

TABLE OF CONTENTS

Chapter III. Evaluation & Action Plan.....	2
Ecosystem Health.....	2
Multiple Benefits to People	5
Effective Public Service.....	7
List of Preparers	9
References.....	10

CHAPTER III. EVALUATION & ACTION PLAN

This chapter provides a synthesis and interpretation of what monitoring reveals about the current contribution of the MNF towards the three GPRA Goals of Ecosystem Health, Multiple Benefits to People, and Effective Public Service.

ECOSYSTEM HEALTH

Factors associated with Ecosystem Health include: managing vegetation and wildlife diversity (especially endangered, threatened, and sensitive species); protecting forest health from pests, diseases, and non-native invasive plants; and preventing the degradation of air and water quality.

Concerning **diversity**, monitoring indicates that the Forest is retaining high biodiversity in terms of both vegetation and wildlife species and communities. Although more work is needed, and monitoring is essential for evaluating the degree of success, management on the MNF is helping sustain ecosystem health and, bit by bit, moving the Forest toward the goals of –

- Improving the diversity of plants, animals, and stand conditions with an emphasis on the habitat needs for wild turkey, black bear, and associated species.
- Maintaining open areas of National Forest land for forage, wildlife, and visual purposes.
- Managing habitat to help recovery of threatened and endangered species on the Forest, protecting sensitive and unique species until their populations are viable.
- Cooperating with, and coordinating plans with, other Federal, State, and local agencies and with private groups to improve the management of natural resources and reduce potential conflicts (*Forest Plan*, page 37-38 and 39).

The Forest has not lost species in recent years; in fact, some vegetative communities and wildlife populations are increasing, as noted in Chapter I. A little progress has been made toward providing early successional habitat for management indicator species; however, age class distribution and perpetuation of mast-producing tree species has not been accomplished to the extent that was anticipated during *Forest Plan* development. The primary means of creating young forest and perpetuating mast is by using commercial timber harvests to regenerate new stands of trees. Since harvest levels have declined, opportunities to provide these ecosystem components have also been reduced (see timber production discussion later in this chapter).

Action Item: Initiate a program level discussion about timber harvesting and retention of mast producing species.

Responsibility: Timber Program Manager and Forest Planning Staff

Some populations of both management indicator species and **endangered, threatened, and sensitive species** have improved over time. However, resource specialists, such as the MNF's biologist staff, are overloaded with work and are only able to survey a limited number of sites each year. Many remote areas where no management activities take place are rarely examined. For most species, program emphasis has been on site protection with an occasional opportunity to make proactive habitat improvement work.

New information about endangered, threatened, and sensitive species is being learned all the time. As monitoring of known populations continues, new populations are found, and more is learned about their habitat needs, efforts are made to refine the Forest's management. For example, the MNF commenced a biological assessment (BA) in FY 2000 to evaluate state-of-the-science information regarding endangered and threatened species. This information will be valuable for 1) determining if existing standards and guidelines should be adjusted or if additional mitigation measures are needed to protect endangered and threatened species; 2) ensuring that management decisions employ state-of-the-science information regarding these species; and 3) if necessary, provide a basis for a *Forest Plan* amendment.

Action Item: Complete a biological assessment and, if necessary, formally consult with USFWS on potential impacts of *Forest Plan* implementation on endangered and threatened species. If needed, amend the *Forest Plan* (Amendment 6) to add directions and standards for protection of these species--making sure the public is involved in development of an amendment.

Primary Responsibility: Forest Wildlife and Planning Staffs

Protection and improvement of endangered and threatened species populations is not the only program that would benefit from the synthesis and analysis of information. For example, more information is needed to properly administer forest botanicals. Little is known about **forest botanicals**; those species collected for use in herbal medicine, the floral industry, or as food. The MNF continues to provide a variety of botanical products, but the upsurge in their popularity has generated concern among Forest managers. Information is needed to determine the prevalence of various species, their reproductive rates, and a sustainable level of collection.

Action Item: Beginning with moss species, develop a program of work to determine the sustainability of forest botanical products and method(s) for monitoring permitted activity.

Primary Responsibility: Forest Botanist

Informal monitoring of **wildlife opening** seeding (non-native versus native) in various timber sale units and detailed monitoring of wildlife opening maintenance (the use of grazing in the Camp Bright Allotment and of prescribed fire in the Beulah Savannah) has provided valuable information. However, additional monitoring and follow-up is recommended to refine the Forest's management of wildlife openings.

Action Item: Continue monitoring seeding success of native versus non-native species.

Primary Responsibility: Forest Botanist and District Rangers

Action Item: Address the recommendations that were made in the Camp Bright & Beulah Savannah Reports (see the 17 page Camp Bright Report and 21 page Beulah Savannah Report at fs.fed.us/r9/mnf/environmental/environmental_index.htm).

Primary Responsibility: Range Program Manager, Fire Management Officer, and District Rangers

Forest Health monitoring indicates that non-native insects and diseases have the potential to noticeably alter the vegetative conditions that exist today. While most of these are now only marginally affecting the MNF, gypsy moth and beech bark complex have the greatest potential to change the species composition of the Forest.

Action Item: Complete an environmental analysis for gypsy moth and take action to retard its spread.

Primary Responsibility: Timber Program Manager

Action Item: Consider strategies to address beech bark complex.

Primary Responsibility: Timber Program Manager and Silviculturists

Air quality monitoring reveals that visibility impairment occurs at different times of the year; this is mostly due to particulate matter in the summertime, primarily caused by sulfates from coal fired power plants and automobile exhaust.

Action Item: Continue existing air quality monitoring.

Primary Responsibility: Air Quality Program Manager

Water quality remains good across the Forest, but many miles of abandoned railroad beds (e.g. Props Run Grade, currently used as a trail) and old roads (e.g. in Aaron's Run and Hobson Run) have been identified as perpetual sediment sources to nearby streams. Rehabilitation projects that have been initiated to correct these problems should, over time, improve water quality and reduce aquatic habitat impacts, but more monitoring is needed to assess the success of these projects.

The Forest has been working to complete high priority watershed assessments to, among other things, identify watershed rehabilitation projects. Significant public support for the Forest's watershed restoration efforts exist as evidenced by numerous past and potential partners from private industry, other federal and state agencies, academia, and groups such as Trout Unlimited and the Shavers Fork Coalition.

Action Item: Follow-up on the recommendations made in the Props Run Report (see fs.fed.us/r9/mnf/environmental/environmental_index.htm).

Primary Responsibility: Marlinton/White Sulphur District Ranger

Action Item: Initiate monitoring on other rehabilitation projects.

Primary Responsibility: Aquatic Biologist and Forest Hydrologist

Action Item: Complete one high priority watershed assessment in FY 2001.

Primary Responsibility: Forest NEPA Team Leader

MULTIPLE BENEFITS TO PEOPLE

The factors associated with this GPRA Goal are: wilderness, recreation, forest products, minerals, and heritage resources. Monitoring described in Chapter II shows that the Forest is providing multiple benefits to people. Limited funding and reduced staffs have affected the degree to which the Forest can provide these benefits, but the Forest is moving (albeit slower for some than others) toward the goals of-

- Preserving Wilderness attributes for which the areas were designated.
- Managing the spectrum of recreation opportunities that exist on the Forest and emphasizing recreation activities that require a large land area, such as hiking or hunting, and facilities to support that use.
- Developing and maintaining open communication and understanding with the public.
- Permitting use of National Forest land by others, under special use or lease authorities, that is compatible with National Forest goals and objectives and will contribute to the improved quality of life for local residents.
- Managing the vegetation on the Forest according to sound professional procedures to provide a sustained yield of timber, benefit other resources, and support the local economy with concern for environmental protection and cost efficiency.
- Using silvicultural systems and all harvest methods, but emphasizing the use of even-age management to provide long-term wildlife and timber quality benefits.
- Providing a stable supply of Forest products to dependent wood using industry.
- Making minerals available for exploration and development consistent with other appropriate resource uses and protection of the environment.
- Protecting heritage resources from damage (*Forest Plan*, p. 37-40).

In regard to **wilderness**, monitoring indicates that campsites located along popular trails are showing signs of considerable change. Action may be needed to manage trail use to reduce recreational impacts and better preserve wilderness attributes.

Action Item: Initiate discussions to address changes that have been observed within the Cranberry Wilderness.

Primary Responsibility: Recreation Program Manager & Gauley Ranger

Although no formal studies have been completed recently to verify it, both developed and semi-primitive recreational use on the Forest appear to be rising in some areas of the Forest. For instance, use of campsites along popular trails has increased; requests for outfitter/guide permits for certain activities is growing; and the use of some MNF trails, like those in the East Gauley area, has expanded. To address public demand and provide the best public service possible, the Forest has been seeking alternative means of managing recreational resources.

For example, the Forest has placed some developed **recreation** sites under concessions management and sought partnerships to provide quality program services at the Seneca Rocks Discovery Center. Recreation monitoring indicates that using concessions to manage recreation sites is having desirable results and that visitors to the Seneca Rocks Discovery Center are

satisfied with the service they receive. Ongoing monitoring will be essential to ensure these methods of program delivery continue to meet public expectations.

Action Item: Continue monitoring program delivery provided via concession management.

Primary Responsibility: Recreation Program Manager

Action Item: Maintain or expand partnerships to enhance program delivery of recreation programs such as at the Seneca Rocks Discovery Center or for Forest trails.

Primary Responsibility: Recreation Program Manager and Partnership Coordinator

Another instance of the Forest using alternative means to address increased recreational use is employing cooperative agreements with other agencies to make improvements to heavily used trails or rehabilitate existing roads (Grants and Agreements, Chapter II). For example, the Corps of Engineers installed water bars and made other trail improvements to the Props Run Grade to facilitate increased mountain bike use and reduce the potential for adverse sediment effects to nearby streams (see Props Run Report). Preliminary monitoring indicates that this work was successful but that additional monitoring, especially after the trail has been reopened to public use, will be needed to evaluate long-term effects (see action item for water quality monitoring).

Timber production on the Forest continues to be noticeably less than was anticipated during the development of the *Forest Plan*. The Forest's commercial timber sale program has averaged about 58 percent of what the *Forest Plan* projected to be provided in 2000 (*Forest Plan*, p.41). Timber volumes have been, and may continue to decrease over time for numerous reasons such as budget cuts; vacancies in key timber, wildlife, and planning positions; and increased fieldwork necessary for environmental analysis. New national direction, audits, appeals, and lawsuits, along with interpretations of existing direction, have increased workloads and additional time is spent performing wildlife, botanical, and fisheries analyses. The type of analysis required and the standards for documentation have also been redefined. The overall result is a lengthening of the amount of time for a project to go from the planning stage to the implementation stage.

Action Item: As previously mentioned, initiate a program level discussion about timber harvesting.

Responsibility: Timber Program Manager and Forest Planning Staff

In respect to **minerals**, the Forest continues to see increased exploration and development of natural gas in the MNF and will continue to monitor the implementation of these developments. As mentioned in Chapter I, no significant coal mine development is expected in the near future. However, as funding becomes available, areas of the MNF that have been impacted by past coal mining (like the Lower Williams River area) could be restored. Restoration efforts could include addressing uncontrolled drainage problems and safety hazards, and revegetating disturbed areas.

Action Item: Complete an environmental analysis to restore abandoned coal mines in the Lower Williams River area.

Responsibility: Forest Geologist

Heritage Resources surveys continue to uncover archeological sites, and site restoration projects are expanding the Forest's understanding of human interactions with the land. Partnerships, such as the one with the West Virginia Sierra Club that focused on the restoration and cleaning of the historic coke ovens in Thomas, West Virginia, have contributed to the Forest's knowledge of the industrial archaeology of the region. Portions of the Blackwater Industrial Complex are eligible for listing in the National Register of Historic Places; and the work at the coke ovens will contribute to the complex's overall significance and ultimate inclusion in the NRHP.

Action Item: Pursue opportunities to work with interested publics and agencies to survey, protect, and interpret heritage resources.

Responsibility: Forest Archeologist and Partnership Coordinator

EFFECTIVE PUBLIC SERVICE

Factors contributing to this goal include the condition, safety, and accessibility of facilities, roads, and trails, land adjustments, and special uses. As examples in Chapter II reflect, the Forest is making progress towards the goals of-

- Protecting natural resources of the Forest and the health and safety of visitors from damage or degradation.
- Permitting use of National Forest land by others, under special use or lease authorities, that is compatible with National Forest goals and objectives and will contribute to the improved quality of life for local residents.
- Improving the efficiency and effectiveness of National Forest Administration through land acquisition, exchange, or donation.
- Constructing and maintaining a transportation system that will allow efficient management and safe public use of National Forest lands (*Forest Plan*, p. 38-40).

The extent to which this progress proceeds is largely determined by funding levels and personnel available to implement projects.

As mentioned previously, recreation use on the MNF is expected to climb as more families from the eastern metropolitan areas discover the scenic beauty and rich terrestrial diversity of the West Virginia Mountains. Currently, a backlog of **facility improvements** need to be made and such needs will only increase if public use increases.

Maintaining adequate, functional, and pleasant toilet facilities is a constant challenge. Every year progress is made to upgrade campsites, visitor centers, and other facilities (see examples in Chapter II), but there is still more to do.

Action Item: Complete data collection and entry for the recreation program and use the information to seek appropriated dollars or initiate partnerships with interested parties.

Responsibility: Recreation Program Manager, Partnership Coordinator, and District Rangers

In regard to **land adjustments**, recent years have yielded significant increases. However, lands programs are somewhat cyclical and often require multiple years of work before accomplishments are obtained. Support from legislators, local governments, and the public is essential for the MNF to meet the goals of the *Forest Plan*, and to add valuable tracts that may come on the market.

Action Item: Pursue methods of informing legislators and the public about land adjustment needs and build support for the lands program.

Responsibility: Lands Program Manager and District Rangers

Working with partners (such as outfitter/guides) under **special use** authorizations is expected to remain a valuable tool for the Forest to provide MNF visitors with quality recreational opportunities and effective service. However, issuing and administering special uses takes tremendous amounts of time, and can produce challenging situations to deal with.

Requests for recreation special uses have been increasing over recent years. There is some internal concern that if recreational use increases natural resources on the Forest could be adversely affected. Managers need to consider long-term implications of increased use and develop possible strategies. For example, internal meetings were held in FY 2000 to discuss social and resource impacts of outfitting and guiding, and a decision was made to begin a programmatic analysis of outfitting and guiding programs in 2002.

Action Item: Begin a programmatic analysis of outfitting and guiding programs.

Responsibility: Special Uses Program Manager

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