

SUBSURFACE RESOURCES

Goals

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

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

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

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

Management Guidelines - Mineral and Coal Development

A. Mineral and Coal Exploration. Recognized exploration methods for locatable minerals will be allowed on all state lands unless specifically closed to prospecting. Exploration methods may be subject to the conditions of a land use permit.

Prospecting for coal may be permitted adjacent to anadromous fish streams (other than those protected in specific corridors); however, if a lease is issued, the department reserves the right to restrict surface entry where it determines the surface values are significant enough to warrant such a restriction. 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 open to mineral entry are multiple use areas where mineral development will be accommodated and encouraged consistent with applicable state law and the policies of this plan.

C. Reclamation of Mined Land. Land use permits and plans of operation for mineral development and gravel extraction will specify measures necessary to return the land to a useful condition. Specific measures and any requirement for a performance bond will be consistent with AS 27.19. Specific measures may include storage and reuse of topsoil, disposal, or overburden, regrading of tailings and revegetation, reestablishment of natural (not necessarily original) contours, reestablishment of 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 should be used for access to mine sites wherever feasible.

Access across tundra, wetlands, and other environmentally sensitive areas will be managed in a manner that minimizes damage (See also Transportation Guidelines, page 2-32).

E. Control of Impacts. Guidelines will be developed as necessary through the land use permit or leasing process to minimize adverse 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, noise pollution, and rehabilitation of mining sites.

F. Coordination with Local Governments. Coordinate subsurface development with local government zoning authority to best achieve common objectives.

Application of Locatable Mineral Closures and the Locatable Mineral Leasing Program

A. Background

Locatable mineral closures are the most restrictive 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.

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 for mining to be allowed only under written leases issued under AS 38.05.205, the commissioner must determine that there are potential use conflicts on state land or 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 DF&G and Department of Environmental Conservation, and concurrent with the designation of an area being open to locatable mineral entry under lease, DNR will identify potential conflicts between mining and other resources that require protection. DNR will also state the general nature of stipulations to be used in leases to protect those other resources.

B. Areas Closed To Mineral Entry

Using the criteria established in AS 38.05.185(a), DNR generally finds mining to be incompatible with the types of 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 when mineral orders are prepared and a determination made that the requirements of AS 38.05.185(a) have been met.

1. Lands Offered for Sale or Transfer to Other Owners.

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 two 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 two 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 resulting settlement pattern 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 when an Interagency Land Management Agreement is signed.

2. Retained Lands. Lands and waters that support production or maintenance of fish or wildlife species having significant economic, recreational, scientific, educational, or cultural values or which have been given special protection through state or federal legislation or international treaty may be closed to mineral entry (see Chapter 4, *Areas Recommended for Legislative Designation*, and Appendix C, *Mineral Orders*).

C. Leasehold Location Areas

Using the criteria established in AS 38.05.185, DNR has determined that on certain lands in the Tanana Basin area, mining will be allowed only under leases issued under AS 38.05.205. The areas subject to leasehold location requirements are certain mineral licks that are important for wildlife populations. The location of these mineral licks and relevant guidelines for leaseholds, are found in management units 4P2, 5C1, 6E2, and 7M2 (see Appendix C, *Mineral Orders*).

D. Other Resource Values That May Conflict with Coal or Mineral Development

In some circumstances, the commissioner may find that some values may require locatable mineral leasing, closure, or a prohibition of coal

leasing and prospecting to protect 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, in future updates, the following categories of resource values are evaluated to determine if locatable mineral leasing, prohibition of coal leasing or prospecting, or another management option is necessary to protect the continued productivity and availability of the resource in conflict. The sites within the planning area that are judged at this time to need these types of protection are identified in sections B and C above.

1. 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, roads, 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.

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 sites for 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.

2. 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 within legislatively established Critical Habitat Areas and Game Refuges, mining will only occur under lease, though the policy has not been implemented yet. Also, individual legislatively designated areas may be recommended for mineral closure, but such closure would be decided on a case-by-case basis 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 concentrations of fish and wildlife.

Management Guidelines - Oil and Gas

The plan defers any decisions regarding leasing for oil and gas and other energy resources to DNR's existing leasing processes. No lease sales are currently proposed. Oil and gas guidelines specific to a particular management unit are found in Chapter 3. The department'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 using the oil and gas lease sale process.

Other Guidelines Affecting Subsurface Resources and Materials

Other guidelines may affect subsurface resources and materials. See in particular the following sections of this chapter:

- Fish and Wildlife Habitat and Harvest
- Public Access
- Settlement
- Stream Corridors and Instream Flow
- Trail Management
- Transportation
- Wetland Management