

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 reduction in the quality and quantity of fish and wildlife habitat.

Contribute to Economic Diversity. Contribute to Alaska's economy by protecting the 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 resource protection to supply 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.

Avoid the Introduction of and Reduce the Spread of Invasive Plant and Animal Species. State lands are to be managed to avoid or reduce the spread of non-native invasive animals and plants. This management shall be consistent with the applicable requirements of 11 AAC 34.

Management Guidelines

A. Mitigation. When issuing permits and leases or otherwise authorizing the use or development of state lands, DNR will recognize the requirements of the activity or development and the effects to habitat when determining 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 stipulations and measures appropriate to their agency, and may require the mitigation 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 may consider requiring replacement with, 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 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.

B. Allowing Uses in Fish and Wildlife Habitats (Ha). The areas designated Habitat (Ha) in Chapter 3 of the plan were defined using the best available information when the plan was written. These data sources were of a generalized nature. Because of this and in order to be conservative in the delineation of habitat areas, Habitat designations encompassed the largest probable area. Thus, the wildlife and fishery information identified for specific management units in Chapter 3 may occupy either part or all of the area of a unit, and it is possible that part of a management unit designated Habitat may not contain the resource or habitat that was identified as requiring protection. In the granting of authorizations within areas designated Habitat, DNR adjudicators should attempt to acquire more detailed and more recent information pertaining to habitat 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’.

Since 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 ADF&G publications.¹ Thus, it may be possible that uses and facilities may be appropriate within areas designated Habitat if the seasonality criteria are satisfied by including mitigating measures in project design.

Upland uses that are not consistent with the types of uses associated with the approved designation or are not authorized in the management intent statement for a specific unit and that, if permitted, would result in the degradation of the resource(s) associated with areas designated “Ha”, are to be considered incompatible with the plan's management intent and, specifically, with the “Ha” designation. 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.

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

- DNR determines through new information or a more detailed analysis 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 use (project) is found consistent under the ACMP and significant adverse impacts are mitigated under Management Guideline A.

C. Allowing Uses Outside of Designated Fish and Wildlife Habitat Areas. Outside of areas designated Habitat, 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 certain 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.

¹ 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.

E. Habitat Manipulation: Management of Invasive Plant and Animal Species. The management of invasive plant and animal species is a significant concern within the planning area. The state is to 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, uses should not be located on state land where they would risk 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 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.

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. DMLW (Water Section) 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.

I. Threatened and Endangered Species. All land activities will be conducted consistent with state and federal Endangered Species Acts to avoid jeopardizing the continued existence of threatened or endangered species of plants or animals, to provide for 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. Presently, only one species, the Cook Inlet beluga whale (*Delphinapterus leucas*) is listed as endangered by the National Marine Fisheries Service and they have identified a 'critical habitat area' for large portions of Cook Inlet.

The U.S. Fish and Wildlife Service (USFWS), Division of Ecological Services or the National Marine Fisheries Service will be consulted on questions that involve endangered species.

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 USFWS to cause significant disturbance to nesting eagles will not be allowed within 330 feet of any bald eagle nest site, whether the nest is currently active or not.
- 2) **Activities Disturbing Nesting Eagles.** Activities the USFWS 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. Moose Winter Concentration and Calving Areas. 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.

L. Trumpeter Swan Nesting Areas. In trumpeter swan nesting areas, uses that would disturb nesting swans or detrimentally alter the 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 known nesting sites. Surface entry should also be avoided within one-quarter mile of nesting sites between April 1 and August 31. 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 M, 'Activities in Important Waterfowl Habitat', also apply. Refer to an upland management unit's 'Resources and Uses' section in the Resource Allocation Tables to determine if the presence of a nesting area is likely.

M. 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 or the activity may be denied. Consult with ADF&G to identify areas of important waterfowl in addition to those identified in the tidelands management units in this plan and to determine appropriate mitigation or avoidance measures.

N. 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.

O. Protection of Fish and Wildlife Resources - Transportation Facilities. Important fish and wildlife habitats such as those described as 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.

P. Anadromous Stream Mouths within Tidelands. Anadromous stream mouths² shall be protected by a management zone. Only activities compatible with the protection or maintenance of anadromous habitats are to be authorized in a zone occurring within a 300 foot radius measured seaward from MHW at the mouth of these streams. Leases, disposals, and other authorizations should not be approved within this zone unless consultation with ADF&G determines that the proposal is compatible with the intent of protecting anadromous fish resources.

Q. 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.

² As identified in the Catalog of Waters Important for Spawning, Rearing, or Migration of Anadromous Fishes and its associated Atlas.