

Reducing Mineral Development Impacts with Geographic Information Systems Technology

Mining and Minerals Branch
Denver Service Center, GIS Branch
National Park Service
Department of the Interior

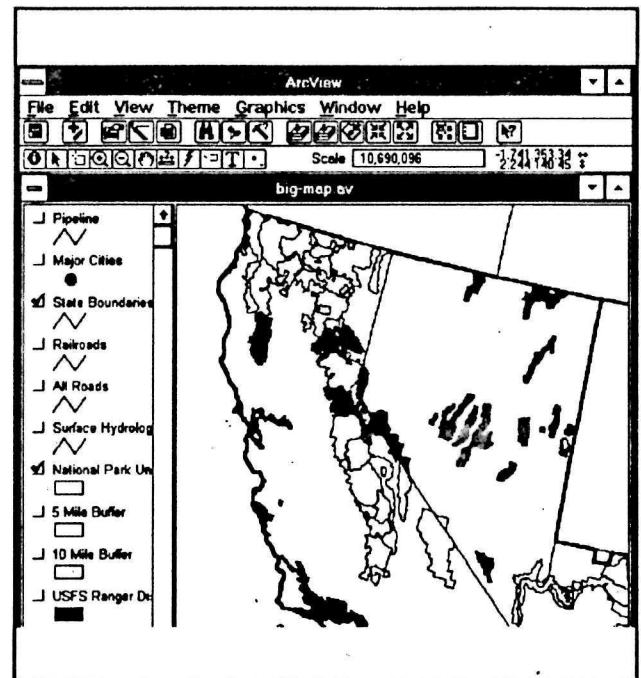
Environmental effects recognize physical boundaries not administrative boundaries. Effective land management planning requires information that goes well beyond individual agency boundaries. Through the use of interagency GIS data, the National Park Service, Mining and Minerals Branch has improved mineral-issue awareness, coordination, and communication with neighboring land management agencies throughout the National Park system. The GIS map layers in association with ArcView[®] software have enabled staff to: produce quick graphics for reports and memos; respond accurately to who, what, and where questions from management and the public; and track land-use planning or mineral leasing efforts.

Map layers and associated databases developed to support this project:

- National Park Service Boundaries (NPS)
- Major Hydrographic / Transportation Features (ArcUSA[®])
- BLM Resource Areas & Districts (NPS)
- State/County Boundaries (ArcUSA[®])
- National Forests and Grasslands (NPS)
- Mineral Industry Location System (MILS) points (USBM)
- Areas within 5 and 10 miles of park boundaries (NPS)
- O & G Pipelines within 10 miles of NPS units (MAPSearch Services[®])

The Denver Service Center, GIS Branch provides GIS solutions in support of National Park planning, design, and construction programs. Services provided include: data collection; data base development; image processing; data analysis; consulting/coordination; and output product (graphics) production.

The Washington Office, Mining and Minerals Branch is field located in Denver Colorado. Branch responsibilities include: technical assistance to parks on geotechnical and minerals related issues; develop policy, guidelines, regulations or legislation to effectively manage in-park mineral development; maintain geologic and minerals data; provide training and/or information to park staff, park management, congressional staff and the public.



The above is an example of an ArcView[®] display. This software allows users to view digital map layers and query associated databases.

For further information, contact:
Denver Service Center, GIS Branch
National Park Service,
P.O. Box 25287
Denver, CO 80225-0287,
pbudde@dsc.nps.gov