Modeling for alternative A: fully meets 19-19-68 for BMU subunits with >75% NFS lands

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Applies only to Alternative A – No action.

Alternative A is existing situation, which means that Amendment 19 (A19) still applies. The following are the A19 standards and objectives:

Forest-wide Standards

In all BMU standards, there will be no net increase in total motorized access density greater than 2 miles per square mile, no net increase in open motorized access density greater 1 mile per square mile, and no net decrease in the amount of size of security core area. Forest Service actions will result in a net gain towards the objectives on National Forest System lands.

Forest-wide Objectives

On all subunits that are predominantly (greater than 75%) National Forest System land:

- Open Motorized Access Density (OMAD): ≤19% of subunit to be ≤1.0 mile/square mile.
- Total Motorized Access Density (TMAD): ≤19% of subunits to be ≤2.0 miles/square mile.
- Security CORE: ≥68% of subunit to be in [CORE] as defined by appendix TT of the 1986 Forest plan, as amended.

On all subunits that are not predominantly National Forest System land:

- Assure that Forest Service activities will not result in an increase in motorized access density or reduction in security core areas on National Forest System lands; and
- Improve habitat effectiveness through cooperative management with other landownerships, land adjustments, or other means.

Current A19 Situation on the Flathead National Forest

Six (6) subunits have amended objectives through previous site-specific decisions:

Canyon McGinnis	19-33-53
Doris Lost Johnny	57-19-36

Lower Whale	37-19-47
Werner Creek	29-19-63
Wheeler Quintonkon	25-19-68
Wounded Buck Clayton	27-30-65

Amendment 19 applies to 54 BMU subunits. Of the 54:

- 7 are <75% NFS lands, standard is no net increase in OMAD & TMAD, no net decrease in security CORE due to FS actions.
- 29 subunits >75% NFS lands meet the 19-19-68 objectives (or amended objectives)
- 18 subunits >75% NFS lands do not meet one, two, or all three objectives (or amended objectives)

The following is information for the 18 subunits not meeting all three A19 objectives:

- Two (2) subunits have project decisions that will meet all of the 19-19-68 objectives. The Emery Firefighter subunit was evaluated in the Firefighter Project, which has a signed decision that included access management actions to fully meet A19 objectives. This project is currently being implemented. The Beaver Creek subunit was evaluated in the Beaver Creek Landscape Restoration Project, which has a recently signed decision to fully meet A19 direction. This project has not yet been implemented.
- One (1) other subunit not fully meeting A19 objectives (Logan Dry Park) is currently being evaluated in a project (Betty Baptiste) which includes an alternative that makes progress towards the objectives and one alternative that fully meets the objectives.
- Seven (7) subunits are in the Swan Valley that, after the transfer of Plum Creek Timber Lands (MT Legacy Project), now have >75% NFS lands (Buck Holland, Cold Jim, Glacier Loon, Hemlock Elk, Lion Creek, Meadow Smith, Piper Creek).
- The eight (8) remaining subunits are: Canyon McGinnis, Crane Mountain, Hay Creek, Peters Ridge, Red Meadow Moose, Skyland Challenge, Swan Lake, and Werner Creek.

Potential Scenario for Full Implementation of A19

In order to provide an estimate of what could be needed to fully implement A19 numeric objectives, the Forest GIS specialist started with existing road management data recorded in the USFS INFRA database and conducted a modeling exercise. Please note there are different scenarios that could be used in some of the BMU subunits, while other subunits are more limited in the options available to fully meet A19 numeric objectives. Mileages for motorized access changes should be considered an estimate for displaying potential effects of alternative A, not a site-specific analysis.

Maps (PDF, 8½ x 11) have been created to show modeled scenarios for Open Route Density (ORD), Total Route Density (TRD), and Security CORE (see planning record GIS exhibits).

Estimate Summary

For the entire A19 area (Glacier View RD, Hungry Horse RD, Spotted Bear RD, and the Swan Valley portion of Swan Lake RD), the following table describes the road & motorized trail management that could be required for the subunits to meet objectives.

Motorized Access Changes	Miles
Motorized routes to be closed to public motorized trail access	57
Miles of trails closed due to moving trailheads back down a road when open yearlong/seasonal roads are closed.	25
Open yearlong/seasonally to be closed by gate	7
Open yearlong/seasonally or closed yearlong by sign to be closed by physical barrier	55
Open yearlong/seasonally to be reclaimed	17
Gated roads to be closed by physical barrier	102
Gated roads to be reclaimed	269
Physically barricaded roads to be reclaimed	202
Impassable roads to be reclaimed	30

If these actions are implemented, 57 miles of motorized trail routes to be closed would represent 47% of the current routes open to motorized trail traffic within the A19 area.

If these actions are implemented the total miles of roads to be reclaimed would be 518.

Potential Consequences

The following table summarizes, by BMU subunit, potential road management changes to meet 19-19-68 and the implications to public access if the action is implemented.

Subunit	Action	Implications
Red Meadow Moose (Glacier View RD)	RD# 115 (Red Mdw Cr) open seasonally would need to be changed to closed yearlong w/gate, 3.8 miles to meet OMAD	This could affect residents of the North Fork area if one of the emergency routes over Whitefish Divide is eliminated. The route is 1 of 3 routes that could be used as an emergency escape route in the event of a fire or flood.
Hay Creek (Glacier View RD)	RD# 5241 (Moran Basin) open yearlong would need to be changed to closed yearlong barrier (to beginning of route at junction RD# 376), 3.6 miles to meet CORE	This potential action would close an existing open road and the Moran Creek trailhead (Tr #2) would need to move about 3.6 miles down the road, converting the road to a trail.
Hay Creek (Glacier View RD)	RD# 376 (Hay Creek) open seasonally would need to be changed to closed yearlong with barrier, 4.2 miles to meet CORE	In addition to closing a seasonally open road, trailhead for TR# 3, Hay Creek, moves 4.2 miles back down road.
Peters Ridge (Hungry Horse & Swan Lake RDs)	All motorized trails in Krause Basin would need to be closed-- 11.3 miles.	All motorized trail routes in this subunit would need to be closed to meet OMAD. Motorized TR# 7 (Alpine 7), could remain

Subunit	Action	Implications
	TR# 51 (Columbia Mtn Loop), on west side would need to be changed to closed to motorized trail access, 4.9 miles. TR# 5 (Strawberry Lake) would need to be changed to closed to motorized trail access, 2.8 miles. TR# 37, Peters Ridge, all would need to be changed to closed to motorized trail access, 2.6 miles. TR# 20 (South Fork Hemler Creek) changed to closed to motorized trail traffic, 5.9 miles	open only from the Hungry Horse Reservoir side.
Peters Ridge (Hungry Horse & Swan Lake RDs)	RD# 5388 (Peter's Ridge Road) open seasonally changed to closed yearlong barrier, 5 miles to meet CORE	In addition to closing a seasonally open road, the trailhead for TR# 37, Peters Ridge, would move 5 miles back down the road.
Peters Ridge (Hungry Horse & Swan Lake RDs)	RD# 5385, Trail Creek, open yearlong changed to closed yearlong barrier, 5.0 miles to meet CORE	In addition to closing an open road, trailhead for TR# 20, South Fork Hemler Creek, would move 5 miles back down road.
Swan Lake (Swan Lake RD)	TR# 10 (Sixmile Lookout) all of it changed to closed to motorized trail access, 3.5 miles. TR# 27 (Sixmile Sidehill) all of it changed to closed to motorized trail, 2.5 miles. TR# 78 (Wire) all of it changed to closed to motorized trail access, 6.7 miles. TR# 7 (Alpine 7) all of it south of Six-Mile Mtn changed to closed to motorized trail traffic, 14 miles.	For this subunit to meet OMAD, either open roads or motorized trails would need to be closed. In order to keep roads open, modeling shows all motorized trail routes would need to be closed. Indirectly, taking this action would cause Ball Branch to have 0.0 miles/sq.mile (in which case a road in BB subunit could be opened to keep OMAD at the current level.
Swan Lake (Swan Lake RD)	RD# 9514 (Bond Cr Lost Cr) and RD# 9501 (Bond North) open seasonally changed to closed by barrier entire road, 6.3 miles to meet CORE	Road open seasonally would be closed.
Lion Creek[1] (Swan Lake RD)	RD# 9882 (Van Lake) open yearlong changed to reclaimed (and all roads off of this road), 3.9 miles to meet TMAD. RD# 558 (Goat Creek Lion Creek) open yearlong changed to reclaimed, 1.4 miles RD# 5383, Lion Foothill, open yearlong past junction TR# 25, changed to reclaimed, 0.4 miles.	Nearly all NFS roads in this subunit would need to be closed and reclaimed to meet TMAD (except where road accesses private, or Napa Lookout and high use trail). This includes access to Van Lake (recreation). This subunit would not be able to meet 19-19-68 without closing and reclaiming DNRC roads in NW corner, which is not within USFS authority.
Meadow Smith[1] (Swan Lake RD)	RD# 9762 (Falls Creek) open yearlong changed to closed by barrier, 1.91 miles to meet CORE.	Open road would be closed. In addition, trailhead for TR# 29 (Smith – Little Salmon) would move 1.6 miles down road.
Meadow Smith[1] (Swan Lake RD)		: Road currently open would be closed yearlong to meet CORE.

Subunit	Action	Implications
	: RD# 124A (Simpson Creek) open yearlong would change to closed by barrier 1.9 miles to meet CORE.	
Meadow Smith[1] (Swan Lake RD)	RD# 10324 (Lowest Condon) and RD# 10324B (Lowest Condon Stub) open yearlong to gated yearlong, 0.9 miles.	Open yearlong road would need to be closed to meet OMAD.
Buck Holland[1] (Swan Lake RD)	RD# 560 (Rumble Creek) open yearlong changed to closed by barrier, 0.4 miles	Open yearlong road would need to be closed to meet CORE.
Buck Holland[1] (Swan Lake RD)	RD# 905 (Barber Creek) open yearlong, changed to closed yrlng by barrier back to junction w/ RD# 9768 (South Fork Barber Spur) at mp 2.404, approx. 3.3 miles	Open yearlong road would need to be closed to meet CORE.
Buck Holland[1] (Swan Lake RD)	RD# 44A (South Holland) open yearlong, changed to reclaimed back to mp 052, approx. 1.26 miles.	Open yearlong road would need to be closed to meet TMAD.
Buck Holland[1] (Swan Lake RD)	RD# 9558 (Owl Creek Loop) open yearlong, changed to closed yearlong by barrier from junction w/ RD# 44A to junction w/ RD# 9814.	Open yearlong road would need to be closed to meet CORE.
Crane Mountain (Swan Lake RD)	RD# 498 (Mission Divide) original decision showed road open seasonally to be reclaimed, 6.8 miles. To fully meet, an additional 8.1 miles would need to be reclaimed.	Road open seasonally would need to be reclaimed to meet TMAD.
Crane Mountain (Swan Lake RD)	RD# 9745 (Upper Bug) open yearlong changed to closed by barrier, 2.5 miles	Open yearlong road would need to be closed to meet CORE.
Crane Mountain (Swan Lake RD)	RD# 9714 (Yew Creek) middle section open seasonally changed to closed by barrier, from mp 3.18 to mp 9.49, approx. 6.3 miles to meet CORE	Road open seasonally would need to be closed. In addition, closing this section means that there would be no open road connection from north end to the south end of the subunit.
Crane Mountain (Swan Lake RD)	RD# 9704 (Woods Bay) (first 0.5 miles open seasonally, rest of road barriered but not CORE) would be changed to closed by barrier entire length to meet CORE.	Road open seasonally would need to be closed. In addition, a short trailhead open seasonally, TR# 314 (Crane Creek) moves back 0.5 miles.
Piper Creek[1] (Swan Lake RD)	RD# 10381 (Fatty Piper) open seasonally, changed to closed by barrier to meet CORE. (install barrier 1.4 miles back from end of road).	Road open seasonally would need to be closed. In addition, trailhead for TR# 738 (Cedar Creek), would move 1.4 miles back down road.
Glacier Loon[1] (Swan Lake RD)	RD# 561F (East Frenchy Connection) open yearlong to be reclaimed, 0.4 miles to meet TMAD.	Open yearlong road would be reclaimed.
Glacier Loon[1] (Swan Lake RD)	RD# 79 (Lindbergh Lake) and RD# 9552 (Meadow Lake) to trailhead for TR# 351 (Crystal Lake) open roads would need to be changed to closed by barrier, 4 miles to meet CORE.	Open road would be closed. In addition, trailhead for TR# 351, Crystal Lake, would move 4 miles back down road.

Subunit	Action	Implications
Logan Dry park (Hungry Horse & Spotted Bear RDs)	RD# 1632 (Logan Creek Felix Creek,) open seasonally--gate at mp 7.46 (at trailhead for TR# 63) would need to be moved back 0.44 miles to meet OMAD.	Road open seasonally would be closed. In addition, trailhead for TR# 62, Logan-Dirtyface, and TR# 63, Baptiste LO, would move 0.44 miles back down road.
Logan Dry park (Hungry Horse & Spotted Bear RDs)	RD# 1625 (Logan Creek Hoke Creek) open seasonally would need to be changed to closed by gate until junction w/ RD# 2838, approx. 1.5 miles to meet OMAD.	Road open seasonally would need to be changed to yearlong closure.
Logan Dry park (Hungry Horse & Spotted Bear RDs)	RD# 1636 (Baptiste Creek) open seasonally, would need to be changed to closed yearlong by barrier at north end, 2.63 miles; and closed yearlong by gate at south end, 0.33 miles to meet CORE and OMAD.	Road open seasonally would need to be changed to yearlong closure with barrier and gate.
Skyland Challenge (Hungry Horse RD)	RD# 569G (Skyland Road G) road closed by gate/barrier would need to be changed to closed to motorized trail access, 1.4 miles to meet OMAD.	Action would result in loss of motorized trail access route.

1 – These BMU subunits include lands acquired in the MT Legacy Project.

Individual subunit specific changes

For each subunit the changes that are estimated to be required are provided in a spreadsheet, titled MotorizedAccessResults2015oct15.xlsx. Roads are summarized in the worksheet titled “SubunitRoadExistDecMeet_freq”. Motorized trails are summarized in the worksheet title “SubunitTrailExistDecMeet_freq”. (see planning record GIS exhibits). Particularly on motorized routes, spreadsheet users should be aware that in the spreadsheet the miles are listed for the subunit in which the trail falls within; whereas, the summary above is listing the miles for the subunit that the trail starts/ends within. For example, in the spreadsheet, Ball Branch has 6.8 miles of trails that are no longer motorized in that subunit. However, this is a trail that is affected by the decisions for the Swan Lake subunit, and the mileages are included in the Swan Lake subunit discussion above.

If you have questions, please contact me.

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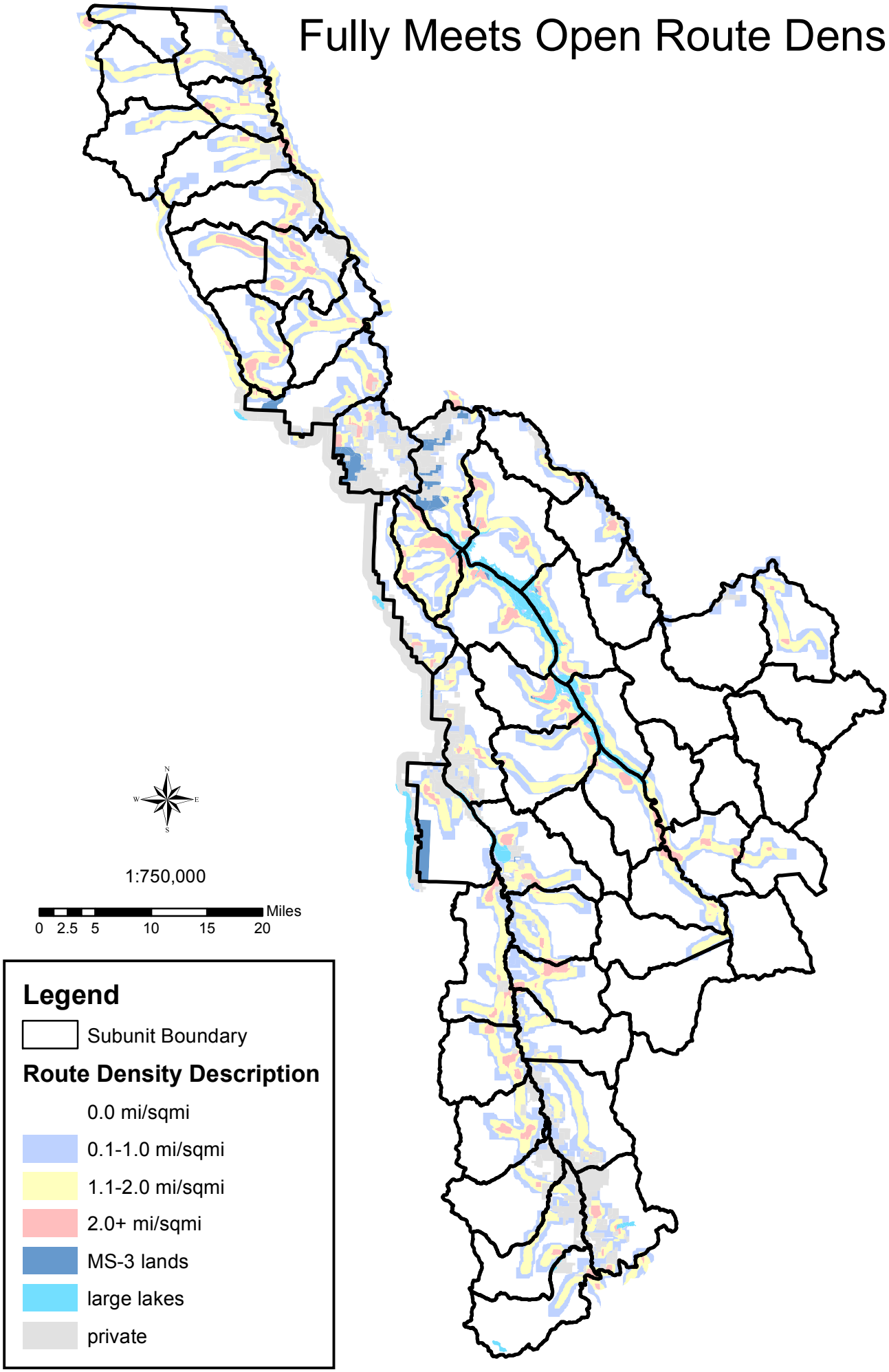
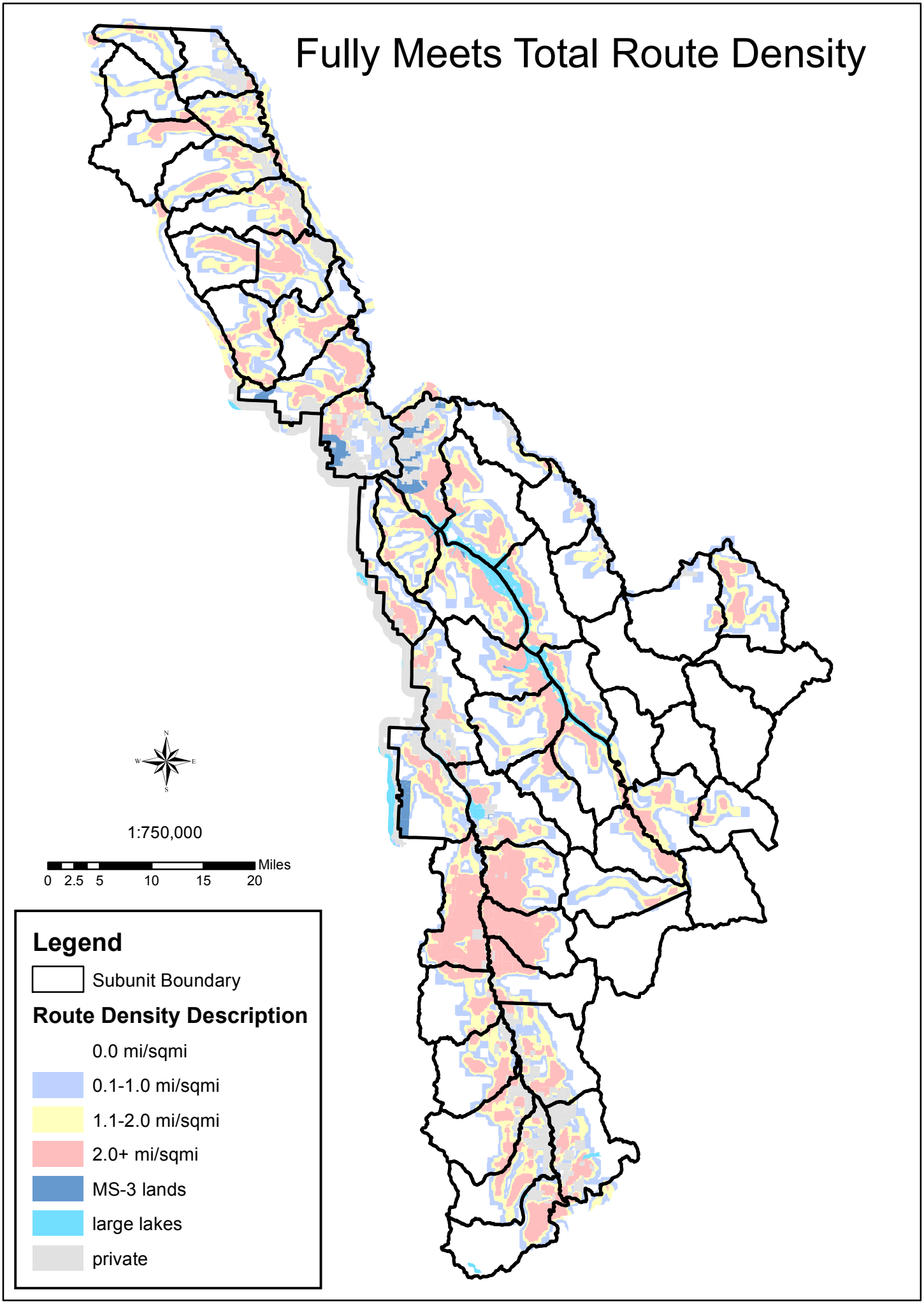
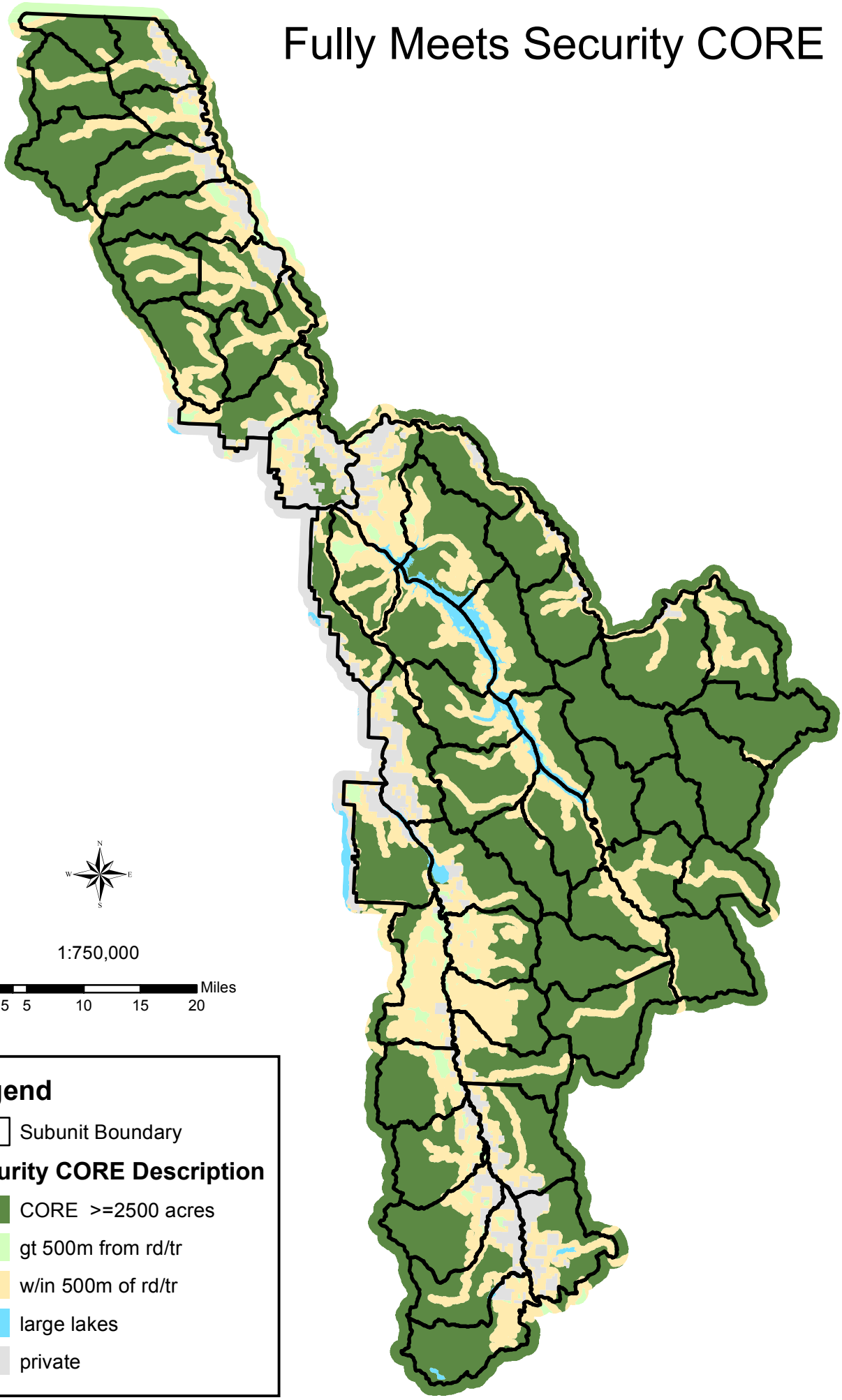
Fully Meets Open Route Density



Fully Meets Total Route Density



Fully Meets Security CORE