

**ITEM 10-1**  
**Visual Quality Objectives**

ACTIVITY, PRACTICE OR EFFECT TO BE MEASURED	REPORTING PERIOD	VARIABILITY (+/-) WHICH WOULD INITIATE FURTHER EVALUATION
Monitor project and activity compliance with visual quality objectives.	Annual	Failure to meet intended Visual Quality Objectives (VQO)

**Introduction:** Each year the Lolo Forest monitors projects that have recently been completed to determine whether Forest Plan Standards have been met. Forest Plan standards for visual quality are called Visual Quality Objectives (VQO's) and have been established for each Management Area on the Lolo Forest. The Visual Resource Management System (National Forest Landscape Management System, Volume 2, Chapter 1, Handbook 462) outlines VQO's and is used as a guideline for this purpose.

**Methods:**

Dry Camp Timber Sale: On September 21, 1999, the Lolo Forest monitored the Dry Camp Timber Sale on the Plains Ranger District. This project area is located in the upper East Fork Dry Creek and Cherry Creek drainages. Several units of this timber sale are located next to and accessed from the East Fork Dry Creek road (Forest Road #352). This route was identified in the Lolo Forest Plan as being a highly used road and visually sensitive areas along the route were mapped. These visually sensitive areas were allocated to MA's 23 and 25, which have a Visual Quality Objective (VQO) of Partial Retention.

The team composed to monitor the effects of the Dry Camp Timber sale consisted of the forest landscape architect, forest wildlife biologist, forest implementation program officer, district silviculturist, forest planner, and forest fire ecologist. This group preformed ocular surveys and discussed the visual effects of the harvesting in Units 8, 39, 71 and 72.

A recreation trail is located in the middle of Unit 8. To evaluate the effects of the harvesting to this trail, the monitoring group walked ¼ to ½ mile of the trail tread and preformed ocular surveys along this route.

McCormick Ecosystem Maintenance Burn (EMB): On September 29, 1999, the Lolo Forest monitored the McCormick EMB project on the Ninemile Ranger District. These EMB's are located within the Sleeping Woman Peak/Frenchtown Face Ecosystem Management Area (EMA). These burns are not visible from any of the identified sensitive viewpoints in the Lolo Forest Plan. Management areas assigned to this project area are MA 16 and 18, both of which are allocated a VQO of Modification.

The team composed to monitor the effects of the McCormick EMB's consisted of the forest landscape architect, forest hydrologist, forest engineer, district ranger, district fire management officer, forest planning and preparation program officer, forest aviation and safety officer, and district supervisor forestry tech in fire. This group preformed ocular surveys and discussed the visual effects of the EMB's both from samples within the burns and from ridge tops across the drainage from the burns.

**Results:**

Dry Camp Timber Sale: Units 8, 39, 71 and 72 were looked at during this monitoring trip. Concerning these units, New Perspectives philosophies had been applied. Larger, less fragmented units were created and more trees per acre were left. In addition, skyline corridor widths were kept narrow (8-10 feet average). Slash was disposed of and stumps were cut low to reduce their negative visual impact, especially in the visual corridor.

Units 8, 71, and 72 are located next to Forest Road #352, on lands allocated to a Partial Retention VQO (MA's 23 and 25). Sixty to seventy percent of Units 8, 71 and 72, **exceed** the Forest Plan allocated VQO of Partial Retention and meet the more restrictive VQO of Retention. The remaining portion of these units, 30-40%, meets the allocated VQO of Partial Retention. The recreation trail in Unit 8 was so well protected that very little if any visible damage occurred to the trail as a result of the timber harvesting.

Blue tree marking paint was used to mark leave trees in Unit 71 along Forest Road #352. This paint was very visible to travelers on Road #352. If the blue paint had not been used, it would have been more difficult for the casual forest observer to tell that harvesting had occurred. Even with the blue markings, the unit met the VQO of Partial Retention.

Unit 39 is located on lands allocated to a Modification VQO. One hundred percent of Unit 39 met the VQO of Modification.

McCormick Creek EMBs: These burns were initiated in May of 1999. Ninety percent of the units contained 10-20% fire killed dead or less. Most burns were of low severity and burned grasses, forbs, shrubs and small seedlings on the forest floor. One burn was of high severity and created a 65-acre patch of dead trees, but this area was within the fire prescription. All of the McCormick EMB's **exceed** the Forest Plan allocated VQO of Modification and meet the more restrictive VQO of the Partial Retention.

**Evaluation:**

Dry Camp Timber Sale: All of the units monitored in the Dry Camp timber sale meet or exceed the VQO's set for this project area by the Forest Plan. Views from the sensitive visual corridor along Forest Road #352 and the recreation trail in Unit 8 are well protected.

One concern the monitoring group had was the use of blue paint to mark leave trees in a unit located next to Dry Creek Road. In the future, to avoid leaving unnatural appearing blue marks in the forest, the district should consider cut tree marking or diameter limits in visually sensitive areas.

McCormick Creek EMB: Implementation of these EMB's was very successful. All units monitored exceed the Forest Plan standards for visual quality in the area.

**Recommendations:**

- 1) Consider cut tree marking, diameter limits, or marking only the non-visible side of leave trees in visually sensitive areas, to avoid leaving unnatural appearing blue marks in the forest.
- 2) Continue the use of people skilled in visual or scenery management during layout and marking of timber sale units and during analysis of EMB's.

**ITEM 11-1**  
**Prescribed Fire and Air Quality**

ACTIVITY, PRACTICE OR EFFECT TO BE MEASURED	REPORTING PERIOD	VARIABILITY (+/-) WHICH WOULD INITIATE FURTHER EVALUATION
Assure prescribed fire meets air quality guidelines and standards	Annual	Burning without required permit

**Methods:** Fire Management personnel compile a list of all burning units to report burning activities and check for permit compliance. This compiled list is stored in the IBM. The data is accurate and requires no qualification.

**Results:** The Lolo NF accomplished all prescribed burning activities during FY 99 under permit and within guidelines of the Montana State Airshed Group. We remain an active participant in this group.

**Evaluation:** During the 1987-99 period, the Lolo NF accomplished all prescribed burning projects under permit and within Montana State Airshed Group guidelines.

**Recommendations:** Continue close association and participation with the Montana State Airshed Group.

**ITEM 11-2**  
**Fuel Treatment Projections**

ACTIVITY, PRACTICE OR EFFECT TO BE MEASURED	REPORTING PERIOD	VARIABILITY (+/-) WHICH WOULD INITIATE FURTHER EVALUATION
Assure accomplishment of fuel treatment targets.	Annual	Less than 75% of Forest Plan projection.

**Methods:** Fuel treatment accomplishments, Brush Disposal (BD) and Forest Fire Protection-115 (FFP), are reported annually in the Timber Stand Management Reporting System (TSMRS), which is maintained in the Forest Supervisor's office. Fire management personnel query that database to report the acres in this report and compare with Forest Plan projections and decadal averages.

**Results:** The accomplishments for 1999 are listed in Table 11-2A. All targets were accomplished or exceeded and the data used to compile accomplishments are accurate. The annual average acres projected to be accomplished for Decade 1 in the Forest Plan is also listed in this table.

**Table 11-2A.** Target Accomplishments for FY 99.

Activity	FY 99 Target (acres)	FY 99 Accomplishment (acres)	Decade 1 Forest Plan Projection (annual average)
FFP-115	12,000	11,106	2,435
BD	2,185	2,185	6,509
Unplanned Ignition	N/A	0	N/A

**Evaluation:** During the 12-year period under the Forest Plan, our fuel treatments have averaged 149% of projection for FFP-115 funded activities, but only 38 % of projection for treatments funded by BD deposits. Table 11-2B displays these averages. The BD treatments are tied to the timber sale program. The low BD accomplishment is because timber harvest levels are lower than projected; see Item 3-10.

**Table 11-2B.** Outputs or Effects - Actual vs. Projected 1987-1999.

<b>Activity</b>	<b>Unit</b>	<b>Plan Projected (Annual Average)</b>	<b>Actual Average to Date</b>	<b>Percent of Projected</b>
Fuel Treatment - FFP - 115- funded	acres	2,453	4,074	167 %
Fuel Treatment - BD-Funded	acres	6,509	2,988	46 %

Concerning FFP-115, burning for ecosystem maintenance and forest health will remain a priority as referenced in "Fire in Western Montana Ecosystems." We expect accomplishments in FFP - 115 to be maintained at 12,000 acres, annually. In BD, the acres treated are expected to decrease because of a decrease in projected timber harvest level. If these projections are accurate, BD accomplishments will be about 30% to 40% of planned acres.

**Recommendations:** The data suggests the Lolo NF is likely to remain below 75% of planned projections in BD. We should re-evaluate out-year estimates to determine accuracy of projections as outlined in the Forest Plan. This will be accomplished with the thorough review and update of the "Fire in Western Montana Ecosystems" publication.

**Review of Last Year's Action Item:** The "Fire in Western Montana Ecosystems" publication is currently being updated for 2000. The 12,000-15,000 maximum annual burn acres estimate will be reviewed by the ID team. The acreage targets and burn intervals for each habitat type group will be adjusted to ensure that it best reflects the ecological needs of those communities. Habitat groups (or some other classification) may be substituted for management areas for the purpose of assigning burn targets and may be coordinated by the Zone Forest Plan Revision team. Research and monitoring studies of the impact of burning on noxious weeds will be continued in the spring of 2000 to identify the risk and possible mitigation actions needed for burning weed-infested areas.

**ITEM 11-3  
Wildfire Acres**

ACTIVITY, PRACTICE OR EFFECT TO BE MEASURED	REPORTING PERIOD	VARIABILITY (+/-) WHICH WOULD INITIATE FURTHER EVALUATION
Evaluate impact of wildfire losses on management area targets.	10 years	Wildfire losses 100% above PARS <sup>1</sup> prediction by MA for decade.

**Methods:** Fire management personnel compared the acres of wildfire by Management Area (MA) to the Forest Plan PARS or maximum acceptable loss. We also compared the average annual total to the Forest Plan projected average. The annual number of acres burned by wildfire is stored and queried from the Lolo's computer system, 5100-29 Fire Report.

**Results:** Wildfire losses in Calendar Year (CY) 1999 totaled 120 acres on Forest Service ownership and 14 acres on private property within Forest Service protection boundaries. Table 11-3A displays wildfire loss acres only, and does not reflect acres burned while fires were in prescription status. The table compares average acres burned over a 13-year period to a 10-year projected average stated in the Forest Plan.

**Table 11-3A.** Wildfire Acres (Actual vs Projected).

Activity	Unit	Plan Projected (Ann. Avg.)	Average to date	% of Projected
Wildfire Loss	Acres	2,907	4,006	138 %

**Evaluation:** For the 13-year period under the Forest Plan, average annual wildfire acreage is over the Forest Plan projection because of the Canyon Creek Fire in 1988. For prescribed natural fire, we have averaged 68 % of projection.

The acceptable limit of wildfire losses in MA 11 (Roadless) and MA12 (Wilderness/Proposed Wilderness) continues to require re-evaluation especially given new direction per the National Wildland and Prescribed Fire Management Policy (August 1998). Re-evaluation will be accomplished with the Forest Plan revision effort.

**Recommendations:** Where the Lolo NF implemented contain or confine suppression strategies for economic reasons, relatively high acre losses should be constrained, considering the values at risk and suppression cost associated with these MA's. The National Forests that manage the Bob Marshall/Scapegoat Wilderness Complex revised the natural prescribed fire program in 1991. Since implementation in FY 91, no ignitions have met the criteria for a prescribed fire in these two MA's.

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<sup>1</sup>PARS = The burned acreage (or fire occurrence standards) developed by the interdisciplinary process which represent the maximum acceptable loss. They are generally expressed by size class and fire intensity level. The Lolo's PARS table by MA is average annual acreage per plan. Since 1988, the average annual acreage for the MA's in wilderness should be based on a 100-250 years cycle, not a 10-year cycle. We exceeded the entire 10-year cumulative acreage for at least two MA's in one year.