

# AGRICULTURE AND GRAZING

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## Goals

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### Economic Opportunities

-Provide opportunities for individuals to produce their own food and derive income from gardens and small farms.

-Provide opportunities for commercial grazing operations and for grazing permits to support guiding operations, homesteads, and other commercial activities.

**Preserving Future Options.** Preserve the option to use potential agricultural lands for agricultural uses in the future.

## Management Guidelines - Agriculture

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**Protecting Options for Agricultural Development.** Land identified in this plan as having agricultural potential and classified in retention categories will be available for uses that do not preclude agricultural development or impact other primary resource values. Such uses include habitat protection and enhancement, recreation, oil and gas, and forestry management. Lands to which this guideline applies are identified in the land allocation summary on page 2-5 and the guidelines for individual subunits in Chapter 3.

## Management Guidelines - Grazing

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**A. Grazing on Important Habitat Lands.** Grazing generally should be prohibited in the following habitat types unless DNR determines, in consultation with ADF&G, that impacts can be mitigated through specific management guidelines:

- Dall sheep range
- Brown bear concentration areas

- Habitats of endangered species and species afforded special protection, if such species would be threatened by grazing
- Moose winter concentration areas
- Caribou calving areas
- Other important habitats identified on a case-by-case basis by DNR in consultation with ADF&G

Areas where grazing will generally be prohibited are shown on Map 2.1 and described in the management intent for individual subunits in Chapter 3

### B. Multiple-use Management of Lands with Grazing Potential

1. Lands with grazing potential will be managed as multiple use lands to support a variety of public benefits in addition to livestock production, including:

- Fish and wildlife maintenance
- Water quality maintenance
- Public recreation
- Timber
- Soil conservation
- Oil and gas

2. Lands under grazing lease or permit will be managed to ensure sustainable forage for domestic stock and wildlife.

3. Public access across and public use of lands under grazing lease or permit may not be limited by persons holding grazing leases or permits unless approved as part of a grazing operations plan.

**C. Grazing Permits and Leases.** A grazing lease or permit issued by DNR is required for any person who proposes to release livestock on state lands.

**D. Permits and Short-term Leases.** Permits may be granted for 1 to 5 years. Permits may be issued wherever grazing is not prohibited if fish and wildlife and other significant resources or uses are not adversely affected. Permits or short-term leases rather than long-term leases should be issued in areas especially susceptible to soil erosion or water quality degradation, environmentally sensitive areas, areas with potentially conflicting uses, or areas where the level of activity and investment by the lessee does not require a long-term commitment of the land. These areas will be identified through DNR's range management plans or through management plans.

**E. Long-term Leases.** Long-term leases (up to 55 years) may be issued where the level of activity and investment by the lessee is significant enough to require a long-term commitment of the land. Leases will establish reasonable use standards that, if not met, may be cause for cancellation of the lease. Long-term leases may be issued unless the best interest finding determines that significant impacts to important fish and wildlife or other resources and uses cannot be adequately mitigated in the terms and conditions of the lease.

**F. Range Management Plans.** Where grazing is anticipated to be a significant, widespread land use with potential for creating environmental harm, DNR will develop range management plans (RMPs) separately or as part of a general land management plan as described before issuing grazing leases or permits. RMPs will be developed by the Division of Land and Water Management, in consultation with the Divisions of Agriculture and Forestry, ADF&G, SCS, and Soil and Water Conservation Districts. The provisions of RMPs, listed below, will provide the basis for approval of grazing operations plans (see below) and of stipulations to be included in grazing leases and permits. RMPs will not be required where grazing is a minor use with a few animals and little land area involved. DNR will determine where range management plans are appropriate, based on consultation with other affected agencies, including ADF&G.

**1. Stocking Densities.** The state shall use standard United States Department of Agriculture range assessment procedures or other scientifically acceptable methods to identify the abundance, distribution, annual productivity, nutrition, and seasonal availability of range vegetation available for grazing. Forage availability, expressed as animal unit months (AUMs), and grazing schedules shall be used to establish maximum allowable stocking densities. Stocking densities will also consider wildlife forage requirements and will not exceed the sustainable range production level.

**2. Water Quality Protection.** Range management plans will state how anadromous fish streams, other waterways, and lakes will be protected from the adverse impacts of grazing. Fencing may be required to protect portions of waterbodies and their riparian habitat. Identification of specific watering sites, feeding stations, headquarter sites, or other improvements, may be required to minimize the adverse impacts of grazing.

**3. Annual Grazing Schedule.** Range management plans will establish dates for release and removal of stock on grazing lands. This may be necessary to protect the range and to minimize competition between stock and wildlife.

**4. Map of Proposed Grazing Areas.** Range management plans will include a map that shows the location, acreage, and configurations of proposed lease and permit areas.

**5. Physical Improvements.** Range management plans will show proposed feed lot sites, stock watering sites, supplemental feeding stations, farm headquarters sites, fences, and other improvements necessary to minimize conflicts between grazing and other resource values. Range management plans shall include, where appropriate, guidelines for the design, location, or use of roads, trails, bridges, and other improvements or actions that may be necessary or incidental to grazing operations.

**6. Environmental Monitoring.** Range management plans will establish procedures to monitor the impacts of grazing on wildlife,

vegetation, and soil stability and establish conditions under which a lessee's or permittee's grazing operations plan may be modified to prevent environmental degradation.

**7. Livestock-predator Conflicts.** Range management plans will establish measures necessary to minimize livestock-predator conflicts. The state will not be responsible for loss of livestock to predators.

**8. Examination for Disease.** All livestock shall be examined by a state licensed veterinarian for diseases and parasites. All livestock will be free of visible symptoms of any infectious or contagious disease and parasites before placing stock on the permit or lease area. Livestock that carry an infectious or contagious disease will be restricted from placement on the range for a 60-day period to allow for treatment and retesting by a licensed veterinarian. Diseased livestock will not be released.

**9. Parasite Treatment.** Before release, all livestock will be treated for ectoparasites and endoparasites with an approved anthelmintic. Diseased livestock will not be released.

**10. Modification of Vegetation.** Artificial modification of natural vegetation (for example, clearing, burning, crushing, or seeding) will be permitted only in the locations and under the guidelines specified by applicable range management plans.

**G. Grazing Operations Plans.** Before receiving a 2-5 year grazing permit or receiving or converting a lease, a person must have an approved grazing operations plan that will become part of the lease or permit. A grazing operation plan will be approved by DNR only when it is in compliance with an existing range management plan. DNR will assist a lessee or permittee in preparing a plan in consultation with ADF&G and SCS. Minimum requirements of a grazing operations plan are listed below.

1. Lessee will have a cooperative agreement with the appropriate Soil and Water Conservation District or Subdistrict.

2. A physical resource map will identify the location, acreage, and configuration of the proposed lease or permit area(s); the proposed feedlot sites, stock watering sites, and supplemental feeding stations; the farm headquarters site, outbuildings, fences, and other proposed improvements; and existing facilities on the applicants own land.

3. A statement of the lessee's proposed management activities will include range management practices considered essential or desirable, including clearing and modification of vegetation; livestock species to be stocked; annual grazing schedule and forage balance sheet.

4. A maximum stocking density will be based on DNR's range management plan for the area concerned (if such a plan exists). A minimum stocking density with a schedule for achieving it will also be established as a part of each grazing operations plan to ensure efficient use of state grazing land.

5. Modification of grazing operation plans may be required if grazing activities are determined to impair water quality or soil stability or if sustainable forage for stock cannot be maintained under an existing grazing operations plan. Determination that modification of a grazing operations plan is necessary will be made by the Division of Agriculture in consultation with the lessee, Alaska Department of Environmental Conservation, Alaska Department of Fish and Game, and the USDA Soil Conservation Service.

**H. Standards of Approval for Grazing Operation Plans.** A grazing operations plan will be approved only when it complies with an applicable range management plan. Where there is no range management plan in effect, approval will be based on consideration of the potential effects of grazing on water quality, riparian lands, soil stability, disease transmission, livestock-predator conflicts, stocking density, and competition between wildlife and stock for forage. DNR, in consultation with affected agencies, may require that appropriate measures be specified in a grazing operations plan to minimize adverse impacts.

## **I. Modification of Grazing Operations**

**Plan.** Modifications of grazing operations plans may be required if grazing activities are determined to cause significant degradation to the range or wildlife habitat, including but not limited to, water quality, soil stability, or sustainable forage for stock and wildlife. Modifications may also be made to accommodate greater carrying capacity. Determination that modification of a grazing operations plan is necessary will be made by DNR in consultation with the lease or permit holder, the Department of Environmental Conservation, and ADF&G.

## **J. Other Guidelines Affecting Grazing.**

Several other guidelines may affect agricultural development. See the following sections of this chapter:

- Fish and wildlife habitat
- Forestry
- Materials
- Subsurface resources
- Transportation
- Lakeshore management
- Public access
- Stream corridors and instream flow
- Trail management
- Wetlands management

## **Land Allocation Summary**

**Agriculture.** Detailed soil surveys and climatic data do not exist for the Kuskokwim Area, so there is little information for identifying lands with agricultural potential. Current assessments of potential are based on the general information in the USDA Exploratory Soil Survey and proximity to transportation

routes. Based on this information, less than 1 percent of the planning area -- 100,000 acres -- has high agricultural potential and most of this land is Native owned ( High potential agricultural areas are defined as accessible lands with more than 40 percent of the soils suitable for crops). An additional 2.3 million acres of land which have 20-40 percent of their soils suitable for crops and have access within two to six miles, were rated moderate. Over half the moderate potential lands are state owned.

The Kuskokwim Area Plan determines whether state land will be offered for private agricultural homesteads or other agricultural sales over the next 20 years. Because of relatively low suitability for agriculture, lack of detailed data on soils and climate, remoteness, and lack of demand for land agricultural development, the plan does not designate any areas for agriculture. Agricultural development may occur on existing Native and other private lands or on lands offered for private ownership through the state's fee-simple homestead program. (see Map 2.3 and Table 2.5)

In areas retained in state ownership, lands that have moderate or high agricultural potential are identified in the individual subunits. In order to protect options for long-term use of these lands, they are subject to a requirement that the Division of Agriculture be consulted prior to issuance of permits or leases for any activities which would significantly diminish their capability to support agriculture. The following management subunits contain retained lands with moderate or high agricultural potential: 1a, 1b, 1c, 2a, 4a, 4b, 4c, 5a, 5i, 5j, 14a, 14c, 15a, and 15c.

**Grazing.** Interest in grazing on state lands in the Kuskokwim Area is likely to focus on two types of operations -- moderate- to large-scale reindeer grazing operations, and grazing of a few pack or livestock animals to support guiding operations or individual homesteads. Except for the high mountains of the Alaska Range and some forest and muskeg land near the Kuskokwim River and the North Fork, nearly all the planning area, including most state land, has high potential for reindeer grazing based on preliminary information in the USDA Exploratory Soil Survey.

Over two-thirds of all state lands are open to grazing permits and leases. However, grazing

is not allowed on certain important habitat lands identified in the grazing guideline A, Grazing on Important Habitat Lands, page 2-2. These lands -- Dall sheep habitat in the Alaska Range; caribou calving grounds in the Alaska Range, the Beaver Mountains, around Aniak Lake, and south of the Nixon Fork; brown bear concentration areas in the Sunshine Mountains and Beaver Mountains and along the South Fork, Salmon River (Pitka Fork Drainage), Salmon River (Aniak River Drainage), Aniak River, Holitna River, and Kogrukluk River; and winter moose range along most of the major rivers -- total approximately 5.1 million acres. (see Map 2.1)

