

FOREST PLAN ANNUAL MONITORING REPORT
for Fiscal Year 1995
Kootenai National Forest

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**FOREST PLAN ANNUAL MONITORING REPORT
for Fiscal Year 1995
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INTRODUCTION

We have recently completed the monitoring of Forest Plan implementation for fiscal year (FY) 1995. Our monitoring and evaluation process is shown in Chapter IV of the 1987 Kootenai National Forest Land and Resource Management Plan (Forest Plan). In FY 1995 we monitored 12 items (all are items to be reported yearly). The FY 1995 report identifies similar trends as those items reported in the five year monitoring report. Following this summary is a more in-depth review of those items.

In this summary, there is a section explaining the Forest Plan itself, the monitoring methods, and evaluation of eight years of monitoring practices, standards, and outputs under the Forest Plan.

FOREST PLAN DECISIONS

The Forest Plan is a set of decisions that guide management of the forest. Taken broadly, it contains three types of decisions:

- **Goals, Objectives, and Desired Conditions** (pages II-1 through II-17 of the Plan) provide general direction regarding where we should be headed as we put the Plan into practice.
- **Standards** (Pages II-20 through II-33, Chapter III of the Plan, and Forest Plan amendments) tell us how to put the plan into practice, or give us conditions we must meet while we implement the plan.
- **Land Allocation - Management areas** (MAs), as described in the Forest Plan Chapter III and displayed on the Forest Plan Map, are those areas of the Forest which are allocated for different types of land management and resource production.

MONITORING METHODS

Chapter IV of the Forest Plan contains a detailed process that was designed to monitor implementation of the decisions discussed above. Are we doing what the Plan envisioned? Are we seeing the effects and outputs predicted in the Plan? Are the standards working; do we need to adjust practices to meet the standards? Does the monitoring process need adjusting?

SUMMARY OF MONITORING RESULTS

Threatened and Endangered Species (C-7): We're monitoring the quantity and quality of habitat for the recovery of peregrine falcons, gray wolves, bald eagles and grizzly bears. We're also cooperating with other agencies to obtain population estimates or trends.

- ◆ *Peregrine falcon:* a single peregrine falcon was observed on the Cabinet District in 1995. The presence was likely the result of a hacking site located just west of the area on the Idaho

Panhandle National Forest. Another single falcon was observed several times near Libby, but no nest was found.

- ◆ *Gray wolf*: reports of wolf sightings were similar to the last few years. Many of these sightings were of the Murphy Lake pack, but areas on the Cabinet District appear to also have wolves on a transient basis.
- ◆ *Bald eagle*: surveys indicate that the total number of bald eagles is similar to past years.
- ◆ *Grizzly bear*: Grizzly bear habitat continues to improve. Grizzly bear habitat effectiveness is above the Plan's standard on a Forestwide average.

Range Use (D-1): During the last eight years, grazing use has averaged 91% of the projected level. In FY 1995 use was 93%.

Noxious Weeds (D-2): Baseline information is still not complete in all parts of the Forest. Efforts were made in 1995 to inventory areas and treat identified sites. Treatment included hand pulling plants, spraying and using biological control (insects that eat the plants).

Allowable Sale Quantity (ASQ) (E-1): The actual sell volumes for FY 1995 are the lowest in the last eight years and represent approximately 24% of the estimated ASQ. This indicates a leveling-off of a downward trend during the past several years. The total timber sell program, for the eight years (1988-1995) is 54% of the Forest Plan projected ASQ.

Acres of Timber Sold for Timber Harvest (E-2): The acres of timber sold for regeneration harvest also continues on a downward trend. Total acres sold the last eight years is 38% of the Forest Plan projection.

Suitable Timber Management Area Changes (E-3): The Forest Plan allows for minor corrections in the boundaries of management areas based upon site-specific analysis and interdisciplinary team review. Land ownership adjustments can also result in a change in the suitable base. In 1995 approximately 1,000 acres were removed from the suitable base. Since 1987 a total of 40,570 acres have been removed from the suitable base and placed into unsuitable timber land categories or into private ownership. The largest changes have occurred in MA 15, timber management (-19,444) acres and MA 11, big game winter range timber (-12,072 acres).

Timber Harvest Deferrals (E-7): In FY 1995 the amount of timber harvest deferred beyond the life of the plan increased from the past two years. 3,235 acres were deferred in 1995 compared to 150 acres in FY 1993 and 1,137 acres in FY 1994. Approximately 29,000 acres have been deferred over the last eight years.

Clearcut Acres Sold (E-9): The Forest has met the congressionally mandated reduction in clearcutting prior to the FY 1995 objective. Additional reduction in clearcutting was expected as a result of guidelines released by the Chief of the Forest Service in 1992. The implementation of these guidelines and other factors has resulted in a 92% decline in clearcutting since 1989.

Soil and Water Conservation Practices (F-1): Best management practice (BMPs) were evaluated by Kootenai forest personnel in FY 1995 for 166 BMP's on 115 projects. These reviews indicated that the Forest declined in ratings of implementation and effectiveness from previous years, however no ratings were noted "very unacceptable" or "grossly unacceptable" in 1995. In addition, spot monitoring of BMP effectiveness was done on a project basis on several sites in 1995. These more

or less site-specific monitoring projects evaluated BMP's with respect to sediment and turbidity data collected downstream.

Water Yield Increases (F-3): The forest water yield model is used to analyze the potential effect of disturbance in a watershed as a part of opportunity analysis for timber sales and other activities. If the analysis shows that water yields approach or exceed guidelines, then no projects are proposed or further studies are made which enable our hydrologists to make professional interpretations. Due to past activities (prior to issuance of the Plan), activities on privately owned land, and effects of wildfire, 26% of the portion of the Forest analyzed has water yields exceeding the Forest Plan standard. In these areas, projects have not been undertaken or have been modified so that water quality, beneficial uses, and stream channel integrity are maintained.

Emerging Issues (H-2): This item identifies those issues that appear to be developing since the Plan was initiated, and also monitors the original Forest Plan issues that are still of concern. Emerging issues include: the increased awareness of fuel buildups as it pertains to the wildland/urban interface; interim grizzly bear management requirements; management of ponderosa pine old growth, balancing public access and Forest Plan standards, and monitoring needs related to the effects of wildfires, particularly tree mortality, vegetative succession, and fuel accumulations. Forest Plan issues that still exist are: grizzly bear management, timber supply (local economic impact), road management, public access, potential mineral development, visual (scenic) quality, and community stability.

Forest Plan Costs (H-3): Timber sale costs are about four times greater than the Forest Plan projected. This is continuing the upward trend that began in FY 1990. The increase is due to the increasing complexity in timber sale preparation along with the concurrent decrease in the amount of volume being sold.

Forest Plan Budget Levels (H-4): As in prior years, there is a great deal of variation in the level of funding for various program areas in comparison to the projected amounts. Notable areas where funding has increased beyond expected are fire suppression, fuels management, law enforcement, tree improvement, and salvage sales. Most other program areas are remaining at budget levels below those projected.

Project Specific Amendments (Appendix B-2): Project specific amendments are changes in a standard that only apply to that project. They do not change the standard for the long term. The Forest Plan states, "If it is determined during project design that the best way to meet the goals of the Forest Plan conflicts with a Forest Plan standard, the Forest Supervisor may approve an exception to that standard for the project." Approximately 54 project decisions were issued in FY 1995. Nine project specific amendments were approved in FY 1995 to allow higher open road densities during activities in MAs 12 (Big Game Summer Range) and MA 15 (Timber).

Programmatic Forest Plan Amendments (Appendix B-3): The Forest Plan provides a process for amending the plan. Programmatic amendments are effective until the plan is revised, or changed. Three Programmatic Forest Plan Amendments were approved in FY 1995 including a change in open road density standards for MA 12 in Upper Cripple Peak; a change in Forest Plan Appendix 8 open road densities for the Murphy and Deep Bear Analysis Areas; and a change in management direction based on the Inland Native Fish Strategy.

FACTORS AFFECTING THE KOOTENAI FOREST PLAN 1996 AND BEYOND

As reported in the FY 1993/1994 Monitoring Report, several events occurred in FY 1995. This section gives an update on the status of those events and any new effects that have occurred in 1996.

Rescission Bill: On July 27, 1995, President Clinton signed the Rescission Act (Public Law 104-19) which contains provisions for an emergency salvage timber sale program. Sales offered under this Law are not subject to administrative appeals, and deadlines for judicial review are set. The Kootenai National Forest has scheduled approximately 130 Rescission Bill salvage sales. Of these approximately 60 sales have been sold for a total of 55 MMBF in FY 1995 and 1996. Full environmental analysis and public involvement are being completed on these sales.

One lawsuit, which includes seven salvage sales, has been filed. The salvage decisions were upheld in District Court. The District Court decision was appealed to the Ninth Circuit court and a hearing was held in March 1996. No decision has been rendered. Salvage timber sale receipts will go back to the local counties. In 1995, County receipts from the administrative Kootenai National Forest totalled approximately \$5,188,272. This money is used by local counties for maintenance and improvement of county roads and for use by the schools. Most of the county receipts came from timber sales (including green and salvage sales).

Public Law 104-19 includes a provision that all term grazing permits that have expired shall be re-issued as is until NEPA analysis is completed. In addition, the law states that no more than 20% of Forest allotments may have NEPA analysis completed prior to the end of FY 1996. For the Kootenai National Forest this means 9 out of 45 allotments may have NEPA analysis completed and a decision made prior to FY 1997. All other grazing permits must be re-issued as is and may not be modified until the proper analysis has been completed.

Amended Biological Opinion on the Kootenai Forest Plan: On July 27, 1995, the US Fish and Wildlife Service amended their 1985 Biological Opinion on the Kootenai Forest Plan. The opinion included terms and conditions which must be followed unless departures are agreed to in consultation with the US Fish and Wildlife Service. The Kootenai is implementing the terms and conditions of the opinion, however the effects of meeting the conditions have been identified as an emerging issue.

Inland Native Fish Amendment (INFISH): The Decision Notice and Finding of No Significant Impact was signed on July 28, 1995, and became effective August 30, 1995. Per the direction of the Decision Notice the Kootenai National Forest has completed action plans for high, moderate and low risk projects. Subsequent monitoring indicates that INFISH guidelines are being incorporated into project planning and implementation.

Social Assessment: This assessment was completed in 1995. It identified items that the Kootenai Forest should consider in Forest Plan revision. The assessment also identified items that could be

addressed immediately. The Forest has reviewed the assessment and developed an action plan to address some of the items. Items that have been implemented or occurred to date are: (1) including the Kootenai Highlights, a summary of Forest activities, with the Quarterly Schedule of Proposed Actions; (2) participating in community events such as Ant Flat Days; (3) actively participating with the local Forest Congress effort; (4) trying different methods of public involvement; and (5) assisting with local disasters and emergencies.

Kootenai Roundtable: On November 28, approximately 80 people from diverse backgrounds participated in the Kootenai Roundtable for the Seventh American Forest Congress. The purpose of the Seventh American Forest Congress is to "develop a shared vision, a set of principles, and recommendations for action that will result in improved policies for our nations's forests". A follow-up committee consisting of approximately 20 people who attended the roundtable has been established to develop "our next steps". The Kootenai Forest is an active participant with the roundtable group. The objective of the follow-up committee is to build relationships, provide an atmosphere for open discussion, build community influence and take responsibility for our actions.

Forest Plan appeal decision: On November 21, 1995, the Chief rendered a decision on the Kootenai National Forest Plan appeal, filed in 1987 by the Montana Wilderness Association and Cabinet Resource Group. In summary, the decision affirmed the Forest Plan Record of Decision and directed the Regional Forester to:

- 1) Clarify that Forest Plan exceptions will be made through project specific amendments;
- 2) Amend or revise the Forest Plan to incorporate the amended biological opinion and Interagency Guidelines;
- 3) Amend or revise the Forest Plan to correct the ASQ calculation which was inaccurate due to a technical error;
- 4) Set a program sell level not to exceed 150 MMBF until an amendment or revision of the ASQ is done; and
- 5) Review oil and gas leasing direction to see if the Forest Plan complies with the new regulations (1990).

This appeal decision gives the Forest one year to complete the amendments or issue a Notice of Intent to revise the Forest Plan.

Floods: The Kootenai Forest experienced high flows in both late November and late February from a combination of events: high precipitation, warm temperatures, and in the case of the February event, channels filled with ice from the January sub-zero period, followed by more warm temperatures and rain. Damages to date are limited to the south half of the forest, particularly in the lower elevation zones. Repairs have been made to several problem areas and funds are being sought through the Emergency Relief Federal Owned Program for the more extensively damaged sites, i.e. Fisher River, etc. Additional damaged areas will no doubt be found in the spring but a plan is underway to identify and treat these. No long term impact to forest uses is expected from these events.

In addition, the saturated soil conditions have caused numerous slumps and land failures throughout the forest, even in areas that did not have actual flooding or high flow problems. We expect to see more of these areas in the spring. For both of these problem-type areas, a plan is underway to identify and treat these as they appear. No long-term impact to forest uses is expected from these events.

WILDLIFE & FISHERIES: T & E Species Habitat; Monitoring Item C-7

ACTION OR EFFECT TO BE MEASURED: Ensure adequate habitat is provided for recovery of Threatened & Endangered (T & E) Species including: Peregrine Falcon, Gray Wolf, Bald Eagle and Grizzly Bear.

VARIABILITY WHICH WOULD INITIATE FURTHER EVALUATION: Any downward population trend. Any forestwide decrease in habitat quantity or quality. Failure to meet recovery plan goals for the Kootenai N.F.

Purpose: This monitoring item was established to help ensure that the Kootenai Forest contributes to the recovery of the listed T & E species. The Plan requires that this item be reported annually. The expected accuracy and reliability of the information is moderate to high.

Results and Evaluation: by species.

Peregrine Falcon -- There are no specific recovery goals for the Forest, but the goal for Montana is 20 nesting pairs (USFWS, 1984). A single peregrine falcon was observed on the Cabinet District in 1995. A bird was confirmed at the same location in previous years. Nesting activity was not found. The presence of the peregrine on the Kootenai was likely the result of a hacking site, located just east of the area on the Idaho Panhandle National Forest. Another peregrine was sighted in Rawlings tracts near Libby in FY 1995, but no nesting site was found.

Gray Wolf -- The Wolf Recovery Plan (USFWS, 1987) provides guidance for the recovery of the gray wolf. There is one recovery area within or adjacent to the Kootenai Forest (the Northwest Montana Recovery Area). A small portion of this recovery area (about 10%) is located in the northeast corner of the Forest, east of U.S. Highway 93.

In 1995, reports of wolf sightings continued at about the same level as recent years. Sightings were noted in areas on the Fortine District, northern portion of Libby District and Cabinet District. Many of these were sightings of the Murphy Lake pack, but new areas on the Cabinet District appear to also have wolves. The Murphy Lake pack is estimated to contain 6-10 animals.

Bald Eagle -- The Montana Bald Eagle Management Plan (MBEWG, 1986) and the Pacific States Bald Eagle Recovery Plan (USFWS, 1986) provide guidance for bald eagle recovery. These plans call for the establishment of 52 nesting pairs within Recovery Zone 7, which is the Montana section of the upper Columbia River Basin. This recovery zone includes all public and private land west of the continental divide in Montana, and the Kootenai Forest area is about 15% of the zone.

Table C-7-1 shows the results of mid-winter bald eagle surveys on the Forest which occur mostly along major watercourses. The surveys indicate increases in the total number of bald eagles during 1995 and similar results regarding active nests and fledglings as previous years.

| C-7-1 Mid-Winter Bald Eagle Survey Count & Spring Nesting Result by Fiscal Year | | | | | |
|--|----------------------|------------------------|---------------------|---------------------|-------------------|
| Fiscal Year | Mature Eagles | Immature Eagles | Total Eagles | Active Nests | Fledglings |
| 1988 | 65 | 12 | 77 | 3 | 6 |
| 1989 | 68 | 35 | 103 | 6 | 9 |
| 1990 | 65 | 21 | 86 | 12 | 17 |
| 1991 | 89 | 14 | 103 | 15 | 22 |
| 1992 | 71 | 32 | 103 | 14 | 17 |
| 1993 | 103 | 18 | 122 | 14 | 14 |
| 1994 | 113 | 30 | 143 | 15 | 15 |
| 1995 | 119 | 17 | 136 | 19 | 24 |
| Average | 79 | 22 | 109 | 12 | 16 |

* Correction in FY 1992

**Averages are rounded off

figure C -7-1

Grizzly Bear -- Recovery goals are based on the Grizzly Bear Recovery Plan (USFWS, 1993). The Kootenai Forest contains portions of two grizzly bear recovery zones; the Cabinet-Yaak Ecosystem (CYE) and the Northern Continental Divide Ecosystem (NCDE). About 72% of the CYE is located on the western portion of the Forest, and about 10% of the NCDE is located in the extreme northeast corner (see Figure C-7-3). Each of these ecosystems are further subdivided into smaller areas for analysis and monitoring, known as grizzly bear management units (GBMU's). The Forest's primary efforts in grizzly bear recovery are in habitat management, cooperating in grizzly bear studies within the Yaak River area, and assisting with bear augmentation tests and monitoring in the Cabinet Mountains.

Table C-7-2 shows habitat effectiveness values for each of the GBMU's evaluated during fiscal years 1988-95. Effectiveness is based on the percent of habitat available to bears, and the desired level is 70%.

| C-7-2 Grizzly Bear Habitat Effectiveness (Fiscal Year 1988-1994) | | | | | | | | |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Grizzly Bear Management Unit | FY 1988 | FY 1989 | FY 1990 | FY 1991 | FY 1992 | FY 1993 | FY 1994 | FY 1995 |
| Above 70 percent | | | | | | | | |
| NC Murphy Lake | 78 | 79 | 78 | 78 | 78 | 78 | 78 | 78 |
| #1 Cedar | 81 | 81 | 81 | 82 | 79 | 79 | 86 | 81 |
| #2 Snowshoe | 82 | 82 | 82 | 81 | 82 | 82 | 84 | 85 |
| #3 Spar | 70 | 71 | 70 | 70 | 79 | 78 | 77 | 77 |
| #5 Saint Paul | 73 | 77 | 79 | 80 | 78 | 81 | 75 | 74 |
| #6 Wanless | 74 | 74 | 72 | 74 | 76 | 76 | 71 | 72 |
| #7 Silver Butte/Fisher | 87 | 87 | 87 | 87 | 87 | 82 | 82 | 82 |
| #8 Vermilion | 79 | 80 | 80 | 73 | 73 | 71 | 71 | 74 |
| #9 Callahan | 64 | 55 | 62 | 67 | 70 | 74 | 74 | 76 |
| #11 Roderick | 60 | 59 | 66 | 68 | 66 | 70 | 70 | 70 |
| #13 Keno | 68 | 68 | 72 | 72 | 69 | 70 | 72 | 73 |
| #14 Northwest Peak | 61 | 61 | 68 | 68 | 68 | 72 | 74 | 72 |
| #15 Garver | 50 | 47 | 62 | 62 | 54 | 65 | 65 | 70 |
| #16 East Fork Yaak | 47 | 46 | 59 | 61 | 62 | 64 | 64 | 73 |
| Below 70 percent | | | | | | | | |
| #4 Bull | 80 | 78 | 80 | 80 | 80 | 92 | 64 | 63 |
| #10 Pulpit | 43 | 47 | 50 | 56 | 59 | 62 | 62 | 66 |
| #12 Newton | 51 | 42 | 43 | 53 | 53 | 49 | 49 | 49 |
| #17 Big Creek | 51 | 58 | 58 | 63 | 64 | 68 | 70 | 68 |
| Forestwide Average | 67 | 66 | 69 | 71 | 71 | 73 | 72 | 72 |

GBMU NC Murphy Lake is in the Northern Continental Divide Ecosystem. All other GBMU's are in the Cabinet-Yaak Ecosystem.
 2 GBMU #8 Vermilion, was recalculated in 1991 and found to have a lower rating, even though nothing changed on the ground.
 3 GBMU's 11, 13 & 15- boundaries were changed and found to have a smaller total acreage which resulted in a lower rating.
 4 Change from 1993 is due to reporting error found in methodology used.

In the Cabinet-Yaak (CYE) recovery zone, an Interim Core Management Strategy was developed jointly by the U.S. Fish and Wildlife Service and the Forest Service to guide analyses of fire salvage projects. The strategy requires maintaining open road density (ORD) within each BMU equal to or less than 0.75 mi/mi², avoiding increases in total motorized access route density (TMARD), and avoiding decreases in the percent of each BMU in core area. Three BMUs were analyzed for existing (end of FY 95) conditions relative to ORD and core. Results for these BMUs are displayed below.

| BMU | ORD (mi/mi ²) | Core (percent) |
|----------------|------------------------------|-------------------|
| Berray Mtn. #4 | 0.18 | 37 |
| Pulpit #10 | 0.73 | 31 |
| Big Creek #17 | 0.75 | 25 |

Summary: The wolf, bald eagle and grizzly bear have had increased sightings during the last eight years. All of the threatened and endangered habitats being monitored appear to be improving or at least maintaining. The information shows that the Kootenai Forest is progressing toward providing adequate habitat for threatened and endangered species recovery.

Finding: Based on the information stated above, the Kootenai Forest is contributing to the recovery goals of threatened and endangered species.

figure c-7-3 map

RANGE: Range Use; Monitoring Item D-1

ACTION OR EFFECT TO BE MEASURED: Determine if the grazing use measured in Animal Unit Months (AUM's) meets Plan projections.

VARIABILITY WHICH WOULD INITIATE FURTHER EVALUATION: +/- 20% of anticipated AUM's.

Purpose: This monitoring item was established to track grazing use on the Forest. The Plan requires that this item be reported annually. The expected accuracy and reliability of the information is high.

Background: The projected amount of forage for livestock grazing is 12,600 AUM's. This activity occurs mostly in the northeastern portion of the Forest on the Rexford and Fortine Ranger Districts.

Results: The FY 1995 level of grazing use was 11,700 AUM's or 93% of the projected level.

Evaluation: During the last eight years, grazing use has averaged 91% of projected use which is within the range anticipated in the Plan. This lower level results from permittee requests for non-use and from Forest requests to defer grazing to prevent stream bank deterioration and overgrazing.

| D-1-1 Range Use in AUM's (Fiscal Years 1988-1995) | | | | |
|--|----------------------------------|-----------------------|----------------|-----------------------|
| Item | Forest Plan Projected Use | 5-Year Average | FY 1995 | 8-Year Average |
| AUM's Percent | 12,600 100% | 11,214 89% | 11,700 93% | 11,437 91% |

Finding: This monitoring item is on-track with the Plan.

RANGE: Noxious Weed Infestations; Monitoring Item D-2

ACTION OR EFFECT TO BE MEASURED: Determine acreage infested with noxious weeds.

VARIABILITY WHICH WOULD INITIATE FURTHER EVALUATION: 10% increase in number of acres infested, density of existing infestations and a change in the diversity of noxious weed species.

Purpose: This monitoring item was established to track the status of noxious weeds on the Forest. The Plan requires that this item be reported annually. The expected accuracy and reliability of the information is moderate to high.

Background: Forest Plan requirements state that noxious weed infestations will be monitored for increases in total acreage, increases in weed density and the introduction of new weed species on the Forest. Spotted knapweed is the primary noxious weed species found on the Forest, and it occurs primarily along roadsides, railroads and powerline rights-of-way. It has also been noticed on trails on the east side of the Forest at the lower elevations, particularly in cutover areas. Another significant factor is the discovery of rush skeltonweed and dalmation toadflax in 1992 and several additional sites in 1993 and 1994.

Results and Evaluation: During FY 1995 forest actions focused on inventory and treatment. The following is a summary of actions:

- The Eureka District efforts focused on spraying leafy spurge on one site and spotted knapweed on several roadsides.
- The Fortine District determined that hand pulling of weeds is not very effective and definitely not cost effective, therefore the District is treating weeds by spraying. Approximately 178 acres were treated in FY 95, with knapweed being the main target. Two small areas of rush skeltonweed were also treated. Emphasis for control is directed towards main use areas and noninfested areas.
- The Three Rivers District focused efforts to treat rush skeltonweed, which had the first reported occurrence in 1992. Three areas were either sprayed or hand pulled. Other efforts included spraying spotted knapweed at the Troy airport.
- The Libby Ranger District focused on inventory and some control. Approximately 25 acres of dalmation toadflax were treated in 1995. No new infestations were noted. Two new locations of rush skeltonweed were found. Approximately 5 acres were treated. Additional mapping of spotted knapweed was done in the Fairview Allotment. Biological agents (knapweed beetles and moths) were released on one site.
- The Cabinet District inventoried most of the District. Most of the spotted knapweed found occurred on road cut and fills and adjacent to roads. They have seeded disturbed areas with grasses. Dalmation toadflax occurs in isolated infestations. Rush skeltonweed was found on the Bull River highway right-of-way but no populations have been located on National Forest land.
- In 1995, in coordination with the Forestry Sciences Lab, in Corvallis, MT, approximately 2,000 insects were released on eight sites on the Forest as a biological weed control.

TIMBER: Allowable Sale Quantity (ASQ); Monitoring Item E-1

ACTION OR EFFECT TO BE MEASURED: Determine if the sell volume meets the projections of the Forest Plan, including other permissible sale volumes.

VARIABILITY WHICH WOULD INITIATE FURTHER EVALUATION: +/- 5% deviation for the ASQ volume, and +/- 10% deviation for the other permissible volumes.

Purpose: This monitoring item was established to help ensure that the ASQ stated in the Plan is not exceeded, and if not attained, why. The Plan requires that this item be reported annually. The expected accuracy and reliability of the information is high.

Background: The ASQ is a projected maximum or ceiling and not a target to be reached at the expense of all other considerations. The Forest's projected total maximum timber **sell** volume for the decade from suitable management areas is 2,270 million board feet (MMBF) which is an average of 227 MMBF per year (see Forest Plan, Appendix 11). In addition, 60 MMBF is estimated to be sold from unsuitable management areas, averaging 6 MMBF per year. These two components of suitable and unsuitable sell volumes comprise the total potential timber sale program of 2,330 MMBF for the decade which is an average of 233 MMBF per year.

Results: The sell volume chargeable to the ASQ for FY 1995 is the lowest in the last eight years and represents approximately 24% of the estimated annual ASQ volume (see Table E-1-1). The general reasons for this lower than average sell are as stated in the FY 1992 monitoring report (effects from wildlife snag management, wildlife hiding cover needs, old growth needs, grizzly bear needs and increased harvest rate on private lands). Other factors that affected the sell program in FY 1995 include additional time needed to examine the environmental effects of our proposed actions, the proposed Montana Wilderness Act of 1994 (HR 2473) (activities in the areas were put on hold pending passage of this act), the Inland Native Fish (INFISH) Decision which included new requirements for streamside protection, the US Fish and Wildlife Service amended biological opinion issued July 1995, changing priorities, and project deferrals (see E-7).

Total Suitable Lands - Total actual timber volume that is chargeable to the ASQ sold for the last eight years is 985 MMBF. This is 831 MMBF (or 54%) less than the projected 8 year ASQ volume (see Table E-1-1).

Evaluation: Table E-1-1 indicates that the average annual sell volume chargeable to the ASQ from total suitable lands is at 54% of the predicted ASQ and continues to be outside the 95% level prescribed in the Plan. The FY 1992 monitoring report summarizes a variety of factors that have affected the timber sell program. Because of these factors the forest sell level has been steadily decreasing.

Public controversy, scrutiny, scheduling requirements necessary to meet mitigation measures, and consultation requirements have increased. New information is being incorporated into decisions. This includes information regarding INFISH, and the US Fish and Wildlife Service amended biological opinion, sensitive species needs, and other requirements. In addition, the salvage sales evaluated in FY 1995 under the Rescission Act (Public Law 104-19) underwent full environmental review and public involvement, which caused delays for some sales until FY 1996.

Finding: This monitoring item continues to be off-track with the Forest Plan projection.

| E-1-1 Timber Sell Volumes (MMBF) by Category by Fiscal Year | | | | | | |
|--|--|--------------------|---|---|---|---|
| | Annual Forest Plan Projection ASQ | FY 1995 | Total 8-Year Actual Sell 1988-95 | 8-Year Sell Average FY 1988-95 | 8 Year Forest Plan Projected ASQ | Difference from Forest Plan 8 YR ASQ Projections |
| Suitable Lands | 227 | 55.1 | 985.4 | 123.2 | 1,816 | -830.6 54% |
| Unsuitable Lands | 6 | 0.3 | 12.8 | 1.6 | 48 | -35.2 27% |
| Total Timber Sell Program | 233 | 55.4 | 998.2 | 124.8 | 1,864 | -865.8 46% |

FY 1995 Financed Sell Program

This year the **financed sell program** has been split from the **total sell volume** discussion because each program includes different information. The volume that is credited towards the *financed sell program* **includes volume that has been offered**. This includes volume that has been offered but received no bids, volume that was advertised within a fiscal year but not awarded and carryover volume.

In FY 1995 the Forest financed sell volume was 122 MMBF. Credited volume towards the finance sell was 65.9 MMBF. Reasons for this shortfall include:

- ◆ Approximately 5 MMBF of small sales were not sold because resource specialists were diverted from these projects to work on higher priority fire salvage projects.
- ◆ Approximately 22 MMBF was not advertised in FY 95 because of need to coordinate on grizzly bear, project analysis took longer than anticipated and some projects needed to be reworked to insure compliance with INFISH guidelines which were issued in August 1995.
- ◆ Approximately 26 MMBF did not receive concurrence from US Fish and Wildlife Service until after the fiscal year. In addition, these projects were on hold because of Congressman Williams request to the Secretary of Agriculture to defer entry into areas considered in his Wilderness Bill HR 2473. These sales were sold in early FY 1996 after clearance was received.
- ◆ Approximately 3 MMBF of planned helicopter volume was withdrawn due to economic infeasibility.

Approximately 44 MMBF of the 1995 financed sell volume is being carried over into FY 1996. This volume will be sold in addition to the 123 financed sell program for FY 1996.

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| TIMBER: Acres of Timber Sold for Timber Harvest; Monitoring Item E-2 |
|---|

ACTION OR EFFECT TO BE MEASURED: Determine if the regeneration harvest acres meet Forest Plan projections by management area.

VARIABILITY WHICH WOULD INITIATE FURTHER EVALUATION: +/- 10% by management area.

Purpose: This monitoring item was established to help ensure that the timber sale acreages and allowable sale quantity (ASQ) volumes sold are closely correlated. The Plan requires that this monitoring item be reported annually. The expected accuracy and reliability of the information is high.

Background: The acres to be harvested to meet the ASQ are located in six different management areas (MA's). Since each MA has different objectives and management standards, the expected costs of timber harvest will vary. Any significant deviation from the expected harvest acreage for each MA could indicate possible changes in costs, benefits, budget requirements, or environmental effects. (For more information on the Forest Plan MA requirements, see Chapters II and III of the Forest Plan).

The Forest Plan projects 15,740 acres of annual regeneration harvests to achieve the ASQ. Regeneration harvests include clearcut, seedtree, and shelterwood cutting methods.

Results: Table E-2-1 shows the acres sold for regeneration harvest by MA by fiscal year plus the eight-year average, and compares that average to the Forest Plan projection. FY 1995 continues the general downward trend. The eight-year average for MA-15 is just under the Plan's projected level while four other suitable timber MA's are significantly below in percentage accomplishment (MA's 12, 14, 16, 17). MA 12 has the largest average acreage deviation (a total of 5,888 acres, or 8,800 minus 2,912). These six MA's indicate productive forest lands, MA 15 lands are managed primarily for high timber yields, MA 11 and 12 are lands which can provide for timber and for big game habitat (11 for winter range and 12 for summer range), MA 14 areas are timberlands which have been identified as essential for recovery of the grizzly bear, MA 16 and 17 indicate areas where protection of the visual resource is important.

Evaluation: This monitoring item is similar to the findings found in E-1, Allowable Sale Quantity. As stated in that item, wildlife needs, watershed concerns, extensive legal requirements, and litigation and appeals have all affected the ability of meeting the Plan's projected regeneration harvest.

Finding: This monitoring item is outside the Plan's specified range (+/-10%).

| E-2-1 Acres of Timber Sold for Harvest by Fiscal Year (FY)* | | | | | | | | | | | |
|--|------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------------------|------------------------------------|
| MA | Forest Plan Projected Acres | FY 1988 | FY 1989 | FY 1990 | FY 1991 | FY 1992 | FY 1993 | FY 1994 | FY 1995 | Average Sold per Year | % of Forest Plan Projection |
| 11 | 690 | 696 | 665 | 831 | 521 | 681 | 105 | 118 | 17 | 404 | 59% |
| 12 | 8,800 | 6,518 | 5,431 | 3,729 | 2,182 | 5,265 | 1,003 | 685 | 1,398 | 2,912 | 33% |
| 14 | 1,220 | 170 | 139 | 142 | 56 | 353 | 491 | 0 | 22 | 153 | 13% |
| 15 | 2,050 | 3,513 | 4,574 | 3,790 | 1,752 | 2,217 | 1,146 | 770 | 487 | 2,028 | 99% |
| 16 | 2,520 | 325 | 416 | 277 | 1,371 | 935 | 340 | 356 | 258 | 475 | 19% |
| 17 | 460 | 55 | 10 | 47 | 47 | 31 | 88 | 228 | 0 | 56 | 12% |
| Total | 15,740 | 11,277 | 11,235 | 8,816 | 5,929 | 9,482 | 3,173 | 2,157 | 2,182 | 6,028 | 38% |

* Regeneration Harvest Methods Only

TIMBER: Suitable Timber Management Area Changes; Monitoring Item E-3

| | |
|---|---|
| ACTION OR EFFECT TO BE MEASURED: | Determine if significant cumulative changes are occurring in the suitable timber base by tracking management area boundary changes. |
| VARIABILITY WHICH WOULD INITIATE FURTHER EVALUATION: | +/- 5,000 acre cumulative total change in any suitable timber management area. |

Purpose: This monitoring item was established to help ensure that the suitable timber base was being validated before any projects were authorized, and to determine what influence any significant changes have on the ASQ. The Plan requires that this item be reported annually. The expected accuracy and reliability of the information is high.

Background: The allowable sale quantity (ASQ) calculated for the Plan is partially dependent on the amount of suitable timber acreage. This acreage is located within MA's 11, 12, 14-17. These MA's are validated during site specific project analysis. When inaccuracies are found, an MA boundary correction is made to keep the Forest Plan MA Map and acreage current. MA boundary changes can result in gains or losses in MA acreage, depending on the conditions found. The important items to track are the total changes by MA and the net gains or losses in suitable timber acreage.

The most common conditions that cause an MA map change are: mapping and drafting errors found on the original maps; non-productive forest land located within an MA that is mapped as productive (the reverse situation is also found); big-game winter range habitat non-existent where originally mapped (the reverse is also found); or additional acreage to meet the 10% minimum old growth standard.

Results: Table E-3-1 displays the net MA acreage changes in suitable timberland for the last eight years (FY 1988-95) and the net change in suitable timberland. The largest change in FY 1995 was a net loss of 1,845 acres in MA 15 and a gain of 1,441 acres in MA 12. Total net losses in the suitable timberland in FY 1995 were 923 acres.

Evaluation: The most significant changes in FY 1995 were the result of validating old growth habitat, big game summer and winter range, sensitive visual resource areas, and non-productive forest land. The cumulative acreage changes for the last eight years for all the remaining (unsuitable) MA's on the Forest are also displayed in Table E-3-2. The bulk of the acreage gains in these unsuitable MA's, which offset the suitable timber acreage losses, were in MA-13 (old growth), and MA-24 (non-productive land). The pattern of change has been fairly consistent in both magnitude and direction. The total amount of changes made in all the MA's during the last eight years is approximately 78,000 acres. This includes map drafting errors found (incorrect MA number assigned or lines missing, etc), errors identified on the ground (non-productive land identified as productive on the Forest Plan map), and land exchanges completed (which require additions or subtractions of MA acreages). As a result of eight years of cumulative change in suitable timber

land, MA-11 and MA 15 continue to be beyond the -5,000 acres total change level shown in the Plan.

Finding: This monitoring item is outside the prescribed range for MA's 11 and 15 (more than 5,000 acres of change). The remaining suitable timber MA's are still on-track (MA's 12, 14, 16, 17).

| E-3-1 Net Acreage Changes by Management Areas (MA) in Suitable Timberland | | | | | | | |
|--|---------------|--------------|--------------|---------------|--------------|--------------|----------------------------------|
| FY | MA 11 | MA 12 | MA 14 | MA 15 | MA 16 | MA 17 | Total Chg to Suitable MAs |
| 1988 | 330 | 0 | 1070 | -1760 | -510 | 0 | -870 |
| 1989 | -1142 | -345 | 386 | 253 | -22 | -48 | -918 |
| 1990 | -164 | -420 | -130 | -4273 | 916 | -661 | -4732 |
| 1991 | 78 | -442 | -1050 | -3188 | -1414 | -281 | -6297 |
| 1992 | -9279 | -3178 | -196 | -1711 | -1498 | -323 | -16185 |
| 1993 | -1329 | 1000 | -705 | -7444 | -2271 | 22 | -10727 |
| 1994 | -109 | -402 | 106 | 524 | 111 | -148 | 82 |
| 1995 | -457 | 1441 | 131 | -1845 | -193 | 0 | -923 |
| Total Net Chg to MA | -12072 | -2346 | -388 | -19444 | -4881 | -1439 | -40570 |

* Suitable MA's indicate productive forest lands with consideration for other resources determining the difference among them. MA 15 lands are managed primarily for high timber yields. MA 11 and 12 are lands which can provide for timber and for big game habitat (11 for winter range and 12 for summer range). MA 14 areas are timberlands which have been identified as essential for recovery of the grizzly bear, MA 16 and 17 indicate areas where protection of the visual resource is important.

| E-3-2 Net Acreage Changes by Management Areas (MA) in Unsuitable Timberland | | | | | | | |
|--|-------------|--------------|--------------|--------------|--------------|--------------|--------------------------------|
| FY | MA 2 | MA 10 | MA 13 | MA 18 | MA 19 | MA 24 | Total Chg to Unsuit MAs |
| 1988 | 240 | 1670 | -500 | 190 | -280 | 480 | 1800 |
| 1989 | 842 | 0 | -149 | 32 | 135 | 100 | 960 |
| 1990 | 150 | 1080 | 1877 | 381 | -950 | 2564 | 5102 |
| 1991 | 1009 | 574 | 4135 | -140 | -231 | 1724 | 7071 |
| 1992 | 196 | 3211 | 7980 | 2656 | 231 | 823 | 15097 |
| 1993 | -338 | 374 | 7931 | -595 | -2115 | 2618 | 7875 |
| 1994 | -173 | -69 | 914 | -437 | -294 | 177 | 118 |
| 1995 | 181 | -643 | 1788 | -657 | 112 | -128 | 653 |
| Total Net Chg to MA | 2107 | 6197 | 23976 | 1430 | -3392 | 8358 | 38676 |

* Unsuitable MA's are used for areas where timber production is not a primary consideration: for example, MA 2 is used for Roadless Recreation; MA 10 for big game winter range not suited for timber production; MA 13 indicates protected Old Growth habitat; MA 18, 19 and 24 are used for lands with little timber value or lands difficult to regenerate (rocky areas, steep slopes). Other unsuitable MA's identify Wilderness, Special Interest Areas, Administrative Sites, etc.

NOTE: The differences displayed in the Fiscal Year totals and the Total MA Changes in the two tables shown above are the result of eight additional MA's which contain some minor changes (usually less than 200 acres each), plus the lands that have been acquired and disposed of in the land exchanges completed during the years since the Forest Plan was approved (about 7,200 net additional acres).

TIMBER: Timber Harvest Deferrals; Monitoring Item E-7

ACTION OR EFFECT TO BE MEASURED: Determine the suitable timber acreage deferred from timber sales because of economics, resource conflicts, or other unforeseen reasons.

VARIABILITY WHICH WOULD INITIATE FURTHER EVALUATION: More than 10,000 acres cumulative change in any suitable management area (MA).

Purpose: This monitoring item was also established to help ensure that the allowable sale quantity (ASQ) is reasonable. Any significant changes in the acreage available for timber harvest could affect the ASQ because it was determined by estimating the maximum amount of available harvest acreage in the first decade while still meeting all the required Forest Plan standards. The Plan requires that this item be reported annually. The expected accuracy and reliability of the information is moderate.

Background: To determine the effect of harvest deferrals on the timber sale program, monitoring is done in two different categories. **Category A** deferrals are those that result from our project specific conclusions about resource or economic conflicts that were not adequately accounted for in the Forest Plan. Examples are: road construction that is too expensive; or a threatened, endangered, or sensitive species found which was unknown during Forest Planning. **Category B** deferrals are those that result from an externally imposed situation. Examples include: appeals and court injunctions, or significant timber harvest on adjacent private land which could cause cumulative watershed damage if the Kootenai Forest timber is harvested before adequate watershed recovery occurs on the private land. Please note that suitable timber acres rescheduled from one year to a later year within the Forest Plan period (FY's 1988-1997) are not considered deferred.

Results: Table E-7-1 displays deferred harvest acres by category for each suitable timber management area on the Forest for FY's 1988-95. Several harvest deferrals occurred in Category A and one in Category B in FY 1995.

Evaluation: In **Category A** 3,235 acres were deferred during FY 1995, which is a higher level than in the last several years. Some timber sales were deferred because of effects from the wildfires including needs to provide adequate grizzly bear security and watershed recovery. Some areas were deferred because the timber was not economical to harvest due either to the size of timber or because use of a helicopter was uneconomical. A few acres were deferred to protect sensitive plants.

In **Category B** no acres were deferred during FY 1995.

Summary: For FY's 1988-95, MA 12 had 17,559 acres deferred. This is the largest amount of all the MA's, and is beyond the prescribed range of 10,000 acres. The grand total cumulative deferred MA acreage for both categories is now 28,800 acres.

Finding: Based on the information stated above, the monitoring item is off-track for MA 12. The remaining suitable timber MA's are still on-track (MA's 11, 14-17).

| E-7-1 Harvest Acres Deferred in Suitable Timber Management Areas (MA's) | | | | | | | |
|--|--------------|---------------|--------------|--------------|--------------|--------------|---------------|
| Category & Fiscal Year | MA 11 | MA 12 | MA 14 | MA 15 | MA 16 | MA 17 | Totals |
| Category A | | | | | | | |
| 1988 | 15 | 340 | 25 | 0 | 0 | 0 | 380 |
| 1989 | 95 | 2,434 | 68 | 196 | 138 | 0 | 2,931 |
| 1990 | 89 | 779 | 107 | 120 | 298 | 0 | 1,393 |
| 1991 | 204 | 1,629 | 360 | 38 | 60 | 0 | 2,291 |
| 1992 | 66 | 4,886 | 2,186 | 76 | 0 | 0 | 7,214 |
| 1993 | 0 | 106 | 0 | 0 | 0 | 0 | 106 |
| 1994 | 0 | 77 | 963 | 0 | 0 | 0 | 1,040 |
| 1995 | 8 | 1,449 | 0 | 936 | 842 | 0 | 3,235 |
| Subtotal Cat. A | 477 | 11,700 | 3,709 | 1,366 | 1,338 | 0 | 18,590 |
| Category B | | | | | | | |
| 1988 | 0 | 2,580 | 274 | 314 | 0 | 0 | 3,168 |
| 1989 | 198 | 2,274 | 301 | 766 | 30 | 8 | 3,577 |
| 1990 | 403 | 912 | 62 | 1,164 | 168 | 80 | 2,789 |
| 1991 | 7 | 60 | 0 | 427 | 50 | 0 | 544 |
| 1992 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1993 | 0 | 33 | 0 | 0 | 11 | 0 | 44 |
| 1994 | 0 | 0 | 0 | 0 | 0 | 97 | 97 |
| 1995 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Subtotal Cat. B | 608 | 5,859 | 637 | 2,671 | 259 | 185 | 10,219 |
| Totals A & B | | | | | | | |
| 1988 | 15 | 2,920 | 299 | 314 | 0 | 0 | 3,548 |
| 1989 | 293 | 4,708 | 369 | 962 | 168 | 8 | 6,508 |
| 1990 | 492 | 1,691 | 169 | 1,284 | 466 | 80 | 4,182 |
| 1991 | 211 | 1,689 | 360 | 465 | 110 | 0 | 2,835 |
| 1992 | 66 | 4,886 | 2,186 | 76 | 0 | 0 | 7,214 |
| 1993 | 0 | 139 | 0 | 0 | 11 | 0 | 150 |
| 1994 | 0 | 77 | 963 | 0 | 0 | 97 | 1,137 |
| 1995 | 8 | 1,449 | 0 | 936 | 842 | 0 | 3,235 |
| MA Totals for FY 88-95 | 1,085 | 17,559 | 4,346 | 4,037 | 1,597 | 185 | 28,809 |

TIMBER: Clearcut Acres Sold; Monitoring Item E-9

ACTION OR EFFECT TO BE MEASURED: Acres of clearcut harvest sold.

VARIABILITY WHICH WOULD INITIATE FURTHER EVALUATION: Not defined.

Purpose: This monitoring item was established to help ensure that the amount of future clearcut harvesting on the Forest is steadily reduced. The Plan requires that this item be reported annually. The expected accuracy and reliability of the information is high.

Background: Congress has directed the Forest Service to reduce the amount of clearcut harvesting by 25% by 1995. The baseline year for this comparison is FY 1988. In addition, in a memo dated June 4, 1992, the Chief of the Forest Service expressed his expectation that, when considered throughout the National Forest System, clearcutting would decline by as much as 70 percent from FY 1988 to FY 1997. The Kootenai is implementing the Chief's guideline policy and using alternative harvest techniques when appropriate.

Results: Table E-9-1 displays the results since FY 1988. As can be seen, the acres of clearcut harvest sold has been reduced in each of the last five years beginning with FY 1990.

Evaluation: The Forest has reduced the amount of clearcut in the last eight years and has met the Chief's goal for 1997.

Finding: Based on the information stated above, the monitoring item is on-track.

| E-9-1 Clearcut Acres Sold by Fiscal Year | | | | | | | | |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | FY 88 | FY 89 | FY 90 | FY 91 | FY 92 | FY 93 | FY 94 | FY 95 |
| Clearcut Acres Sold | 5,734 | 5,795 | 3,068 | 4,159 | 3,557 | 1,469 | 1,262 | 483 |
| Percent Reduction from 1988 | N/A | none | 46% | 27% | 38% | 74% | 78% | 92% |

* FY 1988 is the baseline year for comparison

SOIL & WATER: Soil and Water Conservation Practices; Monitoring Item F-1

ACTION OR EFFECT TO BE MEASURED: Determine if regional and project soil and water practices meet State Water Standards.

VARIABILITY WHICH WOULD INITIATE FURTHER EVALUATION: Failure to meet State Standards.

Purpose: This monitoring item was established to help ensure that the State water quality standards are met. The Plan requires that this item be reported annually. The expected accuracy and reliability of the information is high.

Background: The Forest has been monitoring the Soil and Water Conservation Best Management Practices (BMP's) since 1988. These BMP's are required forestwide to meet State water quality standards. The BMP's are various practices (such as erosion control) which are designed to reduce non-point sources of pollution such as sediment which is the primary source of non-point pollution on the Forest. BMP monitoring consists of two important parts: (1) determining whether the practice (BMP) was applied on-the-ground as called for, and (2) if applied correctly, did it reduce the chances for sediment to enter a streamcourse. The determination of proper BMP application is referred to as implementation monitoring. The determination of whether the BMP worked or not is effectiveness monitoring.

Projects that are evaluated for BMP implementation and effectiveness include timber sale road construction, timber harvest, mine site rehabilitation, and other activities that expose or disturb soil.

In addition, spot monitoring of selected activities is being completed to determine BMP effectiveness as well as compliance with numerical State standards for turbidity and sediment.

FY 1995 BMP monitoring on the Forest involved monitoring done by Kootenai Forest personnel during their normal work activities, where BMP's were evaluated at particular sites on various projects across the Forest. The implementation evaluations and the effectiveness evaluations were both rated on the following scale:

| BMP Evaluation Rating Scale and Summary | | |
|--|--|---|
| Rating | Implementation | Effectiveness |
| Acceptable or Better | Operation Meets Requirements | Adequate or Improved Protection of Soil & Water Resources |
| Unacceptable | Minor Departure from Intent | Minor and Temporary Impact |
| Very Unacceptable | Major Departure from Intent | Major and Temporary, or Minor and Prolonged Impact |
| Grossly Unacceptable | Gross Neglect or No Application At All | Major and Prolonged Impact |

Results of BMP Monitoring Done by Kootenai Forest Personnel: There were 80 separate projects audited in FY 1995 by KNF personnel. In FY 1995 implementation evaluations were completed for 1,047 BMP's. Implementation evaluations met the requirement of acceptable 92% of the time in FY 1995. Effectiveness evaluations were completed for 955 BMP's in FY 1995 and met the requirement of acceptable 92% of the time (see Table F-1-2).

| F-1-2 BMP Monitoring Results by Kootenai Forest Personnel by Fiscal Year | | | | | | | | | | | | |
|--|--------------------|----|----|-----|------|----|-------------------|----|----|----|----|----|
| | Implementation (%) | | | | | | Effectiveness (%) | | | | | |
| | 90 | 91 | 92 | 93 | 94 | 95 | 90 | 91 | 92 | 93 | 94 | 95 |
| Acceptable or Better | 96 | 96 | 93 | 98 | 99 | 92 | 91 | 88 | 86 | 96 | 99 | 92 |
| Unacceptable | 4 | 3 | 6 | 2 | 1 | 8 | 8 | 12 | 13 | 3 | 1 | 8 |
| Very Unacceptable | 0.4 | 1 | 0 | 0.2 | 0.02 | 0 | 1 | 0 | 2 | 1 | 0 | 0 |
| Grossly Unacceptable | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

figure f-13

Evaluation of BMP Monitoring by Kootenai Forest Personnel: The results of the FY 1995 BMP monitoring show decreased percentages of acceptable results compared to those made for the preceding fiscal years (see Table F-1-2). However no BMP's were rated as "very unacceptable" or "grossly unacceptable" in FY 1995.

In 1992 the most frequent violation involved a BMP regarding tractor operations in wet areas (BMP #13.03). After an improvement in this practice during the FY 1993-94, it showed up as a problem again this year. Practice 13.5, Slash Filter Windrowing, Erosion Control During Sale Operations and Erosion Control on Skid Trails were also identified as problems.

In 1995 the Forest Hydrologist conducted training sessions at one of the problem audit units identified in the 1994 Sale Audit. Fifty individuals completed the training session in addition to the Forest Management Team. Spot monitoring of BMP effectiveness was done on a project basis on several sites in 1995. These more or less site specific monitoring projects evaluated BMP's with respect to sediment and turbidity data collected downstream.

Finding: Improvement can still be made on implementation and effectiveness of the BMP's.

SOIL & WATER : Water Yield Increases; Monitoring Item F-3

ACTION OR EFFECT TO BE MEASURED: Determine the cumulative level of water yield increases and the effects on stream channels.

VARIABILITY WHICH WOULD INITIATE FURTHER EVALUATION: 20% of watersheds exceed hydrologic guidelines.

Purpose: This monitoring item was established to help ensure that the State water quality standards are met. Water yield increase protection measures are designed to protect stream channels and fisheries habitat from the damaging effects of peak flow increases, and thus protect water quality and beneficial uses. The Plan requires that this item be reported annually. The expected accuracy and reliability of the information is moderate to high.

Background: Water yield estimations for project planning utilize the Kootenai Forest water yield model which calculates the peak flow increase over natural conditions for a watershed or sub-watershed. The results are displayed on a percentage-increase basis and include past and proposed activities on both the public and private lands. If the calculated peak flows exceed acceptable limits, stream channel damage may occur. Monitoring of water yield estimates is done to identify the watersheds where Forest Plan standards will be exceeded. When this occurs, projects are modified or deferred to ensure that State Water Quality goals are met. This monitoring item evaluates whether model-projected peak flows exceed a value determined from analysis of the existing stream condition, modified where necessary for instream values. Channel damages have not necessarily occurred for the reported instances of exceedance of hydrologic guidelines.

Results: In FY 1995, the Kootenai water yield model was used to estimate the peak flow increase on 277,229 acres which included both National Forest and private land (see Table F-3-2). Of this total area analyzed, 11% of the acres exceeded the Forest water yield guidelines under present conditions.

Evaluation: The combined totals for FY's 1988-95 show that of the 1,966,955 acres analyzed for peak flow increases on both public and private land, 26% exceed the limits for water yield increase under present conditions.

Summary: Most of the area analyzed in this monitoring item occurs on the Libby Ranger District (see Table F-3-1), which has also experienced the most acreage (including private lands) exceeding the water yield limits (32% of 849,532 acres). Libby Ranger District (including lands formerly in the Fisher River Ranger District) is located in the southeast corner of the Forest and contains large segments of intermingled private land. Significant amounts of timber harvest have recently occurred on the intermingled private land within the Forest.

Water yield calculations were done for these areas as a part of project planning for potential Kootenai Forest timber sales, and the private land characteristics were included. Most of these areas were found to exceed allowable peak flow levels, even though there were few recent or previous activities on Kootenai Forest lands. As stated above, these intermingled private land areas are primarily located in the southeast corner of the Forest where the Montana Cumulative Watershed

Effects Cooperative has agreed to evaluate future harvest schedules and methods to ensure that State Water Quality standards are met. This cooperative includes the Kootenai, Flathead and Lolo Forests, the State of Montana, and Plum Creek Timber Company.

Finding: Based on the information stated above, this monitoring item is currently outside the prescribed range of 20%.

| F-3-1 Watersheds Analyzed by Ranger District FY 1988-95 (Includes Private Lands) | | | |
|--|---|--|--------------------------------|
| Ranger District | Total Acres of Watersheds Analyzed | Acres of Watersheds Exceeding WY Guideline* | Exceeding WY Guidelines |
| Rexford | 280,990 | 19,588 | 4% |
| Fortine | 155,830 | 22,731 | 13% |
| Three Rivers | 524,960 | 75,525 | 13% |
| Libby** | 849,532 | 389,738 | 32% |
| Cabinet | 155,643 | 0 | 0% |
| Totals | 1,966,955 | 507,582 | 26% |

* The Forest Plan limit is 20%.

** Libby District combined with Fisher River District in FY 1995.

See Figure F-3-3a for map of areas that have been analyzed.

| F-3-2 Watersheds Analyzed for all Ranger District by Fiscal Year (Includes Private Lands) | | | |
|---|---|--|---|
| Fiscal Year | Total Acres of Watersheds Analyzed | Acres of Watersheds Exceeding WY Guideline* | Percent of Acres Exceeding WY Guidelines |
| 1988-89 | 944,170 | 314,404 | 33% |
| 1990 | 141,054 | 14,564 | 10% |
| 1991 | 226,836 | 13,020 | 6% |
| 1992 | 163,297 | 59,661 | 37% |
| 1993 | 83,479 | 16,654 | 20% |
| 1994 | 130,890 | 59,597 | 46% |
| 1995 | 277,229 | 29,682 | 11% |
| Totals | 1,966,955 | 507,582 | 26% |

* The Forest Plan limit is 20%

HUMAN & COMMUNITY DEVELOPMENT: Emerging Issues; Monitoring Item H-2

| | |
|---|---|
| ACTION OR EFFECT TO BE MEASURED: | Emerging issues |
| VARIABILITY WHICH WOULD INITIATE FURTHER EVALUATION: | Issues surfaced that were not included in or analyzed for effect by the Plan. |

Purpose: This monitoring item was established to track the amount of resource management conflict that is occurring, especially those conflicts which were not foreseen during the preparation of the Forest Plan. The Plan requires that this item be reported annually. The expected accuracy and reliability of the information is moderate.

Background: Newly emerging issues could affect the Forest's ability to implement the Plan as intended, so they're identified as part of monitoring.

Emerging or Potential Forest Issues Not Specifically Evaluated in the Forest Plan:

Wildland/Urban Interface - Due to the fires in 1994, there is an increased awareness and concern regarding the wildland/urban interface and fuel buildups as it pertains to risk to human life and property.

Amended Forest Plan Biological Opinion: The USFWS amended biological opinion of July 1995 states that until new Forest-wide access management direction is issued, projects should not increase the density of open roads above the current Forest Plan standard, should not increase the density of open motorized trails, should not increase the net total motorized access route density, and should not decrease the existing amount of core area in a Bear Management Unit. Departures can be made in consultation with the USFWS and will emphasize ways to increase security for bears with a long-term goal of achieving the Access Committee's recommendations. Meeting this direction may limit the level of management that could have been realized under past direction.

Ponderosa Pine Old Growth Management: Ponderosa pine stands historically evolved with disturbances such as low-intensity ground fires. Without such disturbances, the potential for attaining an old growth state is reduced due to increased understory vegetation which could carry a high-intensity fire. Due to long history of fire suppression, a need may exist to remove (through timber harvest) some of the understory vegetation prior to burning. The Forest Plan allows for prescribed burning within MA 13 old growth stands, but does not allow for removal of timber without an amendment to the plan.

Balancing Road Closures to Meet Forest Plan Standards While Providing Access to the National Forests for the Public: Recent planning efforts indicate that the Forest Plan open road density standard of .75 miles per square mile in MA 12 cannot be achieved in some areas without closing all the roads including main collector roads and loop roads which have been traditionally used for decades. Projects which cannot meet the standard are either being winter logged, deferred, or a Forest Plan amendment (either programmatic or project specific) is being proposed.

Wildfire and Subsequent Effects: The Forest has experienced significant fire events in the last few decades (1979, 1984, 1988, 1991, and 1994) and has been faced with a number of project-level proposals for rehabilitation and salvage that require an assessment of burn intensity and tree mortality levels. In response to these needs, the silviculturists have written guidelines that apply the findings of area fire research and professional experience to site specific conditions. This effort has been without the benefit of local long term study of post-fire conditions.

Following an extensive fire event in 1994, the Forest Management Team approved a long term monitoring project. This project is intended to establish baseline information regarding fire caused tree mortality, vegetative succession and fuels accumulation. Specific objectives include a refinement in the predictive guidelines used for estimating tree mortality in fire-affected areas, and to determine trends in succession of vegetation. Thirty-eight plots are established to date. Monitoring will continue on a one, two, three, five and ten year schedule.

Continuing Forest Issues that May Still Affect the Forest Plan:

The Forest Plan initially identified and addressed 13 public issues. As stated in the FY 1992 monitoring report of these original 13 issues, the following are still resisting resolution: grizzly bear management, timber supply (local economic impact), road management and public access, potential mineral development, visual (scenic) quality, and community stability (in the broader sense of using the natural resources of National Forest lands to provide jobs related to recreation, tourism, and forest products other than timber).

HUMAN & COMMUNITY DEVELOPMENT: Forest Plan Costs: Monitoring Item H-3

ACTION OR EFFECT TO BE MEASURED: Determine if the costs of producing outputs that were used in the plan continue to be valid.

VARIABILITY WHICH WOULD INITIATE FURTHER EVALUATION: A deviation of more than 10% from the cost data used to calculate present net value in the Plan.

Purpose: This monitoring item was established to track the cost of major items contributing to the present net value of the Plan. The Plan requires that this item be reported annually. The expected accuracy and reliability of the information is moderate to high.

Background: During the development of the Forest Plan, cost data were broken down into fixed, other, and variable costs. Fixed costs consisted of 45 categories of costs, and these items were the same for all alternatives considered. Other costs include 16 categories of cost items which were lumped but varied by alternative. Variable costs consisted of certain recreation costs, wildlife habitat improvement costs, range management and improvement costs, and all timber-related costs. These breakdowns were consistent with analytical techniques used for the Plan, but do not compare directly with accounting classifications (different breakdowns) now in use. As a result, only some of the variable costs can be readily used to determine changes in unit costs. However, the ones used are the variable cost items which influenced land allocation and activity scheduling in the Plan and indicate trends in unit cost change for monitoring purposes.

Cost analysis was undertaken for timber sale preparation and administration (site preparation, reforestation, precommercial thinning) and roads constructed primarily for timber harvest. The baseline unit cost figures (those used to calculate Present Net Value in the Plan) were extracted from the planning record, and inflated to FY 1995 dollars in order to provide comparability. The fiscal year unit cost values were obtained from Forest accounting reports and the Forest management attainment reports, and inflated to FY 1995 dollars. Timber sale preparation costs include all planning, sale preparation, and sale administration expenditures for the fiscal year. Timber output is based on the amount sold in the fiscal year. Timber road costs are based on purchaser credit established and associated engineering support costs. Reforestation costs include all reforestation-related costs including co-operative work required by timber sale contractors. All acres with reforestation work are represented in the output level. Table H-3-1 shows the baseline, the first 5 years, and FY's 1993-1995 unit cost data for these items.

Results and Evaluation:

Timber Sales unit costs for FYs 1993-1995 are displayed in Table H-3-1 and show an increase over the level projected in the Forest Plan. This is continuing the upward trend that began in FY 1990. Currently, costs are about 4 times greater than projected, which is well outside the +/-10% range prescribed in the Plan. This increase is due to the increasing complexity in timber sale preparation along with a concurrent decrease in the amount of timber volume being sold. For more detail on these aspects, please refer to Items E-1 through E-3 and E-7.

Timber Roads unit costs were close to the level projected in the Forest Plan for the first five years of the Plan, but have increased in FY 93 through FY 1995 (see Table H-3-1). This is largely a result of decreased volume sold, lowering cost efficiency.

Reforestation unit costs were also higher than projected in the Forest Plan in FY 1995 (see Table H-3-1). This continues the slight upward trend that began in FY 1990. Although there has been a wide variation in these costs (both above and below the projected level), the costs for 1995 have changed minimally from the 5-year average of +11% above the projected unit cost.

Precommercial thinning unit costs continue to stay below projected costs, helping the Forest to minimize overall costs (see Table H-3-1). However, in terms of the total PNV of the Plan, precommercial thinning accounts for only 0.2% of the total contribution to PNV costs, so the overall economic efficiency is only slightly affected.

Finding: Based on the information presented above, this monitoring item is outside the range prescribed in the Plan.

| H-3-1 Forest Plan Unit Costs by Fiscal Year | | | | | | | |
|--|--------------|-------------------------------------|----------------------------------|--------------|--------------|--------------|------------------------------|
| Cost Item | Units | Unit Costs Projected in Plan | Weighted Average FY 88-92 | FY 93 | FY 94 | FY 95 | Weighted Avg FY 93-95 |
| Timber Sales | \$/MBF | 28 | 40 | 107 | 123 | 135 | 118 |
| Timber Roads | \$/MBF | 30 | 50 | 52 | 53 | 56 | 53 |
| Reforestation | \$/acre | 337 | 356 | 378 | 400 | 496 | 405 |
| Precommercial Thinning | \$/acre | 302 | 214 | 211 | 221 | 279 | 231 |

*All unit costs in this table have been updated to FY 95 dollars to account for inflation and to provide comparability

| |
|---|
| HUMAN & COMMUNITY DEVELOPMENT: Forest Plan Budget: Monitoring Item H-4 |
|---|

ACTION OR EFFECT TO BE MEASURED: Assess Forest budget levels and their effects on Forest Plan implementation

VARIABILITY WHICH WOULD INITIATE FURTHER EVALUATION 10% deviation by funding item from the predicted levels in the Plan.

Purpose: This monitoring item was established to track the budget levels received from Congress. The Plan requires that this item be reported annually. The expected accuracy and reliability of the information is high.

Background: The budget process is directly related to the Forest Plan, but also influenced by other factors. Program targets vary from year to year to meet certain needs and such changes are reflected in the budget figures. As a result, budget levels for any single year should be interpreted with care. However, given major trends now seen since 1988, it is apparent that many programs and costs have changed substantially, and Forest Plan predictions are no longer fully valid. The analysis presented below will be helpful in budget analysis for Forest Plan revision.

Results: Table H-4-1 (next page) shows the percentage difference between the planned budget and actual expenditures for the first five years of the Plan, and FY's 1993-95. Significant increases have occurred in fire, fuels, law enforcement, timber salvage sales, trail construction and tree improvement. For more detailed information on the specific dollar amounts for each budget item by fiscal year, see Appendix D at the end of this report.

Evaluation: In order to evaluate this information with its wide variations, the major Forest programs were grouped for easier comparison. For each major Forest program (such as timber, wildlife, recreation, etc.), all applicable budget items were grouped and added together. Data for all fiscal years were averaged to smooth out year-to-year variations. Output levels for each major resource area were obtained from Appendix A (at the end of this report) and are based on the Forest's Management Attainment Report for FY's 1988-95. For each major program area, all applicable outputs were added together. To some extent, some misrepresentation was introduced by this addition (for instance, developed recreation and dispersed recreation) but overall results do show the major trends. Table H-4-2, on a following page, shows the results of this analysis. Following that table, there is a brief listing of each program area, the outputs contributing to it, and an evaluation of the trend.

| H-4-1 | | Comparison of Actual Budgets Used to Implement the Forest Plan (%) | | | |
|---------------|--|--|--|-----------|-----------|
| Funding Item | Budget Activity | Avg. Percent for FY 88-92 | Actual Budget as a Percent of Planned Budget | | |
| | | FY 88-92 | FY 1993 | FY 1994 | FY 1995 |
| 0 | General Administration (approp) | 75 | 65 | 60 | 41 |
| 01 | Fire | 76 | 85 | 1252 | 835 |
| 02 | Fuels | 39 | 113 | 113 | 197 |
| 03-05 | Timber | 69 | 50 | 50 | 38 |
| 06-07 | Range | 111 | 84 | 54 | 117 |
| 08 | Minerals | 57 | 54 | 53 | 77 |
| 09 | Recreation | 68 | 68 | 73 | 69 |
| 10 | Wildlife and Fish | 58 | 60 | 59 | 49 |
| 11 | Soil, Air, Water | 77 | 91 | 83 | 89 |
| 12 | Facility Maintenance | 82 | 107 | 93 | 113 |
| 13-15 | Lands/ Land Management | 59 | 94 | 75 | 92 |
| 42-43 | Lands-Status/ Acquisition | 114 | 51 | 51 | 40 |
| 16 | Landline Location | 77 | 91 | 89 | 40 |
| 17 | Road Maintenance | 77 | 52 | 59 | 63 |
| 18 | Trail Maintenance | 78 | 87 | 75 | 69 |
| 19 | Co-op Law Enforcement | 25 | 120 | 89 | 92 |
| 20 | Reforestation (appropriated) | 69 | 51 | 55 | 63 |
| 21 | TSI (appropriated) | 60 | 62 | 55 | 88 |
| 23 | Tree Improvement | 106 | 304 | 217 | 280 |
| 26-28 | KV (Trust Fund) | 132 | 153 | 124 | 117 |
| 29 | CFWS - Other (Trust Fund) | 109 | 107 | 95 | 86 |
| 30 | Timber Salvage Sales (Perm Fund) | 375 | 1125 | 828 | 1327 |
| 31 | Brush Disposal (Perm Fund) | 102 | 86 | 58 | 51 |
| 32 | Range Improvement | 68 | 40 | 39 | 77 |
| 33 | Recreation Construction | 79 | 48 | 132 | 49 |
| 34 | Facility Construction: FA&O | 4 | 4 | 8 | 109 |
| 35 | Engineering Const. Support | 59 | 49 | 35 | 36 |
| 36 | Const. Capital Invest Roads | 16 | 18 | 2 | 14 |
| 37 | Trail Const/ Reconstruction | 87 | 191 | 217 | 251 |
| 24, 38 | Timber Road Const.: PC/Elect. ¹ | 52 | 53 | 33 | 22 |
| Totals | | 72 | 79 | 98 | 90 |

For more detail, please refer to Appendix D, at the end of this report, for the specific dollar amount for each budget item by Fiscal Year.

¹PC = Purchaser Credit established.

| H-4-2 Forest Plan Budget & Output Levels for Fiscal Years 1988-95 | | |
|--|---|--|
| Activity or Output | Actual Budget as a Percent of Forest Plan | Actual Output as a Percent of Forest Plan Projection |
| Minerals | 58 | 71 |
| Protection, Natural Fuels Treatment | 78 | 130 |
| Range | 78 | 92 |
| Recreation | 71 | 185 |
| Reforestation | 84 | 77 |
| Timber | 64 | 57 |
| Timber Stand Improvement | 77 | 90 |
| Wildlife | 63 | 60 |

* Factors contributing to the outputs are shown in the text.

FIGURE H-4-2

Minerals (number of cases handled): The number of minerals cases arising is not a controllable item, because the Forest is required to respond to cases as they arise. Although a significant number of cases have been completed, many of them have been less complicated than the expected longer-term average. Also, the restrained budgets have decreased the quality of the case workload.

Protection (natural fuels treatment, in acres): Continuing the trend which began in FYs 1992 and 1993, the acres of natural fuels treatments went up substantially over prior years (see Table H-4-1). As a result, the level of accomplishment is continuing very high, at 130% of the planned amount.

Range (permitted grazing use, in acres): Both range budgets and production amounts are below that shown in the Plan, but relatively less so for production. See Item D-1 for more information.

Recreation (Total of developed and dispersed use, in recreation visitor days): Compared to the Plan, recreation budgets are lower and outputs are higher. Continuing difficulty in obtaining full funding on a national basis affects this program area. Outputs, however, are steadily increasing as more people opt for volunteers and challenge grants helps reduce this gap between planned and realized funding. Recreation experience quality could diminish if the current co-operation diminishes and the budget gap continues. The low reliability and accuracy of the dispersed recreation use data (using traffic counts to calculate driving for pleasure and viewing values, for example) may also be a contributing factor to the large overrun of outputs.

Reforestation (Acres reforested naturally and artificially, by Forest and cooperators): Reforestation budget and achievement levels are close to those projected in the Plan.

Timber (Total volume sold, MMBF): Both timber budgets and outputs are less than planned. See Monitoring Item H-2 for a discussion of timber unit costs and Monitoring Item E-1 for timber sell volume information.

Timber Stand Improvement (Acres precommercially thinned): Actual costs for precommercial thinning for the first eight years of the Plan have been less than those anticipated. Acreage thinned has not fully reached planned levels due to budget limits, but may approach planned amounts in future years as more stands grow into overstocked conditions or more stands become accessible.

Wildlife and Fish (Total acres of wildlife, fish, and T & E habitat improvement): Budgets in this area average at around 60 percent of planned amounts. Accomplishment also remains lower than expected at about 63%. Table H-4-1 shows a decline in these budgets in FY 95, which indicates a possible trend away from funding at the 60% level.

Finding: Based on the information stated above, this monitoring item is outside the range prescribed in the Plan.

APPENDIX A: Planned Outputs or Activities, and Accomplishments

APPENDIX A: Planned Poutputs or Activies , and Accomplishments

| | | | Planned | Actual Accomplishments | |
|--------------------------|--------------------------------------|-----------------|-------------------------|------------------------|--------------------------|
| Target Item | Output or Activity | Unit of Measure | Planned Amount per Year | FY 95 | Percent of Planned Units |
| Recreation | Developed Use | M RVD | 297 | 315 | 106 |
| | Dispersed Use | | | | |
| | Wilderness | M RVD | 18 | 28 | 156 |
| | Non-Wilderness | M RVD | 559 | 1275 | 228 |
| Wildlife and Fish | Wildlife Habitat Improvement | M acres | 5.6 | 1.2 | 21 |
| | T & E Habitat Improvement | Acres | 150 | 275 | 180 |
| | Fish Habitat Improvement | Acres | 120 | 400 | 333 |
| Range | Permitted Grazing Use | M AUM | 12.6 | 11.7 | 93 |
| Soil | Soil Inventory | M Acres | 15.7 | - | - |
| Lands | Land Exchange | Acres | 1700 | 380 | 22 |
| Minerals | Minerals Management | Cases | 300 | 102 | 54 |
| Protection | Fuels Treatment, Natural | Acres | 800 | 750 | 94 |
| Timber | Total Volume Offered ² | MMBF | 233 | 66 | 28 |
| | Reforestation (appropriated) | M Acres | 3 | 3.6 | 120 |
| | Reforestation (KV) | M Acres | 7.1 | 5.7 | 82 |
| | Reforestation (Other - Co-op) | M Acres | 4 ³ | .2 | 5 |
| | Total Reforestation | M Acres | 14.1 | 9.5 | 68 |
| | Timber Stand Improv (appropriated) | M Acres | 4 ⁴ | 4.7 | 118 |
| | Timber Stand Improv (KV) | M Acres | 1 | 1.2 | 120 |
| | Total Timber Stand Improv | M Acres | 5 | 5.9 | 118 |
| | Stand Examination | M Acres | 139 | 105 | 76 |
| | Fuel Treatment (BD/ KV) | M Acres | 11.7 | 6.4 | 55 |
| Facilities | Total Road Construction ⁵ | Miles | 237 | 8 | 3 |
| | Trail Construct/ Reconstruct | Miles | 7.5 | 133 | 177 |

²Timber offered but not necessarily sold as of Oct 31 of the Fiscal Year. Planned amounts include 25 MMBF/year of non-interchangeable volume (primarily dead lodgepole) plus 202 MMBF of live green timber for an ASQ of 227 MMBF/year. In addition to the ASQ, 6 MMBF/year of unregulated volume is expected to be offered

³Acres of site preparation for natural regeneration as part of the timber sale contract (purchaser's requirement) and other contributed funds

⁴Includes precommercial thinning and release.

⁵Includes arterial collector and local roads.

APPENDIX B-1: Timber Sell Volume: Monitoring Item E-1

APPENDIX B-2: Project Specific Amendments

The Kootenai Forest Plan identified overarching standards for all forest lands. One of these standards (Forest Plan, page II-20) states, "If it is determined during project design that the best way to meet the goals of the Forest Plan conflicts with a Forest Plan standard, the Forest Supervisor may approve an exception to that standard for the project." Project specific amendments change the standard only for the time period covered by that project.

The Kootenai Forest Supervisor determined that the following projects are designed to meet the goals of the Forest Plan, therefore approved these project specific amendments.

| Appendix B-2 Project Specific Amendments FY 1995 | | | | | | |
|---|----------------------|------------------------------|-----------|-------------------------------|--|------------------------|
| District | Date Approved | Decision Name | MA | Standard | Description | Completion Date |
| D1 | 08/03/95 | Webb DN | 12 | Facilities #3 | ORD of 1.12 during sale; .44 after sale | 2 years |
| D1 | 01/18/95 | Compartment 4 DN | 12 | Timber #2; Wildlife & Fish #7 | Harvest w/in movement corridors | 10-15 years |
| D1 | 02/10/95 | Compartment 2 DN | 12 | Facilities #3 | ORD of 1.3 during harvest; .75 after | 2 years |
| D5 | 05/01/95 | Dry Fork Salv DN | 12 | Facilities #3 | ORD of 2.1 during harvest; .75 after | 1 year |
| D5 | 05/11/95 | Road 4904K; Mushroom harvest | 12 | Facilities #3 | ORD of 1.5 during picking | 2 months |
| D5 | 07/14/95 | Canyon Salv DN | 15 | Wildlife & Fish #2 | ORD of 3.8 during first year; 3.0 after | 1 year |
| D5 | 07/10/95 | Cripple Horse Salv DN | 12 | Facilities #3 | ORD of 2.1 during harvest; .7 after | 1 year |
| D5 | 7/23/95 | Brush Cr Salv DN | 12 | Facilities #3 | ORD of 1.4 during harvest; .75 after | 1 year |
| D5 | 9/21/95 | Peace Alexander Salv DN | 12 | Facilities #3 | ORD of up to 2.5 during harvest; .75 after | 1 year |

MA 12 - Big Game Summer Range Timber
 MA 15 - Timber Production

APPENDIX B-3: Programmatic Amendments, FY 1995

The Forest Plan provides a process for amending the plan. Amendments are effective until Forest Plan revision or until they are changed. The following amendments were approved in FY 1995.

- No 8.** **5/5/95** MA 12 is modified for the "Facilities" section, standard #3, to allow an open-road density of 1.5 miles per square mile during non-harvest periods, and a site specific exception of 2.0 miles per square mile for implementation of Cripple Peak Salvage and associated sales during activity period for Upper Cripple Peak, Libby Ranger District, or approximately 3,635 acres of MA-12.
- No 9.** **9/29/95** Forest Plan, Appendix 8, Grizzly Bear Management Situation Guidelines, page A 8-12 is modified for the "Timber/Fire Management" section, Standard #3a, to allow an open-road density of up to 1.0 miles per square mile within the Murphy Bear Analysis Area and up to 1.3 miles per square mile within the Deep Bear Analysis Area after the Murphy Timber Sale Activities are completed within the Krinklehorn Bear Management Unit, Fortine Ranger District. This standard is also modified to allow a site specific exception of 1.79 miles per square mile within the Deep BAA and 1.36 miles per square mile within the Murphy BAA until the Murphy Timber Sale and associated activities are completed and the road management strategy is fully implemented.
- No Num** **7/28/95** Inland Native Fish Strategy. Amends the management direction established in the Kootenai Forest Plan to protect habitat and populations of resident native fish. This interim direction is in the form of riparian management objectives, standards, guidelines, and monitoring requirements.

APPENDIX D-1: Projected & Actual Budgets Used to Implement Forest Plan

Projected and Actual Budgets Used to Implement the Forest Plan (in thousands of dollars)

| Item | Budget Activity | Planned Amount base year FY78 | FY 88-94 % of Planned | FY 1995 Planned Amount | FY 1995 Actual Amount | FY 1995 % of Actual Amount |
|---------------|-------------------------------|-------------------------------------|--------------------------|------------------------------|-----------------------------|----------------------------------|
| 00 | General Administration | \$1,465 | 63% | 3228 | 1233 | 41 |
| 01 | Fire | \$530 | 675% | 1168 | 9754 | 835 |
| 02 | Fuels | \$59 | 131% | 130 | 256 | 197 |
| 03-05 | Timber | \$2,648 | 50% | 5835 | 2240 | 38 |
| 06-07 | Range | \$59 | 97% | 130 | 152 | 117 |
| 08 | Minerals | \$287 | 53% | 632 | 487 | 77 |
| 09 | Recreation | \$561 | 70% | 1236 | 856 | 69 |
| 10 | Wildlife and Fish | \$648 | 60% | 1420 | 703 | 49 |
| 11 | Soil, Air, Water | \$269 | 87% | 593 | 531 | 89 |
| 12 | Facility Maintenance | \$145 | 100% | 319 | 360 | 113 |
| 13-15 | Lands/ Land Management | \$156 | 84% | 344 | 315 | 92 |
| 42-43 | Lands-Status/ Acquisition | \$96 | 38% | 212 | 85 | 40 |
| 16 | Landline Location | \$285 | 90% | 628 | 253 | 40 |
| 17 | Road Maintenance | \$764 | 55% | 1684 | 1055 | 63 |
| 18 | Trail Maintenance | \$115 | 81% | 253 | 175 | 69 |
| 19 | Co-op Law Enforcement | \$12 | 104% | 26 | 24 | 92 |
| 20 | Reforestation (appropriated) | \$871 | 53% | 1919 | 1205 | 63 |
| 21 | TSI (appropriated) | \$562 | 58% | 1238 | 1090 | 88 |
| 23 | Tree Improvement | \$20 | 260% | 44 | 123 | 280 |
| 26-28 | KV (Trust Fund) | \$1,427 | 138% | 3144 | 3678 | 117 |
| 29 | CFWS - Other (Trust Fund) | \$348 | 101% | 767 | 659 | 86 |
| 30 | Timber Salv Sales Perm Fund | \$275 | 974% | 606 | 8039 | 1327 |
| 31 | Brush Disposal (Perm Fund) | \$694 | 72% | 1530 | 776 | 51 |
| 32 | Range Improvement | \$6 | 39% | 13 | 10 | 77 |
| 33 | Recreation Construction | \$99 | 91% | 218 | 107 | 49 |
| 34 | Facility Construction: FA&O | \$111 | 6% | 245 | 268 | 109 |
| 35 | Engineering Const. Support | \$2,360 | 42% | 5200 | 1879 | 36 |
| 36 | Const. Capital Invest Roads | \$1,801 | 10% | 3968 | 569 | 14 |
| 37 | Trail Const/ Reconstruction | \$32 | 204% | 71 | 178 | 251 |
| 24, 38 | Timber Road Const.: PC/Elect. | \$2,399 | 43% | 5286 | 1143 | 22 |
| Totals | | \$19,104 | 89% | 42096 | 38303 | 90 |

Planned Dollars are the costs originally calculated for the budget activity, base year 1978.
 FY 1988-94 percent is brought forward from the 1993-1994 Monitoring Report.
 FY 1995 Planned Dollars are FY 78 times 2.20356 to account for inflation.

SOURCES OF INFORMATION

For information about the Forest Plan and this monitoring report, contact the following offices:

Kootenai National Forest
Supervisor's Office
506 US Highway 2 West
Libby MT 59923
406-293-6211

Kootenai National Forest
Rexford Ranger District
1299 Highway 93 North
Eureka MT 59917
406-296-2536

Kootenai National Forest
Fortine Ranger District
PO Box 116
Fortine MT 59918
406-822-4451

Kootenai National Forest
Three Rivers Ranger District
1437 North Highway 2
Troy MT 59935
406-295-4693

Kootenai National Forest
Libby Ranger District
1263 North Highway 37
Libby MT 59923
406-293-8861

Kootenai National Forest
Cabinet Ranger District
2693 Highway 200
Trout Creek MT 59874
406-827-3533

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