East Face Vegetation Management Project

Transportation System Report

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Background - Transportation

This report is intended to provide all the information needed for a Roads Analysis to complete the East Face Environmental Analysis in accordance with NEPA. The analysis area is the 47,636 acre East Face project area boundary. The East Face Vegetation Management Project (East Face) lies on the eastern face of the Elkhorn Range of the Blue Mountains. It is bordered on the north and west by National Forest System Road (NFSR) 43, and on the south by NFSR 73, also known as Elkhorn Drive Scenic Byway, Private, state and BLM land on the east. Because of its reasonably close proximity to Baker City (approximately 20 miles) and La Grande (approximately 25 miles), it is popular for people to recreate here. Roads were built in this area primarily to facilitate mineral exploration in the late 1800s. Later, the road system was altered to accommodate timber harvest for ground based and skyline operations. Roads were also constructed for access to a small number of private land inholdings. Several timber sale projects have been completed in the past such as High Ham, Isham I and Isham II, and Dutch-Wolf timber sales; however, there has been no harvest activity in the area since 1996.

This East Face report addresses roads currently listed in the Forest's transportation atlas. Unauthorized roads were not inventoried, nor specifically addressed; however, there are some old road templates (ie, unauthorized roads) identified that may be used for temporary road access to vegetation management activities.

Existing Condition - Transportation

Roads

There are approximately 364 miles of NFSR in the East Face project area. Of these miles, 127 miles are managed as open (Operational Maintenance Level 2 through Operational Maintenance Level 5), and 237 miles are managed as closed (ML1). Of particular note is that approximately 13 miles of the Elkhorn Drive State Scenic Byway traverses the southern edge of the analysis area boundary. This road is a double-lane, paved road which has a variety of RV, truck, passenger car, and tourist traffic year round. Additionally, there are an extensive number of non-system roads which appear across the landscape from a variety of methods: firewood cutting, private land access, fire suppression trails/dozer lines, and old, temporary logging spurs being the predominant reasons. These road prisms exist in a variety of conditions, ranging from barely discernable, to primitive wheel tracks to full-bench construction. The system roads in the project area also exist in a variety of conditions. Some are passable with no work needed, while some need a significant amount of road work to become passable to even high clearance vehicular traffic. Currently, in the Forest's INFRA database, there is over $1 million in deferred maintenance in the East Face analysis area. Some road prisms are still visible from old roads which were decommissioned several decades ago. Although there is an inventory of decommissioned roads, a total inventory of these non-system roads has not been completed. Some of these templates would be available to be utilized as temporary roads to facilitate timber and vegetation management.

There is one bridge located on NFSR 7312 that is considered structurally deficient, and currently has a load rating of 10 tons placed on it. This means that commercial haul and generally any type of large truck traffic (empty or loaded) would not be permitted to haul across it without some form of bridge reconstruction or replacement. This bridge is located at the crossing of the North Fork of Anthony Creek.

The following table displays the number of roads located in the subwatersheds (6th field HUC) in the analysis area by operational maintenance level (ML). Operational maintenance level is defined as "the maintenance level currently assigned to a road considering today's needs, road condition, budget constraints, and environmental concerns. It defines the level to which the road is currently being maintained. (FSH 7709.59, 62.31). In general, the lower the maintenance level, the less often a road will

be maintained, and there is less concern with the road traveler's comfort. For example, ML 1 roads are generally closed to vehicular traffic (by barrier or promulgation) and only receive maintenance during periods of use. These roads are often considered to be placed in storage. ML 5 roads are maintained on a more frequent interval, and the traveler's safety and comfort is a high priority for scheduling maintenance activities. On the Wallowa-Whitman, these ML 5 roads are generally paved and double-lane.

Table 1 - General NFS Roads Information

Subwatershed	Size (Square Miles)	Miles Open Road (Operational ML 2-5)	Miles of Closed Road (Operational ML 1)	Total Miles of NFS Road
Lower Anthony Creek	13.34	15.62	49.92	65.54
Lower North Powder River	0.10	0.00	0.21	0.21
Middle North Powder River	6.71	18.36	23.56	41.92
Tanner Gulch-Grande Ronde River	0.82	4.22	0.09	4.31
Upper Anthony Creek	22.33	25.67	42.10	67.77
Upper Beaver Creek	5.32	9.91	18.03	27.94
Upper Ladd Creek	2.25	10.97	5.51	16.48
Upper Wolf Creek	21.63	42.04	97.65	139.69

The table above does not include miles of private, state, or county owned roads. There are very small slivers of Baldy Creek and Jordan Creek subwatersheds that are not included, as they round to 0.00 mi/mi^2 in size.

There are generally four NFSR routes out of the East Face project area that lead toward Interstate 84. These routes are Road 43 at the far north and west sides of the project, Roads 4315 and 4330 in the interior portion of the project, and Road 73 at the south end of the project. Additionally, collector routes 4316, 4320, 4350, 4380, 7302, 7307 and 7312 will provide internal connections between these routes. These routes are all open roads and experience recreational traffic year round.

Most of the roads in the East Face project area are closed, however, some of these roads are being used by OHVs, and some are being used by full-size vehicles. The 1990 Wallowa-Whitman Forest Land and Resource Management Plan (FLRMP) currently allows use of closed roads, stating it is acceptable to "permit all-terrain vehicle (ATV) use and over-the-snow use on blocked or closed roads unless this use is found to be incompatible with resource management objectives. These types of uses were considered to be an acceptable form of recreation except where site specific analysis shows them to be incompatible due to resource management problems" (1990 Forest Plan, pp. 4-36).

Past site specific analysis has determined that motor vehicle use in the area defined by the Clear Creek closure area, on the north side of the project, is seasonally restricted from 3 days prior to the opening of rifle bull elk season through the close of rifle bull elk season, except for routes designated as open. This restriction is also known as a 'green dot closure', as open routes during this closure period were signed on the ground with a green dot. In the Indian-Gorham closure area (located on the south portion of the project) all motor vehicle use is prohibited on Road 7315 and all of its tributary routes, for reasons tied to wildlife protection.

Haul

For commercial harvest operations, the nearest timber processor to the project is Boise Cascade in La Grande, Oregon, however, small diameter or biomass material could be taken to nearby North Powder, Oregon, or as far away as Parma, Idaho.. It is estimated that about one-quarter of the commercial volume will haul northeast to NFSR 43 to Interstate 84, while another one-quarter of the volume would haul south

on NFSRs 43, 7302 or 7312 (or north on NFSR 7307) to NFSR 73, to Baker County road 1146 and Union County road 101 to Interstate 84. The remainder of the volume would haul east on NFSR 4315 to Union County 104 or east on NFSR 4330 to Union County 102 and 101. From here, these roads connect to Interstate 84 near North Powder, and haul could travel north to La Grande, or southeast to Idaho.

Right of Way

The landlines in the project area are posted. There is private land located inside and adjacent to the project area, and there are several roads where right-of-way has been acquired. However, most of the roads on private land do not have right-of-way, so road use agreements will be needed for access to a few units. It is expected that any use of roads 4315952 or 4315954 would need an agreement between the Forest Service and the landowner in place prior to vegetation management activities taking place. For this project and long-term road system needs, right-of-way is being acquired in the form of an easement across approximately 0.5 miles of NFSR 7302 located in T7S, R 38E, Section 6. See Figures 1 and 2, below.

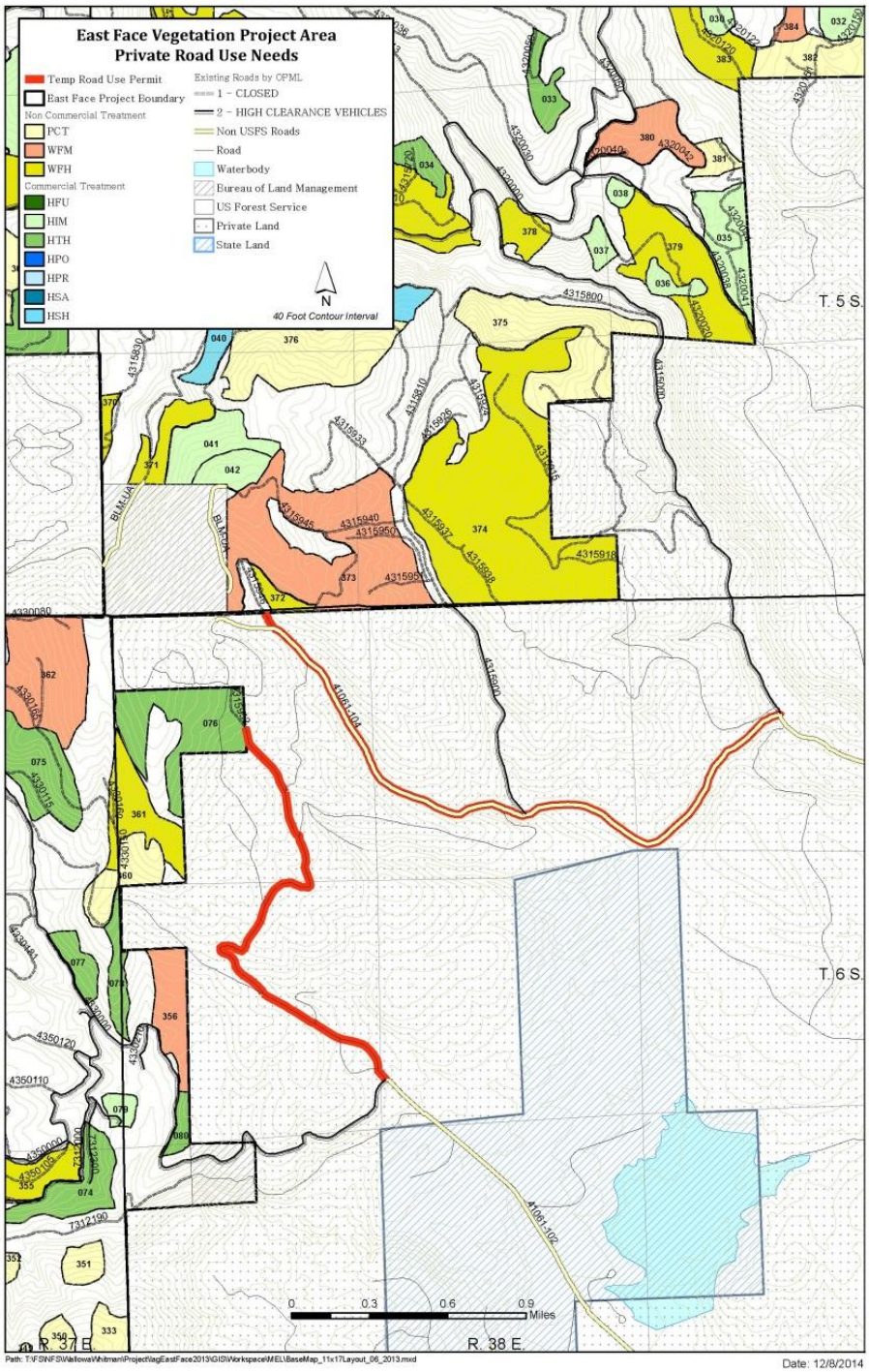
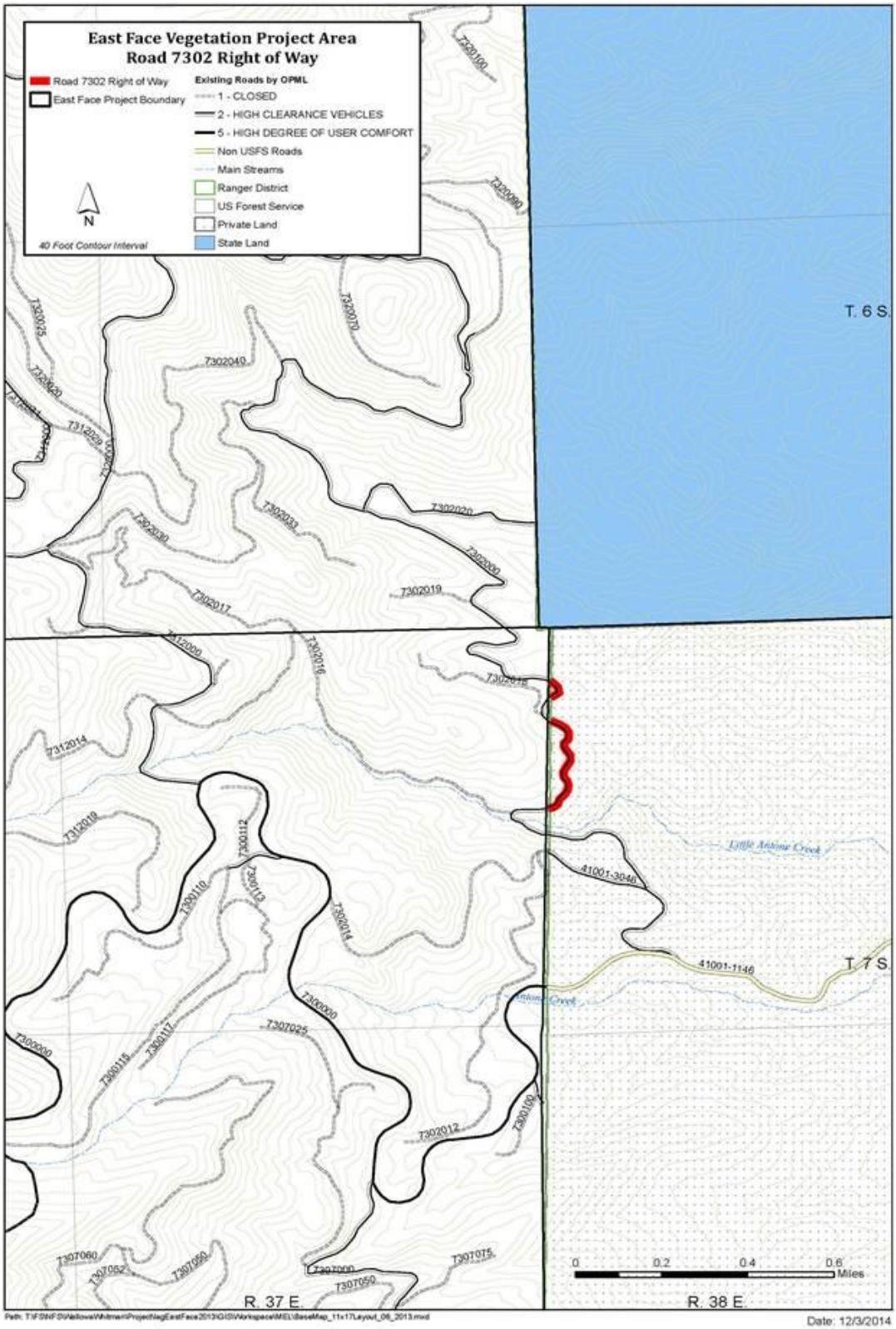


Figure 1: Temporary Road Use Permit Needs

Figure 2: Right-of-Way Needs



Road Density

There are standard and guidelines referenced in Chapter 4 of the FLRMP for Open Road Densities. These open road density guidelines specifically address certain management areas (MA), of which there are five (5). The five management areas are: MA1 (timber emphasis), MA1W (timber/wildlife emphasis), MA3/3A (big game winter/summer range), and MA18 (anadromous fish emphasis). For MA3, note that snow will effectively close most winter range areas to access by wheeled vehicles during the winter months, consequently, road closures more restrictive than those applied to MA1 will not normally be necessary" (FLRMP, pp. 4-63). The guidelines for management areas listed in the forest plan (FP) are shown in the following table:

Table 2: FLRMP Guidelines

Management Area	FLRMP Open Road Density Guideline (mi/mi^2)
1	2.5
1W	1.5
3	1.5
3A	1.5
18	1.5

In the East Face analysis area, there is no anadromous fish emphasis area (MA18). A summary of the current road densities for the operational (existing) road system are summarized below:

Table 3: Open Road Density for Existing Road System

SUBWATERSHED NAME	MA	GIS Acres	Area in Sq Miles	Open Rd Miles	Open Rd Mile Density
Lower Anthony Creek	1	7,819.79	12.22	9.55	**0.8**
	3	704.54	1.10	4.53	**4.1**
Middle North Powder River	1	3,656.06	5.71	15.03	**2.6**
	3	171.04	0.27	0.52	**2.0**
Tanner Gulch-Grande Ronde River	3A	219.46	0.34	2.61	**7.6**
Upper Anthony Creek	1	11,193.22	17.49	16.79	**1.0**
Upper Beaver Creek	3A	3,389.41	5.30	9.73	**1.8**
Upper Ladd Creek	1	1,438.92	2.25	10.98	**4.9**
Upper Wolf Creek	1	13,725.17	21.45	41.84	**2.0**
	3	102.82	0.16	0.02	**0.1**

Miles shown are calculated from GIS. In areas where the square miles are less than 0.1 mi/mi^2, the road density has been rounded to zero. Subwatersheds where there are no road miles or relevant management areas (MAs with no FP open road density requirements) are not shown for clarity.

The management areas where the open road density appears high, is generally due to the fact the only a very small amount of acreage exists in the project area. The MA3 portion of Lower Anthony Creek subwatershed, the MA3 portion of Middle North Powder River, the MA3A portion of Tanner Gulch-Grande Ronde, and the MA3 portion of Upper Wolf Creek are slightly above or less than one square mile in size and contain approximately 7.68 miles of open roads which are the sole access into the area and would therefore not be considered for closure. Because these portions of these subwatersheds result in a very small number of acres being analyzed within each management area which results in skewed road densities due to the inappropriate scale of the analysis area for an evaluation of this type resulting in figures which do not provide useful information (WWNF Forest Plan, page 4-35) they were not carried forward in this analysis.

Material and Water Sources

There are several, well-developed material sources located in the analysis area. In addition, there are numerous roadside borrow sources located in or adjacent to the analysis area, mostly on open, well developed roads (i.e., Road 43). These sources have all been used with past harvest activities or for capital improvement projects such as the reconstruction of NFSR 43 (mid-1990s). Material sources are listed in the table below.

Table 4: East Face Material Sources

Material Source Name	Legal Location	Road Access	Type of Material Available
Dutch Creek	T 6 S, R 37 E, Sec. 12	7312400	Crushed, pit-run, grid-roll, rip-rap
Summit Springs	T 5 S, R 38 E, Sec. 29	4320038	Crushed, pit-run, grid-roll
Rainbow	T 6S, R 37 E, Sec. 6	5125439	Crushed, pit-run, grid-roll
Porcupine	T 5S, R 37E, Sec. 23	43	Pit-run, grid-roll
Unnamed Stockpile	T 5S, R 37E, Sec. 28	4300510	Pit-run, grid-roll
Unnamed	T 5 S, R 37 E, Sec. 26	4300301	Crushed, Pit run, grid-roll, rip-rap

There are several streams in the project area that could be used for water sources; however, with the multitude of ditches in the area, water rights should be closely evaluated. A limited use water license should be obtained from the Oregon State Water Resources Department prior to any use of water from a stream. The streams that could potentially be used are: Antone Creek, Anthony Creek, North Fork Anthony Creek, Dutch Creek, Webfoot Creek, Wolf Creek, and Clear Creek. Additionally, there are two material sources that hold water: Summit Springs, the unnamed source on Road 4300301, and Grande Ronde Lake have been used as a source of water in the past. These could be proposed for use during project activities such as reconstruction and road maintenance. Wolf Creek and Pilcher Creek Reservoirs also lay just outside of the project area along primary forest access routes. Although they are unlikely to be used, the potential for use should be mentioned, with the appropriate permits and licenses being obtained. Use of any water source, other than a commercial supplier, would be required to use screens on the drafting equipment.

Skiing, Snowmobile, Cross-Country Ski and Bike Routes

Within the project area there are a variety of winter and summer trail opportunities. The Anthony Lakes recreation area has the largest amount of concentrated visitor use year-round and lies at the southwestern corner of the analysis area. Developed recreation facilities in the area include the Anthony Lakes Mountain Resort (ALMR) ski area, and a state supported sno-park system with parking areas located at

the Anthony Lakes Mountain Resort, the Grande Ronde Snopark and one at Forest Road 73 near the Forest boundary. Dispersed recreation in the area includes several kilometers of cross-country Nordic ski opportunities around the resort and adjacent campground. There are also several designated snowmobile trails located on Roads 43, 4300020, 4300095/4300100, 4315, 4316, 4330, 4350 and 7312. During the summer, mountain bike use is occurring at the ALMR where the resort is providing mountain biking trail riding opportunities near the adjacent campground on the Nordic trails. In the Indian-Gorham closure area, a small group of mountain bikers are using closed roads and game trails on an un-designated user built system.

Effects

The following describes the direct, indirect, and cumulative effects of the East Face project alternatives on access and the transportation system. The analysis area boundary is the project area boundary.

No Direct, Indirect, or Cumulative Effects on Access and Transportation

The following activities associated with the East Face project have been analyzed and are of such limited context and constrained nature that they would have little to no measurable effect on transportation resources.

- Precommercial thinning without harvest removal
- Snag Retention
- Non-commercial fuel reduction work by hand
- Hand treatments within RHCAs
- Connective corridors
- Mitigation Measures
- Whitebark Pine treatments

These activities and their effects will not be discussed further in the transportation resources section.

Direct/Indirect Effects for Transportation

A sustainable roads analysis for the forest was in the process of being developed in accordance with the 2005 Travel Management Rule, Subpart A. Because of its unavailability for use, resource specialists have been consulted during on-the-ground field reconnaissance to assist in providing recommendations for management of the road system based on resource impacts, effectiveness, and sustainability. A summary of findings and specialist recommendations is included as an appendix to this document. The effects (direct, indirect and cumulative) of Alternatives 2, 3 and 4 would be similar for the road system, while the effects of Alternative 5 would be slightly different, because in addition to the post-sale road system identified in Alternatives 2-4, it also proposes extending the promulgated seasonal closure for the Clear Creek and Indian-Gorham closure areas to include all elk hunting seasons. The effects of Alternative 1 are described below.

Alternative 1- Transportation

Alternative 1 would not use or change the existing transportation system, and access to the area would remain the same. Road maintenance on the majority of the road system would be deferred until future entries into the area or procurement of additional funding could provide this work. Maintenance on the

main system roads in the area (Roads 73and 7312) would continue to be provided on a 1-3 year cycle, while other collector routes would be maintained at a longer interval (5-8 years),or as funds become available. Road densities and number of miles of road open to the public for access would remain the same as described in the existing condition. Roads that are closed and still being used would continue being used. No roads would be improved with reconstruction or timber sale maintenance, and no change in the management of the road system would occur. Resource problems tied to the road system in its current condition would continue to occur. There would be no change to the deferred maintenance backlog of over $1 million, and in fact, it would continue to rise, as periodic road maintenance would be performed only on a few higher level roads on a cyclic basis due to the level of appropriated funding received by the Forest.

Alternatives 2, 3, 4, and 5 - Transportation

Temporary Roads

Temporary roads would need to be used for vegetation management activities for the project under Alternatives 2, 4, and 5 (Table 5). Of these, some would lie on existing templates of non-system road prisms that currently exist on the landscape. These road templates exist in a variety of states, and may have grown over, been partially decommissioned, or are otherwise in a state that only a minimal amount of work would be needed to open them for use. Where there are units with no road access, temporary roads would need to be constructed to facilitate vegetation management activities. No new, permanent road construction is proposed for this project, and temporary roads would be closed and rehabilitated after activities have completed. Rehabilitation would be done in such a manner as to discourage use, reduce or eliminate erosion and sedimentation, and promote the natural regeneration of vegetation. Therefore, the temporary roads proposed in Alternatives 2, 4, and 5 would have no effect on the current road system.

Road Maintenance

Under all the action alternatives, several miles of road would be used and maintained (Table 5). Road maintenance would be required to be performed by the purchaser or contractor in accordance with Region 6 contract provisions and supplemental T-Specifications. These maintenance activities involve such things as brushing, logging out, road blading, pothole patching, ditch cleaning, and cleaning of culverts and other drainage devices. Danger tree removal would be required under specification T-854, and would require the treatment and/or disposal of live or dead trees that pose a hazard to contractors operations. These trees would be felled, and most will be left on the ground. Additionally, placement of aggregate surfacing on limited portions of road and application of dust abatement may be required. Dust abatement usually consists of placement of water on the travelled way, but on roads with a heavy volume of timber haul, magnesium chloride or lignin sulfonate may be utilized for cost-efficiency and effectiveness. In accordance with 16 USC 537, deposits for surface rock replacement would be collected from the purchaser or contractor for commercial haul over roads with aggregate or paved surfacing. In lieu of deposits, commercial users may perform maintenance or provide materials proportionate to their share of collections (36 CFR 212.5 (d) (3)). Bridge maintenance would also be performed on the 3 bridges located in the project area.

In these alternatives, there would be closed (ML 1) roads which would need to be re-opened for use. Upon completion of haul over these roads, most will be waterbarred and reclosed. The number of miles of closed roads that would be used for vegetation management varies between alternatives and are shown in the Table 7.

Open (ML 2-5) roads would be used for vegetation management activities for Alternatives 2, 3, 4, and 5. The commercial operation would use and maintain these roads, and upon completion of contract

activities, most of these roads would remain open. A very small amount of the open roads would be proposed for closure as reflected in the recommended objective maintenance level in Table 7.

It is estimated that the road maintenance costs would range between $1,000-$1,500 per mile. If spot rocking is required, these costs would increase. Haul and placement costs for spot rocking are estimated to be approximately $20/cubic yard (or approximately $30,000/mile). These costs would vary depending on haul distances, location of the source, and the type of material being used. If pothole patching is required on NFSR 73, the cost for this type of maintenance would be approximately $700/ton of asphalt placed. The action alternatives would be estimated to perform approximately $300,000-$700,000 of road maintenance, thus providing a significant impact (reduction) to the deferred maintenance backlog of over $1 million.

Road Reconstruction

Due to limited harvest operations in the area over the past 15-20 years, many roads have become difficult to navigate, have grown in with small trees, or have otherwise become unusable. These roads will require reconstruction to accommodate vegetation management operations. Some roads have sloughed in, eroded, developed springs in the travelled way, have had culverts removed, or were built and remain in such a primitive state (narrow widths, tight corners) as to render them unsuitable for haul with today's log trucks, mule-trains, and chip vans. In all alternatives, there are roads identified for reconstruction activities (Table 7). Some of this work could be considered as incidental reconstruction or reconstruction-like maintenance of the travelled way. In other words, they need trees fell and stumps grubbed for the road to become passable, but all work would be confined to the existing road template, and no new ground would be disturbed.

The remainder of the road reconstruction would involve improvement of the travelled way to obtain road widths and support heavy haul, as well as addressing drainage problems, safety issues, and resource concerns. The number of miles of operational (OP) ML 2-3 roads and OP ML 1 reconstructed are shown, by alternative, in the table, below. Roads 43, 4330, 4350, and 4380 are all roads used in all action alternatives and are proposed to remain open to vehicular traffic. All have some serious drainage and erosion concerns. Road 7312 is also an integral route for any type of operation (commercial and non-commercial). This road hosts a load-rated bridge across the North Fork Anthony Creek which would need to be replaced for any truck or heavy equipment traffic to use. In all alternatives, roadbed stabilization, excavation, addition of drainage structures, and placement of pit-run or crushed aggregate surfacing would be accomplished to accommodate vehicular use or to achieve an extended season of haul over routes that are fundamental to the harvest and post- sale operations. Reconstruction costs for this project area are estimated to be $10,000-$75,000 per mile, depending upon the level of intensity of the proposed reconstruction. Reconstruction activities would utilize material sources within the project area. All of these sources have been developed, and use of these sources would not expand any source greater than 5 acres.

A summary of the actions of each alternative on the transportation system is shown in Table 5, below:

Table 5: Road Use Comparisons by Alternative

Description		Alternative 1 (miles)	Alternative 2 (miles)	Alternative 3 (miles)	Alternative 4 (miles)	Alternative 5 (miles)
Total miles of road used for harvest activities		**0.0**	**224.5**	**174.4**	**115.8**	**244.5**
Maintenance	Closed roads (open, use and maintain)	**0.0**	**107.0**	**66.9**	**38.6**	**122.7**
	Closed roads used, then reclosed		100.5	60.4	32.1	116.2
	Closed roads used, then left as open roads		6.5	6.5	6.5	6.5
	Open roads (use and maintain)	**0.0**	**117.5**	**107.5**	**77.2**	**121.8**
	Open roads to remain open		116.9	107.5	76.6	121.8
	Open roads to close after harvest		0.6	0.0	0.6	1.1
Reconstruction	Roads with full reconstruction	**0.0**	**53.0**	**39.3**	**27.8**	**61.6**
	Open roads		20.4	20.9	16.5	23.6
	Closed roads		32.5	18.4	11.3	38
	Roads with heavy maintenance	**0.0**	**35.5**	**18.2**	**16.5**	**42.2**
	Open roads		0.1	0.1	0.1	0.1
	Closed roads		35.4	18.1	16.4	42.1
Temporary Roads	Temporary roads needed for harvest (total)	**0.0**	**12.62**	**0**	**2.62**	**14.71**
	Temp roads on existing templates		6.01	0	0.67	6.57
	Temp. roads needing construction		6.61	0	1.95	8.14

Road Management

Generally, the transportation system in the East Face analysis area would be managed in the same manner it has been managed over the past 20 years; however, a few changes would be proposed. Road 7312100, also known as the High Mountain road, is currently ineffectively closed in the interior section, and would be recommended to remain an open, through route connecting Roads 7312 and 4380. A short spur (7312140) off this road, and the road into the Dutch Creek material source (7312400) would also be proposed to remain open. Associated with these proposed changes, it would be proposed to close Road 7312150, a road paralleling in very close proximity to the North Fork Anthony Creek. This road would be rehabilitated to reduce erosion and protect water quality in this drainage.

Additionally, in Alternative 5 only, the closure periods for the Indian-Gorham and Clear Creek Cooperative Closure areas would be extended to 3 days prior to archery season and through the end of second rifle bull season. Closed, overgrown roads that would be opened for project use would have a promulgation that would restrict vehicular use for 5 years.

The proposed changes in road management described above make only minor changes to the already low open road densities in the project area. The following table exhibits this information.

Table 6: Post-Harvest Open Road Densities (as recommended)

SUBWATERSHED NAME	MA	GIS Acres	Area in Sq Miles	Open Rd Miles	Open Rd Density
Lower Anthony Creek	1	7,819.79	12.22	13.43	1.1
Middle North Powder River	1	3,656.06	5.71	15.02	2.6
Upper Anthony Creek	1	11,193.22	17.49	17.44	1.0
Upper Beaver Creek	3A	3,389.41	5.30	9.82	1.9
Upper Ladd Creek	1	1,438.92	2.25	10.13	4.5
Upper Wolf Creek	1	13,725.17	21.45	41.84	2.0

Miles shown are calculated from GIS. In areas where the square miles are less than 0.1 mi/mi^2, the road density has been rounded to zero, and is not being shown, for clarity.

The MA1 portion of Upper Ladd Creek is approximately 2 ¼ square miles of the nearly 70 square mile project area. This small sliver of subwatershed contains five open roads, of which two are the major access through this portion of land: 4.3 miles of Road 43 and 2.3 miles of Road 4300160. The other 3 roads generally provide access to private and BLM land adjacent to the area. Because this sliver of subwatershed is so small in scale, the calculated open road densities are skewed and not representative of what these densities would be if calculated at scale of an entire subwatershed of 12,000-26,000 acres. Upper Beaver Creek is slightly above forest plan density standards for MA3A (1.5 miles/square mile) because of the presence of Road 43 in this subwatershed. Similar to Upper Ladd Creek, only a sliver of the subwatershed was included in the East Face project area, thus skewing the road densities. Because the calculation was restricted to the East Face project area, it did not take into consideration the Beaver Creek Roadless Area immediately adjacent to the project area and within the same subwatershed. Incorporating the roadless area portion of this subwatershed lowers the open road density to well below the summer range standards.

There several road segments in the East Face project area that the interdisciplinary team identified as not needed for future resource management or recreation access, or they provide redundant access, and this analysis has recommended them for decommissioning. These roads generally have grown in or devolved to such as state as to be impassable, and often have invisible templates. Treatment of these roads would address hydrologic concerns such as reducing sedimentation by providing additional drainage structures in the form of surface cross drains. This action would occur separate from any commercial operation as funds become available. Additionally, there are roads in the area which are not scheduled for commercial use, but operate at a maintenance level that is different from the objective maintenance level of the road. These objective levels are listed in the INFRA database and reflect past NEPA decisions on road management in the area, or are recommended for future change in the objective maintenance level. The operational ML of these roads would be changed once on-the-ground work has been implemented, either by the commercial activity, post-sale improvements, or as supplemental funds become available. A summary of the existing and recommended changes in road management are shown in Table 7, below. This summary is inclusive of all roads in the analysis area. Additional details regarding specific road numbers and segments can be found in Appendix A.

Table 7: Summary of Recommended Changes in Management of Roads *

Existing Operational Maintenance Level	Existing Objective Maintenance Level	Recommended Objective Management	No. of Miles of Road Affected
Closed Road (OPML 1)	Closed Road (OBML 1)	Decommission	26.8
		Close/Store (OBML 1)	201.4
		Open (OBML 2)	6.5
	Open Road (OBML 2)	Close/Store (OBML 1)	0.06
	Decommission	Decommission	2.01
		Close/Store (OBML 1)	0.01
		Open (OBML 2)	0.09
Open Road (OPML 2-5)	Closed Road (OBML 1)	Close/Store (OBML 1)	1.52
		Open (OBML 2)	0.07
	Open Road (OBML 2-5)	Close/Store (OBML 1)	0.23
		Open (OBML 2-5)	109.22
		Decommission	2.12
	Decommission	Decommission	0.36
		Total	363.94

- *Numbers include past road management decisions and new road management opportunities.*

Right of Way

For Alternatives 2, 3, 4, and 5, the right-of way issues associated with one of the main collector routes would be resolved. Right-of-way would be acquired in the form of an easement across approximately 0.5 miles of NFSR 7302 located in T7S, R 38 E, Section 6. This would assure legal access for all types of vehicular and non-vehicular traffic on this long-term open road.

Over-Snow Routes

Roads 43, 4300020, 4300095/4300100, 4315, 4316, 4330, 4350 and 7312 will remain designated as winter snowmobile routes. If winter haul was proposed, use of these routes would be coordinated with the local snowmobile clubs. No changes would be proposed for this system. No change is proposed in the management of the Nordic or Alpine ski routes. Refer to the recreation analysis for further details.

Invasives

There are provisions in every timber sale contract which aide in prevention of the spread of invasive species. B(T) 6.35 and C(T) 5.12 both require the cleaning of equipment prior to moving equipment onto the forest, but also when equipment is moved out of areas of known infestation. When specified road work is included for reconstruction, supplemental specification 171 (Weed and Disease Prevention) is also included in the contract which provides additional requirements that any subcontractor of the purchaser would have to comply.

Cumulative Effects

Alternative 1

As described under the direct and indirect effects of the no action alternative, maintenance and improvements would not occur and the road system within this area would continue to degrade. Under the 2005 Travel Management Rule, the forest is required to designate a road system for vehicular use.

Since the forest is currently an open forest for vehicular use, these designations may be more restrictive than what is currently allowed. This may result in concentrating the recreational, commercial, and administrative users on a smaller number of roads. This concentration of use may generate conflicts between users, especially with OHVs and full-size traffic. Increasing the number of users on a smaller road system would increase the amount of wear on the roads. More frequent blading of roads may mitigate these negative impacts on the road surface and surfacing. This increase in maintenance would require additional funding which is not predicted to occur based on current declining budget trends. Therefore, road maintenance would be deferred until funding becomes available. Designation of roads, trails, and areas by publishing of the MVUM would have a minimal short-term effect on the transportation system as it currently exists on the ground. Long-term, as use and maintenance is eliminated on undesignated roads, these roads are likely to grow over with trees and vegetation and become unusable.

Implementation of activities such as noxious weed management would continue to occur within the areas accessible for treatment; however, this may be impacted as access is reduced.

Alternatives 2, 3, 4, and 5

Commercial Harvest and Post-Harvest Activities

The effects of most projects proposed in the foreseeable future are negligible on the transportation system; however, the effects of possible timber haul from the Elkhorn Wildlife Area or private land operations on the roads may have an initial negative effect due to wear on the road surface. It is anticipated that this would be mitigated by the road maintenance and reconstruction requirements of pre-haul, during-haul, and post-haul operations. In addition, the surface rock replacement deposits by the timber purchaser would provide a means to maintain/repair/replace the crushed aggregate, should it wear out due to the timber haul. Timber sale road maintenance should provide a beneficial effect to the road system beyond the close of the project.

Noxious weed management of the existing invasive populations within the project area in combination with the prevention measures for the East Face project has the potential to improve the ability to control roadside noxious weed populations. Known populations will also be treated before roads are either reclosed or decommissioned which will minimize the potential for spread by continued motor vehicle use.

Travel Management

The 2005 Travel Rule established regulations for Travel Management under 36 CFR 212, Subparts A, B, and C. In FSM 7710.1, the following is stated:

1. Travel Management (36 CFR Part 212, Subparts A, B, and C). Subpart A of these regulations establishes requirements for administration of the forest transportation system, including roads, trails, and airfields, and contains provisions for acquisition of rights-of-way. Subpart A also requires identification of the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of NFS lands and use of a science-based roads analysis at the appropriate scale in determining the minimum road system. Subpart B describes the requirements for designating roads, trails, and areas for motor vehicle use and for identifying designated roads, trails, and areas on a motor vehicle use map (MVUM). Subpart C provides for regulation of use of over-snow vehicles on NFS roads, on NFS trails, and in areas on NFS lands.

2. Executive Order 11644 (“Use of Off-Road Vehicles on the Public Lands”), dated February 8, 1972, as amended by Executive Order 11989, dated May 24, 1977. Provides for developing regulations

governing use of off-road vehicles on federal lands to protect natural resources, promote public safety, and minimize conflicts among uses.

To comply with the 2005 Travel Management Rule (TMR) the WWNF began a planning effort to designate roads, trails, and areas for public motor vehicle use in 2007. The 2012 WWNF TMP FEIS displays a range of alternatives meeting the intent of the TMR and the effects of implementing them. In the Spring of 2015, the Regional Forester directed the forest to pause on any further Subpart B development until the Blue Mountain Forest Plan Revision was completed. This is expected to be complete by Fall of 2017. Because this planning effort for Subpart B is expected to occur within the reasonably foreseeable future (next 5 years), the range of alternatives from the TMP FEIS was considered the best representation of a reasonable range of potential effects that could occur upon implementation for use in this analysis. While a specific number of miles of designated routes (roads and trails) will not be known until a decision is made, the analysis from the WWNF TMP FEIS indicates that designated routes could range from a potential high of approximately 6,700 miles to a potential low of approximately 2,600 miles and x-country motor vehicle use would be managed. Once a final decision is made, the roads, trails, and areas designated for motor vehicle use by the public will be displayed on a Motor Vehicle Use Map (MVUM) and x-country motor vehicle travel will be regulated.

As described under Alternative 1 above, designation of routes for motor vehicle use may result in concentrating the recreational and commercial users on a smaller number of roads. This concentration of use may generate conflicts between users, especially with OHVs and full-size traffic increasing the amount of wear on the roads. Road maintenance completed under the East Face project may mitigate some of these negative impacts on the road surface and surfacing possible decreasing the funding needed for maintenance while sale and project activities are going on. Long-term, as use and maintenance is eliminated on undesignated roads, roads not designated for motor vehicle use are likely to grow over with trees and vegetation and become unusable.

Table 8 - Total Transportation System Maintenance Levels (Pre- and Post-Project)

Maintenance Level	**Operational** (# Miles Pre Project)	**Objective** (# Miles Post Project
Maintenance Level 5	10.5	10.5
Maintenance Level 3	3	3
Maintenance Level 2	113.5	116
Maintenance Level 1	237	196
Decommission	N/A	38.5
Total	364	364