

Subsurface Resources

Subsurface resources within the planning area are related to the extraction of mineral resources from the Subsurface Estate, and the following requirements pertain to such operations. The requirements for the extraction of materials (part of the Land Estate) are covered under the section, ‘Materials’ of this chapter. Hydrocarbon resources are not known to be significant in the Upper Yukon planning area, and the plan defers any decisions regarding leasing for oil and gas and other energy resources to DNR's existing leasing processes. Oil and gas lease sales are specifically not subject to this planning process and follow the requirements of AS 38.05.180.

Almost all state land within the planning area is managed for multiple use and is open to mining. The state-selected much of the land in the planning area because of its mineral potential, as well as its recreation and wildlife values. Exploration and development of mineral resources involves considerable investment of time and monetary resources. A small fraction of prospects that are investigated actually result in identification of a site that is economical to develop. If a deposit proves economical for development, state and federal regulations and additional stipulations determined through the permitting process will ensure that other resource values are protected.

Goals

Mineral Supplies. Make metallic and non-metallic resources available to contribute to the energy and mineral supplies and economy of Alaska.

Economic Development. Contribute to Alaska's economy by making subsurface resources available for development, which will provide job opportunities, and stimulate economic growth.

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 Development

- A. Mineral 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.
- B. Open to Mineral Entry.** By statute, all state lands are open to mineral entry unless specifically closed to location through a Mineral Closing Order or legislative action. Except

for the few areas designated Settlement and Settlement-Commercial, all other state lands 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.** Mining operations should be conducted in a manner that prevents unnecessary and undue degradation of land and water resource. Mining operations, including placer mining, shall be consistent with the reclamation standards given in AS 27.19, which apply both during and after mining operations. 11 AAC 97 (Mining Reclamation) details the specific requirements that must be followed. Consistent with AS 27.19 and 11 AAC 97, land use permits and plans of operation will specify measures necessary to return land used in mining operations to a useful condition. In designated habitat areas, annual reclamation will be required concurrent with mining.
- D. Access for Mineral 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.
- E. Control of Impacts.** The Department should consider the inclusion of management stipulations in its authorizations where necessary to minimize the adverse impacts of mining, especially in settled areas, recreation areas, and in areas viewed from roads. In such areas, management stipulations may be appropriate to control of the placement of solid wastes; removal of vegetation; noise and particulate generation; the design and location of mining access roads; and the siting of mining structures, tailings and overburden. These management stipulations may be in addition to standard statute and regulatory requirements.
- F. Management Requirements for the Middle Fork Region.** Management units M-01 and M-02 are identified as high concentration calving areas in the report, “Habitat Management Needs Assessment for the Fortymile Caribou Herd” (2001). Mining activities, including mineral exploration, during calving season are to be limited to operations with only short term disturbance effects. See also *management intent statements for management units M-01 and M-02* in the Resource Allocation Tables.
- G. Recreational Panning Areas.** Recreational mining areas have been established in other parts of the state to provide a permanent recreational mining experience for the general public. Where this has occurred, an area of state land with placer mining potential but without existing mining claims has been reserved for recreation use by the general public. In the Upper Yukon planning area, areas appropriate for this type of activity would occur near communities and have reasonable access.
- H. Commercial Recreational Mining Activities.** Commercial recreational mining opportunities can be developed on state mining claims to provide tourists and others interested in mining the opportunity to experience mining firsthand. Typically, there is a fee paid by the public for this experience. In the Upper Yukon planning area, areas appropriate for this type of activity would occur near communities, have reasonable access, and occur on existing mining claims. Development of a commercial tourist business on a mining claim requires a separate authorization from the Division of Mining, Land and Water, such as a lease under AS 38.05.070.

- I. Coordination With Local Governments.** Where local governments exist, the Department should coordinate its mineral development authorizations with local land use plans and zoning.

Application of Locatable Mineral Closures and the Locatable Mineral Leasing Program

A. Background.

Mineral Closing Orders. 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. Closure of an area to mining is not, however, the basis for denying access across state land. Mineral closures do not affect valid existing mineral rights.

Leasehold Location Orders. 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.

B. Areas Closed To Mineral Entry.

Areas Closed to Mineral Entry at the Time of Plan Adoption

No Mineral Closing Order is established with the adoption of the Upper Yukon Area Plan.

Areas to be Closed to Mineral Entry during the Planning Horizon.

- Areas identified as ‘Remote Settlement Areas’ in the Walker Fork Region are not closed to mineral entry by a Mineral Closing Order. Closure of some or all of these areas to mineral entry and location will occur before the state disposes of land, which may occur through subdivision, remote staking, or another authorization that may exist at the time of disposal. The timing of the closure is at the discretion of the Department but should be early enough in the planning process to avoid the inadvertent staking of mining claims.
- Lands that may be part of a land exchange are to be closed at the time of the approval of the Preliminary Exchange Agreement and lands that may be conveyed to another public agency for the 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.

C. Leasehold Location Areas.

Using the criteria established in AS 38.05.185, DNR has determined that on certain lands in the planning area mining will be allowed only under leases issued under AS 38.05.205. See *Leasehold Location Orders 28 and 29*, included as Appendices B and C, respectively. The areas subject to leasehold location requirements are certain mineral licks that are important for wildlife populations, and settlement units near communities. The location of the mineral licks and relevant guidelines for leaseholds, are described in the Leasehold Location Orders.

A Leasehold Location Order does not close land to mineral entry. In these areas, a location is referred to as a “leasehold location,” and must be converted to an upland mining lease before mining can occur. State land is designated for leasing only if potential use conflicts require that mining be allowed only under written leases.

In Leasehold Location Order 28, mining is being restricted to lease to provide extra tools to the department to ensure that mining will avoid impacts to the particular area of a mineral lick that is critical to wildlife populations and to protect specific trails leading to the licks.

Mining activity must avoid direct impacts to the mineral licks and the routes that animals use to access them, or mitigate adverse impacts to these resources. If a game trail or mineral lick is affected, mitigation alternatives may include a variety of measures to address lick accessibility. In addition to protection of the routes themselves, activities that may divert animals from the routes or otherwise affect usage patterns shall be avoided or mitigated. Development will minimize or avoid disturbance to the animals during May for the Merry Christmas, Joseph, and Pittsburgh Creek licks; and during May and June for the Utah Creek lick.

The mineral licks within the areas identified in Leasehold Location Order 28 for Joseph Creek, Pittsburgh Creek, and Merry Christmas Creek are important to the Fortymile caribou herd. They are used by a high proportion of the Fortymile caribou herd during May. Leasehold location areas larger than the actual mineral licks are established for these licks because of the intensity of annual use that they receive from large numbers of caribou, and because of the well defined traditional access routes used by caribou to access the licks. The mineral lick within the area identified for Utah Creek is important to the Dall sheep population on Glacier Mountain. Because a very high percentage of the sheep in this isolated population use this lick every year during May and June, a leasehold location area larger than the actual lick has been established to protect the well defined traditional access routes. Furthermore, it appears that geographical barriers are minimizing colonization of other suitable habitat by this sheep population, causing the population to be more vulnerable to human activity. The mineral licks within the areas identified for Walker Fork and Logging Cabin Creek are important to moose. These leasehold location areas are smaller in size because the mineral licks are less defined and their use is not as intense as the other licks.

D. Other Guidelines Affecting Subsurface Resources. Other guidelines may affect subsurface resources. Sections in this chapter that should also be referred to include but are not limited to:

Fish and Wildlife Habitat and Harvest
Forestry
Settlement
Stream Corridors, Shorelands and Instream Flow
Trails and Public Access
Wetlands Management