

# THE WILDLIFE SOCIETY

## ALASKA CHAPTER

### POSITION STATEMENT OF THE ALASKA CHAPTER OF THE WILDLIFE SOCIETY ON WETLAND MANAGEMENT IN ALASKA

The Alaska Chapter of The Wildlife Society is dedicated to wise management of wildlife resources and their habitats. In Alaska, wetlands provide important habitats such as rearing and spawning areas for fish, nesting and staging areas for migratory waterfowl and shorebirds, and year-round habitat for mammals such as aquatic bears, moose, and other species important to the economy of Alaska. Alaska's wetlands have increased in importance for migratory birds displaced by extensive wetland loss and periodic drought in the Lower 48 States. Wetlands help maintain an abundance of ecologically- and economically-valuable fish and wildlife species, many of which are harvested commercially, taken for personal consumption, or through food webs support species enjoyed by visitors to Alaska.

Alaska's wetlands provide other public values in addition to fish and wildlife habitat. Hydrologically, wetlands moderate and desynchronize flood peaks, maintain stream and river flows during periods of low rainfall, and replenish and discharge groundwater. Wetlands trap sediment and sediment-borne pollutants, convert inorganic nutrients such as nitrogen and phosphorus into less harmful organic forms, and protect shorelines from erosion; all are important water-quality functions. High primary productivity in wetlands supports food chains and global biogeochemical processes. Wetlands often support downstream ecological communities through export of nutrients and carbon during peak flows. Wetlands support wildlife populations that are important to subsistence hunters and trappers, and provide valuable recreational opportunities to residents and nonresidents. Alaska's wetlands are essential breeding grounds for migratory birds enjoyed by consumptive and nonconsumptive users in the states and countries south of Alaska.

In the United States exclusive of Alaska, wetlands have declined from about 87 million to 38 million hectares. Estimates of Alaska's wetland area range from 69 million to 90 million hectares, representing from 45% to 59% of the State's total area; but population growth, industrial development, transportation and utility systems, and resource extraction threaten to remove an ever increasing wetland area from wildlife and fisheries production. Although losses of wetlands in Alaska have been localized, within these areas wetland conversion has been extensive, affecting more than 50 percent of total wetlands in the Anchorage Bowl and 30 percent of the freshwater wetlands in the Juneau area.

Alaska possesses diverse wetlands, some unique to its arctic and subarctic climate. Permafrost, in particular, forms an impermeable layer analogous to the impermeable silt or clay layers that underlay many temperate wetlands. The impermeable layers retain water, creating characteristic wetland soils and vegetation. Although individual wetlands and wetland types may not exhibit all possible wetland functions and values, numerous studies have documented that Alaska wetlands collectively exhibit the full range of hydrologic, water quality, production, and habitat functions of wetlands in more temperate climates.

Protection of high-value wetlands and mitigation of wetland losses requires site-specific assessment of wetland functions and values to accommodate the diversity of Alaska's wetlands and their individual characteristics. Some abundant wetland habitats having low values for selected wildlife species may be less critical as habitats for these species than are adjacent uplands. Where this is the case, it is appropriate to direct development efforts towards less critical habitats and away from more critical ones. Conversely, other wetlands may be sufficiently scarce and valuable to justify exclusion of all development.

Exemption of Alaska from a national wetlands policy until Alaska has lost the same proportion of its wetlands as other states would remove a huge area from the nation's wetland base and would fail to protect scarce, high-value riverine, coastal, and estuarine wetlands. Wetland losses, particularly if concentrated around centers of development, could eliminate locally scarce habitats critical to fish and wildlife and would diminish populations of wetland wildlife species. Establishing an arbitrary threshold for implementation of wetland protection in Alaska would be a serious departure from assessing wetland functions and values and mitigating losses of fish and wildlife habitats.

Compensatory mitigation may involve restoring, enhancing, or creating wetlands to provide wetland values equivalent to those lost to development. Compensatory mitigation is not expected to be required for every wetland fill or necessarily achieved on a hectare-for-hectare basis.

Nonregulatory programs also may be necessary to fulfill "no net loss" goals. Much remains to be learned about restoration processes in Alaska as in other parts of North America. Lack of well-developed restoration technology, however, does not justify unmitigated loss of habitat. Pilot projects using available restoration technology should be included in future mitigation projects to expand our understanding of the preceding processes, leading to improved guidelines and procedures for effectively restoring, creating, or manipulating wetlands to provide productive fish and wildlife habitats.

Alaska's wetlands have local, statewide, national, and international significance for the production of fish and wildlife. In recognition of this, and in the interest of maintaining these valuable resources for the enjoyment and use of future generations, the Alaska Chapter of The Wildlife Society finds that:

1. Alaska's wetlands possess the functions and values of wetlands in the rest of North America;
2. Alaska's wetlands require regulatory reviews and protections to maintain their important functions and values when threatened with loss or alteration;
3. The ecological reasons put forth to justify exempting Alaska from a national wetlands policy or from regulations that affect the other 49 states are without merit; and
4. A "no net loss" strategy for the nation's remaining wetlands can accommodate wetland development judged necessary by society through mitigation and other programs that maintain overall wetland functions and area.

In support of the preceding findings, the Alaska Chapter of The Wildlife Society specifically recommends that:

1. Citizens and governmental bodies treat Alaska's wetlands in the same manner as wetlands in the remainder of the United States when formulating and implementing the goal of "no net loss" of wetlands and for restoring wetland area and functions lost to previous development;
2. Wetlands plans and regulations incorporate the National Environmental Policy Act mitigation steps summarized as "avoid, minimize, and compensate" (40 CFR 1508.20) and include the following features:
  - a) scientifically-valid evaluations of wetlands in which fish and wildlife professionals of the Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service play a primary role as required by the federal Fish and Wildlife Coordination Act,
  - b) rigorous application of permit-review criteria such as those contained in the federal Clean Water Act 404(b)(1) guidelines, particularly those aspects dealing with water dependency and the alternatives analysis, that value fish and wildlife habitats and uses equally with other socio-economic uses of wetlands,
  - c) mechanisms to direct development into habitats with lower fish and wildlife values,
  - d) mechanisms to achieve compensatory mitigation, as determined necessary by evaluations described in item 2.a., to offset the effects of development in wetlands,
  - e) encouragement of innovative techniques to reduce or minimize wetland impacts provided such techniques are effective for maintaining or restoring wetland values; and
  - f) application of compensatory mitigation in which wetland managers first attempt to balance wetland gains and losses locally, then regionally within Alaska, next statewide, and as a last resort at the national level, recognizing that achieving local and regional balance may be difficult in Alaska.
3. The federal government should establish the overall regulatory framework for implementing national wetlands policies, but within this framework, state and local governments should use their planning and legislative authorities to meet national goals with programs tailored to local conditions; and
4. State government assume federal permitting authority for wetlands only after demonstrating the following:
  - a) the program's criteria for assessing the potential impacts of wetland development on fish and wildlife and the program's requirements for mitigating those impacts are the same as, or more stringent than, federal requirements and
  - b) adequate funding commitments exist to ensure comprehensive permit review and enforcement.