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 resources affected by the plan: agriculture, fish and wildlife, forestry, materials, mineral resources, recreation and tourism, cultural features, and water. It also presents management policies for several specific land management concerns: protection of fish and wildlife habitat, public and private access, timber harvest, settlement, shoreline and stream corridor management, and public access. These policies apply to state land throughout the planning area regardless of the land use designation.

This chapter consists 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 occurs.

Definitions

For definitions of terms commonly used in this chapter, see Appendix A, Glossary.

Goals

The following goals are for state lands in the planning area. Goals are general conditions that DNR attempts to achieve through management actions. The goals are listed alphabetically. No single goal has a priority over the others.

Economic Development. Provide opportunities for jobs and income by managing state land and resources to support a vital, self-sustaining, diverse local economy.

Environment and Habitat. Manage state land to protect natural ecosystems, sensitive species, and wildlife habitats.

Fiscal Costs. Minimize the needs for, and the fiscal cost of, providing government services and facilities such as schools and roads.

Public Health and Safety. Maintain or enhance public health and safety for users of state land and resources.

Public Use. Provide, plan, enhance, and manage diverse opportunities for public use of state lands, including uses such as hunting, fishing, boating and other types of recreation.

Quality of Life. Maintain or enhance the quality of the natural environment including air, land and water, and fish and wildlife habitat and harvest opportunities; provide opportunities to view wildlife and the natural environment; and protect heritage resources.

Recreation. Protect recreational resources including public access and visual resources, and manage recreational activities to minimize user conflict, while providing for a range of recreational experiences on state land managed for multiple uses.

Settlement. Provide opportunities for private ownership and leasing of land currently owned by the state.

Sustained Yield. Maintain the long-term productivity and quality of renewable resources including fish and wildlife, agriculture, and timber.

Management Intent

Management intent for state land is expressed through statements of management emphasis identified on a unit specific basis. These statements are based on resource and use inventories, the review of existing and potential economic trends, state authorizations, existing plans and similar resource management documents, agency review and comment, and public participation.

General Framework of the Plan

- **A.** State land within the planning area will be managed to allow for multiple use unless legislatively designated¹, or a parcel of state land is less than 640 acres and managed under a management agreement by another state agency, or affected by 11 AAC 96.014 (Special Use Land).
- **B.** State land will also be managed to protect access and public resources. Types of resources to be protected include, but are not limited to habitat, recreation, water quality, anchorages, watersheds, scenery and trails.
- **C.** State land will remain open to mineral entry unless specifically closed. This plan does not recommend any areas to be closed to mineral entry, although it does recommend a

¹ Typically, LDA's refer to state game refuges, state parks, and the like, that are withdrawn from the public domain and are managed as special purpose sites. However, certain LDA's may be managed for multiple use, although they have been withdrawn from the public domain. Within the planning area, the Tanana State Forest and the Dalton Highway Public Use Area are examples of such types.

leasehold location order, which would affect newly designated settlement areas as well as existing settlement areas that are not now closed (2014) to mineral entry. No new mineral closing orders are recommended. Except for those areas now closed to mineral entry or affected by the leasehold location order, all other state land within the planning area is open to entry.

- **D.** In management units where a primary surface use has been designated, activities and authorizations pertaining to that primary designated use may take precedence over other uses. Although there may be a priority for use in certain parcels, other uses may also be allowed if they do not preclude the primary use assigned to a management unit. This plan emphasizes minimizing land use conflicts through plan guidelines and intent rather than through prohibitions, although prohibitions are sometimes identified. All other uses are initially presumed compatible with the primary use. However, if DNR determines that a use conflict exists and that the proposed use is incompatible with the primary use, the proposed use should not be authorized or the use should be modified so that the incompatibility no longer exists (11 AAC 55.040 (c)). Except in areas closed to mineral entry, subsurface uses are considered an allowable use but must take into consideration the effects upon surface uses.
- **E.** This plan designates state lands in categories that are generally consistent with current use patterns and reflect the significant resources in the planning area.
- **F.** This plan honors the intent of existing settlement agreements with the Mental Health Trust Authority and the University of Alaska. These settlement agreements as well as pertinent sections of state law and regulation shall prevail over the area plan, if inconsistencies exist.
- **G.** DNR, in its consideration of resources and in the management of state land, shall consider the impacts of such use upon fish and wildlife, habitat and soil degradation, and upon other forms of use, including recreation, which may occupy the area that is under consideration in an authorization. Uses that are not compatible with these uses and resources are, if the use is nonetheless determined appropriate, to be made compatible to the extent feasible and prudent through the use of stipulations. The ability of the Department to manage the subsequent activities that may result from the issuance of an authorization is to be taken into consideration in the adjudication of an application that requires a written determination by DNR.

Management Guidelines by Activity or Resource Value

The remainder of this chapter specifies guidelines that are specific directives to apply to management decisions. DNR will use these guidelines when considering issuing authorizations and conveyances or making management decisions on state lands. These guidelines will also apply to lands that are currently state-selected and ANILCA topfiled when they are tentatively approved or patented into state ownership.

Chapter 2 guidelines apply to all state land covered by the YTAP unless the plan explicitly exempts some parcels or designations from a guideline or the resource or use for which a guideline is intended does not exist in the parcel in question. There are few such exemptions.

General Guidelines

- **A.** All authorizations for use of state land within the planning area will be consistent with the management intent in this plan.
- **B.** In considering authorizations for use of state land, DNR will adjudicate applications to:
 - 1) avoid, and if not possible, minimize damages to streambeds, fish and wildlife habitat, vegetation, trails, anchorages, and other resources;
 - 2) minimize conflicts between resources and uses: and
 - 3) protect the long-term value of the resource, public safety, and the environment.
- **C.** If authorizations from other agencies are required, DNR will consider issuing a permit or lease contingent upon issuance of these other authorizations.

Other State Land

Parcels that are donated or acquired after the plan is adopted will be designated for the uses for which they were acquired or donated without an amendment to the plan. Lands that come into state ownership through other means will be designated and classified consistent with the designation identified in the applicable management unit or, if not so identified, according to the standards of the section, 'Applicability of Plan Designations and Classifications', in Chapter 4 without an amendment to the plan or to the Land Classification Order adopting this plan revision. This same process applies to those parcels of state land that may be missed during the plan preparation process and have subsequently identified as state land.

Agriculture and Grazing

Agriculture

Goals

Food Security. Provide a reserve of land for agricultural use to support the local and regional production of foodstuffs necessary to support the citizens of Alaska in the future. Known as 'food security', this goal recognizes the potential variabilities of worldwide food production and its distribution in the future and indicates the state's intent to ensure a continuing agricultural land base.

Economic Development. Diversify and strengthen the state's economy by increasing the availability of Alaska food products by:

- Encouraging expanded production and availability of farm products from agricultural lands within Alaska;
- Increasing the acreage available as demand or market opportunities warrant;
- Preserving the ability to produce agricultural products as a future option.

Agrarian Lifestyle. Provide the opportunity for Alaskans to pursue an agricultural lifestyle.

Agricultural Land Disposals. The primary purpose of future agricultural land disposals is to bring land into agricultural production and/or preserve it for agricultural use by future generations.

Conservation of Agricultural Resources. Agricultural land disposals shall be designed to maintain or enhance the productivity of the soil.

Protection of Environment. Agricultural land disposals shall consider off-site impacts and shall utilize appropriate mitigation measures.

Management of Invasive Plants and Animals. Mitigation efforts shall be taken to avoid the spread of invasive plants and animals.

Management Guidelines

- **A. Agricultural Sales: Classification.** Agricultural land disposals under AS 38.05.321 may only occur within areas designated Agriculture Land².
- **B.** Agricultural Sales: Size. Within the planning area, agricultural sales must have a minimum area of 40 acres. Sale areas may be less than 40 acres, if in the opinion on the Division of Agriculture and in the written decision under AS 38.05.035(e), it is determined that such an action is in the best interests of the state.
- **C. Agricultural Land Disposals.** Agricultural land disposals shall be consistent with the requirements of 11 AAC 177. Agricultural land cannot be used for other purposes that would preclude its eventual use for agriculture.
 - Land conveyed under this authority may only be used for agricultural purposes or for purposes that do not conflict with the use of the land for agriculture.
 - Remote state land with good agricultural potential and designated Agriculture, but not scheduled for sale within the next 15 year period, shall remain in public ownership, continue in an agricultural designation, and shall not be used for other purposes except through a plan amendment that re-designates such areas into another land use designation. (This prohibition does not extend to non-permanent, temporary uses of agricultural land such as uses associated with permits.)
 - A Farm Conservation Plans approved by the state shall be provided as a condition of an agricultural sale and shall meet all other requirements of 11 AAC 177.
 - In addition to the requirements of 11 AAC 67.180 or as part of an AS 38.05.035(e) decision, agricultural sales adjoining areas designated Habitat shall evaluate the need for measures needed to protect adjacent habitat, and shall incorporate these features into the Preliminary/Final Finding and Decision or Farm Conservation Plan (FCP), Agricultural sales adjoining lands designated Settlement shall evaluate the need for measures necessary to minimize adverse impacts to areas of land disposals and shall similarly incorporate such measures into the Preliminary/Final Finding and Decision or FCP. It is not intended that mitigation measures will always be required in these instances, but that the need for such measures be assessed and required where necessary.
 - Generally, agricultural land disposals should not occur within mapped floodways.
 Where neither floodways nor flood plains have been mapped, the best available
 information will be used to identify areas where flooding is likely to be a severe
 limitation on agriculture. Agricultural disposals in such areas should be avoided.

² There may be instances where areas classified Settlement may also be appropriate, within specific areas of the site, for agricultural land disposals. The determination of whether a management unit is appropriate for the collocation of these two forms of disposal shall be made in the written decision process under AS 38.05.035(e). The decision shall specify which areas of the unit are appropriate for each type of disposal.

- **D. Site Specific Requirements.** Agricultural land sales within the planning area are subject to the following additional requirements:
 - A riparian buffer of undisturbed vegetation of 100' shall be retained in state ownership (or otherwise protected so that riparian functions are not impaired) adjacent to all anadromous waterbodies and high value resident fish streams. See the standards for riparian areas in the section 'Shorelands and Stream Corridors' in this Chapter.
 - Areas of reported historic, archaeological, or paleontological sites should not be disturbed. Agricultural operations shall not be authorized within 300 feet of the boundaries of known sites unless OHA determines, in coordination with the Division of Agriculture, that agricultural activities can occur without significant impact to the cultural resource. OHA shall work with the Division of Agriculture to develop site-specific mitigation measures to protect known cultural sites while allowing agricultural operations. A buffer (or other management mechanism sufficient to protect the cultural resource) of 50' or greater shall be established around significant cultural resources identified by OHA as part of agency review.
- **E.** Other Guidelines Affecting Agriculture. Other guidelines may affect agriculture. See other sections of this chapter.

Grazing

Goals:

Food Security. Provide opportunities for grazing on state lands to support the local and regional production of livestock to support the citizens of Alaska in the future. Known as "food security", this goal recognizes the potential variability of food production and distribution in the future and indicates the state's intent to ensure a grazing land base.

Availability of State Land. Make units with existing forage and rangeland resources available for short-term and long-term grazing, consistent with the management intent of the units affected by grazing operations and with the following management guidelines.

Contribute to Economic Diversity. Contribute to Alaska's economy by protecting range lands that provide opportunity for the development of the livestock industry.

Management Guidelines

- **A.** Use of State Land for Grazing. Grazing on state land may be allowed in areas with appropriate classifications (11 AAC 60.010) and if consistent with the management intent of the unit and with management guideline B, and if DNR determines in the authorization decision that the potential conflicts with other resource or land uses are acceptable or can be mitigated with stipulations. (11 AAC 60.170)
- **B.** Areas Not Appropriate for Grazing Leases. In addition to the restrictions of 11 AAC 60.010, lands designated Water Resources, Materials, Public Facilities-Retain, and codesignated Reserve Use and Habitat may not be used for grazing leases.
- **C. Multiple Use.** Lands used for grazing will be managed as multiple use lands to support a variety of public benefits, including fish and wildlife habitat and harvest, water quality maintenance, public recreation, and public access. (11 AAC 60.130)
- **D.** Access and Use. Public access across and public use of grazing lands may not be limited by persons holding grazing leases or permits unless approved as part of a grazing operations plan. (11 AAC 60.130)
- **E. Operational Requirements.** Grazing operations on state land are subject to the requirements of 11 AAC 60.
- **F. Grazing Operations Plans.** Prior to initiating grazing activities on a grazing permit or lease, a person must have an approved grazing operations plan that will become part of the lease or permit. DNR will assist a lessee or permittee in preparing a plan in consultation with the Natural Resources Conservation Service or other agencies.
- **G. Other Guidelines Affecting Grazing.** Other guidelines may affect grazing. See other sections of this chapter.

Coordination and Public Notice

Goals

Coordination with Non-state Landowners. Coordinate the use of state land with that of private and other public landowners to provide for the optimal use, development, and protection of area resources.

Public Participation. Provide local governments, state and federal agencies, adjacent landowners, and the general public with meaningful opportunities to participate in the process of making significant land use decisions.

Management Guidelines

- **A.** Notice for Decisions Requiring Public Notice (Under AS 38.05.945). As required by statute, public notice will be given for decisions involving the sale, lease, or disposal of (or interests in) land, property, or resources. Notice will be given to parties known or likely to be affected by an action proposed by the state or an applicant to the state.
- **B.** Coordination with Local Plans and Zoning Ordinance. The comprehensive plan and zoning map of the North Star and Denali Borough are to be reviewed by DNR prior to issuing permits, leases, or other forms of use authorizations.
- **C.** Avoiding Conflicts with Adjacent Upland Owners. Before DNR issues a land use authorization on shorelands, DNR should encourage applicants to use areas that will reduce the likelihood of possible land use disagreements with upland owners where comments have been solicited as part of project review. DNR will 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.** Authority of State Plans. State plans only affect state lands and federal lands that have been selected by the state for conveyance. They do not affect Borough, other state lands not affected by Title 38, other federal lands, or private lands.

Boroughs have developed and will continue to develop local comprehensive plans for specific parts of the two boroughs. These are intended to identify preferred land use patterns and development stipulations. DNR reviews these plans in the course of developing management plans or area plans, and often makes use of their recommendations. However, while community comprehensive plans can make recommendations for state lands within

their planning areas, they cannot establish land use designations or other planning requirements for state land. State land use designations are decided on a regional basis through the state land use planning process and local plans do not supersede state plans for the use of state lands.

E. Other Guidelines Affecting Coordination or Public Notice. Several other guidelines may affect coordination or public notice. See other sections of this chapter.

Cultural Resources

Goal

Cultural 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. Cultural Resources Identification.** Identify and determine the significance of cultural resources on state land through the following actions:
 - 1) Cultural resources surveys conducted by qualified personnel;
 - 2) Research about cultural resources on state land by qualified individuals and organizations; and
 - 3) Cooperative efforts for planned surveys and inventories between state, federal, and local or Native groups.
- **B.** Cultural Resources Protection. Protect significant cultural resources through the following actions:
 - 1) The Office of History and Archeology (OHA) within the Division of Parks and Outdoor Recreation (DPOR) reviews authorizations, construction projects or land uses for potential conflict with cultural resources. The office determines if there may be an adverse effect on heritage resources and makes recommendations to mitigate these effects.
 - 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.
 - 3) Require the establishment of buffers (50' or greater) around significant cultural resources³ as part of the overall protection process when subdividing or otherwise using state lands.
- **C.** Cultural Resource Surveys Prior to Land Offerings. If determined by OHA during an agency review of a proposed land disposal that a cultural survey may be required, further coordination between OHA and DMLW prior to the land disposal is warranted. Cultural

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³ Cultural resources, for the purposes of this management guideline, do not include trails or routes.

surveys should be considered where OHA reported sites exist or where there is a high potential for such sites to exist. The extent and type of the cultural survey within the area of the proposed land disposal shall be determined by OHA in consultation with DMLW. Detailed procedures exist governing when a survey is required and extent of the cultural resource survey and are to be consulted by DNR adjudicators.

- **D.** Cultural Resources in Timber Management Areas. The Office of History and Archaeology (OHA) will review proposals for timber management activities through the interagency review process for the Five-Year Schedule of Timber Sales and Forest Land Use Plans for individual sales and provide comments and information about areas of concern within the review deadline. OHA may recommend archaeological surveys in timber sale areas with a high potential for cultural resources. Areas of reported historic, archaeological, or paleontological sites that retain historic integrity should not be disturbed. Timber operations shall not occur within 300 feet of the boundaries of known sites unless the OHA determines, in consultation with the Division of Forestry, that certain activities can occur without significant adverse impacts to the cultural resource. The OHA shall assess the extent and significance of the cultural resource and work with Division of Forestry to develop site-specific mitigation measures to protect the cultural sites while allowing timber management.
- **E.** Cultural Resources Adjacent to Recreation Facilities. Recreation facilities that might subject cultural sites to vandalism because of the increased public use should not be placed adjacent to the cultural sites.
- **F.** Heritage sites should be reported when found. The Alaska Heritage Resources Survey (AHRS) is an inventory of all reported historic and prehistoric sites within the State of Alaska and is maintained by the Office of History and Archaeology (OHA). The AHRS is used to protect cultural resource sites from unwanted destruction. By knowing of possible cultural remains prior to construction, efforts can be made to avoid project delays and prevent the destruction of cultural sites. While over 22,000 sites have been reported within Alaska, this is probably only a very small percentage of the sites which 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 Cultural Resources.** Other guidelines will affect cultural resources. See other sections of this chapter.

Fish and Wildlife Habitat

Goals

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

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

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

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

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

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

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

Management Guidelines

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

A. Mitigation. When issuing permits and leases or otherwise authorizing the use or development of state lands, DNR will include stipulations or measures needed to protect fish, wildlife, or their habitats. The costs of mitigation relative to the benefits to be gained will be considered in the implementation of this policy.⁴

All land use activities will be conducted with appropriate planning and implementation to avoid or minimize adverse effects on fish, wildlife, or their habitats, and on public access to those resources.

DNR and ADF&G will enforce permit stipulations and measures appropriate to their agency, consistent with their authorities and enforcement capabilities. Mitigation will be required of any significant damage to fish, wildlife, or their habitats that may occur as a direct result of the party's failure to comply with applicable law, regulations, or the conditions of the permit or lease.

When determining appropriate stipulations and measures, the departments will apply, in order of priority, the following steps. Mitigation requirements listed in other guidelines in this plan will also follow these steps:

- 1) Avoid anticipated, significant adverse effects on fish, wildlife, or their habitats through siting, timing, or other management options.
- 2) When significant adverse effects cannot be avoided by design, siting, timing, or other management options, the magnitude of the adverse effect(s) of the use or development will be minimized.
- 3) If significant loss of fish or wildlife habitat occurs, the loss will be rectified by repairing, rehabilitating, or restoring the affected area to a useful state.
- 4) DNR shall consider replacement or enhancement of fish and wildlife habitat when steps 1 through 3 cannot avoid substantial and irreversible loss of habitat. The ADF&G will identify the species affected, the need for replacement or enhancement, and the suggested method for addressing the impact. In those instances when replacement or enhancement is not feasible, DNR will consider the provision of substitute resources or environments. DNR will consider only those replacement and enhancement techniques that have either been proven to be, or are likely to be, effective and that will result in a benefit to the species impacted by the development. Replacement or enhancement will be required by DNR if it is determined to be in the best interest of the state either through the AS 38.05.035(e) or other authorization process.

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⁴ The types and amounts of mitigation requirements are determined through the balancing of potential impacts against the potential benefits of a given project, and DNR, though a written determination, may determine that the impacts that are associated with a project are likely and are adverse, but are acceptable in the determination of the state's best interest. This does not preclude DNR from imposing those stipulations necessary to protect the public interest.

- **B.** Allowing Uses in Fish and Wildlife Habitats (Ha). These habitats are defined as areas that serve as important use areas for fish and wildlife species during a sensitive life history stage where alteration of the habitat and/or human disturbance could result in a loss of a population or sustained yield of the species. Fish and wildlife categories used, in part, to identify Habitat (Ha) designations in this plan include the following:
 - Anadromous and high value fish spawning, rearing, and overwintering migration areas.
 - Trumpeter swan nesting and molting concentrations.
 - Waterfowl nesting and molting areas, and areas important for waterfowl migration.
 - Fish streams frequented by bears (including concentrations by season).
 - Moose rutting, wintering and calving areas.
 - Caribou wintering and calving areas.
 - Dall sheep lambing, winter use areas and mineral licks.
 - Important wildlife migration corridors.

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

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

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

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⁵ These publications include, but are not limited to the following: ADF&G Regional Habitat Guides and related ADF&G publications. Note to DNR adjudicators: In the event that information is not contained in these publications, consult pertinent publications and coordinate with ADF&G and federal agencies with jurisdiction over species in question to determine seasonal windows and use patterns.

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

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

- DNR determines that the management unit in question does not possess those attributes characteristic of a Habitat designation as defined in the plan; or
- If DNR in consultation with ADF&G determines that the non-designated use can be made compatible and significant adverse impacts to the "Ha" area avoided with appropriate design, siting, and operating stipulations; or
- The project is found to be in the best interest of the state under state disposal decisions under AS 38.056.035(e) or similar department authorizations and significant adverse impacts are mitigated under Management Guideline A⁶.
- C. Allowing Uses Outside of Designated Fish and Wildlife Habitat Areas. Habitataltering uses will be sited consistent with the management guidelines in this chapter, and the management intent and guidelines in Chapter 3, and applicable statutes and regulations.
- **D. Habitat Manipulation: General Requirements.** Habitat restoration through water control, timber management practices, removal of pollution sources, or other measures may be used to improve habitat for fish and wildlife species where ADF&G determines that it is beneficial to the species or habitat and DNR determines that it is compatible with other primary uses.
- **E. Habitat Manipulation: Management of Invasive Plant and Animal Species.** The state shall manage its lands and waters to avoid the introduction of and reduce the spread of invasive non-native plants and animals, consistent with the requirements of 11 AAC 34. Although the strategic management plan for noxious and invasive plant species recognizes this as a statewide issue, in most instances this problem is best handled at the local level. The local Soil and Water Conservation District has a program in place that currently concentrates on surveying areas of infection and providing landowners with treatment options and Best Management Practices in an effort to manage these species. Contact them for more information.

⁶ Authorizations involving uses that have been determined to be necessary in the best interest finding but are inconsistent with plan designations and management intent or management guidelines require a plan amendment. See 11 AAC 55.030(f). See also Management Guideline R.

- **F.** Hatchery and Aquatic Farm Source Waters. To preserve the quality of an existing hatchery's water supply, land uses should be limited to those that reduce the risk of reducing water quality or quantity below that needed by the hatchery.
- **G. Water Intake Structures.** When issuing water rights for waters providing fish habitat, DNR and ADF&G will require that practical water intake structures be installed that do not result in entrainment or impingement of fish and will maintain instream flows needed to sustain existing fish populations. The simplest and most cost-effective technology may be used to implement this guideline.

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

- **H.** Alteration of the Riverine Hydrologic System. To the extent feasible, channelization, diversion, or damming that will alter the natural hydrological conditions and have a significant adverse impact on important riverine habitat will be avoided. If projects like this are proposed they will require a review and permit from the ADF&G Division of Habitat and other agencies.
- I. Threatened and Endangered Species. All land use activities will be conducted consistent with state and federal Endangered Species Acts to avoid jeopardizing the continued existence of threatened or endangered species of animals or plants, to provide for their continued use of an area, and to avoid modification or destruction of their habitat. Specific mitigations recommendations should be identified through interagency consultation for any land use activity that potentially affects threatened or endangered species. There are no known threatened or endangered species under either federal or state statute or regulation within the planning area. The U.S. Fish and Wildlife Service (USFWS), Division of Ecological Services, should be consulted on questions that involve endangered or threatened species of federal interest and the ADF&G for those listed by the state.
- **J. Eagles.** Authorizations or disposals that potentially affect bald eagles will be consistent with the state and federal Endangered Species acts and the Bald Eagle Protection Act of 1940 as amended. Applicable standards are drawn from a cooperative agreement signed by the U.S. Forest Service and the USFWS or such subsequent standards that may be promulgated. These standards, however, may not be adequate in all circumstances, and the USFWS may determine that additional measures are necessary. In addition, meeting the guidelines does not absolve the party from the penalty provisions of the Bald Eagle Protection Act; therefore, the USFWS should be consulted when activities may affect bald or golden eagles.

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

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

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

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

<u>Caribou</u>. Caribou are present throughout the mountainous terrain within the Parks Highway and West Alaska Range region. Except for a small portion of the southeastern part of the Kantishna region, which contains general range, they are generally absent from the Kantishna regions. Caribou are prevalent in the northern areas Lower Tanana Region. Within the Parks Highway and West Alaska Range region, they are distributed throughout the large of mountainous terrain situated south of the Japan Hills with this range extending south nearly to the Nenana River. Within this area, caribou are widely distributed and there are numerous areas that are important for calving and winter habitats. Authorizations in these areas are to use the same management requirements as those for moose calving and winter concentration areas, described above.

<u>Dall Sheep</u>. Dall sheep are present throughout the mountainous terrain within the Parks Highway and West Alaska Range region. Within the Parks Highway and West Alaska Range region, they are distributed throughout the mountainous terrain. Within this area, sheep are widely distributed and there are numerous areas that are important for lambing

rutting, and winter habitats. Authorizations in these areas are to use the same management requirements as those for moose/caribou calving, rutting and winter concentration areas, described above.

- L. Protection of Mineral Licks. Mineral licks identified within specific management units are used by significant numbers of wildlife primarily during the spring and early summer. Known mineral licks occur in the Parks Highway and West Alaska Range region and are identified within that region under management unit P-49. The regular use of these areas suggests that the licks play an important role in the life history of the animals that use them. These same areas may also have significant mineral values. Management Intent should protect the area around the licks for their wildlife value. Stipulations should be developed on a case-by-case basis, in consultation with ADF&G, for specific leases or permits. The stipulations should address the following: 1) The avoidance of direct and indirect impact on the mineral licks, the animal tracks leading to them and other areas of concentrated animal use that is associated with the mineral lick; 2) the method and routing of mining-related access to these areas.
- M. Trumpeter Swan Nesting Areas. In Trumpeter swan nesting areas, uses that would disturb a significant number of nesting swans or detrimentally alter their nesting habitat should be avoided. The siting of permanent facilities, including roads, material sites, storage areas, and other forms of permanent structures should be avoided within one-quarter mile of these known nesting sites. Surface entry should also be avoided within one-quarter mile of these nesting areas between April 1 and August 31. Both of these should be evaluated on a case-by-case basis. Some areas are more open and susceptible to noise and visual disturbances and therefore require larger protection areas. Leases or permits may require seasonal restrictions on activities to avoid disturbance to swans. Consult with ADF&G and USFWS to identify current or potential nesting habitat and to determine guidelines to follow and activities to avoid. The standards of Guideline N, 'Activities in Important Waterfowl Habitat', also apply. Refer to the management unit's 'Resources and Uses' section in the Resource Allocation Tables to determine if the presence of a nesting area is likely.
- N. Activities in Important Waterfowl Habitat. In important waterfowl habitat, activities requiring a lease, permit, or development plan, and producing habitat disturbance or high levels of acoustical or visual disturbance from sources such as boat traffic, vegetation clearing, construction, blasting, dredging, and seismic operations, should be avoided during sensitive periods such as nesting, staging, or brood-rearing periods. Where it is not feasible and prudent to avoid such activities, other mitigation measures may be required to avoid significant adverse impacts and the activity may be denied. If it is likely that a waterfowl concentration exists within the area affected by a potential project, consult with ADF&G and USFWS to identify areas of important waterfowl in addition to those identified in the management units in this plan and to determine appropriate mitigation or avoidance measures.

- **O. Fish and Wildlife Enhancement on State Lands.** Fish and wildlife enhancement activities on state lands, whether by ADF&G or other parties, will be consistent with the management intent for those lands. Enhancement activities likely to attract significant public use, including sport fishing use, will be designed and located to minimize the impact of additional public use on the existing recreation resources, including anchorages, campsites, and existing and intended wilderness values.
- **P.** Protection of Fish and Wildlife Resources Transportation Routes and Facilities. Important overwintering, calving, lambing, or mineral lick areas, fish and wildlife habitats in riparian areas, fish and wildlife movement corridors, important wintering areas, and threatened or endangered species habitat should be avoided in siting transportation routes unless no other feasible and prudent alternatives exist. Location of routes and timing of construction should be determined in consultation with ADF&G. Transportation corridors that intersect or cross fish or wildlife movement areas shall be equipped with appropriate crossing devices or structures to allow the free and efficient passage (in both directions) of the species using the corridor.
- **Q. Protection of Riverine Areas.** Riverine areas perform a variety of important functions related to recreation, habitat protection, and water quality/quantity maintenance. To the maximum extent feasible and prudent, the protection of these areas is important and DMLW and DOAg authorizations are to ensure the maintenance of these areas in any authorizations that may be issued. See Management Guidelines D, E, F, H, and I in the 'Shorelands and Stream Corridors' section in this Chapter for guidance and standards pertaining to riverine areas. These standards are to apply to authorizations issued by DMLW and the Division of Agriculture.⁷
- **R.** Protection of Resources and Balancing of Impacts with Potential Development. DNR, in its consideration of resources and in the management of state land, shall consider the impacts of such use upon fish and wildlife populations and human uses of those populations, habitat and soil degradation, and upon other forms of use that may occupy the area that is under consideration in an authorization. Uses that are not compatible with these uses and resources are to be made compatible through the use of stipulations. The ability of the Department to manage the subsequent activities that may result from the issuance of an authorization is to be taken into consideration in the adjudication of an application that requires a written determination by DNR.

It is recognized that the use and development of resources will create some level and area of impact. Nonetheless, the state may determine through its authorization processes that the development of specific surface or subsurface resources is appropriate, even with some level of impact, and may approve such developments, with appropriate stipulations. It is also

⁷ Separate riparian standards under AS 41.17.115 and .118 apply to timber sales conducted by the Division of Forestry on state land. The riparian standards followed by DMLW and DOAg are similar to those followed by DOF.

recognized that the development of specific subsurface resources may take precedence over surface uses. Material site development and construction access may also take precedence in certain instances.

- **S.** Conflicts with Traditional Uses of Fish and Game. The harvesting of fish and game resources is an important part of the subsistence lifestyle within the planning area, with concentrations of this activity occurring in native villages generally along the Yukon River. The underlying integrity of the ecological system and traditional way of life within the planning area is to be maintained to the maximum extent practicable. DNR decisions are to carefully consider the effects of a proposed project or activity upon these uses and resources, and authorizations are to ensure that adverse impacts are avoided, minimized, or mitigated consistent with the requirements of this section of Chapter 2 and, specifically, with Management Guideline A within areas designated or co-designated Habitat.
- **T. Other Guidelines Affecting Fish and Wildlife Habitat.** Other guidelines may affect the protection and management of fish and wildlife habitat. See other sections of this chapter.

Forestry

The forest resources of the YTAP planning area are a mixture of White spruce and Paper birch in the upland areas. Balsam poplar is commonly found in riparian areas. Paper birch is the dominant species in this boreal forest type. White spruce has commercial value for sawlogs, biomass, fiber, and woodchips. The commercial value of the Paper birch is for biomass, fiber, and wood chips with some sawlog value in birch which contains little or no defect. Spruce and birch support a significant personal use firewood harvest by residents of the Tanana Valley.

The Tanana Valley State Forest occupies significant portions of the planning area, chiefly near Nenana. The TVSF, occupying over 1.8 million acres of state land within the Tanana Basin, is managed under the TVSF Management Plan, updated in 2001. The YTAP recommends a number of additions to the TVSF, principally areas similar in character to the lands within the TVSF and generally adjacent to it. These areas are more effectively managed under the TVSF. If these areas are, in fact, determined to be appropriate as additions to the TVSF and are included, there is often a time gap between the date of their inclusion in the TVSF and the time that the TVSF Management Plan is updated and readopted. In this circumstance the additions to the TVSF are to be managed according to the management intent of the nearest management unit in the 2001 TVSF Management Plan. In the event that these areas are not added to the TVSF, they remain subject to the requirements of the YTAP.

The recommendations that follow implement constitutional and statutory policies to develop the state's renewable resources, making them available for maximum use, consistent with the principle of sustained yield and with the overall public interest. The primary purpose of the timber management program is timber management that provides for the production, utilization, and replenishment of timber resources while allowing other beneficial uses of public lands and resources. Forestry designated lands are to be managed by DNR as a 'working forest' consistent with the constitutional mandate to encourage the use and development of state's resources, including renewable resources. A 'working forest' refers to actively managed forest lands that provide wood for personal and commercial use, while protecting fish and wildlife habitat, providing the public with recreation and other multiple use of state land, and maintaining public benefits such as clean air, land, and water.

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 $^{^{8}}$ It was revised in 2001 and is not scheduled for modification for some time. Such plans are usually revised every 15-20 years.

Goals

Personal Use Timber. Provide timber to meet the needs of Alaskans. This program will be provided on a demand basis when the operational costs of administering this program are satisfactory.

Economic Opportunities. Provide for economic opportunities and stability in the forest products industry by allowing the use of state uplands in areas designated Forestry. Also, to benefit the state's and borough's economies by providing royalties to the state from stumpage receipts, and adding to the state's economy through wages, purchases, jobs, and business.

Support Timber Industry. Continue to perform reviews of private timber harvests for adherence to the Alaska Forest Resources and Practices Act and provide the timber industry with information, technical expertise, and management guidance for utilizing forest resources.

Wildland Fire Suppression. DOF shall continue to provide wildland fire suppression within the planning area consistent with the requirements of the Alaska Interagency Fire Management Plan.

Forest Health. To improve forest health and vigor by harvesting and replacing mature birch stands with healthy new stands of regrowth, while protecting and maintaining other resource values.

Wildlife Habitat Management. DNR will seek to create, enhance and maintain wildlife habitat consistent with forest management by providing a mosaic of forest stand areas, reflecting the natural range of species and habitat diversity, for the variety of wildlife species that live in the planning area.

Provision of Biomass for Public Purposes. DNR shall support actions by to develop sustainable sources of energy for meeting community needs from renewable woody biomass obtained from state forests or other state lands that are suitable for this purpose and consistent with state and federal permitting standards. Wherever feasible and practical, the by-products of forest management practices involving harvest or land clearing are to be utilized for biomass.

Management Guidelines

A systematic program of scheduled timber harvests is appropriate within the planning area within those areas designated Forestry on general state land as well as within the TVSF itself. Timber management activities are subject to the following management guidelines. Another important component of the state forestry program within the planning area is fire

management. A management guideline is included that describes the broad aspects of this program. The implementation of the state fire management program is identified and controlled in detail by the Alaska Interagency Fire Management Plan.

A. Timber Harvest Guidelines.

- 1) All timber harvest activities must be compatible with the general management guidelines of this section and with the management intent statements and land use designations identified in specific management units of this plan found in Chapter 3. Systematic timber harvest programs are to be conducted in areas designated Forestry. Forest harvest operations conducted on a parcel of state land intended for subdivision development or agriculture by DNR can precede actual construction. However, these operations must be consistent with the subdivision plan or Farm Conservation Plan for the parcel; consultation with DMLW is required before commencing operations.
- 2) Timber harvest operations will be conducted in accordance with the stipulations in the Forest Land Use Plan, the Five Year Schedule of Timber Sales, the Alaska Forest Resources and Practices Act (AS 41.17 & 11 AAC 95), the Alaska Land Act (AS 38.05 & 11 AAC 71), and other pertinent state guidelines and laws. The Forest Practices Act provides statewide policy and regulatory authority for managing forestry related activities. The specific layout and other site-specific requirements of a timber sale is addressed through a Forest Land Use Plan (FLUPs), which is prepared prior to any commercial timber harvest or sale (AS 38.05.112).
 - FLUPs developed for timber sale or harvests in the planning area are to be consistent with the Forestry Management Guidelines of this Chapter and the Management Guidelines specified for particular parcels in Chapter 3. FLUPs shall consider, in their preparation, the sensitive resources and wildlife, or any other significant factors, identified in the Management Guidelines for a parcel.
- **B. Timber Salvage from Rights-of-Way.** Timber with commercial or personal use value should be salvaged from lands that are to be cleared for other uses such as roads, transmission lines, material sites, mining, and habitat enhancement projects (AS 41.17.083). The DMLW Regional Manager shall determine the amount and kind of material that is to be salvaged and shall coordinate with DOF on timber salvage operations having commercial value.
- **C. Personal Use Wood Harvest.** When forested lands are available near communities and where personal use harvest is consistent with other purposes for which the land is being managed, DOF may provide wood products for personal use. This program will only be undertaken, however, if it can be effectively and efficiently administered by DOF. In areas designated for settlement, personal use forestry permits may be issued by Division of Forestry after consultation with DMLW's Land Sales Section to assure compatibility with future land sales.

- **D. Sustained Yield of Forest Resources.** Forestland will be managed to guarantee perpetual supplies of renewable resources to serve the needs of all Alaskans for the many products, benefits, and services obtained from them. The annual allowable harvest will be calculated using the area control method and the units designated Forestry or co-designated Forestry are to be used for the basis of this calculation. It is appropriate to include the estimates from the management units identified in the YTAP with similar sustained yield estimates for the TVSF, to determine estimates of total allowable (annual) harvest within the DOF planning area.
- **E. Salvage of Damaged Trees.** Trees damaged due to fire, wind throw, insects or disease, or other causes may be salvaged on all land use designations unless management intent statements for specific management units in Chapter 3 specifically prohibit salvage harvest. A Forest Land Use Plan, if required, will provide the rationale for conducting the salvage harvest and describe how the action will not conflict with the management intent for each management unit.
- **F. Fire Disturbance.** The intent of fire management is to identify where wildland fire can be allowed or managed fires can be used to reduce costs of fire suppression, reduce the risk of damaging fires, and maintain the natural diversity and productivity of forest stands. Fire suppression will be a priority near residential areas or other forms of active land use, high value recreation use areas, and areas with infrastructure development. Consistent with AS 41.15.010 and AS 41.15.020, DOF will protect forest resources from destructive agents commensurate with the values at risk identified in the Alaska Interagency Fire Management Plan. The Fire Management Plan indicates where suppression operations are likely to occur; generally, such operations are to be limited to decreasing the long-term risk of damaging fires and maintaining the natural diversity of forest stands, stand ages, and habitat types. Where soil erosion in not a concern, habitat enhancement techniques may also be appropriate. Ground scarification to ensure exposure of mineral soil, a substrate essential to the natural regeneration of early successional browse species, may also be appropriate for use. Specific fire suppression levels are identified in the Alaska Interagency Fire Management Plan.
- **G.** Wildlife Habitat. Forest management can be an important tool for improving wildlife habitat. DOF will consult with ADF&G's local biologist during the planning stage of timber harvest layout and in the preparation of the Forest Land Use Plan in order to receive guidance on wildlife habitat enhancement opportunities. Trees and vegetation may be manipulated by cutting, crushing, harvesting, or burning to provide or improve wildlife habitat.
- **H.** Additions to the Tanana Valley State Forest. This plan recommends that consideration be given to adding areas of state land that have significant forest resources to the TVSF. These areas have important timber resources, are similar in character to parcels within the TVSF, and, typically, adjoin areas that are currently part of the TVSF. State forests are multiple use in terms of overall management, providing for areas of public recreation and the protection of key habitat areas, while providing a more vigorous approach to the management of forest stand resources as 'working forests' within the western portion of the Tanana Basin.

This recommendation applies to those management units that are designated Forestry or codesignated Forestry and that include the recommendation for inclusion in the TVSF in the unit's management intent statement. (There are areas that are designated Forestry or codesignated Forestry in the YTAP but are not recommended for inclusion in the TVSF. These areas are usually distant from current areas of the TVSF.) Management units recommended for inclusion in the TVSF are identified in Map 2-1 and Table 2-1 below.

Note: Should areas be added to the TVSF, it is likely that it will be some time before these newly acquired areas are included within an updated TVSF Management Plan. During this transition period, the management intent and management requirements of the closest management unit in the TVSF shall apply.

- **I.** Maintenance of State Land Timber Base. Land designated or co-designated Forestry is to be retained by the state and is not to be converted to another designation. If the latter is considered necessary, a public hearing is to accompany the plan amendment. It is the policy of this plan that such conversions not be considered until the plan is revised through a comprehensive plan revision process.
- **J.** Coordination with Borough Forest Management Plans and Programs. Prior to the preparation of the (biennial) Five Year Schedule of Timber Sales and the development of a Forest Land Use Plan, DNR should coordinate with local government and major land owners in order to obtain maximum efficiencies and reduce management conflicts over the harvesting of timber and land use.
- K. Timber Harvest in Areas Designated Settlement, Agriculture, Materials, Coal or **Minerals.** Timber harvests are considered appropriate in areas designated Settlement if intended to support the costs of subdivision development, provide access to the subdivision, or provide ancillary facilities subject to the other requirements of the Forestry standards in this Chapter. Timber harvests may also be appropriate for purposes of forest health or the clearing of right-of-way. The elective harvesting of timber before subdivision development is considered appropriate, after consultation with the Land Sales Section and if authorized by the Regional Manager, NRO. Similarly, the harvesting of timber at material sites may be appropriate, after consultation with the Regional Manager, NRO. Timber harvests are also considered appropriate in areas designated Agriculture if the timber harvest is identified as an appropriate use or activity in the Farm Conservation Plan that is approved prior to agricultural production. Consult with the Division of Agriculture prior to the initiation of timber harvest in areas designated Agriculture. Such harvests are also considered appropriate in areas designated Minerals, Coal, or Materials if the use is consistent with the submitted plan of operations or as may be authorized by the Chief, Mining Resources Section, DMLW. Consult with the Regional Manager, NRO, prior to mineral or coal development.
- **L. Other Guidelines Affecting Forestry.** Other guidelines will affect management practices for timber development support facilities and forestry. See other sections of this chapter.

Table 2-1: Lands to be Considered for Legislative Designation as State Forest Management Units

Region	Unit No.	Acres
Lower Tanana Region	T-41	34,361
Kantishna Region	K-26	17,897
Kantishna Region	K-31	2,547
Parks Hwy / W. Alaska Range	P-01	2,211
Parks Hwy / W. Alaska Range	P-03	4,838
Parks Hwy / W. Alaska Range	P-11	514
Parks Hwy / W. Alaska Range	P-30	4,300
Parks Hwy / W. Alaska Range	P-41	4,658
Parks Hwy / W. Alaska Range	P-48	18,813
	Total:	90,139

Map 2-1: Lands to be Considered for Legislative Designation as State Forest

Reservations of Water

Goal

Reservation of Water. Maintain water quantity and quality sufficient to protect the overall ecosystem integrity and as well as the human, fish, and wildlife resources and uses of the region.

Management Guidelines

- **A.** Stream Uses to Consider for Instream Flow Reservation (General). Streams, lakes, and other waterbodies may be considered for reservations of water under AS 46.15.145. Such reservations are intended to maintain the rate or volume of flow for one or a combination of purposes: 1) protection of fish and wildlife habitat, migration, and propagation; 2) recreation and park purposes; 3) sanitary and water quality purposes; and 4) navigation and transportation purposes.
- **B. Priorities.** Instream flow reservations have been established on the Wood River and Nenana River (see http://dnr.alaska.gov/mlw/mapguide/wr_intro.htm). Proposals for new developments requiring substantial water use or uses of water or that have the potential to negatively impact instream flows needed to produce fish, sustain water quality, provide for navigation, and/or recreation, should include an evaluation of the need for an instream water reservation or other forms of instream flow protection.
- **C. Process for Determining Reservations.** Applications for instream flow reservations are submitted to the Department for adjudication following the procedures identified in 11 AAC 93.141-147. In general, these procedures estimate the quantity of water seasonally available and review the amount of water already appropriated in consideration of the requested instream flows or levels of water for the purposes to be protected.
- **D.** Other Guidelines Affecting Instream Flow. Several other guidelines will affect instream flow. See other sections of this chapter.

Material Sites

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 long-term economic needs of the area for material resources. Material sites may be necessary and are considered appropriate for the construction and maintenance of roads.

Management Guidelines

A. Preferred Material Sites⁹. When responding to a request for a material sale or identifying a source for materials, the highest priority should be given to using existing material sources. Using materials from wetlands or lakes should be avoided unless no feasible public upland alternative exists. As a general policy, sales or permits for gravel extraction should only be permitted in known fish spawning areas or within 100 feet of known spawning areas with ADF&G approval. Material sites shall be maintained in public ownership unless the management intent language for a specific management unit indicates that it may be appropriate for alternative uses. To minimize construction and maintenance cost of transportation facilities, material sites should be located as near as is feasible to where the material will be used ¹⁰.

B. Maintaining Other Uses and Resources When Siting, Operating or Closing Material Sites. The disposal of materials should be consistent with the applicable management intent statement and management guidelines of the plan. In some instances, areas occupied by a material site may be appropriate for reuse for settlement or another form of development. When this occurs, this is noted in the 'management intent' of the affected unit and reuse of the parcel for the intended use is appropriate. If this occurs, the reclamation plan shall take this into consideration and not preclude possible reuse.

C. Land Sales in Areas of High Material Potential. Generally, if a settlement area contains sand and gravel deposits, rock sources or other similar, high value material resources, a material source area should be identified during subdivision design and retained in state ownership for future use.

⁹ Material sites are the sites where materials are developed. They are generally located within or near transportation corridors.

¹⁰ Consultation of the following reference is advised: North Slope Gravel Pit Performance Guidelines. McLean, R.F. 1993. Alaska Department of Fish and Game, Habitat and Restoration Division, Juneau, AK, Technical Report No. 93-9, 97 pp. Document available for download at http://www.adfg.alaska.gov/static/home/library/pdfs/habitat/93_09.pdf

- **D.** Avoidance or Minimization of Impacts. Material extraction sites are to be sited so that they avoid or minimize impacts, including but not limited to noise and dust, to adjacent residential or institutional areas (i.e., schools).
- **E. Screening and Rehabilitation.** Where topographic and vegetation 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. Material extraction sites adjacent to the Parks Highway shall provide a vegetation buffer of 75' or more. Rehabilitation of the site shall follow the requirements of AS 27.19.020 and 11 AAC 97.250.
- **F. Protection Area Adjacent to Anadromous or High Value Resident Fish Waterbodies.** Where topography and vegetation allow, a riparian buffer of at least 100' shall be provided adjacent to anadromous waterbodies. The adjudicator is to review the DMLW on-line procedures pertinent to riparian buffers and Management Guidelines B, D, E and H in the 'Shorelands and Stream Corridors' section of this chapter prior to issuing an authorization or disposing of an interest in state land to determine the amount of area to protect and the type of management stipulation to impose.
- **G. Coordination with Boroughs.** Prior to granting authorizations for material sales, the DNR should coordinate with the North Star and Denali Boroughs to determine applicable local land use requirements.
- **H. Development of Material Sites.** Materials sites are surface resources that occur in specific geologic locations. It is recognized that the use and development of material resources will create some level and area of impact. Nonetheless, the state may determine that the development of material resources is appropriate, with appropriate stipulations. It is also recognized that the development of specific material resources may take precedence over surface uses. Material sites are necessary to and are a type of use that is often associated with the construction and maintenance of roads, and therefore an essential component of the road construction process.
- **I.** Other Guidelines Affecting Materials. Other guidelines will affect the use of material resources. See other sections of this chapter.

Recreation and Scenic Resources

Goal

Recreation Opportunities. Lands will be provided for accessible outdoor recreational opportunities with well-designed and conveniently located recreational facilities. In addition, undeveloped lands should be provided for recreation pursuits that do not require developed facilities. These opportunities shall be realized by:

- providing recreation opportunities on state land and water that serves multiple purposes such as habitat protection, timber management, and mineral resource extraction;
- assisting communities through cooperative planning, conveyance of state lands, and grants-in-aid for parks and trails within population centers;
- encouraging commercial development of recreational facilities and services through concession contracts, land sales, leases, and permits where public recreation needs can most effectively be provided by private enterprise, while minimizing environmental impacts and conflicts with the existing users of an area;
- protection of recreation resources including public access, visual resources, fish and wildlife important for recreation, and, where appropriate, the isolation and unique wilderness characteristics of the planning area;
- management of recreation to minimize user conflict, provide for a quality experience for all user groups, and protect the natural values and attributes of the area within which the recreation occurs; and,
- protection of ecosystems and habitat from damage caused by inappropriate recreation use.

Management Guidelines

- **A.** Coordination with Other Landowners and Users of an Area. Recreation management, including the location and management of recreation facilities, will take into account the current and projected future uses of lands owned by local governments and private landowners, and should strive for compatibility with adjacent current and projected uses.
- **B.** Roles of Different Public Land Owners in Providing Public Recreational Opportunities. Generally, the state's role is to retain and manage land supporting recreational opportunities of regional or statewide significance. The state and federal governments are most capable of providing recreational opportunities that require large land

areas, while local government is generally best suited for providing and managing community recreation opportunities. To recognize local government's role in providing community recreation needs, the state may transfer state land designated Public Recreation-Dispersed (Rd) or state recreation sites within or near existing communities, if the municipality has parks and recreation powers and if this action is in the overall best interest of the state (AS 38.05.810). The selection of these sites shall be agreed to by local government and the state, and shall be contingent on the local government's commitment to develop and maintain the recreation uses, facilities, and values of these areas.

- **C. Public Use Sites.** Uses that adversely affect public use sites or areas should not be authorized. Uses that are made available to the public, recreational or other sites (such as airstrip development or docks) may be authorized if consistent with the management intent for the public use site or area and if there is a demonstrated public need.
- **D.** Private Commercial Recreation Facilities and Operations on State Land. Lodges or other private commercial facilities and operations designed to be run as or to support private commercial recreation facilities may be authorized if the facility or operation fulfills the conditions outlined in this section, conforms to the requirements of AS 38.05.850, AS 38.05.070 and .075 or AS 38.05.073, or a management plan is prepared in accordance with AS 41.21.302(c) authorizing the facility.

If so authorized, the facility or operation should be sited, constructed, and operated in a manner that creates the least conflict with natural values and existing uses of the area. The commercial facility and the use it generates should avoid significant adverse impacts on fish and wildlife habitat and existing uses of an area. For facilities supporting recreational fish and wildlife harvest, ADF&G should be consulted on the possible effects of increased harvest on fish and wildlife resources, and on established commercial, recreation, and subsistence users.

E. Commercial Recreation Leasing Processes. There are several processes for leasing state land for commercial recreational facilities under the following Alaska Statues (AS): AS 38.05.070, 38.05.073, 38.05.075, and 38.05.810. The first three are used for commercial recreation facilities and the last is used for not-for-profit entities that provide some type of recreational use or service.

In particular, AS 38.05.073 is designed for creating recreational facility leaseholds. This statute requires that the regional land use plan identify areas suitable for recreational facility leasing. Given the broad scope of the YTAP, the determination of particular sites is impractical, although such uses are generally appropriate within most plan designations, except Agriculture, Forestry, and Water Resources. Authorizations under AS 38.05.073 must evaluate the adequacy of the proposed recreation facility, and a final site determination and best interest finding must support this determination. Any amendments to the YTAP to accommodate a .073 commercial lease shall be reviewed by the Director of DMLW prior to or concurrent with the adjudication process.

- **F. Permits, Easements, and Leases Adjacent to Recreation Facilities.** Permits, easements, and leases may be issued adjacent to recreation facilities if the land manager determines that the two uses can be made compatible by design, siting or operating guidelines; or if the land manager determines there is no feasible and prudent alternative for the activity. This guideline also applies to sites reserved for future recreation facilities. The land manager's determination will be made after consultation with the facility manager.
- **G.** Management of Recreation Use on State Lands. To the extent provided by law, DNR is to manage recreation use and activities to be enable a variety of uses and vehicle types, while ensuring that adverse impacts to fish and wildlife species and habitats are avoided or minimized, and to avoid the creation of user conflicts and if in existence, to minimize their impact.
- **H. Scenic Areas of Exceptional Value.** To the extent feasible and prudent, areas of exceptional scenic value are to be retained by the state or protected through the use of easements, setbacks, or other management techniques. Authorizations issued by DNR shall consider scenic values and such areas during the process of adjudication, and if found to be in the state's best interest, should retain or protect these areas through appropriate stipulations or management requirements.
- **I.** Consultation with ADF&G. Consult with ADF&G in the siting of facilities where fish and wildlife species or important habitats are likely to occur.
- **J.** Other Guidelines that Affect Recreation, Tourism, and Scenic Resources. Other guidelines will affect recreation, tourism, and scenic resources. See other sections of this chapter.

Settlement

Background

Residential development on state land within the planning area over the past 25 years has been relatively modest, with most of the growth occurring along the Parks Highway and along the major rivers, especially the Nenana. Near and within community areas, this growth has predominately involved pre-survey lots, created through state subdivisions. Most of the lots created in this manner have been conveyed out of state ownership, either to individuals, disposal to borough and cities under the Municipal Entitlement program, or disposals to the University of Alaska or the Mental Health Trust. In the more remote areas, much of the development has occurred in the areas east of the Nenana River in generally flat areas or adjacent to the Parks and Elliot Highways, with some development also occurring adjacent to larger streams in the Kantishna region and adjacent to the larger lakes in this region. A mix of settlement types have occurred in these areas; pre-surveyed lot are generally common adjacent to lakes and to some streams, while remote settlement forms occupy more remote terrain on less desirable land. In general, most of the pre-surveyed lots have been conveyed out of state ownership, primarily to individuals but also to the Mental Health Trust as part of the settlement of litigation that occurred in the early 1990's. Residential development in remote sales areas has been less significant, reflecting the relatively remote locations of these settlement areas and the presence of less desirable conditions. In comparison to the growth that has occurred around the Fairbanks area and South-central Alaska, especially within the Susitna Valley, this growth can be characterized as modest.

It is likely that residential development will continue in the next 25 years, although it is probable that the amount of this growth will be somewhat less than in previous periods, reflecting the modest demand for remote homesites and the fact that the more desirable areas of residential development have already been occupied. Nonetheless, continued growth is likely to occur along the Parks and Elliot Highways and at the more desirable sites in remote locations, especially adjacent to lakes, streams, and areas having scenic views. The dream of having a cabin in a remote part of Alaska will continue to drive the demand for remote homesites.

The Settlement designations in the planning area total approximately 619,864 acres or about 7% of the total state land inventory of this area. This is about the same amount of land in the Settlement designation as in the 1985 Tanana Basin Area Plan within the three regions that are now part of the YTAP plan. Settlement areas primarily occur in the more accessible and better drained uplands adjacent to the Parks and Elliot Highways, in areas east of the Nenana River, and at the more desirable locations in remote areas, principally at lakes, streams, areas having scenic views.

The application of the Settlement designation to a specific parcel resulted from the consideration of a number of factors. It was primarily based on whether it had reasonable access by road, water, or air, consisted of topography that would be suitable for development, and posed minimal conflict with recreation, scenic values, important fish and wildlife resources, or resource development. Compatibility with adjacent land uses and the plan designations used herein were also considered.

It should be noted that the Denali and Fairbanks North Star Borough has developed and will continue to develop local comprehensive plans for specific parts of the Borough. These are intended to identify preferred land use patterns and development stipulations. DNR reviews these plans in the course of developing management plans or area plans, and often makes use of their recommendations. However, while community comprehensive plans can make recommendations for state lands within their planning areas, they cannot establish land use designations or other planning requirements for state land. State land use designations are decided on a regional basis through the state planning process and local plans do not supersede state plans for the use of state lands.

Goals

Private Land Ownership. Provide suitable public land for transfer to private ownership for settlement purposes. DNR will attempt to satisfy three settlement categories within the planning area:

- 1) Seasonal residences for recreation. DNR will offer land suitable for seasonal recreation use. This land will be provided as demand warrants, subject to the availability of funding. This category of land disposal is intended to provide land, often in remote locations, for recreational needs. No public facilities and services are intended to be provided.
- 2) Year-round residences for community expansion. DNR will offer accessible land suitable to meet the needs of existing communities. This category serves people whose principal place of residence and work is, or will be, in the area of the disposal. It also includes land disposals of commercial and industrial land to accommodate the expansion needs of communities. This land will be provided as demand warrants, subject to the availability of funding.
- 3) Industrial or commercial development. DNR will sell, lease, or protect for future use suitable land for private commercial and industrial uses. Within the YTAP planning area most land designated Settlement is intended for residential use. Relatively few parcels are suitable for possible commercial or industrial development and these are indicated in the Resource Allocation Table. If DNR sells the land, the timing of this disposal will depend on market demand and adequate funding.

Community, Social, and Aesthetic Values. In designing future disposals, DNR will maintain compatibility with the cultural lifestyle and aesthetic values of residents and users, and minimize undesired impacts on those values while considering the needs and demands of all state residents.

Protection of Critical Recreational Areas, Environmental Resources, and Habitats.

Sensitive environmental features, habitat resource areas, and areas (or corridors) used by local residents for recreation purposes will be taken into consideration in subdivision design and subdivisions should be developed to protect or maintain these features. Vegetated wildlife migration corridors, riparian buffers, and retained open space should also be considered when there is also a high value for fish and wildlife resources in the areas. Subdivisions should be developed to protect or maintain these features. Refer to the 'Shorelands and Stream Corridors' section of this chapter for guidance on the management of riparian areas.

Fiscal Impacts. Land disposals (not including remote settlements) should be sited and planned to minimize the costs of infrastructure and other services resulting from settlement. Disposals should be focused on areas of existing settlement; areas along the road system or a waterway that can be easily accessed by water transport; or areas where service requirements may be provided by local government or community organizations. These requirements are not pertinent to a state remote settlement disposal since these occupy areas that are remote and are of limited density and the provision of services is not to be expected or intended.

Coordination with Local Governments and Landowners. Where state land adjoins Borough land and where both areas are designated for Settlement, consideration should be given to the coordination of land disposal programs in order to achieve economies of scale and reduce infrastructure costs. Coordinate state land offering programs with similar programs of local governments and major landowners to best achieve common objectives.

Management Guidelines

A. Planning and Coordination.

- 1) **Competition.** The state may compete with the private sector or local governments if necessary to satisfy demand, provide market choice, or moderate unreasonably high prices.
- 2) Local Plans. DNR will comply with provisions of the Borough comprehensive plan and zoning ordinance (if applicable) regarding the location and density of land development except to the extent that local requirements are inconsistent with an overriding state interest.

- 3) Coordination with Local Governments. Where state land adjoins Borough land and where both areas are designated for Settlement, consideration should be given to the coordination of land disposal programs in order to achieve economies of scale and reduce infrastructure costs.
- 4) Pacing. Settlement offerings may be phased over 20 years, the life of this plan. The timing and extent of disposals will depend upon anticipated demand, availability of funding, the rate of community expansion, the availability of or costs to provide necessary infrastructure, and the particular land requirements of such expansion. Another factor may be whether the disposal will generate a demand for services that cannot be reasonably expected to be met by local government or community organizations.
- 5) Areas Designated General Use. The large areas of state land that are designated General Use are generally not suitable for development during the planning period. Most General Use areas are remote and generally unsuitable for residential development because of the presence of adverse topography, drainage, and extensive areas of wetlands that adjoin these areas. This makes the uplands within the General Use areas difficult to develop because of the costs and difficulty of road construction in the adjacent wetlands. For these reasons, residential development during the planning period in areas designated General Use is considered generally inappropriate except in those areas that adjoin parcels designated Settlement, where road access has been provided to adjoining properties, or for remote land disposals that are not dependent upon access.
- 6) Ensure Access to Remote Settlements. Because these types of settlement in areas are almost always distant from infrastructure, it is generally not practicable to identify and develop access corridors¹¹ to such areas, whether or not they are adjoined by state land or land under other ownership. However, in those limited instances where access corridors can be identified and economically developed, access should be provided. In this circumstance, it is intended that this access be accommodated even if plan designation(s) differ from that of Settlement.
 - As part of the development of remote settlement areas, DNR should consider the provision of staging areas, parking areas, and/or trailheads in order to accommodate landowners parking vehicles and other equipment while accessing their remote parcels. ADF&G should be consulted to ensure there will be no habitat associated impacts from parking areas or trailheads.
- 7) Maintenance of State Settlement Land Base. Areas designated Settlement in the area plan are intended to provide a land base for DNR's long term land disposal program and are not to be converted to other land use classifications. Departures from this standard will require a plan amendment and a public meeting.

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¹¹ Meaning roads or trails.

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. YTAP designates certain lands for settlement and provides guidelines for land sales and, in certain instances, will designate certain management units for remote staking. The designation of remote staking areas in this plan is made when an established pattern of this settlement form has already occurred; for this reason, additional development, to achieve compatibility in land use type, is appropriately the remote staking type. In other instances, the plan does not provide a recommendation for a particular form of settlement. This situation exists when it is equally probable that one or the other, or both forms, of settlement can be developed within a management unit. Many management units are quite large and could accommodate both types of settlement. In these instances the plan is silent as to type of settlement and the decision on type is to be made in the context of the Preliminary Decision and Final Finding and Decision.

C. Protection, Management, and Enhancement of Other Resources.

- 1) Protect Life and Property. DNR should design and develop subdivisions to protect life and property. Sensitive areas such as wetlands or potentially dangerous areas such as areas with unstable soil, riverbanks subject to active stream erosion, or within floodways or floodplains, should be avoided in subdivision design or protected by retaining these areas in state ownership or restricting their use through developmental reservations or restrictions. Wildland fire risks in areas with heavy fuels such as black spruce need to be considered during early decision-making on subdivision development. DMLW should coordinate with state and/or federal fire suppression agencies early in the process of developing a best interest finding and in the identification of potential settlement areas. Easements or plat notes can be used for this purpose in lieu of retaining land in state ownership.
- 2) Protect and Manage Valuable Environmental Areas. The state will provide, in its design of land disposals, an open-space system to preserve important fish and wildlife habitats and natural areas such as shorelands, freshwater wetlands, and riparian lands. As part of this design process, consideration should also be given to the connectivity of habitat types as well as access to fish and wildlife resources. Where appropriate other design and management approaches may be used; these may complement an open space system or substitute for it, although preference should be given to the provision of an open space system.
 - These areas should 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 protected to provide adequate terrestrial habitat.
- 3) **Priority of Public Uses in Stream Corridors.** Within stream corridors, DNR will set a higher priority on protecting public use values than on providing opportunities for private ownership of land. Disposals near streams with important recreation value will be designed to protect riparian habitat and protect access to and along the stream for fishing, hiking, camping, and other recreational activities. Disposals near streams

that have important fish or wildlife habitat or wildlife value will be designed to insure the protection of the habitat or wildlife. In certain limited cases, it may be appropriate to provide land for private use, but such an action must be in the overall best interests of the state. Before lands are disposed of in stream corridors, DNR will assess existing and projected public use needs associated with the stream corridor, in consultation with other affected agencies and the public. Depending on the context, DNR may either protect these areas through retaining land in state or public ownership or through the imposition of a reservation of an interest in land for the maintenance of riparian values and access.

In making determinations as to whether a riparian area should be protected and the manner of that protection, adjudicators are to consult the DMLW on-line procedures for riparian areas and Management Guidelines B, D, and H of the 'Stream Corridors and Shorelands' section of this chapter. These procedures emphasize retaining such areas where a significant public interest or value exists, which is often common in riparian areas.

- 4) Protect and Enhance Scenic Features. DNR will design and develop subdivisions to protect or maintain unique geologic and scenic features such as cliffs, bluffs, or waterfalls. These areas should be avoided altogether or protected in subdivision design and development through the use of reservations or plat restrictions. Where scenic views exist, lots should be oriented to this feature.
- 5) Mineral Closing Orders. There are a variety of existing mineral closing orders that affect state land within the planning area, many of which occur on state land designated for Settlement. Although the YTAP does not recommend any additional mineral closing orders, the plan includes a Leasehold Location Order that is intended to affect areas currently classified Settlement that do not now have a mineral closing order as well as all new areas of Settlement identified in this plan revision. Many state subdivisions have been staked with mineral claims, the purpose of which appears to be to prevent the development of a settlement area. This practice has significantly affected state land disposals in the Northern region and continuation of this practice will do fundamental damage to that program in this part of the state unless some action is taken. The Leasehold Location Order will permit mining to occur while precluding the issuance of nuisance claims. See Appendix D for the Leasehold Location Order. The management intent section of parcels designated Settlement should be consulted to determine if a management unit is affected by the leasehold location order recommendation.
- 6) Timber Harvest in Areas of Settlement or Agriculture. Timber harvests are considered appropriate in areas designated Settlement if intended to support the costs of subdivision development, provide access to the subdivision, or provide ancillary facilities subject to the other requirements of the Forestry standards in this Chapter. Timber harvests may also be appropriate for purposes of forest health or the clearing of right-of-way. The elective harvesting of timber before subdivision development is considered appropriate, after consultation with the Land Sales Section and if authorized by the Regional Manager, NRO. Timber harvests are also considered

appropriate in areas designated Agriculture if the timber harvest is identified as an appropriate use or activity in the Farm Conservation Plan that is approved prior to agricultural production. Consult with the Division of Agriculture prior to the initiation of timber harvest in areas designated Agriculture.

7) Protect and Enhance Recreational, Educational, and Cultural Opportunities. DNR should determine the need for and retain appropriate areas for outdoor recreation, hunting, fishing, trails, campsites, boat launches, historic sites, and areas for scientific study. Areas for intensive and dispersed use will be preserved.

D. Design.

- 1) Provide State Land for Important Environmental and Resource Development Purposes. DNR, as a general policy, should retain appropriate green belts, public-use corridors, water supply areas, riparian buffer areas, wildlife migration corridors, public access sites, material sites, roads and other public facilities, as well as other open space to create a desirable land use pattern in developing areas. Where appropriate other design and management approaches may be used; these may complement retained areas or substitute for them.
 - Generally, however, subdivision design should provide for the creation of an open space system designed to protect or maintain important uses and values. Depending on the context, DNR may either protect these areas through retaining land in state or public ownership or through the imposition of a reservation of an interest in land for the maintenance of riparian values and access or through the use of a stipulation (i.e., 'subject to').
- 2) Cost of Public Services. In accordance with AS 38.04.010, DNR will focus year-round settlement to 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. Wildfire management costs that result from settlement will be considered and minimized to the extent feasible.
- 3) Ensure Access. DNR should ensure that legal, practical public access (roads, trails, or other options most appropriate to the particular situation) is identified and reserved to and within land offerings. However, the state is not legally obligated to construct roads. In instances where a subdivision or other development is to abut a major arterial, the location of driveway and main road access is to be coordinated with ADOT/PF and other approving agencies. Section line or other easements should not be relied on for access without field inspection of the practicality of such routes, where topography or other conditions might make the practicability of the section line location suspect. Identified access routes should be described in the land-offering brochure. Where needed to reduce the likelihood of conflicts with existing private owners, DNR may brush or flag public access routes to land offering projects.

- 4) Subdivision Design. Subdivisions 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. Riparian buffers or building setbacks shall be imposed on all disposals where important riparian areas have been determined to exist. If there is some question as to whether a riparian protection area should be imposed, consult ADF&G. DNR should review Borough subdivision requirements prior to the initiation of subdivision design. See also design requirements described in C (1 through 3) and D (1), described previously, and Management Guidelines B through F in the 'Stream Corridors and Shorelands' section of this chapter.
- **E.** Other Guidelines Affecting Settlement. Other guidelines will affect settlement. See other sections of this chapter.

Shorelands and Stream Corridors

Goals

Recreation. Provide opportunities for a variety of recreational activities within publicly owned stream corridors, including both wilderness and developed recreational activities.

Habitat. Protect fish and wildlife habitats along lakeshores, stream corridors and wetlands.

Water Quality. Protect water quality to support domestic uses, fish and wildlife production, and recreational activities. Protect watersheds that supply community drinking water.

Water Dependent and Water Related Uses. Provide for needed water dependent and water related uses.

Management Guidelines

- **A.** Alaska Clean Water Act (ACWA). In accordance with the ACWA program, DNR will work with ADF&G and ADEC to protect and improve water quality, water quantity and fish habitat. Any development that impacts anadromous fish bearing waters or resident fish streams will require a permit from ADF&G.
- **B. Priority of Public Uses in Stream Corridors.** DNR will place a higher priority on protecting public use values in stream corridors than on providing opportunities for private ownership or development of land. However, the department recognizes the 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 (AS 38.05.127) for fishing, hiking, camping, and other recreational activities. Similarly, disposals near streams that have important fish or wildlife habitat or wildlife value will be designed to ensure the protection of the habitat and wildlife through the imposition of measures to ensure riparian protection.

In making determinations as to whether a riparian area should be protected and the manner of that protection, adjudicators are to consult the DMLW on-line procedures for detail and, if there is some question as to whether a riparian area should be protected, ADF&G. These procedures emphasize retaining such areas where a significant public interest or value exists, which is often common in riparian areas. Other methods may be used depending on the specific context, including setbacks and easements.

C. Public Access Adjacent to Waterbodies. Pursuant to AS 38.05.127, legal public access will be reserved in order to protect the public's right to travel to and along the ordinary high water (OHW) of a waterbody without encouraging trespass. Permits, leases, and plans of operation for commercial and industrial uses, transportation facilities, pipelines and other water dependent uses may be authorized on state uplands adjacent to waterbodies if their activities are consistent with the management intent for the area and if they maintain shoreland and stream bank access, and protect important fish and wildlife habitat, public water supplies, and public recreation. Trails and forms of non-motorized public access are generally considered to be appropriate within these areas, if they meet the conditions listed in 11 AAC 96.025.

Where feasible and prudent, there should be setbacks between these activities and adjacent waterbodies. The width of this setback may vary depending upon the type and size of the use, but must be adequate to maintain public access to and along riparian areas. The amount of impervious surface created within the riparian area should be minimized.

D. Protection of Land Adjacent to High Value Waterbodies. When the management intent for state land adjacent to waterbodies (including shorelands, streams, or lakes) is to protect wildlife habitat, anadromous or high value resident fish streams, or provide for intensive recreation uses associated with fishing, picnicking, hunting, camping, or other similar uses, the state should retain ownership of the adjacent uplands. Alternatively, to minimize on-going management responsibilities or for some other public purpose, a riparian buffer should be imposed either through an easement or setback. See Table 2-2 for requirements related to 'riparian buffers'. In instances involving a land disposal, the area of a riparian buffer may be reserved as public open space to be maintained by a common interest association. Whichever method is chosen, they should be designed to minimize negative impacts on visual character, habitat value, water quality, and ensure public access. Public use sites may also be reserved during the land disposal process, along high value water bodies to provide public access and use of the water body.

In making determinations as to whether a riparian area should be protected and the manner of that protection, adjudicators are to consult the DMLW on-line procedures for detail. These procedures emphasize retaining such areas where a significant public interest or value exists, which is often common in riparian areas.

State owned buffers or riparian buffers may be retained along the full length of the waterbody or on segments of the water body determined to have high current or future use, public use, or to require habitat protection. If the intent is to provide forested wildlife habitat, the width and configuration of this buffer shall be determined during preliminary subdivision design or in the preparation of the Forest Land Use Plan. Consult with ADF&G.

E. Access Easements Adjacent to Navigable or Public Water Waterbodies. A public use easement of approximately 50 feet is to be imposed on all navigable or public water bodies, consistent with the requirements of AS 38.05.127 and 11 AAC 51.035 and .045 for all disposals of state land or interests in state land. The public rights retained in an easement

shall be identified and noted in the DNR decision document and on the subdivision plat. In areas that may be sensitive to vehicular travel, the easement should be reserved for pedestrian access only. Access easements may be used in combination with state land that is to be retained for public use or for the protection of environmental resources. In these situations, easements may be used to provide access to areas of state retained sensitive land or provide access corridors between lots or parcels within the subdivision.

F. Protection Easements and Setbacks Adjacent to Non-Anadromous Waterbodies. Easements ¹² or building setbacks may be used in those instances where public recreation use is moderate or where sensitive habitat or other environmental resources exist but are not of the same importance as described under Management Guideline D. See the requirements for 'Sensitive Environmental Features Buffer' in Table 2-2 when an easement is to be applied. The purpose of the easement or setback should be noted in the Department decision document and on the subdivision plat. Where a protection easement or setback is to be applied, vehicular use within the area of the easement is inappropriate and should not be authorized. Building setbacks may be used in lieu of a protection easement in those instances where it is not appropriate or necessary for the state to retain any easement rights *or* they may be used in combination with buffers, access easements, and protection easements. Building setbacks used in this fashion provide an added level of protection. See the requirements for 'Building Setback' in Table 2-2.

G. Lakeshore Public Access. A portion of the lakefront on lakes greater than 10 acres that have or may be expected to have public recreation and all inlets and outlets of lakes of this size and capable of sustaining year-round natural or stocked game fish species shall remain in public ownership for habitat protection and public recreation. Adequate public access to these lakes shall also remain in public ownership or is to be provided through section line or 'to and along' easements. The amount of public ownership may vary on a site specific basis, but, at a minimum, some portion of these lakes shall remain public. The size of the public reservation shall be appropriate to its expected long range recreational use and relative to the size of the lake. A width of 150' or more measured from OHW is to be retained or protected through an easement along inlet and outlet streams¹³. Public use sites, created through the land disposal program, on lakes of 10-20 acres shall have at least 4 contiguous acres reserved for public access. For lakes larger than 20 acres a public use site of at least 6 acres shall be provided.

H. Buffer, Easement, and Building Setback Widths.

1) The width of state retained land, access and protection easements, and building setbacks adjacent to waterbodies (lakes and streams) will vary, depending on whether the area is a retained parcel or imposed easement, and according to management intent and the specifics of the parcel under consideration. In addition, this width may

¹² These areas are often referred to as 'protection areas' in the management units described in the Resource Allocation Tables on Chapter 3.

As measured from each bank of the inlet/outlet stream. This requirement applies whether or not the stream is anadromous.

vary along the area of the stream, or lake that is to be protected. Establishing widths, especially for publicly retained lands, will be based on the following considerations: recreational activities to be accommodated, floodway and floodplain widths, habitat protection and management objectives, visual quality, use compatibility, prevention of erosion, or retention of a significant hydraulic resource (like a wetland).

2) Although these widths may vary, the following criteria are provided to establish the minimum width that can be expected on various types of buffers, easements, and setbacks. They are specified here in order to establish some consistency in application and ensure a minimum level of resource and habitat protection or public access. Distances are measured horizontally landward from ordinary high water along streams and other inland waterbodies and from the line of mean high water adjacent to coastal waters. Because of the linear nature of streams and certain other habitat or hydraulic features, these minimum dimensions will apply to both sides of the feature that is to be protected. For example, the total protected area along a stream with a 100 foot setback would be 200 feet (100 feet each side).

If state land is to be retained, it may be preferable to retain a larger width, often 200 feet on each side. Widths greater than 200 feet may also be warranted, depending on the specific site characteristics and the importance of the habitat or resources to be protected.

- a) Riparian buffers along anadromous and high value resident fish streams and waters: 100 feet along each side of the anadromous waterbody or high value resident fish stream. (Widths greater than this amount, up to 300 feet, may be authorized if, after consultation with ADF&G, it is determined that larger widths are necessary to protect fisheries, wildlife, or habitat.)
- **b)** Buffers on other freshwater waterbodies on retained public land: 50 feet along each side of the stream or 50 feet along the shoreline of lakes.
- c) Easements ¹⁴ used in areas of sensitive environmental features: 50 feet on each side of important environmental features, such as high value wetlands. Distances greater than 50' (up to 100') may be appropriate if the feature being protected is considered to be especially sensitive to disturbance and is considered a particularly high value resource; such features might include lacustrine and riverine wetlands, springs, salt licks, or geologic hazards requiring additional distance separation for public safety. Consult ADF&G if there is a question as to whether a width greater than 50' should be considered.
- **d)** Public access easements, including 'to and along' easements required under AS 38.05.127, or utility easements adjacent to lakes and streams: 50 feet. ¹⁵
- e) Building setbacks: 100 feet adjacent to anadromous and high value waterbodies and 50 feet adjacent to all other waterbodies. The use of a building setback is usually not required if a 'riparian buffer' is being imposed in an authorization.

¹⁴ These areas are sometimes referred to as 'protection areas' in management unit descriptions in Chapter 3.

Other types of utility easements may be less than this width, depending on the purposes of the easement.

Riparian buffers preclude principal and most accessory structures within the riparian area; only water dependent uses are authorized in these areas. For more detail see 'riparian buffer' in Table 2-2.

I. Application Requirements for Easements and Buffers Along Waterbodies and Related Environmental Features. Table 2-2 specifies widths and other requirements for easements, buffers and public access in order to ensure consistency between authorizations along waterbodies and related environmental features. The table captures the information provided in Management Guideline H but also provides guidance on when these requirements are to be applied as well as aspects related to types of uses that may be appropriate.

On a case-by-case basis, widths may be wider, in order to accommodate floodplain width, bank characteristics, size of the waterbody, extent of present or expected future public use, the need to protect important environmental features, or other relevant factors. Similarly, widths can be narrower on a case-by-case basis if it is determined that the harm intended to be avoided by the requirement is not likely to occur because of site-specific circumstances. However, the strip of land must be of sufficient width to allow for public access as well as to screen the waterbody from development, where possible, with an undisturbed strip of vegetation. In all instances, requirements for easements shall be noted on the lease, patent or subdivision plat. This requirement also applies to easements described in Management Guideline H.

J. Other Guidelines for Shorelines and Stream Corridors. Other guidelines will affect shorelines and stream corridors. See other sections of this chapter.

Table 2-2: Application Requirements for Easements and Buffers Along Waterbodies and Related Environmental Features

Guideline/	Minimum Width/	Where it		
Application	Measured from	Applies	Primary Purpose	Guidelines
1. Public Access (To and Along Easement) Adjacent to all navigable waters or public waters as determined under 11 AAC 51.035 16.	* Landward from ordinary high water line.	Along: * Lakes * Streams	Provide public access along navigable and other waterbodies.	 Prohibited: Water Dependent ¹⁷ or Water Related ¹⁸ uses or structures that would obstruct passage by the public within the area of the easement. Alternate upland access needs to be provided if access is blocked. Allowed: Water Dependent or Water Related structures that would not significantly obstruct passage by the public within the area of the easement. 'Along' easement is to be continuous unless topography or land status prevents a continuous easement. See 11 AAC 51.045. The 'To' easement has a minimum width of 50 feet but may be increased to 60 feet or more if DNR determines that the need for increased public access to navigable and public waters may justify construction of a road along an easement. A section-line easement under AS 19.10.010 can function as a 'To' easement to the extent that the section-line easement runs on state land and if the section-line easement provides a practical route to the shore or river.
2. Riparian Buffers Adjacent to anadromous waterbodies and high value fish streams.	* Landward from ordinary high water line.	* Anadromous and high value resident fish streams and lakes that are navigable or are public waters under 11 AAC 51.035.	Protect riparian areas adjacent to anadromous and high value fish streams.	 Allowed: Water Dependent uses or structures that do not require extensive de-vegetation and/or land clearing. This requirement applies to the first 60' measured from OHW. 'Extensive' means more than 20% of affected area within the project site. Water related uses or structures that do not de-vegetate more than 40% of the affected area are allowed in areas greater than 60' measured from OHW. Prohibited: Water related uses within the first 60 feet measured from OHW. The width of riparian buffers may be increased along navigable or public waterbodies if recreation use is heavy, a wildlife corridor needs to be provided, or if increased protection of a riparian area is warranted. Consult with ADF&G on decisions to increase buffer width. Note: the requirements for an 'along' easement also apply within the 50' of OHW.
3. Freshwater Waterbodies Buffer Adjacent to waterbodies that are not protected under #2 but where a significant public use	* Landward from ordinary high water line along streams and lakes that are not covered in item #2 but are considered to have public	Along freshwater waterbodies that are determined to have public significance but where the requirements of #2 do not	Protect areas adjacent to freshwater waterbodies that are not important riparian areas but that may be important for other public purposes.	Allowed: Water Dependent uses or structures that do not require extensive de-vegetation and/or land clearing. This requirement applies to the first 60' measured from OHW. 'Extensive' means not more than 20% of affected area within the project site. Water related uses or structures that do not de-vegetate more than 40% of the affected area are allowed in

¹⁶ See 11 AAC 51.035 for determination of Navigable and Public Water. See also 11 AAC 51.045 for easements 'To and Along Navigable and Public Water'. Other waters may be considered on a case-by-case basis.

Water Dependent: means a use or an activity that can be carried out only on, in, or adjacent to a water body because the use requires access to the water body.

Water Related: means a use or activity that is not directly dependent upon access to a waterbody, but which provides goods or services that are directly associated with water-dependent and

which, if not located adjacent to a water body, would result in a public loss of quality in the goods or services offered.

Guideline/ Application	Minimum Width/ Measured from	Where it Applies	Primary Purpose	Guidelines
or resource is determined to exist.	significance or from the edge of the waterbodies, including wetlands, that are to be protected.	apply.		areas greater than 60' measured from OHW. Prohibited: Water related uses within the first 60 feet measured from OHW. The width of riparian buffers may be increased along navigable or public waterbodies if recreation use is heavy, a wildlife corridor needs to be provided, or if increased protection of a riparian area is warranted. Consult with ADF&G on decisions to increase buffer width.
4. Sensitive Environmental Features Buffer	*** Measured from edge of sensitive environmental feature.	Areas of important environmental features. These may include hydrologic features (wetlands, marshes), sensitive habitat areas, or areas subject to geotechnical constraints.	Protect sensitive environmental features not otherwise protected under Public Access, Riparian Buffers, or Freshwater Waterbodies.	 Sensitive environmental features may include wetlands, important upland habitat, prominent scenic features, and the like. The imposition of this requirement is discretionary and depends on the type and value of the area or resource that is to be protected. Prohibited: Residential (or other) structures and associated out buildings but not including utilities or minor accessory structures. Buffers can be created through the use of easements or building setbacks, or both. Where this easement is imposed as part of a municipal entitlement action, this width is also 50 feet. Areas greater than 50 feet (up to 100') may be imposed on a case-by-case basis.
5. Building setback Adjacent to all waters except anadromous and high-value resident fish waters (see guideline 6 below).	* Landward from ordinary high water.	Non-anadromous and non-high-value resident fish: * Lakes * Streams	Protect riparian habitat including access, recreation, and water quality along all waterbodies.	 This requirement is imposed where feasible and prudent, and necessary to protect public values along the stream. Does not apply to exceptions listed at bottom of table. The imposition of this requirement is discretionary and depends on the type and value of the area or resource that is to be protected. It is intended that the area of the setback remain vegetated to maintain habitat values or protect riparian areas. Areas greater than 100 feet may be imposed on a case-by-case basis. Consult with ADF&G.
6. Building setback Adjacent to anadromous and high-value resident fish waters.	* Landward from ordinary high water.	Anadromous and high- value resident fish: * Lakes * Streams	Protect riparian fish habitat, water quality, and recreation values along anadromous and high-value resident fish waters.	 This requirement may be imposed if necessary to achieve or protect riparian areas or other sensitive environmental features. The imposition of this requirement is discretionary and depends on the type and value of the area or resource that is to be protected. Applies only to Water Related uses. Does not apply to exceptions listed at bottom of table. It is intended that the area of the setback remain vegetated to maintain habitat values or protect riparian areas. Areas greater than 100 feet may be imposed on a case-by-case basis. Consult with ADF&G.

Where widths apply:

* Freshwater areas

** Tidally-influenced areas

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 items 5 and 6 above: a) Structures such as docks, bridges, and culverts whose purpose is access to or across the stream or lake; b) Water-dependent or water-related uses such as placer mining, fish culturing, and water supply intakes will be evaluated for exception on a case specific basis in consultation with ADF&G.

^{***} Sensitive Environmental Features

Subsurface Resources

Goals

Opportunities for Mineral Exploration and Development. Provide opportunities through state land management for the exploration and development of mineral resources.

Economic Opportunities. Provide economic opportunities and stability by managing state lands for the efficient and environmentally sound:

- disposal of tailings;
- development of state land and submerged land mining sites; and,
- siting of infrastructure to support development of mineral resources.

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

Management Guidelines

- **A. Mineral Exploration.** By statute, exploration for locatable minerals is allowed on all state lands. A land use permit is required under most circumstances. Hand prospecting and exploration activities generally do not require a permit. DNR may determine that some forms of access will not be allowed in specific areas to avoid resource damage.
- **B. Open to Mineral Location.** By statute, all state lands are open to mineral location unless specifically closed. Where an area is open to mineral location, a miner has the right to stake a mining location regardless of the surface use designation or classification. Any adverse effects of mining on surface resources or uses will be managed through compliance with state laws and regulations and the management guidelines in this plan. Except for areas designated Settlement, Public Facilities, or Water Resources, all other state land is considered appropriate for mineral exploration and development consistent with applicable state law, administrative regulation, and management intent and guidelines. Areas designated Settlement, Public Facilities, or Water Resources may be appropriate for mining activity but will likely require the use of stipulations to avoid or mitigate impacts to important public facilities, settlement areas, and large wetland complexes. Reclamation activities are directed by the Mining Reclamation Act (AS 27.19) and regulations (11 AAC 97). (Note: Mineral entry on Alaska Mental Health Trust Land is not authorized

without the prior approval of the Trust Land Office of DNR in accordance with 11 AAC 99. Mineral entry on land owned by the University of Alaska is not authorized without the prior approval of the University of Alaska, Land Management office.)

- **C. Reclamation of Mined Land.** The reclamation of mining operations, including placer mining, must meet the reclamation standards given in AS 27.19. The reclamation law provides a standard that miners must meet during and after mining. The mining operation must be conducted in a manner that prevents unnecessary and undue degradation of land and water resources and requires that reclamation occur "contemporaneously" with the mining operation. Regulation 11 AAC 97 (Mining Reclamation) details the specific requirements that must be followed. In designated habitat areas, annual reclamation will be required concurrent with mining. Reclamation will be required to restore degraded fish and wildlife habitat and prevent hazards to navigation.
- **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 and must be consistent with the requirements of applicable administrative regulations, including 11 AAC 96.010 and 11 AAC 96.025.
- **E. Mining in Fish Habitat.** When DNR issues a permit for mining in or adjacent to designated fish habitat, conditions of the permit will require any necessary measures, such as levees, berms, seasonal restrictions, and settling ponds that will allow the operation to meet water quality standards and statutes and regulations governing the protection of fish ¹⁹. Because less than 50% of all anadromous streams are listed within the ADF&G Anadromous Waters Catalog (AWC), and documentation of resident fish streams is not centralized, DNR should consult with ADF&G prior to the issuance of an authorization where stream channels are present and the likelihood of anadromous or high value resident fish is high, at least seasonally.

F. Mineral Closures.

1) Background. The decision to apply mineral location closures will be made by the Commissioner of DNR within the standards set by Alaska Statutes. AS 38.05.185(a) requires that the Commissioner determines that mining is incompatible with a significant surface use before an area can be closed to mining. The same section of the statute requires that the Commissioner determine that a potential use conflict exists before imposing leasing requirements for development of locatable minerals. The fact that an area is closed to new mineral location will not be cause for denying access across state land. Mineral closures do not affect valid existing mineral locations.

¹⁹ Note: Mining in fish habitat requires additional permits from ADEC and ADF&G.

- 2) Land Closed to Mineral Entry. State mining law stipulates that mining must be determined to be in conflict with significant surface uses before an area can be closed to mineral entry (AS 38.05.300). There is relatively little correspondence between the location of state upland parcels designated Settlement and historical or potential mining activity in the planning area and specifically in areas designated Minerals. Since little potential conflict is expected to exist, this plan does not create any new mineral closing orders, although the current mineral closing orders will be retained since these occur within streams and land disposal areas. A leasehold location order is recommended (Appendix C) within areas designated Settlement but not now closed to mineral entry, and all new settlement areas are so designated in this plan revision. The purpose of the leasehold location order is to prevent the creation of 'nuisance claims' in areas of land disposal. Appendix C lists these management units in Table C-1 and depicts the management units affected by the LLO on Map C-1. The management intent section of parcels designated Settlement should be consulted to determine if a management unit is affected by the leasehold location order recommendation. To determine the location of areas closed to mineral entry in the planning area consult the DNR Alaska Mapper, available on-line at: http://dnr.alaska.gov/mapper.
- **G. Oil and Gas Resources.** It is probable that oil and gas resources are present within the planning area. The potential for petroleum reserves within the planning area are believed to be high in the Nenana River Basin and exploration is underway (2012) in that area and within the Lower Tanana and Kantishna regions, including lands within the Minto Flats State Game Refuge. The planning and decision making processes for oil and gas development occur under a separate section of Alaska Statutes (AS 38.05.180) and these processes are not included as part of area plans. For this reason, the area plan does not make any development decisions related to these resources, and defers all decisions regarding licensing or leasing of oil and gas to DNR's existing licensing and leasing processes.

Oil and gas sales are not subject to the regional planning process; instead they follow the planning process identified under AS 38.05.180. The land use designations of the plan are multiple use in character and do not preclude oil and gas development.

H. Geothermal Resources. The presence of geothermal resources, to support renewable energy development, may be likely within the planning area. The vicinity of the community of Manley is an active geothermal area and it will be an appropriate area for the development of geothermal resources.

The exploration and development of geothermal resources follows the planning processes under AS 41.06, and 38.05.181. The land use designations of the plan are multiple use in character and do not preclude geothermal leasing and resources development.

The exploration and development of geothermal resources follows the planning process under AS.41.06 and 38.05.181. The land designations of the plan are multiple use in character and do not preclude geothermal leasing and resource development.

- **I.** Coal Resources. The coal potential within the planning area is generally considered to be high, especially in the western part of the Parks Highway and West Alaska Range region where extensive coal resources exist and there has been coal production over the last 25 plus years. Coal exploration, development, and extraction are governed by a mix of statutory (AS 38.05.150 and AS 27.21.010-.260) and administrative (11 AAC 85) requirements, which must be followed for exploration and for subsequent extraction to be authorized. This plan does not impose additional requirements of coal exploration and extraction to those cited in statute and regulation. All areas, except within areas closed to such activity in legislatively designated areas, are open to coal exploration, development, and extraction.
- J. Coal Extraction and Mining in Areas Co-Designated Minerals/Coal and Habitat. In a number of management units in the Parks Highway and West Alaska Range region, codesignations of Minerals and Habitat or Coal and Habitat apply. If this co-designation is used, it means that either high mineral (or coal) and habitat values exist within all or portions of the management unit. Mineral or coal development is considered an appropriate use within units affected by this co-designated, although there may be sites within a management unit that may not be appropriate for mineral or coal development. Determinations of this type are to be made as part of the regulatory/permitting processes related to the authorization of these uses. Although coal or mineral development within the aforementioned areas is considered appropriate or may be appropriate with stipulations, mining or coal authorizations granted by DNR shall carefully consider the effects of a proposed development on the area's fish and wildlife and their associated habitats within the management unit, and the short and long term effects on human access to those resources. Those habitats considered significant within a management unit are identified in the Resource Allocation Table in Chapter 3. Some of these habitat areas are used on a seasonal basis and activities that occur at other times of the year than these periods may be appropriate. Consult the Fish and Wildlife Habitat section of this chapter for the specific periods that these seasonal use periods occur. In all instances, consult ADF&G prior to issuing an authorization for mineral or coal exploration or development.
- **K.** Leaseable Mineral Development. State land within the planning area may be leased or opened for mineral or coal exploration and development if the department determines it is in the best interest of the state to enter into a lease for such resources. Before authorization of a lease, the department will determine if the surface values are significant enough to warrant restricting surface entry. The surface impacts of proposed underground mining shall be fully considered as part of the permitting process.
- **L. Other Guidelines Affecting Subsurface Resources.** Other guidelines will affect subsurface resources. See other sections of this chapter.

Public Access

Goals

Public Access. 1) Preserve, enhance, or provide adequate access to public and private lands and resources. Provide for future trail and access needs, and protect or establish trail corridors to ensure continued public access consistent with responsible wildlife and fish habitat conservation. 2) Ensure adequate opportunities for the public's use of public resources of local, regional, and statewide significance. 3) Provide access to and within developing areas within the region, including bridge crossings of major rivers, consistent with federal/state design and environmental requirements.

Management Guidelines: General Public Access

- **A. Reservation of Public Use Easements.** Before selling, leasing, or otherwise disposing of the land estate, DNR will reserve public use easements pursuant to the requirements of 11 AAC 51.015. This section of administrative code establishes when public access easements are to be reserved and the widths of these easements. Specific standards for section-line easements are identified in 11 AAC 51.025 and for easements required under AS 38.05.127, to and along navigable and public waters, in 11 AAC 51.045. These sections of Administrative Code shall be used as the basis for the reservation of public access easements in authorizations granted by DNR.
- **B. Retain Access.** Improve or preserve public access to areas with significant public resource values by retaining access sites and corridors in public ownership; reserving rights of access when state land is sold or leased; or identifying, managing and legally validating RS 2477 (Revised Statute Section 2477) rights-of-way. RS 2477 rights-of-way within the planning area that are identified in AS 19.30.400 (d) or otherwise determined by DNR to qualify as RS 2477 trails are to be retained in state ownership or made a stipulation of approval ('subject to') in the transfer of state land. Standards for the vacation of easements are contained in 11 AAC 51.065. Information regarding RS 2477 rights-of-way easements can be found at the DNR web site: http://dnr.alaska.gov/mlw/trails/index.cfm.
- **C.** Access to Non-State Lands. Reasonable access will be provided across state lands to other public and private lands. Existing legal access will not be precluded unless equivalent access is available.
- **D.** Management of ANCSA 17(b) Easements. The state will identify any new 17(b) easements as required and ensure that public access is maintained to existing 17(b) easements. These easements are intended to provide access through private Native lands to public lands and waters. They are reserved and managed by the federal government.

Information regarding ANCSA 17(b) easements can be found at the DNR web site: http://dnr.alaska.gov/mlw/trails/index.cfm .

- **E. Access for Development.** When an access route is constructed for resource development over state land, public access to mineralized or oil, gas or geothermal areas, recreation, fish, wildlife, or other public resources should generally be retained. If the new resource facility is likely to be of limited duration and provides superior access to the current means of access, the state should retain the new facility for public access. If the new route or facility will not or should not provide public access due to concerns for public safety or the long-term detrimental impact on natural resources, the current means of public access should be retained. Additional access routes in some areas may lead to negative impacts on valuable resources, particularly certain renewable resources. Consultation with ADF&G is necessary to determine whether or not the access road will cause detriment to fish and wildlife habitat and populations. The development of new trails should not displace current methods of access without providing alternative routes.
- **F. Limiting Access.** Access to state lands may be curtailed at certain times to protect public safety, provide for the remediation of public use areas, allow special uses, and prevent harm to the environment, fish and wildlife. Public access may be limited because of the presence of fire management operations, timber harvest, high soil moisture content when vehicular traffic may cause damage to the base or sub-base, or sensitive populations of fish or wildlife.
- **G.** Consultation with NRO, DMLW. Proposed trails, easements, and RS 2477 routes shall be reviewed by NRO prior to authorization. NRO determines if the routes or trails are required, consistent with applicable sections of statute and administrative code.
- **H. Siting and Constructing Temporary and Permanent Roads or Causeways.**Temporary and permanent roads or causeways will, to the extent feasible and prudent, be routed to avoid sensitive wetlands, avoid streams and minimize alteration of natural drainage patterns, and avoid long-term adverse effects on fish and wildlife, water quantity or water quality. If a temporary road is routed through sensitive wetlands, clean fill will be required and construction methods, which facilitate removal of the fill, will be required. Temporary roads should be obliterated when no longer needed for their original purpose.
- **I. Protection of the Environment.** In the siting of public access facilities, consideration is to be given to the effect of the proposed project or improvement on the natural environment, fish and wildlife species, and habitats identified in this plan as significant. ADF&G should be consulted prior to the issuance of an authorization to determine whether or not significant impacts to fish or wildlife resources or their associated habitats are anticipated and can be mitigated.

- **J. Joint Use and Consolidation of Surface Access.** Joint use and consolidation of surface access routes and facilities should be encouraged wherever it is feasible and prudent to do so²⁰. Surface access also should be sited and designed to accommodate future development and avoid unnecessary duplication.
- **K. Preservation of Access Opportunities.** The Department shall preserve potential access routes to developing areas. Unless there is an overriding state need, section-line easements are to be preserved. It is likely that any road corridor that is developed to resources areas will utilize sections easements as important components of this corridor. ADOT/PF is to be consulted prior to any action involving requests for the vacation of section-line easements. Vacation requests should not be granted unless it clearly be shown that there will not be a need for the foreseeable future (25 years) of if an alternative route is available of equal or better access.

Because of their linear alignment, it is recognized that roads and trails may traverse a number of different land use designations. Land use designations are not intended to affect or preclude access development, and such facilities may be constructed on all land use designations, including Habitat, Public Recreation, and Water Resources, although stipulations may be required to mitigate adverse impacts to the resources associated with these designations.

Management Guidelines: Trails Within and Between Developing Areas

- **A. General.** The following guidelines pertain to the siting and development of trails within developed or developing areas and between these areas. This is a more specific application of the general public use easement. These types of facilities provide movement areas for people and, if appropriate, wildlife. The width and siting of trail corridors depends upon their function and location. General precautions should be taken when developing new trails to avoid critical wildlife concentration areas. Easements are used to create an access corridor, similar to the more general public use easements described previously.
- **B. Requirement for Trails.** The Department shall assess the need for public access before selling, leasing, or otherwise disposing of the land estate. If local access needs are identified through the adjudication and agency or public review process, access trails may be reserved. This will occur through the retention of state land in public ownership or through the creation of a public use easement. Under either approach, the public is to have the right of access within the area of state land or the public use easement.

Note: There are instances where access routes should not be consolidated; their purposes may be at odds with one another or one consolidated route cannot effectively provide access to resources required by the public.

- **C. Ownership.** The following factors shall be considered by DNR in making the decision to retain the access corridor under state ownership or to provide for public access through a public use easement:
 - 1) If the access (usually a trail within a developed or developing area) is used as a neighborhood collector trail that connects to a public open space system or a trail of regional significance, access should be retained in public ownership.
 - 2) If a trail is used as access by neighborhood residents, it should be dedicated to local government or established as an easement to an entity willing to accept maintenance and management responsibility. This would typically occur when the purpose is to establish access between lots or to improve pedestrian circulation within subdivision.
 - 3) If the access provides a connection to other areas and is considered of regional or statewide significance, it should be retained in public ownership.
- **D.** Width of Trail Corridors. The width of the access corridor²¹ shall be determined according to its function and location:
 - 1) Within developed or developing areas, access corridors shall not be less than 25 feet in width for pedestrian movement and not less than 40 feet if motorized movement (other than car or truck) can be expected in addition to pedestrian travel. In areas where topographic conditions restrict development, widths less than 40 feet may be considered.²²
 - 2) In all other areas, the width shall vary with terrain, function, and the need for separation from other uses, but shall not be less than 50 feet.
 - 3) Trails or other access facilities of statewide or regional significance shall not be less than 100 feet in width.
- **E. Trail Rerouting.** Standards for the vacation and modification of trails are identified in 11 AAC 51.065. Rerouting of trails may be permitted to minimize land use conflicts, reduce duplication in trail routings, or minimize habitat destruction. If trails are rerouted, provision should be made for construction of new trail segments if warranted by type and intensity of use. Rerouting trails shall be done in consultation with affected private users and public agencies. Rerouted trails should allow the same uses and activities as the original trail. Reroutes should not interrupt access, and reroutes should be established, open and usuable for the intended uses before the original route is closed. Closed routes should be blocked off and restored. The development of new trails should not displace current methods of access without providing alternative routes.

An access corridor includes the tread of the trail and an area immediately adjacent to the tread.

Note: These standards apply to motorized uses other than cars or trucks, or similar sized and types of vehicles. The standards of 11 AAC 51.015(d)(1)(D) apply when a 'neighborhood service road' is to be established or when a public use easement is to be used by cars or trucks. The width of this road or easement is not less than 60 feet.

- **F.** Alignment with Crossings. When it is necessary for power lines, pipelines or roads to cross trails, crossings should be at a 90-degree angle where possible, with consideration for visibility and public safety. Vegetative screening should be preserved at trail crossings.
- **G.** Other Guidelines Affecting Public or Trail Management. A number of other guidelines may affect public and trail access management. See other sections of this chapter.