

Recreation Opportunity Spectrum Item 1

OBJECTIVE: Compare actual to projected use and capacity.

DATA SOURCE: Infrastructure System (INFRA), NVUM results, and visitor use and trend patterns.

FREQUENCY: Annually.

REPORTING PERIOD: 2010-2013.

VARIABILITY: +/- 20 percent by Recreation Opportunity Spectrum category.

EVALUATION & MONITORING RESULTS:

At the time the Forest Plan was signed, we established our baseline reports of recreation use on the Bitterroot NF by using traffic counters, fee campground receipts, river permits, trailhead registration cards, and observation by field personnel. Since then, we have updated the reports using observations and comparisons by field personnel. By using field observations, we are able to identify recreation trends, but do not have statistically accurate Forest use numbers. For this reason, we have eliminated Forest-wide recreation visitor numbers from this report. Instead, we will report recreation use by trends and general use patterns.

Beginning October 1, 2001, the forest participated in the national forest Visitor Use Monitoring (NVUM) project, which provides estimates of recreation and other visitor use on national forests throughout the United States. NVUM was developed to provide statistically reliable estimates of visitors needed to assist with federal land management planning decisions. The survey also provides important information collected for Congress and external customers such as the states, private industry, and academia.

The NVUM program surveys over 100,000 visitors to National Forest System lands every five years. This nationwide visitor use survey provides statistically sound estimates of visitation to each national forest and to each site type. The surveys also provide information about who these visitors are demographically, why they come to the national forests, how satisfied they are with the facilities and services provided, and how much money they spend on their visit. The National Visitor Use Monitoring Surveys have been conducted on the Bitterroot National Forest in the fall of 2001 through 2002, 2006 through 2007, 2011 through 2012. The survey will be conducted again fall of 2016 through 2017.

The survey results provide broad summary information about recreation use and visitor characteristics forest wide. Results are available at <http://www.fs.fed.us/recreation/programs/nvum>.

Recreational use on the Forest continues to increase, both in the numbers of recreationists visiting the Forest, and in the variety of uses. The Forest is trying to meet this increased demand with higher quality facilities and better customer service at selected sites, while maintaining diverse experiences. Examples include:

- Reconstruction of Three Frogs Campground
- McCart Lookout Reconstruction
- Increased Forest Service presence and user education at Lake Como
- Construction of a picnic shelters at East Fork Guard Station and Lake Como
- Replacement of old wooden outhouses with anew concrete outhouse at Lost Horse Corridor portal.

The Forest makes decisions to improve or expand facilities with the understanding that there are benefits and trade-offs associated with meeting the increasing demand for recreation. Our goal is to provide a wide range of recreation opportunities, from primitive wilderness to developed recreation, that complement each other and are compatible with other resource demands.

During the period from 1990 to 1998, the population of Ravalli County grew by 40.6 percent. The Stevensville area grew at a comparatively faster rate than the rest of the Bitterroot Valley. There has been an increase in day use associated with this population growth, especially from new residents using the Forest for day hikes, driving

for pleasure, and wildlife viewing. Examples of areas where this increasing day use is occurring are the Willow Creek and East Fork drainages, Ambrose/Three mile area, Lake Como area, and the Fred Burr/Gash Creek drainages. Day hiking in the west side canyons is also increasing.

The Federal Lands Recreation Enhancement Act (REA) was passed in the 2005 Consolidated Appropriations Act (PL 108-447, 94 16 USC-Ch 87) signed into law by President Bush on December 8, 2004. The 10-year Act authorizes the Secretaries of the Interior and Agriculture to establish, modify, charge and collect recreation fees at Federal recreation lands and waters as provided for in the Act. REA was extended in 2013 to expire December 8, 2015. This act allows federal agencies to charge user fees that are returned to manage the site where they are collected. Under this act, the Bitterroot NF charges fees at some campgrounds on the Forest, day use at Lake Como, the cabin rental program, and outfitter and guide permit payments. Under current authorization the forest retains 95 percent of funds collected for use on forest. This program has provided funding to maintain safe facilities and cover basic visitor services, such as trash collection, toilet pumping, water testing, and site patrols

Winter Recreation: Local user groups are helping us meet the demands for Nordic ski trails, snowmobile trails, and dispersed snow activities such as backcountry skiing and snowshoeing. The Bitterroot Cross-Country Ski Club and the Ridge Runners Snowmobile Club are primarily responsible for making groomed trails available to cross-country skiers and snowmobilers.

Off-Highway Vehicle Use: Off-highway vehicle use has increased along with the general population increase in the Bitterroot Valley. Additional information about this activity is found in Item 28, Off-Highway Vehicle Effects on Lands.

Rock Climbing: The Forest is working with user groups to promote a low impact climbing education program. In future years a formal questionnaire will be developed to further assess climbing issues and user attitudes.

Accessible Facilities: The Forest continues to improve its facilities by making some of them accessible to persons with disabilities. The Forest provides areas for those hunters that meet the State's Handicapped Hunters eligibility requirements. The Summit Independent Living Center, Inc. has recognized the Lake Como picnic area with a "Good Access is Good Business" award for commitment and service to people with disabilities.

Condition of Developed Recreation Sites Item 2

OBJECTIVE: Evaluate the need for increasing or decreasing developed facilities (Forest Plan, p. II-4). Assure compliance with Forest Plan direction in the maintenance of facilities (Forest Plan, p. III-69).

DATA SOURCE: Meaningful Measures standards.

FREQUENCY: Annually.

REPORTING PERIOD: 2010-2013

VARIABILITY: Failure to eliminate, replace, or repair 50 percent of MC 2 (facility condition is substandard) and MC 5 (facility condition needs betterment); and 25 percent of MC 3 (facility condition needs heavy maintenance) and MC 4 (facility condition needs replacement).

EVALUATION:

The Recreation Facilities Analysis conducted in FY2006 (described below) has addressed the objectives for this monitoring item. As a result of this analysis managers concluded that the Forest should increase the number of cabin rentals by three within the next five years. Buildings to be added to the rental system are the Lost Horse Cabin, Magruder Office, and Boulder Lookout. We also determined that we should not close any existing sites, but should reduce facilities at some, improve services at others, and make operational changes in order to maintain facilities to national standards.

Maintenance needs have gone unmet for many years at some sites, leaving an inventory of deferred maintenance estimated at over one million dollars. We are outside the monitoring variability on the maintenance issue, and the recreation facilities analysis constitutes our evaluation of that situation.

In 2009 the Forest Leadership Team discussed that the Recreation Facility Analysis should be a dynamic document to keep up with the ever changing recreation uses, needs and desires of our public.

MONITORING RESULTS:

Recreation Facilities Analysis

In FY2006, the Forest completed a strategic evaluation of our developed recreation facilities. This process involved updating information regarding condition of facilities, operating costs, and costs associated with bringing many deficient sites up to national standards (deferred maintenance). Based on this updated information, the estimated deferred maintenance costs for the Bitterroot N.F. are over one million dollars. We then described the unique recreation opportunities that the Bitterroot N.F. offers and used a variety of survey and use information to understand how the public uses the Forest and what they value. The Proposed Program of Work, a 5-year plan to bring developed recreation sites up to national standards within expected budgets, provides a framework for identifying needed work on recreation sites.

The recreation facilities analysis basically fulfilled the objective of this monitoring item to “evaluate the need for increasing or decreasing developed facilities” and also addressed the maintenance backlog concern. The proposed program of work is intended to provide developed sites that consistently meet management standards, reduce the maintenance backlog, and allow recreation visitors to enjoy the unique opportunities on the Bitterroot N.F.

The Proposed Program of Work recommended the following actions related to our 80 developed recreation sites over the next five years:

Table 1: Proposed and Accomplished Program of Work

Proposed Action	Number of Sites	Accomplishments	Year Proposed or Accomplished
No changes proposed	7 sites		
Change in season of operation	33 sites	Limit the services offered (generally no services before Memorial Day and after Labor Day)	2010--present
New site fees (3 cabin rentals, 3 existing campgrounds)	6 sites	The addition of Lost Horse Cabin to the reservation system will be presented to the RAC for their approval Spring 2015	
Increase of existing fees (8 cabin rentals, 13 campgrounds & group sites, 5 sites associated with Lake Como)	26 sites	Rock Creek Horse Camp increase from \$5.00 to \$8.00 Fee increases in campgrounds and cabins will be presented to the RAC Spring 2015	2010
Increase or improvement in services	12 sites	Projects associated with ARRA (see list below)	2011-2012
Removal of facilities or operation as dispersed sites	16 sites	Dispersed sites with deferred maintenance along Magruder will be removed	Summer 2014
Seek partners to help operate sites	10 sites	Boy Scouts adopted Black Bear CG Bitterroot Climbing Coalition assisted with Lost Horse portal	2010-2012 2010-2012

Conditions and needs will change frequently, so managers will review and update the analysis and this list of actions regularly.

In 2010, the Forest received American Recovery and Reinvestment Act dollars to improve developed recreation site facilities. Projects within the Lake Como Recreation Area included: reconstruction and expansion of Three Frogs Campground (included replacement of picnic tables, fire rings, signs; installation of 2 new outhouses; addition of 11 new camp sites); Three Sisters Group Site (included construction of a pavilion to accommodate group uses; installation of new picnic tables, fire ring, two new outhouses, and construction accessible paths and parking areas); construction of a wider boat dock and boat ramp to accommodate vehicle traffic on both sides of dock to help ease congestion and improve accessibility; water system repairs. Forest-wide projects included replacement of highway recreation directional signs and trailhead improvements (included installation of new information boards, registration boxes, and informational and interpretive signs); purchase of forest recreation signs. Projects on the Sula district included: the construction of the East Fork Pavilion; road improvement at Warm Springs Campground and Jennings Campground; and replacement of picnic tables.

In 2012 and 2013, wooden outhouses were replaced with new SST outhouses at the following sites: Fales Flat C.G., Jennings C.G., and East Fork Trailhead.

RAC money was received in 2010 and 2013 for the installation of a portal sign, trash cans, and an outhouse at the entrance of Lost Horse corridor. The Bitterroot Climbing Coalition assisted with this project.

No new fees or increase of fees were implemented in 2011-2013. The forest is working with Region 1 on a Business Plan for fee implementation to standardize the fee schedule across the region. The forest will present fee increase and new fee proposals to the Resource Advisory Committee spring 2015.

Off-Highway Vehicle Effects on Lands Item 28

OBJECTIVE: Monitor OHV effects on land.

DATA SOURCE: Site inspection and interdisciplinary team reviews.

FREQUENCY: Twenty-five percent of high use areas and trails annually.

REPORTING PERIOD: 2010- 2013

VARIABILITY: Irreversible ecosystem damage, user conflicts, displacement of wildlife, and public safety.

EVALUATION:

In areas where motorized recreation use is recognized by the Forest Plan as compatible with other resource values and where trail systems have been designed to accommodate the use, unacceptable resource impacts are generally not occurring. Where developed trail systems have been created to avoid problem areas, users are mostly staying on the trails. When indicators of obvious trail maintenance are present, monitoring is showing trail visitors respond by being more careful in their use of the area. The visible presence of an OHV ranger has enabled the Forest to educate OHV users and offset, to some degree, the impacts of increasing OHV use.

Generally, where the terrain and vegetation do not provide opportunities to ride OHVs off the road or trail system, there is little overall damage from OHV use. However, in areas of the Forest where travel off roads is easier, impacts to sensitive vegetation and soils do occur. To date, we have not found any of this damage to be irreversible. Rehabilitation efforts are generally successful in terms of restoring the physical and vegetative resources, but are less successful in preventing future damage to restored areas. The Bitterroot NF is using travel restrictions and other methods of reducing resource impacts (signs, barriers, and public education) to address this problem. The illegal use of vehicles on closed roads continues to be a problem. Many of these roads are gated, but each year gates are vandalized in an effort to gain access to closed roads.

Conflicts between motorized and non-motorized users of the Forest occur every fall during the big game hunting season. In areas of the Forest where both motorized and non-motorized use is allowed, users who expect a non-motorized experience are dismayed to find motorized use. User conflicts are increasing as OHV use increases and as technological advances allow OHVs to access areas that historically have only been accessible by foot or horseback.

The Forest has identified a need, through many discussions with the public, to provide well-designed loop routes for OHV use, using old roads where possible. Without designed routes available, motorized users will find their own opportunities in places that may be inappropriate and more likely to cause resource damage. With use focused on routes designed and designated for OHV use, our monitoring has shown less likelihood of resource damage and user conflict. We have determined that the travel management planning process is the best way to delineate a manageable system of routes for motorized uses while providing non-motorized opportunities. The Forest has been working on the Travel Plan and Motorized Vehicle Use Map since 2008 with plans for a decision in 2016.

MONITORING RESULTS:

It is difficult to directly monitor OHV use and the impacts resulting from inappropriate or illegal use. This monitoring requires motion sensitive cameras and/or enough on-the-ground personnel to cover thousands of acres throughout a six-month season. Because of these difficulties, there is no "numerically based" monitoring system in place for OHV effects.

However, Forest personnel do watch for, take note of, and address OHV resource damage, illegal use, and user conflicts. These are recorded each year via trail condition surveys, law enforcement records, site-specific project planning inventories, and other resource monitoring reports and notes. OHV effects are also considered either directly or indirectly in these other Forest monitoring and evaluation items: Monitoring Items numbered 3, 7, 10, 17, 19, 21, 22, 24, 27, 28, 29, 38, 39, 40, 41 and additional monitoring headings Threatened and Endangered Wildlife Species, Sensitive Wildlife Species, Neotropical Migratory Birds, and Law Enforcement on the Bitterroot

Forest. While not all-inclusive, the forest has developed a list of areas used by OHV's that have been rehabbed (see 2009 Forest Plan Monitoring Report, Item 28) that is periodically monitored for effectiveness.

Impacts included on this list may include: deep ruts, trail widening around wet areas, stream crossings that contribute sediment, trees cut down, signs torn down, or user conflicts. While noteworthy for monitoring use and for scheduling management actions and maintenance, damage was seldom required immediate or emergency action. Existing trails that are hardened and open for OHV use are not included. We are tracking this information to establish a more complete record of OHV effects. In addition to the areas noted, some damage is occurring where OHVs cut switchbacks on system roads.

It should be clarified that the Forest's "inventory" of user created routes, mentioned in the FY 2004 Monitoring Report, likely does not reflect all the routes that existed on the ground in 2001, as was intended. Nevertheless, the map has proven useful as one piece of information that helps us determine when a new, illegal route appears so that we can close it.

In 2010, OHV hill climbs were rehabbed in Johnson and Cinnabar Creeks, three different hill climbs in the Hart bench area rehabbed. Off road OHV use was documented in Skalkaho Creek on NFSR 75 road. The user created trail that led into the area was also rehabbed. A full size vehicle hill climb in Canyon Creek trail head area was noted and rehabbed. A total of nineteen travel management signs were installed or replaced.

In 2011, a firewood trail created by wood cutters below Sawmill Saddle and was rehabbed. A total of six new signs were put in that year.

In 2012, four illegal hill climbs were rehabbed- one in Little Sleeping Child, two off of NFSR 75, and one in the Ambrose watershed. There was off road use starting to occur in Meadow Creek and patrols were increased and signs installed. A total of eleven travel management signs were installed in various locations across the forest.

In 2013, four signs were installed, one in Canyon Creek for off road use by full size vehicles, one in Bass Creek stating no motorized use on the trail and two on the NFSR 75, off of Daly Creek where OHV were leaving the authorized road.

Education and Law Enforcement

Since 2002, the Bitterroot NF has received Montana State grant that funds a seasonal OHV Ranger. Each year the OHV ranger focuses on educating OHV users through field contacts, posting signs so that users know where they can legally ride. He works regularly with the local OHV dealers, Western Montana Trail Riders Association, and Ravalli County Off-Road Users Association and has recruited a cadre of OHV users to help educate valley residents on safe and proper OHV use.

In March of 2010, as part of the Earth Stewardship Program, Track the Tread and Ride the Right Trail programs, the OHV ranger along with four volunteers from the Ravalli County Off-Road User Association (RCORUA) and RC&D, put together a recreational ethics & etiquette class for 220 7th Graders from five different schools in the Bitterroot Valley. The classes ranged from fifteen to twenty-five students & were approximately 1 to 1 ½ hours long. Class topics included:

- Safety – use of proper helmets, chest and elbow protectors, shin guards, goggles, footwear; safe loading and transportation of OHV's; proper sizing of OHV's for rider; need for first aid kits; safely carrying firearms.
- Legalities – Need for driver's license, wearing a helmet if under the age of 18, properly equipped vehicles, OHV licensing, consequences, accidents.
- Respect for land, knowing where it is legal to ride, avoidance of sensitive areas, weeds, hunting and OHV's, pack it in/pack it out, picking up others trash too.
- Trail etiquette – Yielding to other users, protocols to reduce user conflicts, riding responsibly and taking accountability for your own actions.
- Notification of other safety and OHV education opportunities available.

May 2010 the group participated in the Conservation Days the annual environmental education day planned by the Conservation District for valley 6th graders. Approximately 300 students attended several sessions over a 3-day period that included the OHV ethics station that taught the "Track the Tread" and "Ride the Right Trail" programs, discussed conduct and safety as OHV riders. An additional 250 students attended ethical OHV education programs offered throughout the valley.

In March and April of 2011, the education group again went to local schools, participated in Conservation days.

Due to the popularity of the program and an article in The Ravalli Republic the education group was asked to put on a class for kids on the Superior Ranger District. The class was a success and the group was asked to come back next year and do it again. They were also invited to participate in and educate a local hunter's education class. Over 700 students received the training in 2011.

In March, April and May of 2012 the education group continued their classes to educate our youth, reaching over 700 kids again, including a youth camp at the East Fork Guard Station and a youth SHEEP (Safety, Hunting, Ethics and Education Program) Expo.

March, April and May of 2013, the education group added Florence to the list of schools visited and the Bitterroot National Forest OHV ranger participated in Conservation Days. The group discussed OHV safety, regulations, and ethical riding with over 750 kids in 2013.

Ongoing Prevention and Restoration

In 2010, routine patrolling across the forest occurred. Signs were installed in Johnson Creek, the Cinnabar and Hart Bench area, Canyon Creek and Skalkaho along the 75 road resulting in recovery and decreased illegal use.

Firewood gathers were responsible for most off-road use violations in 2011. A total of 55 incident reports, eight warning notices and one violation notice issued.

In 2012, four illegal hill climbs were rehabbed, one in Little Sleeping Child, two off of Skalkaho 75 road and one up Ambrose and a total of eleven travel management signs were installed.

Presentations by the education group continue to reach hundreds of students each year through various training and teaching opportunities.

Monitoring of Past Rehabilitation

The Forest issued an order in January 2003 closing the Lake Como lake shore (below the high water mark) to off-road motorized travel. This closure was implemented to reduce impacts from OHVs on sensitive sites when the reservoir level drops below full pool. Monitoring shows the closure has been followed for the most part, with some illegal full size use in early spring.

Other areas where illegal use was occurring have been monitored during the reporting period. In 2010 monitoring did not detect illegal use in the Gird Creek area. In 2011 and 2012 there was an increase in illegal OHV use in the Little Sleeping Child area that resulted in an illegal hill climb needing rehabilitation. 2011 also saw no more damage to the 2010 rehab work done on trails. Monitoring in 2013 found that use had decreased and areas impacted were recovering. There is still some illegal use in the area, but overall the use has decreased.

Off road use in the Meadow Cr has increased beginning in 2010 and as a result, patrols by the OHV ranger were increased. In 2013, use in Meadow Creek decreased, indicating the increased patrols and signing was effective. Daly Creek is still seeing some off road use, as is the Canyon hill climb; these areas will continue to be monitored. The Forest also rehabilitated damage from "mud-bogging" at various sites across the forest. Monitoring in 2013 in the God's Little Acre area found that no mud bogging has been occurring.

Recreation Site and Trail Use Effects on Land Item 29

OBJECTIVE: Identify areas that are proceeding toward irreversible ecosystem damage.

DATA SOURCE: Site and trail inspection and interdisciplinary team review.

FREQUENCY: Annually (25 percent of high use areas and trails).

REPORTING PERIOD: 2010-2013

VARIABILITY: Irreversible ecosystem damage.

EVALUATION:

We did not identify any irreversible ecosystem damage attributable to recreation site and trail use in 2010-2013.

MONITORING RESULTS:

Table 1 displays recreation sites where condition surveys were conducted from 2010 to 2013.

Table 1 – Developed Recreation Sites receiving Condition Surveys from 2010 to 2013.

Ranger District	Recreation Site
Stevensville	Bass Creek Day Use
	Gold Creek Campground
	Charles Waters Campground
	Larry Creek Group Site
	Saint Mary's Trailhead
	Willoughby 40
	Blodgett Campground
	Bear Creek Trailhead
	Mill Creek Trailhead
	Blodgett Trailhead
	Big Creek Trailhead
	Burnt Fork Trailhead
	Kootenai Creek Trailhead
Darby	Coyote Coulee Trailhead
	Lake Como Picnic Area
	Lake Como Campground
	Three Frogs Campground
	Black Bear Campground
	Bear Creek Pass Trailhead
	Wood's Cabin
	Rock Creek Horse Camp
	Lake Como Trailhead
	Three Sisters Group Site
	Gird Point Lookout
	Twin Lakes Trailhead
	Schumaker Campground
Lake Como Boat Launch	
Sula	East Fork Trailhead
	East Fork Guard Station

Ranger District	Recreation Site
	Two Good Cabin
	Spring Gulch Campground
	Jennings Campground
	Indian Trees Campground
	Crazy Creek Campground
	Warm Springs Campground
	Crazy Creek Horse Camp
	McCart Lookout
	Medicine Point Lookout
	Martin Creek Campground
	West Fork
Slate Creek Bay	
West Fork Boat Launch	
Rombo Campground	
Sam Billings Campground	
Fales Flat Campground	
Observation Point	
Horse Heaven Cabin	
Magruder Ranger House	
Paradise Campground	
Indian Creek Campground	
Raven Creek Campground	
Deep Creek Campground	
Alta Campground	
Paradise Flat/White Cap Creek Trailhead	
Paradise Boat Launch	
Watchtower Creek Trailhead	
Little West Fork Snowmobile Trailhead	
Magruder Crossing Campground	
Blue Joint Trailhead	
Nez Perce Pass Trailhead	
Cayuse Creek Trailhead	
Kim Creek Saddle Trailhead	
Salmon Base Camp Trailhead	
Pete Creek Day Use	
Beaver Point Day Use	

The National Visitor Use Monitoring Surveys (NVUM) was conducted on the Bitterroot National Forest in the fall of 2011 through 2012. These results are not yet available.

MONITORING RESULTS:

Trails

Table 2 displays trails where condition surveys were completed between 2010 and 2013. A random sample of Forest system trails are pulled annually and assigned to the forests for these condition surveys.

Table 2 – Bitterroot NF System Trails Receiving Condition Surveys from 2010 - 2013

Ranger District	Trail Name
Stevensville Ranger District	Trail # 147 Bitterroot Big Springs -3.1 miles Trail # 44- Palisade – 4.9 miles Trail # 146 – Cutoff – 3.7 miles Trail # 326 – One Horse Lake – 3.3 miles
Darby Ranger District	Trail # 149 Skalkaho-Little Burnt Fork – 2.2 miles Trail # 503 Jerry Lake - 5.3 miles Trail # 59 North Fork Lost Horse – 1.8 miles Trail # 101 Blodgett Overlook – 1.4 miles Trail # 84 – South Fork Sleeping Child – 6.6 miles
Sula Ranger District	none
West Fork Ranger District	Trail # 702.0 Harrington Saddle – 1.4 miles Trail # 712.0 Elkhorn Springs – 0.5 miles Trail # 26 – Kim Creek – 5.6 miles Trail # 28.0 – Sabe Creek – 7.0 miles Trail # 546.0 Archer Point – 3.4 miles Trail # 96.2 Salmon River – 1.9 miles

Roadless Areas Item 3

OBJECTIVES: Track the contribution of timber from roadless areas as projected by the Forest Plan. Monitor the change in the roadless inventory from project implementation.

DATA SOURCE: Roadless inventory and project documentation.

FREQUENCY: Annually.

REPORTING PERIOD: 1988 to 2013.

VARIABILITY: Change in roadless base different from projections in Appendix C of the Forest Plan EIS.

EVALUATION:

During the monitoring period 2010-2013 the Bitterroot NF harvested 5 acres from the Selway Bitterroot Roadless area.

Between 1988 and 2009, the Forest has harvested 9.0 MMBF from roadless areas. This is less than 15 percent of the Forest Plan scheduled volume planned to come from roadless areas during the nineteen-year time period (Forest Plan Record of Decision, p. 6). Most of the volume was harvested from the Rock Creek fire salvage located in the Selway-Bitterroot Roadless Area.

Almost half of the roadless area component of the Forest Plan allowable sale quantity (ASQ) involves Montana Wilderness Study Act areas that are not available for harvest without legislative action. Combining this with the difficulty of entering other roadless areas that are available, it is clear that the Forest will not approach the roadless component of the ASQ (Forest Plan Record of Decision, p. 6).

Activities in roadless areas between 1988 and 2013 have not reduced the roadless inventory because no roads were constructed in connection with these projects. Timber harvest activity can be consistent with the natural integrity of the area, and is usually not an irreversible loss of the roadless resource. Through NEPA scoping over the last few years, the public raised an issue regarding portions of the Forest that do not have roads (i.e., "unroaded") but were not included in the roadless inventory completed for the Forest Plan. "Unroaded" as well as inventoried roadless areas are often analyzed in NEPA documents for site-specific projects. The Lower West Fork Project DEIS, completed in 2009, contained such an analysis.

Nationally, roadless areas have been a subject of public debate, concern and litigation for over 30 years. These National Forest System lands have remained unroaded for a variety of reasons--inaccessibility, rugged terrain or environmental sensitivity. Extensive controversy continues over management of these areas, including lawsuits, appeals, letters, and Congressional hearings. There is a strong need to come to agreement on the future management and protection of these lands.

MONITORING RESULTS:

Below is a discussion of the planned and completed activities in inventoried roadless areas on the Bitterroot NF from 1988 to 2013. Table 43 displays the acres of actual roading or harvesting once it has occurred on the ground.

Table 1- Roadless Area (MA 1, 2, 3a, 3b, and 3c) Access and Harvest 1988 To 2015

Roadless Area & No.	Total Roadless Acres	Forest Plan MA 1-3c Acres (roaded emphasis)	Acres Planned for Development in Decade 1	Actual Acres Affected by Harvest, 1988-2013	Change in Inventoried Roadless Acres
Allan Mountain (01946)	102,300	18,700	1,600	214	0
Blue Joint (01941)	65,400	16,700	6,200	0	0

Roadless Area & No.	Total Roadless Acres	Forest Plan MA 1-3c Acres (roaded emphasis)	Acres Planned for Development in Decade 1	Actual Acres Affected by Harvest, 1988-2013	Change in Inventoried Roadless Acres
Lolo Creek (01805)	587	0	0	0	0
Needle Creek (01066)	1,100	1,100	0	0	0
North Big Hole (01001)	3,700	700	0	0	0
Sapphire (01421)	44,100	15,800	1,100	0	0
Selway-Bitterroot (01067)	115,100	18,700	3,000	1,682	0
Sleeping Child (X1074)	21,400	9,200	2,100	192	0
Stony Mountain (01808)	43,700	10,700	2,700	265	0
Swift Creek (01065)	700	700	0	0	0
Tolan Creek (X1070)	7,100	7,100	3,300	0	0
TOTAL	405,187^{1/}	99,400^{2/}	20,000	2,353^{3/}	0

^{1/} 25.7% of Bitterroot NF lands.

^{2/} 24.5% of roadless acres.

^{3/} 11.8% of acres planned in Decade 1.

Activities in the Allan Mountain Roadless Area (01946)

The Buck-Little Boulder Timber Sale was designed to restore the ponderosa pine type through improvement cuts followed by underburning. Two units of this sale fell entirely within the roadless area, and approximately one-half of a third unit was also in the roadless area. Three units were helicopter logged in the summer and fall of 1996. The inventoried roadless boundaries remained the same.

Activities in the Blue Joint Roadless Area (01941)

In the fall of 1992, Pegasus Gold Corporation performed exploration work on a block of mining claims in the Blue Joint Roadless Area. This was a core drilling operation using portable equipment they flew to the project site. Pegasus Gold Corporation drilled three holes and then shut the project down for hunting season. This project did not change the roadless character of the Blue Joint Roadless Area.

Activities in the Selway-Bitterroot Roadless Area (01067)

For the period 1988 through 1991 the only activity affecting this roadless area was the Rock Creek fire salvage. This was reported in the 1989-1990 Monitoring and Evaluation Report. In 1992, the St. Joseph's Timber Sale was sold. Approximately 20 acres of the sale was in the roadless area. The area was harvested using shelterwood silvicultural systems with over-the-snow tractor skidding. This roadless area harvest was reported in 1994. The harvest did not require any new system roads. The 1996 Ward Mountain Timber Sale was a fire salvage sale located entirely within this roadless area. All 137 acres of the sale were logged by helicopter.

The Stevensville Southwest Decision Notice was signed in 1994. This project planned to harvest 385 acres in the roadless area using a helicopter and ground-based skidding. The project had no new road construction planned. The Stevensville SW Timber Sale was advertised in 1995, but received no bids. The Forest has no further plans to pursue harvesting in the roadless portions of this timber sale.

The 1996 Stevensville West Central Decision Notice included 22 acres of group selection harvest in the roadless area. No roads were planned to be built into the roadless area and the logging was to be done by helicopter. This activity was determined to not preclude the area's consideration as part of the National Wilderness Preservation System. These 22 acres were not included in the Stevensville West Central Timber Sale due to the economic considerations of harvesting small groups with a helicopter. The Forest has no further plans to pursue harvesting in the roadless portions of this timber sale.

Small portions of activity units in the 2010 Lower West Fork project were inside the Selway-Bitterroot Roadless area boundaries. Approximate five acres were treated with prescribed fire in this project.

The roadless inventory acreage remains the same for the Selway-Bitterroot Roadless Area.

Activities in the Sleeping Child Roadless Area (X1074)

The White Stallion Timber Sale was sold to Darby Lumber Company in 1993. Approximately 67 acres were harvested in the roadless area.

The Decision Notice for the Bear Project on the Darby Ranger District was signed in 1994 and planned to harvest 113 acres within this roadless area. The Bear Timber Sale sold in FY1998 and logging began on these two units. The fires of 2000 burned a portion of these units and logging was not completed until 2004. The harvest prescription for these units required the removal of dead and dying trees with some areas to be regenerated leaving a sparse overstory. The final units appear as a mosaic of burned areas, areas with a sparse overstory, and more forested areas where limited harvesting occurred. No new or temporary roads were built. The final harvest acreage was 125 acres.

The roadless boundaries remain the same for the Sleeping Child Roadless Area.

Activities in the Stony Mountain Roadless Area (01808)

The Gird Point MA5 Heli-Salvage Timber Sale was sold in 1994. Two units totaling 265 acres fell within the roadless area. These units were harvested by helicopter in 1995. The inventoried boundaries remain the same.

Road Construction, Mitigation, and Maintenance Item 24

OBJECTIVE: To determine if Forest Plan Soil and Water Conservation Practices and State of Montana Best Management Practices are being implemented in project management activities.

DATA SOURCE: Road construction and timber sale contracts, post-sale ID team review, force account crew work accomplishments, and INFRA database records.

FREQUENCY: One sale per district per year.

REPORTING PERIOD: 2010-2013

VARIABILITY: Deviation from Best Management Practices Standards.

EVALUATION:

The Bitterroot National Forest (BNF) uses Best Management Practices (BMPs) as a mechanism to help achieve water quality standards. The Forest incorporates BMPs as mitigation in all projects that may impact soil and water resources. In recent years new road construction has become a very minor part of the National Forest program of work, while maintenance, reconstruction, hydrological stabilization for long term storage and road decommissioning through obliteration have become more prominent.

The Forest conducts interdisciplinary team reviews of projects on a yearly basis. We have reported these reviews, including road impacts to soil and water, in the yearly monitoring report (see Items 19, 21, 22, and 31 in this and previous reports). However, what has not been covered in the other reports is the overall status of roads on the Forest and ongoing road maintenance, reconstruction, and decommissioning. These are summarized below.

MONITORING RESULTS:

Road Reconstruction

The Bitterroot National Forest has been reconstructing roads each year to reduce sedimentation, meet best management practices (BMPs) and to assure the standard of the roads meet traffic and safety needs.

In FY 2010, the Bitterroot National Forest finished culvert installations, drainage improvement and/or gravel placement on the following roads:

- Trapper Chaffin Road NFSR 374, 9.96 miles
- Hart Bench Loop Road NFSR 374A, 0.70 miles
- Lost Horse Road NFSR 429, 2.60 miles
- Robbins Gulch Road NFSR 446, 1.70 miles
- Nez Perce Trail Road NFSR 468, 6.1 miles
- Sawmill Saddle Road NRSR 710, 7.65 miles
- Black Bear Campground NFSR 1145, 0.30 miles
- Little Trapper – Trapper Road NFSR 62866, 0.056 miles
- Twin Lakes Road NFSR 5605, 2.40 miles

In FY 2011, the Bitterroot National Forest finished culvert installations, drainage improvement and/or gravel placement on the following roads:

- 78E Jennings Camp Campground NFSR 78E, 0.116 miles
- Hayes Creek Road NFSR 496, 1.00 miles

- Tin Cup Road NFSR 639, 2.20 miles
- Railroad Creek Road NFSR 711, 9.42 miles
- Big Creek Road NFSR 738, 1.37 miles
- Little Boulder Creek Road NRSR 1130, 1.20 miles
- Gash Ridge Road NRSR 1325, 0.85 miles
- Mink Creek Road NFSR 5753, 9.366 miles
- Little Blue Joint Road NFSR 5656, 0.40 miles
- East Fork Flat Road NFSR 73574, 0.30 miles

In FY 2012, the Bitterroot National Forest finished culvert installations, drainage improvement and/or gravel placement on the following roads:

- Beaver Creek Road NFSR 91, 3.7 miles
- Ambrose Creek Road NFSR 428, 2.20 miles
- South Ambrose Road NFSR 428A, 1.70 miles
- Nez Perce Trail Road NFSR 468, 4.05 miles
- Hayes Creek Road NFSR 496, 1.80 miles
- Kootenai Creek Road NFSR 1322, 0.40 miles
- Claremont Road NFSR 1339, 0.80 miles
- Woods Creek Road NFSR 5669, 0.20 miles

In FY 2013, the Bitterroot National Forest did not reconstruct any roads.

Aquatic Organism Passage or AOP Projects

AOP project improve, replace, or remove undersized culverts to allow for aquatic organisms to safely pass at all life stages. Bridges and AOP structures are typically sized to mimic the bankfull width of the channel and culverts are designed to have a natural stream substrate throughout the length of the culvert. Each AOP project accounts for 0.10 miles of road improvement per project, there were two accomplished in 2010, the Two Bear Bridge project on County Road 8520, and Mine Creek culvert on NFSR 5688. Two Bear and Mine Creek sites were identified as fish barriers in the Burned Area Restoration (BAR) EIS, 2001. The Two Bear project constructed a bridge in place of an undersized culvert, and the Mine Creek project replaced an undersized culvert with an open bottom arch culvert. In addition to these installations there were three undersized culverts were pulled to allow fish passage. Two of these removals were on the Elk Creek Road NFSR 13833, and the third was near Sawmill Creek on NFSR 62384.

In 2011 there were seven AOP projects on the Bitterroot. They include Warm Springs Bridge NFSR 370, Pete Creek Bridge NFSR 468, Pierce Creek NFSR 5629, West Fork Camp Creek tributary NFSR 729, Castle Creek NFSR 49, Baker Creek South Channel NFSR 5629, and Baker Creek North Channel NFSR 5629. The Warm Springs and Pete Creek projects constructed bridges in place of undersized culverts. The other five AOP structures replaced undersized culverts with AOP structures.

In 2012 there were four AOP projects on the Bitterroot. They include two AOP structures on South Fork Chaffin NFSR 374, Woods Creek NFSR 5672, and Woods Creek Tributary NFSR 5672. The South Fork Chaffin projects replaced undersized culverts with AOP structures. The Woods Creek projects were culvert removals after the Saddle Fire in 2011.

In 2013 there were eight AOP projects on the Bitterroot. They include Skalkaho Creek Bridge NFSR 75, Halfway Creek NFSR 468, Schumaker Creek NFSR 468, Scimitar Creek NFSR 468, Little Boulder Creek NFSR 1130, East Piquett tributary NFSR 13411, Pierce Creek NFSR 13466, and Lodgepole Creek NFSR 73279. The Skalkaho project constructed a bridge in place of an undersized barrier culvert. The Little Boulder, Halfway Creek, Schumaker Creek, and Scimitar Creek projects were AOP structures that replaced undersized culverts.

The East Piquett, Pierce Creek, and Lodgepole Creek projects were undersized culverts that were removed for AOP passage.

For additional information regarding the AOP program of work refer to Item 22 in this monitoring report.

Figure 1 - Halfway Creek Pipe Installation 2013



Road Storage and Obliteration

The Bitterroot National Forest has been hydrologically stabilizing future needed roads, and obliterating unneeded system and non-system roads in an effort to reduce sedimentation and to restore areas to pre-road conditions

Road decommissioning work includes full or partial recontouring of road prism, culvert removal, full recontouring of stream crossings, seeding, mulching, and fertilizing of disturbed areas. Road storage treatments include full recontouring of entrance, de-compaction of road prisms, culvert removal, full recontouring of drainages, surface drainage improvements, and seeding, mulching and fertilizing disturbed area.

The Bitterroot National Forest Watershed program began treating and field reviewing roads identified in the Burned Area Recovery Record of Decision (ROD) as well as other past NEPA decisions. The watershed program began treating those roads identified for decommissioning and road storage using a rented excavator and a force account crew. The crew also did field reviews on these roads in order to identify those road where treatment has been done in the past, or where natural recovery has mitigated resource risks.

The majority of those roads considered to be naturally recovered, are at high elevation, near the top of the watershed boundary, located on rocky soils, had been burned by the 2000 fires and also the Sleeping Child fire in the early 1960's. Review found these roads to be very stable, not erosive, and inaccessible to full size vehicle traffic. They were signed for no motorized access, and no evidence of violation of restrictions was evident.

Much of the work associated with road storage in 2010 was identified in the Burned Area Record of Decision (ROD). A total of 16.4 miles of road were evaluated, treated as needed and stored for future administrative use on the Bitterroot National Forest. This work was done in the following drainages: Sleeping Child Creek, Rye Creek, Elk Creek, Jerry's Gulch, and Skalkaho Creek. There were roads decommissioned in 2010.

In 2011 the Bitterroot National Forest started the road storage and decommissioning work identified in the Lower West Fork EIS. The work included 11.9 miles of decommissioning, and 5.6 miles of storage. All miles treated were National Forest System Road. This work was done in the following drainages: Castle Creek, Violet Creek, and Piquett Creek.

In 2012 the Bitterroot National Forest continued the road storage and decommissioning work identified in the Lower West Fork EIS. The work included 10.0 miles of decommissioning, and 5.4 miles of storage. All miles treated were National Forest System Road. This work was done in the Piquett Creek drainage.

In 2013 the Bitterroot National Forest finished all but 0.60 mile of road storage/decommissioning work identified in the Lower West Fork EIS. The work included 7.5 miles of decommissioning, and 7.1 miles of storage. All miles treated were National Forest System Road. This work was done in the Piquett Creek, Troy Creek, Lavene Creek,

Pierce Creek, Ward Creek, Castle Creek, and Barn Draw drainages. The remaining 0.60 miles was delayed due to access needs by the Fuels program of work.

From the Burned Area Recover EIS, (2001) NFSR 73251 was stored in 2013. The total length was 1.0 miles. This work was done in the Guide Creek drainage.

The watershed crew then began road storage and decommissioning work identified in the Martin Creek Watershed Restoration EA. The work included 3.40 miles of decommissioning, and 2.40 miles of storage. All miles of road identified in this project area were classified as Undetermined roads. Those slated for a storage treatment were identified in the project area as needed for future administrative use. The National Forest Road System data base was updated by adding these undetermined roads to the database and designating them as Maintenance Level to 1. These roads were also closed yearlong to motorized travel. Roads that were identified to be decommissioned in the EA also were updated in the database. Maintenance Level was changed to Not Applicable, and System was changed to Decommissioned.

A portion of the work identified in the Martin Creek EA was completed through a partnership with Trout Unlimited, who contracted an excavator and an operator, and two laborers. The work included 5.3 miles of decommissioning, and 0.9 miles of storage. All the roads treated were in an "Undetermined" status.

Road Maintenance

The Bitterroot National Forest's road crew and timber sale operators maintained roads on the Bitterroot from 2010 to 2013, the breakdown of road miles per maintenance level (ML) is as follows:

Table 1 – Road Miles per Maintenance Level on Maintained Roads from 2010-2013

Maintenance Level	2010 Miles	2011 Miles	2012 Miles	2013 Miles
ML 1	29.3	5.6	6.2	7.5
ML 2	47.0	85.4	49.8	41.4
ML 3	216.3	186.3	226.2	165.4
ML 4	7.3	5.2	6.0	6.0
ML 5	10.0	14.8	8.4	0.0

Figure 2 - Photo of new bridge over Skalkaho Creek on Skalkaho/Rye Road No. 75



Yearly routine maintenance items completed in FY 2010-13 may include spot gravelling, removing large rocks from road surfaces, culvert maintenance and repair, road surface grading and bridge maintenance. In addition to road maintenance, the road crew assisted with watershed and recreation projects.

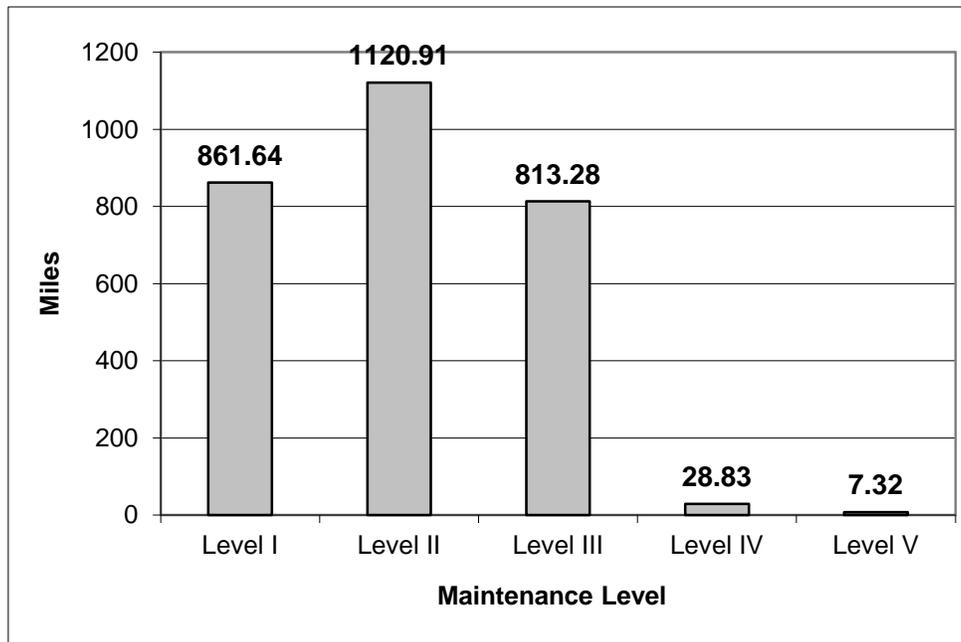
In 2010 the Bitterroot National Forest had the opportunity to spend ARRA funding on a large road side brushing contract. There were 64.6 miles of road that were brushed with that contract. They include the following roads: 374, 550A, 711, 714, 739D, 1126, 1321, 1394, 5627, 5634, 5730, 5771, 13200 and 13201.

Road Maintenance Status

Existing roads are maintained and managed based on access needs, volume and types of traffic, and the impacts the roads have on other resources. There are five levels of maintenance. They are as follow:¹

Level I	Not maintained for public use. These are only maintained to preserve the road template. There are 861.64 miles of Level I roads on the Forest, these roads are closed yearlong to full size motorized vehicle traffic.
Level II	Managed for high clearance vehicles, maintenance mainly focused on erosion control. There are 1120.91 miles of Level II.
Level III	Native and gravel surface, low traffic volumes, maintained for template preservation and some user comfort. These roads are managed for use by standard highway vehicles. There are 813.28 miles of Level III.
Level IV	Higher traffic volumes, gravel surfaced arterial roads, maintenance at a higher standard. There are 28.83 miles of Level IV.
Level V	High traffic volumes, paved arterial roads. There are 7.32 miles of Level V roads.

Figure 3 – Miles of Roads Maintained and Not Maintained by Maintenance Level



In the winter of 2008/2009 the Bitterroot National Forest identified a fundamental error in the current data base used for tracking road information, (Iweb). Approximately 600 miles of road were erroneously identified as decommissioned in the Iweb data base. This error related to coding in the old Road Management System (RMS) database. The RMS had a Maintenance Level code of historic, or HIST. The Bitterroot National Forest used this code to identify roads that were grown in, not being utilized by full size vehicle traffic, the actual situation on the ground. When Infra now called Iweb was being developed, there was no HIST code available for use in the future. The roads coded with HIST for the Maintenance Level and a status of existing in RMS were then rolled into a decommissioned status in the new Iweb database. Upon discovery of this error a decision was made to

¹ Please note that minor variations from year to year reflect on-the-ground changes as well as adjustments and corrections to the INFRA database.

change the status of these roads from decommissioned to existing and change the system code from not needed to “undetermined”. This action did not place these roads on the transportation system, but did uniquely identify this subset of roads so they can easily be identified during future planning efforts. In the future, the Bitterroot National Forest can make decisions to use, store or decommission these roads, project by project, based on the minimum transportation system needed to manage Forest Service lands.

Since discovering the database error, the Bitterroot National Forest has been making decisions on Undetermined roads. Martin Creek Watershed Restoration Project and Three Saddle EIS made decisions regarding the future need of Undetermined roads within those project areas. The Bitterroot National Forest will continue to address these roads when they are present in project planning areas.

In 2010 direction from the Regional Office affected the mileages of Maintenance Level 1 and 2 roads. Prior to this direction, all roads closed yearlong to public traffic were classified as ML 1. The change in mileages referred to how a road was closed. Those roads that were closed by a gate that could be used for administrative traffic were changed from ML 1 to ML 2. Those roads closed by an earthen berm, or by road storage treatments were classified as ML 1 roads.

The paved portion of Nez Perce Trail Road, NFSR 468 over Nez Perce Pass was changed from an Operational Maintenance Level of 5 to 4. The reason for this change was the physical condition of the pavement going over the pass. The fill slope creep has resulted in rough pavement conditions. The Forest will continue to spot repair the pavement on an as needed basis.

Schedule A Agreement with Ravalli County

The Forest Service has special authorities under the Forest Road and Trail Act to trade road maintenance equally with the counties where it is more efficient for the Forest Service to maintain some county roads and for the county to maintain some Forest Service roads. Under the most recent agreement with Ravalli County, the county will perform normal spring maintenance and grading on all or portions of the following Forest Service roads: Mill Creek, Blodgett Creek, Warm Springs-Laird, North Kootenai, Rye Creek, and Lost Horse. The Bitterroot NF will perform normal spring maintenance and grading on portions of the following county roads: Three Mile, Willow-St. Clair, Bitterroot-Big Hole, Hughes Creek, Fred Burr, and Pierce Creek. We will do joint maintenance on Nez Perce Road.