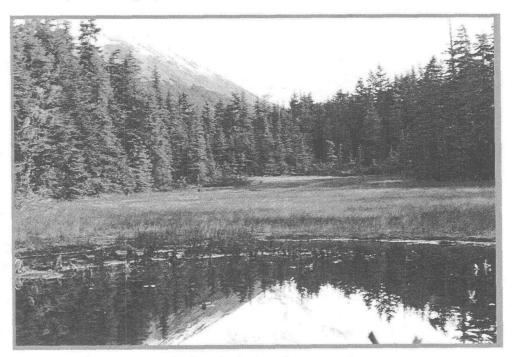
FISH AND WILDLIFE HABITAT

GOALS

The Turnagain Arm Management Plan will protect the habitat values of sufficient suitable lands and waters to provide for the habitat needs of fish and wildlife resources necessary to maintain or enhance public use and economic benefits. Human use, harvest, and viewing of fish and wildlife is important to the quality of life and to the recreation and tourist industry in this region.



Pond and meadow bordering forest near Girdwood

MANAGEMENT GUIDELINES

a. Mitigation

When issuing permits or leases, or otherwise authorizing the use or development of state lands, the Department of Natural Resources (DNR) will recognize the requirements of the activity or development and the benefits it may have to habitat when determining stipulations or measures needed to protect fish and wildlife or their habitats. The costs of mitigation relative to the benefits to be gained will be considered in the implementation of this policy.

All land use activities should be conducted with appropriate planning and implementation to avoid or minimize adverse effects on fish and wildlife or their habitats.

The departments will enforce stipulations and measures, and will require the responsible party to remedy any significant damage to fish and wildlife or their habitats that may occur as a direct result of the party's failure to comply with applicable law, regulations, or the conditions of the permit or lease.

When determining appropriate stipulations and measures, the department will apply, in order of priority, the following steps. Mitigation requirements listed in other guidelines in this plan will also follow these steps:

- (1) Avoid anticipated, significant adverse effects on fish and wildlife or their habitats through siting, timing, or other management options.
- (2) When significant adverse effects cannot be avoided by design, siting, timing, or other management options, the adverse effect of the use or development will be minimized.
- (3) If significant loss of fish or wildlife habitat occurs, the loss will be rectified, to the extent feasible and prudent, by repairing, rehabilitating, or restoring the affected area to a useful state.
- (4) DNR will consider requiring replacement or enhancement of fish and wildlife habitat when steps 1 through 3 cannot avoid substantial and irreversible loss of habitat. The Department of Fish and Game (ADF&G) will
 clearly identify the species affected, the need for replacement or enhancement, and the suggested method for addressing the impact. Replacement
 or enhancement of similar habitats of the affected species in the same region
 is preferable, DNR will consider only those replacement and enhancement
 techniques that have either been proven to be, or are likely to be, effective
 and that will result in a benefit to the species impacted by the development.

Replacement or enhancement will only be required by DNR if it is determined to be in the best interest of the state either through AS 38.05.035(e) or permit review process. Replacement may include structural solutions such as creating spawning or rearing ponds for salmon, creating wetlands for waterfowl, or non-structural measures such as research or management of the species affected, legislative or administrative allocation of lands to a long-term level of habitat protection that is sufficiently greater than that which they would have otherwise received.

b. Activities that Impact Fish and Wildlife Habitat

Types of activities known to negatively impact fish and wildlife habitat that should be considered when evaluating a proposal include:

- (1) Reduction in the quantity, quality, or variety of food items available.
- (2) Introduction of animals (wild or domestic) that might lead to the transmission of diseases, increased predation, or harassment.
- (3) Creation of barriers to movement, either physical or behavioral.
- (4) Harassment or disturbance to animals causing: a) movement from areas rich in food resources to less desirable habitat; b) increased stress or energy expenditures, thereby reducing the survival of the animal; or c) abandonment of young.
- (5) Interactions with humans that are likely to increase illegal hunting or killings in defense of life and property.
- (6) Reduction in the quality or availability of water supply.

c. Threatened and Endangered Species

A review of the current Federal and State lists of Threatened or Endangered species indicates that there are no known Threatened or Endangered species likely to utilize the planning area. There are several species likely to utilize the planning area that are listed as ADF&G Species of Special Concern. These include Olive-sided flycatcher, Townsend's warbler, and Blackpoll warbler (all uncommon summer residents and rare spring migrants); and Cook Inlet beluga whale (an occasional visitor along Turnagain Arm). A Species of Special Concern is administratively identified by ADF&G to include any species or subspecies of fish or wildlife native to Alaska which has entered a long-term decline in abundance or is vulnerable to a significant decline due to low numbers, restricted distribution, dependence on limited habitat resources, or sensitivity to environmental disturbance.

Activities that potentially affect bald and golden eagles will be consistent with the federal Eagle Protection Act as amended in 1978.

d. Aircraft Noise

Any helicopter skiing, or other aircraft activity that requires DNR authorization shall route the aircraft to minimize or avoid noise impacts to wildlife. Of particular concern are goat concentration areas. See also *Recreation Guideline c* in this chapter.