

Fish and Wildlife Habitat

Goals

Ensure Access to Public Lands and Waters. Ensure access to public lands and waters and promote or enhance the responsible public use and enjoyment of fish and wildlife resources.

Mitigate Habitat Loss. When resource development projects occur, avoid or minimize changes in the quality and quantity of fish and wildlife habitat.

Contribute to Economic Diversity. Protect fish and wildlife resources which contribute directly or indirectly to local, regional, and state economies through commercial, subsistence, sport and non-consumptive uses.

Maintain and Protect Publicly Owned Habitat Base. Maintain in public ownership and protect habitat for fish and wildlife resources to conserve sufficient numbers or a diversity of species to support commercial, recreational, or traditional uses on an optimum sustained yield basis; or protect a unique or rare assemblage of a single or multiple species of regional, state, or national significance.

Manage for Sustained Yield. The management of state land and resources shall be consistent with the requirements of sustained yield, as written in the State Constitution under Article VIII (Natural Resources).

Manage to Maintain and Enhance the Natural Environment. DNR shall maintain and enhance the natural environment in areas known to be important as habitat for fish and wildlife.

Avoid the Introduction of and Reduce the Spread of Invasive Plants, Exotic Animals and Diseases. State lands are to be managed to avoid or reduce the spread of non-native invasive animals and plants as well as exotic diseases that can be detrimental of wildlife populations. This management shall be consistent with the applicable requirements of 11 AAC 34.

Management Guidelines

The Management Guidelines that follow apply to all habitat areas throughout the planning area, with emphasis on Dall sheep, moose, and caribou seasonal habitats; anadromous streams and high value resident fish streams; and other uses listed in Guideline B where alternation of the habitat and/or human disturbance could result in a permanent loss of a population or sustained yield of a species.

A. Mitigation. When issuing permits and leases or otherwise authorizing the use or development of state lands, DNR will include stipulations or measures needed to protect fish, 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, wildlife, or their habitats.

DNR and ADF&G will enforce permit stipulations and measures appropriate to their agency. Mitigation will be required of any significant damage to fish, 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 departments 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, 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 by repairing, rehabilitating, or restoring the affected area to a useful state.
- 4) DNR shall consider replacement or enhancement of, fish and wildlife habitat when steps 1 through 3 cannot avoid substantial and irreversible loss of habitat. ADF&G will identify the species affected, the need for replacement or enhancement, and the suggested method for addressing the impact. Replacement with 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 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.

B. Allowing Uses in Fish and Wildlife Habitats (Ha). These habitats are defined as areas that serve as concentrated use areas for fish and wildlife species during a sensitive life history stage where alteration of the habitat and/or human disturbance could result in a permanent loss of a population or sustained yield of the species. Fish and wildlife categories used, in part, to identify Habitat (Ha) designations in this plan include the following:

- Anadromous fish spawning, rearing, and overwintering migration areas.
- American peregrine falcon and trumpeter swan nesting and molting concentrations.
- Waterfowl nesting and molting areas.

- Fish streams frequented by bears (including concentrations by season).
- Moose wintering and calving areas.
- Caribou wintering and calving areas.
- Dall sheep wintering and lambing areas.
- Important wildlife migration corridors.

The areas designated Habitat (Ha) in Chapter 3 of the plan were defined using the best available information when the plan was written. In the granting of authorizations within areas designated Habitat, DNR adjudicators should attempt to acquire more detailed and more recent information pertaining to habitat resources and values if there is some question as to the appropriateness of the use that is under consideration for authorization.

The resource that was used to make the determination that an area should be designated “Ha” is identified in the parcel descriptions contained in Resource Allocation Tables in Chapter 3 under the column, “Resources and Uses”. In some cases, there is only a single resource but in other instances, several resources exist, with these resources sometimes occupying differing portions of the parcel. The spatial distribution of habitat resources is described in the management intent language, if known. Units are to be managed to protect the resource(s) identified in these tables. The fish and wildlife associated with the Habitat designation are listed in the Glossary under the term ‘Habitat’.

There is a distinct seasonality associated with the critical life periods of certain species; seasonality shall be taken into consideration during project review and approval. Seasonality and critical life cycle stages are identified in various publications.³ Thus, it may be possible, through consultation with ADF&G and other agencies, that uses and facilities be found appropriate within areas designated Habitat if the seasonality criteria are satisfied by including mitigating measures in project design.

Uses not consistent with a plan designation or not authorized in a management intent statement and that, if permitted would result in the degradation of the resource(s) within areas designated “Ha”, are to be considered incompatible and are not to be authorized. Degradation of the resource might result from actions involving one or more of the following factors: dredging, filling, significant compaction of vegetation and sediment, alteration of flow patterns, discharge of toxic substances, or disturbance during sensitive periods. If there is a question as to whether a use would be appropriate or whether it would degrade a listed resource, DNR shall consult with ADF&G in making the determination of initial incompatibility.

³ These publications include, but are not limited to the following: ADF&G Regional Habitat Guides and NOAA's Oil Spill Response Atlas. Note to DNR adjudicators: In the event that information is not contained in these publications, consult pertinent publications and coordinate with ADF&G and federal agencies with jurisdiction over species in question to determine seasonal windows and use patterns.

Non-designated uses that cause significant adverse impacts to the resources identified within a given “Ha” parcel can be allowed if:

- DNR determines that the management unit in question does not possess those attributes characteristic of a Habitat designation as defined in the plan; or
- If DNR in consultation with ADF&G determines that the non-designated use can be made compatible and significant adverse impacts to the “Ha” area avoided with appropriate design, siting, and operating stipulations; or
- The project is found consistent under the ACMP or necessary (in the best interest of the state) under state disposal decisions under AS 38.056.035(e) and significant adverse impacts are mitigated under Management Guideline A⁴.

C. Allowing Uses Outside of Designated Fish and Wildlife Habitat Areas. Habitat-altering uses will be sited consistent with the management guidelines in this chapter, and the management intent and guidelines in Chapter 3.

D. Habitat Manipulation: General Requirements. Habitat restoration through water control, timber management practices, removal of pollution sources, or other measures may be used to improve habitat for fish and wildlife species where ADF&G determines that it is beneficial to the species or habitat and DNR determines that it is compatible with other primary uses.

E. Habitat Manipulation: Management of Invasive Plant and Animal Species. The state shall manage its lands and waters to avoid the introduction of and reduce the spread of invasive non-native plants and animals, consistent with the requirements of 11 AAC 34. Although the strategic management plan for noxious and invasive plant species recognizes this as a statewide issue, in most instances this problem is best handled at the local level. The local Soil and Water Conservation District has a program in place that currently concentrates on surveying areas of infection and providing landowners with treatment options and Best Management Practices in an effort to manage these species. Contact them for more information.

F. Hatchery and Aquatic Farm Source Waters. To preserve the quality of an existing hatchery’s water supply, land uses should be limited to those that reduce the risk of reducing water quality or quantity below that needed by the hatchery.

G. Water Intake Structures. When issuing water rights for waters providing fish habitat, DNR and ADF&G will require that practical water intake structures be installed that do not result in entrainment or impingement of fish and will maintain instream flows needed to sustain existing fish populations. The simplest and most cost-effective technology may be used to implement this guideline.

⁴ Authorizations involving uses that have been determined to be necessary in the best interest finding but are inconsistent with plan designations and management intent or management guidelines require a plan amendment. See 11 AAC 55.030(f).

Water intake structures should be screened, and intake velocities will be limited to prevent entrapment, entrainment, or injury to fish. The structures supporting intakes should be designed to prevent fish from being led into the intake. Other effective techniques may also be used to achieve the intent of this guideline. The DMLW (Water Section) and ADF&G Division of Habitat should be consulted to determine screen size, water velocity, and intake design if the intake structure is in fish habitat.

H. Alteration of the Riverine Hydrologic System. To the extent feasible, channelization, diversion, or damming that will alter the natural hydrological conditions and have a significant adverse impact on important riverine habitat will be avoided. If projects like this are proposed they will require a review and permit from the ADF&G Division of Habitat and other agencies.

I. Threatened and Endangered Species. All land use activities will be conducted consistent with state and federal Endangered Species Acts to avoid jeopardizing the continued existence of threatened or endangered species of animals or plants, to provide for their continued use of an area, and to avoid modification or destruction of their habitat. Specific mitigations recommendations should be identified through interagency consultation for any land use activity that potentially affects threatened or endangered species. One species (Cook Inlet Beluga whales) has been identified as Endangered within the planning area. The U.S. Fish and Wildlife Service (USFWS), Division of Ecological Services, or the National Marine Fisheries Service (NMFS) should be consulted on questions that involve endangered or threatened species. In the instance of the Beluga whale, NMFS is the responsible federal agency.

J. Eagles. Authorizations or disposals that potentially affect bald eagles will be consistent with the state and federal Endangered Species acts and the Bald Eagle Protection Act of 1940 as amended. Applicable standards are drawn from a cooperative agreement signed by the U.S. Forest Service and the USFWS or such subsequent standards that may be promulgated. These standards, however, may not be adequate in all circumstances, and the USFWS may determine that additional measures are necessary. In addition, meeting the guidelines does not absolve the party from the penalty provisions of the Bald Eagle Protection Act; therefore, the USFWS should be consulted when activities may affect bald or golden eagles.

- 1) Siting Facilities to Avoid Eagle Nests.** Facilities determined by the U.S. Fish and Wildlife Service to cause significant disturbance to nesting eagles will not be allowed within 330 feet and up to one-half mile of any bald eagle nest site, whether the nest is currently active or not.
- 2) Activities Disturbing Nesting Eagles.** Activities the U.S. Fish and Wildlife Service determines likely to cause significant disturbance to nesting eagles will be prohibited within 330 feet of active bald eagle nests between March 15 and August 31. Temporary activities and facilities that do not alter eagle nesting habitat or disturb nesting eagles, as determined by the USFWS, may be allowed at other times.

K. Dall Sheep Wintering and Lambing Areas, Moose and Caribou Wintering and Calving Areas.

Dall Sheep. The planning area encompasses important concentration areas for Dall sheep in the Alaska Range near and within Denali National Park, and the Talkeetna and Chugach Mountains. Windswept ridges 2000'-5000' in elevation within the plan area are considered prime wintering habitat for Dall sheep. The upper valleys between these ridges provide protected lambing habitat from May through June as well as movement corridors between winter concentration areas.

Dall sheep move seasonally along the north facing slopes of the Chugach Mountains on the south side of the Lower Matanuska River and the Glenn Highway, a corridor which provides critical access to important wintering areas depending on winter severity conditions. Also vital is the 30,000 acre Sheep Mountain Closed Area adjacent to the Glenn Highway, which serves as a year-round refuge for Dall sheep, as well as a historically important viewing area. The narrow Upper Matanuska River drainage between Sheep Mountain and the Chugach Mountains to the south also provides a passageway between sheep ranges, essential to the long-term viability of Dall sheep in this region. ADF&G should be consulted prior to issuing an authorization in an area suspected to contain moderate concentrations of Dall sheep in order to better determine: 1) the location of lambing and wintering areas; 2) when activities within these areas should be avoided; and 3) identify appropriate mitigation measures if no feasible or prudent alternative site exists.

Moose. Many portions of the planning area are important for moose calving and rutting, or are used as winter concentration areas. Calving typically occurs from May through June, depending upon location. Uses that are likely to produce levels of acoustical or visual disturbance sufficient to disturb calving, rutting, or post-calving aggregations that cannot be seasonally restricted should not be authorized in these areas. Uses may be authorized in these areas at other times of the year. DNR authorizations should include seasonal restrictions on activities that would produce significant acoustical or visual disturbance during sensitive periods.

Moose calving and rutting areas change over time. ADF&G should be consulted prior to issuing an authorization in an area suspected to contain such concentrations in order to better determine: 1) the location of calving and rutting areas; 2) when activities within these areas should be avoided; and 3) identify appropriate mitigation measures if no feasible or prudent alternative site exists. Refer to a management unit's 'Uses and Resources' section in the Resource Allocation Tables to determine whether the presence of a rutting or calving area is likely or if it is a winter concentration area.

Caribou. A portion of the planning area in the Talkeetna Mountains region, generally the easternmost area, provides habitat for the Nelchina Caribou herd. Generally, caribou concentrations occur within the Nelchina Public Use Area and therefore are not subject to the

requirements of this plan. However, a portion of the Talkeetna Mountains regions that abuts the Nelchina PUA is also part of the herds range. Authorizations in these areas are to use the same management requirements as those for moose calving and winter concentration areas, described above.

L. Protection of Mineral Licks. Mineral licks identified within specific management units are used by significant numbers of wildlife primarily during the spring and early summer. 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. Management Intent should protect the area around the licks for their wildlife value. Stipulations should be developed on a case-by-case basis, in consultation with ADF&G, for specific leases or permits. The stipulations should address the following: 1) The avoidance of direct and indirect impact on the mineral licks, the animal tracks leading to them and other areas of concentrated animal use that is associated with the mineral lick; 2) Methods for compensating for the destruction or loss of a lick; 3) the method and routing of mining-related access to these areas.

M. Trumpeter Swan and Tule Geese Nesting Areas. In trumpeter swan and Tule geese nesting areas, uses that would disturb a significant number of nesting swans or geese, or detrimentally alter their nesting habitat, should be avoided. The siting of permanent facilities, including roads, material sites, storage areas, and other forms of permanent structures should be avoided within one-quarter mile of these known nesting sites. Surface entry should also be avoided within one-quarter mile of these nesting areas between April 1 and August 31. Both of these should be evaluated on a case-by-case basis. Some areas are more open and susceptible to noise and visual disturbances and therefore require larger protection areas. Leases or permits may require seasonal restrictions on activities to avoid disturbance to swans. Consult with ADF&G and USFWS to identify current or potential nesting habitat and to determine guidelines to follow and activities to avoid. The standards of Guideline N, 'Activities in Important Waterfowl Habitat', also apply. Refer to the management unit's 'Description' section in the Resource Allocation Tables to determine if the presence of a nesting area is likely.

N. Activities in Important Waterfowl Habitat. In important waterfowl habitat, activities requiring a lease, permit, or development plan, and producing habitat disturbance or high levels of acoustical or visual disturbance from sources such as boat traffic, vegetation clearing, construction, blasting, dredging, and seismic operations, will be avoided during sensitive periods such as nesting, staging, or brood-rearing periods. Where it is not feasible and prudent to avoid such activities, other mitigation measures may be required to avoid significant adverse impacts and the activity may be denied. If it is likely that a waterfowl concentration exists within the area affected by a potential project, consult with ADF&G and USFWS to identify areas of important waterfowl in addition to those identified in the management units in this plan and to determine appropriate mitigation or avoidance measures.

O. Fish and Wildlife Enhancement on State Lands. Fish and wildlife enhancement activities on state lands, whether by ADF&G or other parties, will be consistent with the management intent for those lands. Enhancement activities likely to attract significant public use, including sport fishing use, will be designed and located to minimize the impact of additional public use on the existing recreation resources, including anchorages, campsites, and existing and intended wilderness values.

P. Protection of Fish and Wildlife Resources - Transportation Routes and Facilities. Important fish and wildlife habitats in riparian areas, fish and wildlife movement corridors, important wintering areas, and threatened or endangered species habitat should be avoided in siting transportation routes unless no other feasible and prudent alternatives exist. Location of routes and timing of construction should be determined in consultation with ADF&G.

Q. Protection of Riverine Areas. Riverine areas perform a variety of important functions related to recreation, habitat protection, and water quality/quantity maintenance. The protection of these areas is essential and DMLW and DOAg authorizations are to ensure the maintenance of these areas in any authorizations that may be issued. See Management Guidelines B, D, H, and I in the *Shorelands and Stream Corridors* section in this Chapter for guidance and standards pertaining to riverine areas. These standards are to apply to authorizations issued by DMLW and the Division of Agriculture.⁵

R. Protection of Resources. DNR, in its consideration of resources and in the management of state land, shall consider the impacts of such use upon fish and wildlife, habitat and soil degradation, and upon other forms of use that may occupy the area that is under consideration in an authorization. Uses that are not compatible with these uses and resources are to be made compatible through the use of stipulations. The ability of the Department to manage the subsequent activities that may result from the issuance of an authorization is to be taken into consideration in the adjudication of an application that requires a written determination by DNR.

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

⁵ Separate riparian standards under AS 41.17.115 and .118 apply to timber sales conducted by the Division of Forestry on state land. The riparian standards followed by DMLW and DOAg are similar to those followed by DOF.