The following section describes land use policy within the Talkeetna Mountain Subregion. It is divided into two parts. The first is an overview of resources and their management for the subregion as a whole. The second presents specific statements of management intent, land use designations, prohibited uses, and management guidelines for each of the subregion's three management units. Maps showing land ownership in the subregion and boundaries of management units and subunits are presented at the end of the second part.

The land use plan's proposals on two issues—the management of lands surrounding three sheep mineral licks and the proposed Susitna hydroelectric project—overlap several management units and are therefore presented in the management summary part of the subregion overview section. The plan's policy on mineral licks is presented in the section on subsurface resources; the material on the Susitna Hydroelectric project is presented in a separate section dealing with just that subject.

1. SUBREGION OVERVIEW

Background

The boundaries of the Talkeetna Mountains Subregion are the planning area boundaries on the north and east (these coincide with the boundary of the Matanuska-Susitna Borough), a line that approximates the northern edge of the Matanuska River drainage on the south, and on the west, a line that roughly follows the 2,500’ elevation contour. These boundaries generally encompass only the upper portions of the mountains. Lower-lying portions of river valleys which extend into the area, such as the Talkeetna, Sheep, and Kashwitna valleys are included in the adjacent subregions.

This subregion encompasses roughly 6 million acres, the majority of which is publicly owned. The northern half of the unit is primarily in federal ownership; the southern half is held by the State of Alaska. The state recently received tentative approval for nearly all of the approximately 80 townships (1,840,000 acres) of federal land it had selected in the southern half of the area. There are approximately 206,000 acres of Native selected and interimly conveyed lands in the area. Most of these lands are located in the Susitna River—Stephan Lake area and in the East Fork of the Chulitna River drainage. Only a portion of the Native selected lands in this area are likely to be conveyed. In addition to private land held by Native corporations, there are also numerous scattered small parcels owned by private individuals. These holdings are generally of two types: state offered open-to-entry sites adjacent to fly-in lakes (primarily used for recreational purposes); and federally patented mining claims located in the Nelchina area, the Clearwater Mountains and other mining areas. See the ownership maps at the end of this section for more information.

The only road access into the subregion is provided by the Denali Highway. This highway traverses the northern part of the subregion through mostly alpine country in federal ownership from Paxson to Cantwell. The State Department of Transportation presently is working on improvements to the western end of this highway. A number of trails branch off from these highways and provide a measure of access into other parts of the subregion. Access to the periphery of the subregion is provided by two major highways—the Glenn on the south and the Parks on the west. Other means of access into the area include landing strips, fly-in lakes, and boatable rivers.

Although most of this rugged area does not offer the potential for agriculture, forestry, or settlement found elsewhere in the planning area, these limitations are balanced by the region's rich fish and wildlife, recreational and mineral resources. This area is one of the most heavily used big game hunting areas in the state, offering moose, Dall sheep, bear, and caribou. The majority of the range of the 20,000 animals of the Nelchina caribou herd is located here. The area's many lakes and rivers offer excellent fishing for salmon, lake and rainbow trout, grayling and other species. The subregion offers millions of acres of alpine country for hiking, camping, skiing and climbing.

These same alpine areas have a rich and to a large degree unexplored potential for mineral development. Several areas—Hatcher Pass, Nelchina and Valdez Creek—are currently active producers of gold and other precious minerals. In addition, portions of this subregion have some potential for grazing.

The Alaska Power Authority recently applied to the Federal Energy and Regulatory Commission (FERC) for a license to build a major hydroelectric project on the Susitna River. Two dams are proposed for sites, at Devil's Canyon and Watana. (More on this proposal below.)

Management Summary

The Talkeetna Subregion will be managed as a multiple use area emphasizing the uses that are most im-
Grazing is the only agricultural use that is possible in the area now. Recreation, including hunting and fishing; protection of fish and wildlife habitat; and mining. Grazing, private recreational settlement (remote cabins), and personal use timber harvests also are appropriate uses in specific portions of this subregion. The vast majority of this rugged, mountainous area is expected to remain remote and very sparsely developed. Additional road access to the area and concentrated settlement on public lands will be contingent on a demonstrated need for such development in order to facilitate activities such as mining or dam construction.

**Settlement**

State and federal land disposals for private recreational settlement are a very low priority in this subregion. The state will issue permits for remote cabin sites under the remote cabin permit program in a limited number of select sites. Should major mineral development occur or the proposed Susitna hydro-power project be constructed, state land will be made available for a workcamp or other settlement uses associated with these developments. Most hydro-project related settlement, however, is expected to occur on lands in Native ownership. If road access into this area is provided as a result of the hydro-project, Native lands are likely to be developed for private recreational purposes as well. Settlement may be an appropriate use on public lands adjacent to areas developed by the Natives, although no lands are designated for this purpose at this time. (Demand for private residential and commercial uses that may be associated with the project are discussed further under the section dealing with the proposed hydroelectric project.) Any settlement in this subregion should be designed to maintain public access and protect fish and wildlife habitat and the area's high scenic quality — particularly within the highway corridors.

**Agriculture**

Grazing is the only agricultural use that is possible in this subregion. Several hundred thousand acres are designated for grazing in the southwestern portion of the subregion. This area is relatively close to access and to land that could be used for farm headquarter sites. Management guidelines will be applied to grazing activities to ensure compatibility with wildlife.

**Forestry**

Although most of this unit is above timberline, lands adjacent to several major rivers (e.g., the Susitna and Talkeetna) have personal use and, perhaps, commercial timber harvest potential. If major developments such as the Susitna hydro-project occur, there undoubtedly will be associated demands for wood products which could be met from these areas. In general, however, the state will set a higher priority on protecting the scenic, habitat, and recreational values of these forested areas than on commercial uses. Limited personal use harvests will be permitted in some areas.

**Recreation and Fish & Wildlife**

This subregion will be managed to protect its current status as one of the major game harvest areas in the state for moose, caribou and sheep. Streams will be managed to protect their recreation and commercial fishery values. The area also will be managed to maintain a full range of summer and winter recreation activities, including skiing, mountain climbing, hiking, and snowmobiling. Adequate access for these recreation purposes should be maintained in public ownership. Because the Talkeetna Mountains are a highly scenic but still relatively gentle mountain range, the area is particularly suited for cross country hiking, skiing, and snowmobiling. In most of the area the terrain and vegetation permit cross country travel without construction of improved trails. The state and borough should seek funding to build and, if necessary, operate public use cabins in select areas of the subregion.

Construction of the Susitna hydroelectric project also could provide increased opportunities for public recreation, primarily due to improved access. Any plans for recreation improvements in the subregion — for example a trails system — should be coordinated with recreation plans associated with the proposed hydro-project.

The plan recommends that the southeastern portion of the Talkeetna Mountains be legislatively or administratively designated as the "Nelchina Public Use Area" to protect the Nelchina caribou herd. This proposal would allow multiple use of the area, including mining, but would prohibit land sales except for what might be required for resource development. (See Management Unit 3 for more details.

**Subsurface Resources**

Mining and mineral exploration are and will continue to be very important activities in this area. The entire subregion will remain open to mineral location except for three sites to be open under leasehold location. All public lands are available for coal and oil and gas leasing. Mineral exploration and development, including necessary roads and work camps, should be designed to minimize impacts on important wildlife and recreation values in this unit.

There are three mineral licks identified within this subregion that are used by significant numbers of wildlife, primarily during the spring and early summer.
No information currently exists on the biological function served by these licks; however, the regular use of these areas suggests that the licks play an important role in the life history of the animals that use them. These same areas may also have significant mineral values.

The management intent for the area around the licks is to protect their value for wildlife and also to allow exploration and development of mineral resources. This will be done through developing a general policy for management of all mineral licks in the Talkeetna Mountains area. Although mineral development may result in disruption of a particular lick or animal access trail, this policy will ensure that at least some licks are open to wildlife use at all times.

In order to ensure these areas can be managed successfully for both wildlife protection and development of mineral values, mineral licks and the adjacent land (the nine sections surrounding each lick) will be open to mineral entry by leasehold location. Stipulations will be applied to individual leases to balance habitat values and mineral development. The general subjects and objectives of these stipulations are presented in the management guideline section below. Existing mining claims within or adjacent to leasehold areas will not be converted to leasehold locations nor will holders of existing claims be required to get a lease from the state prior to production. However, exploration and mining on existing claims will be managed as outlined in the management guidelines through miscellaneous land use permits to afford protection to the mineral lick areas.

**Mineral Lick Management Guidelines**

Mineral exploration and development will be allowed in the 9 sections surrounding specified mineral licks. Stipulations included as part of the mining lease and/or permit will include measures to minimize, to the extent feasible and prudent, the potential impacts of mining on wildlife use of these areas. The following guidelines will be followed in preparing stipulations for specific leases and permits.

1. Stipulations will be developed on a case-by-case basis for specific leases or permits considering the type and importance of wildlife use and of planned mining activities at a particular site. At the same time, the status of wildlife use and potential for mineral development of other mineral licks in the region will be taken into consideration. The Alaska Department of Natural Resources, to the extent feasible and prudent, will ensure that a minimal number of licks are being intensely explored or developed at any one time.

2. Stipulations associated with the lease or permit must address the following concerns:
   - The avoidance of direct and indirect impact on the mineral licks, the animal trails leading to them and other areas of concentrated animal use that are associated with the mineral lick.
   - Methods for compensating for the destruction or loss of a lick (this could take the form of relocating or introducing new mineralized material).
   - The method and routing of mining-related access to these areas.

Areas open under leasehold location and affected by these guidelines are listed below:

- **T31N R8E S.M.**
  - Section 1; section 2; section 11; section 12; section 13 N'/2; section 14 N'/2
- **T31N R9E S.M.**
  - Section 6; section 7; section 18 N'/2
- **T32N R8E S.M.**
  - Section 35 S'/2; section 36 S'/2
- **T32N R9E S.M.**
  - Section 31 S'/2
- **T33N R8E S.M.**
  - Section 25 S'/2; section 26 S'/2; section 27 SE 1/4; section 34 E'/2; section 35; section 36
- **T32N R8E S.M.**
  - Section 1; section 2; section 11 N'/2; section 12 N'/2
- **T32N R9E S.M.**
  - Section 6; section 7 N'/2
- **T33N R9E S.M.**
  - Section 30 SW'/4; section 31 W'/2
- **T26N R1E S.M.**
  - Section 25 W'/2, W'/2, E'/2; section 26; section 27; section 28 E'/2, E'/2; section 33 E'/2 E'/2; section 34; section 35; section 36 W'/2, W'/2 E'/2
- **T25N R1E S.M.**
  - section 1 W'/2, W'/2 E'/2; section 2; section 3; section 4 E'/2 E'/2

**Access**

The road/rail system that would provide access to the Susitna hydroelectric project is the only major access improvement being considered in the area. The Alaska Power Authority’s proposed access route, described in the FERC license application, would provide access to the Watana Dam site from the Denali Highway via Deadman Creek. The Devils Canyon site would be provided with access via a railroad spur from near
Gold Creek (on the existing Alaska Railroad line) and via a road on the north side of the Susitna River from the Watana site. A final decision on the planned access route will be made through the environmental impact statement review process.

**Stream Corridors**

The headwaters of many major streams lie in the Talkeetna Mountains. Management of these corridors will be determined on a case-by-case basis consistent with the management objectives for the more heavily used downstream segments of the rivers. In general, the objectives for the rivers originating in this subregion will be to protect water quality, fish and wildlife habitat, and public access.

**Susitna Hydroelectric Project**

As mentioned, the sites of the two proposed Susitna hydroelectric dams are located within this subregion. The plan does not address any of the issues concerning the direct social, fiscal or environmental impacts of this project. That task is being addressed by the FERC licensing process and by the many state and federal agencies already working on the project. Several of the indirect impacts of the hydro-project are, however, within the purview of the plan, and will be addressed here. Because the issues associated with the hydro-project affect virtually the entire subregion, these issues will be discussed here for the whole subregion rather than within each of the three management units.

Four issues addressed by the plan are mitigation lands, land ownership, settlement and recreation associated with the project. Each is discussed below.

1. **Mitigation Lands**

Construction of the Susitna Hydroelectric project would have significant effects on terrestrial and aquatic habitats. One proposed method for mitigating the loss of wildlife habitat that would be inundated or disturbed by the hydro-project is to designate and manage nearby lands in a way that compensates for this loss. The Alaska Power Authority estimates that roughly 20,000 acres of land would be needed to adequately compensate for the predicted loss of habitat lands.

No compensation lands have been depicted in this plan. The Power Authority has prepared a description of the objectives to be met in identifying mitigation lands and criteria for selecting such areas, and has identified a large pool of possible mitigation lands. This information is available from the Alaska Power Authority or from the Alaska Department of Natural Resources, Division of Land and Water Management, Southcentral Regional Office. The final determination of mitigation strategies and, if appropriate, mitigation lands, will be made after the plan is complete.

2. **Land Ownership**

Nearly all of the land where the proposed dams, reservoirs, and associated facilities are planned to be located are selected by or inter临时ly conveyed to Cook Inlet Region, Inc. and its village corporations. If the hydro-project is approved, the state has the option to condemn or buy these lands, or trade for lands in other areas. Roughly 40,000 acres of land are at issue. However, the Power Authority estimates as little as 16,000 acres actually will have to be acquired. Final decisions related to land acquisition will be made in light of the plan’s designations on land adjacent to the project and on the availability of state lands for trade.

3. **Settlement Associated with the Dam Project**

If the project is constructed, development pressures would increase on the portions of the planning area that are already settled and also, due to construction of new access, open new areas to settlement pressures. On the first of these two issues, sufficient private land presently exists in areas like Cantwell, Trapper Creek and Talkeetna to accommodate the predicted level of population growth associated with the project. Regarding possible new settlement areas, no plans can be made until a final decision is reached on the location and mode of new access into the area. However, whatever route is ultimately chosen, DNR will follow a settlement policy of "commensurate impact." This means that in locations where the Power Authority is making a special effort (e.g., through road design and siting) to protect some aspect of environmental quality, DNR will not negate this effort through selling land in the particularly sensitive area. On the other hand, portions of the area opened as a result of the project likely will be able to support some land sales (or cabin construction under the remote cabin program) with an acceptable level of environmental impact. Overall, DNR does not intend to sell much land in this area, since it has limited physical capability to support settlement and is generally sensitive to development.

4. **Recreation Associated with the Proposed Dam Project**

The area surrounding the project has good potential for various types of public recreation activities. As part of the FERC application, the Power Authority and the State Division of Parks and Outdoor Recreation are working together to finalize a plan identifying areas for trails, camping, dispersed recreation, etc. The Department of Natural Resources supports the proposal to expand public recreation oppor-
opportunities in the area. Decisions on specific recreation-related land uses (e.g., campgrounds, trails, etc.) will be made on a case-by-case basis when the details of the project are known.

**Talkeetna Mountains Special Use District**

This subregion is within the boundaries of the borough’s Talkeetna Mountains Special Use District (TMSUD). Land within this district can be used for recreation, protection and use of fish and wildlife, mining, and grazing. The TMSUD ordinance allows land sales but requires a permit before construction of a cabin. Limitations on residential uses imposed by the ordinance include restrictions on subdivision, the size and appearance of cabins, allowable water systems, and the methods for sanitary waste disposal. Conditions for issuance of a specific permit may be modified on a case-by-case basis.