Forest Plan Monitoring and Evaluation Report

Malheur, Umatilla, Wallowa-Whitman National Forests
May 29, 2003

The annual Forest Plan Monitoring and Evaluation Reports for fiscal years 1991 through 2001 were reviewed to determine if any areas have been identified where the Forest Plans need to be changed. The first six reports (1991-1996) were Forest specific, with the following reports (1997-2001) being completed in a consolidated format. The results of the review are documented in three parts.

This, the first part, is a narrative discussion of areas where a potential need for change has been identified. This includes Forest Plan goals and objectives, and standards and guidelines that need to be adjusted to reflect changed conditions, and areas where thresholds of variability established in the Forest Plans have been exceeded. Unless otherwise noted, each need for change discussion area was pertinent to conditions on each Forest.

The second part contains a table for each Forest that summarizes the recommended actions in each annual monitoring and evaluation report.

The third part contains a spreadsheet for each Forest of the Forest Plan outputs by fiscal year, and includes a comparison to applicable Forest Plan projections and thresholds of variability.

Stream Temperature (Umatilla)

Situation: Five or more years of thermograph data are available for several streams across the Forest. Many of these streams do not meet State water quality standards. Of the streams reported in the FY2001 monitoring and evaluation report, 67% had a month or more of days above the temperature standard.

Recommendation: Continue to develop and implement water quality management plans that address temperature impairment. Management plans identify activities for improvement of riparian shade and channel morphology.

Vegetation Management

Timber Offered

Situation: None of the Forests have offered the Forest Plan projected levels for timber since the Plans were implemented. Percentage of actual versus projected for each Forest over the last 11 years are: Malheur – 32%, Umatilla – 22%, and Wallowa-Whitman – 21%. There have also been instances where offered timber received no bids, partly due to a large component of non-saw material, small diameter material, and advanced logging system requirements.

Evaluation of this area has suggested reasons for the low levels of offered timber. They include a shift to ecosystem restoration, increased use of commercial thinning and sanitation/salvage harvest methods, endangered species concerns, Regional direction (Screens, PACFISH, INFISH), and declining budgets. Additionally, partly due to some of the aforementioned reasons, some areas that were classified as capable, available, and suitable for timber management in the current Forest Plans are no longer planned for harvest.

Recommendation: Adjust ASQ and TSPQ levels based on current management direction. Tri-Forest monitoring of Rescission Bill timber sales in 1997 identified an apparent conflict among current management direction. The Regional Forester's Amendment #2 (Screens) frequently necessitates leaving late and old stands, usually comprised of late seral species. This may preclude reaching the Forest Plan Desired Future Condition of an emphasis on younger seral species for timber yield.

Silviculture Harvest Methods

Situation: Forest Plans assumed the wide spread use of intensive, even-aged management. The use of even-age harvest methods (clearcut, shelterwood/seed tree, and overwood removal) has declined to levels far below those predicted in the Forest Plans, generally less than 10%. Uneven-aged harvest methods (commercial thinning and uneven-age selection) have occurred at levels higher than predicted in the Plans. Additionally the total acres of harvest have been much lower than predicted in the Plans. The established thresholds of variability have been exceeded for these areas.

Recommendation: Revision of the Plans should consider the shift away from intensive, even-aged management, and the effect of Regional direction (Screens, PACFISH, INFISH). Also to consider is that many of the social, economic, and resource objectives of the Plans are somewhat dependent on the amount and method of timber harvest for their successful accomplishment.

Reforestation

Situation: The comparisons of actual accomplishment to Forest Plan projection for planted and natural reforestation differs Forest to Forest. On the Malheur the two methods are reported together (the majority being planted), with the combined total exceeding the threshold of variability. On the Umatilla, planted acres are lower than projected, while natural levels are higher. The Forest Plan established a threshold of variability for planted reforestation and the actual amount is within the established range. However, it is likely the amount would have been much less without the occurrence of stand replacement wildfires, and the threshold of variability would have been crossed. On the Wallowa-Whitman, planted acres were more than projected, while natural acres were less; and both were outside the threshold of variability. Although looking at the most recent fiscal years, the amount of planted acres were lower than projected, and this is a more accurate portrayal of the current situation than the 11 year average.

Recommendation: The assumptions used in the Forest Plans relative to reforestation need to be reviewed. In general, the changes discussed in the silvicultural harvest method section have led to less regeneration type harvests and a reduction in the need for reforestation.

Non-commercial Thinning

Situation: On the Malheur and Wallowa-Whitman Forests the acres of non-commercial thinning were less than projected in the Plans, and were outside the threshold of variability. The amount on the Umatilla was actually slightly more than projected in the Plan, but the projected amount is small (only 2,900 acres per year). The Umatilla Plan in particular may have seriously underestimated the need for non-commercial thinning. The Forest's need for stocking-level control has continued to grow at a rapid rate. Funding for non-commercial thinning has not been adequate to meet the Forest's projections and needs.

Recommendation: The Forest Plans did not anticipate some of the objectives for stocking-level control. These include reduction of wildfire risk, forest health improvement, development or protection of fish and wildlife habitat, encouragement of undergrowth vegetation, and promotion of late-successional characteristics for biological diversity. The levels of stocking-level control (both non-commercial thinning and release) should be evaluated during revision in light of the mentioned objectives.

Noxious Weeds (Malheur and Wallowa-Whitman)

Situation: On the Wallowa-Whitman Forest, the actual treated acres were over 400% of the Plan projection. This included the use of herbicide. The amount on the Malheur was less than projected in the Plan, and relied on manual methods. Manual methods of control were not very effective. There was also a question of the use of prescribed fire in relation to the Mediated Agreement. The scope of burning has become much greater than anticipated at the time of the Mediated Agreement.

Recommendation: Continue to promote an integrated approach to weed management, including the use of a broad array of treatment methods such as prescribed fire, chemical applications, moving, hand-pulling, sheep grazing, and competitive grass seedings.

Wildlife

Dead and Defective Tree Habitat

Situation: Amendment to the Forest Plans requires 100% potential population levels of primary cavity excavators for snag retention standard. This level has not been achieved on all projects. There are also concerns regarding snag and down wood retention in association with prescribed fire, hard versus soft snag retention, and loss of snags from fuel wood harvest.

Recommendation: Need to define what the 100% levels are for different biophysical environments. Current standards may not be achievable in hot/dry biophysical environments.

Elk/Deer Habitat

Situation: Ten recent planning areas on the Wallowa-Whitman exceeded HEI standards. The HEI model as described in the Forest Plans has problems and is no longer a useful tool to evaluate elk habitat.

Recommendation: Continue to assess the utility of the HEI model. Develop a new habitat model to replace the current HEI model or modify the existing one to reflect more recent research findings (such as coming out of the Starkey Experimental Forest).

Old Growth Habitat

Situation: Declines in old growth habitat have been documented in watershed analyses, and in surveys of dedicated old growth areas. Many dedicated old growth areas are not meeting Forest Plan intents for these areas. Surveys of dedicated old growth areas on the Wallowa-Whitman indicate that only 32% of surveys areas meet the Forest Plan definition for these areas. Size of current old growth areas may be inadequate to meet habitat requirements.

Recommendation: Consider dedicated old growth areas in light of new science findings concerning fragmentation, connectivity, ICBEMP recommendations, impact of large stand replacement fires, old growth patch size, and rotation. Old growth management should be consistent with historic range of variability and structure based management strategies.

Management Indicator Species (Umatilla and Wallowa-Whitman)

Situation: There is a lack of information regarding these species (Pileated and Northern Three-Toed woodpeckers, goshawks, and pine martens). Monitoring for these species has been inadequate.

Recommendation: If these species are going to be used as an indicator of forest health, both habitat and population monitoring needs to be completed.

Recreation

Trails

Situation: Forest Plan projections for trail construction and maintenance have not been achieved. The levels on the Malheur and Umatilla Forests have been less than projected (below the threshold of variability for the Umatilla), and the Wallowa-Whitman has exceeded projections.

Recommendation: Review trail programs on the Forests and revise Plan projections in light of current management strategies and funding.

Developed Recreation

Situation: The number of PAOTs has averaged more than the Forest Plan projections for each Forest, indicating use levels are greater than anticipated in the Plans.

Recommendation: Use National Visitor Use Monitoring (NVUM) data to develop a recreation strategy. Continue to assess the adequacy (capacity) and condition of facilities.

Range

Allotment Management Plans

Situation: As of FY2000, each Forest had the following percentage of active allotments that are Forest Plan sufficient: Malheur – 21%, Umatilla – 21%, and Wallowa-Whitman – 24%. The threshold of variability was exceeded on each Forest. Overall accomplishments are low due to changes in program emphasis and ESA consultation efforts.

Recommendation: Update the allotment management plan schedule to reflect the requirements of the Rescission Bill, as well as funding levels.

Riparian Areas (Malheur)

Situation: Riparian areas within the North Fork Malheur Scenic River in four grazing allotments were inspected and standards were met. However, almost 50% of comment cards received in FY2000 had negative comments about cattle grazing in the scenic corridor (cattle damage to trail, streambanks, and channel). In the same year, 24% of monitored pastures exceeded standards for cattle grazing in riparian areas. These conditions were probably related to drought conditions.

Recommendation: Adjustments to allotment management were made the following year to mitigate the above conditions. The range program should be funded at levels to permit completion of allotment management plans, fence maintenance, and adequate monitoring of riparian area grazing.

Permitted Grazing (Malheur)

Situation: The average yearly permitted grazing over the life of the Plan is 83% of Plan projection. This exceeds the threshold of variability.

Recommendation: Complete allotment management plans, and adjust Plan projections for permitted grazing.

Range Improvements (Malheur)

Situation: Both structural and non-structural range improvements have been at levels well below Forest Plan projections, and thresholds of variability have been exceeded.

Recommendation: Revise Plan projections based on current management direction and funding levels.

Minerals (Wallowa-Whitman)

Situation: Monitoring indicates several Forest Plan standards and guidelines cannot be met in the short-term during some placer operations. These standards include: limiting detrimental soil conditions, maintaining riparian and streamside vegetation, giving preferential considerations to riparian-dependent species, and maintaining old growth qualities (including solitude).

Recommendation: Address possible conflicts between Plan standards and guidelines, and the mining law during Plan revision.

Roads

Situation: Miles of road construction and reconstruction are well below Forest Plan projections, and exceed the threshold of variability on the Malheur. Plan goals for open road densities are almost met on the Malheur and Umatilla, and while significant progress has been made on the Wallowa-Whitman, about 700 miles of road need to be closed on the Wallowa-Whitman to meet road density guidelines.

Recommendation: Review and revise Plan projections for road construction and reconstruction based on current management direction and funding levels. The portions of the Wallowa-Whitman which have the largest problems with road densities are within the Upper Joseph watershed.

Fire/Fuels

Fire Managed for Resource Benefit

Situation: Natural ignitions within wilderness areas are being suppressed using an appropriate suppression response. These natural ignitions are not utilized to allow fire to play its natural ecological role in wilderness areas.

Recommendation: Utilize the revision process to reassess and update Fire Management Plans, with opportunities to utilize Fire Managed for Resource Benefits.

Fuels

Situation: The level of activity fuels needing treatment is less that the level predicted in the Forest Plans, while the level of non-activity fuels has been greater. Activity fuel levels are related to harvest activity, which is not reaching Forest Plan predictions. Non-activity fuel levels are anticipated to continue to exceed current Forest Plan projections due in part to national direction, such as the National Fire Plan.

Recommendation: Levels of activity and non-activity fuel acreages should be tied to management programs and direction identified in the Forest Plan revision process. Tri-Forest monitoring of prescribed fire in 1998 identified a number of issues to be addressed during the revision process. They are

- Are current standards for snags, down woody material, and big game cover ecologically sustainable in drier pine sites if fire is to be kept as part of the ecosystem?
- Areas or stands with prescribed fire mortality may need to be replanted in order to meet NFMA requirements, if they fall below minimum stocking levels.
- How does the historic fire regime fit the Desired Future Condition?
- The current Forest Plan standards and goals view prescribed fire primarily at the stand level. It should be addressed at a landscape level.

Social/Economic

Situation: Monitoring on these items was last reported in 1997. At that time Forest program budgets, local income and employment, and payments to counties were considerably down from Forest Plan predictions. Costs for producing timber volume were considerably higher than projected in the Plans. Thresholds of variability have been exceeded.

Recommendation: Review and revise the social and economic parameters of the Plan during the revision process. Consider use of criteria and indicators for assessing key elements of sustainability.