United States
Department of
Agriculture

Forest Service

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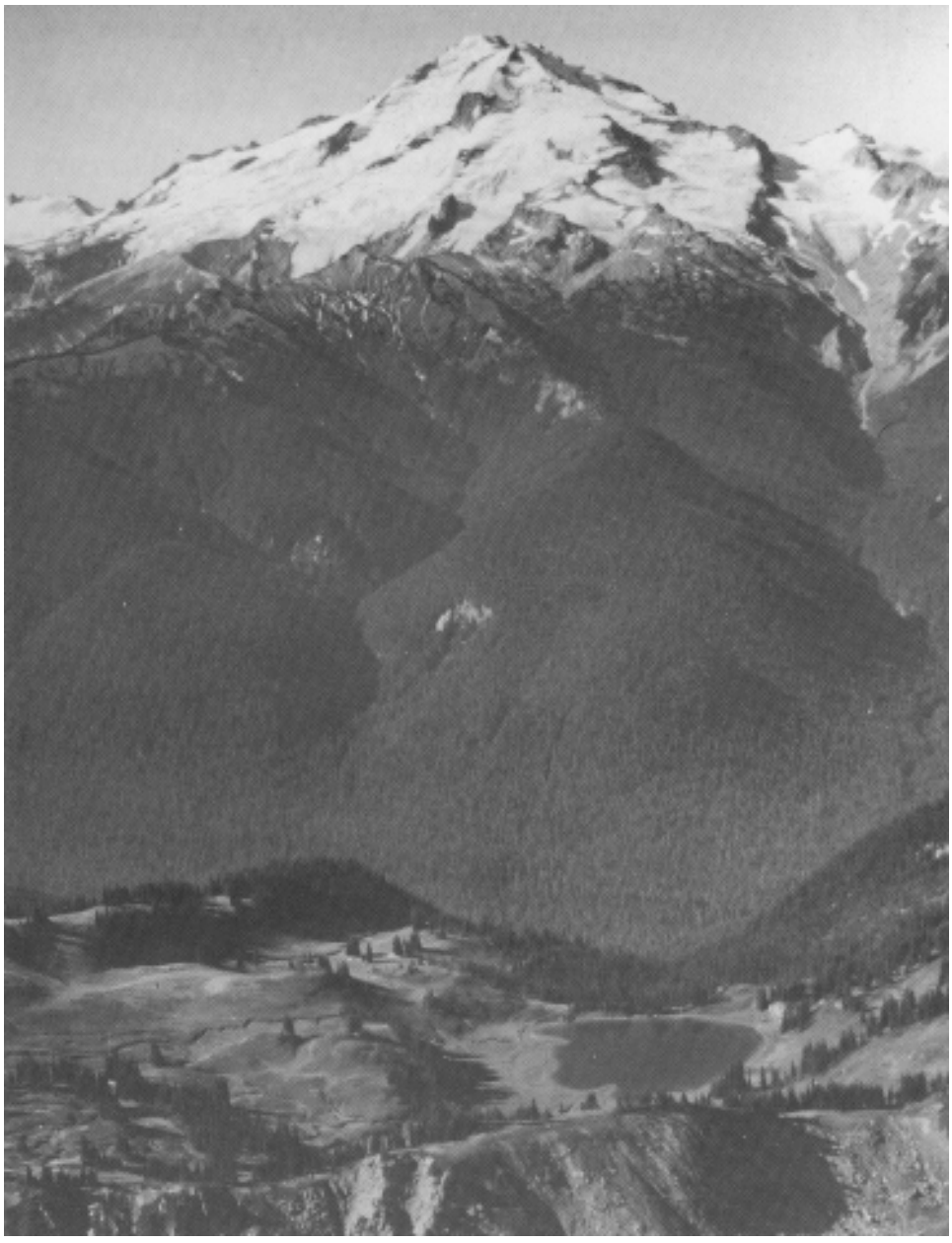
National Strategic Plan For Air Resource Management

Ensuring Effective Integration of Air Resource Considerations in Ecosystem Management of Natural Resources



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I INTRODUCTION

Many National Forest System (NFS) lands downwind of population centers receive high levels of air pollution. Ozone, metals, toxics,. sulfur and nitrogen deposition, and particulate matter (PM-10) are the pollutants of greatest concern, affecting visibility and ecosystem functions on the National Forests. Furthermore, people downwind of the National Forests receive air pollutants from NFS management activities, such as smoke from prescribed fire and dust from our roads.

Lack of information about non-Forest Service sources of air pollution hampers our ability to assess their full impact on our National Forests. In addition, lack of data on levels of smoke and dust downwind of NFS management activities raises questions about our impact on local communities.

The Clean Air Act (CAA) requires the Forest Service to protect the natural resources we manage from the adverse effects of anthropogenic air pollution. The CAA specifically mentions the need to protect visibility in Class I Wilderness areas of the NFS. At the same time, the CAA requires us to ensure that our own emissions from the NFS do not violate Federal or State health standards.

II. PURPOSE

The National Strategic Plan for Air Resource Management has a twofold purpose: (1) to provide air resource managers with a common set of strategies addressing interregional air issues that affect management of National Forest ecosystems; and (2) to provide regions with a framework for their local strategic plans.

The plan is primarily designed for national and regional air resource managers, but other line officers and staff may also find it useful.

III. MISSION

Under the Strategic Plan, the mission of the Forest Service's Air Resource Management (ARM) is (1) to protect NFS lands from the adverse effects of anthropogenic air pollution, (2) to manage NFS emissions in accordance with national and local standards for human health, and (3) to protect visibility in our Class I Wilderness areas.

IV. VISION

Under the Strategic Plan, ARM envisions a leading role for the Forest Service in recognizing that air is a resource that can and should be protected to meet the changing needs of the public. Our stewardship of air resources is to be based on science, conducted professionally, integrated internally and externally, and recognized nationally and internationally as highly effective.

V. GUIDING PRINCIPLES

To realize our mission and in accordance with our vision, ARM will follow these five guiding principles:

- We will integrate air resource management with other disciplines.
- We will use science as the basis for our recommendations.
- We will form partnerships to achieve shared ARM goals.
- We will strive for excellence.
- We will obey the law

VI. ELEMENTS AND STRATEGIES

On the following pages are the five program elements. The elements include a description of the scope, the current situation, the desired state, and the strategies to achieve the desired state. These elements will be used to guide the effective integration of air resource considerations in the implementation of ecosystem management.

Program Element: Air Pollution from Non-Forest Service Activitie

Scope: This element includes management actions taken to protect the natural resources on National Forests and Grasslands from air pollution. Actions include inventorying, monitoring, modeling, and consulting on the effects of air pollution. Potential resources affected by air pollution include water, plants, animals, soil, odor, visibility, air quality, and cultural resources.

This element also includes reviewing State-processed permit applications for new point sources of air pollution (Prevention of Significant Deterioration permits, or PSD's), reviewing State Implementation Plans (SlP's) and operating permits, predicting the effects of air pollution, and managing data and information from inventories and monitoring sites.

Current Situation: Many air quality management efforts across the country lack coordination and continuity, and tend to be reactive rather than proactive. Air resource managers fight uphill battles for full disclosure of the potential impact of pollution sources on the NFS. Virtually all efforts are directed toward protecting Class I areas of the NFS (8 percent of National Forest lands), while Class II areas (92 percent) are essentially ignored. Efforts to develop a national strategy to monitor the regional quality of air over public lands have been undertaken but a hit-or-miss approach has been taken by air resource managers.

Most states look only at incremental increases in emissions from new or modified industry, overlooking the cumulative impact of air pollution. Moreover, States do not give air quality monitoring on public lands a high priority, and partnerships with States for monitoring air pollution are rare.

Desired State: Air resource management is an integral, effective part of ecosystem management. All NFS lands are fully protected from the adverse effects of air pollution. States understand and support the protection of sensitive ecosystems on National Forest land. Monitoring of air quality and pollution is state-of-the-art, coordinated with cooperators, consistent with national strategy, and sufficient to support the decision making process.

Strategies:

1. Review regional screening documents for completeness and consistency, and determine whether they should be updated.

2. Create an interagency monitoring network that provides air resource managers with access to current information on exposure, deposition, and impacts of pollutants on the NFS, and that notifies managers of pending changes in policy, regulations, research activities, and monitoring network designs.

3. Address air pollution issues on a regional scale as well as on a global scale.

4. Initiate actions to effect the rules being drafted that dictate how states determine the emissions a PSD permit applicant must include when determining downwind concentrations from a source.

5. Identify and implement ways to provide air resource managers with easy access to new information and technologies related to air pollution effects and air resource management.

6. Review and revise the Forest Service manual for air quality (FSM 2580) to reflect current policy, laws, regulations, and procedures.

7. Assess the air resource management work to be done as an integral partner in ecosystem management.

8. Characterize the natural range of variability for ecosystem functions that are influenced by air quality.

9. Provide national direction to ensure that all Regions have established levels of protection for visibility.

10. Identify areas where additional research is needed to characterize emissions from non-Forest Service management activities.

11. Support the ongoing effort to develop and implement information management as an integral part of air resource management.

12. Develop, update, and review progress on our plan for national monitoring needs for air quality and the efects of air pollution.

Program Element: Air Pollution from Forest Service Activities

Scope: This element includes all Forest Service responses to atmospheric emissions originating on the National Forests (including the activities of permittees) that can adversely affect human health, ecosystem health, or visibility. Included are activities associated with determining compliance with all applicable Federal and State laws and regulations relating to implementation of the CAA and SIP's.

Current Situation: The impact of Forest Service activities on air quality is not adequately considered before ecosystem management activities are implemented. Often, information on the environmental impact of Forest Service emissions is either unavailable or deficient in detail. The public demands complete and objective disclosure of the impact of Forest Service activities on the environment.

In the broad scheme of things, however, human health depends on a healthy environment. Paradoxically, some pollution (such as smoke from prescribed fire) may be necessary to ensure the health, quality, and resiliency of larger ecosystems (such as short-interval fire-adapted ecosystems.)

Desired State: All managers routinely monitor the impact of management activities on air resources, addressing Forest Service emissions and their effects in a consistent way. The apparent contra diction between preserving air quality and using fire as an ecosystem management tool is resolved, -and the need to create limited pollution is understood and accepted both internally and externally. States work closely with the Forest Service to develop SIP's that are consistent with ecosystem management, and air resource managers are recognized as good stewards of not only the air resource, but entire ecosystems as well. Agency actions conform to applicable laws and regulations.

Strategies:

1. When planning and implementing land management projects, develop training courses on BAA requirements for line, staff, and air resource managers.

2. Develop technical and administrative tools to properly implement conformity rules and other applicable standards, guidelines, and regulations.

3. Develop emission inventories that allow land managers to consider the acute, chronic, and cumulative effects of Forest Service emissions.

4. Coordinate with other resource managers and agencies to develop a policy on the role of fire and air quality in ecosystem management.

5. Coordinate with other resource managers to develop research, education, and management strategies for air resources.

6. Develop an emissions inventory for agency activities in order to better manage pollution originating on the NFS.

7. Provide national direction to ensure that all Regions have established levels of protection for visibility.

8. Identify areas of the CAA that should be addressed agency wide.

9. Identify areas where additional research is needed to characterize emissions from Forest Service management activities.

Program Element: External Relations and Contacts

Scope: This element includes coordination among industry, land managers, and air regulators to efficiently address the responsibilities of the Federal land manager (FLM) under the CAA and SIP's. It also includes coordination and cooperation with research and other natural resource disciplines to better understand the effects of air pollution.

Current Situation: Coordination with State and other government agencies at the national and regional levels has been on an opportunistic (hit- or-miss) basis. Little time is devoted to planning strategically the nature and extent of desired coordination. Moreover, there is a perception that the contact necessary for strategic planning is beyond the capability of ARM staff. At best, we miss opportunities to better protect and manage our resources; at worst, we risk public conflict with other agencies on issues where we can and should be in agreement, thereby hindering our program.

We have not developed and implemented ways of informing our customers of our air resource management mission, objectives, and program strategies. Some resource marketing materials are outdated.

Desired State: Well-established internal and external relationships with research institutions, other agencies, other disciplines, and the public allow us to efficiently and effectively address our responsibilities as air resource management stewards of public lands.

Strategies:

1. Plan and implement a public awareness and communication program that explains the harmful effects of air pollution on natural and cultural resources.

2. Develop a plan for inter- and intragovernmental coordination in implementing strategies and activities dealing with the effects of air pollution.

3. Review existing inter- and intragovernmental agreements, memorandums of understanding, and partnership arrangements for their currency and relevancy; identify and establish new agreements as needed.

4. Formulate a plan for discovering and developing nongovernmental partners, including organizations perhaps not traditionally associated with air quality.

5. Maximize our coordination and cooperation opportunities within USDA.

Program Element: Technology Development and Transfer

Scope: This element includes developing and transferring new research findings, technologies, and techniques to air resource managers, their partners and regulators, and interested environmental protection groups. It also includes communicating research needs to scientists.

Current Situation: Many environmental models and control technologies are available to air resource managers, but few meet their needs. Current technology is neither readily available nor packaged in a user-friendly manner. Because of conflicting priorities, air resource managers are either unaware of or unable to take advantage of the expertise, technologies, and techniques available in other agencies and functional areas.

Desired State: Air quality is an integral part of ecosystem management strategies. Air resource managers receive and use techniques, technologies, and research findings in a timely manner, influencing the direction of research to address ARM needs.

Strategies:

1. Initiate actions to efficiently transfer new research findings, technologies, and techniques to air resource managers and their partners.

2. Develop technology and procedures to integrate air resource management into ecosystem management processes.

3. Cultivate and strengthen partnerships to meet research needs.

4. Fashion basic research results into tools that can readily be used by resource managers and their partners.

Program Element: Program Administration

Scope: This element includes staffing, training, interregional coordination, information management, policy development and review, and budget development and execution.

Current Situation: Because ARM is a relatively new program, its organizational needs, budgets, technical roles, and staff priorities are not as well defined as for older programs. Current downsizing requires creative use of available resources. ARM staff morale is fading because there is no obvious career ladder for ARM employees and because outstanding work usually goes unrecognized.

Desired State: Air resource managers are a nationally diverse group of people augmented by an equally motivated group of partners. The skills and budget necessary to meet the demands of the program are available, an effective information management system is in place, and program successes are duly acknowledged.

Strategies:

1. Review the air resource management workload and develop a plan to augment staff and raise skills to a level that is appropriate to perform efficiently the task of air resource management.

. Develop a standardized approach to program budgeting.

3. Recognize and reward people for their successes.

4. Implement the information management plan for the ARM program (Air Resource Management Information Strategy Project).

5. Develop a strategy to get ARM included in program and activity reviews.

6. Revise FSM 2580 to reflect current ARM policies.

7. Prioritize the air resource management workload so that we can provide completed products within a reasonable timeframe with the resources that we actually have.