NOTICE OF AVAILABILITY
ENVIRONMENTAL ASSESSMENT (OR-L050-2009-0063-EA)
AND FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Sand Dunes Road Maintenance and Realignment

The Lakeview Resource Area, Lakeview District, Bureau of Land Management (BLM) has prepared an environmental assessment to address alternative road maintenance and realignment proposals for the Sand Dunes access road (BLM Road 6151-00) located northeast of Christmas Valley, Oregon. The alternatives include continuing existing annual maintenance, and widening and realigning portions of the existing road to improve public safety.

The EA and FONSI have been prepared to document the effects of each alternative. Copies of the documents are available for review by writing to BLM, Lakeview District Office, 1301 South G Street, Lakeview, Oregon 97630, or by calling Vernon Stofleth at (541) 947-2177. The documents are also available on the BLM’s website at www.blm.gov/or/districts/lakeview/plans/index.php.

If you wish to comment on the proposal, you must do so in writing at the address above by September 18, 2009.
Finding of No Significant Impact (FONSI)

Sand Dunes Road Maintenance and Re-Alignment
Environmental Assessment Number OR-L050-2009-0063-EA

The Bureau of Land Management (BLM) proposes to conduct road maintenance, widening, and re-alignment on 4.2 miles of the Sand Dunes Road (BLM Road #6151-00). The purpose of this project is to provide safe access to the Sand Dunes motorized recreation area and alleviate safety concerns identified in the Sand Dunes Road Corridor Safety Analysis Report.

Three alternatives were analyzed in detail within the attached Environmental Assessment (EA). Two action alternatives were analyzed that involved a combination of widening of the existing road and alternative road re-alignment segments designed to increase visibility, allow tow vehicles to pass each other safely, and remove excessively sharp curves. The No Action Alternative included no change in current road management (periodic maintenance would continue). Several other alternatives were considered and eliminated from the analysis because they did not meet all the requirements of the purpose and need or were not consistent with either the Wilderness Interim Management Policy or the existing Resource Management Plan.

There would be no impacts to land status, water quality, range management or livestock grazing, prime or unique farmlands, wild and scenic rivers, designated wilderness or other lands with wilderness character, fisheries or aquatic resources, forest or woodlands, special status plants, wild horses, low income or minority populations, or hazardous materials resulting from any of the alternatives analyzed in detail.

The potential impacts to access and public safety, soils, vegetation, wetlands, floodplains, wildlife, special management areas, cultural, recreation, visual quality, and social-economics were not found to be significant and are discussed within the attached EA.

On the basis of the analysis contained in the attached EA and all other available information, it is my determination that none of the alternatives analyzed constitute a major federal action that would adversely impact the quality of the human environment. Therefore, an Environmental Impact Statement (EIS) is unnecessary and will not be prepared.

Thomas E. Rasmussen, Manager  
Lakeview Resource Area

Date
Purpose and Need for Action

The Bureau of Land Management’s (BLM’s) Lakeview Resource Area proposes to conduct road maintenance, widening, and re-alignment on approximately 4.2 miles of the Sand Dunes Road (BLM Road 6151-00) to alleviate safety concerns identified in the Sand Dunes Road Corridor Safety Analysis report (BLM 2008). The road is located approximately 15 miles northeast of Christmas Valley, Oregon (Map 1), and provides access to the Christmas Valley Sand Dunes, an area that is managed both as a wilderness study area (WSA) and an off highway vehicle (OHV) motorized recreation area. The road currently is narrow and contains numerous narrow horizontal and vertical curved sections that are very excessive and have poor visibility. The area receives almost year-round public use and can have an estimated 5,000 users during peak summer weekend periods.

Plan Conformance

The proposed action is consistent with the management direction contained in the following land use plans, policies, or guidance:

Lakeview Resource Management Plan/Record of Decision (RMP/ROD; BLM 2003b)

Roads and Transportation Management Goal, “maintain existing roads on the resource area transportation plan and other roads to provide administrative or public access to public land. Construct new roads using best management practices (BMPs) and appropriate mitigation to provide administrative, permitted, and recreational access as needed” (pages 95, 98-99).

Operation and Maintenance Action management direction, “maintenance of existing and newly constructed facilities or projects will occur over time… Such activities could include, but are not limited to, routine maintenance of existing roads, ditches, culverts,… fences,… signs, and other similar facilities/projects” (page 100).

North Lake Special Recreation Management Area management direction, emphasizing “OHV use, increased monitoring and patrols to curb vandalism, … the protection of natural and cultural resource values, maintaining public health and safety, and meeting increased recreation demand” (page 85).

Interim Management Policy and Guidelines for Lands under Wilderness Review (BLM 1995)

In general, road maintenance or construction activities within a WSA would not be consistent with the non-impairment standard (page 9). The southern edge of the BLM Road 6151-00 forms a portion of the Sand Dunes WSA northern boundary. The existing road surface and re-alignment alternatives are located outside of the WSA boundary, and therefore do not violate the non-impairment standard.

Generally, off-road or motorized cross-country travel is prohibited in WSAs. However, open areas may be designated in sand dunes that were open to such use prior to October 21, 1976 (page 47).
Integrated Noxious Weed Control Program (BLM 2004)

This plan outlines methods for preventing weed spread, as well as treating and monitoring weed sites. These methods have been incorporated into the alternative design.

State, Local, and Tribal Plans

The proposed action is not in conflict with any known patents, state, local (city/county), or tribal land use plans or zoning regulations.

Alternatives Including the Proposed Action

Introduction

This section describes the alternatives considered. The development of these alternatives was an interdisciplinary team effort to provide a range of management options that would (with the exception of No Action) implement the management direction of the current land use plan (BLM 2003b) and provide for increased public safety.

Alternatives Considered in Detail

Alternative 1 - No Action

Under the no action alternative, the western-most 4.2 mile segment of Road 6151-00 would be maintained as needed on its existing alignment and managed as it has been in the past, without any widening or upgrading of the road surface (Map 2). The maintenance of the different sections of the road segment can be described as follows:

Section 1 (Mile 0.0 to 1.4) – Maintain the existing roadway at 16-feet width.
Section 2 (Mile 1.4 to 1.6) – Maintain the existing roadway at 16-feet width.
Section 3 (Mile 1.6 to 1.7) - Maintain the existing roadway at 14-feet width.
Section 4 (Mile 1.7 to 1.9) – Maintain the existing roadway at 14-feet width.
Section 5 (Mile 1.9 to 3.5) - Maintain the existing roadway at 14-feet width.
Section 6 (Mile 3.5 to 4.2) – Maintain the existing roadway at 14-feet width.

Alternative 2 - Proposed Action

Under this alternative, the western-most, 4.2 mile road segment would be upgraded and widened. Two short sections would be re-aligned (Map 3) to minimize the safety concerns identified in the Sand Dunes Road Corridor Safety Analysis (BLM 2008).

Approximately 6 inches of base rock would be placed on top of the existing road surface and compacted. An additional 4 inches of surface gravel would be added on top of the base material. A new ditch would be cut along the north side of the road to provide drainage. The existing ditch on the south side of the road would be maintained (Figure 5).
All borrow material would be procured off-site from commercially available sources. BLM standards for road construction and maintenance would be followed as outlined in BLM Road Standards, Excerpts From BLM Manual Section 9113 (BLM 1982). This alternative alignment was designed to avoid a small wetland area and existing archaeological sites. Both segments of the existing roadway that are replaced by the new alignment would be rehabilitated by rolling in and spreading material from existing road berms (that contain native seed source) over the former road surface. These areas would be marked closed to vehicular use with signing and blocked with berms. The rehabilitated roadway would be allowed to revegetate naturally and would be monitored for noxious weeds and treated if necessary.

Re-aligned sections would be constructed utilizing a combination of cut and fill techniques. Fill techniques would be utilized in areas with high potential for exposure of sub-surface archaeological resources and all cut activities would have a BLM archaeological monitor on-site during excavation. If any archaeological materials are excavated, all operations would be shut down and the BLM District Archaeologist and the State Historic Preservation Office (SHPO) would be contacted.

The different sections of the proposal can be described as follows:

Section 1 (Mile 0.0 to 1.4) - From the east end of County Road 5-14E up to the first re-alignment section, the existing roadway is 16-feet wide. The proposal would widen this section by 4-feet to the north for a total of 20-feet width.

Section 2 (Mile 1.4 to 1.6) – First re-alignment segment would be constructed to 20-feet width.

Section 3 (Mile 1.6 to 1.7) - Mid section between re-alignment segments, the existing roadway is 14-feet wide, the proposal would widen this section by 6-feet to the north for a total of 20-feet width.

Section 4 (Mile 1.7 to 1.9) – Second re-alignment segment would be constructed to 20-feet width.

Section 5 (Mile 1.9 to 3.5) - From re-alignment to Junipers Camp, the existing roadway is 14-feet wide, the proposal would widen this section by 6-feet to the north for a total of 20-feet width. The widening would not conflict with any existing fences.

Section 6 (Mile 3.5 to 4.2) - From the Junipers Camp to the western edge of the Lost Forest, the existing roadway is 14-feet wide, the proposal would widen this section by 4-feet to the north for a total of 18-feet width.

**Alternative 3 – Wetland Alternative**

This alternative is similar to Alternative 2 except the proposed re-alignment would cross through a small area identified as a wetland on the U.S. Fish and Wildlife Service’s (USFWS) National Wetlands Inventory map. Construction activities through the wetland would require Clean Water Act permits or a waiver of such permits from the Corps of Engineers and the Department of State Lands along with a plan to mitigate the loss of about 0.2 acres of wetland. The different sections of this alternative can be described as follows:

Section 1 (Mile 0.0 to 1.5) - From the east end of County Road 5-14E up to the re-alignment section, the existing roadway is 16-feet wide, the proposal would widen this section by 4-feet to the north for a total of 20-feet width.

Section 2 (Mile 1.5 to 1.8) - Re-alignment segment through the wet meadow and several small dunes would be constructed to a 20-feet width.
Section 3 (Mile 1.8 to 3.5) - From re-alignment segment to the Junipers Camp, the existing roadway is 14-feet wide, the proposal would widen this section by 6-feet to the north for a total of 20-feet width. The widening would not conflict with any existing fences.

Section 4 (Mile 3.5 to 4.2) - From the Junipers Camp to the west side of the Lost Forest, the existing roadway is 14-feet wide, the proposal would widen this section by 4-feet to the north for a total of 18-feet width.

**Alternatives Considered but Eliminated from Detailed Study**

Several alternative alignments were considered that widened and/or re-alignment segments of the road to the south of its current location. These alternatives were eliminated from detailed study as the road forms a portion of the northern boundary for the Sand Dunes Wilderness Study Area (WSA) and any alternatives involving new construction within the WSA boundary would not be consistent with either the Wilderness Interim Management Policy (BLM 1995) or the existing land use plan (BLM 2003b).

**Affected Environment**

This section presents a description of the existing environment to serve as a baseline from which the impacts of the alternatives can be assessed. The project area consists of about 4.2 miles of existing roadway (14-16 feet wide) and associated drainage ditches. The area of proposed road re-alignment consists of several acres of vegetated sand dunes.

**Land Status**

The surrounding land ownership pattern is split by BLM Road 6151-00 between private and public land (Map 2). The private lands adjacent to BLM Road 6151-00 occur in sections 1 and 3 of Township 26 South, Range 19 East, section 6 of Township 26 South, Range 20 East, sections 33, 35, and 36 of Township 25 South, Range 19 East, and Section 31 of Township 25 South, Range 20 East. Private lands in the area are generally managed for livestock grazing purposes or off-highway vehicle camp sites.

The BLM has an existing right-of-way (ROW) for BLM Road 6151-00 where it crosses private land. This ROW is 60 feet wide (30 feet each side of the centerline), between Townships 25 and 26 South. This ROW is utilized for both public and administrative access and includes the right to conduct periodic road maintenance.

**Access and Public Safety**

Numerous road analyses were conducted on heavily used roads within the Lakeview Resource Area and recommendations were made to rectify potential unsafe conditions. The Sand Dunes Road 6151 Corridor Safety Analysis (BLM 2008) analyzed the current conditions of the western-most 4.2 mile segment and reported that the roadway is very narrow and is characterized by horizontal and vertical curves that are very excessive (approximately 50-foot radius). Sight distances were also very short (less than 150 – foot visibility). The current condition of the road (average 14 – foot width) does not allow safe passage of towing vehicles going to and from camping areas. The immediate recommendations from the corridor analysis were to designate the road segment as a posted “Safety Corridor”. This posting would reduce speeds throughout the 4.2 mile segment to 25 mph and through the excessive curve to 15 mph. The overall recommendations in the analysis are to widen the roadway to an average of 20-feet to allow safe passage of tow vehicles and re-align curved segment to provide greater than 150 – feet of visibility and thus reduce the potential for vehicle accidents.
Soils, Vegetation, and Floodplains

The topography of the area is a relatively flat (0-20% slopes), rangeland type terrain with medium depth soils (cool, Fossillake – Salhouse complex with sand dunes) and is located at 4,300 foot elevation. There are no perennial streams within the project area. The surrounding area is used heavily by off highway vehicles and supports very limited vegetation, primarily invasive annual cheatgrass and some native grasses (Indian Ricegrass, creeping wildrye, and Sandberg bluegrass). The area supports green and rubber rabbitbrush, big sagebrush, greasewood, and spiny hopsage, as well as, some forbs common to high desert rangelands. A botanical inventory has been conducted and no special status plants were found. An inventory for noxious weeds was also conducted and no noxious weeds were found.

An inventory of the proposed re-alignment area revealed a small wetland identified by the U.S. Fish and Wildlife Service’s, National Wetlands Inventory (NWI). The area was classified as a palustrine, emergent, temporarily flooded (PEMA) wetland based on remote sensing techniques (ie. no field inventory). Though our field inventory found the area contained spikerush, Baltic rush, and Nebraska sedge, all obligate wetland plants, the site was dominated (>70%) by creeping wild rye. The dominance of creeping wild rye, the lack of dominance by obligate wetland vegetation (such as cattails and bulrush) indicate that the Fossillake – Salhouse complex soils are not saturated or hydric for a long enough period to support cattails and tules, which are typical of proper functioning wetlands.

There are also numerous drainages and floodlains within the project area created by dunes and swales, as well as the roadbed itself. These slow the movement of water but do not create conditions conducive to wetland perpetuation. The existing roadway is porous and allows slow movement of water beneath the surface.

Wildlife and Special Status Species

Due to the highly disturbed condition of the project area (existing roadbed and adjacent lands), it does not provide suitable habitat for most typical sagebrush-obligate mammal, bird, amphibian, or reptile species including sagegrouse, pygmy rabbits, or other special status wildlife species.

The project is located about 5.5 miles southwest from the nearest active sagegrouse lek (strutting ground) or known occupied sagegrouse habitat. The project area does not contain habitat values conducive to sagegrouse strutting or brood-rearing activities.

The project area is located 20 miles from the nearest active pygmy rabbit habitat and does not appear to contain adequate habitat values that would support pygmy rabbits. The project area was surveyed for the presence of pygmy rabbits in June 2009. Some marginal pygmy rabbit habitat was found to exist along the edge of the existing road and within the area of realignment. Five old burrows were located along the existing road and within the area of realignment, but no recent pygmy rabbit sign was observed at these locations. A sixth burrow located within the area of realignment was observed that had old pygmy rabbit pellets present. No pygmy rabbits were observed using the project area.

The immediate project area provides minimal, low-quality habitat for migratory birds, including raptors.
Special Management Areas

The southern edge of disturbance associated with BLM Road 6151-00 forms part of the northern boundary of the Sand Dunes (OR-1-24) Wilderness Study Area (WSA). This road extends east into the Lost Forest – Sand Dunes – Fossil Lake Area of Critical Concern Area (ACEC).

In 2005, the Oregon Natural Desert Association (ONDA) submitted a report to the BLM proposing a number of new WSAs. The project area does not fall within any of these proposed WSAs, nor has the BLM, as a result of its own wilderness inventory update efforts, identified any other lands with wilderness character within the project area (BLM 2009) outside of the Sand Dunes WSA.

Recreation

Road 6151-00 provides the main public recreational access into the Christmas Valley Sand Dunes off-highway-vehicle (OHV) motorized use area, the Lost Forest, and public lands further east. This route segment is also designated as a National Backcountry Byway (Map R-9; BLM 2003b), in part to encourage recreational visitation of the surrounding area.

The Fossil Lake area, south of Road 6151-00, is closed to OHV use. OHVs are limited to designated roads and trails in much of the Lost Forest and other public lands north of BLM Road 6151-00. BLM Road 6151-00 is one of the existing roads in the area that is designated as open. Approximately 9,000 acres of the Sand Dunes, south of Road 6151-00, are open to OHV use (see Map SMA-9A in the Lakeview RMP/ROD; BLM 2003b).

Camping is allowed in designated, primitive camping areas (see Map SMA-9 in the Lakeview RMP/ROD; BLM 2003b). There are some more developed camping areas on surrounding private lands. Recreational use occurs in the surrounding area almost year-round and can exceed 5,000 visitors during peak summer holiday weekend periods.

Visual and Air Quality

The project area lies within visual resource management classes (VRM) I and III (BLM 2003b, Map VRM-3). BLM Road 6151-00 serves as the boundary between the two visual class designations. The VRM class I boundary is essentially the same as the northern boundary of the Sand Dunes WSA (ie. the southern edge of disturbance of BLM Road 6151-00). The proposed road widening and realignment would occur entirely within VRM class III lands located to the north of BLM Road 6151-00. The management objectives for VRM class I and III can be found in Appendix M3 of the Draft RMP/EIS (BLM 2001).

The air quality in the area is good overall and has not been identified a non-attainment area by the Oregon Department of Environmental Quality. However, local air quality is dependent upon the local weather conditions and amount of vehicle use. During dry, windy conditions, dust and sand from the road surface and surrounding sand dunes can get airborne and reduce the air quality and visibility. During heavy use periods (with frequent vehicle traffic on the road and heavy OHV use on adjacent lands) air quality conditions can be reduced for short periods of time.

Cultural Resources

A cultural resource survey has been conducted for the project area. Two archaeological sites were identified. These appear to be small campsites located in the dunes. They contain lithic materials
primarily obsidian, projectile points and fragments, ground stone such as metates and manos and camp rock. One of the sites is located outside of the proposed road alignment and will not be impacted. The second site is within the alignment.

**Hazardous Materials**

Field inventories did not reveal any indication of the presence of hazardous materials, nor is there any evidence that hazardous materials ever have been used or stored in the area.

**Economic Conditions**

Lake County is one of Oregon’s least populated counties with an economy based primarily upon the timber, ranching, and agriculture industries. However, recreation also plays a role in the economy, particularly in north Lake County. The county is rural in character with BLM, U.S. Forest Service, U.S. Fish and Wildlife Service, and State lands representing approximately 78% of the total county land base. Government agencies are the largest employers within the county. Due to the high percentage of public lands within the county, the taxable land base is relatively low and the county tax revenues generated from property taxes to support public services are very limited. These low property tax revenues have been supplemented over the years by the Federal government through the payment in lieu of taxes (PILT) program. However, these Federal funds have declined substantially in recent years making it more difficult for the county to provide needed services. A more detailed discussion of socio-economic conditions can be found in the Lakeview Proposed RMP/Final EIS (BLM 2003a; pages 2-68 through 2-77).

**Environmental Consequences**

**Introduction**

This section provides the analytical basis for the comparison of alternatives and describes the probable consequences of each alternative on the relevant resource values within the project area.

The following resource values were considered during this analysis, but were either not found to be present within the project area or would not be impacted by any of the alternatives considered: land status, water quality, range or livestock grazing, prime or unique farmlands, wild and scenic rivers, designated wilderness or other lands with wilderness character (outside of designated WSAs), fisheries or aquatic resources, forest or woodlands, special status plants, wild horses, low income or minority populations, or hazardous materials. These resources or issues will not be discussed further in this analysis.

The potential impacts to access and public safety, soils, vegetation, wetlands, floodplains, wildlife, special management areas, cultural, recreation, visual quality, and social-economics are described in the following section.

**Alternative 1 - No Action**

Under the no action alternative, the western-most 4.2 mile section of BLM Road 6151-00 would not be widened, upgraded, or re-aligned. However, periodic maintenance would be needed and would continue within the existing footprint/alignment on an almost annual basis.
There would be no changes the project area’s access or public safety conditions, soils, vegetation, floodplains or wetlands, wildlife habitat, special management areas, cultural resources, recreation, visual quality, or economic conditions.

Though this alternative would be consistent with the management direction within the Wilderness Interim Management Policy (BLM 1995) and some of the management direction within the Lakeview RMP/ROD (BLM 2003b), it would not address public the safety issues identified in the Sand Dunes Road 6151 Corridor Safety Analysis (BLM 2008).

**Alternative 2 - Proposed Action**

Generally, there would be little or no direct environmental impact associated with the proposed action to widen, upgrade the surface, and re-align BLM Road 6151-00. There would be approximately 4.2 acres of new disturbance associated with the widening and the realigned segment. There would also be about 1.8 acres of old road rehabilitated and physically closed.

The type and extent of impacts associated with realignment could vary depending upon the type of construction method actually utilized (cut versus fill). Some surface disturbance and soil compaction would occur throughout the project area.

The small archaeological site that is located within the alignment of the preferred alternative road would be protected by placing fill over the site (rather than cutting through the low dune on which it is located). This would result in no negative archaeological impacts to the site.

This alternative would avoid designated floodplains or wetlands and would have minimal impacts to the upland vegetation in the area. There would be some (approximately 4.2 acres) loss of upland shrub and grassland habitat from the widening and re-alignment phase of the project. However, this would be offset by the rehabilitation of the curved sections of the existing road that would be closed. Rehabilitation of the closed road would be achieved through the spreading of the existing road berms across the road surface and physically closing and signing the closed road sections. The closed area would be allowed to revegetate naturally from existing seed sources in the soils.

The risk of noxious weed invasion is low as there are no known sites within the project area. Noxious weed introduction would be further minimized by requiring all contractor equipment to be cleaned prior to coming on-site. Further, the BLM would monitor the area after construction and treat any noxious weeds that develop in accordance with its existing weed management plan (BLM 2004).

Some marginal, potential pygmy rabbit habitat would likely be impacted by the project, but the amount of habitat loss would be extremely low (4.2 acres). Though surveys did not detect the presence of pygmy rabbits, the proposed project could displace some rabbits if present during construction activities. However, there would be no measurable population level effect on the species. There would be some potential for minor disturbance to migratory songbirds that frequent the area, but the area of disturbance would be very small. A few individual birds may be displaced by construction activities, but there would not be any measurable population level effects associated with the project. There would be no measureable effects to other wildlife species, including special status wildlife species.

Since this alternative has been designed to avoid any construction activities within the boundary of the Sand Dunes WSA, there would be no impacts to the wilderness character of the WSA.
The proposed project would be consistent with VRM class III management objectives and would have minimal effects on the visual quality of the surrounding area.

There would be a short-term reduction in air quality conditions (dust and hydrocarbons) due to construction equipment. However air quality conditions would return to ambient levels following construction.

In the short-term there would be an increased safety hazard along the road as the project is being constructed. Large trucks, heavy equipment, and workers present in the area would pose a temporary hazard to public entering and leaving the Sand Dunes area. However, public and administrative access would be improved over the long-term under this alternative.

The main social benefit derived from the proposed project would be a long-term increase in public safety associated with accessing the Sand Dunes area following construction. The improved recreational access would help insure motorized recreation continues in the surrounding area, but would not likely have a measureable benefit on the economy of north Lake County. Construction activities would be funded by the appropriations associated with the American Recovery and Reinvestment Act of 2009 and, consistent with the goals of this Act, would have a minor, short-term benefit on employment opportunities in north Lake County.

This alternative would be consistent with the management direction within the Wilderness Interim Management Policy (BLM 1995) and the Lakeview RMP/ROD (BLM 2003b). It would also address the safety issues identified in the Sand Dunes Road 6151 Corridor Safety Analysis (BLM 2008).

**Alternative 3 – Wetland Alternative**

In general, the impacts and benefits associated with this alternative would be similar to Alternative 2 with the exception of potential wetland impacts. A total of approximately 3.6 acres would be disturbed by the widening and re-alignment proposed under this alternative. Approximately 0.3 acres of the old roadbed would be rehabilitated.

Approximately 0.2 acres of low-quality, seasonal wetland habitat would be filled by the new road alignment. The remaining wetland area would be bisected into 2 smaller units (Map 4), further limiting the remaining habitat quality. Construction of this alternative would require Section 404 and 401 (Clean Water Act) permits or a waiver of such permits from the Corps of Engineers and Oregon Division of State Lands. The area impacted would likely have to be mitigated through the creation of up to 1.0 acres of wetlands on or off-site. This would add to the total project costs.

**Irreversible, Irretrievable, or Unavoidable Impacts.**

There would be no irreversible, irretrievable, or unavoidable impacts associated with the No Action Alternative (1). Other than staff time, labor costs, and construction materials, there would be no irreversible or irretrievable impacts associated with either of the two action alternatives (2 or 3). The wetland impacts associated with Alternative 3 could be avoided by choosing Alternatives 1 or 2.
Secondary, Indirect, and Cumulative Impacts

Both Alternatives 2 and 3 would require a substantial amount of gravel material for the road base. Though this material would come from an existing, commercial borrow source in north Lake County, there would be secondary impacts associated with removing material from the borrow site and trucking to the project area. These would include minor impacts of increased ground disturbance, dust, and noise near the borrow site and a temporary increase in truck traffic on area roads during construction.

Following completion of Alternatives 2 and 3, the BLM would expect to see a decrease in future road maintenance costs in future years. This could have an indirect effect of allowing road maintenance funding currently allocated to the Sand Dunes Road to be made available to fund some of the current backlog in road maintenance activities in other parts of the resource area. The amount of other road maintenance activities that could occur in the future is difficult to predict and would depend upon future road maintenance funding levels.

No other secondary or indirect impacts are expected to occur as the result of any of the three alternatives analyzed in detail.

Cumulative Impacts

The Council on Environmental Quality (CEQ) defined a cumulative effect as an “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) undertakes such other actions” (40 CFR Part 1508.7). The CEQ issued cumulative impact guidance on June 24, 2005, that outlines its cumulative impact analysis requirements.

Past Activities

The CEQ guidance states the “environmental analysis required under NEPA is forward-looking,” and review of past actions is required only “to the extent that this review informs agency decision-making regarding the proposed action.” Use of information on the effects of past action may be useful in two ways: one is for consideration of the proposed action’s cumulative effects, and secondly as a basis for identifying the proposed action’s direct and indirect effects.

The CEQ states that “[g]enerally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions.” This is because a description of the current state of the environment (i.e. affected environment section) inherently includes the effects of past actions. Further, the “CEQ regulations do not require the consideration of the individual effects of all past actions to determine the present effects of past actions.”

The importance of “past actions” is to set the context for understanding the incremental effects of the proposed action. This context is determined by combining the current conditions with available information on the expected effects of other present and reasonably foreseeable future actions. By comparing the total effect of the no action alternative to the effects of any action alternative, one can estimate the incremental cumulative impact of a given alternative.

In this instance, a detailed catalogue or comparison analysis of all the individual past actions and their effects would be practically impossible to compile and unduly costly to obtain. Cataloguing each past action would not provide a clearer understanding of why the existing environmental conditions are what
they today. Instead of incurring these exorbitant costs (both time and money), it is possible to use information on the current environmental condition as a starting point for a cumulative effects analysis, rather than attempting to establish such a starting point by “adding up” the effects of individual past actions. This provides a useful description of the environmental baseline condition that, unlike past conditions, can be verified by direct examination. This method provides information that is easier to obtain, less costly, more comprehensive, and is ultimately more accurate.

The current conditions of the land within the project area resulted from a multitude of natural and human actions that have taken place over many decades. BLM Road 6151-00 was constructed at some point in the past and has been maintained or improved periodically since that point in time. The surrounding public land has been used for livestock grazing, research, off-highway vehicle use, camping, hunting, logging (1950s), and even military training during WWII. The surrounding private lands have been used primarily for agriculture (livestock grazing and hay production), but private lands immediately adjacent to Road 6151-00 have also been used for camping and as OHV play areas in the recent past. Fencing has been constructed in a few locations on both public and private lands to manage livestock or people. All of these past activities have affected or shaped the surrounding landscape into the condition it is today. Environmental conditions within the project area have already been described in the “Affected Environment” section of this EA and will not be repeated here.

The second area in which the CEQ guidance states that information on past actions may be useful is in “illuminating or predicting the direct and indirect effects of a proposed action. The usefulness of such information is limited by the fact that it is anecdotal only, and extrapolation of data from such singular experiences is not generally accepted as a reliable predictor of effects”. BLM’s long-time experience with road maintenance and minor improvement activities has confirmed that such activities typically have very minor direct, indirect, or cumulative effects. In fact, the Department of Interior and the BLM consider normal road maintenance and operation activities to have such minor impacts, even at a cumulative national scale, that they are typically categorically excluded from analysis under NEPA. In this instance, a detailed catalogue or comparison analysis of all of the individual past road maintenance actions would not be useful in illuminating or predicting the direct or indirect effects of the proposed action.

**Analytical Scale and Timeframe**

For the purposes of this analysis, the BLM has considered the potential incremental cumulative impacts of the alternatives as two scales. The potential effects of the road and transportation program management activities are considered at the resource area (land use plan) scale. The main reason for choosing this analysis scale is because the BLM made assumptions or predictions and conducted cumulative effects analysis within the Lakeview Proposed RMP/Final EIS (BLM 2003a) regarding the number of other potential reasonably foreseeable road maintenance and new road construction actions that may occur within the resource area during the implementation of the plan.

The potential cumulative effects of each alternative are also considered, along with other management activities, at the special management area (Lost Forest-Sand Dunes-Fossil Lake ACEC, Lost Forest RNA, and Sand Dunes WSA) boundary scale.

The timeframe of analysis is defined as the same 15-20 year expected life of the Lakeview RMP/ROD, which represents the time horizon which BLM can reasonably project potential future actions. The plan was completed in 2003, so the BLM has spent about 6 years implementing this management direction to date.
Reasonably Foreseeable Future Activities

The Department of Interior has defined “reasonably foreseeable future actions” as “those federal and non-federal activities not yet undertaken, but sufficiently likely to occur, that a Responsible Official or ordinary prudence would take such activities into account in reaching a decision. These federal and non-federal activities that must be taken into account in the analysis of cumulative impact include, but are not limited to, activities for which there are existing decisions, funding, or proposals identified by the bureau. Reasonably foreseeable future actions do not include those actions that are highly speculative or indefinite” (43 CFR 46.30).

The following is a summary of activities that the BLM can reasonably foresee happening during the implementation of the Lakeview RMP/ROD on both BLM and private lands within the boundary of the surrounding special management area. These activities could occur regardless of which alternative is adopted as the final decision.

The Lakeview RMP/ROD (BLM 2003b) anticipated numerous types of operation and maintenance activities would occur across the resource area throughout the life of the plan including such things as “routine maintenance of existing roads, ditches, culverts, water control structures, recreation facilities, signs, and other similar facilities/projects” (page 100). It is possible that some the existing roads and recreation sites in the surrounding area could receive some level of maintenance (by either the BLM or others) during the life of the RMP/ROD.

The Lakeview RMP/ROD (BLM 2003b) anticipated maintaining existing roads or constructing new roads on public lands within the resource area. An estimated 100 miles (out of about 5,000 total existing miles) was expected to be maintained each year across the resource area. In addition to new roads that could be proposed and constructed by outside parties, the BLM anticipated constructing up to 20 miles of new road during the life of the plan (pages 95, 98-99).

The RMP/ROD also made a decision to minimally upgrade the main road (ie. the eastern half of BLM Road 6151-00) going through the Lost Forest - Sand Dunes – Fossil Lake ACEC to prevent continued resource damage (pages 62 and 85). Since completion of the RMP, no maintenance or upgrade of this route segment has occurred.

The RMP/ROD put OHV designations in place on lands within the special management areas surrounding the project area (Map SMA-9A). These designations would likely remain in place during the life of the plan. The RMP/ROD also designated primitive camping areas within the Lost Forest RNA and Sand Dunes WSA and designated day use parking areas (page 63 and Map SMA-9). These camping areas would continue to be used into the foreseeable future. The RMP/ROD also encouraged the establishment of campgrounds located on private lands near the Sand Dunes Area to minimize pressure on primitive campgrounds located on BLM-administered lands (page 63).

The BLM is currently considering developing a recreation management plan for the north Lake County Special Recreation Management Area which could include more proactive management of the Lost Forest, Sand Dunes, and Fossil Lake areas immediately surrounding the project area. That plan has not been finalized and will include additional NEPA analysis prior to implementation. In the interim, the BLM expects that on-going recreation management (OHV designations, camping areas, signing), ACEC/RNA management, WSA monitoring, livestock grazing management, and law enforcement patrolling would continue on the public lands immediately surrounding the project area into the foreseeable future at levels that have occurred since 2003, in accordance with management direction in
the Lakeview RMP/ROD (BLM 2003a, see Table 5, pages 52-54, 57-60, 62-63, 70-73, 83-88, Map SMA-9, and Map SMA-9A).

Lake County is expected to continue to maintain County Road 5-14E, a main gravel road which connects to the western end of BLM Road 6151-00, on an almost annual basis. Commercial camping activities are likely to continue on adjacent private lands. No other reasonably foreseeable future activities have been identified within the project area.

**Cumulative Impacts - Alternative 1 (No Action)**

The Lakeview Proposed RMP/Final EIS (BLM 2003a) analyzed the potential effects of maintaining up to 100 miles (out of about 5,000 total existing miles) of existing BLM roads per year within the resource area (pages 3-116, 4-144 to 4-146). Since 2003, about 140-160 miles have actually been maintained annually. (In a few instances these road miles are inflated because the same route segment was maintained more than once that year and the mileage was included in the total more than once). Generally, the western-most 4.2 mile segment of the Sand Dunes Road has been maintained at least annually. (This mileage has been included in the total miles of annual maintenance estimated above). This maintenance has included blading of the road surface and ditches, and placing gravel and cinder material on the road surface. This road would continue to be maintained at about the same intensity and frequency under this alternative.

The Lakeview Proposed RMP/Final EIS (BLM 2003a) also considered minimal upgrading the eastern section of BLM Road 6151-00 through the Lost Forest. This project is expected to prevent the continued widening and braiding of the road and result in less damage to relevant and important resources within the adjacent Lost Forest (pages 3-55 and 3-95).

The Proposed RMP/Final EIS analyzed the impacts of putting OHV designations in place on lands within the special management areas surrounding the project area (Map SMA-9A). These designations limit most OHV use to designated routes or the open portion of the Sand Dunes area. The impacts of continuing these designations would include protecting cultural and paleontological resources while still allowing some OHV use on the majority of the Sand Dunes (pages 3-43 to 3-48, 3-53 to 3-56, 3-99 to 3-101, 4-88 to 4-91, 4-128 to 4-132, Table 3-5, and Map SMA-9A).

The Proposed RMP/Final EIS analyzed the impacts of designating primitive camping areas within the Lost Forest RNA and Sand Dunes WSA and designating parking areas to be used as day use only (pages 3-55, 3-56, 3-98, 4-90, 4-126, and Map SMA-9). At least one campground has been developed on private lands near the Sand Dunes Area since 2003. This has helped take some pressure off of designated campgrounds on BLM-administered lands.

The BLM expects that recreation management (OHV designations, rotating camping sites, signing), ACEC/RNA management, WSA monitoring, livestock grazing management, and law enforcement patrolling activities would continue on public lands surrounding the project area at levels that have occurred since 2003.

The potential cumulative effects of all of the above reasonably foreseeable future management activities, fall within the range of the direct, indirect, and cumulative impacts that have already been analyzed within Chapters 3 and 4 of the Lakeview Proposed RMP/Final EIS (BLM 2003a).
Cumulative Impacts - Alternatives 2 and 3

Under both Alternatives 2 and 3 the same cumulative effects described for all of the reasonably foreseeable future actions under Alternative 1 above would occur with two notable exceptions:

These two alternatives would have a small, incremental or additive effect associated with constructing approximately 0.3 to 0.4 miles of new road, due to road realignment. Though the BLM has authorized several miles of new road construction associated with new rights-of-ways issued in north Lake County since 2003, to date, the BLM has not constructed any new roads. The Lakeview Proposed RMP/Final EIS (BLM 2003a) analyzed the potential effects of constructing up to 20 miles of new roads within the planning area (pages 4-144 to 4-146). These impacts include additional soil disturbance, soil compaction, and a minor loss of vegetation/wildlife habitat, along with improved public and administrative access. The additive or incremental cumulative impacts of both alternatives would not be significant, and are well within those that were anticipated and have previously been analyzed in the Lakeview Proposed RMP/Final EIS (BLM 2003a).

Following construction of either action alternative, the frequency and intensity of future road maintenance activities on this 4.2 mile segment would decrease. The impacts of future maintenance actions would be minor and less than those associated with Alternative 1.

Improving BLM Road 6151-00 could possibly attract more recreational visitors to the area in the future which could cause additional safety, sanitation, and trash concerns over the long-term. However, OHV use in the surrounding area has been increasing in recent years even without the proposed road improvements. The majority of the increase in area has been directly related to other factors outside of the BLM’s control. These factors include 1) a general increase in disposable income/OHV ownership by the recreating public, and 2) an increase in closures and restrictions within other historic OHV play areas throughout Oregon and northern California which has resulted in a transfer of OHV use to the Sand Dunes area. The additive impacts are difficult to estimate, but would be expected to be minor when compared with these other on-going factors.

Consultation and Public Input

Those individuals, organizations, tribal representatives, and other agencies with a known interest in the BLM’s transportation or special management area management activities, have been notified of the availability of this Environmental Assessment and Finding of No Significant Impact (FONSI) for a 30-day review. This mailing list is contained in the project file. In addition, the documents will be made available for review on the BLM’s website. All comments received will be considered prior to making the final decision.
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Theresa Romasko     Assistant Field Manager
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Bill Cannon         Cultural Resources
Tessa Teems         Rangeland Resources
Casey O’Conner      Rangeland Resources
Vern Stofleth       Wildlife Resources
Steve Flock         Minerals Resources
Paul Whitman        Planning & Environmental Coordinator

References

BLM. 1982. BLM Road Standards, Excerpts From BLM Manual Section 9113, Rel. 9-186. 26 pages.


BLM. 2008. Sand Dunes Road 6151 Corridor Safety Analysis. USDI, BLM, Lakeview District. 5 pages.

BLM. 2009. Wilderness Inventory Evaluation of the Lost Forest West Area. USDI, BLM, Lakeview District. 7 pages.

Map 1 - Location of Sand Dunes Road Project Area

Legend
- Lakeview Resource Area
- Cities
- Major Roads

No warranty is made by the bureau as to the accuracy, reliability, or completeness of the data. Original data were converted through digital means and may be updated.

Lake County
- Fort Rock
- Silver Lake
- Summer Lake
- Christmas Valley
- Silver Lake
- Winter Lake
- Alkali Lake
- Valley Falls
- Plush
- Lakeview
- Westside
- New Pine Creek

Klamath County

Harney County

Oregon

Nevada

California

Miles
0 5 10 20

012345678910111213141516171819202122232425262728293031323334353637383940414243444546474849505152535455565758596061626364656667686970717273747576777879808182838485868788899091929394959697989900
Map 2 - Sand Dunes Road Maintenance Area

Legend
- Section
  - Sand Dunes Road Maintenance Section
  - Motorized Routes
  - Sand Dunes WSA
- Land Status
  - Other
  - Bureau of Land Management
  - Private

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This product was developed through digital means and may be updated without notification.

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