BUREAU OF LAND MANAGEMENT

Air Resource
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Program Strategy

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BLM

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Air Resource Management Program Strategy 2015-2020

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Executive Summary

The Bureau of Land Management (BLM) Air Resource Management Program manages air resources and air quality related values on BLM public lands in a manner that complies with the Clean Air Act, Federal Land Policy and Management Act, and National Environmental Policy Act, as well as state, tribal, and local requirements. This 5-year strategy will enable the BLM's air program to meet challenges posed by the increasing demand for resource development and recreational opportunities on public lands. This strategy highlights those challenges; describes the interrelated roles and responsibilities of federal, state, tribal, and local agencies with respect to air resources; and outlines four overarching goals and five specific objectives supporting BLM efforts to protect and improve shared air resources. Emphasis on proactive measures that reduce emissions, regional air resource assessments, and improved monitoring and data management will be critical to its success. This strategy also offers opportunities for continual learning that can inform the BLM's air resource management actions as well as its other resource management decisions.

This strategy identifies the goals and objectives the program will address over the next 5 years. The goals include: (1) reduce and mitigate pollutant emissions to promote environmental stewardship; (2) improve the effectiveness of air quality analyses by conducting regional-level assessments in collaboration with stakeholders; (3) strengthen the BLM's abilities to address emerging issues, such as more stringent regulatory standards for ozone and policy direction to reduce greenhouse gas emissions; and (4) build relationships with stakeholders to reduce conflict and promote collaborative efforts to achieve and maintain good air quality. The objectives include: (1) limit pollutant emissions to the atmosphere; (2) strengthen working relationships and increase collaboration with federal partners, states, and other stakeholders concerned about air resources on public lands; (3) improve effectiveness and efficiency of air quality analyses; (4) improve availability and access to air quality monitoring data; and (5) enhance and maintain technical expertise relevant to air resources.

The Air Resource Management Program will continue to coordinate its activities with other BLM programs responsible for decision and management of use authorizations, resource uses, and resource conservation and protection. The program will focus on collaboration with other federal agencies on common air issues and cooperation with state agencies responsible for compliance, monitoring, and enforcement of air quality regulations.
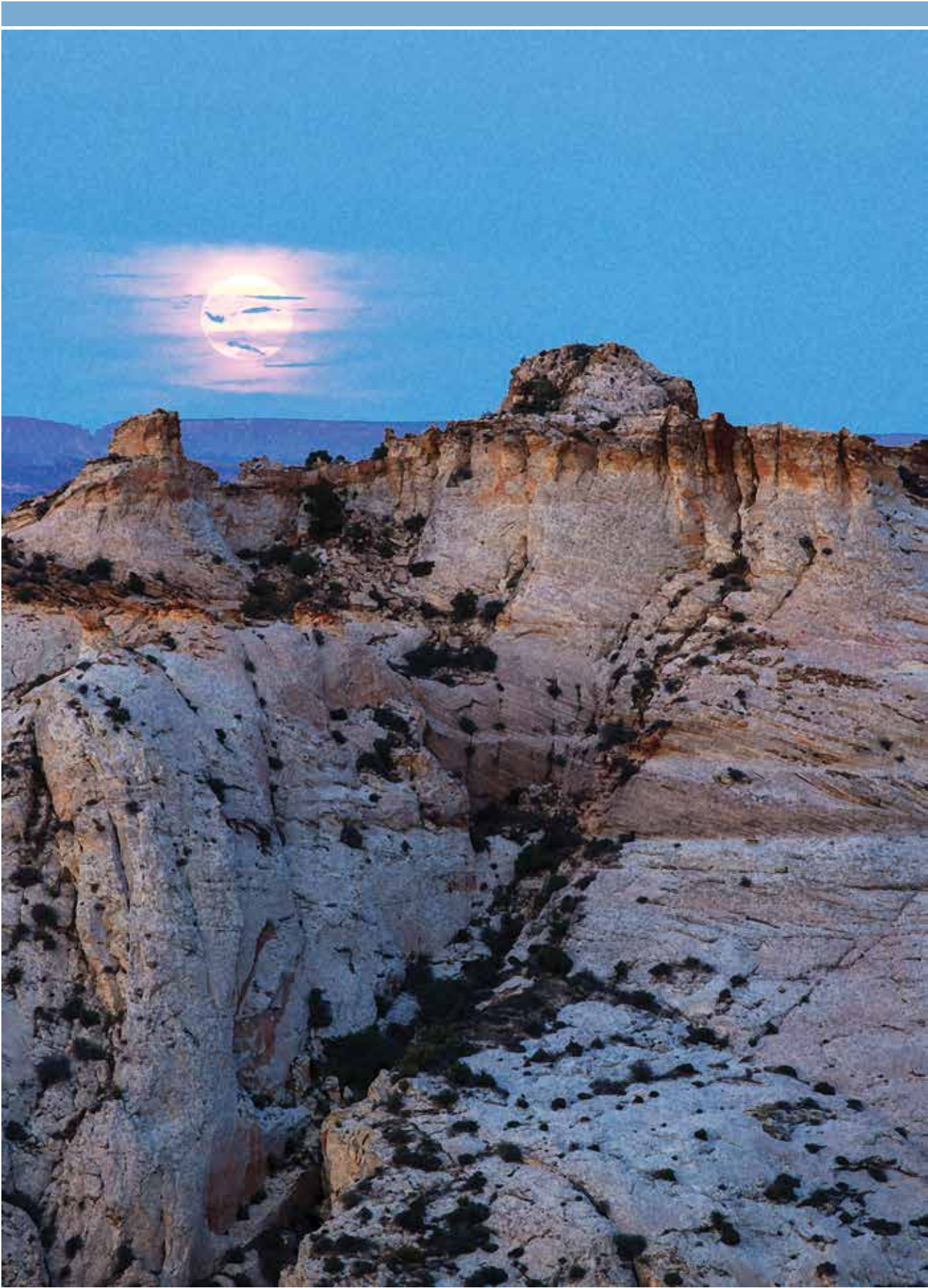
1. Introduction

In managing about 245 million surface acres of public lands and 700 million subsurface acres of mineral estate, the Bureau of Land Management (BLM) in the U.S. Department of the Interior (DOI) initiates and authorizes energy development, mineral extraction, timber harvesting, grazing, recreational opportunities, and other activities that can affect air resources by releasing pollutants to the atmosphere. The Federal Land Policy and Management Act (FLPMA) directs the BLM to manage the public lands on the basis of "multiple use" and "sustained yield" principles.

FLPMA and two other Federal statutes—the Clean Air Act (CAA) and the National Environmental Policy Act (NEPA)—guide the BLM's management of air resources. Several provisions of FLPMA are relevant: (1) FLPMA declares a policy that the BLM will manage the public lands in a manner that will protect the quality of air and atmospheric values, among other resources; (2) FLPMA requires the BLM's land use plans to provide for compliance with applicable air pollution standards or implementation plans, among other laws; and (3) FLPMA requires the BLM's leases or other instruments authorizing use or development of public lands to include provisions allowing the BLM to revoke or to suspend the lease for violation of terms that require compliance with air quality standards or implementation plans. While the CAA defines a regulatory framework for protecting and improving the nation's air quality, the BLM's air resource management decisions may, in appropriate circumstances, complement CAA requirements, particularly to protect the public lands, as broadly defined in FLPMA, from unnecessary and undue degradation. NEPA, which requires the BLM to analyze potential environmental impacts of actions it initiates or authorizes and to discuss means to mitigate adverse environmental impacts, offers a process for identifying air resources that should be considered during the environmental review process.

The BLM is facing increasingly complex and critical air resource issues that affect its ability to authorize many activities and uses. The BLM also is facing challenges, protests, and litigation regarding air quality analyses in planning and NEPA documents, including analyses of regional air pollution issues, impacts to sensitive areas, and mitigation measures. It is critical for the BLM to address these matters in order to (1) appropriately authorize activities and uses consistent with FLPMA's "multiple use" and "sustained yield" principles and FLPMA's instructions to protect air and atmospheric values and (2) ensure CAA compliance. Addressing these matters also could increase
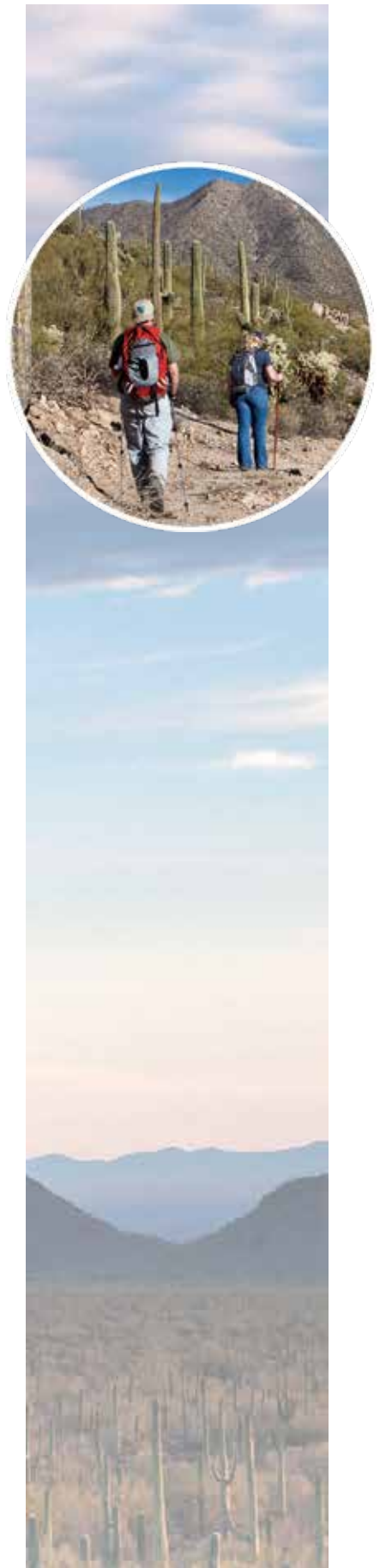
certainty in the BLM's planning and NEPA processes, benefiting the BLM, its government partners, and other stakeholders. By ensuring that analyses of cumulative air quality impacts of major planning and project decisions adequately address regional air pollution issues, sensitive areas, and mitigation, the BLM could reduce costs and delays associated with protests, appeals, and litigation. The BLM is already seeing results of implementation of a memorandum of understanding (MOU) signed in June 2011 by the U.S. Department of Agriculture (USDA), DOI, and U.S. Environmental Protection Agency (EPA), which commits the signatories to a clearly defined, efficient approach to compliance with

NEPA regarding air quality in connection with oil and gas development on federal lands.

The BLM will address air resources over the next 5 years by increasing emphasis on: (1) proactive measures that reduce traditional pollutant and greenhouse gas (GHG) emissions to the atmosphere; (2) collaborative, regional air resource assessments; (3) monitoring and effective data management; (4) improved relationships with other agencies and stakeholders; and (5) access to sufficient expertise so managers can make informed and effective decisions. The BLM anticipates that this strategy will support its efforts to protect and improve air resources, consistent with its authority under FLPMA.

2. Roles and Responsibilities

Federal, state, tribal, and local agencies have distinct roles and responsibilities under the legal framework governing air resource management. Air resources cross geographic and political boundaries and are important to numerous government entities, interest groups, and the general public. Therefore, the BLM must collaborate with all levels of government, stakeholders in the private and nonprofit sectors, and

members of the public to protect and manage air resources on public lands.

2.1 Environmental Protection Agency and State, Tribal, and Local Governments

The CAA assigns primary regulatory responsibility for national air quality to the EPA. The EPA has established national

ambient air quality standards (NAAQS) to protect public health and welfare, national goals to improve visibility, and regulations to reduce emissions from stationary and mobile sources. Subject to EPA oversight, state, some tribal, and some local air regulatory agencies are responsible for implementing, maintaining, and enforcing plans to meet the NAAQS and comply with other CAA regulations within their respective jurisdictions. These agencies have either adopted the federal air regulations or have established their own air quality regulations, which may be more, but not less, stringent than the federal standards. The EPA also is responsible for reviewing and commenting on other federal agencies' NEPA documents and for rating those agencies' analyses and environmental impacts of proposed actions.

2.2 Bureau of Land Management

The BLM manages the public lands on the basis of the "multiple use" and "sustained yield" principles described in FLPMA, which directs the BLM to manage the public lands in a manner that will protect the quality of air and atmospheric values, among others. The BLM also must ensure that BLM-authorized activities comply with the CAA and all applicable federal, state, tribal, and local air

quality laws and regulations. The CAA gives the BLM an affirmative responsibility to protect air quality related values (AQRVs) (including visibility) in the "Class I" areas that it manages (Class I areas include designated wilderness areas exceeding 5,000 acres). One way in which the BLM manages air resources is by establishing goals and objectives in land use plans that must, at a minimum, comply with regulatory standards; these goals and objectives also may give effect to FLPMA's instructions to protect air and atmospheric values.

2.3 Other Federal Land Managers

Other federal land management (FLM) agencies—namely, the U.S. Fish and Wildlife Service (FWS), National Park Service (NPS), and U.S. Forest Service (USFS)—are required to protect air quality and AQRVs under their respective enabling legislation. FLM agencies also have an affirmative responsibility under the CAA to protect AQRVs (including visibility) within Class I areas, including many larger national parks and wilderness areas. When activities initiated or authorized by the BLM are located in or near Class I areas, the affected FLM agency reviews the relevant air quality analyses and may comment on the potential air quality impacts and recommend appropriate mitigation measures.

3. Goals and Objectives

This strategy is designed to position the BLM Air Resource Management Program as a leader in protecting air resources while helping the BLM to continue to meet its multiple-use mandate for managing public lands, which includes authorizing activities needed to meet increasing demands for resources and recreational opportunities. This strategy includes the following overarching goals:

- Reduce and mitigate pollutant emissions to promote environmental stewardship.

- Improve the effectiveness of air quality analyses by conducting regional-level assessments in collaboration with stakeholders.

- Strengthen the BLM's abilities to address emerging issues, such as more stringent regulatory standards for ozone and policy direction to reduce GHG emissions.

- Build relationships with stakeholders to reduce conflict and promote collaborative efforts to achieve and maintain good air quality.

The BLM will pursue the following five specific objectives to achieve these goals.

3.1 Objective 1: Limit pollutant emissions to the atmosphere.

The BLM will adopt a more proactive approach to manage air resources at regional scales to address challenges resulting from more stringent air quality regulatory standards, increasing population growth and urbanization, and accelerating development of public lands. This approach will require the BLM to collaborate with stakeholders to maintain or improve overall air quality and prevent violations of regulatory standards. In addition, Executive Order 13514, titled "Federal Leadership in Environmental, Energy, and Economic Performance," released October 5, 2009, and Secretarial Order No. 3289, titled "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources," as amended February 22, 2010, direct agencies to reduce GHG emissions associated with their activities. The BLM's air quality monitoring, modeling, and related activities are intended to inform and support the ultimate objective of limiting emissions.

In support of this objective, the BLM will:

- Continue to develop policy to reduce pollutant and GHG

emissions from fluid and solid mineral development and production by increasing the use of cost-effective best management practices (BMPs) and technologies. Emissions from these activities, including carbon dioxide and methane, contribute to air resource issues in many states, have been associated with protests and lawsuits by interest groups, and have been a source of conflict with other federal agencies.

- When developing or revising resource management plans (RMPs), the BLM works with stakeholders to develop effective air resource management goals and objectives to maintain or improve air quality. Traditionally, goals and objectives in existing RMPs have focused on compliance with the CAA and other regulatory standards. Future planning goals and objectives also should reflect FLPMA's separate instruction to protect air and atmospheric values in managing the public lands, giving greater consideration to other factors including comprehensive air quality management concepts.

- Coordinate and share information with other agencies and stakeholders with relevant expertise to maintain consistent, up-to-date lists of accepted BMPs and technologies for reducing emissions and mitigating impacts from authorized activities.

- Pursue opportunities to practice adaptive management. Consistent with applicable law and lease rights and obligations, this may include using air monitoring data to require the adoption of BMPs, control technologies, or other mitigation measures under existing leases, as needed to address emerging air quality problems and new regulatory requirements. For example, if an operator has plans to initiate development of, or continue developing, federal oil and gas resources, the BLM may require the use of mitigation measures as conditions of approval on proposals (i.e., applications for permits to drill, or APDs) to develop existing and newly issued leases, provided that there has been compliance with NEPA and that the mitigation measures are consistent with the terms of the leases.

- Continue using BMPs for smoke management related to the use of prescribed fire, and continue adherence to state-specific regulations and permit requirements regarding prescribed burning. Pollutant emissions from prescribed fires can be minimized by practices such as selecting the conditions under which burning occurs (weather and fuel conditions), ignition methods and patterns, and cleanup procedures. Compared to wildfires, good smoke management of prescribed fires allows emission of only a fraction of pollutants.

3.2 Objective 2: Strengthen working relationships and increase collaboration with federal partners, states, and other stakeholders concerned about air resources on public lands.

Collaboration among the BLM, other FLM agencies, the EPA, other air regulatory agencies, and stakeholders is essential to successful air resource management. Land use planning and NEPA processes offer opportunities for collaboration on specific decisions that affect air resources, particularly with other FLM agencies and the EPA. Other opportunities for collaboration include air monitoring data collection, air quality modeling analyses, selection of appropriate BMPs and emission control measures, and regional air quality planning activities.

In support of this objective, the BLM will:

■ Increase collaboration with the EPA and other FLM agencies. Collaboration can be challenging because (1) each agency has unique, often competing responsibilities; and (2) stakeholders bring diverse perspectives to air resource management.

- To increase collaboration in the NEPA process to inform federal oil and gas decisions, an MOU between the USDA (on behalf of the USFS), DOI (on behalf

of the BLM, FWS, and NPS), and EPA establishes common procedures for analyzing and mitigating impacts to air quality and AQRVs associated with oil and gas planning, leasing, and field development activities on federal lands.

- The BLM and the other participating agencies will continue to collaborate, provide joint training opportunities, and develop specific training, as necessary, to implement the MOU requirements.

■ Engage partners in planning and management efforts to support regional air quality improvement. In addition, the BLM will engage cooperating agencies with special expertise or jurisdiction by law, as well as coordinate actions with other state, local, and tribal governments, early in the NEPA process to produce more effective land use authorizations and plans that adequately address relevant issues.

■ The BLM will continue to participate in regional, interagency work groups and partnerships to build working relationships, share information, and avoid duplication of efforts. Such efforts include the:

- Federal Leadership Forum (FLF). The FLF is a consortium of states (Colorado, Utah, and Wyoming), FLM agencies, and EPA Region 8 (serving several

states and tribal nations in the Rocky Mountain region) that addresses issues and coordinates policy in areas of common concern.

- Western Regional Air Partnership (WRAP). WRAP is a voluntary partnership of states, the EPA, FLM agencies, tribes, and local air agencies that is dedicated to understanding regional air quality issues in the West. BLM representatives currently serve on the WRAP board and plan to participate on the WRAP Technical Steering Committee (re-formed in 2014) to address air issues related to oil and gas development.

- Western States Air Resources Council (WESTAR). WESTAR is a group of 15 states that promotes the exchange of information, serves as a forum to discuss western regional air quality issues, and shares resources for the common benefit of members. FLM agencies participate in WESTAR as partner agencies.

- Four Corners Air Quality Group. This group is convened by the states of New Mexico and Colorado as a forum for individuals interested in air quality in the Four Corners region of New Mexico, Colorado, Arizona, and Utah. Previously known as the Four Corners Air Quality Task Force, the group published a report on possible mitigation

strategies for air quality in November 2007. Group participants include private citizens and representatives from public interest groups; universities; industry; and federal, state, tribal, and local governments.

- Smoke Committee (SmoC) of the National Wildfire Coordinating Group (NWCG). The BLM participates in the SmoC of the NWCG, which is comprised of representatives of federal agencies that engage in wildfire management, state and local air regulatory agencies, and interest groups.

3.3 Objective 3: Improve effectiveness and efficiency of air quality analyses.

Air resource managers and regulatory agencies request increasingly complex analyses to assess increasing emissions of air pollutants across the West and to address challenges resulting from more stringent regulatory standards. These analyses can be challenging, time consuming, and expensive. The BLM and other FLM agencies have dedicated significant resources to develop predictive numerical models for conducting air quality analyses for individual projects. Analyses conducted on a project-specific basis are of limited long-term use and often do not address the larger issue of regional air pollution. A combination of

regional predictive numerical models and site-specific analyses is a better approach for addressing regional air pollution, meeting new regulatory requirements, and allowing activities to be authorized in a timely, cost-effective manner.

The BLM will continue supporting the use of collaboratively developed regional models, which will provide the BLM and other air resource managers with tools to fully assess cumulative impacts for NEPA analyses and to address long-term planning issues. NEPA analyses conducted to authorize plan- or project-specific activities will reference regional-level analyses but be based on approaches appropriate for plan- or project-specific analyses, such as emissions inventories, simplified screening models, or qualitative assessments.

In support of this objective, the BLM will:

- Continue cooperating with stakeholders (e.g., the FLF) on a pilot project to develop and operate a regional air quality data warehouse and modeling repository for Colorado, Utah, and Wyoming, and expand to include other states.

- Continue participating in the Four Corners Air Quality Group on collaborative efforts to assess, manage, and mitigate air quality impacts in northwestern New Mexico and southwestern Colorado.

- Continue working with the EPA and other agencies, states, and other stakeholders to utilize existing air quality datasets and to develop new regional air quality assessments and additional regional modeling capacity.

- Develop guidance to assist BLM field offices with selecting appropriate NEPA air quality analyses for plan- and project-specific activities that are not covered by the June 2011 air quality MOU. The guidance may include information about emissions inventories and calculators, screening models, predictive models, relative costs, preparation time, and technical limitations.

3.4 Objective 4: Improve availability and access to air quality monitoring data.

Air quality monitoring data supports and informs BLM management decisions and those of other FLM agencies. Prior to authorizing activities, for example, the BLM uses such monitoring data to establish baseline conditions and evaluate trends, to assess the effects of air emissions on other natural resources such as vegetation and water, and to calibrate and validate numerical predictive models. Accordingly, air quality monitoring data is important to many facets of air resource management. Other public and

private organizations, including several federal organizations, use air quality monitoring data to study long-term trends. In addition, federal and state air regulators use air quality monitoring data to designate areas as in attainment or nonattainment of the NAAQS and to identify exceedances of the NAAQS over time.

Traditionally, the BLM has relied on data collected from existing monitoring networks maintained by regulatory agencies and has collected its own data as needed to address specific monitoring needs. In recent years, significant development has occurred on BLM lands in remote areas that have not been included in existing monitoring networks, which focus on monitoring conditions in more populated, urban areas.

Systematic processes also are lacking for storing, managing, and sharing air quality and meteorological data among various agencies and stakeholders. Agencies must expend significant time and resources to compile data from various sources when conducting assessments and analyses; many of these efforts are redundant, as they are conducted for individual projects within the same geographic areas.

In support of this objective, the BLM will:

- Increase the number of air quality monitoring stations in areas lacking sufficient data to establish baseline conditions,

assess trends in air quality conditions, calibrate and validate predictive models, and evaluate compliance with regulatory standards. The BLM will coordinate with air regulatory agencies and other FLM agencies to install or maintain stations in locations that increase effectiveness of existing monitoring networks. Priorities will be placed on monitoring ozone, particulate matter, hazardous air pollutants, and other pollutants related to oil and gas activities.

- Expand the use of portable instruments to address specific short-term data needs, such as monitoring seasonal ozone concentrations associated with oil and gas activities and temporary smoke monitoring for prescribed fire events.

- Improve the efficiency of data collection, reduce overall costs, and leverage resources through cooperative arrangements with air regulatory agencies and collaborative partnerships with proponents.

- Cooperate with the FLF and others on a pilot project to develop and operate a regional air quality data warehouse and modeling repository for Colorado, Utah, and Wyoming. The data warehouse will provide a systematic approach for agencies to store, maintain, and share air quality and meteorological data. Once fully implemented, the pilot project

may be expanded to include other areas with similar air quality issues.

■ Develop guidance for BLM field offices on approaches and considerations for air quality monitoring and effective uses of monitoring data to support decisionmaking.

3.5 Objective 5: Enhance and maintain technical expertise relevant to air resources.

BLM managers require access to sufficient expertise and information to make informed and effective land use planning and management decisions, assess resource conditions, comply with changing regulatory requirements, and develop effective relationships with stakeholders. The BLM is facing an increase in both the volume and the technical demands of the work required to meet applicable legal requirements and the goals of this strategy.

In support of this objective, the BLM will:

■ Continue to work to ensure the BLM Air Resource Management Program has adequate and appropriate air resources staff to handle growing complexity and challenges. Such specialists provide subject matter expertise throughout the BLM, coordinating with field office air contacts to assist with air

resource management and the development of relationships with stakeholders.

■ Increase the effectiveness of air contacts and line managers by ensuring access to relevant information, basic training, and communications with the core staff of air resource specialists. The BLM Washington Office and the National Operations Center are initiating an effort to improve the content of the BLM's air resources website to better support the needs of air contacts; this website will be maintained on a regular basis to ensure that its content remains relevant. An air resources SharePoint site also has been developed to support interactive information exchange and communication among the air resources team within the BLM.

■ Develop basic training courses to improve comprehension and awareness of management, technical, and regulatory issues. The National Training Center is preparing an introductory, web-based soil, water, and air course with a team of air resource specialists and other subject matter experts. Staff also will be encouraged to attend training courses available through other agencies to increase knowledge and build personal working relationships.

■ Develop and issue air program guidance to ensure consistent approaches are used, and provide references for air

contacts and line managers to address technical and process questions. BLM Manual Section 7300 was issued in 2009 to document the authority, policy, objectives, program structure, roles, and responsibilities for the BLM Air Resource Management Program. The BLM will develop a handbook addressing technical, regulatory, and management considerations for the program.

■ Increase internal communication and interaction with smoke management staff in the fire directorate to ensure the BLM fully utilizes available expertise and to ensure all parties are aware of and understand existing policies and regulations. Air resources and smoke management programs are managed under different BLM directorates, and it is important to facilitate coordination across staffs in many offices.

4. Conclusion

The goals and objectives described in this 5-year strategy will enable the BLM Air Resource Management Program to meet challenges posed by the increasing demand for resource development and recreational opportunities on public lands. This strategy will enable the BLM to continue to protect air resources while carrying out FLPMA's multiple-use mandate for managing public lands. New emphasis on proactive measures that reduce emissions, regional air resource assessments, and improved monitoring and data management will be critical to its success. Collaborative relationships with other agencies and stakeholders, plus heightened air expertise within the BLM, will be equally important. The strategy also offers opportunities for continual learning that can inform the BLM's air resource management activities as well as its other resource management efforts.

List of Acronyms

AQRV	–	air quality related value
BLM	–	Bureau of Land Management
BMP	–	best management practice
CAA	–	Clean Air Act
DOI	–	Department of the Interior
EPA	–	Environmental Protection Agency
FLF	–	Federal Leadership Forum
FLM agency	–	federal land management agency
FLPMA	–	Federal Land Policy and Management Act
FWS	–	U.S. Fish and Wildlife Service
GHG	–	greenhouse gas
MOU	–	memorandum of understanding
NAAQS	–	national ambient air quality standards
NEPA	–	National Environmental Policy Act
NPS	–	National Park Service
NWCG	–	National Wildfire Coordinating Group
RMP	–	resource management plan
SmoC	–	Smoke Committee
USDA	–	U.S. Department of Agriculture
USFS	–	U.S. Forest Service
WESTAR	–	Western States Air Resources Council
WRAP	–	Western Regional Air Partnership