

CHAPTER 2

AREAWIDE LAND MANAGEMENT POLICIES

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CHAPTER 2

AREAWIDE LAND MANAGEMENT POLICIES

Introduction

This chapter presents land management policies for each of the major resource or land use categories affected by the plan: heritage resources, fish and wildlife habitat and harvest, forestry, materials, recreation, tourism, settlement, mineral resources, transportation, and trapping cabins. The chapter also presents management policies for several specific land management concerns: public access, stream corridors and instream flow, trail management, and wetland management.

These policies apply to state land throughout the region, regardless of the land use designation.

The policies in this chapter consist of goals and management guidelines. Goals are the general condition the department is trying to achieve, and guidelines are specific directives that will be applied to land and water management decisions as resource use and development occur.

Definitions

For definitions of terms commonly used in this chapter, see the *glossary* in Appendix A.

Fish & Wildlife Habitat & Harvest

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 responsible 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, 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 that contribute directly or indirectly to local, regional, and state economies through commercial, subsistence, sport, and non-consumptive uses.

Support the Mixed Cash-Subsistence Economy. Recognize the subsistence economy in the planning area and adjacent communities, contribute to the stability of the mixed cash and subsistence economy in the region by providing opportunities for resource development that are in balance with and accommodate traditional uses and subsistence resources and uses.

Mitigate Adverse Effects to Subsistence Activities¹. Avoid or minimize interference with subsistence activities or traditional uses when authorizing land and water use activities.

Adhere to Land Use Requirements. All land use activities will be conducted with appropriate planning and implementation to avoid or minimize adverse effects on fish and wildlife, or their

¹ The allocation of fish and wildlife resources among competing users is managed through the Alaska Boards of Fisheries and Game, not by DNR. DNR manages state lands which support subsistence resources and uses. DNR also authorizes other land uses, and some of these uses may conflict with subsistence activities or traditional uses. DNR has the responsibility to manage state lands for multiple use and resolve or mitigate conflicts among competing beneficial uses including traditional uses and subsistence activities. (See: AS 38.04.015 and AS 38.05.830)

The State of Alaska, through the Boards of Fisheries and Game, manages subsistence resources on all lands and waters in Alaska, and the Federal Government, through the Federal Subsistence Board, is responsible for assuring a federal subsistence priority on federal public lands and waters. Both state and federal laws define subsistence as the “customary and traditional” use of wild resources for food, clothing, fuel, transportation, construction, art, crafts sharing, and customary trade.

Eligibility for subsistence uses differs in state and federal law. Under federal law, only rural residents qualify for subsistence hunting and fishing on federal public lands. Federal subsistence regulations further restrict eligibility only to those rural residents who have customary and traditional use of a particular fish stock or game population in a particular area. Some federal public lands remain open to use by residents who are not federally qualified subsistence users. Under current state law, all state residents qualify for subsistence fishing and hunting on state and private lands of those fish and wildlife populations where subsistence use occurs.

habitats.

Management Guidelines

A. 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. When an authorization may result in significant adverse impacts to fish and wildlife or their habitats, DNR will consult with Alaska Department of Fish and Game (ADF&G). The costs of mitigation relative to the benefits to be gained will be considered in the implementation of this policy.

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 the following steps in order of priority. 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 or 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 with other areas with like resource values or enhancement of fish and wildlife habitat when steps 1 through 3 cannot avoid substantial 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 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 Best Interest Finding process 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 otherwise receive, or fire management to increase habitat productivity.

- B. Habitat Enhancement.** 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 designated primary uses.
- C. Structures in Fish Habitat.** Structures to be located in fishbearing waters will, to the extent feasible, be designed to minimize impacts on fish migration and other important life stages and activities, including 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 upon fish. The most simple and cost-effective technology may be used to implement this guideline.

Where necessary to protect fish, water intake structures will 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. Screen size, water velocity, and intake design should be reviewed by ADF&G in an authorization request.

This guideline also applies to temporary water removal activities that do not require a DNR authorization.

- E. Threatened and Endangered Species.** All land use activities should be conducted consistent with the federal Endangered Species Act and the state endangered species statutes (AS 16.20.180--210) to avoid jeopardizing the existence of threatened or endangered species of fish or wildlife or their use of an area, and to avoid modification or destruction of their habitat.

U.S. Fish and Wildlife Service

No species listed as threatened or endangered, or as candidates for such listing, by the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service are known to occur in the Upper Yukon planning area.

Although peregrine falcons are no longer listed under the federal Endangered Species Act, the USFWS encourages the continued conservation of these species by applying protection measures during the nesting period. The recommended protection measures, as well as technical advice on conducting activities near peregrine falcon nest sites, can be obtained from the Fairbanks Ecological Services office of the USFWS. Activities that may disturb nesting peregrines are low-flying aircraft, other noisy activities, ground level activities, and construction near nest sites during critical nesting times. In addition, activities that could have negative impacts throughout the year (not only during nesting periods) include habitat alterations, construction of permanent facilities, and pesticide use.

State of Alaska

No species listed as endangered by the State of Alaska are known to occur in the Upper Yukon planning area. The State of Alaska Species of Special Concern list (maintained by the Commissioner of ADF&G) contains six species that occur within the Upper Yukon planning area: Arctic peregrine falcon (*Falco peregrinus tundrius*), American peregrine falcon (*Falco peregrinus anatum*), Olive-sided flycatcher (*Contopus cooperi*), Gray-cheeked thrush (*Catharus minimus*), Townsend's warbler (*Dendroica townsendi*), and Blackpoll warbler (*Dendroica striata*). Arctic peregrine falcons may occur in the Upper Yukon area, but only during migration. American peregrine falcons nest at a number of sites along the Yukon and Fortymile rivers and their tributaries.

- F. Eagles.** Activities that potentially affect bald and golden eagles will be consistent with the Bald Eagle Protection Act of 1940 as amended. For activities within ¼ mile of known bald or golden eagle nest sites, refer to the bald eagle land management practices for Alaska. Current guidelines and locations of nests, as well as technical advice on conducting activities near eagle nest sites, should be obtained from the Fairbanks Ecological Services office of the USFWS. The recommended practices are designed to prevent human disturbance to eagles, particularly during the nesting season. Specific activities that are likely to cause disturbance to eagles include major land uses such as logging, the development of new commercial and industrial sites, the building of new homes, mining, and road construction. During the critical nesting period, human activities such as human entry into the primary nesting zone (330 feet from the nest) and low-level aircraft operations may also cause disturbance to eagles.
- 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. Leases or permits may include seasonal restriction on activities to avoid disturbance to swans. Consultation with ADF&G should be used to identify current or potential nesting habitat and to determine guidelines to follow and activities to avoid. The standards of Guideline J, Activities in Important Waterfowl Habitat, also apply.
- H. Caribou Calving Areas.** The calving season distribution for the Fortymile caribou herd is located in Region 1, Middle Fork. Activities in this region should avoid or minimize conflicts with caribou calving. Only activities with minimal impact (i.e., mineral or land surveys conducted by a small ground based crew) should be authorized during the calving season in this region, which is generally during the month of May. Specific requirements apply to management units M-01 and M-02. Refer to the *Resource Allocation Summary table for Region 1* in Chapter 3.
- I. Dall Sheep.** A distinct population of Dall sheep is located in the Glacier Mountain area, inside management unit M-03. Activities in this management unit should avoid or minimize impacts to the Dall sheep in this area. Refer to the *Resource Allocation Summary table for Region 1* in Chapter 3.
- J. Activities in Important Waterfowl Habitat.** In important waterfowl habitat, activities requiring a permit, lease, or development plan, and producing 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 such as nesting, staging, or brood-rearing 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.

- K. Dredge and Fill in Important Waterfowl Habitat.** Permits for dredging and filling in important waterfowl habitat, including permits for gravel extraction and construction of roads and pads, will not be granted unless it is determined that the proposed activity will not cause significant adverse impacts to important waterfowl or that no feasible and prudent alternative exists. Where dredging or filling does take place, other mitigative measures will be considered to attempt to avoid significant impacts.
- L. 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.
- M. Soil Erosion.** Soil erosion will be minimized by restricting soil disturbance along water bodies and by stabilizing disturbed soil as soon as possible.
- N. Conflicts with Traditional and Subsistence Uses of Fish and Game.** Authorizations by DNR will consider the effect on and minimize significant conflicts with traditional uses of fish and wildlife resources as described in AS 38.04.200 (b) (3), and subsistence uses of fish and wildlife resources. Significant conflicts will be avoided or minimized, when feasible and prudent, through project design, siting, timing, or other management options. When an authorization may result in significant adverse impacts to traditional or subsistence uses of fish and wildlife or their habitats, DNR will consult with ADF&G. The costs of mitigation relative to the benefits to be gained will be considered in the implementation of this policy.
- O. Mineral Licks.** There are several mineral licks in the planning area that are identified in the Leasehold Location Order in Appendix B. Mineral licks near Merry Christmas, Joseph, and Pittsburgh creeks are used annually by a high proportion of the Fortymile caribou herd during May. Access to these licks is of particular importance to pregnant cows. The Utah Creek mineral lick is used primarily by a small, disjunct Dall sheep population on Glacier Mountain. On a daily basis, up to 30% of that sheep population will use the lick during mid-May through June. Authorizations in the area of these licks will protect or mitigate impacts to the licks and access routes to the licks used by the wildlife. Development will minimize or avoid disturbance to the animals during May for the Merry Christmas, Joseph, and Pittsburgh Creek licks; and during May and June for the Utah Creek lick. There may be other, as yet unidentified, mineral licks within the planning area. Additional licks found in the future should be evaluated for appropriate levels of protection in future amendments to this plan. In addition to protection of the routes themselves, activities that may divert animals from the routes or otherwise affect usage patterns shall be avoided or mitigated.
- P. Other Guidelines Affecting Fish and Wildlife Habitat.** Other guidelines may affect the protection and management of fish and wildlife habitat. Sections in this chapter that should also be referred to include but are not limited to:

Forestry
Heritage Resources
Materials
Recreation and Tourism
Settlement
Stream Corridors, Shorelands and Instream Flow
Subsurface Resources
Trails and Public Access
Transportation
Trapping Cabins
Wetlands Management

Forestry

The timber resources within the planning area are limited primarily to riverine bottoms and some midslope elevations. Pole timber around the City of Eagle and Eagle Village has been identified for fuelwood cutting areas. Because of the limited timber resources on state land and the lack of inventory, no lands are assigned a Forestry designation. Forest products are available for use from state lands with other designations provided the use is consistent with the management intent of the unit. The vast majority of state land within the planning area is designated General Use, a multiple use designation. Forest management, including timber sales, is considered appropriate in this designation subject to plan management intent and guidelines.

The ecology of the planning area is heavily influenced by the occurrence of fire. Some form of disturbance, natural or man-caused, is necessary to maintain the forest and its biological diversity.

Goals

Economic Development. Provide an adequate supply of timber for a forest products industry that provides jobs to Alaskans.

Support Recreation and Tourism. Support tourism and maintain opportunities for diverse recreational activities in a variety of settings.

Personal Use Timber. Provide timber to meet the personal needs of Alaskans.

Timber Salvage. Where appropriate, salvage trees damaged due to windthrow, insect, or disease conditions.

Resource Management. Manage forest resources on a sustained yield basis to maintain continuous productivity, the maintenance or enhancement of other public resources over the long term, protection or enhancement of fish and wildlife habitat, and maintenance of land and water quality.

Management Guidelines

A systematic program of scheduled commercial timber sales is not anticipated within the Upper Yukon planning area, although a few sales are possible on an opportunistic basis. Should such sales occur during the planning horizon, they are likely to be small, isolated sales or sales that extend from the Tanana Valley State Forest. The provision of forest products for personal uses or salvaged from disease (or other destructive agents) are likely components of a management program during the planning horizon. Timber management activities are subject to the following management guidelines in addition to the requirements of the state Forest Resources and Practices Act and any Forest Land Use Plan for a specific sale area.

- A. Forest Resources and Practices Act and Regulations.** In addition to the guidelines below, the Forest Resources and Practices Act (AS 41.17) and Regulations (11 AAC 95) provide statewide policy and guidance for managing forestry related activities. Site-specific guidelines for forestry management activities will be addressed through the Forest Land Use Plan prior to any commercial timber sale or harvest (AS 38.05.112). Timber harvest activities must be compatible with the guidelines in this section and with the management intent statements and land-use designations identified for each unit in Chapter 3.
- B. Multiple Use Management.** Unless particular forms of natural resource use are specifically prohibited, timber harvests may occur consistent with the management intent for the unit.
- C. Commercial Timber Sales.** A systematic program of scheduled timber harvests in the planning area is not planned or anticipated. However, there may be instances where an isolated commercial timber sale may occur or where timber sales in the Tanana Valley State Forest include areas of adjacent land within the planning area. These sales shall follow the requirements of this plan and of the Forest Resources and Practices Act. The standards of the Tanana Valley State Forest Plan should apply to those operations that emanate from the State Forest and use general state land in the planning area.
- D. Timber Salvaged from Land Cleared for Non-Forest Use.** Timber with commercial or personal use value should be salvaged from lands that are to be cleared for other uses such as for roads, transmission lines, materials sites, mining, and habitat enhancement projects (AS 41.17.083).
- E. Personal Use Wood Harvest.** An important objective of forest management is to provide opportunities for people to harvest firewood and houselogs from public land for their personal use. Therefore, when forested lands are available near communities and where personal use harvest is consistent with other purposes for which the land is being managed, consideration should be given by the Department to providing wood products for personal use. Dead and down wood on state land may be gathered for personal use. However, harvesting of dead and down wood or cutting live trees for personal use or for other uses requires a permit.
- F. Transportation and Access for Forestry Management Activities.** The location, design, and development of roads shall consider multiple use values of state lands, and reflect the management intent and primary uses for the affected area. The goal is to optimize long term public use benefits from new access while minimizing adverse effects on existing public uses, including maintaining a range of recreation opportunities and wildlife habitat values. Forest road standards for the Northern Region will be used for constructing roads to commercial timber sources.
- G. Fire Disturbance.** The intent for fire management is to identify areas where wildland fire can be allowed or prescribed fire can be used to reduce costs of fire suppression, reduce risk of damaging fires, and maintain natural diversity and productivity of forest stands. Fire suppression will continue to be a priority near residential areas, infrastructure developments, and other investments. Consistent with AS 41.15.010 and AS 41.15.020, the Division of Forestry will protect forest resources from destructive agents commensurate with the values needing protection. However, where feasible, wildland fires will be allowed to burn and

suppression will be limited in other areas to decrease the long-term risk of damaging fires and to maintain natural diversity of forest stands, stand ages, and habitat types. Where allowing wildland fire is not feasible, timber harvest, prescribed fire, and habitat enhancement techniques will be used to disturb the forest and maintain a natural range of forest types and stand ages. Specific recommendations for changes in fire suppression levels will be developed through the Alaska Interagency Fire Management plan review process. (Also see *Habitat Enhancement* under the section *Fish and Wildlife Habitat and Harvest*.)

H. Other Guidelines Affecting Forestry. Other guidelines may affect forestry. Sections in this chapter that should also be referred to include but are not limited to:

- Fish and Wildlife Habitat and Harvest
- Heritage Resources
- Recreation and Tourism
- Settlement
- Stream Corridors, Shorelands and Instream Flow
- Subsurface Resources
- Trails and Public Access
- Transportation
- Trapping Cabins
- Wetlands Management

Heritage Resources

Goal

Heritage Resources. The Alaska Historic Preservation Act establishes the State’s basic goal: to preserve, protect, and interpret the historic, prehistoric, and archaeological resources of Alaska so that the scientific, historic, and cultural heritage values embodied in these resources may pass undiminished to future generations.

Management Guidelines

A. Heritage Resources Identification. Identify and determine the significance of all heritage resources on state land through the following actions:

1. Heritage resources surveys conducted by Division of Parks and Outdoor Recreation;
2. Research on heritage resources on state land by qualified individuals and organizations; and
3. Cooperative efforts for planned surveys and inventories between state, federal, local, and/or Native groups.

B. Heritage Resources Protection. Protect significant heritage resources through the following actions:

1. As part of the agency review process, the Office of History and Archaeology within DPOR reviews authorizations for potential conflict with heritage resources. The office determines if there may be an adverse effect on heritage resources and makes recommendations to mitigate these effects. Heritage resource surveys or inventories should be conducted in areas the Office of History and Archaeology determines have a high potential to contain important heritage sites and for which information is inadequate to identify and protect these sites.
2. Cooperating with concerned government agencies, Native corporations, statewide or local groups, and individuals to develop guidelines and recommendations on how to avoid or mitigate identified or potential conflict.

C. Heritage Resource Surveys Prior to Land Offerings. Heritage resource surveys or inventories should be conducted prior to the design of land offerings in areas the state Office of History and Archaeology determines have high potential to contain important heritage sites and for which information is inadequate to identify and protect these sites.

D. Heritage Resources in Timber Management Areas. The Division of Parks and Outdoor Recreation Office of History and Archaeology (OHA) will review proposals for timber

management activities through the interagency review processes for the Five-Year Schedule of Timber Sales and Forest Land Use Plans for individual sales. Areas of known historic, archaeological, or paleontological sites should not be disturbed. Timber operations shall not occur within 300 feet from the boundaries of known sites unless the OHA determines, in consultation with the Division of Forestry, that certain activities can occur without significantly impacting the heritage resource. The OHA shall, within the limits of staffing and funding, assess the extent and significance of the heritage resource and work with Division of Forestry to develop site-specific mitigation measures to protect the heritage sites while allowing timber management.

- E. Heritage Resources Adjacent to Recreation Facilities.** Recreation facilities that might subject heritage sites to vandalism because of the increased public use should not be placed adjacent to the heritage sites.
- F. Heritage Sites Should be Reported to the Office of History and Archaeology When Found.** The Office of History and Archaeology (OHA) will add information to the Alaska Heritage Resources Survey (AHRS), an inventory of all reported historic and prehistoric sites within the State of Alaska. The AHRS is used to protect heritage resource sites from unwanted destruction. By knowing about possible heritage remains prior to construction, efforts can be made to avoid project delays and prevent unnecessary destruction of heritage sites. While over 22,000 sites have been reported within Alaska, this is probably only a very small percentage of the sites that may actually exist but are as yet unreported. The AHRS is not complete or static, so heritage sites, when found, should be reported to the OHA.
- G. Other Guidelines Affecting Heritage Resources.** Other guidelines may affect the protection and management of heritage resources. Sections in this chapter that should also be referred to include but are not limited to:

- Fish and Wildlife Habitat and Harvest
- Forestry
- Recreation and Tourism
- Stream Corridors, Shorelands and Instream Flow
- Trails and Public Access

Materials

Goal

Land for State-owned Materials Sites. Maintain in state ownership and make available to public and private users sufficient, suitably located materials sites to economically meet the area's long term need for materials.

Management Guidelines

- A. Preferred Material Sites.** When responding to a request for a material sale or identifying a source for materials, the highest priority should be to use existing material sources. Using materials from wetlands and lakes should be avoided unless no feasible alternative exists. Sales or permits for sand, silt, or gravel extraction will not be permitted in fish spawning areas identified by ADF&G unless extraction would enhance the site for rearing and ADF&G determines that the activity is compatible with fish habitat values.
- B. Material Sites.** To minimize the construction and maintenance cost of transportation facilities, material sites should be located as near as is feasible to the site where the material will be used.

Design of projects will be on a case-by-case basis in consultation with other agencies. The following are general guidelines for extracting materials:

- 1. Material Sources.** Consideration should be given to all potential material sources. Location and design of sites should take into account factors such as scenic quality, transportation to the site, and effects to fish and wildlife habitat.
 - 2. River Size and Recharge Rates.** Selection of gravel sites in floodplains should take into account the volume of gravel available from various stream types. Generally, the largest river feasible, or the one with the largest gravel recharge rates should be chosen.
 - 3. Reclamation.** Reclamation of material sites will be accomplished consistent with AS 27.19 and 11 AAC 97.250. See also *Guideline E*, below.
 - 4. Extraction from Active Channels.** When extracting gravel in active or inactive floodplains, maintain buffers that will minimize sedimentation and will contain active channels in their original locations and configurations in the short term.
- C. Maintaining Other Uses and Resources when Siting and Operating Material Sites.** Before allowing the extraction of materials, the manager will ensure that the requirements of the permit or lease give adequate protection to other important resources and uses including existing water rights, water resource quantity and quality, navigation, fish and wildlife habitat and harvest, commercial forest resources, recreation resources and opportunities,

historic and archaeological resources, adjacent land uses, and access to public or private lands. Disposal of materials should be consistent with the applicable management intent statement and management guidelines of the plan. The manager should also determine if other existing material sites can be vacated and rehabilitated as a result of opening a new material site.

- D. Land Sales in Areas of High Materials Potential.** Generally, if a unit is designated Settlement but contains sand and gravel deposits, rock sources, or other similar, high-value materials resources, a pit area should be identified and retained in public ownership for future use before lands are offered for sale.
- E. Screening and Rehabilitation.** Where topographic and vegetative features allow, material sites should be screened from roads, residential areas, recreational areas, and other areas of significant human use. Sufficient land should be allocated to the material site to allow for such screening. Rehabilitation of the site shall follow the requirements of AS 27.19.020 and 11 AAC 97.250.
- F. Designation of Material Sites in Plan.** Material sites are designated General Use (Gu); this includes both existing material sites as well as those yet to be identified. The Gu designation is applied in order to provide flexibility in the management of these areas, especially to accommodate other potential uses in the future, and because the large number of existing and potential future sites along the Taylor Highway made use of the Materials designation cumbersome. The continued use of material extraction sites is recognized in this plan as appropriate under the Gu designation.
- G. Other Guidelines Affecting Materials.** Other guidelines may affect materials. Sections in this chapter that should also be referred to include but are not limited to:

- Fish and Wildlife Habitat and Harvest
- Settlement
- Subsurface Resources
- Transportation

Recreation and Tourism

Goals

Commercial and Private Recreation Opportunities. Provide the full spectrum of accessible, developed, and undeveloped recreation opportunities for Alaskans and visitors.

Tourism Opportunities. Recognize the importance of the tourism industry to the local and state economy and provide opportunities to appreciate the natural environment, history and culture, and other features important to the visitor industry.

Resource Protection. Protect ecologic, scenic, and other recreation resources for present and future generations.

Economic Development. Manage Alaska's recreation resources to support a commercial recreation industry that supplies jobs, income, and revenue.

Meet the four goals above through:

- 1. State Park System.** Develop a system of parks, recreation areas, trails, historic parks, rivers, and sites that provide a wide range of year-round outdoor recreation opportunities, and areas of unchanged scenic landscape for all ages, abilities and use preferences.
- 2. Recreation on State Lands.** Provide recreation opportunities on land and water areas which serve multiple purposes such as habitat protection, timber management, and mineral resource extraction.
- 3. Community Assistance.** Assisting communities through cooperative planning of state and municipal lands and grants-in-aid for parks and trails within population centers.
- 4. Commercial Recreation Facilities.** Encouraging commercial development of recreation facilities and services through land sales, leases, and technical assistance where recreation needs can most effectively be provided by private enterprise.
- 5. Optimum Use of Sites.** Achieve the optimum use of recreation and tourism sites consistent with maintaining high quality recreation experiences, wildlife harvest, environmental quality, and safety.

Management Guidelines

A. The Roles of Different Public Land Owners in Providing Public Recreational Opportunities.

1. Generally the state's proper role is to retain and manage land supporting recreational opportunities of regional or statewide significance. The state and federal governments are particularly capable of providing recreational opportunities, such as hunting, dispersed wilderness hiking, or boating, that require large land areas. In general, the role of a municipality or borough is to provide and manage community recreational opportunities.
2. In recognition of a municipality's role in meeting community recreational needs, the state should consider, under AS 38.05.810, eventual transfer of certain state recreation sites near communities to municipal ownership. Selection of these sites shall be agreed to by the municipality and the state and shall be contingent on the municipality's commitment to develop and maintain the recreational values of the sites as required by AS 38.05.810.

B. Shelter Cabins. A system of shelter cabins should be established in the Upper Yukon area for public, non-profit use. The development and maintenance of these facilities is to be the responsibility of private, non-profit or other non-state organizations. State land may be made available to support the development of this program.

C. Commercial Recreational Facilities on State Land. Lodges, tent camps, or other private facilities designed as private recreational facilities will be permitted or leased where a management plan or AS 38.05.035 finding shows the following.

1. **Commercial and Private Recreation Opportunities.** Commercial recreation development adds to or enhances available recreation opportunities.
2. **Impacts on Other Uses.** The commercial facility and the use it generates will avoid significant negative impacts on the amount and quality of existing uses, including fish and wildlife harvest. It is recognized that a quantitative determination of the effects of the proposed facility will rarely, if ever, be possible, but an assessment of the impacts should use information as available from DNR, ADF&G, or other available sources.
3. **Siting, Design, Construction, and Operation.** The facility will be sited, designed, constructed, and operated in a manner that creates the least conflict with natural values and traditional uses of the area.
4. **Other Guidelines.** The facility will be sited and designed in accordance with stream corridor, access, wetlands, and other guidelines in this plan. Final approval of a permit or lease for the facility will be given only after consultation with ADF&G and the Division of Parks and Outdoor Recreation.

D. Commercial Recreation Leasing Processes. Two processes exist for leasing state land for commercial recreational facilities – one process is described by AS 38.05.073, the other by

AS 38.05.070 and .075. Unless Chapter 3 specifically requires the .073 commercial leasing process for a management unit, applications may be adjudicated under either process. DNR will determine the appropriate process on a case-by-case basis. DOT/PF has its own leasing process that applies to land it manages in rights-of-way, airports, materials sites, and other lands and facilities it manages.

1. **The .070 / .075 Process.** The .070 / .075 process is simpler and faster, but it offers the state less flexibility in choosing the lessee and in structuring lease payments. This process is generally suited to small projects with few anticipated impacts. The management intent for the unit need not specifically state that this type of leasing is an allowed use for it to be authorized under this process.
2. **The .073 Process.** The .073 process is longer, but it allows submission of alternative proposals for a particular lease, requires more public involvement in reviewing a proposed lease, and offers the state more choices for structuring payments on the lease. The .073 process is generally suited to large projects that are likely to have significant impacts on surrounding areas. Under the .073 process, DNR will give public notice that it intends to solicit proposals for a lease. DNR will then prepare a “request for proposals” that must include specific information on the lease and must be advertised in state and local newspapers. Once a prospective lessee has been chosen, DNR must give public notice and hold public meetings on the preliminary decision to issue the lease.

DNR may impose eligibility standards, including proof of the developer’s financial backing and capability, experience in this type of development, ability to meet bonding or insurance requirements, and ability to comply with resource and environmental analysis requirements.

The .073 process requires that potential economic, social, and environmental impacts of the proposed project must be evaluated. DNR may require the prospective developer to fund additional studies; the studies must involve the appropriate state agencies, and ADF&G must approve any studies involving fish and game.

For a .073 lease to be considered in a unit, the plan must specifically allow for this type of leasing in a given unit before it can be authorized. Since no units are identified in this area plan specifically for commercial recreation leasing under the .073 process, a plan amendment is required.

- E. Optimum Use of Sites.** Achieve optimum use of recreation sites consistent with maintaining high quality recreation experiences, wildlife harvest, environmental quality, and safety.
- F. Other Guidelines Affecting Recreation and Tourism.** Other guidelines may affect recreation and tourism. Sections in this chapter that should also be referred to include but are not limited to:

- Fish and Wildlife Habitat and Harvest
- Forestry
- Heritage Resources

Trails and Public Access
Transportation

Settlement

Goals

Private Land Ownership. Provide a pool of state land available for conveyance into private ownership over the long term. The State's goal is to provide individuals a range of options for acquiring title to state land. Generally, state lands offered for private ownership under the state's land disposal program will be sold for current fair market value. DNR can identify and offer lands that have characteristics which make them suitable for year-round residence, seasonal residence, or self-sufficient remote residence, but once the land is sold, the owner will decide how to use the land. DNR can not guarantee that, for instance, land sold to satisfy the demand for seasonal residences will not be used for permanent residences.

Resource and Economic Impacts. Contribute positively to other uses of natural resources and minimize the undesired impacts of land offerings on opportunities for resource use.

Community Land Needs. To accommodate potential needs for community expansion and public facilities, DNR should make land available for both private and public ownership. DNR should sell, lease, or reserve suitable land for future community use. Requirements for these uses are highly specific and disposal decisions will be made on a case-by-case basis as demands arise.

Fiscal Impacts. Minimize future fiscal costs to local or state government for services, wildfire suppression, and infrastructure requirements that result from settlement of state lands.

Community and Social Impacts. Minimize undesired changes in the character of life among nearby communities or residents caused by land disposal projects while considering the needs and demands of all state residents.

Coordination with Local Governments and Landowners. Coordinate state land offering programs with similar programs of local governments and major landowners to best achieve common objectives. Consider availability of land in private ownership when determining the amount, type, and location of state land offerings.

Management Guidelines

A. Planning and Coordination

1. **Long-term Program.** Land sales programs in the planning area will be designed to make land available for at least 20 years to ensure that Alaskans have the opportunity to acquire state land. The pacing of land disposals will be controlled through the statewide land sales program and through the guidelines in Chapter 3.
2. **Local Plans.** DNR will comply with provisions of local comprehensive plans regarding

the pace, location, and density of land development to the extent that local requirements are consistent with the state’s best interest.

B. Types of Settlement Land and Land Offerings. The nature of state land available for private ownership is influenced by both the characteristics of land designated for settlement, and the type of land sales program that makes it available. The Upper Yukon Area Plan identifies and designates certain lands for settlement and provides guidelines for land sales, but does not develop or require a specific land sales program.

1. Settlement Land. Various types of state lands are identified for settlement in order to accommodate a broad range of options for Alaskans to acquire land. In determining the location and extent of lands to be designated for settlement, the state must balance settlement needs with other resource values and land uses. Once an area has been identified for settlement, its size and location may make it more suitable for a certain type of sales program, but that does not necessarily preclude other types of sales.

Two types of settlement areas are identified and designated in this plan:

a. Community Settlement Areas. These areas are relatively small, usually closer to communities, and are accessible from the road system. They are generally suitable in meeting potential needs for community expansion, public facilities, or other purposes that do not require a large amount of acreage. Management units of this type of settlement land, which would be available for residential or commercial use, are designated Settlement or Settlement-Commercial and occur at Jack Wade Junction and near the communities of Chicken, Eagle, and Boundary. These management units are affected by a Leasehold Location Order. See *Appendix C*. At the discretion of the Department, land in these management units may be offered through a land sales program or may be sold in response to individual requests to purchase land. When considering individual requests for the purchase of land, the Department may find it necessary to exercise its discretion by requiring sales to be done through an organized program, so that the impacts of land sales in the area can be more carefully considered.

b. Remote Settlement Areas. These settlement areas are larger in size and further away from communities and the road system. They include a relatively large amount of acreage, making them suitable for meeting the potential need for dispersed land sales. There are two management units that are designated Settlement for this purpose within the Walker Fork Region, and are identified on the Plan Map for that region as management units W-01 and W-02. Land within these management units is only to be sold through a state initiated land sales program. These management units are currently not affected by a Mineral Closing Order.

2. Land Offerings. Specific types of state land offerings are established by the legislature, and are subject to change. Since statehood, there have been many different land sales programs, and it is possible that new programs will be developed in the future. Generally, land offerings can be categorized by the way the parcels are established. Both types of land offerings should be made available:

- a. **Presurveyed Parcels.** In this type of land offering, the state identifies an area of suitable land, surveys and plats parcels, and then offers them for sale. These are also referred to as “subdivision” sales. They can include a large number of parcels or just a few, and the size of the parcels, sometimes called “lots,” can vary. This type of land offering is usually more suitable for smaller, Community Settlement Areas, but may also occur in large Remote Settlement Areas where appropriate.
 - b. **Staked Parcels.** In this type of land offering, eligible applicants are allowed to identify a parcel of land within a specified area by staking it, and the parcel is surveyed prior to actual sale. Staking is usually subject to certain restrictions such as parcel size limits and setbacks from sensitive areas in order to protect other resources within the staking area.
- C. **Isolated Parcels of State Land.** The state has acquired (and will continue to acquire) isolated parcels of land through foreclosure, escheat, and other methods. The following guidelines apply to management and possible disposal of these parcels.
 - 1. **In or Near Existing Communities.** If the parcel is in or immediately adjacent to an existing community or past state land offering, the parcel can be offered for settlement unless it is appropriate as a site(s) for schools, gravel pits, roads, parks, sewer treatment plants, or other public facilities.
 - 2. **Parcels Near Other State Land.** If the parcel adjoins or is surrounded by other state land, it should be managed according to the management intent and guidelines applicable to the adjacent lands.
 - 3. **Parcels not Near Other State Land.** Isolated parcels, such as property acquired through foreclosure or escheat, which is surrounded by federal land, should be considered for sale or exchange to the adjacent federal land owner.
- D. **Leases for Private Recreation Cabins.** Leases for private (non-commercial) recreational cabins are prohibited.
- E. **Protection, Management, and Enhancement of Other Resources.**
 - 1. **Protection of Life and Property.** The state will, to the extent feasible and prudent, discourage development in areas of flooding, unstable ground, fire risk, significant avalanche risk, and other hazards. The department will achieve this objective by retaining public land, requiring building setbacks, and providing public education.

DNR will discourage development of nonwater-dependent structures in the 100-year floodway by requiring necessary residential building setbacks and by providing available information about flood zones in land disposal brochures when a disposal is in a potential flood hazard area.

In drainages where the 100-year floodway has not been surveyed, the best available information will be used to determine the flood hazard zone that should remain in public ownership.

- 2. Protection and Management of Valuable Environmental Processes.** In areas to be conveyed to private ownership, the state should provide a publicly owned open-space system to preserve important fish and wildlife habitats and natural areas such as shorelands, freshwater wetlands, riparian lands, watersheds, and surface and ground water recharge areas. (See policies on these subjects for details, especially *Fish and Wildlife Habitat and Harvest Guideline I, Conflicts with Traditional Uses of Fish and Game*).

Wetlands with important hydrologic, habitat, or recreational values, and adjacent buffer strips, will be retained for open space. Systems of publicly owned open space will be designed to provide the necessary linkage and continuity to protect or increase values for human uses and wildlife movements. In some places, large areas may be retained to provide adequate terrestrial habitat.

- 3. Protection and Enhancement of Scenic Features.** Generally, the state will retain in public ownership unique natural features such as cliffs, bluffs and waterfalls, and foreground open space for panoramic vistas. Public access to such amenities will also be preserved. Islands in rivers or lakes will be retained in public ownership for enjoyment and use by the public.
- 4. Protection and Enhancement of Recreational, Educational, and Cultural Opportunities.** Protect the need for and retain appropriate areas for outdoor recreation, trails, campsites, boat launches, historic sites, and areas for scientific study. Areas for intensive and dispersed use will be preserved. (See also *Heritage Resources* guidelines regarding heritage resource surveys for land offerings).
- 5. Protection of Material Sources.** Generally if a designated settlement area contains sand and gravel deposits, rock sources, and other similar high value material resources, a pit area will be identified and retained in public ownership for future use.
- 6. Cumulative Effects.** As land offerings and sales proceed, the impacts from them should be examined to minimize the chances for inadvertent and undesired cumulative effects of the land sales programs.

F. Design and Development.

- 1. Provision of Public Land for Communities.** Protect the need for and retain appropriate greenbelts, public-use corridors, personal-use woodlots, buffer areas, commons, building setbacks, sites for schools, gravel pits, roads, parks, and other public facilities, such as sewer treatment plants and health clinics, and other open spaces to help create a desirable land use pattern in developing areas.
- 2. Cost of Public Services.** In accordance with AS 38.04.010, DNR will attempt to direct year round settlement toward areas where services exist or can be provided with reasonable efficiency. State land that is located beyond the range of existing schools and other necessary public services or that is located where development of sources of employment is improbable will be sited and designed to encourage seasonal use with

sufficient separation between residences so that public services will not be necessary or expected. Wildland fire management costs that result from settlement will be considered and minimized to the extent feasible.

3. **Ensure Access.** The state will ensure that legal, practical public access (landing areas, rivers, trails and road easements, or other options most appropriate to the particular situation) is identified and reserved within land offerings. However, the state is not legally obligated to construct roads. The location of access points onto the road system should be coordinated with DOT/PF.
4. **Personal Use of Nearby Resources.** One of the considerations in deciding the location, size, and design of land disposal projects will be the nearby supply of resources, such as gravel, sand, firewood or houselogs, and the expected demand from people who will own the parcels.

Where it is anticipated that land recipients will want to use timber resources, nearby woodlots may be retained instead of selling individual parcels large enough to meet the personal use demands of the owner. This would provide some nearby public land on which firewood and houselogs can be gathered while keeping open options for other uses of those lands when access develops or new demands are identified.

5. **Subdivision Design.** If subdivisions are offered, they will be designed to preserve and enhance the quality of the natural setting and the recreational opportunities that make an area attractive to potential buyers. State subdivision design will take account of site limitations and opportunities such as slope, drainage, soils, erosion, riparian zone and coastal buffer, and other features to ensure that sites offered are buildable and can be developed without the need for extensive public infrastructure. Timber harvests are considered appropriate in areas designated Settlement or Settlement-Commercial if intended to support the costs of subdivision development, access to the subdivision, or ancillary facilities, subject to the other requirements of the Forestry standards in this Chapter. Selective harvesting of timber before construction of the subdivision is considered appropriate, if authorized by the Regional Manager, DMLW.
6. **Boundaries of Settlement Designations.** Boundaries of land use designations shown on the maps in Chapter 3 may be modified through on-the-ground implementation activities (for example, site planning for disposals) if the modifications adhere to the management intent for the units affected.
7. **Easements.** Easements will be used as one means to retain public use rights needed on privately owned lands.

Easements generally will not be used to retain a public interest in lands within a subdivision. Instead, DNR will generally retain such lands in public ownership. Exceptions to this policy may be made where the interest protected is very limited, such as for local pedestrian access that is not part of an integrated neighborhood or community trail system. This policy will minimize confusion between public use and private ownership rights.

- 8. Design of Settlement Areas near Mineralized Areas.** When siting a settlement area near or adjacent to a mineralized area is unavoidable, DNR will take measures to reduce conflicts between existing or future mineral development and settlement. These measures may include retaining buffers that will remain closed to mineral entry in the design of the settlement area. See also, *Subsurface Resources, management guideline E, 'Control of Impacts.'*
- 9. Water Availability.** The availability of groundwater in the Upper Yukon planning area is limited, and can vary greatly from one location to another. This should be taken into consideration when DNR implements a land sale program in the area.
- G. Other Guidelines Affecting Settlement.** Other guidelines may affect settlement. Sections in this chapter that should also be referred to include but are not limited to:

- Fish and Wildlife Habitat and Harvest
- Forestry
- Heritage Resources
- Materials
- Recreation and Tourism
- Stream Corridors, Shorelands, and Instream Flow
- Subsurface Resources
- Trails and Public Access
- Transportation
- Wetland Management

Stream Corridors, Shorelands, and Instream Flow

Goals

Recreation and Tourism. Protect and enhance a variety of public recreation and tourism opportunities along waterbodies including developed and undeveloped recreational and tourism activities.

Habitat. Protect riparian fish and wildlife habitats. Maintain fish and wildlife habitat and harvest opportunities.

Private Ownership of Land. Provide opportunities for private ownership of land near streams.

Water Quality. Maintain water quality to achieve and protect state water quality standards, and to protect streambeds and wetlands from degradation. Also, protect watersheds that supply community drinking water.

Scenic Qualities. Protect the visual quality of waterbodies and wetland habitats.

Access. Provide public access to and along state-owned waterbodies. Access across streams will be provided on a case-by-case basis.

Resource and Economic Opportunities. Contribute positively to other uses of natural resources and economic opportunities.

Shorelands. Provide for needed water-dependent and water-related uses.

Management Guidelines - General

A. Alaska Clean Water Actions (ACWA). In accordance with the ACWA program, DNR will work with the Departments of Fish and Game and Environmental Conservation to protect and improve water quality, water quantity and fish habitat.

Management Guidelines - Stream Corridors

A. Priority of Public Uses in Stream Corridors. Along most streams, DNR will set a higher priority on protecting public use values in stream corridors than on providing opportunities for private ownership of land. However, the department recognizes the strong demand for property along streams and will provide land for private purchase in some stream corridors. Prior to the disposal of stream corridor lands, DNR, in consultation with other affected agencies and the public, will assess existing and projected public use needs associated with the stream corridor. State land sales programs near streams having important recreation value will be designed to protect access to and along the stream for fishing, hiking, camping,

and other recreational activities.

B. Retain Public Access Adjacent to Waterbodies.

- 1. Public Access Adjacent to Waterbodies.** Pursuant to AS 38.05.127, some form of legal public access will be reserved in order to protect the public's right to travel to and along the shore of a waterbody without encouraging trespass. Some uses on access routes may be limited on a case-by-case basis. On an individual basis, the state may reserve specific rights (for example, the right to fish or to picnic) to protect the public interest.
- 2. State Land Sales.** In state subdivision sales, when it has been determined that access to waterbodies should be preserved (see *criteria in B-1*, above), land adjacent to waterbodies will either be retained in state ownership or dedicated for public access through establishment of an easement or right of way.
- 3. Length of Stream Buffers.** Publicly owned buffers adjacent to a stream may be retained along the full length of the stream or on the segments determined to have high current or future use and habitat values.

C. Retention of Access Easements.

- 1. Easements for Travel.** An easement rather than a publicly owned stream corridor may be reserved where the primary management intent is to protect the public's right to travel along or across a stream rather than to retain an area for public use. An easement should state the rights that it reserves. State access easements should reserve the rights of ingress and egress plus associated or incidental uses of the public resources of the water body, such as resting, loading and unloading boats, and fishing. Boat storage and camping are not considered incidental uses of the water body and usually should not be reserved. On a case-by-case basis, the state should decide which rights are appropriate for individual easements and may reserve more or fewer rights than are listed above. Easements established before adoption of this plan are not affected by this guideline.
- 2. Type of Travel in the Easement.** Easements along streams should establish the right to travel by foot, dogsled, horseback, and snowmobile. On a case-by-case basis the right to travel by all terrain vehicles and wheeled vehicles may be reserved, where doing so is in the public interest. Easements should be reserved for roads or railroads only if they are likely to be built.
- 3. Easements in Combination With Buffers.** Easements and publicly owned buffers may both be used on a waterbody to provide opportunities for private ownership near the waterbody while protecting public use or habitat values on other portions of the stream. Therefore, although easements should not be used where significant public use is to be encouraged, they may be used on portions of a stream with important public recreation and habitat values when most land adjacent to the stream is retained for public use.

D. Establishing Widths of Buffers, Easements, and Setbacks.

1. **Reasons for Varying Widths.** Width of easements, setbacks, and publicly owned buffers along a stream will vary according to management intent for the stream and adjacent uplands. In addition, the buffer width for any given stream may vary along the stream course depending on topography, vegetation, and land ownership. Establishing buffer widths for particular streams will be based, at a minimum, on the following: recreational activities to be accommodated, habitat protection and management, noise abatement, visual quality, water quality, prevention of riverbank erosion (in which case the buffer should be widened to compensate), retention of a significant hydraulic feature (such as a wetland), and land disposal.
2. **Guidelines for Establishing Widths.** Although buffer, easement, and setback widths may vary from stream to stream, a basic level of consistency is necessary to avoid confusion about the width of public use and access areas along the state's many streams; also fieldwork and site analysis to establish separate buffer widths for each stream corridor would be prohibitively expensive. The following guidelines are intended to establish a reasonable degree of consistency in buffer, easement, and setback widths used by the department when disposing of an interest in state land.
 - a. **Standard Buffer Width.** To provide separation between uses or to protect a sensitive environment or habitat zone, 100 to 300 feet. When it is determined that a publicly owned buffer is appropriate, a standard minimum buffer width of 100 feet should generally be established landward from the ordinary high watermark on each bank unless the use or activity is water-dependent or water-related. This width may be reduced to a minimum of 100 feet on each bank in individual cases when consistent with the management objectives for the stream corridor. The width of the setback may be increased to 300 feet on each bank if necessary, to maintain public access to riparian areas and protect water quality in accordance with water quality standards established by the Department of Environmental Conservation and the Forest Practices Act (see *Guideline F*).
 - b. **Standard Easement Widths.** 50-foot minimum. When it is determined that a public access easement will be reserved on land adjacent to a stream, a minimum easement of 50 feet landward from the ordinary high water mark on each bank will be reserved.²
 - c. **Building Setbacks in Land Sale Areas.** When state land is conveyed through a land sales program, including subdivisions, or if leased for a period greater than five years, a minimum building setback of 100 feet landward from the ordinary high watermark on each bank will be established.³ The width may be reduced when land adjacent to the stream is stable and development or use does not pose a risk to water quality or other values, such as wildlife or recreation. In some cases stream buffers

² Note: A public use easement of 50 feet must be established whenever state interests in land are transferred. This includes disposals or transfer of land.

³ A minimum setback of 100 feet applies to all high value resident fish streams or cataloged anadromous fish streams. A minimum setback of 50 feet applies to all streams that are 10 feet or greater in width.

Table 2.1 Minimum widths for reserved public access and building setbacks

Guideline/ Description	Minimum Width	Where It Applies	Primary Purpose	Guidelines
1. Public access Adjacent to all navigable waters ⁴	<u>50 feet</u> Landward from ordinary high water	Along: Lakes Streams	Provide public access along navigable and other waterbodies.	<ul style="list-style-type: none"> Prohibited: Residential structures, fences, and other non-water-dependent structures that will obstruct passage.
2. Building setback Adjacent to all waters <u>except</u> anadromous and high-value resident fish waters (see <i>guideline 3</i> below)	<u>50 feet</u> Landward from ordinary high water	Non-anadromous and non-high –value resident fish: Lakes Streams	Protect public values, including public access, recreation, and water quality along all waterbodies.	<ul style="list-style-type: none"> Where feasible and prudent, and necessary to protect public values along the stream. Does not apply to exceptions listed at bottom of table.
3. Building setback Adjacent to anadromous and high-value resident fish waters	<u>100 feet</u> Landward from ordinary high water	Anadromous and high-value resident fish: Lakes Streams	Protect fish habitat, water quality, and recreation values along anadromous and high-value resident fish.	<ul style="list-style-type: none"> Where feasible and prudent. Applies only to non-water-dependent uses. Does not apply to exceptions listed at bottom of table. The setback shall be vegetated or revegetated to maximize shade on the stream. Incorporate measures to prevent adverse changes including erosion, turbidity, sedimentation, and temperature differences within the waterbody or adjacent wetlands.
4. State Retention areas Adjacent to anadromous and high-value resident fish waters	<u>200 feet</u> Landward from ordinary high water	Anadromous and high-value resident fish: Streams and lakes	Maintain or enhance anadromous and high-value resident fish habitat, recreation, and water quality values.	<ul style="list-style-type: none"> The state will retain these corridors in conveyances to private owners, municipalities, and other entities. Alternately, land conveyed will be subject to a conservation easement or other management tool that meets the principal purposes of this buffer.

For the definition of *anadromous waters* and *high-value resident fish waters* (derived from AS 41.17.950) see the *Glossary* in Appendix A. Exceptions that apply to Sections 2 and 3 above: a) Structures such as docks, bridges, and culverts whose purpose is access to or across the stream or lake; b) Uses that must be in or adjacent to the waterbody in order to function, such as placer mining activities, fish culturing, water supply intakes, and similar uses.

⁴ Other waters may be considered on a case-by-case basis.

may be reduced to allow for an adequate publicly owned buffer or setback on a nearby, more valuable wetland or lake.

- 3. Uses Allowed in Easements, Setbacks, and Buffers.** Water-dependent structures, such as docks and boathouses, are allowed within easements, setbacks, and publicly owned buffers. If a structure would block public access, alternative access must be provided. Commercial or industrial uses and activities that are neither water-dependent nor water-related may occur within 100 feet only if there is no feasible and prudent alternative to meet the public need. Where it is not feasible and prudent to maintain a setback adjacent to fish habitat, public water supplies, or recreational waters, other measures will be used to mitigate the impacts.
- 4. Timber Harvest Near Streams.** Timber harvest near streams will be consistent with the Forest Practices Act and regulations (AS 41.17 and 11 AAC 95). See AS 41.17.118(a)(1) for harvest within 100 feet of an anadromous or high value resident fish water body.
- 5. Structures in Fish Habitat.** See *Fish and Wildlife Habitat and Harvest Guideline C*.
- 6. Water Intake Structures.** See *Fish and Wildlife Habitat and Harvest Guideline D*.
- 7. Alteration of the Hydrologic System.** To the extent feasible, channelization, diversion, or damming that will alter natural hydrologic conditions and have a significant adverse impact on important riverine habitat will be avoided.
- 8. Soil Erosion.** Soil erosion will be minimized by restricting the removal of vegetation adjacent to streams and by stabilizing disturbed soil as soon as possible. Projects to stabilize a streambank require an authorization.

Management Guidelines for Shorelands

- A. Public Trust Doctrine.** For information on the Public Trust Doctrine, see the *Management Intent for Navigable Rivers* section at the end of Chapter 3.
- B. Uses on Shorelands Adjacent to Non-State Land⁵.** Permanent facilities and temporary facilities⁶ will be prohibited on shorelands. Floating facilities, boat storage, airstrip development, docks, and other long-term uses⁷, such as trails and waterlines, may be allowed if consistent with management intent and applicable guidelines.
- C. Avoiding Conflicts With Adjacent Upland Owners.** Before DNR issues a land use authorization on shorelands, DNR will require applicants to use areas that will reduce the likelihood of possible land ownership disagreements with upland owners (such as

⁵ See *Director's Policy File 91-03, Shorelands Adjacent to Non-State Land*.

⁶ Camping at one site on state land for longer than 14 consecutive days is considered a temporary facility.

⁷ Use that takes place at one site on state land for longer than 14 consecutive days.

unvegetated gravel bars). DNR will carefully consider comments from private landowners and others before making a decision. DNR will retain the right to issue a land use authorization over the objection of adjacent landowners.

- D. Written Agreements With Upland Owners.** Applications for use of shorelands that require use of adjacent uplands in non-state ownerships will not be considered until there is a written agreement between the applicant and the upland owner(s) approving the necessary use. The term of the authorization should not be longer than the term of agreement between the applicant and the upland owner. If the applicant has not applied for use of the adjacent uplands, the application must show how all necessary, associated uses will be accommodated on the shorelands.
- E. Modification of Authorizations to Protect Other Resources.** Shoreland uses that will result in significant conflicts with habitat, harvest, or historic or archaeological sites should be modified to avoid or mitigate the effects on these resources and uses or be located elsewhere.
- F. Disposal of Land Under Waterbodies.** Shorelands may be made available for lease or less than fee-simple disposal. These lands can also be assigned to other state agencies for management. These lands cannot be sold or conveyed to private entities but can, under certain conditions, be conveyed to municipalities. Under municipal ownership, these lands are still subject to the Public Trust Doctrine.⁸

Management Guidelines for Instream Flow

- A. Streams and Uses to Consider.** Under AS 46.15, reservation of instream flow is possible for four types of uses: (1) protection of fish and wildlife habitat, migration and propagation; (2) recreation and park purposes; (3) navigation and transportation purposes; and (4) sanitary and water quality purposes.
- B. Process for Determining Reservations.** The process for determining instream flow reservations is outlined in 11 AAC 93.141 – 11 AAC 93.147. Before beginning the process to determine instream flow reservations, an applicant should contact the Water Management Section of the Northern Region Office of DNR. If the application will involve fishbearing waters, the applicant should contact ADF&G as well.
- C. Other Guidelines Affecting Stream Corridors, Shorelands, and Instream Flow.** Other guidelines may affect stream corridors, shorelands, and instream flow. Sections in this chapter that should also be referred to include but are not limited to:

Fish and Wildlife Habitat and Harvest
Forestry
Heritage Resources
Materials

⁸ See the *Management Intent for Navigable Waterbodies* section at the end of Chapter 3 for an explanation of the Public Trust Doctrine.

Recreation and Tourism
Subsurface Resources
Trails and Public Access
Transportation
Wetland Management

Subsurface Resources

Subsurface resources within the planning area are related to the extraction of mineral resources from the Subsurface Estate, and the following requirements pertain to such operations. The requirements for the extraction of materials (part of the Land Estate) are covered under the section, ‘Materials’ of this chapter. Hydrocarbon resources are not known to be significant in the Upper Yukon planning area, and the plan defers any decisions regarding leasing for oil and gas and other energy resources to DNR's existing leasing processes. Oil and gas lease sales are specifically not subject to this planning process and follow the requirements of AS 38.05.180.

Almost all state land within the planning area is managed for multiple use and is open to mining. The state-selected much of the land in the planning area because of its mineral potential, as well as its recreation and wildlife values. Exploration and development of mineral resources involves considerable investment of time and monetary resources. A small fraction of prospects that are investigated actually result in identification of a site that is economical to develop. If a deposit proves economical for development, state and federal regulations and additional stipulations determined through the permitting process will ensure that other resource values are protected.

Goals

Mineral Supplies. Make metallic and non-metallic resources available to contribute to the energy and mineral supplies and economy of Alaska.

Economic Development. Contribute to Alaska's economy by making subsurface resources available for development, which will provide job opportunities, and stimulate economic growth.

Environmental Quality and Cultural Values. When developing subsurface resources, protect the integrity of the environment and affected cultures to the extent feasible and prudent.

State Support for Mining. Aid in the development of infrastructure such as ports, roads, and railroads and continue to provide geologic mapping and technical support for the mining industry.

Management Guidelines – Mineral Development

- A. Mineral Exploration.** Recognized exploration methods for locatable minerals will be allowed on all state lands unless specifically closed to prospecting. Exploration methods may be subject to the conditions of a land use permit.
- B. Open to Mineral Entry.** By statute, all state lands are open to mineral entry unless specifically closed to location through a Mineral Closing Order or legislative action. Except

for the few areas designated Settlement and Settlement-Commercial, all other state lands are multiple use areas where mineral development will be accommodated and encouraged consistent with applicable state law and the policies of this plan.

- C. Reclamation of Mined Land.** Mining operations should be conducted in a manner that prevents unnecessary and undue degradation of land and water resource. Mining operations, including placer mining, shall be consistent with the reclamation standards given in AS 27.19, which apply both during and after mining operations. 11 AAC 97 (Mining Reclamation) details the specific requirements that must be followed. Consistent with AS 27.19 and 11 AAC 97, land use permits and plans of operation will specify measures necessary to return land used in mining operations to a useful condition. In designated habitat areas, annual reclamation will be required concurrent with mining.
- D. Access for Mineral Development.** Existing roads should be used for access to mine sites wherever feasible. Access across tundra, wetlands, and other environmentally sensitive areas will be managed in a manner that minimizes damage.
- E. Control of Impacts.** The Department should consider the inclusion of management stipulations in its authorizations where necessary to minimize the adverse impacts of mining, especially in settled areas, recreation areas, and in areas viewed from roads. In such areas, management stipulations may be appropriate to control of the placement of solid wastes; removal of vegetation; noise and particulate generation; the design and location of mining access roads; and the siting of mining structures, tailings and overburden. These management stipulations may be in addition to standard statute and regulatory requirements.
- F. Management Requirements for the Middle Fork Region.** Management units M-01 and M-02 are identified as high concentration calving areas in the report, “Habitat Management Needs Assessment for the Fortymile Caribou Herd” (2001). Mining activities, including mineral exploration, during calving season are to be limited to operations with only short term disturbance effects. See also *management intent statements for management units M-01 and M-02* in the Resource Allocation Tables.
- G. Recreational Panning Areas.** Recreational mining areas have been established in other parts of the state to provide a permanent recreational mining experience for the general public. Where this has occurred, an area of state land with placer mining potential but without existing mining claims has been reserved for recreation use by the general public. In the Upper Yukon planning area, areas appropriate for this type of activity would occur near communities and have reasonable access.
- H. Commercial Recreational Mining Activities.** Commercial recreational mining opportunities can be developed on state mining claims to provide tourists and others interested in mining the opportunity to experience mining firsthand. Typically, there is a fee paid by the public for this experience. In the Upper Yukon planning area, areas appropriate for this type of activity would occur near communities, have reasonable access, and occur on existing mining claims. Development of a commercial tourist business on a mining claim requires a separate authorization from the Division of Mining, Land and Water, such as a lease under AS 38.05.070.

- I. Coordination With Local Governments.** Where local governments exist, the Department should coordinate its mineral development authorizations with local land use plans and zoning.

Application of Locatable Mineral Closures and the Locatable Mineral Leasing Program

A. Background.

Mineral Closing Orders. Locatable mineral closures are the most restrictive management tool that can be used by DNR to resolve subsurface and other resource conflicts. AS 38.05.185(a) requires that before an area of state land can be closed to mining or mineral location, the Commissioner must make a written finding that mining would be incompatible with significant surface uses. Closure of an area to mining is not, however, the basis for denying access across state land. Mineral closures do not affect valid existing mineral rights.

Leasehold Location Orders. Requiring that locatable mineral developments occur under a lease is a more flexible management tool than mineral closure. Therefore, mineral leasing is preferred over mineral closure as a management option to resolve conflicts between other significant resources and mining and mineral location. AS 38.05.185(a) requires that for mining to be allowed only under written leases issued under AS 38.05.205, the commissioner must determine that there are potential use conflicts on state land or the land was mineral in character at the time of state selection. Under 11 AAC 86.135(b), if a surface disposal area is not closed entirely to mineral entry, it will be made available only by leasehold location.

B. Areas Closed To Mineral Entry.

Areas Closed to Mineral Entry at the Time of Plan Adoption

No Mineral Closing Order is established with the adoption of the Upper Yukon Area Plan.

Areas to be Closed to Mineral Entry during the Planning Horizon.

- Areas identified as ‘Remote Settlement Areas’ in the Walker Fork Region are not closed to mineral entry by a Mineral Closing Order. Closure of some or all of these areas to mineral entry and location will occur before the state disposes of land, which may occur through subdivision, remote staking, or another authorization that may exist at the time of disposal. The timing of the closure is at the discretion of the Department but should be early enough in the planning process to avoid the inadvertent staking of mining claims.
- Lands that may be part of a land exchange are to be closed at the time of the approval of the Preliminary Exchange Agreement and lands that may be conveyed to another public agency for the development of a public facility or reserved as a future townsite will be closed to mineral entry and location at the time the area is classified “Reserved Use” or when an Interagency Land Management Agreement is signed.

C. Leasehold Location Areas.

Using the criteria established in AS 38.05.185, DNR has determined that on certain lands in the planning area mining will be allowed only under leases issued under AS 38.05.205. See *Leasehold Location Orders 28 and 29*, included as Appendices B and C, respectively. The areas subject to leasehold location requirements are certain mineral licks that are important for wildlife populations, and settlement units near communities. The location of the mineral licks and relevant guidelines for leaseholds, are described in the Leasehold Location Orders.

A Leasehold Location Order does not close land to mineral entry. In these areas, a location is referred to as a “leasehold location,” and must be converted to an upland mining lease before mining can occur. State land is designated for leasing only if potential use conflicts require that mining be allowed only under written leases.

In Leasehold Location Order 28, mining is being restricted to lease to provide extra tools to the department to ensure that mining will avoid impacts to the particular area of a mineral lick that is critical to wildlife populations and to protect specific trails leading to the licks.

Mining activity must avoid direct impacts to the mineral licks and the routes that animals use to access them, or mitigate adverse impacts to these resources. If a game trail or mineral lick is affected, mitigation alternatives may include a variety of measures to address lick accessibility. In addition to protection of the routes themselves, activities that may divert animals from the routes or otherwise affect usage patterns shall be avoided or mitigated. Development will minimize or avoid disturbance to the animals during May for the Merry Christmas, Joseph, and Pittsburgh Creek licks; and during May and June for the Utah Creek lick.

The mineral licks within the areas identified in Leasehold Location Order 28 for Joseph Creek, Pittsburgh Creek, and Merry Christmas Creek are important to the Fortymile caribou herd. They are used by a high proportion of the Fortymile caribou herd during May. Leasehold location areas larger than the actual mineral licks are established for these licks because of the intensity of annual use that they receive from large numbers of caribou, and because of the well defined traditional access routes used by caribou to access the licks. The mineral lick within the area identified for Utah Creek is important to the Dall sheep population on Glacier Mountain. Because a very high percentage of the sheep in this isolated population use this lick every year during May and June, a leasehold location area larger than the actual lick has been established to protect the well defined traditional access routes. Furthermore, it appears that geographical barriers are minimizing colonization of other suitable habitat by this sheep population, causing the population to be more vulnerable to human activity. The mineral licks within the areas identified for Walker Fork and Logging Cabin Creek are important to moose. These leasehold location areas are smaller in size because the mineral licks are less defined and their use is not as intense as the other licks.

D. Other Guidelines Affecting Subsurface Resources. Other guidelines may affect subsurface resources. Sections in this chapter that should also be referred to include but are not limited to:

Fish and Wildlife Habitat and Harvest
Forestry
Settlement
Stream Corridors, Shorelands and Instream Flow
Trails and Public Access
Wetlands Management

Trails and Public Access

Goals

Public Use Opportunities. Ensure adequate opportunities for summer and winter public use of important recreation, public access, and historic trails of regional and statewide significance. Also provide for future trail and access needs.

Local Trails. Assist in establishing local trail systems that provide access to community recreation areas.

Trail Corridors. Protect or establish trail corridors to meet projected future use requirements as well as protecting current use.

Management Guidelines

I. General

- A. Retain Access.** Improve or maintain public access to areas with significant public resource values by retaining access sites and corridors in public ownership, by reserving rights of access when state land is sold or leased, by acquiring access, or by managing rights-of-way through Revised Statutes Section 2477 (RS 2477). Generally, section line easements should not be vacated unless reasonable alternative usable access can be established.
- B. Public Use of Trails.** DNR should keep trails available for public use. DNR should not authorize land uses that foreclose the ability of the public to use important trails. If a land use authorization is issued that blocks a public access route, an alternate route should be identified and established prior to the authorization. On occasion, there are trail routes, designs, or areas where a trail authorization is not appropriate because of potential resource damage, sensitive habitats, or public safety concerns.
- C. Adequate Access Rights.** Where practical and within the limits of available funding, full public rights of access should be provided when roads and trails are constructed by state or local governments. Easements should be acquired and recorded when the state acquires access rights across property in other ownerships.
- D. Limiting Access.** Developed access to public lands may be curtailed to protect public safety, to allow special uses and to prevent harm to public resources. Examples of conditions that may justify limiting public access are fire management, timber harvest operations, and high soil moisture content when traffic may cause extensive damage to roads and trails.
- E. Off-Road Travel.** Authorization for cross-country travel across sensitive tundra, wetlands, or other surface susceptible to damage should be directed toward appropriate existing trails

and roads. Appropriate trails are defined as having similar widths to the proposed mode of transportation. If no hardened trails exist, DNR should authorize transport only in winter when there is adequate ground frost or snow cover or both. This kind of authorization is usually for one-time use only, for example, for moving machinery. If the authorization is for one-time use, additional clearing that results from larger vehicle use on the trail will be discouraged. See *11 AAC 96* for Generally Allowed Uses and conditions for those uses. www.legis.state.ak.us/cgi-bin/folioisa.dll/aac/query

F. Off Road Vehicle Management and Potential Special Use Areas. If there is significant damage to wetlands, stream banks, and other areas with poorly drained soils, or erosion and wildlife disturbance or displacement, mitigation measures should be considered. Such measures would include stabilization, such as hardening or corduroying. Other possible methods of addressing trail damage are to install educational road signs, develop a trail management plan (through acquisition of grant money), and work through cooperative agreements with other land-owners and interested groups. If these methods are not feasible, it may be appropriate for DNR to designate certain state lands within the planning area as “Special Use Lands” under *11 AAC 96*. A Special Use Lands designation that addresses trail issues may be established after mapping existing trails and analyzing trail use.

The following guidelines would be considered in the development of a Special Use Lands designation. See *11 AAC 96*.

1. DNR will map trails and designate certain trails for off-road vehicle (ORV) use. ORV trails would be designated based on their ability to support year-round ORV use without damage to public resources and the need for public access.
2. Standards may be established for Special Use Lands that specify when snow cover is sufficient to prevent damage to surface vegetation and when travel off designated trails is allowed.
3. When snow cover is not sufficient to prevent damage to surface vegetation, off-road vehicle use would be allowed only on designated trails or by permit.

II. Corridor Widths and Uses

Corridors should be designed to protect the quality of the experience of the user and to minimize negative effects, such as noise or dust, from adjacent land uses. Corridor widths may be increased to include a buffer to minimize land use and ownership conflicts, to protect privacy of adjacent landowners, to separate motorized from non-motorized uses, to allow future siting of public facilities, to allow flexibility for rerouting, or to adapt a trail to allow specific public uses or aesthetic or environmental concerns. Corridor widths may vary along the length of a trail because of the above considerations. The width of a corridor on any portion of a trail should also be based on the management intent for adjacent public land as expressed through applicable land use plans. (See *Regulations 11 AAC 51 Public Easements*.)

A. Corridors for Standard Trails. Trails of regional or statewide significance, including RS 2477 trails, on state land will be protected by publicly owned corridors that have a minimum width of 100 feet (50 feet each side of centerline). However, in no case should the width of the corridor be less than 100 feet. Local groups or users are encouraged to maintain existing

trails. Trail corridors should be designed in consultation with affected divisions of DNR, ADF&G, and DOT/PF. Activity areas of 10-40 acres may be identified along trails for activities such as camping areas and rest areas.

- B. Corridors for Special Trails.** Some trails require unusual widths or management practices because of historical significance or unique values. Management guidelines should be developed for such trails on a case-by-case basis. As a general policy, special trails will be protected by publicly owned corridors. These corridors will generally be wider than the 100-foot minimum trail corridor width (50 feet each side of centerline) established for standard trails.
- C. Corridors for Neighborhood and Community Trails.** Local trails that are not of regional or statewide significance will be identified and protected through management plans or disposal design. The following criteria should be used to determine whether a local trail should be protected by easement or public ownership.
1. If the local trail serves as a neighborhood collector trail that connects to a public open space system or a regional statewide trail and is identified prior to staking for sale, it will be kept in public ownership.
 2. Use by Neighborhood Residents. If the trail is to be used mostly by neighborhood residents for their own use, it should be dedicated to the public or local government.
 3. Local Pedestrian Access. If the objective is to provide local pedestrian access that is not part of an integrated neighborhood or community trail system, an easement may be used. This would typically occur when the purpose is to establish access between two lots in order to improve pedestrian circulation within the subdivision where a greenbelt and neighborhood trail system does not provide adequate access or where it is impractical to establish such an integrated trail system.
 4. Buffers and Easements. In cases of land disposals where lots are not pre-designated, either a publicly owned corridor or an easement will be used to protect designated trails. If a trail has the characteristics described in 1 or 2 above, it will be retained in public ownership. If it has the characteristics described in 3 above, an easement will be reserved.
- D. Land Use in Trail Corridors.** Land use activities within a trail corridor, such as, permits, leases, timber sales, traplines, and material sales, should be managed to avoid adversely affecting trail use over the long term or the aesthetic character of the trail. This does not preclude trail crossings or rerouting of trails as described below.

III. Location and Construction of Trails or Roads

- A. Trails in Wetlands.** DNR may authorize trails across wetlands if it is determined that the proposed activity will not cause significant adverse impacts to important fish and wildlife habitat, important ecological processes, or scenic vistas, a feasible and prudent alternative does not exist, and it is determined to be in the state's best interest. A trail across a wetland may be restricted to winter use only.

Easements and rights-of-way that are issued for motorized vehicle use in summer that will not use fill should follow well-drained routes and be located away from riparian zones and wetlands wherever possible. ADF&G will be consulted to provide recommendations on easement alignment to avoid wetlands and sensitive wildlife habitats. The intent of this guideline is to avoid motorized vehicle use across wetland areas that could result in paralleling trails that eventually extend outside the easement. This in turn could result in damage to wetlands and the unauthorized use of state land.

- B. Identification of Trails.** Prior to lease or disposal of state lands, trails that merit protection by one of the methods described above should be identified and reserved. The Division of Mining, Land and Water will be the lead agency for identification of trails and will consult with the other divisions of DNR, DOT/PF and ADF&G. In addition, any agency, organization, or individual may identify public trails to be considered for protection.
- C. Trail Crossings.** When it is necessary for powerlines, pipelines, or roads to cross trail corridors, crossings should be perpendicular whenever feasible. An exception is when a trail corridor is deliberately combined with a public utility or transportation corridor. Where feasible, vegetation screening should be preserved when a utility crosses or co-locates within a trail corridor.
- D. Rerouting or Vacation of Trails or Easements.** Rerouting trails for a short distance may be authorized to minimize land use conflicts or to facilitate use of a trail if alternate routes provide opportunities similar to the original. If trails are rerouted, provision should be made for construction of new trail segments if warranted by type of use. Historic trails that follow well-established routes should not be rerouted unless necessary to maintain trail use. The sections of trails that have been rerouted and are no longer intended for use should be rehabilitated.
- E. Trailhead Reservations and Information Signs.** Sufficient acreage for trailheads should be retained in public ownership to accommodate public access need, safety requirements, and provide for expected recreational use. The size and location of trailheads should be determined in consultation with ADPDR, ADOT/PF, and ADF&G. These trailheads should be marked, especially the ones adjacent to or near private property to prevent trespass problems.

Non-profit user groups, ANCSA Corporation landowners, and federal and state agencies are encouraged to provide information about land ownership, access, and allowable uses on lands owned by the various entities.

- F. Section-line Easements.** AS 19.30.400 is the statute governing RS 2477 rights-of-way. Additionally it applies to section-lines that are 33' or 66' wide, and to the inner part of some wider section-line easements. Section-line easements and RS 2477 rights-of-way are public access easements managed by DNR. Regulation 11 AAC 96 sets out permit requirements for various uses on state land, including state-owned easements along surveyed and unsurveyed section lines and RS 2477 rights-of-way across state land. Access-related activities that require a DNR permit include road construction, use, and transportation of heavy equipment.

G. Upgrading Trails to Roads or New Construction of Roads. Construction of either a new road or upgrade of an existing trail may be approved after consideration of the guidelines above. Forest road standards are used as guidelines. Higher construction standards may be needed for site-specific projects and conditions.

H. Management of RS 2477 Routes Across Non-State Land. The Department of Natural Resources has the management authority of all RS 2477 rights-of-way regardless of land ownership under AS 19.30.400. The department requires an authorization for use or development on a public easement that would either displace or preclude a traditional means of access. The Department will provide notice and a comment opportunity before a decision is rendered regarding the proposed activity on the easement. A survey will be required for new access construction across non-state land unless the location of the public easement is clearly determined and if a dispute does not exist regarding whose land the easement crosses. A state authorization is not required on a valid RS 2477 right-of-way for those uses that are generally allowed on state land. (See *11 AAC 51.100 (e-j)*).

Rerouting of trails should be done in consultation with DNR. An easement or RS 2477 right-of-way may be rerouted or vacated, according to 11 AAC 51.065, if a reasonably comparable, established alternate right-of-way or means of access exists that is sufficient to satisfy all present and reasonably foreseeable uses.

Width determinations have not been made on most routes. Therefore, any user should proceed as if the right-of-way width is confined to ditch-to-ditch width until a width determination is made following additional research. Furthermore, the exact location of the RS 2477 right-of-way may be unclear if the route has not been surveyed.

I. Roads in Wetlands. Summer use roads that do not use fill shall be located away from riparian zones and wetlands to discourage the formation of parallel trails and very wide river crossings. DNR may authorize construction of trails or roads across wetlands if it is determined that the proposed activity will not cause significant adverse impacts to important fish and wildlife habitat, important ecological processes, or scenic vistas. The department will write a decision that considers alternatives and whether the proposed activity is in the state's best interest.

J. RS 2477 Trails in the Upper Yukon Planning Area. There are many RS 2477 trails in the planning area. For the most part, these trails are indicated on the plan maps where scale allows. During the RS 2477 Project conducted by DNR, hundreds of trails throughout the state were researched to identify which trails would qualify as RS 2477 rights of way. A case file number (RST prefix) was assigned to each trail that was researched. Further information regarding the RS 2477 Project can be found at www.dnr.state.ak.us/mlw/trails. Trails in the planning area that qualify as RS 2477 trails include the following:

RST 10	Chicken-Franklin
RST 11	Eagle-Alder Creek Trail
RST 67	Eagle-Circle Mail Trail
RST 78	Fortymile-Franklin
RST 130	Lillywig Creek Winter Sled Road

RST 159 Lillywig Creek Summer Pack Trail
RST 258 Dome Creek-Steel Creek
RST 260 Canyon Creek-Walkers Fork
RST 284 Franklin-Steele Creek
RST 302 Liberty Cabin-Dome Creek
RST 379 North Fork of Fortymile-Big Delta
RST 391 Tanancross-Kechumstuk
RST 409 Jack Wade-Steele Creek (Winter)
RST 410 Jack Wade-Steele Creek (Summer)
RST 421 Ketchumstuk-Chicken
RST 656 Dennison Fork Trail
RST 465 Fortymile Dome–Boundary Creek
RST 787 Teddy’s Fork Trail
RST 789 Ketchumstuk Winter Trail
RST 792 Boundary-Lassen Landing
RST 797 Napoleon Creek Trail
RST 803 Trout Creek Trail
RST 1065 Jack Wade Landing-Boundary
RST 1594 Fortymile Station-Eagle
RST 1801 Lost Chicken to Wall Street
RST 1832 Chicken–Fish McKinley Creeks
RST 1854 Ladue River Trail
RST 1871 Steele Creek–Fortymile (U.S. / Canadian Boundary)
RST 1883 Walker Fork–Davis Creek–Border
RST 1891 Mission Creek Trail
RST 1892 Fortymile Station–Eagle: Government Supply Route
RST 1903 Poker Creek Trail
RST 1921 Washington Creek Trail

K. Other Trails in the Upper Yukon Planning Area. In addition to RS 2477 trails, there are many other trails in the planning area. For the most part, these trails are indicated on the plan maps where scale allows.

L. Other Guidelines Affecting Trails and Public Access. Other guidelines may affect trails and public access. Sections in this chapter that should also be referred to include but are not limited to:

Fish and Wildlife Habitat and Harvest
Forestry
Materials
Settlement
Stream Corridors, Shorelands and Instream Flow
Subsurface Resources
Transportation
Trapping Cabins

Transportation

Goals

Support Plan Designations. Through coordination with other state agencies, develop a transportation system needed to implement this plan and integrate it with other areawide transportation needs.

Minimize Costs. Design a transportation system that minimizes the long run costs, including construction, operations, and maintenance.

Minimize Adverse Impacts. Provide for a transportation system with minimal adverse impacts on local residents, the environment, fish and wildlife resources, and aesthetic and cultural features.

Promote Efficiency. Provide for a transportation system that uses land and energy resources efficiently and encourages compact, efficient development patterns. Avoid unnecessary duplication of transportation facilities.

Ensure Public Safety. Provide for a transportation system with a high standard of public safety.

Management Guidelines

A. Access for Land Offerings, Townsite Development, or Resource Development Projects.

The development of road access to new town sites, resource development projects, and some areas of land disposal may be necessary. Such access development is recognized as appropriate. Specific route alignment decisions are to be made at the time of route analysis that precedes road construction. Before a land offering or the start of a resource development project, DNR will work with DOT/PF to identify appropriate locations for access to the State Highway system and identify responsibilities for design, construction, and maintenance of any proposed transportation facilities. Access plans will be developed in consultation with affected local governments.

B. Joint Use and Consolidation of Surface Access.

Joint use of surface access routes and facilities will be encouraged wherever it is feasible and prudent to do so. Surface access also should be sited and designed to accommodate future development and avoid unnecessary duplication. The feasibility of using an existing route or facility should be evaluated before the use of a new route or facility is authorized.

C. Protection of Hydrologic Systems.

Transportation facilities will, to the extent feasible and prudent, be located to avoid significant adverse effects on quality or quantity of adjacent surface water resources, or to avoid detracting from recreational use of the waterway.

- 1. Minimize the Number of Stream Crossings.** Stream crossings should be minimized. When it is necessary to cross a stream for road construction, the crossing should be as close as possible to a 90° angle to the stream, consistent with good road alignment practices. Stream crossings should be made at stable sections of the stream channel.
 - 2. Minimize Construction in Wetlands.** Construction in wetlands, floodplains, and other poorly drained areas should be minimized, and existing drainage patterns maintained. Culverts should be installed where necessary to enable free movement of water, mineral salts, and nutrients.
 - 3. Design Bridges and Culverts.** Bridges and culverts should be large enough to accommodate, or be positioned to avoid altering direction and velocity of stream flow, or interfering with migrating or spawning activities of fish and wildlife. Bridges and culverts intended for permanent use should be large enough to accommodate the 50-year peak discharge (where known). Bridges should provide adequate clearance for boats, pedestrian, horse, and large game passage whenever these uses occur or are anticipated at significant levels. DOT/PF will be consulted for design requirements and best management practices.
 - 4. Rehabilitate Disturbed Stream Banks.** Disturbed stream banks will be recontoured, revegetated, or protected by other measures to prevent soil erosion into adjacent waters.
 - 5. Winter Stream and Lake Crossing.** During winter, snow ramps, snow bridges, or other methods should be used to provide access to frozen rivers, lakes, and streams to avoid cutting, eroding, or degrading banks.
- D. Protection of Fish and Wildlife Resources.** Important fish and wildlife habitats such as riparian areas, wildlife movement corridors, important wintering or calving 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 the Department of Fish and Game.
- E. Road Pull-Outs.** Where road corridors intersect streams, habitat corridors, or other areas of expected recreational use and tourism, sufficient acreage should be retained in public ownership to accommodate public access, safety requirements, and expected recreational and tourism use. The size and location of pullouts should be determined in consultation with the Division of Parks and Outdoor Recreation, Department of Transportation and Public Facilities, and Department of Fish and Game.
- F. Timber Salvage from Right-of-Way.** See *Forestry Guideline D*, “Timber salvaged from land cleared for non-forest use.” All timber having high value for commercial or personal use should be salvaged on rights-of-way to be cleared for construction.
- G. Scenic Resources.** Scenic resources should be considered during planning for transportation needs to avoid significant degradation to visual quality along these routes.
- H. Other Guidelines Affecting Transportation.** Other guidelines may affect transportation. Sections in this chapter that should also be referred to include but are not limited to:

Forestry
Materials
Recreation and Tourism
Settlement
Stream Corridors, Shorelands and Instream Flow
Subsurface Resources

Trapping Cabins

Goal

Trapping Economy. Support the trapping economy and tradition of the region by providing opportunities for trapping cabin permits.

Management Guidelines

A. Trapping Cabins in Settlement Areas. New trapping cabin permits may be allowed in designated settlement areas before the area is scheduled for sale. Permits may be issued or renewed in designated settlement areas for up to 10 years or until the time the area is offered for sale or staking, whichever is shorter.

Existing trapping cabin permits will be renewed in proposed disposal areas. When an area is offered for sale or staking, permittees will be given the opportunity to:

1. relinquish the trapping cabin permit and take a chance on acquiring fee simple title to the cabin site through staking, or
2. keep the trapping cabin subject to the Department's trapping cabin policies (not acquiring title). If the permittee keeps the cabin, the cabin site will be deleted from the staking area prior to the offering.

B. Other Guidelines Affecting Trapping Cabins. Other guidelines may affect trapping cabin management practices. Sections in this chapter that should also be referred to include but are not limited to:

Fish and Wildlife Habitat and Harvest
Forestry
Settlement
Trails and Public Access

Wetland Management

Goal

Protect Wetland Values. Maintain the hydrologic, habitat, and recreational functions of public wetlands. Land management practices will be directed to avoid or minimize adverse impacts on the following important functions of wetlands:

- Wetlands filter nutrients, pollutants, and sediment from surface run-off.
- Wetlands stabilize water supplies by storing excessive water during flooding and by recharging and discharging groundwater, regulating flow, and controlling erosion.
- Wetlands provide important feeding, rearing, nesting, and breeding grounds for many species. Related recreational use and aesthetic values also are important.

Management Guidelines

A. Definition of Wetlands. For purposes of inventory and regulation of wetlands, DNR will use the definition adopted by the State of Alaska under the regulation of the Coastal Management Program (6 AAC 80.900(19):

Freshwater wetlands means those environments characterized by rooted vegetation which is partially submerged either continuously or periodically by surface freshwater with less than 0.5 parts per thousand salt content and not exceeding three meters in depth.

For purposes of these management guidelines, wetlands are divided into three classes:

- Class I, wetlands larger than 100 acres and all wetlands with a locatable stream outlet (the stream shall be considered part of the wetland);
- Class II, wetlands between 40 and 100 acres with no outlet; and
- Class III, wetlands less than 40 acres with no outlet.

National Wetland Inventory maps, when available, should be used to determine the presence of wetlands and for the classification of wetlands, described. Deviation from the boundaries of these maps can occur if more precise field observations are available and if the definition of wetlands in 6 AAC 80.900(19) is applied.

B. Retention of Wetlands in Public Ownership. In areas designated ‘General Use,’ ‘Resource Management – High Value,’ or ‘Habitat,’ Class I and II wetlands will be retained in public ownership unless DNR determines, after evaluation and consultation with affected agencies, that they do not have sufficiently important water quality, water supply, habitat,

and/or recreation values to merit public ownership. Class III wetlands will be evaluated on a case-by-case basis to determine if public retention or other measures are necessary to protect their values. Generally, Class III wetlands of less than 5 acres will not be retained.

Within areas designated Settlement, Settlement-Commercial, or Public Facilities – Retain in this plan, consideration shall be given in land disposals to the protection of high value wetlands that perform critical hydrologic, water quality, or habitat functions. In general, such areas should not be developed and the state should retain these lands. Wetlands identified in the National Wetlands Inventory as Lacustrine or Riverine should, specifically, be retained in state ownership. Development related to settlement or public facilities should avoid wetlands but may occur where less critical functions exist. Hydrologically isolated, forested palustrine wetlands are often associated with less critical functions.

C. Retention of Land Adjacent to Wetlands – Standard Buffers. The following standards apply to those wetlands that are to be retained by the state, as described in B above:

- 1. Class I Wetlands.** Class I wetlands that remain in public ownership will include, at minimum, a 100-foot strip adjacent to the wetland.

Restrictive use covenants and public access easements rather than public ownership may be used to protect Class I wetlands and associated buffers under conditions specified in D below.

- 2. Class II Wetlands.** Class II wetlands that remain in public ownership will include, at minimum, a 60-foot strip adjacent to the wetland. Restrictive use covenants and public access easements, rather than public ownership may be used to protect Class II wetlands and associated buffers under conditions specified in D below.

- 3. Class III Wetlands.** Class III wetlands will be evaluated on a case-by-case basis through the public land disposal process or applicable public land management plans.

- 4. Criteria for Changing Buffer Size.** Wetland buffers may be increased from the previous standards if necessary to avoid adverse impacts on wetlands from development on adjacent lands. If, for instance, surrounding lands are steep and have high erosion potential or the proposed use poses a high risk to water quality or other values, buffer widths will be increased accordingly.

When steep conditions exist, general guidelines should be used for increasing buffer width: if a 10 to 40 percent slope exists, the buffer width should increase 25 percent; if the slope exceeds 40 percent, the buffer width should increase 50 percent.

Wetland buffers may be decreased if land adjacent to the wetland is stable and the proposed development or use does not pose a risk to water quality or other values. A minimum buffer width of 100 feet will apply to agricultural land disposals.

D. Restrictive Use Covenants and Public Access Easements. Restrictive use covenants for public access easements may be used rather than public ownership on wetlands retained by the state:

1. **Where Surveying a Meandering Boundary Would be Excessively Expensive.** Where the configuration of the wetland is such that surveying the meandering boundary of the wetland would be excessively expensive, an aliquot-part (rectangular) survey rather than a meander survey may be used along the edges of wetlands. This may result in small portions of the wetland being conveyed to private ownership. Where justified by the value of the wetland, restrictive use covenants, public access easements, or staking setbacks will be applied to ensure that those portions of wetlands and associated buffers conveyed to private ownership remain in a natural condition and that public access and use are maintained.

 2. **Where An Entire Wetland Is Included with a Parcel of Land to be Sold for Private Use.** In this case, the wetland and associated buffer may be conveyed to private ownership. Where justified by the value of the wetland, restrictive use covenants should be used to ensure that the wetland and associated buffer remain in a natural state. If there is a stream outlet from the wetland, public access easements shall be reserved adjacent to both the outlet and the wetland.
- E. Dredge and Fill Permits in Wetlands.** Permits⁹ for dredging and filling in wetlands, including permits for gravel extraction and the construction of roads and pads, should not be granted when significant adverse impacts to important, fish and wildlife habitat or ecological processes can be expected and permit stipulations will be inadequate in maintaining wetland functions or values. Exceptions to this standard may be granted if no feasible and prudent alternative exists. Where it is not feasible and prudent to avoid such activities, mitigation or other appropriate measures should be applied to meet the intent of this guideline.
- F. Operation of Heavy Equipment in Wetlands.** Permits issued for activities that require heavy equipment in wetlands that have important hydrologic, recreation, or habitat values will, to the extent feasible and prudent, avoid damage to wetlands and wetland vegetation. Only winter access should be used in or to access wetlands whenever feasible. DNR will consult with other affected agencies prior to issuing such permits.
- G. Defining Wetlands and Wetland Buffer Boundaries.** The National Wetland Inventory maps should be used in ascertaining the boundary of wetlands. If more precise boundary locations are required, they should be defined through field inspection, interpretation of aerial photographs, or both. Field inspection is preferred but will not always be possible because of cost. Where wetlands are particularly valuable and field inspection is not possible, boundaries should be sufficiently generous to allow for errors in interpretation. This will often be the case where aliquot parts are used to define wetlands.

Where a covenant is used to protect wetlands conveyed to private ownership, aliquot parts may define boundaries where the covenant applies, or otherwise described so the landowner can clearly define where the covenant applies.

⁹ Permits from other agencies, including U.S. Army Corps of Engineers 404 and Department of Environmental Conservation 401 permits, are necessary for most dredging and filling activities in wetlands.

- H. Approval of Other Activities in State-owned Wetlands and Buffers.** Activities such as establishing trails or issuing leases for commercial or noncommercial uses shall be considered on an individual basis. Such activities will be allowed if they can occur without sufficient damage to the water, habitat, or recreation values of the wetland. These activities often require other permits, including a U.S. Army Corps of Engineers 404 permit.
- I. Other Landscape Features Providing Similar Wetland Functions.** Some types of landscape features are similar in many respects to the functions of wetlands, but do not specifically meet the ACMP definition of (emergent) wetlands. Areas of scrub-shrub and forest vegetation with hydric soils and hydrophytic plants can provide water flow regulation, erosion control, sediment and nutrient retention, contaminant removal, nutrient cycling, and fish and wildlife habitat. If such features exist and can be identified spatially, the effects of proposed activities on the equivalent wetland functions shall be considered during permit review. Activities will be allowed if they can occur, individually and cumulatively, without significant reductions to the identified functional values.
- J. Other Guidelines Affecting Wetland Management.** Other guidelines may affect wetland management. Sections in this chapter that should also be referred to include but are not limited to:

- Fish and Wildlife Habitat and Harvest
- Forestry
- Materials
- Settlement
- Stream Corridors, Shorelands and Instream Flow
- Trails and Public Access
- Transportation