | 46% | 150,993 | 1,162 | 0.0077 |
| McMinnville | 46% | 760,939 | 641 | 0.0008 |
| Medford | 47% | 137,371 | 512 | 0.0037 |
| Newberg | 46% | 963,756 | 901 | 0.0009 |
| Portland | 55% | 1,136,424 | 2,142 | 0.0019 |
| Roseburg | 41% | 73,796 | 859 | 0.0116 |
| Salem | 50% | 937,711 | 928 | 0.0010 |
| Sandy | 45% | 704,886 | 2,800 | 0.0040 |
| Tillamook | 34% | 26,923 | 269 | 0.0100 |
| **1st Quartile** | **44%** | **121,477** | **495** | **0.0010** |
| **Median** | **46%** | **402,411** | **853** | **0.0032** |
| **2nd Quartile** | **48%** | **805,132** | **986** | **0.0055** |

Hiking trail miles per capita with respect to the local residential population within 30 minutes is lowest for Portland, followed by Eugene and McMinnville. At the 60-minute radius, McMinnville, Newberg, Corvallis, and Salem have the fewest hiking trail miles with respect to population. When available trail miles per capita for these communities are low increased visitor interactions can be expected to degrade the user experience near in these areas.

### *Mountain Bike Trails*

The availability of all identifiable mountain bike trails (BLM and non-BLM) within 30-minute and 60-minute driving distance of the study communities varies, with Corvallis having the most trail miles available within 30 minutes and Sandy having the most trail miles available within 60 minutes (**Table 3-135** and **Table 3-136**). Based on the available trail data, mountain bike trails are generally scarcer for Salem and Tillamook than other communities are when looking at a 30-minute drive.

**Table 3-135.** Supply and demand for mountain bike trails within a 30-minute driving distance from study communities

| Community | Community Participation Rate | Local User Population | Trail Miles | Trail Miles Per User |
|---|---|---|---|---|
| Coos Bay | 11% | 5,716 | 30 | 0.0052 |
| Corvallis | 17% | 34,276 | 183 | 0.0053 |
| Eugene | 11% | 36,811 | 11 | 0.0003 |
| Grants Pass | 10% | 11,990 | 56 | 0.0047 |
| McMinnville | 9% | 11,698 | 27 | 0.0023 |
| Medford | 14% | 25,988 | 16 | 0.0006 |
| Newberg | 9% | 48,456 | 42 | 0.0009 |
| Portland | 11% | 159,198 | 47 | 0.0003 |
| Roseburg | 9% | 8,554 | 15 | 0.0018 |
| Salem | 12% | 50,348 | 9 | 0.0002 |
| Sandy | 7% | 26,005 | 79 | 0.0030 |
| Tillamook | 11% | 2,651 | 8 | 0.0030 |
| **1st Quartile** | **9%** | **10,912** | **14** | **0.0005** |
| **Median** | **11%** | **25,996** | **29** | **0.0020** |
| **2nd Quartile** | **12%** | **39,723** | **49** | **0.0035** |

**Table 3-136.** Supply and demand for mountain bike trails within a 60-minute driving distance from study communities

| Community | Community Participation Rate | Local User Population | Trail Miles | Trail Miles Per User |
|---|---|---|---|---|
| Coos Bay | 11% | 8,746 | 42 | 0.0048 |
| Corvallis | 17% | 157,663 | 193 | 0.0012 |
| Eugene | 11% | 70,336 | 284 | 0.0040 |
| Grants Pass | 10% | 32,567 | 155 | 0.0048 |
| McMinnville | 9% | 156,175 | 187 | 0.0012 |
| Medford | 14% | 41,999 | 221 | 0.0053 |
| Newberg | 9% | 197,801 | 202 | 0.0010 |
| Portland | 11% | 233,849 | 225 | 0.0010 |
| Roseburg | 9% | 16,137 | 147 | 0.0091 |
| Salem | 12% | 221,404 | 170 | 0.0008 |
| Sandy | 7% | 103,383 | 280 | 0.0027 |
| Tillamook | 11% | 8,531 | 244 | 0.0286 |
| **1st Quartile** | **9%** | **28,460** | **166** | **0.0012** |
| **Median** | **11%** | **86,859** | **197** | **0.0034** |
| **2nd Quartile** | **12%** | **167,698** | **230** | **0.0049** |

Mountain bike trails per capita with respect to the local residential population within 30 minutes is lowest for Salem followed by Portland and Eugene. At the 60-minute radius, Salem, Newberg, and Portland have the fewest mountain bike trails with respect to population.

### *Off-highway Vehicle Trails*

The availability of all identifiable OHV trails (BLM and non-BLM) within 30-minute and 60-minute driving time of the study communities varies, with Grants Pass having the most trail miles available within both a 30-minute and 60-minute drive (**Table 3-137** and **Table 3-138**). Based on the available trail data, OHV trails are negligible for Eugene and Portland when looking at 30-minute driving distances.

**Table 3-137.** Supply and demand for OHV trails within a 30-minute driving distance from study communities

| Community | Community Participation Rate | Local User Population | Trail Miles | Trail Miles Per User |
|---|---|---|---|---|
| Coos Bay | 29% | 15,853 | 51* | 0.0032 |
| Corvallis | 10% | 19,356 | 21 | 0.0011 |
| Eugene | 6% | 19,925 | 34 | 0.0017 |
| Grants Pass | 10% | 12,354 | 177 | 0.0143 |
| McMinnville | 11% | 13,440 | 58 | 0.0043 |
| Medford | 10% | 18,589 | 89 | 0.0048 |
| Newberg | 11% | 55,673 | 58 | 0.0010 |
| Portland | 2% | 20,947 | - | - |
| Roseburg | 19% | 18,551 | 53 | 0.0028 |
| Salem | 11% | 44,848 | 2 | 0.0000 |
| Sandy | 9% | 34,673 | 80 | 0.0023 |
| Tillamook | 16% | 3,989 | 58 | 0.0146 |
| **1st Quartile** | **9%** | **15,250** | **31** | **0.0020** |
| **Median** | **10%** | **18,972** | **55** | **0.0029** |
| **2nd Quartile** | **12%** | **24,379** | **64** | **0.0026** |

* Trail miles shown for Coos Bay reflect designated and user-created trail miles found within the Oregon Dunes National Recreation Area. These trail miles under-represent the supply available for this geographic area, since there are more than 6,000 acres of open riding available within the Oregon Dunes National Recreation Area.

**Table 3-138.** Supply and demand for OHV trails within a 60-minute driving distances from study communities

| Community | Community Participation Rate | Local User Population | Trail Miles | Trail Miles Per User |
|---|---|---|---|---|
| Coos Bay | 29% | 24,258 | 175* | 0.0072 |
| Corvallis | 10% | 89,033 | 22 | 0.0002 |
| Eugene | 6% | 38,072 | 35 | 0.0009 |
| Grants Pass | 10% | 33,554 | 653 | 0.0194 |
| McMinnville | 11% | 179,435 | 124 | 0.0007 |
| Medford | 10% | 30,041 | 278 | 0.0093 |
| Newberg | 11% | 227,261 | 150 | 0.0007 |
| Portland | 2% | 30,770 | 168 | 0.0054 |
| Roseburg | 19% | 34,994 | 243 | 0.0069 |
| Salem | 11% | 197,21 | 119 | 0.0006 |
| Sandy | 9% | 137,844 | 162 | 0.0012 |
| Tillamook | 16% | 12,835 | 78 | 0.0061 |
| **1st Quartile** | **9%** | **30,587** | **109** | **0.0036** |
| **Median** | **10%** | **36,533** | **156** | **0.0043** |
| **2nd Quartile** | **12%** | **148,242** | **192** | **0.0013** |

* Trail miles shown for Coos Bay include 51 designated and user-created trail miles found within the Oregon Dunes National Recreation Area. These trail miles under-represent the supply available for this geographic area, since there are more than 6,000 acres of open riding available within the Oregon Dunes National Recreation Area.

Off-highway vehicle trails per capita with respect to the local residential population within 30 minutes are lowest for Eugene and Portland. At the 60-minute radius, Eugene, Corvallis, and Salem have the fewest OHV trails with respect to population.

## Environmental Consequences

The BLM focused on the 12 population centers within the planning area to serve as study communities when evaluating effects of the alternatives and the Proposed RMP to recreation supply and demand. The BLM focuses discussions here on recreation demand for trails, as this accounts for 69 percent of the identified demand within the planning area (**Table 3-132**). As such, this analysis focuses on trails in general[87] and RMAs that target popular trail based activities within the planning area, specifically hiking, mountain biking, and riding OHVs. See the Socioeconomics section of this chapter for further discussion of more general recreation demand within the planning area.

Individual RMAs do not identify total miles of trail per area, but extrapolating from available trail miles per acre under current conditions allows an approximation of the number of trail miles that would be available under each alternative and the Proposed RMP. Currently there are approximately 395 miles of trails on BLM-administered lands in western Oregon, which could increase to the highest levels at 1,734 miles under the Proposed RMP and to 2,037 miles under Alternative D (**Table 3-139)**.

**Table 3-139.** Potential RMA trail miles

| District/ Field Office | No Action (Miles) | Alt. A (Miles) | Alt. B (Miles) | Alt. C (Miles) | Alt. D (Miles) | PRMP (Miles) |
|---|---|---|---|---|---|---|
| Coos Bay | 35 | 2 | 35 | 81 | 114 | 125 |
| Eugene | 46 | - | 46 | 54 | 78 | 54 |
| Klamath Falls | 29 | - | 29 | 42 | 92 | 40 |
| Medford | 146 | 79 | 146 | 831 | 1,221 | 1,103 |
| Roseburg | 39 | 1 | 39 | 230 | 238 | 116 |
| Salem | 100 | 5 | 100 | 197 | 294 | 296 |
| **Totals** | **395** | **88** | **395** | **1,435** | **2,037** | **1,734** |

### *No Action Alternative*

Existing developed recreation sites would often meet the current level of recreation demand in the planning area. However, the anticipated increase in recreation could result in the demand for additional or expanded recreation sites and trail systems because of user conflicts and degraded recreation experiences. Existing motorized and non-motorized trails within the decision area would continue to attract users, but a need to manage trail systems commensurate with other resources and resource uses within the planning area would limit effective management and allow for increased conflict between recreation and competing uses along both motorized and non-motorized trails. Seasonal crowding at certain developed sites (e.g., Fishermen's Bend and Sandy Ridge Trail System) would affect user enjoyment of the area because use exceeds management capability. While expansion of existing sites or development of new

[87] Data sources for trail miles within 30- and 60-minute driving distances were sourced from – AllTrails (hiking and OHV), Singletracks and MTB Project (mountain biking), and RiderPlanet USA (OHV) (ECONorthwest 2015).

sites to address crowding would be considered, it would only occur where it would be commensurate with other resources and resource uses within the planning area.

#### *Action Alternatives and the Proposed RMP*

Overall, the alternatives and the Proposed RMP increase RMA acreage progressively from Alternative A through D with the Proposed RMP providing the second highest number of acres, although the changes in RMA acreage do not follow consistent patterns for all of the identified communities. Recreation opportunities that are close to population centers experience the most participants and visitor-days, and consequently result in the highest value for residents within the 12 study communities.

In terms of proximity to the 12 study communities, the overall acreage accessible within 30-minute and 60-minute driving distances under each alternative and the Proposed RMP track with their overall RMA acreage. The study communities with the least existing non-motorized and motorized trail miles within 30-minute proximities for the various recreation activities see some improvement under the Proposed RMP and Alternative D, while other study communities with little trail mileage within 30-minutes would see substantial increase in total RMA acreage (including non-trail) under the Proposed RMP and Alternative D (**Table 3-133**). Moving out from 30- to 60-minute driving distances increase the recreation area acreage by more than double, and increases to five- or six-fold under the Proposed RMP and Alternative D. While all communities would see increased total RMA acreage progressively in Alternatives A–D, the Grants Pass and Medford communities would experience the highest increase in RMA acreage under the Proposed RMP and Alternative D.

### Recreation Participation Changes

This analysis includes estimates of changes in outdoor recreation participation based on different levels of outdoor recreation opportunities in the form of RMA total acreage by alternative and the Proposed RMP. The Proposed RMP/Final EIS includes estimates of participation based on elasticity of demand (i.e., demand responsiveness) estimates derived from data collected by the U.S. Census Bureau as part of the American Time Use Survey sponsored by the Bureau of Labor Statistics. That is, as the quantity of available RMA acreage increases, there is some proportionate increase in participation based on existing levels. The BLM applied outdoor recreation visitor day and visit forecasts to these estimated changes in participation that would occur under each alternative and the Proposed RMP. See **Appendix P** for more detail on the methods for estimating and applying demand elasticity.

The BLM applied changes in demand resulting from differing quantities of RMA acreage to provide a breakdown by district and local vs. non-local participation. The BLM does not directly measure local vs. non-local recreation participation. Local and non-local breakdowns for these analyses are based on proportions observed for the nearest U.S. Forest Service lands, which does measure the breakdown. The BLM applied the general forecasts for trends in future outdoor recreation participation to all alternatives and the Proposed RMP as a multiplier on the demand effects of increases in RMA acreage. These demand analyses do not include any consideration of changes in quality of RMAs. To this extent, any improvements in RMA quality that would occur and would be likely to increase participation are not included and corresponding participation estimates would likely be underestimates.

**Table 3-140** displays the change in recreation visitation that would result from an increase in designated RMA acreage by alternative and the Proposed RMP with full implementation in 2062.

**Table 3-140.** Recreation visitation estimates with full implementation in 2062

| District/ Field Office | No Action (Visits) | Alt. A (Visits) | Alt. B (Visits) | Alt. C (Visits) | Alt. D (Visits) | PRMP (Visits) |
|---|---|---|---|---|---|---|
| Coos Bay | 909,878 | 760,199 | 909,878 | 1,119,515 | 1,267,736 | 1,320,747 |
| Eugene | 1,433,945 | 1,181,424 | 1,433,945 | 1,479,730 | 1,612,827 | 1,478,836 |
| Klamath Falls | 191,562 | 157,954 | 191,562 | 206,216 | 265,531 | 203,895 |
| Medford | 1,750,602 | 1,606,946 | 1,750,602 | 3,199,395 | 4,024,774 | 3,774,585 |
| Roseburg | 1,501,923 | 1,242,401 | 1,501,923 | 2,815,480 | 2,869,646 | 2,031,426 |
| Salem | 2,318,837 | 1,930,109 | 2,318,837 | 2,718,855 | 3,117,211 | 3,126,341 |
| **Totals** | **8,106,746** | **6,879,033** | **8,106,746** | **11,539,191** | **13,157,726** | **11,935,831** |

The changes in recreation visitation resulting from differing quantities of RMA acreage increases proportionately from Alternatives A to D. Recreation visitation for the Proposed RMP would be higher than Alternatives A, B, and C and less than Alternative D.

## Issues Considered but not Analyzed in Detail

*How would BLM management affect significant caves?*

The Federal Caves Resources Protection Act (16 U.S.C. 4301) defines a cave as significant if it meets at least one of the following criteria: size, mineral formations, endemic or other unusual species or subspecies, seasonally important habitat for non-endemic species or subspecies, archaeological or paleontological site, historical or religious significance, hydrologic connectivity to other caves or springs, unusual geologic strata or processes, recreationally important, or pristine in that human contact has been minimal or nonexistent.

The BLM has designated five caves within the decision area as significant under this Act. All of these caves are in the Medford District: three in the Grants Pass Field Office and two in the Butte Falls Field Office. The size and extent of these caves are unknown.

Under all alternatives and the Proposed RMP, the BLM would continue to apply current management to protect the resources associated with these caves and protect visitor safety. All alternatives and the Proposed RMP would maintain conditions at significant caves, and there would be no meaningful difference among the alternatives and the Proposed RMP.

*How would BLM management affect public health and safety at Formerly Used Defense Sites (FUDS)?*

The decision area includes a portion of one Formerly Used Defense Site (FUDS): the Modoc Aerial Gunnery and Bombing Range (Modoc Range), which is located in Modoc County, California, and Klamath and Lake Counties, Oregon. The estimated acreage of the Modoc Range varies depending on the source of the information, but it covers between 623,328 and 2,872,000 acres in southern Oregon and northern California, most of which is outside of the planning area. The Modoc Range was constructed by the U.S. Navy in the 13$^{th}$ Naval District during World War II. Prior to the 13$^{th}$ Naval District operations at the site, the predominant land use was agricultural for forestry and livestock grazing. The Modoc Range was associated with the Naval Air Station, in Klamath Falls, and was used as a practice area for aerial gunnery, bombing, and strafing. Currently, the majority of the land comprising the Modoc Range is managed by the U.S. Forest Service, U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, and the BLM, and is mostly used for recreational purposes.

The Army Corps of Engineers Modoc Aerial Gunnery and Bombing Range Site Inspection Report (2009) indicates that the BLM has two Munitions Response Sites within the planning area, which are potentially affected with munitions and explosives of concern. These sites were Navy bomb target areas that may present an explosive risk. The affected BLM-administered lands are located at two recreation sites: Gerber Lake Reservoir (937 acres) and Willow Valley Lake (649 acres). These lakes were used as practice bombing targets for approximately 15 months in the 1940s, with targets set at the center of the lakes. Munitions debris (i.e., non-explosive remnants) from practice bombs have been found on the shores of the lakes and on an island in Gerber Lake. Although the munitions used in bombing were practice, these rounds originally had spotting charges and other energetic components that could potentially represent an explosive hazard if they did not function properly upon impact. Until Unexploded Ordinance-trained technicians inspect the munitions, certify them as safe, and remove them from the site, all munitions are presumed to be a hazard. The Army Corps of Engineers has scheduled additional investigations at these two locations in 2021 to assess hazardous materials, explosives, and explosive remnants. Based on current information, the two sites on BLM-administered lands in the decision area are considered low risk compared to others in the FUDS Inventory, with a score of 6 out of 9 (with 1 being the highest risk and 9 the lowest risk). However, the investigation and cleanup of the sites and the eventual remedy may affect recreational use over the long-term, depending on the risks identified. Discovery of munitions at any time may result in a change in the schedule to address these areas and an increase in the need for site access controls.

Under all alternatives and the Proposed RMP, the BLM would apply the same management to protect public health and safety in the portion of the Modoc Range within the decision area. All alternatives and the Proposed RMP would maintain conditions at the Modoc Range, and there would be no meaningful difference among the alternatives or the Proposed RMP that the BLM can discern at this scale of analysis with the information currently available to the BLM.

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