File Code: **1900 NEPA**
2500 Watershed

Date: 11/29/09

Subject: **Hegben Basin TMA Travel Plan and Road Decommissioning – Implementation Monitoring Review**

To: **Hegben Lake District Ranger**

On October 24, 2009 an Implementation Monitoring Review was held in Hegben Basin to review Gallatin Travel Management Plan implementation with a focus on road decommissioning project work (2008 & 2009) and travel plan standards compliance. Attendees included Susan Lamont, Lauren Turner, Todd Stiles, Tim Campbell, Rob Davies, Kimberly Schlenker, Susan James, Rebecca McNamara, and Mark Story.

This review is consistent with Appendix B of the Gallatin NF Travel Plan (FEIS Appendix B-12) which calls for an Implementation review team to evaluate if the Travel Plan goals, objectives, standards, and guidelines were implemented and effective and still valid.

This monitoring review consisted of the following process:

1. Review and rate the Hegben Basin TMA road decommissioning and Hegben Reservoir recreation management project work for application and effectiveness of the following:
   - Gallatin NF Road and Trail Improvement Projects DN & FONSI Standard Operating Procedures and Additional Mitigation
   - Gallatin NF Travel Plan Goals, Objectives, Standards, and Guidelines

2. Provide recommendations for future travel plan implementation in Hegben Basin as appropriate for the rest of the GNF.

The application and effectiveness rating system consisted of the following measures:

Application
5- operation exceeds requirements of objective or measure
4- operation meets requirements of objective or measure
3- minor departure from measure, objective marginally met
2- major departure from measure, objective sporadically met
1- gross neglect of measure, objective not met

Effectiveness
5- improved conditions over pre-project condition
4- adequate protection of resources, effective
3- minor and temporary impacts on resources, moderately effective
2- major and temporary or minor and prolonged impacts on resources or only slightly effective
1- major and prolonged impacts on resources or not effective

Gallatin NF Travel Plan Goals, Objectives, Standards, and Guidelines				
Rating item	source	apply	effect	comments
1. Goal D. Obj. D-1. Close and rehabilitate existing roads that are in excess to administration, recreation, and access needs.	GNF Travel Plan FEIS pg. 1-11	4	4	About 38 miles of roads were decompacted, seeded and slashed to improve conditions for

				vegetation.
2. Standard D-5. Project Roads. Existing roads that were constructed for project use and not designated for motorized use via the Forest Travel Plan are to remain closed to public (wheeled) motorized use.	GNF Travel Plan FEIS pg. 1-11	3	3	-Need to leave utility corridor roads open. Hegben RD has several of these project roads which can't be effectively closed. Some of these roads should be revisited in the Travel Plan update in 2011 to modify designation.
3. Goal E. Water Quality, Riparian, Fisheries and Aquatic Life. Manage a road and trail system that fully supports the protection of water quality, and habitat for fish, riparian dependent species, and other aquatic organisms.	GNF Travel Plan FEIS pg. 1-13	4	4	On west side of Hegben Reservoir some of the rocks placed were too far apart. Needed to add more rocks to effectively close to cars & trucks.
4. Hegben Basin TPA. Goal 1. Summer Recreation Area. Provide opportunities for high levels of summer recreation with an emphasis of motorized use of open roads. Managed activities would include pleasure driving, ATV/motorcycle use and mountain biking.	GNF Travel Plan FEIS pg. II-98	4	4	Still need to construct a few ATV routes.
5. In order to mitigate effects to wildlife during important times of year such as calving and fawning, wintering, road/trail work will be conducted from 7/15 to 10/15**.** Outside of important big game winter ranges, work in the late fall or winter may occur. Complete road/trail work in high elevation whitebark pine habitat by 9/1 to avoid conflicts with grizzly bear. (See Travel Plan Guideline I-1)	Road and Trail Work DN & FONSI p 25	4	4	
6**. <u>Road Restoration, Stabilization, and Decommissioning</u>** **Treatment Type II:** This treatment is for closing roads that may be reused in the future or for roads that will be decommissioned and of low risk for sediment production into stream courses. • Remove road surface compaction by ripping road to 12" depth. • Remove at risk culverts from drainages and remove road fills within drainage. • Plug and store ditch relief	Road and Trail Work DN & FONSI p 25	4	4	No culverts needed to be removed. No waterbars were needed. Slash was sparcely scattered, and used mostly small sized green LP trees to avoid creating pine beetle bait. Some of the slash will probably get cut up for firewood in the future. Most exposed soil was

culverts for future use. • Install frequent cross drains. • Slash road surfaces. • Seed any exposed soils. • Block road entrances with an earthen berm, ripping and slashing, recountouring & slashing, or a mix.				seeded with native species. Most roads were ripped and then a small earthen berm was placed at entrance.
7. **Water, Fisheries and Aquatic Life.** Road materials shall not be side-cast into streams or wetlands. (See Travel Plan Guideline E-7).	Road and Trail Work DN & FONSI p 25	4	4	Cougar Creek road - decommissioned a road that was eroding into the stream, built new road further from the stream. No sediment to Hegben Reservoir from west side rock placement.
8**. Invasive Weeds.** For road stabilization and decommissioning, survey for existing weeds and then treat weeds at least one or two seasons prior to disturbing the site. This will reduce the existing weed density and encourage the successful establishment of new grass seedlings and other vegetation. If weeds are present, and more than 500 feet from motorized access route, use Treatment Type 1 (install small cross drains, lightly scarify road surface and seed with native grasses, sign the route closed to motorized vehicles, and block the road entrance with boulders, fence or gate). The road needs to remain accessible to the furthest weed patch by either ATVs or UTVs. The route is for weed treatments, and will not be for motorized public use. If weeds are present, and less than 500 feet from motorized access route (if it is reasonably accessible for backpack sprayer treatments), then use Treatment Types II or III (rip or re-contour road, and make impassible to all ATVs). Avoid spreading contaminated soil to new areas. Clean equipment prior to moving to new site.	Road and Trail Work DN & FONSI p 25, 26	3	2	Weeds were surveyed when the road decommissioning project reconnaissance was done in 2008. Subsoiler was pulled up when weed patches were encountered to avoid spreading weeds. 500' is almost too far as a guideline for how far weed crews can walk into treatment areas. COR's and inspectors need some weed identification training & experience. Some roads were closed that had weeds patches more than 500 feet from open roads, these patches will not be treated in the future and will continue to spread.

9. **Invasive Weeds.** For projects scheduled to be implemented in 2010 and beyond, weed surveys of project areas shall be conducted at least 1 year prior to soil disturbance. If weeds are found, work with the district weed specialist to adjust project design or execution as needed to minimize the risk of spreading weeds. Any weed treatment shall be done at least one year in advance of soil disturbance work. For projects to be implemented in 2009, work shall be scheduled in late summer and fall such that weed surveys and any needed treatment can be done earlier in the summer.	Road and Trail Work DN & FONSI p 27	na	na	Most weed infestation will need crew access for 6+ years for treatment to reduce density. Residual herbicide in pretreated road decommissioning areas can kill new grass seedlings, if tordon is used. Roundup has a shorter residual soil life. Gallatin Cnty RAC proposal for 2 years of preparation spray work and post treatments. Implement weed ID training, including recommended herbicides .
10. **Rare Plants.** All projects will be surveyed prior to construction for rare plants/habitats and appropriate mitigation (e.g. avoidance) will be applied if sensitive plants are found.	Road and Trail Work DN & FONSI p 27	2	3	Rare plant surveys should be conducted on all ground disturbance projects. A botanist may be able to map areas which have a higher probability of rare plants and avoid walking entire road lengths.
11. 300' travel off designated roads to dispersed campsites not applicable to Hegben Basin TMA which requires designation of dispersed campsites.	GNF Travel Plan- Std. A-8, and ROD pages 28 & 50.	4	3	Effective work in designating camp sites and blocking off vehicles. In some spots more rocks needed to be added. The work on Hegben Res is not totally effective since it is not fully completed.

Some of the monitoring results will be illustrated in photos:

South Fork Madison Ranch Road. This road was ripped with a dozer and winged rippers, slashed, seeded, and signed. Only small to medium size trees were use to avoid excessive visual impact and pine beetle bait.

Cougar Creek road #1781. The section above was decommissioning and the section to the right was slashed in lieu of another road segment which was left open. This section was directly adjacent to Cougar Creek hence the emphasis in road decommissioning.

Road adjacent to the Madison Addition on the NW side of West Yellowstone which was ripped and closed on the west side and converted to a non-motorized but non-system trail. This road is not specifically designated on the GNF Travel Plan but is intended to provide a large recreation need on the GNF of non-system trails. Many similar routes occur on other GNF Districts and frequently are near residences. These trails are intended to be managed for non-motorized use and are not maintained by the GNF.

The Travel Plan ROD (pg. 28 & 50) requires designation of dispersed campsites on the west side of Hegben Reservoir. The upper left photo is in Spring Creek Campground (non fee system) where extensive rock placement directs the road, campsite, and parking areas. The right photo is in the Spring Creek Campground addition and shows the use of rocks to guide recreationists to not drive to the shoreline of Hegben Reservoir. The rocks are intended to help define the areas where motor vehicles are allowed to drive and park. Tent camping is allowed beyond the boulders. Some longterm existing sites were moved away from the lake shoreline to protect lake shore habitat and wetlands that have been damaged from past motor vehicle use. Approximately 52 user developed campsites exist along the west side of Hegben Reservoir and upon completion of this project in 2010 as many or more campsites will be available designated by campsite symbol signs.

Conclusions

1. The Hegben Basin road decommissioning and Hegben Reservoir campsite management projects have met the primary goal of implementing the Gallatin NF Travel Plan, close excess and unauthorized roads and trails, provide for motorized recreation opportunities, and provide dispersed camping opportunities.

2. The projects were effective in reducing soil compaction and did not result in increased erosion.

3. It is difficult in the travel planning and implementation process to account for the complexity of actual road and trail needs. Many non-system trails and routes are used by non-motorized recreationists which can be difficult to leave open while constraining ATV and motorcycles. Other road segments, such as the powerline roads near West Yellowstone have facility maintained needs but when left open are difficult to exclude public motorized use. The Hegben Project made several logical on the ground decisions relative for non-system non-travel plan routes.

4. Effective consideration and treatment of weeds in road decommissioning continues to be difficult. In the Hegben Basin road decommissioning reconnaissance in 2008 weeds were identified and then treated and avoided in 2009. Many of the other GNF Districts do not have comparable weed knowledge for personnel laying out road decommissioning projects. The funding for road projects is tied to 1-2 current fiscal years and makes multi year road decommissioning treatments problematic.

5. The Road and Trail EA Standard Operating Procedures call for pre-project identification and avoidance of rare plants. For the Hegben Basin road decommissioning D7 staff had sufficient knowledge to minimally provide the rare plant "survey" but for many GNF road decommissioning projects the rare plant survey work has not been systematically completed.

6. Adjustments (fine tuning) of the Gallatin Travel Plan will be appropriate for the 5 year date after the plan was approved or in 2011. The changes are generally for localized routes that were not specifically authorized in the Travel Plan or other Travel Plan provisions that are un-implementable. The compilation of changes could be done at the District level then authorized in the Travel Plan through an appropriate venue.

Recommendations

1. A GNF Travel Plan update will be needed by 2011 to provide for changes for localized routes that were not specifically authorized in the Travel Plan or other Travel Plan provisions that are un-implementable. Review of potential adjustments in some seasonal restrictions is also appropriate.

2. Cultural resource review for road decommissioning has generally been fairly cursory since the roads are in areas that have been previously disturbed. Consider use of Cultural Resource Techs para-cultural techs to provide cultural resource review in the future.

3. Weed encroachment into treated areas poses an increasing constraint to decommissioning of GNF roads. Future GNF road decommissioning projects should be more aggressive in following weed management practices in FSM 2080, in the Gallatin NF Weed EIS mitigation measures, and in the Gallatin NF Roads and Trails EA.

- To the extent possible, areas to be decommissioned should be inventoried for weeds and treated up to 3 years prior to decommissioning in order to minimize noxious weeds which could be stimulated from the decommissioning.

- It is important to understand the vulnerability and exposure of road decommissioning treatment areas to weed expansion.

- For treatment areas where weeds are increased, persist in weed treatments as long as necessary – generally up to 5-15 years.

- To the extent possible and practical, in heavily weed infested areas, minimize the length or road segments that are ripped or recontoured. Often only a relatively short length of segment needs to be treated to effectively close a road.

- Provide COR/inspector with weed identification training so they can adjust the road decommissioning treatment to minimize impact on exisiting weed patches.

- Initiate a Gallatin County RAC proposal for 2 years of preparation spray work prior to road decommissioning and for multiple year follow up treatments.

4 . Rare plant surveys for Travel Plan implementation projects require botany skills that frequently go beyond GNF staff expertise. The rare plant surveys should ideally be completed a year in advance. A staff or contract botanist may be able to identify likely areas of rare plants and avoid the need to inventory all of the segment areas of roads to be decommissioned.

5. Continued Travel Plan project implementation reviews, per Appendix B-12, on a 1 per year basis are encouraged in order to continue to refine treatment methods and mitigations for GNF Travel Plan implementation. The implementation reviews are a convenient way of sharing updated treatment method and mitigation methods.

6. A complete inventory of the designated dispersed sites should be completed on the GNF. The Gallatin will beta test a new field application where site information can be entered into INFRA in 2010.

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