

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 non-consumptive 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 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 result in entrainment or impingement of 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. Water Withdrawal in the Winter. Water withdrawal during winter months will, to the extent feasible and prudent, avoid fish overwintering areas.

F. Threatened and Endangered Species and Raptors. All land use activities shall be conducted consistent with state and federal Endangered Species Acts 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 consult-

ation for any land use activity that potentially affects threatened or endangered species and bald or golden eagles. At a minimum, the U.S. Fish and Wildlife Service should be consulted if an activity is proposed within 1/4 mile of a bald or golden eagle nest.

In Alaska, five species are listed under the jurisdiction of the U.S. Fish and Wildlife Service and Alaska Department of Fish and Game as threatened or endangered in accordance with state and federal Endangered Species Acts, as amended:

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

The Eskimo curlew and short-tailed albatross are not likely found in KAP. The American peregrine falcon is probably 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.

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.

G. Trumpeter Swan Nesting Areas. In trumpeter swan nesting areas 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. Avoid Conflicts with Traditional Uses of Fish and Game. Where feasible and prudent, surface activities authorized under lease or permit will be restricted to prevent significant conflicts with local subsistence harvests and other traditional uses of fish and wildlife resources.

I. Public Notice to Help Avoid Conflicts with Traditional Uses of Fish and Game.

When making decisions on right-of-way permits, trapping cabins, remote cabins, or actions requiring notice under AS 38.05.945, DNR will notify the appropriate regional non-profit associations and other organizations listed in Appendix B using standard procedures and time frames existing at the time the decision is made. The Division of Boards in ADF&G will notify the appropriate fish and game advisory committees of the proposed action. When setting deadlines for responses to proposed actions, DNR will recognize the extra time it takes mail to reach people in rural Alaska. People responding will be expected to be prompt in returning comments to meet deadlines. (Also see guideline B, Public and Commercial Recreation, page 2-26).

J. Avoid Creating Nuisance Animals. Garbage associated with uses authorized under a lease or permit will be thoroughly incinerated or removed for disposal at an approved location (if one is available) to avoid creating nuisance animals that must be relocated or

destroyed. Burning will be done consistent with Division of Forestry burning restrictions.

K. Mitigation. When issuing permits and leases or otherwise authorizing the use or development of state lands, the Department of Natural Resources 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 will be conducted with appropriate planning and implementation to avoid or minimize adverse effects on fish and wildlife or their habitats.

The department 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 and 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 can not avoid substan-

tial and irreversible loss of habitat. 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 the 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, or fire management to increase habitat productivity.

L. Management of Trapping Cabins. See Trapping Cabin guidelines A through E, page 2-30 through 2-31.

M. 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
- Cultural resources
- Forestry
- Lakeshore management
- Materials
- Public and commercial recreation resources
- Public access
- Settlement
- Stream corridors and instream flow
- Subsurface resources
- Trail management
- Transportation
- Wetlands management

Land Allocation Summary

Background. All lands, including lands in disposal areas, serve as fish or wildlife habitat and harvest areas to some degree.

The most important habitat and public use lands will be retained in public ownership and managed to maintain fish and wildlife production and related public uses. (Table 2.1) These areas total approximately 10.5 million acres.

Within the entire planning area, including state and non-state lands, approximately 13.3 million acres have high value fish and wildlife habitat and harvest values. Approximately 5.5 million acres contain moderate values, and 5.2 million acres contain low values. Lands along the navigable portions of major river systems that contain anadromous fish and provide important habitat for moose, bear, and furbearers have the highest value for fish and wildlife habitat and harvest. The next highest values are found in the Alaska Range and the habitat adjacent to the floodplains of the major rivers. Moderate values were identified in the uplands in the southern half of the planning area and near Ophir. Low value areas for fish and wildlife habitat and use were mostly in the higher elevations in the Kuskokwim Mountains and the Sischu Mountains north of the Kuskokwim River, in portions of the Folger and Innoko drainages, in the foothills of the northern part of the Alaska Range, and in the uplands just east of Devils Elbow.

Fish. Fish and wildlife habitat and harvest are identified as a primary use of state lands along most rivers, streams, and lakes with anadromous fish and important resident fish populations. To protect important salmon spawning and rearing areas, and sheefish spawning areas, certain streams will be closed to new mineral entry (see Map 2.4). In areas identified for land offerings, buffers are required along streams and wetlands, including staking setbacks along streams that support anadromous fish.

Wildlife. State land in the planning area provides habitat for moose, caribou, Dall sheep, bear, fur bearers, and other animals; these resources are used by people from throughout the state 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 except in areas identified for land offerings or resource management. In addition, approximately 62,500 acres of land in the Candle Hills, Nun-satuk, Iditarod, and Dishna areas that are designated resource management also have moderate to high fish and wildlife habitat values. These lands will be retained in public ownership in the near term and managed for multiple use, including fish and wildlife habitat. When the plan is reviewed in five years, these areas will be reevaluated to determine whether they should be kept in public ownership for long-term multiple use or offered for private ownership.

The 38 subunits with a primary designation for wildlife habitat include:

TABLE 2.1 Fish and Wildlife Habitat Designations

Lands Where Fish and Wildlife Habitat is Designated a Primary Use

<u>Unit</u>	<u>Subunit</u>	<u>Acreage</u>
North Fork	1b, 1d	287,000 ac.
East Fork	2a, 2d	399,000 ac.
Tonzona	3a	212,000 ac.
Big River - South Fork	4a, 4c	395,000 ac.
Kuskokwim River	5a, 5j	436,000 ac.
Nixon Fork	6a, 6b, 6d	263,000 ac.
Innoko River	7a, 7b, 7d	355,000 ac.
Dishna - Iditarod	8c, 8d, 8f, 8g	522,000 ac.
Takotna River	9b, 9d	193,000 ac.
George River	10a, 10b	385,000 ac.
Swift River	11a	143,000 ac.
South Alaska Range	12a	726,000 ac.
North Alaska Range	13a	1,831,000 ac.
Stony River	14a, 14b, 14d	482,000 ac.
Holitna River - West - East	15a, 15b, 15c, 15g	2,658,000 ac.
Holokuk - Oskawalik	16a	424,000 ac.
Aniak River	17a, 17b, 17e	791,000 ac.
<u>Birch Tree Crossing</u>	18a	<u>28,000 ac.</u>
TOTAL:		10,530,000 ac.

Resource Management Lands With Fish and Wildlife Habitat Values

<u>Unit</u>	<u>Subunit</u>	<u>Acreage</u>
Kuskokwim River	5d, 5h	17,000 ac.
<u>Dishna River</u>	8a, 8b	<u>46,000 ac.</u>
TOTAL:		63,000 ac.