## SUBSURFACE RESOURCES

### Goals

Mineral and Energy Supplies. Make metallic and nonmetallic minerals, coal, oil and gas, and geothermal resources available to contribute to the energy and mineral supplies and independence of the United States and Alaska.

Economic Development. Contribute to Alaska's economy by making subsurface resources available for development, which will provide stable job opportunities and stimulate growth of secondary and other primary industries.

State Revenues. Establish a stable source of state revenues.

Environmental Quality and Cultural Values. When developing subsurface resources, protect the integrity of the environment and affected cultural resources to the extent feasible and prudent.

State Support for Mining. Aid in the development of infrastructure (such as ports, roads, or railroads) and continue to provide geologic mapping and technical support to the mining industry.

## Mineral and Coal Development Guidelines

- A. Mineral and Coal Exploration. State land in the Copper River Basin may be leased or opened for coal prospecting permits if the department determines it is in the best interest of the state as required by AS 38.05.035. Before a permit is issued, DNR will determine if the surface values are significant enough to warrant restricting surface entry. Decisions on surface entry for coal adjacent to streams will be made in consultation with the affected agencies.
- B. Open to Mineral Entry. All state lands that are open to mineral entry are multiple use areas where mineral development will be accommodated and encouraged. Recognized exploration methods for locatable minerals will be allowed on all state lands unless specifically closed to mining and will be subject to the conditions of a land use permit. DNR may determine that some traditional forms of access will not be allowed in specific areas to avoid resource damage.

Where an area is open to mineral entry, a miner has the right to stake a claim regardless of the surface use designation or classification. Any adverse effects of mining on surface resources or uses will be managed through compliance with state laws and regulations and the management intent and guidelines of this plan.

- C. Reclamation of Mined Land. Land use permits and plans of operation for mineral development will specify measures needed to return the land to a useful state. Determination of the specific measures to be taken and whether or not a performance bond will be required will be done in consultation with the affected agencies. Specific measures may include storage and reuse of topsoil; disposal of overburden; regrading of tailings and revegetation; reestablishment of natural (not necessarily original) contours; reestablishment of a natural drainage system; long-term erosion control measures; and removal of equipment, improvements, and other man-made items.
- D. Access for Mineral and Coal Development. Existing roads and trails should be used to provide access to mine sites wherever feasible. Regulations for miscellaneous land use permits require that access will be managed so that damage is minimal. (See p. 2-38.)

- E. Unauthorized Use of State Lands. DNR will place a high priority on taking appropriate action against construction of illegal structures, blocking public access, or other unauthorized use of public lands for private purposes. This will include taking appropriate action against mining claimants who use their claims for facilities that are unnecessary for prospecting, extraction or basic processing activities. In carrying out this policy, emphasis will be placed on unauthorized uses that obstruct significant settlement, public recreation, other public uses, or public access.
- F. Control of Visual Impacts. Guidelines will be developed as necessary through the land use permit or leasing process to minimize the adverse visual impacts of mining especially in settled areas, recreation areas, and in areas viewed from roads. In such areas, guidelines should consider, at a minimum, the following items: control of solid wastes; removal of vegetation; siting of mining structures, tailings and overburden; roads; and rehabilitation of mining sites.
- G. Approval of Plans of Operation. Using procedures established under existing leasing laws and regulations, DNR reviews plans of operation required for locatable mineral leases and will consult with and carefully consider recommendations of the Department of Fish and Game (ADF&G) and the Department of Environmental Conservation (DEC). DNR will approve plans of operation if they adequately address the guidelines of the area plan and applicable laws and regulations. Violation of the plan of operations is cause for revocation of the approved plan of operation or termination of the lease.

### Guidelines for Land Sales in Areas with Mineral or Coal Potential

- A. Land Sales in Areas with High Mineral Potential. Generally, settlement areas designated by this plan have avoided areas of high mineral potential and areas with mining locations in good standing.
- B. Land Sales in Areas with High or Moderate Coal Potential. Generally, land sales will not occur in areas of existing coal leases or areas of high coal potential as defined in 11 AAC 85.010. Land sales should be avoided in areas of moderate coal potential as defined in 11 AAC 85.010 except where land sales are determined to be the highest and best use of the land.

# Guidelines for the Application of Locatable Mineral Closures

Locatable mineral closures are the most extreme management tool that can be used by DNR to resolve subsurface and other resource conflicts. AS 38.05.185(a) requires that before an area of state land can be closed to mining or mineral location, the commissioner must make a written finding that mining would be incompatible with significant surface uses. Using the criteria established in AS 38.05.185(a), DNR generally finds mining to be incompatible with the surface uses listed below and closes the area to mining or mineral location at the specified times in the decision making process. However, each situation will be evaluated separately and a determination made that the requirements of AS 38.05.185(a) have been met.

A. Areas Scheduled for Disposal. Land scheduled for commercial, industrial, agricultural, or subdivision sale will be closed to mining and mineral location at the end of the first year of the Land Availability Determination System (LADS) process (that is, approximately 2 years before the anticipated land sale).

- B. Homesteading Areas. Lands available for homesteading (including agriculture homesteading) will be closed to mining and mineral location at the end of the first year of the LADS process (that is, approximately 2 years before the anticipated land sale). These areas will remain closed until the allowed number of homestead entries has occurred. At that time, those portions of the project area with few or no homesteads will be reopened for mineral entry and location unless it is determined that the settlement pattern that has resulted creates significant, irreconcilable land use conflicts.
- C. Land Proposed for Exchange. Lands proposed for exchange or trade will be closed to mineral entry and location at the time a preliminary agreement to exchange the land is reached.
- D. Land to be Transferred to Another Public Agency. Lands reserved for transfer to another public agency for development of a public facility or reserved as a future townsite will be closed to mineral entry and location at the time the area is classified "reserved use" or an Interagency Land Management Agreement is signed.

# Guidelines for the Application of the Locatable Mineral Leasing Program

Requiring that locatable mineral developments occur under a lease is a more flexible management tool than mineral closure. Therefore, mineral leasing is preferred over mineral closure as a management option to resolve conflicts between other significant resources and mining and mineral location. AS 38.05.185(a) requires that the commissioner determine that potential use conflicts on state land require that mining be allowed only under written leases issued under AS 38.05.205 or the commissioner has determined that the land was mineral in character at the time of state selection. Under 11 AAC 86.135(b), if a surface disposal area is not closed entirely to mineral entry, it will be made available only by leasehold location.

After consultation with ADF&G and DEC, and concurrent with the designation of an area being open to locatable mineral entry under lease, DNR will identify potential conflicts between other resources and mining and other resources that need protection. DNR will also state the general nature of stipulations to be used in leases to protect those other resources.

# Resource Values that May be in Conflict with Coal or Mineral Development

The decision to apply mineral closures or locatable mineral leasing will be made by the commissioner within the parameters set by the Alaska Statutes. AS 38.05.185(a) requires that the commissioner determine that mining is incompatible with a significant surface use before an area can be closed to mining. The same section of the statutes requires that the commissioner determine that a potential use conflict exists before requiring that development of locatable minerals be conducted only under a lease.

In some circumstances, the commissioner may find that some resource values require locatable mineral leasing, closure, or a prohibition of coal leasing and prospecting to protect their continued productivity and availability. In other circumstances, care during mineral development is all that may be necessary to protect these resources. It is impossible to predict the degree of conflict that could occur between mining and any other resource value in all circumstances. Therefore, the following categories of resource values will be evaluated to determine if locatable

mineral leasing, prohibition of coal leasing or prospecting, or another management option is needed to protect the continued productivity and availability of the resource in conflict.

#### A. Retained Lands with Significant Commercial, Industrial, or Public Use Values

- Lands with significant coal, oil and gas, timber or other commercial potential.
- Lands recognized as future transportation corridors where access for pipelines, road, railroads, or other surface transportation infrastructure could be blocked or impeded by mining claims. (After the alignment is established, areas will be reopened if they are surplus land.)
- Lands and waters that provide unique or unusual opportunities for human use and enjoyment, such as fishing, hunting, trapping, photography, and fish and wildlife viewing.
- Lands and waters that provide significant recreation opportunities, such as clear water rivers that are now or are expected to be important for recreation, key public access sites, and recreation facilities.
- Lands and waters that are the watershed of a community water supply.
- Sand and gravel pits, stone quarries, or other significant known material sites where development might be impeded if mineral claims were staked.

#### B. Retained Lands With Significant Fish or Wildlife Resources

- Lands and waters that support protected species of plants, fish or wildlife (bald and golden eagles), threatened species (Arctic peregrine falcon), or endangered species (American peregrine falcon).
- Lands and waters that support production or maintenance of fish or wildlife species that have significant economic, recreational, scientific, educational, or cultural values or which have been given special protection through state or federal legislation or international treaty.
- State game refuges, critical habitat areas, and sanctuaries. (In decision memorandum 44 signed by the commissioner in January 1984, DNR set the statewide policy that in legislatively established Critical Habitat Areas and Wildlife Refuges mining will occur under lease. Also, individual legislatively designated areas may be recommended for mineral closure, but such a closure would be decided case by case using the criteria found in AS 38.05.185(a).)
- Other lands and waters not included above that are known to support unique or unusually large assemblages of fish or wildlife.

### Oil and Gas Guidelines

Generally, oil and gas exploration, development, and production will be encouraged on state lands. Impacts on other important uses and resources will be managed through appropriate mitigation measures such as those contained in this plan and those developed during the permitting and leasing processes.

Oil and gas guidelines are not addressed here. Oil and gas guidelines specific to a particular management unit are found in Chapter 3. DNR's statewide policies for oil

and gas are found in the Five-Year Oil and Gas Leasing program. Specific stipulations for oil and gas exploration, development, and production activities will be developed and applied case by case for each oil and gas lease sale using the lease sale process.

## Other Guidelines Affecting Subsurface resources

Several other guidelines may affect subsurface resources. See the following sections of this chapter:

Fish and wildlife habitat
Settlement
Transportation
Public Access
Stream corridors and instream flow
Trail management
Wetlands management

### Land Allocation Summary

Minerals. Mining is a primary use in the Slate Creek mining area which is the only state land with extensive mining activity. Most other mining claims and most lands with mineral potential in the Copper River Basin occur on Native lands or private claims located in the Wrangell Mountains. Approximately 3.15 million acres (97 percent) of the state land in the basin remains open to mineral entry. Approximately 108,000 acres (3 percent) of the state land in the basin would be closed to mineral entry to protect certain recreation and fish resources. Additional acreage (approximately 36,000 acres, or 1 percent) would be closed for land disposals before individual land offerings. State land remains open to mineral entry except for the Kettlehole Lakes - Mendeltna recreation area, Thompson Pass transportation and utility corridor, and the streams and lakes listed below. The north shore of Tazlina Lake, which contains extensive archaeological sites, will also be closed to new mineral entry. The following areas would be closed to new mineral entry to protect important salmon spawning and rearing areas, resident fish habitat, recreation and scenic resources:

Mendeltna Creek and Old Man Lake Tolsona Creek Kaina Lake and Creek St. Anne Creek Klutina Lake and River above Manker Creek Mahlo River Manker Creek Tonsina Lake and River above Rainbow Creek Greyling Creek Bernard Creek Long Lake and Long Lake outlet Nizina River - Dan Creek to Spruce Point Slana River above Lost Creek Ahtel Creek East Fork Chistochina River below Mankomen Unnamed tributary to Gakona River near Alder Lake and Swampy Lake Spring Creek Gulkana River

Paxson Lake
Summit Lake
Gunn Creek and Gunn Lakes
Fish Creek and Fish Lakes
Crosswind Lake

State-owned uplands within 200 feet of mean high water on both sides of these streams would also be closed to new mineral entry.

Oil and Gas. All state land is available for oil and gas exploration and leasing except state-owned shorelands under the Gulkana River. The Gulkana River is a National Wild River and adjacent federal lands are withdrawn from leasing. Seasonal restrictions may be applied to oil and gas activities in the trumpeter swan habitat areas.

Other Leaseable Minerals (Coal, sedimentary uranium, potassium, sodium, oil shale, geothermal). Any leases will be dealt with case by case consistent with the intent of the appropriate management unit.