

PANEL

Federal Water Quality Information Responsibilities, Activities and Needs

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The U.S. Bureau of Land Management (BLM) is a multiresource land management agency responsible for providing goods and services to the public from the public lands it administers. These goods and services include water as a resource.

Responsibilities

The production of renewable and most nonrenewable resources is intimately tied to the availability and quality of this resource. Water also has finite limits in both quantity and quality which place constraints on its capacity to support various uses. In addition to these natural constraints, there are also executive and legal requirements protecting the water resource that the BLM must comply with in its management of public lands. Examples of some of these mandates are:

1. National Environmental Policy Act
2. Federal Land Policy Management Act
3. Surface Mining Control and Reclamation Act
4. Clean Water Act
5. Safe Drinking Water Act
6. Wild and Scenic Rivers Act
7. Executive Order 11988, Floodplain Management
8. Executive Order 11990, Protection of Wetlands

These and other related mandates require, among other things, that the BLM protect or improve the quality of the water resource, prevent the deterioration of soil and watershed conditions, prepare environmental im-

impact statements (EIS) for major actions significantly affecting the quality of the human environment, and develop and maintain land use plans using ecological information and an interdisciplinary approach. The BLM also conducts and maintains a continuing inventory of water resources, complies with all applicable federal, state and local requirements respecting control and abatement of pollution, improves public rangelands to make them as productive as feasible and rehabilitates areas having unacceptable erosion and runoff conditions. The U.S. Bureau of Land Management responsibilities also are to avoid adverse impacts associated with the occupancy and modification of floodplains and to minimize the destruction or degradation of wetlands.

The BLM water resources program is somewhat unique in that it involves hydrology watershed management and also small drainage basins for which little information is available. The following projects are the major current BLM activities:

Baseline Data Collection--The BLM is funding the U.S. Geological Survey (USGS) to collect surface water discharge and sediment data at six gauging stations in New Mexico. Data from these stations are used to characterize drainage basins and establish long-term averages and determine trends. Data for these stations are published by the USGS.

Water Use Inventory--A water use inventory is being conducted statewide to locate water sources and quantify water uses on public lands for protecting and securing water rights of the United States. Such an inventory will provide the basis for the administration and management of water uses on public lands. The inventory also includes chemical quality of major wells and springs.

Areal Investigations--Areal investigations are designed to assess ground water levels, aquifer and surface water characteristics, water quality data, sediment yields, etc. There is need to provide a general description of the water resources in the study area. Areal investigations provide the basic water resources information that is used in the BLM's

land use planning system and environmental assessment program. Investigations are conducted in-house or under contract. Investigations have been completed for EIS areas in east and west Socorro, east Roswell, southern Rio Grande, Las Cruces/Lordsburg and San Juan BLM planning/grazing EIS areas. Preparation plans are underway to complete management plans and EISs for the Roswell and Rio Puerco areas.

Coal Hydrology Studies--These are comprehensive studies of the water resources at specific study sites located in leaseable coal areas of the San Juan Basin. The purpose of the studies is to evaluate the rehabilitation potential of the area following mining and to evaluate potential impacts on the water resources. Data collected include streamflow and ground water characteristics, surface and ground water quality and climatological variables. Results from these studies are published in reports for each study site by the BLM and in basic data reports by the USGS.

Water Quality Monitoring of the Rio Grande and Red River Wild and Scenic River, Taos County--This project is designed to provide water quality data for river administration. This ongoing study of the quality of the Rio Grande and lower Red River in northern New Mexico is being conducted to characterize existing quality, identify and evaluate existing and potential pollution problems and evaluate water quality in relation to water quality criteria and standards. Such data are needed for the administration and management of the designated wild and scenic river. Water quality data including physical, chemical and microbiological characteristics are collected by the BLM and published by the USGS.

Information Needs - In Summary

The foregoing list of current activities is an example of the type of information needed and its application in BLM management programs. Almost all of these activities are expected to continue for varying periods of time.

Water resource information is needed by the BLM not only for water management but also for the management of the many other resources under BLM's jurisdiction. Water resource information is needed on a continuing basis for the BLM's cyclic land use planning system and for the assess-

ment of impacts in environmental impact statements. The first cycle of planning is scheduled for completion in 1989. Information is also needed in the BLM's coal program and asset management program which are receiving more emphasis recently. The coal leasing schedule for the Salt Lake coal field in the BLM Socorro district has been accelerated to accomplish leasing in 1986.

Water quality, ground water and floodplain information will be needed for the application of unsuitability criteria in the coal planning process and for the assessment of hydrologic impacts from mining and reclamation. Floodplain and wetland information particularly will be needed in the asset management program for the sale or other disposition of some 242,000 acres of federal lands identified to date. Such information is essential for compliance with the floodplain and wetland executive orders.

Information to protect the quality of the water resource, to prevent the deterioration of soil and watershed conditions and to assess land use impacts is required in order for BLM to meet its mandated management responsibilities.

We look forward to working with the people and organizations represented here to better our ability to perfect and manage the water resources of New Mexico.