

# **Colville National Forest Forest Plan Monitoring and Evaluation Report: 1995**

The purpose of this report is to provide the results of monitoring the implementation of the Colville National Forest Land and Resource Management Plan (Forest Plan) during Fiscal Year 1995 (10/1/94 - 9/30/95) to the Forest Supervisor, the Regional Forester, and the public.

This report focuses on the monitoring and evaluation process described in Chapter V of the Forest Plan. It is not intended to be a complete overview of the many accomplishments and activities on the Colville National Forest during the past year.



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## CHAPTER 1 EXECUTIVE SUMMARY

This section of the report presents an executive summary of results, evaluation, and recommended actions to be taken for those monitoring items reported during FY95. Details of monitoring results and recommendations are found in Chapter 2.

### SUMMARY OF MONITORING RESULTS AND EVALUATION

<u>MONITORING ITEM</u>	<u>RESULTS AND EVALUATION</u>
1-Compliance with NEPA	Standards for NEPA compliance are being met. Seven District Ranger decisions were made and one decision was appealed. There were 12 Supervisor's decisions made Five were appealed and resolved. Five other decisions were appealed and upheld in the Regional review. One appealed decision is being litigated (Copper Salvage/East Curlew). Most decisions made were green or fire-killed timber sales.
2-Standard and Guidelines	Standards and guidelines are being met on timber sale activities, recreation, and watershed improvement activities monitored in 1995. Grazing systems need to be re-evaluated when preparing new Allotment Management Plans in future.
3-Recreation User Experience	Visitor/user satisfaction is good. Maintenance/reconstruction of developed recreation sites is falling behind schedule.
4-Trail use	Trail use within ROS criteria. Winter trails/improvements need more attention.
5-Semiprimitive Setting	ROS criteria being met.
6-Off Road Vehicle Use	Some resource damage occurring but still at acceptable levels. Increasing use of four wheel vehicles on trails intended for single track vehicles observed. Need

standards of acceptable level of resource impacts due to ORV use.

7-Visual Quality Objectives

Generally, VQO's being met with the exception that mitigation measures for trail corridors not always being included in timber sale EA's and VQO's in some Modification areas not being met.

8-Wilderness

Draft Limits of Acceptable Change standards are being met or exceeded (doing better than the minimum requirement).

9-Potential Wild and Scenic Rivers

No management activities were planned or occurred.

10-Deer & Elk Winter Range

Existing (pre-treatment) conditions in several areas of the Forest are improving, but do not yet provide the desired levels and distribution of forage and cover. Open roads not under Forest Service control occasionally prevent attainment of desired road densities. However, timber sale planning, direct habitat improvements, and road closures during Fiscal Year 1995 all contributed toward protecting existing winter big game habitat and achieving the Forest Plan objectives over the long term.

11-Primary Cavity Nesters

Timber sale planning and marking activities continue to address the need for snag retention and green replacement trees to provide for cavity nesting wildlife and meet Forest Plan objectives. However, in the only post-harvest sample taken, results showed that efforts to maintain these snags and green replacement trees over time are not effective, and snag requirements are not being met in many areas. Snag falling during the sale to address safety requirements, and post-harvest activities (site preparation and public firewood cutting) are cited as the primary reasons for snag losses.

12-Old Growth Dependent Species	Existing (pre-treatment) conditions are not yet providing the desired levels and distribution of old growth habitats across the Forest. However, Districts are meeting Forest Plan direction to provide for these habitats over the long term by identifying and protecting the best available habitats within the constraints of the grid system established in the Forest Plan.
13-Management Indicator Species	Forest Plan direction to provide for Management Indicator Species is being followed. Additional emphasis on post-harvest monitoring to evaluate the effectiveness of treatment prescriptions is recommended.
14-Threatened, Endr, & Sens. Species	Forest Plan direction regarding protection and management of habitat for threatened, endangered and sensitive species is being met. During Fiscal Year 1995, the Forest completed 93 separate project-level Biological Evaluations and made significant progress in streamlining the process required to assess and document the effects of projects on TES species.
15-Fisheries	Forest Plan direction is being met with the application of fisheries standards and guides on timber sales.
16-Range Improvements	Construction of improvements meets Forest Plan direction. However, more involvement of permittees needed.
17-Livestock Permitted	Permitted AUM's were 34,070 for FY 1995.
18-Utilization of Forage	Overall monitoring results indicate that we are meeting Forest Plan Standards and Guidelines. Some allotments surveyed may not be in compliance with standards and work is being implemented on most to correct problems.
19-Riparian and Range Conditions	Not monitored

20-Restocking of Lands	In 1990, final removal harvest occurred on 3340 acres. By the end of FY95, 2603 of those acres (78%) had been certified as satisfactorily stocked. The remaining 737 acres are expected to be certified in FY96 and FY97.
21-Timber Yields	Not monitored in 1995.
22-Land Suitability	Management direction met.
23-Size and Dispersal of Harvest Units	Harvest unit layout is consistent with Forest Plan standards.
24-Silvicultural Practices	Harvest acres by silvicultural method is below Forest Plan projection, for all methods, due to less than full implementation of the Forest Plan (harvest of 123.4 MMBF).
25A-Water Quality	Data collected from 21 selected baseline sites, during the summer months, indicated little change from previous years. Washington State water quality criteria are being met. Sampling revealed the presence of elevated fecal coliform levels adjacent to grazing allotments.
25B-Watershed Best Management Practices	Best Management Practices are being implemented as planned and are effective at the time of implementation.
26-Riparian Areas	Riparian areas in general are being maintained for the benefit of riparian dependent resources.
27-Soils	Detrimental soil disturbance varied from 1 to 21% on the units monitored. There was a wide variation in results due to season, soil type and harvest method used.
28-Transportation System Management	Forest Plan Standards are being met. Constructed, reconstructed, passenger car and closed road mileage is decreasing.

29-Insect and Disease Populations	Defoliator populations decreased significantly. Forest structure and composition unchanged with much of Forest still at high risk. Douglas-fir dwarf mistletoe and root rots are still primary disease agents.
30A-Heritage Resource Protection	Although harvest and other undertakings are avoiding direct impact to significant properties, they are being adversely impacted through vandalism and natural deterioration.
30B-Heritage Res Compliance Activities	Compliance-generated archaeological surveys were conducted on approximately 20,000 acres; 110 new cultural properties were documented. While compliance standards are being met, compliance fieldwork and reporting varied in quality.
31-Actual and Planned Costs	Not monitored in 1995.
32-Economic Effects	Returns to Government are 44 percent of Plan projections. Payments to States are 39 percent of Plan projections.
33-Coordination with Adjacent Landowners	Direction being met.
34-Modeling Assumptions	Not monitored in 1995.
35-Minerals	Management direction is being followed. Failure to meet the Plan reclamation threshold is attributed to unforeseen conditions on a single project and should be on track in FY96.
36-Community Effects	Community effects were not reported for fiscal year 1995.

### **SUMMARY OF RECOMMENDED ACTIONS**

Table 1.1 displays a summary of the recommended actions for each item monitored during FY95. The recommended actions referenced in Table 1.1 have been broadly categorized as follows:

### **RESULTS ACCEPTABLE/CONTINUE TO MONITOR**

Results are within the threshold of variability listed in Forest Monitoring Guide or indicate that more data is needed to evaluate results. .

**CHANGE OR CLARIFY MANAGEMENT PRACTICES**

Results are outside the threshold of variability listed in the Forest Monitoring Guide and an evaluation of the situation indicates the need to change practices to comply with the Forest Plan.

**FURTHER EVALUATION/DETERMINE ACTION**

Results are inconclusive indicating that additional monitoring and evaluation, or a change in monitoring practices is needed.

**INITIATE ADJUSTMENT OF THE FOREST PLAN**

Results are inconsistent with the Forest Plan or the Forest Plan direction is unclear. Follow-up action is to initiate the Forest Plan Adjustment process.

**Table 1.1** Summary Of Recommended Actions

Monitoring Item	Results Accept/Cont. to Monitor	Change or Clarify Mgmt Practices	Further Evaluation Needed	Initiate Forest Plan Adjustment
1-NEPA Compliance	X			
2-Standards And Guidelines	X			
3-Recreation Experience	X			
4-Recreation Trail Use	X			
5-Semiprimitive Recreation	X			
6-Off-Road Vehicle Use			X	
7-Visual Quality Objectives		X		
8-Wilderness	X			
9-Potential Wild Scenic Rivers	X			
10-Deer and Elk Winter Range				
I-1			X	
I-2			X	
I-3	X			
I-4	X			
11-Primary Cavity Nesters		X		
12-Old Growth Dependent Species	X			
13-Management Indicator Species				
I-2			X	
I-4			X	
E-2	X			
14-T.E.S. Species				
I-2	X			
I-3	X			
I-4	X			
I-5	X			
I-6	X			
E-2			X	
15-Fisheries:				
I-1	X			
I-2	X			
I-3	X			
I-4	X			
16-Range Improvements	X			
17-Livestock Permitted	X			
18-Utilization Of Forage	X			
19-Riparian & Range Condition	X			
20-Restocking of Lands	X			
22-Land Suitability	X			
23-Dispersal of Units	X			
24-Silvicultural Practices	X			
25A-Water Quality	X			
25B-Watershed BMPs	X			
26-Riparian Areas	X			
27-Soil Productivity Changes	X			
28-Transportation System	X			
29-Insects and Disease	X			
30A-Heritage Resource Protection		X		
30B-Heritage Resource Compliance	X			
32-Economic Effects			X	
33-Cood W/ Adjacent Land Owners	X			
35-Minerals	X			

## **CHAPTER 2 MONITORING RESULTS AND EVALUATION**

This section summarizes the results of monitoring and evaluation conducted during fiscal year 1995, which ran from October 1, 1994 to September 30, 1995. In 1990, the Forest developed a detailed Forest Plan Monitoring Guide consisting of monitoring instructions and a monitoring schedule. Not all items identified in the Forest Plan are scheduled to be monitored every year.

### **MONITORING ITEM 1**

#### **Compliance With The National Environmental Policy Act**

##### **Forestwide Goal**

The analysis and documentation developed for all projects will meet the requirements of the National Environmental Policy Act.

##### **Purpose of Monitoring**

To ensure the conditions of NEPA are being met.

##### **Standard**

All project environmental analysis and documentation must meet Federal, agency, and Forest standards for NEPA compliance.

##### **Summarized Results**

Twelve Forest Supervisor decisions were made. Two were not appealed, including a land exchange. Five were appealed and resolved in the informal disposition meeting between the Forest Supervisor and the appellants. Five were not resolved in the informal disposition meeting and were reviewed by the Region. All were upheld in review. One decision is being litigated, the EIS for Copper Salvage/East Curlew timber sales. There were seven appealable District Ranger decisions, and only the Bead Lake boat launch decision was appealed. There were numerous appeals of the boat launch decision, 10 appeals were reviewed and three dismissed. The decision was upheld in review.

##### **Evaluation**

Analysis and documentation for projects is meeting the requirements of the National Environmental Policy Act.

##### **Recommended Action**

Results Acceptable/Continue to Monitor.

## **MONITORING ITEM 2 Standards And Guidelines**

### **Forestwide Goal**

Forest Plan standards and guidelines are implemented where appropriate and result in the desired future condition described in the Forest Plan.

### **Purpose of Monitoring**

To determine if Forest Plan standards and guidelines are implemented and meet the objective of protecting the resource values identified in the Forest Plan.

### **Standard**

Forest Plan standards and guidelines and management area prescriptions should be implemented and the actual on the ground results should approximate predicted results in the Forest Plan.

### **Summarized Results**

The Forest Leadership Team reviewed several Forest Supervisor authority projects as well as general Forest Stewardship in various locations. The Ranger Districts also reviewed projects to monitor compliance with a variety of resource standards. Specific areas or resources monitored included:

- 1) Mill timber sale EA,
- 2) Johnson Mill South sale implementation, and No Name Lake improvement,
- 3) Olson Peak salvage timber sale and Fawn Swamp timber sale,
- 4) Snow Peak shelter,
- 5) North Fork O'Brien Creek rehabilitation work,
- 6) Vulcan Mountain wildlife burn.,
- 7) Le Clerc Creek grazing allotment, and
- 8) Calispell Creek fisheries habitat improvement project.

Monitoring on these activities showed that Forest Plan standards and guidelines were being met. A review of the Le Clerc Creek grazing allotment showed some problems that need to be addressed in future decision making. Grazing systems impacts on riparian vegetation, fisheries habitat and water quality are violating Plan standards.

### **Evaluation**

Monitoring indicated that Standards and Guidelines are being met except by grazing activity on an existing allotment.

### **Recommended Action**

Results Acceptable/Continue to Monitor on all activities but the exception noted. Recommendations by the FLT review on the grazing allotment are to Change or Clarify Management Practices and Further Evaluation/Determine Action needed.

## **MONITORING ITEM 3**

### **Recreation User Experience And Physical Setting**

#### **Forestwide Goal**

To ensure a spectrum of dispersed and developed recreation opportunities are provided on the Forest, as described in the Forest Plan management area descriptions.

#### **Purpose of Monitoring**

To determine if the Forest is meeting recreation opportunity spectrum (ROS) guidelines regarding site conditions and user satisfaction.

#### **Standard**

Desired physical, social and managerial settings for each ROS class should be met.

#### **Summarized Results**

Visual observation, personal contacts, fee collection records and random sample surveys were completed for all fee sites on the Forest and many of the dispersed and non-fee sites. Sullivan Lake District physically inventoried most of their dispersed sites using the Code-a-site process. User satisfaction was surveyed through trail registration cards, personal contacts, and concessionaire data collection reports for most developed sites and trailheads on the Forest.

Generally, weekend use for campgrounds continues to reach 80-100% of capacity, with use generally at 100% of capacity during holiday or extended weekends. Users complained that the campground reservation system was not working, but use of the Nationwide campground reservation system is projected to increase. There are currently 5 reservation campgrounds on the Forest. Newport District placed 4 campgrounds under a concessionaire operation.

Dispersed recreation use is significant and continues to increase, with numerous sites experiencing resource damage. Formal monitoring indicates these sites are filled on extended weekends and during the fall hunting season. Dispersed sites were visited to explore potential projects to improve riparian habitat to meet INFISH requirements.

#### **Evaluation**

Results for the most part showed visitor/user satisfaction to be good. Most comments were positive and indicated that user satisfaction was aligned with expectations of the users. The replacement of existing vault toilets with new, accessible facilities is continuing across the Forest. Barrier Free boat docks were installed at Pierre Lake campground and Lake Ellen West boat launches. All recreation standards will be met at the Sullivan Lake Recreation Complex with the completion of that expansion and renovation project and the trailhead facilities at North Fork Silver Creek. These changes and improvements are being noticed and appreciated by the public. There is still need for rehabilitation and reconstruction of facilities at several trailheads and campgrounds. The physical, social and managerial settings for the Recreation Opportunity Spectrum (ROS) class of Roaded Natural appears to have exceeded (better than minimum requirement) guidelines and site conditions.

The Forestwide objective of bringing these developed sites up to standard is progressing slowly due to a shortage of funding for this work. Reports of deteriorating and vandalized structures, water lines and vault toilets are on the increase. Weekend demand of many developed sites is greater than supply. Heavy maintenance of improvements is being accomplished on districts as budgets allow. Major replacement and reconstruction of recreation sites is falling behind due to the lack of capital improvement program funding. Improvements to signing, host sites, accessibility, and interpretation have been made when opportunities and funding are available.

While ROS classification appear to be within variability limits, more dispersed recreation sites are showing the signs of heavy recreation use. The physical, social and managerial settings for these other ROS classes appear to meet guidelines and site conditions to provide a broad spectrum of ROS settings.

The new Infrastructure database (INFRA) has been loaded at the Supervisor's Office and will house inventories of developed and dispersed recreation sites, as well as recreation use data and information regarding accessibility of sites and trails. Inventories will concentrate not only on quantity of use, but also on quality and degree of user satisfaction. A great deal of individual time will be involved in the implementation of this new program.

#### **Recommended Action**

Results Acceptable/Continue to Monitor. Results of site-specific monitoring and recreation reports indicate further evaluation is needed to continue rehabilitation of existing sites and respond to visitor needs. Inventories, evaluations and management strategies are still needed address numbers and types of users, resource damage and user conflicts. More education and enforcement is needed than is currently available. Specific developed and dispersed recreation areas of concern to recreation managers and visitors include; Pioneer, S. Skookum, Panhandle, Browns Lake, Ferry Lake, Middle Fork Calispel, Tacoma Creek, North Fork Chewelah Creek, and No Name Lake.

## **MONITORING ITEM 4**

### **Recreation Trail Use**

#### **Forestwide Goal**

To provide for a spectrum of recreational experiences and trail development within each recreation opportunity spectrum (ROS) class.

#### **Purpose of Monitoring**

To determine if the Forest Plan standards and guidelines are being met and to assess the effects of trail use.

### **Standard**

Capacity of each ROS class should be within 90 percent of the physical, social and management setting criteria.

### **Summarized Results**

Monitoring consisted of visual inspections, trail counters, registration boxes, user surveys and visitor contacts. Trail use was found to be within 90 percent of the ROS class criteria. Trail counters were located on various trails across the Forest, including an infrared counter at Frater Lake to record cross country skier visitation.

Trail use continues to grow on the Forest. Survey information indicates more multi-day trips along the Kettle Crest, as well as an increase in mountain biking and winter use Forestwide.

### **Evaluation**

Monitoring indicates that Forest Plan Standards and Guidelines are being met. All districts reported that trail registration card comments indicated that users were generally satisfied with their recreation experience, and complimentary of the trail maintenance. No major conflicts of use were reported, and district trail brochures and maps are well received. The Copper Butte fire is still having an impact on trails within the burn area. The Old Stage trail has been effectively closed to the majority of users and repair of the trail has not been accomplished due to funding constraints.

Winter recreation opportunities were expanded through the development of a cooperative Sno-park on Scatter Creek road. Ferry County Parks and Recreation Dept. is administering the Sno-park with the assistance of State funds. Planning is proceeding on the Ryan Cabin and Sherman trails that are scheduled for reconstruction in 1996. Fifteen miles of trail were reconstructed at North Fork Silver Creek. Four campsites were reconstructed. And, an accessible restroom and a loading ramp also installed.

### **Recommended Action**

Results Acceptable/Continue to Monitor. Future trail planning should be focused on maintenance of existing heavily-used trails.

Continue to develop and implement a system across the Forest for assessing trail use and visitor needs.

## **MONITORING ITEM 5 Semi-Primitive Setting**

### **Forestwide Goal**

To manage these areas to protect the existing natural character and provide opportunities for dispersed, nonmotorized and motorized recreation experiences.

### **Purpose of Monitoring**

To ensure the desired physical, social, and managerial setting for each recreation opportunity spectrum (ROS) class is achieved and that these areas remain in an unroaded condition.

### **Standard**

The desired physical, social, and managerial setting for the ROS class should be achieved.

### **Summarized Results**

Monitoring was conducted through the use of observations and trail counts. Several trail counters were installed along various trails. Trail registration cards indicated visitor satisfaction with the recreation experience.

### **Evaluation**

Observations and trail counts that were completed indicate that ROS class criteria are being met. The use in the area and trail maintenance met requirements for Semi-Primitive Non-motorized Recreation. However, problem still occur with unauthorized motorized use of several trails within MA-11 (and MA-3B) most notably Barnaby Butte Trail, Thirteenmile Trail, Midnight Ridge Trail and the Kettle Crest. These reports are sporadic in nature and the use would be virtually impossible to stop given current funding levels. Compliance with management objectives will continue to rely on distribution of the Forest Travel Plan Map for education and relying on users to self patrol the area and notifying the Forest of violators.

The Snow Peak multi-season permanent shelter is almost complete. This partnership effort will provide temporary shelter in the Sherman Peak/Snow Peak backcountry area for user safety and resource protection.

### **Recommended Action**

Results Acceptable/Continue to Monitor. Interest in the Snow Peak shelter project indicates the need to consider a reservation system to assist with maintenance costs.

## **MONITORING ITEM 6 Off-Road Vehicle Use**

### **Forestwide Goals**

To ensure off road vehicles (ORV) are used on the Forest in an appropriate manner, compatible with other Forest uses, and as prescribed in management area objectives.

### **Purpose of Monitoring**

To determine if Forest Plan standards and guidelines are being met and to assess the effects of ORV use.

### **Standard**

Off-road vehicle (ORV) use will meet appropriate Forest Plan Standards and Guidelines.

### **Summarized Results**

Monitoring was conducted through the use of field reviews, user surveys, observations and trail counts. Several trail counters were installed along various trails. The Colville District ORV trail ranger contacted students in local schools promoting the Tread Lightly program. User contacts were made in the Middle Fork Calispel area through an information stop on the road during Labor Day weekend.

Motorcycles and ATV use continues to increase in certain areas. Heavy use has been observed in Middle Fork Calispel and Tacoma Creek drainages on holiday weekends. Of the users checked, 90% were not in compliance with State and Federal laws, including spark arrestors and required permits. There are no facilities for these users in this area and use is occurring in dispersed sites, within riparian areas, and on roads.

Resource damage continues to occur, within areas of LeClerc Creek and Old West Branch Campground, in the form of soil displacement, compaction, and removal of vegetation. The impacts come from trails created by ORV use in areas not officially dedicated to ORV use. The Salmo-Priest Wilderness trailhead was visited during the winter to verify reports of snowmobile use in the wilderness.

### **Evaluation**

ORV use within dispersed sites, on roads, and within riparian areas is creating a safety hazard in some areas and is also resulting in varying degrees of resource damage. Trails causing unacceptable soil displacement have been blocked by barriers under T&E habitat improvement projects for the Whiteman timber sale in the LeClerc Creek and Old West Branch Campground areas. Damage is becoming unacceptable and will soon require mitigation. An increasing problem on some multi-purpose trails is the use of 4-wheel drive vehicles on existing trails designed for single track vehicles.

Efforts have been made in the Middle Fork area to inform the users, but it is too soon to tell whether these efforts have been successful. One road system was converted to a trail to accommodate the ORV use and attempt to meet standards and guidelines for the area. In the Tacoma Creek area, the district does not feel standards and guidelines are being met. Post and pole fencing was installed along a meadow near Phillips Lake to deter motorized travel in riparian areas.

Snowmobile use in the Salmo-Priest Wilderness is violating Standards and Guidelines for Management Area 9. Signing has been added to trailheads informing users that the trails, and Wilderness itself, are closed to snowmobiles and other motorized and mechanized equipment.

Problems were reported with noxious weeds on closed roads. Informal monitoring indicated infestations of noxious weeds on most roads, open and closed, on the Republic Ranger District. Since the majority of these infestations are confined to the

roadway, it is assumed that spread of weeds is most likely associated with vehicular traffic rather than livestock and/or wildlife.

### **Recommended Action**

Further Evaluation/Determine Action. Although monitoring indicated that some resource damage is occurring, the results are still inconclusive due to a lack of consistency in defining acceptable levels of resource damage specifically attributed to ORV use. It is recommended that the monitoring procedures pertaining to the effects of ORV use on other resource values be evaluated and that additional monitoring be conducted. Opportunities to educate all types of ORV users should be optimized.

## **MONITORING ITEM 7**

### **Visual Quality Objectives**

#### **Forestwide Goal**

To maintain or enhance scenic qualities on the Forest, with emphasis on scenic viewsheds and foreground and middleground areas seen from sensitive view areas as prescribed by the Forest Plan.

#### **Purpose of Monitoring**

To ensure the Forest Plan visual quality objectives are being met.

#### **Standard**

Forest Plan Standards and Guidelines for meeting visual quality objectives.

#### **Summary of Results**

Forest monitoring trip results and field observations were made for several current timber sales.

#### **Evaluation**

Forest Plan visual quality objectives are generally being met with the exception of management activities within some areas with a modification visual quality objective. Management within foreground and middleground areas, in most cases, is meeting or exceeding (doing better than the minimum requirement) visual quality objectives. Mitigation measures for protecting trails are not consistently being included in timber sale environmental assessments.

#### **Recommended Action**

Change or Clarify Management Practices. Management direction regarding how to achieve visual quality objectives for trail corridors within or near harvest areas requires clarification. Review and begin implementation of the Trail Management Guidelines developed as a result of the 1993 Monitoring Report's recommendations

Recommend that the Forest Landscape Architect provide training on the Forest by winter FY96 to increase understanding of how to meet visual quality objectives.

## **MONITORING ITEM 8**

### **Wilderness**

#### **Forestwide Goal**

To preserve the wilderness characteristics of the Salmo-Priest wilderness in conformance with existing legislation.

#### **Purpose of Monitoring**

To ensure the wilderness is being protected or enhanced.

#### **Standard**

Forest Plan Standards and Guidelines/Minimum limits of acceptable change.

#### **Summarized Results**

The Salmo-Priest Wilderness Standards and Guidelines Environmental Assessment has been completed and signed by the Colville Forest Supervisor. Final approval of this assessment amends both the Colville and Idaho Panhandle National Forest Plans by providing detail, measurable social and physical standards.

In 1995, a Wilderness Ranger and one Student Conservation Association volunteer monitored the proposed standards for resource and social indicators as set forth in the 1994 draft document. About 80 percent of all trailed areas were monitored, as well as the most frequently traveled untrailed areas. Because about 2/3 of the wilderness campsites were inventoried in 1994, no further physical measuring of campsites was done in 1995.

#### **Evaluation**

Monitoring the standards and guidelines outlined in the draft Limits of Acceptable Change for the Salmo-Priest Wilderness during 1994 indicated that standards are being met or exceeded (better than the minimum requirement). Approximately 8 new campfire rings were naturalized wilderness-wide in order to maintain campsite density at or below the maximum numbers to meet standards. Campsite conditions are generally within standards for amount of barren core mineral soil and amount of vegetation loss per campsite. Two of the three largest campsites in the Salmo Basin were identified in 1994 as growing and not complying with the baseline standard for barren core mineral soil. These same two sites are more than likely out of compliance with the same standard in 1995, and therefore the variability threshold as well. These standards will be more stringent in the future under the finalized document. The standards for campsite solitude, and numbers of encounters, were not observed to be out of compliance.

#### **Recommended Action**

Results Acceptable/Continue to Monitor. Implement the standards for resource and social indicators set forth in the LAC/WIS Plan (Limits of Acceptable Change/Wilderness Implementation Schedule).

## **MONITORING ITEM 9**

### **Wild And Scenic Rivers**

#### **Forestwide Goal**

To protect the outstanding remarkable values of the Kettle River that contribute to its eligibility as a potential Wild and Scenic River.

#### **Purpose of Monitoring**

To determine if the Forest Plan standards and guidelines for protection of the Kettle River are being met.

#### **Standard**

Resource condition or level of activities should not lower the potential for Wild and Scenic River designation and must meet or exceed (do better than the minimum requirement) the Forest Plan standards and guidelines.

#### **Summarized Results**

No management activities occurred or were planned during FY 95 within the Kettle River corridor.

#### **Recommended Action**

Results Acceptable/Continue to Monitor.

## **MONITORING ITEM 10**

### **Deer and Elk Winter Range**

#### **Forestwide Goal**

To manage habitat to meet big game management objectives per Management Prescriptions 6 and 8, pertinent Forest Plan Standards and Guidelines, Desired Future Conditions, and Forest Plan Appendix B.

#### **Purpose of Monitoring**

To determine if:

- I-1 Cover units on managed winter ranges are maintained as defined in prescriptions for Management Areas 6 and 8 (30% of cover stands west of Kettle Crest and 20% of cover stands east of Kettle Crest to be maintained in snow intercept thermal cover);
- I-2 Distances between cover units are being maintained an average of 600 feet or less;
- I-3 Winter ranges are being maintained toward cover/forage ratios of 50:50;
- I-4 Open road densities are being maintained below the prescribed levels on Management Areas 6 and 8 (Road densities not to exceed 0.4 mi/mi<sup>2</sup> on all elk winter range and mule deer winter range in Ferry County. Road densities not to exceed 1.5 mi/mi<sup>2</sup> on the rest of deer winter range areas).

### **Standard**

Habitat condition and trend will not be allowed to deteriorate for more than 3 years or more than 5% in any one Wildlife Management Unit (Resource Shed).

### **Summarized Results**

Existing (pre-treatment) winter deer habitat conditions (availability and distribution of cover and forage, and open road densities) were evaluated within selected winter range areas on all Districts, in conjunction with efforts covering several large timber sale planning areas, including Mill, Addy-Chewelah, Sherman, New Moon, Eagle Rock, and Wolfman.

Winter range management activities (outside of timber sales) included 1,058 acres of prescribed burning, 187 acres of seeding and/or pruning to improve shrub availability, 25 road closures, and over 22,000 acres of surveys to determine future project needs. The Rocky Mountain Elk Foundation continued to be a major partner, enhancing the Forest's ability to fund needed habitat improvements.

### **Evaluation**

#### **I-1 Availability and Distribution of Winter Cover**

I-3 to Existing (pre-treatment) habitat conditions in many areas often do not meet the desired conditions described in the Forest Plan. In some areas, existing vegetative patterns and age of timber stands makes it difficult, if not impossible, to achieve the desired 50/50 forage/cover ratios, prescribed levels of snow intercept thermal cover, and/or distances between cover units during a single timber sale entry. The nature of this problem varies, with some areas severely lacking in cover, and other areas lacking sufficient forage. However, progress is being made, and in most cases, Districts are able to protect existing cover values and move toward achievement of Forest Plan objectives during timber sale planning.

I-4 As with cover/forage conditions, current open road densities in some areas do not meet Forest Plan objectives, often due to the presence of roads not under Forest Service control. Road Closures, like the 25 completed during 1995, and others being prescribed during timber sale planning, continue to show progress toward meeting the desired conditions.

### **Recommended Action**

I-1 Results Acceptable/Continue to Monitor. The timber sale planning process to continues to show progress toward meeting Forest Plan objectives for winter deer I-3 habitat. Additional emphasis should be placed on post-sale monitoring to insure planned forage and cover improvements and protection measures are being implemented.

I-4 Results Acceptable/Continue to Monitor. Efforts to reduce open road densities need to continue, as should monitoring to determine the effectiveness of road closures.

## **MONITORING ITEM 11**

### **Primary Cavity Nesters**

#### **Forestwide Goal**

To maintain standing dead and defective trees and down trees for habitat for primary cavity excavators as provided in the Forest Plan.

#### **Purpose of Monitoring**

To determine whether or not snags or defective trees that provide suitable habitat for primary cavity excavators are being maintained as prescribed by the Forest Plan within timber harvest units, and if these densities are being maintained throughout the harvest rotation of these stands.

#### **Standard**

Maintain sufficient standing dead and defective and down dead trees to support at least 60% of the potential populations of primary cavity excavators. (Note - timber sales initiated after August, 1993 must provide sufficient dead/defective trees to provide for 100% of potential cavity excavator populations.)

#### **Summarized Results**

Districts reported that current timber sale planning and marking activities are in compliance with Forest Plan direction regarding retention of snags and green replacement trees. However, only 2 Districts (Colville and Newport) conducted any monitoring of closed timber sales to assess post-harvest snag and/or downed log densities within harvest units. Low funding levels, and other, higher priorities were described as reasons why this monitoring item continued to receive so little emphasis during 1995. Only one of these monitored sales (Fawn Swamp - Newport Ranger District) provided both pre and post-harvest snag and downed log data, so the sample size available for analysis was very small. Monitoring results indicate that Forest Plan standards regarding retention of snags within timber sale units are not being met during timber sale implementation and post-harvest activities (site preparation and fuelwood harvest).

Management activities directed toward primary cavity nesters included the creation of over 400 snags and 120 nest boxes, and maintenance on over 400 existing nest boxes.

#### **Evaluation**

Although available information continues to indicate that Districts are prescribing and marking sufficient snags and replacement trees during timber sale planning to meet Forest Plan requirements. However, efforts to retain these snags during and after the timber harvest are insufficient to provide the desired snag densities after the sale and through time. None of the post-harvest units monitored met the Forest Plan requirements for snag retention. The monitoring on Newport Ranger District was conducted before site preparation and any post-harvest firewood collection had been conducted. Cutting of snags for safety concerns was cited as the reason these sale units failed to meet Forest Plan requirements, because pre-harvest surveys in 1993 indicated an abundance of snags in the units monitored. These units should be

monitored again after burning to determine in additional snags are created during site preparation.

### **Recommended Action**

Change or Clarify Management Practices. As stated in previous Monitoring Reports (1992-1994), the Forest is not meeting post-harvest requirements for snag retention. Snag falling to meet safety concerns and post-harvest firewood cutting effectively nullify most efforts to prescribe and mark trees for snag retention during timber sale planning. Changes in snag marking practices should be developed to address safety concerns, and tighter restrictions on post-harvest firewood cutting are needed.

## **MONITORING ITEM 12 Old Growth Dependent Species**

### **Forestwide Goal**

To ensure essential habitat is being provided for wildlife species that require old-growth forest components, and diversity of such wildlife habitats and plant communities is maintained in accordance with Forest Plan direction.

### **Purpose of Monitoring**

To determine whether or not old-growth habitat is being managed in sufficient quantity and quality to maintain viable populations of old growth dependent species and to meet management objectives for the barred owl indicator species.

Monitoring reports for marten and pileated woodpeckers have been moved from Management Indicator Species (Monitoring Item 13) to this Monitoring Item. This was done to provide a more comprehensive analysis and assessment of monitoring for old-growth dependent species.

### **Standard**

MA-1's (and associated foraging areas), and pileated woodpecker and marten MRs are maintained as described in the Management Prescription and Forest-wide Standards and Guidelines.

### **Summarized Results**

Analysis of 9 MA-1 areas, 45 marten, and 7 pileated woodpecker MR areas was conducted during Fiscal Year 1995 in conjunction with timber sale area planning on all Districts. Actions taken on individual Districts are shown below:

Colville Ranger District: Two MA-1 areas were proposed for enlargement and additional foraging habitat was identified for 6 MA-1 areas as part of the Addy-Chewelah analysis. In addition, the locations of 11 marten and 2 pileated woodpecker areas were refined based on improved mapping data.

Kettle Falls Ranger District: Old-growth habitat within the Sherman watershed is in very short supply. One MA-1 area, 15 marten, and 3 pileated woodpecker areas were examined. In general, these areas do not meet desired conditions as described in the Forest Plan, but better areas are not available for substitution.

Three marten areas were surveyed with remote cameras. Four camera sites were established and operated for a total of 98 “trap nights”. No marten were detected by this effort.

Newport Ranger District: In the New Moon planning area, one MA-1 area was examined and evaluated as barred owl habitat. Although snags and downed woody material were not abundant, the overall area achieved a good score (41 out of 60 points) on the Barred Owl Habitat Scoresheet, and barred owls responded to calling in the area. In addition, 12 marten and 2 pileated woodpecker areas were evaluated. All had suitable habitat conditions, and pileated woodpeckers were seen and heard within the units.

Republic Ranger District: A pileated woodpecker unit within Eagle Rock planning area was enlarged to meet Forest Plan standards. An additional 304 acres of foraging habitat were delineated as part of the analysis.

Sullivan Lake Ranger District: Within the Wolfman timber sale area, one MA-1 area was realigned to include the best available habitat. Evidence of barred owl use was present.

### **Evaluation**

Available information indicates that Districts continue to identify and protect the best available habitat for MA-1, marten, and pileated woodpecker areas, within the confines of the grid system established in the Forest Plan. Therefore Forest Plan direction is being met. Because this grid system was based on a desire to provide old-growth habitats uniformly distributed across the Forest, situations will continue to arise when field examinations reveal that the designated areas do not currently meet desired conditions.

### **Recommended Action**

Results Acceptable/Continue to Monitor.

## **MONITORING ITEM 13 Management Indicator Species**

### **Forestwide Goal**

To manage habitat in compliance with Forest Plan standards and guidelines for pileated woodpecker, northern three-toed woodpecker, Franklin's grouse, blue grouse, raptors and great blue heron, northern bog lemming, marten, and unique habitat components.

### **Purpose of Monitoring**

To monitor the amounts of habitat for the management indicator species and to evaluate the effectiveness of these habitats through utilization and population trends.

### **Standard**

Defined management objectives and Standards and Guidelines must be met.

### **Summarized Results**

- I-1 Marten, Pileated and Three-toed Woodpecker Habitat  
See Old-Growth Dependent Species section of this report.
  
- I-2 Franklin's Grouse/Lynx Habitat  
Lynx habitat was mapped and assessed in conjunction with analyses for the Addy-Chewelah, Sherman, and New Moon planning areas. The lynx range map within the Sherman analysis area was adjusted to accommodate sightings of lynx tracks within the watershed. Lynx habitat improvements were planned within the New Moon area. Sixty miles of lynx track surveys were conducted on the Kettle Falls District. One set of lynx tracks was recorded.
  
- I-3 Blue Grouse Habitat  
No specific monitoring for blue grouse was conducted in Fiscal Year 1995. Suitable habitat for blue grouse was mapped within the Addy-Chewelah planning area.
  
- I-4 Raptor and Great Blue Heron Habitat  
Goshawk surveys were conducted in the Mill, Addy-Chewelah, Sherman, and Wolfman planning areas. Existing nests within the Crown and Exposure-Snyder timber sales were monitored. In the Crown Sale, the nest has not been active for the past 5 years, even though a 40 acre buffer was used at the time of the sale. It is unknown if this territory had any alternate nest sites. In the Exposure-Snyder sale, the goshawks abandoned the nest site used in 1994 and apparently moved to an alternate nest approximately 1/2 mile away. At least 1 young was fledged from this nest, and the sale was modified to protect this new location.

### **Evaluation**

Results indicate that Districts are following Forest Plan direction with regard to planning to provide and/or protect habitat conditions for Management Indicator Species. Implementation monitoring (assessment of post-harvest conditions) continues to be treated as a lower priority than other projects, and it has been difficult to collect large enough sample sizes to draw conclusions regarding many management practices.

### **Recommended Action**

Results Acceptable/Continue to Monitor. Additional emphasis on monitoring and assessing post-harvest habitat conditions is needed.

## **MONITORING ITEM 14**

### **Threatened, Endangered and Sensitive Species**

#### **Forestwide Goal**

Habitats for threatened, endangered, and sensitive species will be protected and managed as provided for by Forest Plan Standards and Guidelines. Assess whether the above direction is providing the anticipated and desired results.

#### **Purpose of Monitoring**

to determine whether:

- I-1 Habitat for caribou is being managed to provide seasonal components to support the Forest's portion of a fully recovered population.
- I-2 Habitat for grizzly bear is being managed as directed in the Interagency Grizzly Bear Guidelines and the Forest Plan.
- I-3 Habitat for bald eagles is being managed in accordance with national policy, Recovery Plan, and Forest Plan.
- I-4 Any occurrences of gray wolves, peregrine falcons, or other T&E species are being documented, their activities monitored, reported to other responsible agencies, and essential habitats are being managed in compliance with recovery plans.
- I-5 Sensitive species lists for the Forest are current and updated as new information becomes available. Pertinent information is being collected and submitted to the proper agencies.
- I-6 Pertinent Biological Evaluations, consultations, etc. are being conducted and they include the required information to ensure Forest activities do not adversely affect the status or survival of TES species.

#### **Standard**

No reduction in population is acceptable. No more than 2% reduction in modeled habitat suitability.

#### **Summarized Results**

- I-1 Caribou Habitat  
Only Sullivan Lake Ranger District has designated caribou habitat. No activities were reported regarding caribou monitoring. Work on a caribou population augmentation plan was conducted in cooperation with the USFWS and WDFW.
- I-2 Grizzly Bear Habitat  
Although all Ranger Districts assess grizzly bear habitat suitability during Biological Evaluations, only Sullivan Lake Ranger District has designated recovery habitat for this species. Road closure effectiveness within the grizzly bear recovery area was monitored through the use of 17 traffic counters, periodic checks in other areas, and 176 person-hours of Forest road patrols during summer holiday weekends and hunting seasons. A total of 14 violations were documented with incident reports. The emphasis for the Forest road patrols was to educate visiting forest users about grizzly bear and caribou seclusion needs and the reasons for road closures.

Follow-up monitoring on 9 grizzly bear reports and investigation of a grizzly bear poaching incident also occurred during the Fiscal Year.

Grizzly bear habitat improvements included 6 road closures and 24 acres of forage seeding.

I-3 Bald Eagle Habitat

Bald eagle surveys were conducted by the Kettle Falls Ranger District along the Columbia and Kettle Rivers. No eagles were located on National Forest lands.

An eagle nest located adjacent to National Forest lands was monitored in conjunction with other activities in the area. This nest fledged 3 young in 1995.

I-4 Wolf Reports Being Investigated

Follow-up monitoring of 7 wolf sighting reports was conducted by District wildlife biologists during Fiscal Year 1995. None of these reports revealed conclusive presence of wolves. One report was determined to be a cougar.

I-5 Maintenance of Sensitive Species List & Distribution of Information

Sensitive species lists (animals and plants) were maintained to provide current information on species occurrence across the Forest, and all pertinent information was shared with other appropriate State and Federal agencies. The Forest is consistently 100% in compliance with this monitoring item.

I-6 Biological Evaluation Being Conducted as Prescribed

Ninety three Biological Evaluations were completed in Fiscal Year 1995. Thirty two of these required informal consultation with the USFWS, and all were in compliance with established direction.

E-2 Number of Sensitive Species Sites Monitored

Sensitive plant sites were monitored in compliance with existing direction, Approximately 287,000 acres of land were surveyed to determine presence of sensitive plants populations during project planning.

### **Evaluation**

Districts are continuing to comply with existing direction regarding protection of habitat for threatened, endangered, and sensitive species. In addition to the species reported above, additional surveys for peregrine falcon and Townsend's big-eared bat were conducted by District personnel and/or volunteers. Biological evaluations are being completed for all projects, and District wildlife biologists made significant progress during Fiscal Year 1995 to streamline the analysis and documentation process without compromising the quality of the results. Coordination and communication between the forest and the USFWS is very good.

### **Recommended Action**

Results Acceptable/Continue to Monitor. As time and funding permit, the Forest should continue to conduct periodic surveys for wolves, bald eagles, peregrine falcons, lynx, wolverine, etc. over broad land areas to maintain current baseline information, as well

as project specific surveys for other less-mobile or sedentary species (bats, plants, etc.). The Forest should also continue to prioritize sensitive plant sites for follow-up monitoring based on population risk and project information needs.

## **MONITORING ITEM 15**

### **Fisheries**

#### **Forestwide Goal**

To manage fish habitat and populations, as directed in the Forest Plan, to meet the projected "desired future condition" and projected habitat improvements.

#### **Purpose of Monitoring**

- I-1 To determine if fisheries Standards and Guidelines are being applied to timber sales;
- I-2 To determine if the timber sale program on the Forest is helping to achieve the desired future condition for fisheries habitat;
- I-3 To determine if fish habitat improvement projects are being planned, funded, and implemented as described in the Forest Plan;
- I-4 To determine if fish habitat capability is improving in streams where habitat improvement projects are being implemented.

#### **Standard**

Habitat condition should not vary more than 50 percent from what was expected in the project analysis.

#### **Summarized Results**

I-1 & I-2

##### **Colville RD**

Fisheries analysis for the Mill timber sale was reviewed for this item and detailed in Monitoring Item 2 of this year's monitoring plan. Interim direction for riparian habitat limit the amount of activities that may occur within riparian habitat conservation areas. As such, little direct impacts to riparian areas have occurred as a result of this project.

##### **Kettle Falls RD**

Timber sale planning has attempted to incorporate habitat improvement projects when possible. Stream crossings are being planned in accordance with established BMPs to address fisheries habitat concerns. District analysis of timber sales does indicate that each one will contribute additional sediment to streams. The effect this additional sediment has on fish habitat quality is uncertain. The timber sale program helps to achieve DFCs for fisheries by improving stand conditions adjacent to RHCAs to reduce the chance of catastrophic fire and disease, therefore protecting the trees that contribute bank stability, large woody debris, and shade to the streams.

**Newport RD** Riparian zones were not actively managed, this decision was made to meet the “screens”. The riparian zones are limited on hardwood trees, active management could have provided opportunities for species such as aspen and cottonwood. The opportunity still exists for future projects. Fisheries standards and guidelines from the Forest Plan are being applied to this sale. Stream crossings on fish bearing streams in this sale are passable to fish. No key components in the stream and riparian zone have been identified for maintenance or improvement.

I-2 Stream crossings and road drainage were designed to minimize impacts to fish and their habitats. The timber sale achieved the DFC for the riparian zone.

**Republic RD** No sales were monitored in 1995 since no sale activity occurred near fish-bearing streams. Fisheries input to Copper Butte Salvage was provided by a fisheries biologist.

**Sullivan Lk. RD** No sales were monitored in 1995 since no sale activity occurred near fish bearing streams.

I-3

**Colville RD** Frequency and duration of monitoring item I-3: All fish habitat improvement projects completed in the previous year.

Fish Habitat structures (large woody debris) were installed in streams associated with Middleport and Leroy salvage timber sales. All identified BMPs for these sales were implemented during road construction/reconstruction and timber harvest activities.

**Kettle Falls RD** The district improved fisheries habitat by installing 13 fish structures.

**Newport RD** One hundred percent of this fiscal years fish habitat improvement projects from the Activity/Project Schedule were funded and completed this year.

**Activity/Project Schedule**

Type	KV	PM
Structures	20	25
Acres	20	23

**Republic RD** San Poil Fish Habitat Enhancement was completed as prescribed by the Ninemile/Thirteenmile Watershed Analysis. Five Structures were placed in addition to bank stabilization and

other enhancements to reduce impacts to fishery habitat from recreationists.

- Sullivan Lk. RD** No Fish Habitat Enhancement was completed this year.
- I-4 **Colville RD** Frequency and duration of monitoring of item I-4: 25% of all projects completed in the previous year; 10% of all projects completed in the previous three years; and 5% of all projects completed in the previous 10 years.  
  
No monitoring of this item occurred for fiscal year 1995.
- Kettle Falls RD** The structures are improving fish habitat by creating cover, protecting bare slopes, providing habitat diversity, storing sediment, and increasing depths.
- Newport RD** The Calispell Creek Trout Habitat Improvement Project had a pool:riffle ratio of 39:61 before the project and is estimated to be 60:40 after the project. The project completed the structures, riparian planting, and the interpretive signs. The planting was not successful because of a bad growing season (dry) during the summer of 1994.
- Republic RD** One watershed improvement project was monitored and found to have resulted in the improvement of fish habitat conditions on North Fork O'Brien Creek.
- Sullivan Lk. RD** Monitoring of the structures revealed that they are improving fish habitat by creating cover, providing habitat diversity, storing sediment, and increasing depths.

**Evaluation**

- I-1 All timber sales reported were in compliance with Forest Plan Standards and Guidelines.
- I-2 On the Kettle Falls RD, the timber sale program helps to achieve the DFCs for fisheries. The Newport Ranger District did not feel that following the screens allowed them to manage riparian vegetation to meet fisheries DFCs. The other districts did not monitor for this item.
- I-3& I-4(E-1). Appendix B of the Forest Plan (p. B-1) structures (check dams, boulder placement, etc.) describes the estimated annual accomplishment of both structural and nonstructural fisheries habitat improvement work for the Forest for the planning decade. The FY95 accomplishment of 69 structures and 43 acres of habitat improvements met the assigned target accomplishment for the Forest through the annual program budget.

District	Structures	Acres
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Colville	7	0
Kettle Falls	13	0
Newport	45	43
Republic	4	0
Sullivan Lake	0	0
Total	69	43

**Recommended Action**

- I-1 Results Acceptable/Continue to Monitor.
- I-2 Results Acceptable/Continue to Monitor. Last year there was a need for the Forest to develop site specific DFCs. Until this is accomplished the Inland Native Fish Strategy Riparian Management Objective’s can be used as DFC to monitor our activities.
- I-3 Results Acceptable/Continue to Monitor.
- I-4 (E-1). Results Acceptable/Continue to Monitor. Forest fisheries biologist(s) and hydrologist(s) need to continue to be involved in project design and monitoring.

**MONITORING ITEM 16  
Range Improvements**

**Forestwide Goal**

All range improvements planned and financed shall be constructed to Forest Service standards and maintained as described in the annual Permitted Plan instructions.

**Purpose of Monitoring**

To ensure that utility, safety, and aesthetic values are protected in construction of improvements and that economic requirements are met and maintained measured in miles and number of improvements monitored.

**Standard**

All construction is expected to meet the established standards as set forth in Forest Service Handbook 2209.22. All prescribed maintenance is to be performed.

**Summarized Results**

All improvements implemented during FY95 were monitored by the Districts during installation to insure conformance with standards provided in Range Improvement Handbook or other standard practices for projects not covered in the FSH. Copies of the Range Improvement Data Sheet, FS-2200-127 are contained in the files.

**Evaluation**

Monitoring results indicate that range improvements are in conformance with standards although there are some situations where the goal of achieving permittee involvement is still not being met.

**Recommended Action**

Results Acceptable/Continue to Monitor. All new construction and reconstruction should conform to the standards in effect with permittees invited to participate in the process.

**MONITORING ITEM 17**  
**Livestock Permitted**

**Forestwide Goal**

The Forest will permit 35,000 animal unit months (AUMs) annually, plus or minus 10 percent.

**Purpose of Monitoring**

Determine the ability of the Forest and the permit system to meet the output level of the Plan.

**Standard**

Permitted AUMs should not fall more than 10 percent below the desired level.

**Summarized Results**

Permitted AUMs of grazing use for FY95 were as follows: in total 34070 AUM of grazing were authorized by the Colville National Forest under term permit and 348 AUMs were authorized under temporary permit for a total of 34,418 AUMs.

A total of 786 AUMs of authorized non-use was granted. In addition several allotments are currently vacant due to recent cancellations, and a sheep allotment has been vacant for some time.

**Evaluation**

The monitoring results show that 1995 AUMs of grazing (34,418 AUMs) are well within the threshold of variability (10%) established for this monitoring item.

**Recommended Action**

Results acceptable, continue to monitor.

## MONITORING ITEM 18 Utilization Of Forage

### Forestwide Goal

The Forest's forage resource will be used according to Forest Plan standards and guidelines.

### Purpose of Monitoring

To meet proper use standards in the Forest Plan ensuring that the forage resource is maintained in a healthy and productive state.

### Standard

Forage utilization should not be greater than what is prescribed in the Forest Plan standards and guidelines. The Colville National Forest Monitoring Guide contains a schedule determining when a specific allotment should be monitored. During the summer of 1995 many more allotments were monitored due to work associated with reissuing permits. Grazing utilization was considered for the allotment as a whole.

### Summarized Results

Table 2.1 summarizes forage utilization monitoring results for fiscal year 1995. The second column indicates the predicted overall compliance with maximum annual utilization (percent) standards at the end of the grazing season.

**Table 2.1** Forest Utilization Results by Allotment

Allotments	Predicted Compliance With Utilization Standard
<b>Colville RD</b>	
Gillette	In Compliance
Twelve Mile	Inconclusive
Silver Creek	In Compliance
S. Fk. Chewelah	In Compliance
N. Fk. Chewelah Cr.	Inconclusive
<b>Kettle Falls</b>	
Bangs Mt.	In Compliance
Churchill	Out of Compliance
Jasper	In Compliance
<b>Newport</b>	
Calispell Creek	Out of Compliance
<b>Republic</b>	
Braken	In Compliance
Quartz	In Compliance
S.Fk. St. Peters	In Compliance
Graphite	In Compliance
N.Fk.St.Peters	In Compliance
Empire	In Compliance
<b>Sullivan Lake</b>	
LeClerc Cr.	In Compliance

### Evaluation

Overall, the monitoring results indicate that for the 1995 grazing season, utilization was in compliance with the Forest Plan Standards and Guidelines. Those allotments

which are shown with inconclusive results were monitored too early in the season to predict the final utilization figures.

**Recommended Action**

Results acceptable, continue to monitor. Many allotments will have improvement work done on them as part of the mitigation work required during permit reissuance. We will monitor this work for effectiveness. We plan to reduce stocking numbers on the Bracken Allotment and will be monitoring this for effectiveness. More training on range sampling methods is recommended.

**MONITORING ITEM 19**

**Condition Of Riparian And Range Resources**

**Forestwide Goal**

To ensure that range ecosystem types, within all range allotments, are in satisfactory condition. Satisfactory condition is defined as being at least fair condition with an upward trend based upon site potential.

**Purpose of Monitoring**

To provide evidence that management activities are effective and the resource is capable of producing forage on a sustained yield basis without deterioration of the resource.

**Standards**

No range type within an allotment or unit may be in less than satisfactory condition.

**Summarized Results**

This item was not specifically monitored in the range analysis work that was completed in 1995, but the range types and condition were evaluated on many allotments. Some localized riparian reaches were found to be functional at risk as defined by the Riparian Area Management guidelines TR 1737-9 Assessing Proper Functioning Condition. Mitigation measures are being implemented to improve conditions within those reaches.

**Evaluation**

The range and riparian resource when looked at as a whole is in good condition and is sustainable in this condition. There are isolated conditions that are in need of mitigation work and much of this work is planned to be completed.

**Recommended Action**

Results acceptable, continue to monitor. Long term monitoring of range and riparian areas needs to be implemented to determine if a trend exists. A potential solution would be to establish photo points at key areas.

## **MONITORING ITEM 20**

### **Restocking of Lands**

#### **Forestwide Goal**

The National Forest Management Act (NFMA) requires that regeneration of harvested units must occur within 5 years. Tree stocking should be sufficient to meet Forest Plan yield projections.

#### **Purpose of Monitoring**

To determine if harvested lands are being restocked in a timely manner with the proper number, type, and species of trees to meet National Forest Management Act restocking of lands requirements and Forest Plan projections of future yields.

#### **Standard**

Stocking levels are measured against two standards. One standard is the NFMA stocking standard which is based on meeting minimum stocking standards within a five year time frame.

In past years another standard was used, one based on stocking levels tailored to timber outputs projected in the Colville National Forest LMP. This year however, this standard will not be measured. Forest Plan yield projections were based on full implementation of the LMP. Conditions have changed, the implementation of the Interim Management Direction establishing riparian, ecosystem and wildlife standards for timber sales, along with other changes in management direction, have caused a significant difference in the Forest's harvest practices. These changes in harvest intensities have also affected reforestation stocking level intensity. Forest Plan stocking levels are higher (require more trees per acre) than NFMA minimum stocking levels.

#### **Summarized Results**

Seventy eight percent of plantations harvested five years ago have been certified as meeting NFMA stocking standards. In 1990, final removal harvest occurred on 3340 acres. By the end of FY95, 2603 of those acres (78%) had been certified as satisfactorily stocked. The remaining 737 acres are expected to be certified in FY96 and FY97.

After a unit is planted, the success of the planting is monitored, at a minimum, the first and third year after the seedlings are planted. Survival, as well as stocking levels (trees per acres) is monitored. Survival and growth results for 1995 showed an average of 91% survival the first year following planting and an average of 73% survival the third year following planting (see table). 1994 was an exceptionally hot, dry year and this contributed to the low third year survival.

**Table 2.2** Plantation Survival and Growth

<b>First Year</b>	<b>Acres</b>	<b>Percent</b>
Total area sampled	2911	100
Average survival		91
Survival by species:		
Ponderosa pine		86
Western larch		89
Douglas-fir		95
Englemann spruce		96
Lodgepole pine		83
Western white pine		91
<b>Third Year</b>	<b>Acres</b>	<b>Percent</b>
Total area sampled	3751	100
Average survival		73
Survival by species:		
Ponderosa pine		79
Western larch		59
Douglas-fir		85
Englemann spruce		89
Western white pine		78
Certified as restocked with one treatment (planting)		87

In 1995, 2933 acres were planted and 1548 acres were regenerated using natural regeneration methods. Over one million seedlings were planted including Douglas-fir, western larch, ponderosa pine, western white pine, Englemann spruce, and lodgepole pine. Planting was accomplished April through June. Natural regeneration occurred with and without site preparation. Site preparation methods included prescribed burning and machine piling.

**Evaluation**

This is the third year that stocking success five years after harvest has been reported. This reporting requirement, along with the recent implementation of an activity tracking database, will enable Districts to more closely monitor, and achieve stocking within a five-year time frame.

**Recommended Action**

Results Acceptable/Continue to Monitor.

**MONITORING ITEM 21  
Timber Yields**

**Forestwide Goal**

To ensure yields from harvested lands are sufficient to meet Forest Plan projections.

**Purpose of Monitoring**

To validate whether actual yields resulting from harvest are meeting Forest Plan projections.

**Standard**

Actual yields should be within 5 percent of projected yields.

**Summarized Results**

This item is scheduled to be monitored coincident with proposed Forest Plan revision or significant amendments pertaining to timber yields.

**MONITORING ITEM 22**

**Land Suitability**

**Forestwide Goal**

To ensure harvest activities are scheduled only on lands meeting the timberland suitability criteria displayed in Appendix B of the Final EIS.

**Purpose of Monitoring**

To ensure programmed harvest activities are only taking place on suitable lands.

**Summarized Results**

During the timber sale planning process, all proposed harvest units are evaluated for suitability. No harvest units during FY95 were planned on unsuitable ground.

**Evaluation**

The timber sale planning process is the proper vehicle for evaluating suitability of proposed harvest units. Lands are being identified and withdrawn from timber harvest when appropriate. The effect of these withdrawals on the overall land base available for timber management is not known.

**Recommended Action**

Results Acceptable/Continue to Monitor.

**MONITORING ITEM 23**

**Size and Dispersal of Harvest Units**

**Forestwide Goal**

Harvest unit layout, with respect to size and dispersal of openings, will adhere to the Forest Plan standards and guidelines.

**Purpose of Monitoring**

To ensure projects are meeting Forest Plan standards and guidelines and that any proposals for exceptions to unit size limitations follow the notice and review requirements on the National Forest Management Act regulations.

**Summarized Results**

In FY95, no requests were made to go beyond the 40-acre size limitation for regeneration harvests. Forest and District reviews of planned activities indicate that the Districts are adhering to Forest Plan standards and guidelines related to size and dispersal of openings.

**Evaluation**

Harvest unit layout has been consistent with Forest Plan guidelines.

**Recommended Actions**

Results Acceptable/Continue to Monitor.

**MONITORING ITEM 24  
Silvicultural Practices by Management Area**

**Forestwide Goal**

To ensure that areas treated on the Forest are consistent with the Forest Plan projections presented in table 4.10 of the Forest Plan.

**Purpose of Monitoring**

To ensure that treatments are consistent with the Forest Plan. This monitoring item is evaluated by the timber sales through gate 6 in STARS, or, sales which have been awarded in FY95.

**Summarized Results**

**Table 2.3** Timber Sale Acres Awarded By Management Area (MA)

Mgmt Area	Forest Plan Projection			Actual Award Acres		
	EAM	UEAM	Total Acres	EAM	UEAM	Total Acres
2	200	100	300	6	0	6
3A	0	100	100	336	181	517
5	1700	1100	2800	697	287	984
6	500	400	900	194	135	329
7	5200	0	5200	3896	851	4747
8	1600	0	1600	117	31	148
Total	9200	1700	10900	5310	1485	6795
Percent of Project Acres	84%	16%	100%	78%	22%	100%

EAM = even-aged management  
UEAM = uneven-aged management

Of the 5310 acres of even-aged treatment, 30 acres are planned to be Clearcut with Reserve Trees. All planned units will have green trees retained for snag replacement trees. Of the timber sales sold and awarded in 1995 that had acreage in management areas 2, 3A, 5, and 6 (see above table), 33% of the planned harvest is uneven-aged. In management area 7, where all harvest methods are permitted, 18% of the harvest is uneven-aged management and 82% is even-aged. In management area 8, even-aged management is preferred and 79% is even-aged and 21% is uneven-aged.

### **Evaluation**

Timber production and harvesting was a major issue in the development of the Forest Plan. As a response to this issue, standards and guidelines were developed for harvest methods in the different management areas. Unevenaged management is emphasized in management areas 2, 3A, 5, and 6. Harvest by silvicultural method is below Forest Plan projections for all methods.

### **Recommended Action**

Results Acceptable/Continue to Monitor. This is the fourth year this item has been measured against acres awarded. In all years, the acreages have been lower than Forest Plan projections. If this trend continues, projected managed stand yields for future rotations will not be met

## **MONITORING ITEM 25A**

### **Water Quality, Including Cumulative Effects**

#### **Forestwide Goal**

To ensure that current Forest water quality meets established Washington State water quality criteria.

#### **Purpose of Monitoring**

To determine if implementation of the Forest Plan results in maintaining or improving water quality within established standards and guidelines.

#### **Standard**

Water quality will meet or exceed (do better than the minimum requirement) Washington State Water Quality Criteria.

#### **Summarized Results**

Water quality data was collected at 30 sites on the forest for the following parameters: fecal coliform levels; specific conductance; dissolved oxygen; pH; water and air temperature; turbidity and aesthetic values. Data collected from 21 selected baseline sites, during the summer months, indicated little change from previous years. Washington State water quality criteria are being met. Sampling revealed the presence of elevated fecal coliform levels adjacent to grazing allotments .

Submersible thermographs were used to collect continuous water temperature data. Four thermographs were located on Sullivan Creek to collect baseline data for the proposed FERC -licensed hydro-electric project. The data showed high temperatures were close to the upper limit of the State criteria, and concern was expressed about the potential effect of future low flows on high temperatures.

### **Evaluation**

Water quality data indicated that there were no unusual conditions at the selected locations. The monitoring focus was on the characterization sites and following conditions throughout the summer season.

### **Recommended Action**

Results Acceptable/Continue to Monitor. Elevated coliform bacteria levels during the summer continue to indicate the need to manage the grazing program to disperse the impacts on the water resource.

## **MONITORING ITEM 25B**

### **Watershed Best Management Practices (BMPs)**

#### **Forestwide Goal**

To comply with State requirements in accordance with the Clean Water Act for protection of the waters of the State of Washington through planning, application, and monitoring of Best Management Practices (BMPs).

#### **Purpose of Monitoring**

To ensure that Forest Plan standards and guidelines are being met during project implementation through application of appropriate Best Management Practices.

#### **Standard**

Forest Plan Standards and Guidelines for selecting and implementing Best Management Practices (see Chapter 4, Forest Plan).

#### **Summarized Results**

In August 1995, the effectiveness of several road design and construction BMPs was evaluated on the Donaldson/Graham, Boulder, Fawn Swamp and Rocky Riparian timber sales (Newport and Colville Districts). On slightly downcut intermittent streams, fords were judged to be consistent with BMP R-1 (Guidelines for the Location and Design of Roads), and preferable to culverts, which would confine flow and could induce scour downstream of the crossing. Problems occur, however, where swales that show little or no surface evidence of concentrated flow are not recognized as requiring constructed crossings. In one instance, where a rocked dip conveyed both upslope and road surface runoff over a 25' fillslope armored with sidecast slash and pit run aggregate, the fillslope had gullied and road surface material had been transported 150' downslope. As a result of this monitoring, BMP R-1 has been modified to require controlled drainage structures on ephemeral draws. Outsloped rocked drains with constructed (not sidecast) armoring, or culverts, are required.

Filter windrows and sidecast slash blankets were used on new roads in these timber sales to implement BMPs R-7 and R-12, which require filtration of road runoff before it enters perennial streams. In fact, these structures were used to protect streams of all classes, and in some cases for on-site fillslope protection where stream water quality was not threatened. The filter windrows appeared to be highly effective in detaining the first year sediment produced from new roads. Sidecast slash was less effective since slash may or may not be placed at the outlets of drainage structures; it can, however,

be used with some effect as a fillslope mulch or armor. Sidecast slash was judged to be an inadequate means of filtering road surface runoff unless there is a buffer of approximately 100' of intact forest ground between road and stream.

Both the 1993 and 1994 CNF monitoring reports indicated that revegetation of new cutslopes was frequently unsuccessful. Grass seeding required in BMP R-5, Road Slope Stabilization, has been implemented but has not been consistently effective. In spite of attempts to improve success by mulching with straw, this remains true on soils that are droughty and prone to erode by dry ravel. Several one-year old sandy cutslopes had little if any grass on them. As a result of this monitoring, the forest will experiment with special erosion control materials on these types of soils in future road construction projects. Future monitoring will evaluate revegetation success on older cutslopes on non-cohesive soils.

The objectives of BMPs R-5 and R-10 included in the Rocky Riparian planning documents were not fully met in the case of the 7018-160 road crossing on Rocky Creek. Roadfill materials are sandy and permeable when compacted, and the culvert was not bedded into the streambed to seal the inlet. These conditions had permitted piping under or around the pipe. The crossing did not fail and will be removed in 1996. A similar problem was observed on the Fawn Swamp sale, where a new culvert had twice required sealing after construction. BMP R-10 has been strengthened to specifically require bedding culverts, use of compactable fill material and layered compaction.

### **Evaluation**

In general, Forest Standards and Guidelines designed to implement the State requirements in accordance with the Clean Water Act for protection of the waters of the State of Washington through planning, application, and monitoring of Best Management Practices (BMPs) are being met. The monitoring described above indicates that, especially in the case of indistinct channel crossings and cutslope revegetation, current practices have produced inconsistent results and are sometimes ineffective. With regard to fillslope protection and sediment retention in filter windrows, current practices appear to be highly effective.

### **Recommended Action**

Results Acceptable/Continue to Monitor. Culvert placements, older cutslope revegetation success, and intermittent/ephemeral stream crossing structures will be monitored in 1996 to further evaluate the problems identified in 1995. Special erosion control materials will be tested in upcoming road construction projects in an attempt to promote more successful and rapid revegetation on new cutslopes. BMPs R-1 and R-12 have been revised to reflect the results of 1995 monitoring.

## **MONITORING ITEM 26**

### **Riparian Areas**

#### **Forestwide Goal**

Provide and manage riparian plant communities that maintain a high level of riparian dependent resources.

### **Purpose of Monitoring**

To determine if Forest Plan standards and guidelines are being followed to ensure riparian area characteristics are maintained or improved through the implementation of projects, thereby protecting the riparian ecosystem.

### **Summarized Results**

Riparian areas were monitored visually at the same time as the Best Management Practices (Monitoring Item 25B). Monitoring of timber sale areas near or adjacent to riparian areas showed that the riparian protection measures in the timber sale screening process and INFISH guidelines are being implemented and effective.

### **Evaluation**

Overall, riparian area standards and guidelines are being met. Timber harvest activities did not appear to have any observable impact on riparian ecosystems, other than at road crossings. In most cases, harvesting in the riparian area was avoided due to implementation of the 'screening' and INFISH direction.

Although grazing, recreation and other impacts do need to be monitored, time and funding are limited. Therefore, monitoring efforts were focused on the activity, timber harvests, with the greatest potential impacts.

### **Recommended Action**

Results Acceptable/Continue to Monitor.

## **MONITORING ITEM 27**

### **Changes In Soil Productivity**

#### **Forestwide Goal**

Soil productivity is maintained or enhanced over time. NFMA requires monitoring of changes on productivity of the land (36 CFR 219.12).

#### **Purpose of Monitoring**

To determine if the Forest is meeting standards and guidelines and to assess the effectiveness of soil management and conservation practices.

#### **Standard**

The total acreage of all detrimental soil conditions should not be greater than 20 percent of the total acreage with the activity area including landings and system roads. Consider restoration treatments if detrimental conditions are about 20 percent or more of the activity area.

#### **Summarized Results**

Various harvest units across the forest were monitored to determine the percentage of detrimental soil conditions within each activity area. The following timber sales (TS) were monitored:

*Colville District:*

Rocky Timber Sale Unit 18, 93 acres, pre-harvest 1% detrimental soil conditions. In 1995, this unit was remeasured on permanent points. Only 4 of the 10 points were accessible due to the harvest activity so results are preliminary. Results in 1995 showed an increase of 9% due to the harvest which is within the standard. The unit will be resurveyed in 1996.

*Kettle Falls District:*

Due to other priorities, no soil monitoring occurred in 1995.

*Newport District:*

Due to other priorities, no soil monitoring occurred in 1995.

*Republic District:*

Gold Timber Sale Harvest began in 1991 and finished in 1995 due to weather delays. Unit 13 (which was logged in May-June 1991) was found to have soil compaction in excess of the Forest Plan Standards and Guidelines. Informal surveys of other units logged around the same time also found very high percentages of compacted ground. As a result, K-V funds have been programmed for ripping of skid trails in order to bring the total acreage with detrimental soil conditions down to within Forest Plan Standards and Guidelines. The other units surveyed (those that were winter logged and those that were logged later in the summer and into the fall) were found to be within Forest Plan Standards and Guidelines.

*Sullivan Lake District:*

Berrypicker Timber Sale Units 1&2 were monitored in 1995, but standard techniques were not used. The informal survey indicates the units were within the Forest Plan Standards and Guidelines. Data gathered using nonstandard techniques will not be used in any forest-wide analysis of monitoring results.

**Evaluation**

In each of the units monitored, the area in landings, skid trails and system roads made up a large percentage of the detrimental soil conditions within the activity area. In most cases the detrimental soil condition identified was compaction. There were other areas of displacement, puddling, and severely burned soils represented, but the percentage of the area was small. Season of treatment, soil type and type of harvest treatment appeared to be the main factors that affected the amount of soil compaction. There is a need for consistency in monitoring techniques in order to determine compliance with the Forest Plan Standards and Guidelines.

**Recommended Action**

Results Acceptable/Continue to Monitor. Prior to treating skidtrails within the interior of harvest units, a hydrologist or soil scientist should be consulted to ensure that the restoration treatment does not result in increased soil displacement or loss of soil productivity.

Further evaluation of the monitoring procedure is recommended to resolve field-level questions regarding the use of the transect method and to ensure that consistent monitoring methodology is utilized.

## **MONITORING ITEM 28 Transportation System Management**

### **Forestwide Goal**

To determine if total open road mileage meet objectives established in the Forest Plan.

### **Purpose of Monitoring**

To measure the effectiveness of closing new roads and to calculate miles of open road.

### **Standard**

The total miles of roads open to public travel should not be greater than mileage listed on page 4-30 of the Forest Plan.

### **Summarized Results**

**Table 2.4** Road Mileage by Type and Year.

<b>Road Maintenance</b>	<b>Forest Plan</b>	<b>FY 91</b>	<b>FY 92</b>	<b>FY 93</b>	<b>FY 94</b>	<b>FY 95</b>
Passenger Car	849	801	716	683	683	581
High Clearance	2500	2409	2350	2299	2286	2242
Total	3349	3210	3066	2982	2969	2823

### **Evaluation**

Forest Plan standards are being met. Due to an increase in the number of timber sales being sold, the number of constructed/reconstructed and closed road miles is increasing. The reduction in the number of timber sales over the past 5 years has reduced the number of miles of road maintained by timber purchasers resulting in increased road maintenance accomplishment through appropriated funding which is also declining. An organized Forest wide effort to resize the road transportation system began in FY96. Resizing of the Forest transportation system will continue at a more rapid rate. Some roads are no longer maintained for passenger cars are being closed to prevent further roadbed deterioration and resource damage, thus continuing the downward trend for the last three years of decreasing Forest access, especially for passenger cars.

### **Recommended Action**

Results Acceptable/Continue to Monitor. Monitoring agrees that the downward trend in appropriated road maintenance funding is declining as the timber sale program is once again on the rise. Management has prioritized the resizing of the Forest road transportation system to begin in FY96.

## **MONITORING ITEM 29**

### **Insects and Disease Populations**

#### **Forestwide Goal**

To prevent major losses to insects and disease pathogens.

#### **Standard**

To maintain insect and disease populations at endemic levels.

#### **Summarized Results**

Monitoring was based on estimates of mortality from aerial mapping surveys. Concerns regarding insect and disease activity remain high on the Forest. Most projects include a forest health alternative that proposes treating high risk areas, and many projects are proposed because of insect and disease activity. The categories that are of highest concern are bark beetles, dwarf mistletoe in Douglas-fir and root diseases. These insects and pathogens are very active on the Forest. Mountain pine beetle in lodgepole pine has increased most dramatically in recent years, up from 3,400 acres in 1991 to 15,100 acres in 1995.

(Note: Comparisons below do not include 1994. Mapping that year was very sketchy due to smoke and flight restrictions associated with forest fires.)

Defoliators: Spruce budworm activity remained at low levels since the dramatic population crash in 1993. No acres with defoliation were detected from aerial reconnaissance in 1995 compared to 146,600 acres in 1992.

Bark Beetles: Activity from mountain pine beetle was mapped on nearly 21,000 acres in 1995; 15,100 ac. in lodgepole pine, 4,200 acres in ponderosa pine, and 1,400 acres in western white pine. In lodgepole pine this is up from 7,700 acres in 1993, and 3,400 and 3,800 acres in 1991 and 92 respectively. The increase is primarily attributed to the long dry season in 1994. Mountain pine beetle was able to complete 2 life cycles that year (Paul Flanagan, personal communication). This species will be closely monitored in 1996.

Root Disease: Bark beetle activity in Douglas-fir and true firs are nearly always associated with root disease. Activity was mapped on about 5,500 acres in 1995. This is again attributed to the long, dry season in 1994.

Dwarf Mistletoes: Mistletoe infections in Douglas-fir are of particular concern on the west half of the Forest. This agent is not mappable from aerial surveys, but is estimated to cover roughly 100,000 acres.

#### **Evaluation**

Defoliators: The area entomologist cautions that population reductions of spruce budworm this year does not mean epidemic, or near epidemic, populations will not return. Forest structure and composition is essentially unchanged, with a large

proportion of the Forest still identified as high risk (Paul Flanagan, personal communication).

Bark Beetle/Root Disease: This year's level of bark beetles in Douglas-fir and grand fir is up slightly over the last few years. In most instances on this Forest, bark beetle activity occurs in root disease centers. Forest structure and composition indicate a high potential for losses from these agents in certain areas. Again, alternatives prioritizing treatment of these areas are included in most timber sale planning .

Mountain pine beetle activity is of primary concern, due to expansive landscapes of lodgepole pine across the Forest created from burns in the 1920's and 30's. This concern was addressed in the recently completed CROP report. The focus is to treat these areas to break up these large landscapes of uniform susceptibility.

Dwarf Mistletoes: Stand structures and composition have developed that favor rapid spread of this agent. Silvicultural treatments focused at reducing mistletoe spread continue to be proposed. The other species of most concern across the Forest is western larch dwarf mistletoe. Mistletoe infections on other species appears to be a widespread concern on the west half of the Forest.

### **Recommended Actions**

Results Acceptable/Continue to Monitor. Continue to focus timber harvest activities in areas that are high risk to insects and diseases. Monitor high risk areas treated, or proposed for treatment in individual projects. Establish patterns of historical variation for each pest/pathogen category, and determine whether current activity is outside this range of variation.

## **MONITORING ITEM 30A Heritage Resource Protection**

### **Forestwide Goal**

Protection of significant archaeological and historical properties by monitoring annually 5% of documented sites on the Forest.

### **Purpose of Monitoring**

To ensure management prescriptions for these sites are being accomplished. To document instances of property destruction due to human-caused or natural deterioration.

### **Summarized Results**

Approximately 43 previously-documented properties were visited to ascertain changing site conditions due to vandalism, natural forces, and project effects, and to determine the need for protection. Site documentation records were updated with the resulting data. All monitoring actions were performed by HRP specialists or technicians on all units and compiled by the Forest Archaeologist. Tabulation of monitoring results are contained within the Forest HRP files.

The number of properties monitored represents about 3% of the total number of sites recorded on the Forest. The monitoring goal is 5% of the total number of sites per year.

### **Evaluation**

Monitoring results confirm the conclusions made by past monitoring efforts. Properties located within or adjacent to on-going or recently completed timber harvests areas are being vandalized in spite of being protected from direct harvest activities. Also, significant sites are being compromised by unmitigated natural deterioration. At the present rate (5% per year), documented properties would only be monitored every 20 years.

Other cultural properties monitored included those within areas receiving a fairly high level of public use (such as developed and dispersed campsites, along trails and roads, etc.). Sites within this category generally were found to have had noticeable levels of adverse change due to erosion, natural deterioration (of historic structures), and a certain amount of vandalism.

The varying quality of unit monitoring activities and reports indicates the need for more training and education to standardize results.

### **Recommended Action**

**Change or Clarify Management Practices.** Monitoring priorities need to be focused on significant properties which are receiving a high level of public use and are undergoing adverse change. It is suggested that the Forest: 1) clarify accountability for monitoring; and 2) consider using public volunteers or partnerships to perform monitoring activities (this approach is being implemented for FY96).

The inventory of almost 1200 Forest properties includes hundreds of unevaluated sites which we are required to manage as if they were significant, thus adding to our monitoring workload. The truly significant properties need to be sorted out from the hundreds of sites which do not offer educational or recreational potential. However, at this time we lack the larger historic contexts to evaluate the significance of many properties and make this selection. A suggested solution is to complete context studies for a number of important historic site themes on the Forest. Several theme studies are already in process but time and expenses need to be allocated to meet this need. This approach is currently being used for the Addy Chewelah Timber Sale area. As documented in past monitoring reports, monitoring results confirm the need to complete individual site management plans for each significant heritage property.

## **MONITORING ITEM 30B**

### **Heritage Resource Compliance Activities**

#### **Forest-Wide Goal**

Monitor all project documents for completion of heritage resource management compliance requirement.

#### **Purpose of Monitoring**

Ensure all compliance mandates are being met in a consistent and timely manner.

### **Summarized Results**

Monitoring was performed by tracking of all Forest project compliance activities through the use of established program procedures, documented on standardized forms. All monitoring actions were performed by the Forest Archaeologist. See Forest HRP file for monitoring documents.

Compliance-generated archaeological surveys were conducted on about 28,000 acres; 55 new cultural properties were documented.

### **Evaluation**

Compliance flowline mechanisms which have been established should allow for the timely completion of all NEPA and NHPA mandates for planned project undertakings. The Forest has improved its ability in allowing for sufficient lead time to complete compliance activities. There is still concern about the level of training for District archaeologists/Cultural Resource Technicians who perform this work.

Compliance fieldwork and reporting varied in quality but compliance standards are being met.

### **Recommended Action**

Results Acceptable/Continue to Monitor. As documented in last year's report, it is recommended that the Forest investigate alternatives for improving compliance. In addition, it is recommended that the Forest Archaeologist prepare a Heritage Program Management Plan to clarify program procedures and compliance actions and conduct additional training of Cultural Resource Technicians.

## **MONITORING ITEM 31**

### **Comparison Of Actual And Planned Implementation Costs**

A comparison of actual and planned costs was not performed for FY95. The 1992 monitoring report contained a recommendation to evaluate further by incorporating a unit cost analysis into the Five-year Forest Plan review which resulted in the determination that revision of the Forest Plan would not be considered until completion of the Eastside EIS.

## **MONITORING ITEM 32**

### **Economic Effects Of Plan Implementation**

#### **Forestwide Goal**

To produce Forest goods and services in the most cost-efficient way consistent with providing net public benefits.

#### **Purpose of Monitoring**

To note significant changes in payments to counties and returns to the U.S. Treasury from Forest Plan projections in dollars.

#### **Standard**

Variations of more than plus or minus 15% will be explained or reconciled.

### **Summarized Results**

#### *Returns to Government*

The Forest Plan estimated that under full implementation of the Plan (including the harvest of 123.4 MMBF of allowable sale quantity), total revenue or total returns to government would be \$12.4 million (1982 dollars). Actual returns to government for FY 1995 was \$5.4 million (1982 dollars).

#### *Payments to States*

The Forest Plan also estimated that full implementation of the Plan would produce \$3.1 million in payments to states (1982 dollars). Actual payments to states during fiscal year 1995 were \$1.2 million (1982 dollars) due to less than full implementation of the Forest Plan. Payments to states is approximately 25 percent of the revenues received from timber, recreation, minerals, range, and land stewardship programs.

### **Evaluation**

Forest Plan estimates of revenues and payments to states will not be realized until the average timber revenue per MBF is \$99.92 (1982 dollars) and total timber harvest is 123.4 MMBF, and the revenue from all other resources is \$70,000 (1982 dollars). According to the planning models used during the planning process, the returns to government related to timber would be roughly \$12.33 million (1982 dollars), which reflects an average revenue per MBF of \$99.92. Revenue values used in the Forest Planning model, FORPLAN, were developed using 1977 to 1982 average values for the Forest, but using Regional Office guidelines and formulas.

Even with an average timber revenue of almost \$200 per MBF for fiscal year 1995, the Forest would had to have harvested at least 98 MMBF of timber during the fiscal year to realize Forest Plan estimates of total returns and payments to states. That is 55.6 MMBF more than what was actually harvested.

### **Recommended Action**

Further Evaluation/Determine Action. The Forest is scheduled to begin a Forest Plan revision effort during fiscal year 1998. Revisions of returns to government and payments to states will be made during the revision effort.

## **MONITORING ITEM 33**

### **Coordination With Adjacent Landowners**

#### **Forestwide Goal**

Determine if effects of Forest activities are affecting adjacent landowners.

#### **Purpose of Monitoring**

Meet the requirements of the National Forest Management Act by ensuring the effects of National Forest management on land, resources, and communities adjacent to the National Forest are considered.

#### **Standards**

The analysis of proposed Forest activities should include consideration of effects on adjacent landowners.

**Summarized Results**

This item is required as part of NEPA compliance for any new project. Districts and the Supervisor's Office maintains mailing lists which are updated periodically. Districts review county assessor records to compile lists of adjacent landowners on projects.

**Evaluation**

Requirements are being met.

**Recommended Action**

Results Acceptable/Continue to Monitor.

**MONITORING ITEM 34**

**Planning Modeling Assumptions-Primarily FORPLAN**

No monitoring of modeling assumptions was performed during FY 1995.

**MONITORING ITEM 35**

**Minerals**

**Forestwide Goal**

Provide opportunities for mineral exploration and development, while integrating those activities with the planning and management of other forest resources, protecting surface resource values and meeting area objectives.

**Purpose of Monitoring**

To determine if the Forest is meeting standards and guidelines as provided in the Forest Plan.

## **Standards**

Forest Plan Standards and Guidelines for mineral exploration and development.

## **Summarized Results**

In addition to district monitoring reviews, the Forest mining geologist visited 3 sites on the forest for the purpose of monitoring operation and reclamation compliance. Those reviews and District reports indicate that approximately 50 percent of the land disturbed by mineral operations has been reclaimed as prescribed within 2 years.

A complete review of District mineral files shows that 36 CFR 228(A) time frames were met on 2 of 9 processed cases or 78 percent of the time. Conflicts with sensitive animal species resulted in the delay of one of the cases for which the timeframe was not met.

Mitigation measures were generally accepted by mineral proponents. No administrative appeals were received for minerals projects during FY 1995.

## **Evaluation**

The results of minerals monitoring for 1995 show that all but two threshold criteria were successfully met. The Forest fell below the 80 percent threshold for reclamation of lands disturbed by mining projects in FY 1995. This is due entirely to a single, large project. Reclamation of Echo Bay's Key West Project on Cooke Mountain has been delayed pending completion of hydrological studies to address pit water inflow and quality. Most disturbance at this site is expected to be reclaimed before fall of 1996.

We met response time frames in 78 percent of 36 CFR 228(A) cases instead of the threshold 90 percent. This downfall resulted in part from conflicts with sensitive animal species. While minerals is not specifically noted as an ICO in the Forest Plan, this monitoring item is supportive of issues involving the management of amenity resources and communities economics.

**Recommended Action** Results Acceptable/Continue to Monitor

## **MONITORING ITEM 36**

### **Community Effects**

No community effects data was reported for fiscal year 1995. This data will not be reported until after the Forest Plan revision, scheduled to begin in 1998, is completed.

## CHAPTER 3 ACCOMPLISHMENTS

Table 3.1 shows comparisons of actual verses planned accomplishments for important Forest-wide outputs, environmental effects, activities and costs.

Table 3.1 Outputs, Environmental Effects, Activities And Costs: Planned vs. Actual.

Outputs, Effects, Activities and Costs	Unit of Measure	Forest Plan Ann Avg	FY1991	FY1992	FY1993	FY1994	FY1995
Developed Recreation Use	MRVD	365	398	406	409	554	na
Non-Wilderness Dispersed Rec (Includes WFUDs)							
Roaded	MRVD	725	609	910	836	1,132	na
Unroaded	MRVD	119	169	196	219	296	na
Wilderness Use	MRVD	2.4	2.9	1.2	1.2	1.2	na
Trail Construction/Reconstruction	Miles	26	25	7	12	8	15
Developed Site Construction/Reconstruction	PAOT	354	270	60	155	130	29
Wildlife Habitat Improvement							
Acres	Acres	1,925	2,707	3,110	641	na	1,630
Structures	Structures	1,140	520	727	186	na	576
Fish Habitat Improvement							
Acres	Acres	11	36	39	16	-	43
Structures	Structures	84	116	124	20	45	69
Range-Permitted Grazing	AUMs	35	33.9	33.3	30.5	30.5	34.4
Range-Structural Improvements/Fences	Miles	5	9	10	10	6	na
Range-Structural Improvements/Water Developments	Number	10	10	14	14	6	42
Range-Nonstructural Improvements	Acres	1,127	556	160	34	175	31
Timber-Allowable Sale Quantity (offered for sale) 1/	MMBF	123.4	96	26	13.5	45.1	60.3
Timber Harvested	MMBF	na	114.0	82.0	72.2	41.4	41.9
Fuelwood 1/	M Cords	17.9	6.9	7.8	3.0	10	6
Reforestation: 2/							
Planted	M Acres	4.2	5.0	4.3	5.2	4.8	2.9
Natural	M Acres	2.8	0.3	1.7	0.8	2.4	1.5
Timber Stand Improvement	M Acres	2.7	2.2	3.3	2.6	1.9	1.8
Improved Watershed Condition	Acres	12	15	20	23	25	20

na...not available

"RVDs" denotes "Recreation Visitor Days"; "WFUDs" denotes "Wildlife & Fish Users Days"; "AUMs" denotes "Animal Unit Months"; "BTUs" denotes "British Thermal Unit".

**NOTE:** Recreation use was estimated for FY 1991. The new system produced usage data that was known to be invalid using a new sampling and recording system. Therefore, recreation use for FY 1991 was estimated based on past trends. This produced RVD and WFUD counts and subsequent employment and income impact estimates, which can not be compared to previous years. Recreation use figures for fy95 are not available due to program conversion problems (RRIS to INFRA).

Table 3.1 Continued

Outputs, Effects, Activities and Costs	Unit of Measure	Forest Plan Ann Avg	FY1991	FY1992	FY1993	FY1994	FY1995
Minerals 3/	Operating Plans	150	69	50	74	60	56
Energy Minerals 4/	Billion BTUs	0	0	0	0	-	-
Non-Energy Minerals (1982 dollars) 4/	MM\$	4.6	7.5	2.7	4.5	0.8	0.2
Arterial and Collector Road Reconstruction	Miles	10	5	3	16	-	-
Bridges	Structures	1	0	0	1	-	1
Timber Purchaser Road Construction/Reconstruction	Miles	98	79	22	108	6	65
Roads Suitable for Public Use 5/							
Passenger Car (current 849)	Miles	849	789	716	683	683	581
High Clearance Vehicle Only (current 2500)	Miles	2,500	2,407	2,350	2,299	2,286	2,242
Roads Closed to Public Use (current 396)	Miles	1,126	736	930	1,024	518	1,025
Total Forest Road (current 3745) 10/	Miles	3,745	3,941	3,996	4,006	4,016	3,947
Total National Forest Budget (1982 Dollars) 6/	MM\$	17.5	13.3	13.6	12.6	11,177	10.3
Returns to Government (1982 Dollars)	MM\$	12.4	7.4	6.3	6.0	4.4	5.4
Payments to States (1982 dollars) 8/	MM\$	3.1	1.7	1.6	1.4	1.1	1.2
Change in Jobs 7/	Change In Number	578	482	280	156	40	na
Change in Income (1982 Dollars) 7/	Change In MM\$	8.8	7.2	3.3	1.4	(1.4)	na
Acres Harvested by Prescription 9/							
Clearcut	M Acres	4.6	3.0	2.6	2.1	1.5	0.4
Shelterwood	M Acres	2.3	1.8	1.0	1.8	1.1	0.7
Uneven-aged Management	M Acres	1.7	0.8	0.6	0.3	0.4	0.7

**FOOTNOTES:**

1/ Figure for the plan represents estimate of supply available. Does not represent amount demanded or collected.

2/ Acres of reforestation also includes natural regeneration that occurs after scarification of site by timber sale operators during logging and subsequent slash disposal.

3/ Includes operating plans, Notice of Intent, prospecting permits, material sales, free-use permits, and leases that involve locatable, leasable, and salable minerals.

4/ These figures are relative values based upon minerals accessibility and are not intended to be accurate estimates of mineral production.

5/ The days available for public use would vary even though the miles do not.

6/ Does not include budget for Job Corps Center.

7/ Changes in number of jobs are presented as change from the BASE scenario to the first decade of PLAN implementation or to the current fiscal year.

8/ Does NOT include portion of Kaniksu N.F. admin by Idaho Panhandle N.F. that is Washington State.

9/ Does not include the Final Removal cut of shelterwood prescriptions or the overstory removal on Remove Now and Remove Next condition classes.

10/ 3745 miles is a correction of a typing error which occurred in the Plan. The mileage stated in the Plan is 4745.

## CHAPTER 4 FINANCIAL REPORT

This section of the Monitoring and Evaluation report describes financial characteristics for the Colville National Forest for fiscal year 1995. This section includes a description of the sources and uses of Forest's funds and a comparison of the proposed Forest Plan budget (described in the Environmental Impact Statement) to actual fiscal year expenditures.

Table 4.1a presents the sources and uses of funds, for each program, by the Forest for FY95. An annual summary (FY1991-1995) of the same information is provided in Table 4.1b.

**Table 4.1a** Sources and Uses of Funds for Fiscal Year 1995 (1995 Dollars), Colville National Forest.

	Program							
	Timber 3/	Recreation	Wildlife	Water & Soil	Minerals	Range	Land Stewardship	Total 2/
<b>Revenue 1/</b>								
Regular Program	8,315,910	76,392			290	37,260	5,893	8,435,745
Reimb./Coop Work								-
<b>Operations/Maintenance Costs</b>	5,802,260	672,363	258,826	110,780	47,875	381,570	191,426	7,465,099
<b>Allocation of Capital Improvements</b>								
Structural Imp			91,905	69,861		29,743		191,510
Nonstructural Imp			43,614	16,232		10,515		70,361
Roads	541,482	1,065,553					38,825	1,645,861
Trails		46,404						46,404
Buildings & Facilities	23,750	632,076						655,826
Other Imp								-
<b>Total Improvements</b>	565,232	1,744,034	135,519	86,093	-	40,259	38,825	2,609,961
<b>Total Oper,Maint,Imp</b>	6,367,492	2,416,397	394,345	196,872	47,875	421,828	230,251	10,075,060
<b>General Administration 4/</b>	2,418,300	1,086,540	196,045	51,045	9,125	121,989	87,109	4,176,112
<b>Net Cash Flow</b>	(469,883)	(3,426,545)	(590,390)	(247,917)	(56,710)	(506,557)	(311,467)	(5,815,427)
<b>Payments To States</b>	1,875,972	19,098			73	9,315	1,473	1,905,931

1/ Revenues also include monies from special-use permits.

2/ Total Forest general administration and cash flows are greater than the sum of the individual program general administration costs and cash flows. General administration costs which could not be allocated to the various resource programs were added to the Forest Total.

3/ All timber data is from TSPIRS.

**NOTE:**

a) TSPIRS doesn't include the cost of Law Enforcement or Land Management Planning, so it is not included above.

b) 25% fund is based on regular collection.

**Table 4.1b** Summary of Annual Sources and Uses of Funds (1995 dollars).

	Program Level							
	Timber	Recreation	Wildlife	Water & Soil	Minerals	Range	Land Stewardship	Total
<b>Revenue</b>								
1991	11,510,327	82,604	-	-	132	53,508	9,347	11,655,918
1992	10,009,186	92,903	-	-	155	49,206	4,764	10,156,215
1993	9,221,765	104,815	-	-	231	44,451	7,276	9,378,538
1994	6,927,004	96,704	-	-	350	45,342	7,414	7,076,815
1995	8,315,910	76,392	-	-	290	37,260	5,893	8,435,745
<b>Operations/Maintenance Costs</b>								
1991	6,711,073	706,002	258,123	113,411	102,235	218,211	509,010	8,618,064
1992	7,609,010	704,714	232,942	52,462	98,048	269,346	663,617	9,630,140
1993	9,326,379	815,731	358,853	110,519	67,255	320,883	612,826	11,612,447
1994	5,845,573	658,297	277,278	276,765	86,682	352,199	546,691	8,043,486
1995	5,802,260	672,363	258,826	110,780	47,875	381,570	191,426	7,465,099
<b>Capital Improvements</b>								
1991	778,556	532,207	308,814	46,370	400	44,896	88,671	1,799,914
1992	679,028	462,969	216,289	29,393	106	60,812	81,197	1,529,794
1993	620,038	2,254,056	162,721	60,675	3,548	92,085	127,347	3,320,470
1994	571,687	2,871,849	213,415	-	-	92,827	66,143	3,815,919
1995	565,232	1,744,034	135,519	86,093	-	40,259	38,825	2,609,961
<b>General Administration</b>								
1991	1,608,517	344,820	79,744	3,433	12,755	35,995	53,600	2,374,825
1992	1,803,904	236,234	66,341	7,006	10,341	42,947	51,704	2,355,493
1993	1,513,068	319,704	70,062	15,781	8,920	54,484	74,260	2,204,095
1994	1,740,232	463,202	88,210	44,776	13,880	78,805	108,804	2,801,631
1995	2,418,300	1,086,540	196,045	51,045	9,125	121,989	87,109	4,176,112
<b>Net Cash Flow</b>								
1991	2,412,181	(1,500,425)	(646,681)	(163,214)	(115,257)	(245,595)	(641,934)	(1,136,884)
1992	(82,757)	(1,311,015)	(515,572)	(88,861)	(108,340)	(323,899)	(791,754)	(3,359,212)
1993	(2,237,720)	(3,284,676)	(591,636)	(186,976)	(79,493)	(423,002)	(807,157)	(7,758,474)
1994	(1,230,487)	(3,896,645)	(578,902)	(321,541)	(100,212)	(478,489)	(714,224)	(7,584,222)
1995	(469,883)	(3,426,545)	(590,390)	(247,917)	(56,710)	(506,557)	(311,467)	(5,815,427)
<b>Payments to States</b>								
1991	2,713,143	20,651	-	-	33	13,377	2,337	2,749,541
1992	2,481,574	23,226	-	-	39	12,302	1,191	2,518,331
1993	2,194,271	26,204	-	-	58	11,113	1,819	2,233,464
1994	1,679,826	24,176	-	-	88	11,335	1,853	1,717,279
1995	1,875,972	19,098	-	-	73	9,315	1,473	1,905,931

The presentation format of the above financial information has changed slightly from that of previous years. Because payments to states is not a cost, just an income redistribution, it is no longer part of the net cash flow calculation.

Operations/maintenance costs, capital improvements, and general administration, are subtracted from the revenue to give the net gain or loss. The net cash flow for the Forest for FY 1995 was a negative 5.8 million dollars.

Total Forest revenue increased by 19 percent from FY 1994 to FY 1995. The increase in Forest revenue was mostly due to the increase in timber harvested during FY 1995 and increases in timber prices. Timber harvested during FY 1995 was up 0.5 MMBF, or 1.21 percent, from the previous year (see Table 3.1 in Chapter 3 Accomplishments).

Timber revenues reflect current commercial market prices. Revenues from the recreation, wildlife and fish, and range programs are collected from user and permit fees which are determined by policy and not by the market. User and permit fees such as these do not cover the full costs of program management. The revenues collected from the water and soil, minerals, and land stewardship programs are also not intended to cover costs.

FY 1991 was the last year the timber program resulted in a net gain (\$2.4 million) before payments to states. During FY 1995, the net gain for the timber program was a negative 0.47 million dollars, up from a net loss of 1.2 million dollars for FY 1994 (for more detail, see the TSPIRS reports).

Table 4.2 shows a comparison of the projected FY 1995 budget, the actual FY 1995 budget and the projected Forest Plan budget. All but the timber, facilities, fire protection, lands, and law enforcement programs were funded close to projected levels during FY 1995. The cumulative expenditures from 1989 to 1995 for all programs is 48 percent of the Forest Plan 10-year total. This percentage would have been 70 percent if all programs were funded at Forest Plan levels since Plan implementation. Given the budgets of the last 7 years, not one program seems to be within the possibility of meeting Forest Plan direction, with the exception of law enforcement.

However, the above conclusion can only be valid if unit or activity costs (cost per unit of output, e.g., harvest administration cost per MBF harvested) in the Forest Plan were estimated accurately. If the actual cost of doing business on the Colville National Forest were much different than those assumed by the Forest Plan, then it would not be possible to make any strong conclusions regarding Plan implementation based solely on funding levels.

**Table 4.2** Comparison of Forest Plan Budget With Fiscal Year 1995 Projected and Actual. Expenditures Are Summarized By Program Level (1995 Dollars).

Program Area	Forest Plan Ten Year Total	Projected FY 95 Budget	Actual FY 95 Budget	Actual as Percent of Projected	Cumulative for Decade	Cumulative for Decade as Percent of Program 10 Yr Plan Level	Cumulative for Decade as Contribution to 10 Yr Plan Level
Timber	129,711	11,132	6,409	58%	63,733	49%	23.2%
Insect & Disease	0	0	0	na	9	na	0.0%
Facilities	50,672	4,595	1,661	36%	16,654	33%	6.1%
General Administration	26,564	2,225	4,222	190%	19,223	72%	7.0%
Fire Protection	17,907	1,646	1,255	76%	9,247	52%	3.4%
Wildlife & Fish	16,588	425	442	104%	3,704	22%	1.3%
Recreation	11,795	676	991	147%	7,543	64%	2.7%
Lands	7,961	612	234	38%	4,411	55%	1.6%
Range	6,005	385	554	144%	2,603	43%	0.9%
Water/Soil/Air	4,520	157	220	140%	1,385	31%	0.5%
Minerals	2,548	60	58	97%	589	23%	0.2%
Wilderness	278	28	40	144%	180	65%	0.1%
Law Enforcement	204	284	95	33%	1,384	678%	0.5%
Planning 1/	na	111	0	na	1,427	na	0.5%
Human Resources 2/	na	na	na	na	na	na	na
Forest Total 1995 \$	274,754	22,336	16,183	72%	132,090	48%	48%
Forest Total 1982 \$	175,006	14,227	10,308	72%	84,135	48%	48%

1/ The Forest Plan budget included Planning expenditures with all other programs.

2/ Human resources programs have been excluded from this data base because funding is provided through agencies other than US Department of Agriculture.

## CHAPTER 5 COOPERATION WITH OTHERS

### **Monitoring Item**

Deer and Elk Habitat and Population

Management Indicator Species

Threatened, Endangered and Sensitive Species

Insects and Disease Populations

Heritage Resources

Fisheries: I-3

### **Cooperators**

WA Dept. of Wildlife  
Rocky Mountain Elk Foundation

WA Dept. of Wildlife  
WA Natural Heritage Program  
U.S. Fish and Wildlife Service  
Inland Northwest Wildlife Council  
Eastern WA State University  
American Birding Association

WA Natural Heritage Program  
WA Dept. of Wildlife  
U.S. Fish and Wildlife Service  
Hawkwatch International  
WA Falconers Association.  
Barstow Area Bald Eagle Society  
Kalispel Tribe of Indians  
Tri-County Diving Club  
Sea Otter Diving Club  
Conservation Biology Research

Regional Office, USFS

State Historic Preservation Office

Trout Unlimited: Spokane Falls  
Chapter

## CHAPTER 6 AMENDMENTS AND FOREST PLAN ADJUSTMENTS

There were no new Forest Plan Amendments in fiscal year 1994. The following amendments have been issued for the Colville Forest Plan since implementation began in February 1989:

<u>Amendment</u>	<u>Date</u>	<u>Nature of Amendment</u>
1	11/30/90	Clarifies Forestwide standards and guidelines for wild and scenic rivers, including the Kettle River or any other streams found to be eligible for inclusion in the wild and scenic river system.
2	1/8/92	A site-specific modification to open road densities in the Golden Harvest Creek area on the Republic Ranger District, developed in response to concerns raised by recreationists.
3	9/24/92	A site-specific adjustment of the Management Area 1 boundaries in the Gatorson Planning Area on the Kettle Falls Ranger District, designed to locate the MA-1 in more suitable habitat that better meets the needs of old growth dependent species.
4	12/7/92	A site-specific adjustment of the Management Area 1 boundaries in the Lost Tiger/Granite Planning Area on the Sullivan Lake Ranger District, designed to locate the MA-1 in more suitable habitat that better meets the needs of old growth dependent species.
5	1/28/93	A site-specific adjustment of the Management Area 1 boundaries in the Kelard Planning Area on the Republic Ranger District, designed to locate the MA-1 in more suitable habitat that better meets the needs of old growth dependent species.
6	5/26/94	THIS AMENDMENT WAS WITHDRAWN when the implementing action, the Deer timber sale EA, was withdrawn on this date. A site-specific adjustment of the Management Area 1 boundaries in the Deer Planning Area on the Kettle Falls Ranger District, was designed to locate the MA-1 in more suitable habitat to better meet the needs of old growth dependent species.
RF1	5/27/94	Regional Forester's Forest Plan Amendment Number 1 amends Forest Plans on Eastside forests by

changing standards to be applied to timber sales. This amendment is titled Continuation of the Interim Management Direction Establishing Riparian, Ecosystem, and Wildlife Standards for Timber Sales; also known as "Eastside screening".

7	6/17/94	A site-specific adjustment of the Management Area 1 boundaries in the Whiteman Planning Area on the Sullivan Lake Ranger District, designed to locate the MA-1 in more suitable habitat that better meets the needs of old growth dependent species.
8	12/1/94	A designation of a communications site with existing use on the Kettle Falls Ranger District.
9	3/31/95	A site-specific adjustment of the Management Area 1 boundaries in the Seldom Seen Planning Area on the Sullivan Lake Ranger District, designed to locate the MA-1 in more suitable habitat that better meets the needs of old growth dependent species.
10	4/26/95	A site-specific adjustment of the Management Area 1 boundaries in the East Curlew Planning Area on the Republic Ranger District, designed to locate the MA-1 in more suitable habitat that better meets the needs of old growth dependent species.
RF2	6/12/95	Revision and clarification of Regional Forester's Forest Plan Amendment #1, which revises descriptions of the structural stages of Historic Ranges of Variability.
11	6/21/95	A site-specific adjustment of the Management Area 1 boundaries in the Upper Ruby and Rufus Planning Area on the Newport Ranger District, designed to locate the MA-1 in more suitable habitat that better meets the needs of old growth dependent species.
12	6/21/95	A site-specific adjustment of the Management Area 1 boundaries in the Pack to Go Planning Area on the Kettle Falls Ranger District, designed to locate the MA-1 in more suitable habitat that better meets the needs of old growth dependent species.

13	6/21/95	A site-specific adjustment of the Management Area 1 boundaries in the Exposure Snyder Planning Area on the Sullivan Lake Ranger District, designed to locate the MA-1 in more suitable habitat that better meets the needs of old growth dependent species.
14	6/21/95	A site-specific adjustment of the Management Area 1 boundaries in the Mill Planning Area on the Colville Ranger District, designed to locate the MA-1 in more suitable habitat that better meets the needs of old growth dependent species.
INF	7/31/95	Inland Native Fish Strategy adopted by Regions 1, 4 and 6 to provide interim direction to protect habitat and populations of resident native fish outside of anadromous fish habitat.
15	9/27/95	Site specific exception to the screening guidelines in the Nancy Tie Hoobedoo Timber Sale in unit E. Treatment within the Marten Management Requirement Area #55 is needed to develop the best possible habitat for pine marten and ensure long term viability.
16	1/23/96	Revision of Forest Plan management direction for the Salmo Priest Wilderness. Additional standards and guidelines developed to maintain wilderness character and non-degradation of the established area. This amendment was signed jointly with the Idaho Panhandle National Forests.
17	Proposed	Site-specific exception to the screening guidelines in the North Sherman and Fritz Timber Sales EIS on the Kettle Falls Ranger District to treat mature lodgepole stands for lynx forage habitat. This would maintain habitat that is being lost for Franklin grouse and lynx. The decision also includes an adjustment of the Management Area 1 boundaries to locate the MA-1 in more suitable habitat that better meets the needs of old growth dependent species.
18	Proposed	A site-specific adjustment of the Management Area 1 boundaries in the Wolfman Planning Area on the Sullivan Lake Ranger District, designed to locate the MA-1 in more suitable habitat that better meets the needs of old growth dependent species.
19	Proposed	A site-specific adjustment of the Management Area 1 boundaries in the Addy-Chewelah Planning Area on

the Colville Ranger District, designed to locate the MA-1 in more suitable habitat that better meets the needs of old growth dependent species.