

# SUMMARY

This Environmental Impact Statement (EIS) is intended to be a part of the decision-making process, providing information to the Secretary of the Interior and the public concerning the use of coal resources from the Powder River Region. It has been prepared to comply with the Council on Environmental Quality (CEQ) regulations issued November 29, 1978 (43 FR 55978-56007), which emphasize concentration on significant issues and impacts. This emphasis sharply defines the options and provides a clear basis for choice by the decision-maker and the public.

Tract Profiles, consisting of the tract delineation report, coal data summary and site specific analysis report, were prepared for each tract within the region. The Tract Profiles constitute the site specific analyses for the EIS although they are not physically attached to the document. These reports consider environmental, social and economic impacts that would occur on the individual tracts and may be obtained from the BLM District Office, Casper, Wyoming at no charge. Impacts identified in each of these tract profiles as well as those occurring from the No-Action Alternative are analyzed cumulatively in this EIS.

Four alternative courses of action, ranging from no new federal leasing, to offering 19 delineated tracts for lease are addressed in this document. The issue of primary concern is the impact of coal mine development and population increases to communities. Many other resource impacts are presented and analyzed here; water resources, reclamation, air quality, sociology, economics, and railroad transportation are of primary significance. Many other resource impacts are presented, but in nearly every case, they are either insignificant or are mitigated by existing regulations. Differences in impacts are mainly by degree, rather than by type.

The alternative selected by the Regional Coal Team (RCT) as the preferred alternative would offer for lease in mid-1982 15 tracts which would result in an average annual production of about 50 million tons. Eight of the 15 tracts are considered production maintenance (coal leased to sustain existing coal mines).

Other alternatives considered herein are:

Alternative 1 (No Action) includes the coal related actions that would occur with or without new competitive federal leasing. Actions within this alternative include 18 existing coal mines, 17 coal mines under construction, 67 Preference Right Lease Applications (PRLAs) organized into 15 groups, three I-90 Coal Exchanges and two non-competitive leases (Northern Cheyenne). The average annual production from this alternative would

be about 369 million tons in 1990. An estimated surface disturbance of 210,000 acres would result from this alternative (see Table 2-2).

Alternative 2 considers leasing 1.5 billion tons of recoverable coal reserves from 13 tracts. The average annual production from this alternative would be about 46 million tons. An estimated surface disturbance of 57,400 acres would result from implementation of this alternative.

Alternative 3 analyzes impacts from the proposed leasing of 14 tracts including 1.5 billion tons of recoverable coal reserves. Average annual production from this alternative would be about 50 million tons. Surface disturbance would total 64,200 acres. This alternative offers the most favorable ratio of coal produced to environmental impacts generated, and is the preferred alternative.

Alternative 4 is the maximum alternative and considers leasing 2.6 billion tons of recoverable coal reserves from 19 tracts. Average annual production from this alternative would be about 90 million tons. Surface disturbance associated with this alternative would amount to 83,500 acres. This alternative would produce the most widespread environmental impacts of all federal action alternatives. Impacts would be most severe to the unincorporated community of Ashland District, Montana, where population would increase eightfold by 1990.

## GENERAL CONCLUSIONS

The No-Action Alternative includes existing coal mines, coal mines under construction, PRLAs, I-90 Exchanges and non-competitive leases. It must be understood that impact from new federal leasing would add to that from the No-Action Alternative. When impacts from the No-Action Alternative is compared to impacts potentially resulting from new federal leasing, it is obvious that the No-Action Alternative has the greatest magnitude. Impacts, which can be traced to new federal leasing, are similar to those already occurring and only magnify the total.

Impacts in Wyoming center around the urbanized community of Gillette in Campbell County. Gillette has been experiencing energy-related impacts over the past ten years. Impacts in Montana would center around the rural, unincorporated community of Ashland in Rosebud County. Unlike Gillette, Ashland has experienced very little growth over the past decade. Therefore, social and economic im-

## SUMMARY

pacts, caused by increased population, would heavily affect Ashland.

All the alternatives, including the No-Action, would further diversify the economic base within the region. This trend is well established in Wyoming but would create a shift in economic base in Montana where agriculture has accounted for a significant part of the economic base to date.

## HIGHLIGHTS

### GEOLOGY AND OTHER MINERALS

Coal, oil and gas, and uranium in economic quantities exist within the region. Coal production would not generally interfere with extraction of other energy minerals due to land-use planning constraints that minimize resource development conflicts.

### WATER RESOURCES

Impacts as a result of new federal leasing would be very small regionally. Loss of shallow local aquifers (the coal in many cases) is extensive and would reach 257,000 acres with the preferred alternative by 1990. Water from shallow aquifers is generally poor quality (3,000-5,000 mg/L DS) although water more suitable for human use is available and would be unaffected by the preferred alternative at the 1,000-1,600 foot level. Increased costs for greater pumping lifts and new well construction are associated with loss of shallow aquifers.

### AIR QUALITY

Air pollution from mining and indirect development would be local and would not significantly affect air quality except in the vicinity of the coal lease tracts. Localized areas of impact would be near Colstrip and Decker, Montana, and throughout a 22-mile strip south of Gillette, Wyoming.

There are no significant impacts forecasted for the Ashland, Montana, area which adjoins the Class I air quality area on the Northern Cheyenne Indian Reservation.

### SOILS, VEGETATION, AND RECLAMATION

Soils in the area are often shallow, although slopes are generally gradual on a rolling type terrain. Reclamation success has shown to be good (Packer, 1974), although some areas could require more intensive and costly management.

### WILDLIFE

Leasing of all 19 tracts would have major effects on local populations of wildlife but minor effects on regional populations. Antelope would be affected heaviest south of Gillette, Wyoming, where existing mining facilities are restricting animal movement and disturbing habitat. Four hundred acres of crucial winter antelope habitat near Decker, Montana, would be lost. Populations of sharp-tailed and sage grouse would be impacted on a local basis.

### CULTURAL RESOURCES

Federal and state regulations protect these resources. Historic and architectural resources on private lands may not be protected unless steps are taken by local governments and private citizens.

### LAND USE

Lands within this region are administered and controlled by a variety of governmental jurisdiction, each of which exercises a different level of land-use planning, development, and resource-use control. Land ownership pattern is dominated (85 percent) by private surface ownership with federally controlled mineral estate (split-estate).

Land-use patterns are expected to shift from agriculture toward mining and urbanization without new federal coal leasing and implementation of the preferred alternative would change this very little. Forty-four ranch and farm operations would be affected. One operator would lose his total holdings and another would lose about 80 percent. All other operations would be affected to a lesser degree. Losses to the ranches that would be substantially affected would be offset by royalties or fees paid by the mines for the use of private land.

## SUMMARY

### RECREATION

Funding for urban recreation facility construction and maintenance would be available. Dispersed recreational opportunities, such as camping and fishing, are restricted somewhat throughout the region and the quality of these experiences may be diminished even further because of the expected increase in population under Alternative 1 (No Action). New federal leasing would not appreciably affect dispersed recreation.

Most of the mining considered in this EIS would severely alter the landscape. These lands are not given a high visual resource classification and in most cases are seldom seen by persons not involved in mining. Thus, degradation of visual quality would not be obvious.

There are no areas of wilderness within the region. The wilderness areas that adjoin the region would be able to absorb the additional use anticipated by population growth.

### TRANSPORTATION

Wyoming has adequate highway capacity to handle the increase in traffic volume. Required

maintenance is expected to fall behind due to increased use by maximum-weight vehicles.

Montana's highway system is adequate in the Colstrip area but will require major upgrading in the Ashland/Decker areas. Highways of major concern include U.S. Highways 212 from Crow Agency to Ashland, and FAS 314 from Highway 212 to Decker.

Railroad traffic on the three main lines leaving the region would increase by 20 percent under the preferred alternative. This would equate to about 50 trains daily through Miles City, Montana, and about 100 each through Newcastle and Torrington, Wyoming.

### SOCIOLOGY AND ECONOMICS

Increases in population are expected with or without new federal coal leasing. The fiscal impact to communities in Wyoming would not be significant. However, impacts to Montana communities, Ashland in particular, would be severe. Rosebud County would experience significant shortages of funds for county government and schools since the proposed mines are actually located across the county line in Powder River County. Most of these impacts could be mitigated but only through strong community commitment and assistance from both federal and state governments.