

FISH AND WILDLIFE HABITAT

Goals

Maintain and Protect Publicly Owned Habitat Base. The state will maintain in public ownership and 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.

Ensure Access to Public Lands and Waters. Ensure access to public lands and waters, where appropriate, to promote or enhance public use and enjoyment of fish and wildlife resources. Access improvements should be designed to match the public use objectives for the area under consideration.

Mitigate Habitat Loss. When resource development projects occur, reduction in the quality and quantity of fish and wildlife habitat should be avoided or minimized.

Contribute to Economic Diversity. Protect and enhance fish and wildlife resources and habitats to contribute directly or indirectly to local, regional, and state economies through commercial, subsistence, sport and nonconsumptive uses, while working to achieve the economic development of other resources.

Management Guidelines

A. Habitat Manipulation. Habitat manipulation through controlled burning, water control, timber management practices, or other measures may be used to improve habitat for certain fish and wildlife species where feasible and compatible with other primary uses.

B. Activities in Important Waterfowl Habitat. In important waterfowl habitat, activities that require a permit, lease, or development plan and produce high levels of acoustical or visual disturbance from sources such as boat traffic, blasting, dredging, and seismic operations will, to the extent feasible and prudent, be avoided during sensitive periods. Where it is not feasible and prudent to avoid such activities, other mitigative measures will be considered to attempt to avoid significant impacts. The Department of Fish and Game (ADF&G) will be consulted for assistance in identifying areas of important waterfowl habitat.

C. Structures in Fish Habitat. Structures in fish habitat will, to the extent feasible, be designed to minimize impacts on fish migration, spawning, and rearing.

D. Water Intake Structures. When issuing appropriations for waters that provide fish habitat, DNR will require that practical water intake structures be installed that do not entrain or impinge on fish. The most simple and cost-effective technology may be used to implement this guideline.

Water intake structures will be screened and intake velocities will be limited to prevent entrapment, entrainment, or injury to fish. The structures that support intakes should be designed to prevent fish from being led into the intake. Other effective techniques may also be used to achieve this guideline. Screen size, water velocity, and intake design will be determined in consultation with ADF&G.

E. Threatened and Endangered Species. All land use activities should be conducted consistent with the federal Endangered Species Act to avoid jeopardizing the continued existence of threatened or endangered species of fish or wildlife or their continued use of an area and to avoid modification or destruction of their habitat.

Specific mitigation recommendations should be identified through interagency consultation for any land use activity that potentially affects threatened or endangered species. In Alaska, five species are listed under the jurisdiction of the U.S. Fish and Wildlife Service as threatened (T) or endangered (E) in accordance with the federal Endangered Species Act, as amended:

	<u>Status</u>
1. Arctic peregrine falcon (<u>Falco peregrinus tundrius</u>)	T
2. American peregrine falcon (<u>Falco peregrinus anatum</u>)	E
3. Aleutian Canada goose (<u>Branta canadensis leucopareia</u>)	E
4. Eskimo curlew (<u>Numenius borealis</u>)	E
5. Short-tailed albatross (<u>Diomedea alabaturus</u>)	E

The Eskimo curlew and short-tailed albatross are not likely found in the Copper River Basin area. The American peregrine falcon is probably present in small numbers, and the Arctic subspecies may be present only during migration. However, little effort has been expended in surveying the area for peregrine falcons. The U.S. Fish and Wildlife Service intends to conduct a survey along the Copper River during the summer of 1987.

Activities that potentially affect bald and golden eagles will be consistent with the federal and state endangered species act and the Bald Eagle Protection Act of 1940 as amended.

The Anchorage Fish and Wildlife Enhancement Office of the U.S. Fish and Wildlife Service should be consulted on questions that involve endangered species.

F. Documented High Value Trumpeter Swan Nesting and Concentration Areas. These areas will be managed to protect the nesting habitats of trumpeter swans and to require land uses to minimize disturbance to swans. General guidelines listed below apply to the following areas:

- Management Unit 4: North of Glenn Highway and Snowshoe Lake
- Management Units 6a and 6b: Crosswind Lake area
- Management Units 9a and 9c: Between Tazlina and Klutina Rivers
- Management Unit 26: Lower Gakona River

General guidelines that apply to permits and leases in these areas are listed below:

1. Surface leasing (other than for oil and gas activities) is prohibited unless ADF&G determines that the proposed use will be compatible with the protection of trumpeter swans and swan habitat, or DNR determines it is not feasible and prudent to prohibit the activity.
2. Oil and gas and mineral exploration activities are allowed, and surface leasing that support oil and gas activities may be allowed; access and certain other activities that would disturb swans will be restricted from May 1 to August 31.
3. Overland access regulated by permit and other activities that require permits will be prohibited from May 1 to August 31 unless ADF&G determines the activity is compatible with the protection of trumpeter swans and swan habitat or DNR determines it is not feasible and prudent to prohibit these activities. Most overland access is difficult or impossible during this period because of the amount of standing water.
4. When DNR determines that it is not feasible and prudent to prohibit a proposed activity and ADF&G determines that the proposed activity is incompatible with

protection of trumpeter swans and their habitat, DNR authorizations will include all portions of the guideline in the following paragraph that ADF&G recommends as necessary to protect swans and their habitat. If ADF&G and DNR staff cannot agree, the final decision on the necessary restrictions or prohibitions will be made by the Commissioner of DNR in consultation with the Commissioner of ADF&G.

Activities that may damage swan nesting habitat which require permits should be restricted or prohibited from May 1 through August 31 in at least one-quarter mile of current or potential swan nesting or staging ponds, marshes, or lakes. Activities requiring permits that may cause visual or noise disturbance should be restricted or prohibited from May 1 through August 31 within at least 1/4 mile of occupied swan nesting or staging ponds, marshes or lakes. This includes actions that may not in themselves be damaging or disturbing to swans, but which are dependent on activities that may be damaging or disturbing (for example, air access, off-road vehicles, or use of motorboats). Particular activities may be restricted or prohibited in a wider area if their potential level of damage or disturbance warrants doing so.

Note: Many activities which now occur in this area do not require permits and are not affected by this guideline. Aircraft and floatplane landings, hunting, and fishing in traditionally used areas are not affected by this guideline.

G. Other Trumpeter Swan Nesting Areas. In trumpeter swan nesting areas other than those described in the preceding guideline, all land use activities that would disturb nesting swans or detrimentally alter the nesting habitat will be avoided to the extent feasible and prudent. Where these activities are deemed feasible and prudent, they will be conducted to minimize disturbance to nesting swans or detrimental alteration of habitat. Leases or permits may include seasonal restrictions on activities to avoid disturbance to swans. Consultation with the ADF&G will be used to identify current or potential nesting habitat and to determine guidelines to follow and activities to avoid.

Construction of transmission lines in trumpeter swan habitat should be avoided. If transmission lines are constructed, they should be sited in forested areas and kept close to treetop level; wires should be strung in one horizontal plane rather than in multiple, vertical stacks. Where wires cross rivers, marshes, and other open spaces, they should be marked so that they are visible to swans.

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

1. Attempt to avoid the loss of natural fish and wildlife habitat.
2. Where habitat loss cannot be avoided, minimize loss and the need for habitat restoration or maintenance efforts:
 - Consider fish and wildlife habitat and use in the early phases of development project planning and design to minimize the spatial and temporal extent of impacts.
 - Develop siting and design criteria that will minimize wildlife-caused damage to life and property where conflicts between people and animals may arise.
 - Request information on the best management practices from the Department of Fish and Game and other appropriate agencies.

3. When loss of habitat productivity cannot be minimized, restore and rehabilitate the habitat that was lost or disturbed to its pre-disturbance condition where doing so is feasible and prudent. (For coal, see 11 AAC 90.)
4. When loss of existing habitat productivity is substantial and irreversible and the above objectives cannot be achieved, compensation with or enhancement of other habitats should be considered. In general, compensation with similar habitats in the same locality is preferable to compensation with other types of habitat or habitats elsewhere.

I. Other Guidelines Affecting Fish and Wildlife Habitat. Several other guidelines may affect the protection and management of fish and wildlife habitat. See the following sections of this chapter:

- Agriculture
- Forestry
- Materials
- Recreation, cultural, and scenic resources
- Settlement
- Subsurface resources
- Transportation
- Lakeshore management
- Public access
- Stream corridors and instream flow
- Trail management
- Wetlands management

Land Allocation Summary

Although all lands serve as fish or wildlife habitats to some degree, important habitat lands generally will be managed to maintain fish and wildlife production and related public uses.

Fish. Fish and wildlife habitat and harvest are identified as the primary use of most anadromous streams and streams and lakes with important resident fish populations. To protect important salmon spawning and rearing areas and resident fish populations, certain streams and lakes will be closed to new mineral entry (see p. 2-35).

Wildlife. State land in the Copper River Basin provides habitat for moose, caribou, bear, fur bearers and other animals; these resources are used by people from throughout and outside of Alaska. Wildlife habitat is designated as a primary use on all lands important for wildlife habitat or those lands used for hunting or wildlife viewing except in areas identified for land offerings or resource management. The important trumpeter swan nesting areas should be evaluated by the legislature for special designation.