

Chapter 2

Areawide Land Management Policies

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Chapter 2

Areawide Land Management Policies

Introduction

This chapter presents land management policies that apply to all state owned, state selected, and ANILCA top filed lands for each of the major resources affected by the plan. The resources identified in this chapter are agriculture, cultural resources, fish and wildlife, forestry, materials, mineral resources, recreation and tourism, and settlement. It also presents management policies for several specific land management concerns: protection of fish and wildlife habitat, public and private access, settlement, public recreation and tourism, timber harvest, and shoreline and stream corridor management. These policies apply to state land throughout the planning area regardless of the land use designation.

This chapter consists of goals and management guidelines that apply to all state owned and state selected land within the Plan boundary. Goals are the general condition the ADNR 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. Additionally, this chapter presents broad management intent statements with unit specific management intent provided in Chapter 3.

Definitions

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

Overall Management Direction

Management goals, guidelines, and intent are focused on maintaining and enhancing opportunities for public and commercial use of the state lands and waters while considering emerging issues related to climate change and conserving the natural resources and habitats necessary to sustain fish and wildlife populations. Access to and within state lands is maintained. The State recommends the Bureau of Land Management (BLM) lift PLO 5150 to allow the State to receive title to its highest priority land selections within the Trans Alaska Pipeline System Corridor in partial fulfillment of its outstanding land entitlement. A limited amount of State land has been identified for potential sale into private ownership.

Plan Goals

The following goals are for state lands in the planning area. Goals are general conditions that ADNR attempts to achieve through management actions. These goals will lay the foundation for maintain these important uses, resources, or activities, and guide use and development interests. The goals are listed alphabetically, and no single goal has a priority over others.

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

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

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

Heritage Resources. Preserve, document, and interpret Alaska's cultural resources and heritage on all lands within the State.

Public Access. Provide access to public and private lands and resources to ensure adequate opportunities for the use of public resources.

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, water, 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 habitat, agriculture, and timber.

Plan Guidelines

Management guidelines identified are intended to provide specific standards, management direction or procedures to be followed by the ADNR in the issuance of permits, leases, or other authorizations for the use of state land or resources within the planning area. Guidelines range in their level of specificity, from giving general guidance for decision making to identifying specific factors that need to be considered when making on-the-ground decisions. In most cases, these guidelines can be implemented through the authorization of applications for proposed uses or through agency actions. In other cases, ADNR may promulgate regulations to ensure that these guidelines can be implemented and are enforceable. Unit specific guidelines are found in Chapter 3.

A. All authorizations for use of state land within the planning area will be consistent with the principles of multiple use and sustained yield and with the management intent in this plan.

B. In considering authorizations for use of state land, ADNR will adjudicate applications to:

1. avoid, or if not possible, minimize damage 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, ADNR will consider issuing a permit or lease contingent upon issuance of these other authorizations.

Management Guidelines by Activity or Resource Value

The remainder of this chapter specifies guidelines that are specific directives to apply to management decisions. ADNR 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 top filed when they are tentatively approved or patented into state ownership.

Chapter 2 guidelines apply to all state land covered by the Copper River Basin Area Plan unless the plan explicitly exempts some management units 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.

Other Guidelines Affecting Resources. Multiple guidelines may affect the use of individual resources. Consult guidelines in other resource sections of this chapter.

Plan Management Intent

Broad management intent for state land is expressed through statements of management emphasis identified on a unit specific basis. These statements define ADNR's near and long-term management policies (goals, guidelines, and intent), and 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.

A. All general domain state land within the planning area will be managed to allow for multiple use and provide for the balanced use, development, and conservation of the resources.

B. Lands retained in state ownership will be managed to continue to provide diverse recreational opportunities and support economic development, and to protect access and public resources such as fish and wildlife habitat, watersheds, and scenic values.

C. State land will remain open to mineral entry unless specifically closed or otherwise affected by a Leasehold Location Order. While this plan does recommend one mineral order that will close land classified as Settlement Land to mineral entry, the vast majority of lands remain open to mineral entry.

D. The designation applied to a unit identifies the recommended use for the unit. In some cases, a unit might have co-designated uses. Up to three classifications may be assigned for one unit. In units where a primary use has been designated, activities and authorizations pertaining to that primary designated use may take precedence over other uses. Consistent with the multiple use mandate, other uses may also be allowed if they do not preclude primary or co-designated uses for a management unit.

E. This plan emphasizes minimizing land use conflicts through plan guidelines and intent rather than through prohibitions, although prohibitions are sometimes identified. If ADNR 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.

F. This plan designates state lands in categories that are generally consistent with current use patterns and reflect the significant resources in the planning area.

G. 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.

1 **H.** It is the intent of the plan to provide land use designations for all state-owned and state-
2 selected lands in the planning area. Any lands inadvertently missed or any state lands,
3 lacking a land use designation, situated in gaps between this plan and adjoining plans are
4 designated using the guidelines in Chapter 4 under “Applicability of Plan Designations/
5 Classifications to State Lands Not Identified in the Plan or Text Maps.”
6
7

8 **Other State Land** 9

10 Parcels that are donated or acquired after the plan is adopted will be designated for the uses
11 for which they were acquired or donated without an amendment to the plan. Lands that come
12 into state ownership through other means will be designated and classified consistent with
13 the designation identified in the applicable management unit or, if not so identified,
14 according to the standards of the section, Applicability of Plan Designations and
15 Classifications, in Chapter 4 without an amendment to the plan or to the Land Classification
16 Order adopting this plan revision. This same process applies to those parcels of state land
17 that may be missed during the plan preparation process and have subsequently been
18 identified as state land.
19

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; and
- 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 Land.¹

B. Agricultural Sales: Size. Within the planning area, agricultural sales should have a minimum area of 40 acres. Sale areas may be less than 40 acres, if through a written decision under AS 38.05.035(e) by the Division of Agriculture, it is determined that such an action is in the best interest of the state.

C. Agricultural Land Disposals. Agricultural land disposals shall be consistent with the requirements of AS 38.05.057 and AS 38.05.321. Agricultural land cannot be used for other purposes that would preclude its eventual use for agriculture.

- Agricultural land conveyed under the authority of AS 38.05.321 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. Longer term uses that do not prevent the use of the surrounding land for agricultural purposes, such as an access easement, may be authorized without a plan amendment with concurrence from the Division of Agriculture.
- State Farm Conservation Plans, which must be approved by the state, shall be provided as a condition of an agricultural sale and shall meet all other requirements of 11 AAC 67.
- In addition to the requirements of 11 AAC 67.180 or as part of an AS 38.05.035(e) decision, the impacts of agricultural activities on adjacent areas classified Habitat Land shall be evaluated in consultation with ADF&G during the decision process. Appropriate measures to minimize impacts of agriculture on adjacent habitat will be incorporated into the Preliminary/Final Finding and Decision or State Farm Conservation Plan. 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 State Farm Conservation Plan. It is not

¹ 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.

intended that mitigation measures will always be required in these instances, but that the need for such measures be assessed and required where necessary.

- Where agricultural land disposals occur within a floodplain; the State Farm Conservation Plan will identify locations where permanent structures are inappropriate due to potential for flooding. Agricultural land disposals should exclude 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 development.

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 a minimum 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 in 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 Matanuska Susitna Borough should be reviewed by ADNR prior to issuing permits, leases, or other forms of use authorizations. The Matanuska-Susitna Borough comprehensive plan and zoning map apply to the region of the planning area in the vicinity of Lake Louise within the Matanuska-Susitna Borough. Only those regions that fall within the Matanuska-Susitna Borough are subject to borough comprehensive plans and zoning maps. The Matanuska-Susitna Borough has developed and will continue to develop local comprehensive plans for Louise, Susitna, and Tyone Lakes.

C. Avoiding Conflicts with Adjacent Upland Owners. Before ADNR issues a land use authorization on shorelands, ADNR 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. ADNR will consider comments from private landowners and others before making a decision. ADNR 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. These are intended to identify preferred land use patterns and development stipulations. ADNR reviews these plans in the course of developing management plans or area plans, and often

1 makes use of their recommendations. However, while community comprehensive plans can
2 make recommendations for state lands within their planning areas, they cannot establish land
3 use designations or other planning requirements for state land. State land use designations
4 are decided on a regional basis through the state land use planning process and local plans do
5 not supersede state plans for the use of state lands.

6
7 **E. Other Guidelines Affecting Coordination or Public Notice.** Several other guidelines
8 may affect coordination or public notice. See other sections of this chapter.
9

Fish and Wildlife Habitat and Harvest

Goals

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

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, personal use, sport and non-consumptive uses.

Manage to Maintain and Enhance the Natural Environment. 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 to wildlife populations. This management shall be consistent with the applicable requirements of 11 AAC 34.

Management Guidelines: Habitat Areas

The Management Guidelines that follow apply to areas designated Habitat or co-designated Habitat throughout the planning area, with emphasis on fish and wildlife populations used for consumptive commercial, subsistence, personal use, and sport purposes, and other uses listed in Guideline B where alteration of the habitat and/or human disturbance could result in a loss of a population or sustained yield of a species. The primary objective is the use of adequate protection measures to ensure the sustainability of fish and wildlife habitat, populations, and the continuation of other uses of the area. The management of state land and resources are also to be consistent with the requirements of sustained yield, as described in Article VIII of the State Constitution.

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

5
6 All land use activities will be conducted with appropriate planning and implementation to
7 avoid or minimize adverse effects on fish, wildlife, or their habitats, and on public access to
8 those resources.

9
10 ADNR enforces permit stipulations and measures, consistent with their authorities and
11 enforcement capabilities. Mitigation will be required for any significant damage to fish,
12 wildlife, or their habitats that may occur as a direct result of a party's failure to comply with
13 applicable law, regulations, or conditions of the permit or lease.

14
15 When determining appropriate stipulations and measures, the department will apply, in order
16 of priority, the following steps. Mitigation requirements listed in other guidelines in this plan
17 will also follow these steps:

- 18
19 1. Avoid anticipated, significant adverse effects on fish, wildlife, or their habitats
20 through siting, timing, or other management options.
- 21
22 2. When significant adverse effects cannot be avoided by design, siting, timing, or other
23 management options, the magnitude of the adverse effect(s) from the use or
development will be minimized.
- 24
25 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.
- 26
27 4. ADNR shall consider replacement or enhancement of fish and wildlife habitat when
28 steps 1 through 3 cannot avoid substantial and irreversible loss of habitat. The
29 ADF&G will identify the species affected, the need for replacement or enhancement,
30 and the suggested method for addressing the impact. In those instances when
31 replacement or enhancement is not feasible, ADNR will consider the provision of
32 substitute resources or environments. ADNR will consider only those replacement
33 and enhancement techniques that have either been proven to be, or are likely to be,
34 effective and that will result in a benefit to the species impacted by the development.
35 Replacement or enhancement will be required by ADNR if it is determined to be in
36 the best interest of the state either through AS 38.05.035(e) or other authorization
37 process.

38 **B. Allowing Uses in Fish and Wildlife Habitats (Ha).** These habitats are defined as areas
39 that serve as a concentration area for a single or multiple species of fish and wildlife during a
40 sensitive life history stage or are highly important to the maintenance or management of a
41 single or multiple species of fish or wildlife. Fish and wildlife categories used, in part, to
42 identify Habitat (Ha) designations in this plan include the following:
43

- 1 • Anadromous and high value resident fish spawning, rearing, overwintering, and
- 2 migration areas.
- 3 • Fish streams frequented by bears (including concentrations by season).
- 4 • Moose rutting, wintering and calving areas.
- 5 • Caribou wintering² and calving areas.
- 6 • Dall sheep lambing and wintering areas, and mineral licks.
- 7 • Mountain goat rutting and nursery areas.
- 8 • Bison foraging, wintering, calving areas, and movement corridors.
- 9 • Trumpeter swan nesting, molting, and migration concentrations.

10
11 The areas designated Habitat (Ha) in Chapter 3 of the plan were defined using the best
12 available information when the plan was written. In the granting of authorizations within
13 areas designated Habitat, ADNR adjudicators should attempt to acquire more detailed and
14 more recent information pertaining to habitat resources and values if there is some question
15 as to the appropriateness of the use that is under consideration for authorization.

16
17 The resource that was used to make the determination that an area should be designated Ha is
18 identified in the parcel descriptions contained in Resource Allocation Tables in Chapter 3
19 under the column, Resources and Uses. In some cases, there is only a single resource but in
20 other instances, several resources exist, with these resources sometimes occupying differing
21 portions of the parcel. The spatial distribution of habitat resources is described in the
22 management intent language, if known. Management units are to be managed to protect the
23 resource(s) identified in these tables. Areas of sensitive habitat in management units
24 designated Resource Management are, similarly, to be managed to protect the resource that is
25 identified.

26
27 There is a distinct seasonality associated with the critical life periods of certain species;
28 seasonality shall be taken into consideration during project review and approval. Seasonality
29 and critical life cycle stages are identified in various publications. Thus, it may be possible,
30 through consultation with ADF&G and other agencies, that uses and facilities may be found
31 appropriate within areas designated Habitat if the seasonality criteria are satisfied by
32 including mitigating measures in project design.

33
34 Uses not consistent with a plan designation or not authorized in a management intent
35 statement and that, if permitted, would result in the degradation of the resource(s) within
36 areas designated Ha, are to be considered incompatible and are not to be authorized unless
37 determined to be necessary and in the best interest of the state. Degradation of the resource
38 might result from actions involving one or more of the following factors: dredging, filling,
39 significant compaction of vegetation and sediment, alteration of flow patterns, discharge of

² Where such areas are concentrated spatially and particularly where they coincide with calving areas.

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, ADNR 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:

- ADNR in consultation with ADF&G determines that the management unit in question does not possess those attributes characteristic of a Habitat designation as defined in the plan; or
- If ADNR 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
- If after consideration of the above statements, the project is then found to be in the best interest of the state under AS 38.05.035(e) or similar department authorizations and significant adverse impacts are mitigated under Management Guideline A.

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

D. Habitat Manipulation: General Requirements. Habitat alteration through water control, timber management practices, removal of pollution sources, prescribed fire, 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 ADNR 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 Upper Susitna and Kenny Lake Soil and Water Conservation Districts have a program in place that currently concentrates on surveying areas of infection and providing landowners with treatment options and Best Management Practices to manage these species. Contact them for more information.

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

G. Water Intake Structures. When issuing water rights for waters providing fish habitat, ADNR will require that practical water intake structures be installed that do not result in entrainment, entrapment, or impingement of fish and will maintain in-stream flows needed to

1 sustain existing fish populations. The simplest and most cost-effective technology may be
2 used to implement this guideline when consistent with all applicable permits.

3
4 Water intake structures should be screened, and intake velocities will be limited to prevent
5 entrapment, entrainment, or injury to fish. The structures supporting intakes should be
6 designed to prevent fish from being led into the intake. Other effective techniques may also
7 be used to achieve the intent of this guideline. The DMLW (Water Resources Section) and
8 ADF&G Division of Habitat should be consulted to determine screen size, water velocity,
9 and intake design if the intake structure is in fish-bearing waters. ADF&G will continue to
10 determine and permit the appropriate intake structures for specific locations and projects.

11
12 **H. Alteration of the Riverine Hydrologic System.** To the extent feasible, channelization,
13 diversion, or damming that will alter the natural hydrological conditions and have a
14 significant adverse impact on important riverine habitat will be avoided. If projects like this
15 are proposed, they will require a review and permit from the ADF&G Division of Habitat
16 and other agencies.

17
18 **I. Threatened and Endangered Species.** All land use activities will be conducted
19 consistent with state and federal Endangered Species Acts to avoid jeopardizing the
20 continued existence of threatened or endangered species of animals or plants, to provide for
21 their continued use of an area, and to avoid modification or destruction of their habitat.
22 Specific mitigation recommendations should be identified through interagency consultation
23 for any land use activity that potentially affects threatened or endangered species. There are
24 no known threatened or endangered species under either federal or state statute or regulation
25 within the planning area. The U.S. Fish and Wildlife Service (USFWS), Division of
26 Ecological Services, should be consulted on questions that involve endangered or threatened
27 species of federal interest and the ADF&G those listed by the state.

28
29 Consideration should also be given to wildlife listed by the state within the State Wildlife
30 Action Plan³ as Species of Greatest Conservation Need (SGCN) which are species whose
31 populations are declining or under threat, species that are culturally, ecologically, or
32 economically important in the state, species for which the majority of their range occurs in
33 Alaska, or species that are indicators of environmental change. As of 2019 there were 80
34 known SGCN (64 bird species and 16 small mammals) identified within the planning area.
35 Location of species and mitigation should be determined in consultation with ADF&G during
36 project reviews. As of the writing of this document, three terrestrial species likely to occur in
37 the Copper River Basin boundary are undergoing a Federal Species Status Assessment. The
38 species include two small mammals, the little brown bat (*Myotis lucifugus*) and northern bog
39 lemming (*Synaptomys borealis*), as well as McKay's bumblebee (*Bombus mckayii*).
40 Depending on the outcome, further actions may be needed (see also: L. Species specific
41 management guidelines). Federal review of other species (e.g., declining boreal songbirds)
42 appear likely in future.

³ Alaska Department of Fish and Game. 2015. Alaska wildlife action plan. Juneau.

J. Eagles. Authorizations or disposals that potentially affect bald eagles will be consistent with the state and federal Endangered Species acts and the Bald and Golden 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.

The Bald and Golden Eagle Protection Act ('Eagle Act') prohibits the take of bald and golden eagles, their parts, nests, and eggs either directly (such as by shooting or collecting parts) or indirectly (such as by disturbance or visual changes to the landscape). Under the Eagle Act, "disturb" means to agitate or bother an eagle to a degree that causes or is likely to cause injury, a decrease in productivity, or nest abandonment. Eagles are found in almost all landscapes across Alaska, including grasslands and tundra, and should be considered early in the project planning stage.

The U.S. Fish and Wildlife Service has developed spatial and temporal buffers to assist with planning activities and siting facilities to avoid take of eagles. The recommended practices are designed to prevent human disturbance to eagles and their nests, particularly during the nesting season, when eagles are most sensitive to disturbance. If activities cannot be conducted outside the eagle nesting season or the recommended spatial buffers around eagle nests cannot be implemented, an Eagle Take or Eagle Nest Take permit may be needed.

Contact the Alaska Region of the U.S. Fish and Wildlife Service to obtain the most current information on nest locations; technical guidance for project activities near eagle nests, including buffer recommendations; and assistance with any necessary permits.

1. Siting Facilities to Avoid Eagle Nests. Facilities determined by the USFWS to cause significant disturbance to nesting eagles will not be allowed within 330 feet 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 USFWS determines likely to cause significant disturbance to nesting eagles will be prohibited within 330 feet of active bald or golden eagle nests during the critical nesting period, which is defined in Alaska as between March 1 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. Current guidelines for Alaska, locations of nests, and technical advice on conducting activities near eagle nest sites, should be obtained from the Fairbanks Ecological Services office of the USFWS. The recommended practices are designed to prevent human disturbance to eagles, particularly during the nesting season. Specific activities that are likely to cause disturbance to eagles during critical nesting include major land uses such as logging, the development of new commercial and industrial sites, mining, and road

1 construction. Human activities such as entry into the primary nesting zone (330 feet
2 from the nest) and low-level aircraft operations may also cause disturbance to
3 breeding eagles. Leaving a few mature trees standing in harvest areas near rivers and
4 sloughs can benefit reproduction of eagles and other raptor species.

5
6 **K. Peregrine falcons.** Although American peregrine falcons are no longer listed under the
7 federal Endangered Species Act, the USFWS encourages the continued conservation of these
8 species by applying protection measures during the nesting period. The same critical nesting
9 periods and activities listed above for eagles also apply (low-flying aircraft, noisy activities,
10 ground level disturbance, construction during nesting). In addition, activities that could have
11 negative impacts throughout the year (not only during nesting periods) include habitat
12 alterations, construction of permanent facilities, and pesticide use. The recommended
13 protection measures, as well as technical advice on conducting activities near peregrine
14 falcon nest sites, can be obtained from the Fairbanks Ecological Services office of the
15 USFWS.

16 17 **L. Species Specific Management Guidelines**

18
19 **Moose.** Moose are present throughout the planning area, and many portions are important
20 for moose calving and rutting or are used as winter concentration areas. Calving typically
21 occurs from May through June, while rutting occurs late September to October. Uses that are
22 likely to produce levels of acoustical or visual disturbance sufficient to disturb calving,
23 rutting, or post-calving aggregations that cannot be seasonally restricted should not be
24 authorized in these areas. Uses may be authorized in these areas at other times of the year.
25 ADNR authorizations shall include seasonal restrictions on activities that would produce
26 significant acoustical or visual disturbance during wintering, calving (including post-
27 calving), or rutting periods.

28
29 Moose calving and rutting areas may change over time. Consult ADF&G prior to issuing an
30 authorization in an area suspected to contain such concentrations to better determine: 1) the
31 location of calving and rutting areas; 2) when activities within these areas should be avoided;
32 and 3) identify appropriate mitigation measures if no feasible or prudent alternative site
33 exists. Refer to a management unit's 'Uses and Resources' section in the Resource
34 Allocation Tables to determine whether the presence of a rutting or calving area is likely or if
35 it is a winter concentration area.

36
37 **Caribou.** Caribou wintering and calving areas are present and widely distributed throughout
38 the planning area. Calving typically occurs from May through June, and areas of particular
39 importance include the entire Northwest region, the southern half of the Northern region,
40 portions of the Glenn/Richardson region from the boundary with the Susitna Matanuska Area
41 Plan to Glennallen, northward on the Richardson highway to milepost 170 and along the Tok
42 cutoff to the boundary with the Eastern Tanana Area Plan (Nelchina Herd), along with the
43 western and northern edges of the Wrangell region from the base of the Wrangell mountains
44 to the Glenn/Richardson region boundary (Mentasta Herd). Authorizations in these areas are

1 to use the same management requirements as those for moose calving and winter
2 concentration areas, described above.

3
4 **Dall Sheep.** Dall sheep are present throughout the mountainous terrain and open alpine
5 ridges within the Northern, Central, Chugach Mountains, and Wrangell regions. Within
6 these areas, sheep are widely distributed and there are numerous areas that are important for
7 lambing, rutting, and winter habitats. Lambing typically occurs in May and June. Ewes and
8 lambs are especially vulnerable and sensitive to disturbances (i.e., helicopters) and other
9 environmental factors. Authorizations in these areas are to use the same management
10 requirements as those for moose/caribou calving, rutting and winter concentration areas,
11 described above. ADF&G should be consulted in determining a course of action for
12 authorizations occurring during this time.

13
14 **Bison.** Plains bison (*Bison bison bison*) are found in two areas of the Wrangell region. The
15 first is from the western flank of the Wrangell mountains to the Glenn/Richardson region
16 boundary. Stretching along the Richardson highway from Copper Center southeastward to
17 Chitna. The second is in the Chitna River valley between McColl Ridge and Towhead
18 mountain. Calving typically occurs in secluded meadows beginning in May. Authorizations
19 in the bison movement corridors and concentration areas are to use the same management
20 requirements as those for moose calving and winter concentration areas, described above.

21
22 **Brown and Black Bear.** Brown bears (constituting all subspecies of brown and grizzly
23 bear) and black bears can be found throughout the planning area and occur throughout
24 Alaska with a few notable exceptions. Brown and black bears share similar habitat and
25 foraging behaviors, and distributions and concentrations vary seasonally and geographically.
26 During spring, bears emerge from dens and are typically found on low elevation south-facing
27 slopes, riparian forests and wetlands. During summer, bear distribution can vary, ranging
28 between herbaceous-rich mid elevations, low elevation river bottoms and fluvial benches,
29 and burns and openings of higher elevations. During fall, bears are commonly found near
30 large anadromous rivers harvesting salmon and in associated riparian forest areas seeking
31 roots, late berries, and fruits. In winter, most bears relocate to hibernation dens in alpine and
32 subalpine areas. Bear density is greatest in productive, southern portions of Alaska.

33
34 Bear mating season typically occurs in the spring between May and July and cubs are
35 typically born in hibernation dens between January and February. Killing cubs and females
36 with offspring is prohibited. Adjudicators shall consult ADF&G and USFWS to identify
37 important areas in addition to those identified in the management units in the Plan and to
38 determine appropriate mitigation or avoidance measures. All permanent and long-term
39 seasonal facilities shall prepare a bear interaction plan to reduce conflicts with wildlife.

40
41 **Goat.** Mountain goat populations within the planning area are interspersed throughout the
42 southern regions of the Wrangell and Chugach Ranges. Breeding season occurs between late
43 October and early December. Males may travel great distances to find a suitable mate while
44 females tend to remain in nursery groups with kids and immature adults. Given their long
45 gestation time and single kid born per season, mountain goat populations take considerable

time to recover from disturbances. Adjudicators shall consult ADF&G to identify important areas in addition to those identified in the management units in the Plan and to determine appropriate mitigation or avoidance measures. ADF&G should be consulted in determining a course of action for authorizations occurring in goat populated areas.

M. Species proposed for Threatened or Endangered Listing. Although no terrestrial species are currently listed as endangered or threatened by the State of Alaska or the USFWS, three are described below, which are likely to occur in the Copper River Basin and are currently undergoing a federal Species Status Assessment for listing under the federal Endangered Species Act (ESA). Depending on the outcome, further actions may be needed in consultation with ADF&G and USFWS. Federal review of other species (e.g., declining boreal songbirds) also appears likely in future.

- Little brown bats (*Myotis lucifugus*) are common forest dwellers, and though we know little about populations in interior Alaska, those in the continental U.S. may be at risk from White Nose Syndrome, a deadly fungal infection, that kills bats during hibernation.
- Northern bog lemmings (*Synaptomys borealis*) are naturally uncommon to rare and associated with a variety of boreal forest habitats, including mesic areas of spruce forest with mossy understory and forest openings, such as meadows and fens.
- McKay's bumblebee (*Bombus mckayii*) is a newly recognized northern species that was previously considered a subspecies of the western bumblebee (*Bombus occidentalis*). Monitoring efforts in Alaska are underway to understand habitat use, though bees often use mixed boreal forest edge and bluff habitats including those in disturbed, riparian areas with flowering forbs and shrubs (Fulkerson et al. 2021).

N. 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 Chugach Mountains and Wrangell regions. 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.

O. Trumpeter Swan Nesting Areas. In 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 should be evaluated on a case-by-case

1 basis. Some areas are more open and susceptible to noise and visual disturbances and
2 therefore require larger protection areas. Leases or permits may require seasonal restrictions
3 on activities to avoid disturbance to swans. Consult with ADF&G and USFWS to identify
4 current or potential nesting habitat and to determine guidelines to follow and activities to
5 avoid. The standards of Guideline P, 'Activities in Important Waterfowl Habitat', also apply.
6 Refer to the management unit's 'Resources and Uses' section in the Resource Allocation
7 Tables to determine if the presence of a nesting area is likely.
8

9 **P. Activities in Important Waterfowl Habitat.** In important waterfowl habitat, activities
10 requiring a lease permit, or development plan, and producing habitat disturbance or high
11 levels of acoustical or visual disturbance from sources such as boat traffic, vegetation
12 clearing, construction, blasting, dredging, and seismic operations, should be avoided during
13 sensitive periods such as nesting, staging, or brood-rearing periods. Where it is not feasible
14 and prudent to avoid such activities, other mitigation measures may be required to avoid
15 significant adverse impacts and the activity may be denied. If it is likely that a waterfowl
16 concentration exists within the area affected by a potential project, consult with ADF&G and
17 USFWS to identify areas of important waterfowl in addition to those identified in the
18 management units in this plan and to determine appropriate mitigation or avoidance
19 measures.
20

21 The USFWS recommends for migratory birds affected by the federal Migratory Bird Treaty
22 Act and Migratory Bird Treaty Reform Act of 2004 (which includes other species besides
23 waterfowl) that land disturbing activities be conducted before May 1 or after July 15 to avoid
24 disturbing nesting, molting, and fledging birds in forests, woodlands, shrub or open areas.
25 For Interior activities near cliffs with nesting raptors (eagles, falcons) or ravens, the dates to
26 avoid disturbance are April 15 through August 1. Adjudicators shall consult with USFWS to
27 identify sensitive areas and determine appropriate mitigation or avoidance measures.
28

29 **Q. Fish and Wildlife Enhancement on State Lands.** Fish and wildlife enhancement
30 activities on state lands, whether by ADF&G or other parties, should be consistent with the
31 management intent for those lands. Enhancement activities likely to attract significant public
32 use, including sport fishing use, will be designed and located to minimize the impact of
33 additional public use on the existing recreation resources, including anchorages, campsites,
34 and existing and intended wilderness values.
35

36 **R. Protection of Fish and Wildlife Resources - Transportation Routes and Facilities.**
37 Important overwintering, calving, lambing, or mineral lick areas, fish and wildlife habitats in
38 riparian areas, fish and wildlife movement corridors, important wintering areas, and
39 threatened or endangered species habitat should be avoided in siting transportation routes
40 unless no other feasible and prudent alternatives exist. Location of routes and timing of
41 construction should be determined in consultation with ADF&G. Transportation corridors
42 that intersect or cross fish or wildlife movement areas shall be equipped with appropriate
43 crossing devices or structures to allow the free and efficient passage (in both directions) of
44 the species using the corridor.
45

1 **S. Protection of Riverine Areas.** Riverine areas perform a variety of important functions
2 related to recreation, habitat protection, and water quality/quantity maintenance. To the
3 maximum extent feasible and prudent, the protection of these areas is important and DMLW
4 and DOAg authorizations are to ensure the maintenance of these areas in any authorizations
5 that may be issued. See Management Guidelines D, E, F, H, and I in the ‘Shorelands and
6 Stream Corridors’ section in this Chapter for guidance and standards pertaining to riverine
7 areas. These standards are to apply to authorizations issued by DMLW and the Division of
8 Agriculture.
9

10 **T. Protection of Resources and Balancing of Impacts with Potential Development.**
11 ADNR, in its consideration of resources and in the management of state land, shall consider
12 the impacts of such use upon fish and wildlife populations and human uses of those
13 populations, habitat and soil degradation, and upon other forms of use that may occupy the
14 area that is under consideration in an authorization. Uses that are not compatible with these
15 uses and resources are to be made compatible through the use of stipulations. The ability of
16 the department to manage the subsequent activities that may result from the issuance of an
17 authorization is to be taken into consideration in the adjudication of an application that
18 requires a written determination by ADNR.
19

20 It is recognized that the use and development of resources will create some level and area of
21 impact. Nonetheless, the state may determine through its authorization processes that the
22 development of specific surface or subsurface resources is appropriate, even with some level
23 of impact, and may approve such developments, with appropriate stipulations. It is also
24 recognized that the development of specific subsurface resources may take precedence over
25 surface uses. Material site development and construction access may also take precedence in
26 certain instances.
27

28 **U. Conflicts with Traditional Uses of Fish and Game.** The harvesting of fish and game
29 resources is an important part of the subsistence lifestyle within the planning area, with
30 concentrations of this activity occurring along the main transportation corridors throughout
31 the planning area. The underlying integrity of the ecological system and traditional way of
32 life within the planning area is to be maintained to the maximum extent practicable. ADNR
33 decisions are to carefully consider the effects of a proposed project or activity upon these
34 uses and resources, and authorizations are to ensure that adverse impacts are avoided,
35 minimized, or mitigated consistent with the requirements of this section of Chapter 2 and,
36 specifically, with Management Guideline A within areas designated or co-designated Habitat.
37

38 **V. Other Guidelines Affecting Fish and Wildlife Habitat.** Other guidelines may affect
39 the protection and management of fish and wildlife habitat. See other sections of this
40 chapter.
41
42
43

Management Guidelines: Harvest Areas

A. Allowing Uses Within Designated Harvest Areas (Hv). Considerations similar to those identified in the Habitat portion above apply to areas designated Harvest (Hv). In the CRBAP, only upland management units are affected by the Harvest designation. These Harvest areas are defined as areas of intense fish and wildlife harvest (compared to the rest of the planning area) where the level of harvest has reached, or is projected to reach, the harvestable surplus for the resource, or discrete fish and wildlife harvest areas historically important to a community for the harvest of a species where alteration of habitat could permanently limit sustained yield for traditional uses:

- important areas for human use of fish and wildlife,
- areas with multiple uses of fish and wildlife,
- localized areas of community or subsistence harvest,
- intensive sport/personal use fishing areas.

The areas designated “Hv” in Chapter 3 of the plan were defined using the best available information at the time of plan preparation. In the designation of these areas, data sources were of a generalized nature, oftentimes at the 1:250,000 scale. In some cases, there is only a single harvest resource, but in other instances several resources exist, with these resources sometimes occupying different portions of the management unit. The spatial distribution of harvest resources is described in the management intent language, if known. The resource(s) used to make the determination that an area should be designated Harvest are identified in the management unit descriptions contained in the Resource Allocation Tables in Chapter 3 under the column, “Resources and Uses”.

Management units designated Harvest will be managed to ensure minimal disturbance to the harvest resources identified for a given area. Since there is a distinct seasonality associated with the critical life periods of certain species; seasonality shall be taken into consideration during project review and approval. Seasonality and critical life cycle stages are identified in various publications.⁴ Thus, it may be possible, through consultation with ADF&G and other agencies, that uses and facilities may be found appropriate within areas designated Harvest if the seasonality criteria are satisfied by including mitigating measures in project design.

Uses that are not consistent with the approved designation, not authorized in the management intent statement for a specific management unit, and, if permitted, would result in the degradation of the resource(s) associated with areas designated Harvest or Ha/Hv, are to be considered incompatible with the plan’s management intent and with the Harvest and Ha/Hv designations. If there is a question as to whether a use would be appropriate or whether it

⁴ These publications include, but are not limited to, the following: ADF&G Regional Habitat Guides and Subsistence Management Reports. Consult ADF&G for further information.

1 would degrade a listed resource, ADNR shall consult with the ADF&G, in making the
2 determination of initial incompatibility.

3
4 Uses may be permitted if the proposed use avoids the resource or if, through stipulations, it
5 can be made to have minimal adverse impact on the harvest activity for which the area was
6 designated. In instances when the proposed use cannot avoid the harvest area or cannot
7 mitigate significant impacts through design, siting, or operation stipulations, the use may be
8 permitted if one of the following conditions is satisfied:

- 9
- 10 • ADF&G determines through new information or more detailed analysis that the area
11 is not Harvest or Ha/Hv as defined in the plan;
 - 12 • The use is of sufficient public importance or lacks a feasible and prudent alternative
13 consistent with the applicable management guidelines of this plan; or
 - 14 • The significant adverse impacts of the use (project) are mitigated under Management
15 Guideline A.
- 16

17 **B. Allowing Uses Outside of Designated Harvest Areas.** Even though only intensively
18 used area were designated Harvest, significant harvest areas do occur in other units
19 throughout the plan.

20
21 **C. Activities Adjacent to Designated Harvest Areas.** To protect access, uses adjacent to
22 intensively used commercial, recreation, community, or subsistence harvest areas will not
23 preclude access for harvest activities during the harvest or use season.

24
25 **D. Other Guidelines Affecting Fish and Wildlife Harvest Areas.** Other guidelines may
26 affect the protection and management of fish and wildlife harvest areas. See other sections of
27 this chapter.

Forestry

The forest resources of the CRBAP planning area are a mixture of species and age classes located primarily in the Tazlina Lake and Copper River regions. The upland areas are composed of white spruce, black spruce, paper birch, and quaking aspen. Balsam poplar is commonly found in riparian and flood plain areas, typically in smaller populations compared to all other species present. Black spruce is the dominant species in this boreal forest type, accounting for the majority of forest acreage across all geographic regions. White spruce has commercial value for sawlogs, biomass, fiber and fuelwood and accounts for the majority of merchantable pole and saw timber in the planning area. The commercial value of the paper birch is for biomass, fiber, and fuelwood with some sawlog value in trees with little or no defect. In addition to white spruce and birch, black spruce and aspen are now recognized as an abundant source of woody biomass. While balsam poplar provides adequate biomass of acceptable quality, other available species are preferred. Some communities are beginning to utilize woody biomass for heating public schools.

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 ADNR 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.

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 and riverine environments in areas designated Forestry or co-designated Forestry. Also, to benefit the state's economy 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

1 with information, technical expertise, and management guidance for utilizing forest
2 resources.

3
4 **Wildland Fire Suppression.** Division of Forestry & Fire Protection shall continue to
5 provide wildland fire suppression within the planning area consistent with the requirements
6 of the Alaska Interagency Fire Management Plan.

7
8 **Forest Health.** To improve forest health and vigor by harvesting and replacing mature aspen
9 stands with healthy new stands of regrowth, while protecting and maintaining other resource
10 values. Replacement of mature aspen stands has also benefited wildlife habitat. Minimize to
11 the extent possible adverse forest health impacts utilizing active forest management
12 techniques.

13
14 **Wildlife Habitat Management.** ADNR will seek to create, enhance and maintain wildlife
15 habitat consistent with forest management by providing a mosaic of forest stand areas,
16 reflecting the natural range of species and habitat diversity, for the variety of wildlife species
17 that live in the planning area. Habitat manipulation through controlled burns, water control,
18 timber management practices, or other measures may be used to improve habitat for certain
19 fish and wildlife species.

20
21 **Provision of Biomass for Public Purposes.** ADNR shall support actions to develop
22 sustainable sources of energy for meeting community needs from renewable woody biomass
23 obtained from state forests or other state lands that are suitable for this purpose and
24 consistent with state and federal permitting standards. Wherever feasible and practical, the
25 by-products of forest land management practices involving harvest or land clearing are to be
26 utilized for biomass.

27
28 **Non-timber Forest Products.** Support Non-Timber Forest Products Industries. In addition
29 to the management of state land for those designations that are delineated in Chapter 3 for
30 specific management units, ADNR shall manage state land to support the gathering of natural
31 materials that have commercial value and that provide a basis for employment in areas of the
32 state.

33 34 35 **Management Guidelines**

36
37 A systematic program of scheduled timber harvests is appropriate within the planning area.
38 Timber management activities are subject to the following management guidelines. Another
39 important component of the state forestry program within the planning area is fire
40 management. A management guideline is included that describes the broad aspects of this
41 program. The implementation of the state fire management program is identified and
42 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 ADNR 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 that is greater than ten acres in size (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, or their delegate, shall determine the amount and kind of material that is to be salvaged and shall coordinate with Division of Forestry & Fire Protection 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, Division of Forestry & Fire Protection (DOF&FP) may provide wood products for personal use. This program will only be undertaken, however, if it can be effectively and efficiently administered by DOF&FP. In areas designated for settlement, personal use forestry permits may be issued by DOF&FP after consultation with DMLW's Land Conveyance 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

1 calculated using the area control method and the units designated Forestry or co-designated
2 Forestry are to be used for the basis of this calculation.

3
4 **E. Salvage of Damaged Trees.** Trees damaged due to fire, wind throw, insects or disease,
5 or other causes may be salvaged on all land use designations unless management intent
6 statements for specific management units in Chapter 3 specifically prohibit salvage harvest.
7 A Forest Land Use Plan, if required, will provide the rationale for conducting the salvage
8 harvest and describe how the action will not conflict with the management intent for each
9 management unit.

10
11 **F. Fire Disturbance.** The intent of fire management is to identify where wildland fire can
12 be allowed or managed fires can be used to reduce costs of fire suppression, reduce the risk
13 of damaging fires, and maintain the natural diversity and productivity of forest stands. Fire
14 suppression will be a priority near residential areas or other forms of active land use, high
15 value recreation use areas, and areas with infrastructure development. Consistent with
16 AS 41.15.010 and AS 41.15.020, DOF&FP will protect forest resources from destructive
17 agents commensurate with the values at risk identified in the Alaska Interagency Fire
18 Management Plan. The Fire Management Plan indicates where suppression operations are
19 likely to occur; generally, such operations are to be limited to decreasing the long-term risk
20 of damaging fires and maintaining the natural diversity of forest stands, stand ages, and
21 habitat types. Fire disturbances, wildland and prescribed, may also be appropriate where soil
22 erosion is not a concern, as habitat enhancement techniques. Fire disturbance may also be
23 appropriate for ground scarification to ensure exposure of mineral soil, a substrate essential
24 to the natural regeneration of early successional browse species. Specific fire suppression
25 levels are identified in the Alaska Interagency Fire Management Plan.

26
27 **G. Wildlife Habitat.** Forest management can be an important tool for improving wildlife
28 habitat. DOF&FP will consult with ADF&G's local biologist during the planning stage of
29 timber harvest layout and in the preparation of the Forest Land Use Plan in order to receive
30 guidance on wildlife habitat enhancement opportunities. Trees and vegetation may be
31 manipulated by cutting, crushing, harvesting, or burning to provide or improve wildlife
32 habitat.

33
34 **H. Maintenance of State Land Timber Base.** Land designated or co-designated Forestry
35 is to be retained by the state and is not to be converted to another designation. If the latter is
36 considered necessary, a public hearing is to accompany the plan amendment. It is the policy
37 of this plan and required under 11 AAC 55.030(f)(1)(A), that such conversions not be
38 considered until the plan is revised through a plan amendment process.

39
40 **I. Coordination with Borough Forest Management Plans and Programs.** Prior to the
41 preparation of the (biennial) Five Year Schedule of Timber Sales and the development of a
42 Forest Land Use Plan, ADNR should coordinate with local government and major
43 landowners in order to obtain maximum efficiencies and reduce management conflicts over
44 the harvesting of timber and land use.

1 **J. Timber Harvest in Areas Designated Settlement, Agriculture, Materials, Forestry,**
2 **or Minerals.** Timber harvests are considered appropriate in areas designated Settlement if
3 intended to reduce fuel loads to minimize fire potential, support the costs of subdivision
4 development, provide access to the subdivision, or provide ancillary facilities subject to the
5 other requirements of the Forestry standards in this Chapter. Timber harvests may also be
6 appropriate for purposes of forest health or the clearing of rights-of-ways. The selective
7 harvesting of timber before subdivision development is considered appropriate, after
8 consultation with the Land Conveyance Section and if authorized by the Regional Manager,
9 SCRO. Similarly, the harvesting of timber at material sites may be appropriate, after
10 consultation with the Regional Manager, SCRO. Timber harvests are also considered
11 appropriate in areas designated Agriculture if the timber harvest is identified as an
12 appropriate use or activity in the State Farm Conservation Plan that is approved prior to
13 agricultural production. Division of Forestry & Fire Protection shall consult with the
14 Division of Agriculture prior to the initiation of timber harvest in areas designated
15 Agriculture. If the use is consistent with the submitted plan of operations, timber harvests
16 are also considered appropriate in areas designated Minerals or Materials. Prior to timber
17 harvest on areas designated Minerals or Materials, DOF&FP shall consult with staff in the
18 Mining Resources Section and DMLW SCRO. Similarly, timber harvest is considered
19 appropriate in areas co-designated Forestry and Habitat but forest management activities are
20 to avoid or minimize impacts to the fishery, wildlife, or habitat resources in such areas.
21 Consult with ADF&G where timber harvests are to occur in co-designated areas as part of
22 the forest land use plan (or similar pre-decisional process).
23

24 **K. Other Guidelines Affecting Forestry.** Other guidelines will affect management
25 practices for timber development support facilities and forestry. See other sections of this
26 chapter.
27

Heritage 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 adverse effects on heritage resources and makes recommendations to mitigate these effects.
2. Cooperate with concerned government agencies, Alaska 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 resources⁵ 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

⁵ Cultural resources, for the purposes of this management guideline, do not include trails or routes.

1 surveys should be considered where OHA reported sites exist or where there is a high
2 potential for such sites to exist. The extent and type of the cultural survey within the area of
3 the proposed land disposal shall be determined by OHA in consultation with DMLW.
4 Detailed procedures exist governing when a survey is required and extent of the cultural
5 resource survey and are to be consulted by ADNR adjudicators.
6

7 **D. Cultural Resources in Timber Management Areas.** OHA will review proposals for
8 timber management activities through the interagency review process for the Five-Year
9 Schedule of Timber Sales and Forest Land Use Plans for individual sales and provide
10 comments and information about areas of concern within the review deadline. OHA may
11 recommend archaeological surveys in timber sale areas with a high potential for cultural
12 resources. Areas of reported historic, archaeological, or paleontological sites that retain
13 historic integrity should not be disturbed. Timber operations shall not occur within 300 feet
14 of the boundaries of known sites unless the OHA determines, in consultation with the
15 Division of Forestry & Fire Protection, that certain activities can occur without significant
16 adverse impacts to the cultural resource. The OHA shall assess the extent and significance of
17 the cultural resource and work with Division of Forestry & Fire Protection to develop site-
18 specific mitigation measures to protect the cultural sites while allowing timber management.
19

20 **E. Cultural Resources Adjacent to Recreation Facilities.** Recreation facilities that might
21 subject cultural sites to vandalism because of the increased public use should not be placed
22 adjacent to the cultural sites.
23

24 **F. Heritage sites should be reported when found.** The Alaska Heritage Resources Survey
25 (AHRS) is an inventory of all reported historic and prehistoric sites within the State of
26 Alaska and is maintained by the OHA. The AHRS is used to protect cultural resource sites
27 from unwanted destruction. By knowing of possible cultural remains prior to construction,
28 efforts can be made to avoid project delays and prevent the destruction of cultural sites.
29 There are 1,860 reported cultural resources within the CRBAP boundary. While over 45,000
30 sites have been reported within Alaska, only a portion of the state has been surveyed. The
31 AHRS is not complete or static, so heritage sites, when found, should be reported to the
32 OHA.
33

34 **G. Other Guidelines Affecting Cultural Resources.** Other guidelines will affect cultural
35 resources. See other sections in this chapter.
36

Materials

Material sites are areas where common variety materials such as sand, gravel, rock, crushed rock, and rip-rap are extracted and processed. Material resources are required for the construction, maintenance, and expansion of infrastructure including roads, pipelines, airports, businesses, residences, utilities, and communication facilities among other types of projects. Some material sites or material sources exist that may have been previously developed and are not currently active or are newly identified sources. Ideally, source areas are located close to a project area or area of use to reduce transportation costs; however, appropriate material sources are not located uniformly in many landscapes, so transportation distances can vary. Transportation costs increase with distance from the material source area which quickly makes their use cost prohibitive, and therefore, a lack of material sites within a reasonable distance from projects increases transportation costs and may effectively prevent some maintenance and development activities that are necessary or desirable.

Goals

Retain Land for State-Owned Material Sites. Maintain in state ownership and make available to public and private users sufficient, suitably located material sites to economically meet long-term economic needs of the area for material resources.

Avoidance or Minimization of Impacts. Material extraction sites are to be sited so that they avoid impacts, including but not limited to noise and dust, to adjacent residential or institutional areas (i.e., schools); environmental resources and sensitive habitats, to the extent that it is economical or practicable.

Management Guidelines

A. Preferred Material Sites.⁶ 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

⁶ Material sites are the sites where materials are developed. They are generally located within or near transportation corridors.

1 cost of transportation facilities, material sites should be located as near as is feasible to where
2 the material will be used.⁷

3
4 **B. Maintaining Other Uses and Resources When Siting, Operating or Closing Material**
5 **Sites.** Prior to material extraction, the adjudicator will ensure that the requirements of the
6 permit or lease adequately protect other important resources and uses. The disposal of
7 materials should be consistent with the applicable management intent statement and
8 management guidelines of the plan. In some instances, areas occupied by a material site may
9 be appropriate for reuse for settlement or another form of development. When this occurs,
10 this is noted in the ‘management intent’ of the affected unit and reuse of the parcel for the
11 intended use is appropriate. If this occurs, the reclamation plan shall take this into
12 consideration and not preclude possible reuse.

13
14 **C. Land Sales in Areas of High Material Potential.** Generally, if a settlement area
15 contains sand and gravel deposits, rock sources or other similar, high value material
16 resources, a material source area should be identified during subdivision design and retained
17 in state ownership for future use.

18
19 **D. Avoidance or Minimization of Impacts.** Material extraction sites are to be sited so that
20 they avoid or minimize impacts, including but not limited to noise and dust, to adjacent
21 residential or institutional areas (i.e., schools).

22
23 **E. Screening and Rehabilitation.** Where topographic and vegetation allow, material sites
24 should be screened from roads, residential areas, recreational areas, and other areas of
25 significant human use. Sufficient land should be allocated to the material site to allow for
26 such screening. Material extraction sites adjacent to the Glenn Highway, the Richardson
27 Highway, the Tok Cutoff, the Edgerton Highway, The Denali Highway, and Lake Louise
28 Road shall provide a vegetation buffer of 75 feet or more. Rehabilitation of the site shall
29 follow the requirements of AS 27.19.020 and 11 AAC 97.250.

30
31 **F. Protection Area Adjacent to Anadromous or High Value Resident Fish**
32 **Waterbodies.** Where topography and vegetation allow, a riparian buffer of at least 100 feet
33 shall be provided adjacent to anadromous waterbodies. The adjudicator is to review the
34 Management Guidelines B, D, E and H in the ‘Shorelands and Stream Corridors’ section of
35 this chapter prior to issuing an authorization or disposing of an interest in state land to
36 determine the amount of area to protect and the type of management stipulation to impose.

37
38 **G. Development of Material Sites.** Material sites are surface resources that occur in
39 specific geologic locations. It is recognized that the use and development of material
40 resources will create some level and area of impact. Nonetheless, the state may determine
41 that the development of material resources is appropriate, with appropriate stipulations. It is

⁷ 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.

1 also recognized that the development of specific material resources may take precedence
2 over surface uses. Material sites are necessary to and are a type of use that is often
3 associated with the construction and maintenance of roads, and therefore an essential
4 component of the road construction process. They may also provide access to other state
5 resources, such as forest stands in the Northwest and Central regions of the planning area.
6 The provision of access to forest resources is appropriate if not in conflict with material
7 extraction activities.
8

9 **H. Management of Material Sites Near Critical Infrastructure.** Construction materials
10 resources are required for the development, maintenance, and expansion of critical
11 infrastructure including roads, pipelines, airports, businesses, residences, utilities,
12 communication facilities, and similar types of projects. Transport of materials over any
13 significant distance (e.g., more than 1000 feet from an existing road) quickly makes their use
14 cost prohibitive, and therefore lack of material sites within a reasonable distance from
15 projects effectively prevents maintenance and development activities that are necessary
16 and/or desirable. Recognizing the critical need for construction materials resources wherever
17 infrastructure is present or planned, generalized management for materials resources is
18 appropriate and encouraged within 1000 feet of existing and planned infrastructure to
19 facilitate appropriate development and maintenance activities.
20

21 Consideration should be given to the identification of material sites near such projects.
22 Because of the importance of such sites, their siting is appropriate within areas designated
23 Settlement, Resource Management, and Agriculture and may, with mitigation requirements,
24 be appropriate in areas designated Habitat or Public Recreation. See Management Guideline
25 T, Protection of Resources and Balancing of Impacts from Potential Development, in the
26 Fish and Wildlife Habitat section in Chapter 2. This management guideline is also applicable
27 to the development of material extraction sites.
28

29 **I. Other Guidelines Affecting Materials.** Other guidelines will affect the use of material
30 resources. See other sections of this chapter.
31

Mineral Resources

Mineral resources in the Copper River Basin planning area includes a wide variety of base metals, precious metals, and industrial rocks and minerals. Many base metals are deposited in Paleogene rocks within the planning area. These metals include manganese, uranium, lead, and copper. Base metals are considered common metals that are used in a wide variety of commercial and industrial applications. Base metals are commonly used throughout manufacturing and construction processes. For base metals to prove profitable frequent monitoring and examination of the rock's minerology aspects, element composition and particle size and shape, is required. The planning area has a high volume of base metals throughout, but it is important to note base metals are inexpensive and do not hold their value because they easily oxidize and corrode, leading to a low intrinsic value.

Precious metals, placer gold and silver, are found throughout the sand lining the Copper River's mouth, alluvial fan deposits from canyons throughout the Copper River, and alluvial deposits under serpentinite rock along more linear aspects of the Copper River. Placer gold's native form is nugget or grain shaped and also found as inclusions in rocks and within rock veins. In these areas, the rocks are expected to be ultramafic, compared to the more common mafic rocks found throughout the planning area. Ultramafic metamorphic rocks are the result of alterations to a rocks composition or structure due to immense heat, pressure, and other volcanic activity. Ultramafic rocks are dominantly composed of magnesium, silicon, and small amount of iron, calcium, and aluminum. Precious metals are more rare than other nonprecious metals, like base metals, but placer gold is not considered rare just difficult to find and extract making it extremely valuable. Gold and silver are considered to have a high economic value because they are harder to find and extract than most other metals but not minimally occurring in nature. Within the planning area placer gold is known to have a high potential in the Glenn/Richardson and Central regions. They are also relatively nonactive meaning they are not susceptible to erosion, oxidation, or other composition altering chemical reactions when exposed to different substances.

Industrial rocks and minerals are non-metals and essential to many infrastructure proceedings like the construction of buildings and roads. Industrial rocks and minerals include crushed rock, sand, and gravel typically composed of limestone, clays, sandstones, silica, gypsum, and talc. Within the Copper River Basin planning area, limestone, clays, sandstones and silica stones are most common. Limestones are considered biologically sedimentary rocks as they form due to immense accumulation of organic debris. They may also form from calcium carbonate precipitation from a nearby water source, which is also seen within the Copper River Basin area. Clays are found as sediments at the bottom of water bodies, buried under sedimentary rocks where water had penetrated through pores in the rock beds, and in rock bodies that have been heated by water previously in contact with molten rock. There is a high sandstone potential on the eastern and western sides of the planning area with the western side's potential being especially concentrated with the Chugach Mountains, Central, and the Northwest portion of the planning area being most notable. Sandstones are clastic sedimentary rocks mostly composed of sand-size silicate grains. Quartz and feldspar are

common groups of minerals found in sandstone and silica stone composition. Both are found in all three types of rocks, igneous, sedimentary, and metamorphic and make up a significant portion of the Earth's crust. Within the planning area, industrial rocks and minerals are found near the Wrangell/McCarthy area and the Northern region of the planning area. Industrial rock and minerals are typically considered inexpensive but can be of great economic value as they are the foundation of many materials used in the construction, chemical, and agriculture industries.

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. ADNOR 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.⁸ 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

⁸ Mineral entry on Alaska Mental Health Trust Land is not authorized without the prior approval of the Trust Land Office of ADNOR 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.

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).

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 ADNR 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 fish⁹. Because only a fraction of all anadromous streams are listed within the ADF&G Anadromous Waters Catalog (AWC), and documentation of resident fish streams is not centralized, ADNR 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 ADNR 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

⁹ Note: Mining in fish habitat requires additional permits from ADEC and ADF&G.

1 locatable minerals. The fact that an area is closed to new mineral location will not be
2 cause for denying access across state land. Mineral closures do not affect valid
3 existing mineral locations.

4 **2. Land Closed to Mineral Entry.** State mining law stipulates that mining must be
5 determined to be in conflict with significant surface uses before an area can be closed
6 to mineral entry (AS 38.05.300). To determine the location of areas closed to mineral
7 entry in the planning area consult the ADNRL Land Administration System (LAS) and
8 Alaska Mapper.
9

10 **G. Leaseable Mineral Development.** State land within the planning area may be leased or
11 opened for mineral exploration and development if the department determines it is in the best
12 interest of the state to enter into a lease for such resources. Before authorization of a lease,
13 the department will determine if the surface values are significant enough to warrant
14 restricting surface entry. The surface impacts of proposed underground mining shall be fully
15 considered as part of the permitting process.
16

17 **H. Other Guidelines Affecting Mineral Resources.** Other guidelines will affect the
18 management of mineral resources. See other sections of this chapter.
19

Public Access

Goals

Trails. 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.

Public Access. Ensure adequate opportunities for the public's use of public resources of local, regional, and statewide significance. 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, ADNR 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 ADNR.

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 ADNR 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 ADNR web site.

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)

1 easements. These easements are intended to provide access through private Native lands to
2 public lands and waters. They are reserved and managed by the federal government.

3
4 Information regarding ANCSA 17(b) easements can be found at the ADNR web site.

5
6 **E. Access for Development.** When an access route is constructed for resource development
7 over state land, public access to mineralized areas, recreation, fish, wildlife, or other public
8 resources should generally be retained. If the new resource facility is likely to be of limited
9 duration and provides superior access to the current means of access, the state should retain
10 the new facility for public access. If the new route or facility will not or should not provide
11 public access due to concerns for public safety or the long-term detrimental impact on natural
12 resources, or OHA identified cultural resource sites, the current means of public access
13 should be retained. Consultation with OHA is necessary to determine identified cultural
14 resources. Additional access routes in some areas may lead to negative impacts on valuable
15 resources, particularly certain renewable resources. Consultation with ADF&G is necessary
16 to determine whether or not the access road will cause detriment to fish and wildlife habitat
17 and populations. The development of new trails should not displace current methods of
18 access without providing alternative routes.

19
20 **F. Limiting Access.** Access to state lands may be curtailed at certain times to protect public
21 safety, provide for the remediation of public use areas, allow special uses, and prevent harm
22 to the environment, fish and wildlife. Public access may be limited because of the presence
23 of fire management operations, timber harvest, high soil moisture content when vehicular
24 traffic may cause damage to the base or sub-base, or sensitive populations of fish or wildlife.

25
26 **G. Siting and Constructing Temporary and Permanent Roads or Causeways.**
27 Temporary and permanent roads or causeways will, to the extent feasible and prudent, be
28 routed to avoid sensitive wetlands, avoid streams and minimize alteration of natural drainage
29 patterns, and avoid long-term adverse effects on fish and wildlife, water quantity or water
30 quality. If a temporary road is routed through sensitive wetlands, clean fill will be required
31 and construction methods, which facilitate removal of the fill, will be required.

32
33 **H. Protection of the Environment.** In the siting of public access facilities, consideration is
34 to be given to the effect of the proposed project or improvement on the natural environment,
35 fish and wildlife species, and habitats identified in this plan as significant. ADF&G should
36 be consulted prior to the issuance of an authorization to determine whether or not significant
37 impacts to fish or wildlife resources or their associated habitats are anticipated and can be
38 mitigated.

39
40 **I. Joint Use and Consolidation of Surface Access.** Joint use and consolidation of surface
41 access routes and facilities should be encouraged wherever it is feasible and prudent to do

1 so.¹⁰ Surface access also should be sited and designed to accommodate future development
2 and avoid unnecessary duplication.
3

4 **J. Preservation of Access Opportunities.** The ADNR shall preserve potential access
5 routes to developing areas. Unless there is an overriding state need, section line easements
6 are to be preserved.
7

8 Because of their linear alignment, it is recognized that roads and trails may traverse a number
9 of different land use designations. Land use designations are not intended to affect or
10 preclude access development, and such facilities may be constructed on all land use
11 designations, including Habitat, Public Recreation, and Water Resources, although
12 stipulations may be required to mitigate adverse impacts to the resources associated with
13 these designations.
14
15

16 **Management Guidelines: Access Within and Between Developing Areas¹¹**

17

18 **A. General.** The following guidelines pertain to the siting and development of access
19 within developed or developing areas and between these areas. This is a more specific
20 application of the general public use easement. These types of facilities provide movement
21 areas for people and, if appropriate, wildlife. The width and siting of access corridors
22 depends upon their function and location. General precautions should be taken when
23 developing new access to avoid critical wildlife concentration areas. Easements are used to
24 create an access corridor, similar to the more general public use easements described
25 previously.
26

27 **B. Requirement for Access.** The ADNR shall assess the need for public access before
28 selling, leasing, or otherwise disposing of the land estate. If local access needs are identified
29 through the adjudication and agency or public review process, access trails may be reserved.
30 This will occur through the retention of state land in public ownership or through the creation
31 of a public use easement. Under either approach, the public is to have the right of access
32 within the area of state land or the public use easement.
33

34 **C. Ownership.** The following factors shall be considered by ADNR in making the decision
35 to retain the access corridor under state ownership or to provide for public access through a
36 public use easement:
37

- 38 1. If the access (usually a trail within a developed or developing area) is used as a
39 neighborhood collector trail that connects to a public open space system or a trail of
40 regional significance, access should be retained in public ownership.

¹⁰ 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.

¹¹ This term includes the general concept of access and is inclusive of roads and trails.

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 a 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 Access Corridors. The width of the access corridor¹² should be determined according to its function and location:

1. Within developed or developing areas, access corridors should 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.¹³
2. In all other areas, the width shall vary with terrain, function, and the need for separation from other uses, but should not be less than 50 feet.
3. Trails or other access facilities of statewide or regional significance should 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 usable 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.

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.

¹² An access corridor includes the tread of the trail and an area immediately adjacent to the tread.

¹³ 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.

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 Statutes (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 CRBAP, 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 CRBAP to accommodate a .073 commercial lease shall be reviewed by the Director of DMLW prior to or concurrent with the adjudication process.

1 **F. Permits, Easements, and Leases Adjacent to Recreation Facilities.** Permits,
2 easements, and leases may be issued adjacent to recreation facilities if the land manager
3 determines that the two uses can be made compatible by design, siting or operating
4 guidelines; or if the land manager determines there is no feasible and prudent alternative for
5 the activity. This guideline also applies to sites reserved for future recreation facilities. The
6 land manager's determination will be made after consultation with the facility manager.
7

8 **G. Management of Recreation Use on State Lands.** To the extent provided by law,
9 ADNR is to manage recreation use and activities to enable a variety of uses and vehicle
10 types, while ensuring that adverse impacts to fish and wildlife species and habitats are
11 avoided or minimized, and to avoid the creation of user conflicts and if in existence, to
12 minimize their impact.
13

14 **H. Scenic Areas of Exceptional Value.** To the extent feasible and prudent, areas of
15 exceptional scenic value are to be retained by the state or protected through the use of
16 easements, setbacks, or other management techniques. Authorizations issued by ADNR shall
17 consider scenic values and such areas during the process of adjudication, and if found to be
18 in the state's best interest, should retain or protect these areas through appropriate
19 stipulations or management requirements.
20

21 **I. Consultation with ADF&G.** Consult with ADF&G in the siting of facilities where fish
22 and wildlife species or important habitats are likely to occur.
23

24 **J. Other Guidelines that Affect Recreation, Tourism, and Scenic Resources.** Other
25 guidelines will affect management practices for recreation, tourism, and scenic resources.
26 See other sections of this chapter.
27

Reservations of Water for Instream Flow

Goal

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

Management Guidelines

A. Considerations for Reservations of Water (General). Streams, lakes, and other waterbodies may be considered for reservations of water under AS 46.15.145. Such reservations are intended to reserve sufficient water to maintain a specified in-stream flow or level of water on a stream or body of water 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. Reservations of Water are pending or have been established according to AS 46.15.145 on the Copper, Delta, Gulkana, Klutina, Little Tonsina, Tangle, and Tonsina Rivers, and Sinona Creek (see DMLW Water Rights and Temporary Use Authorizations webpage for current information). Proposals for new developments requiring the use of a significant amount of water as defined by 11 AAC 93.035 shall submit an application for water rights or temporary water use authorizations to DMLW.

C. Process for Determining Reservations. Applications for instream flow reservations are submitted to DMLW for adjudication following the procedures identified in 11 AAC 93.141-147.

Settlement

Background

A mix of settlement types have occurred within the planning area; pre-surveyed lots are generally common adjacent to lakes and to some streams, while remote settlement areas occupy more remote terrain on land adjacent to streams or small lakes. In general, most of the pre-surveyed lots have been conveyed out of state ownership, primarily to individuals but also to the University of Alaska, and 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 Southcentral Alaska, especially within the Susitna Valley, this growth can be characterized as modest.

Settlement areas are identified in this plan through two ways. 1) They were existing settlement areas from the 1986 CRBAP; or, 2) they were identified by evaluation of the physical characteristics (slope, aspect, topography, soils, etc.) or proximity to access through this planning process.

The identification and ultimate sale of state land is a multi-phased process. First, land is identified as appropriate for settlement in the area plan. From the settlement areas identified in the plan, the competitive land sales unit will identify potential project areas where land may be sold. Once the project area has been identified the land sales team will initiate a step-down process that includes agency and public comment period to determine if the proposed land sale project remains appropriate. If ADNR determines it is in the state's best interest to move forward with a land disposal a Final Finding and Decision will be issued for the project, which is an appealable decision. Depending on the type of competitive land sale process determined appropriate for the projects area, parcels of land may be sold within the project area. The remaining unsold lands within a project area are available for multiple use, including subsistence harvest, by the public. Not all lands designated as Settlement will be developed.

It is likely that residential development will continue in the next 25 years, although it is probable that the amount of this growth may be somewhat less than in previous periods, reflecting the interest in seasonal residences for recreation (remote recreation) and community expansion. Continued growth is likely to occur along the major 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 and co-designations in the planning area total approximately 619,474 acres or about 12 % of the total state land inventory of this area. This is an increase of 5,160% from the amount of land in the Settlement designation in the 1986 Copper River

Basin Area Plan (approximately 12,000 acres).¹⁴ Settlement areas primarily occur in the more accessible and better drained uplands adjacent to the four major highways, in the remaining undeveloped portions, and at the more desirable locations in remote areas, principally at lakes, streams, and 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.

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. ADNR will attempt to satisfy three settlement categories within the planning area:

- **Seasonal residences for recreation.** ADNR 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.
- **Year-round residences for community expansion.** ADNR 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.
- **Industrial or commercial development.** ADNR will sell, lease, or protect for future use suitable land for private commercial and industrial uses. Within the CRBAP planning area most land designated Settlement is intended for residential use. Relatively few parcels are suitable for possible commercial or industrial development

¹⁴ The current planning area is 619,427 acres larger than the 1986 CRBAP boundary.

and these are indicated in the Resource Allocation Table. If ADNR 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, ADNR 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.** ADNR 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.

- 1 **3. Coordination with Local Governments.** Where state land adjoins Borough land
2 and where both areas are designated for Settlement, consideration should be given to
3 the coordination of land disposal programs in order to achieve economies of scale and
4 reduce infrastructure costs.
- 5 **4. Pacing.** Settlement offerings may be phased over 20 years, the life of this plan. The
6 timing and extent of disposals will depend upon anticipated demand, availability of
7 funding, the rate of community expansion, the availability of or costs to provide
8 necessary infrastructure, and the particular land requirements of such expansion.
9 Another factor may be whether the disposal will generate a demand for services that
10 cannot be reasonably expected to be met by local government or community
11 organizations.
- 12 **5. Areas Designated Resource Management.** The large areas of state land that are
13 designated Resource Management are generally not suitable for development during
14 the planning period. Most Resource Management areas are remote and generally
15 unsuitable for residential development because of the presence of adverse
16 topography, drainage, and extensive areas of wetlands that adjoin these areas. This
17 makes the uplands within the Resource Management areas difficult to develop
18 because of the costs and difficulty of road construction in the adjacent wetlands. For
19 these reasons, residential development during the planning period in areas designated
20 Resource Management is considered generally inappropriate except in those areas
21 that adjoin parcels designated Settlement, where road access has been provided to
22 adjoining properties, or for remote land disposals that are not dependent upon access.
23 There may be other restrictions that affect specific management units, and it is
24 necessary that adjudicators consult the management intent portion of a management
25 unit to determine if these exist.
- 26 **6. Ensure Access to Remote Settlements.** Because these types of settlement in areas
27 are almost always distant from infrastructure, it is generally not practicable to identify
28 and develop access corridors to such areas, whether or not they are adjoined by state
29 land or land under other ownership.¹⁵ However, in those limited instances where
30 access corridors can be identified and economically developed, access should be
31 provided. In this circumstance, it is intended that this access be accommodated even
32 if plan designation(s) differ from that of Settlement.
- 33 As part of the development of remote settlement areas, ADNR should consider the
34 provision of staging areas, parking areas, and/or trailheads in order to accommodate
35 landowners parking vehicles and other equipment while accessing their remote
36 parcels. ADF&G should be consulted to ensure there will be no habitat associated
37 impacts from parking areas or trailheads.
- 38 **7. Maintenance of State Settlement Land Base.** Areas designated Settlement in the
39 area plan are intended to provide a land base for ADNR's long term land disposal

¹⁵ Meaning roads or trails.

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.

B. Types of Settlement Land and Land Offerings. The nature of state land available for private ownership is influenced by both the characteristics of land designated for settlement, and the type of land sales program that makes it available. The CRBAP designates certain lands for settlement and provides guidelines for land sales and, in certain instances, will designate certain management units for a specific type of settlement land or land offering. 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.

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

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

- a. Community Settlement Areas.** These areas are relatively small, usually closer to communities or existing settlements, and are accessible from the road system or by water. They are generally suitable in meeting potential needs for community expansion, public facilities, or other purposes that do not require a large amount of acreage.
- b. Remote Settlement Areas.** These settlement areas are further away from communities and the road system, are accessed by water or air, and can be small or large in size. Generally, they are more challenging to access and develop than other types of management units and are most suitable for residential or recreational use.

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

- a. Presurveyed Parcels.** In this type of land offering, the state identifies an area of suitable land, surveys and plats parcels, and then offers them for sale. These are also referred to as “subdivision” sales. They can include a large number of parcels or just a few, and the size of the parcels, sometimes called “lots,” can vary. This type of land offering is usually more suitable for smaller, Community

Settlement Areas, but may also occur in large Remote Settlement Areas where appropriate. The decision on which type of parcel to create, large or small, is to be made at the time of subdivision design and development.

- b. Staked Parcels.** In this type of land offering, eligible applicants are allowed to identify a parcel of land within a specified area by staking it, and the parcel is surveyed prior to actual sale. Staking is usually subject to certain restriction such as parcel size limits and setbacks from sensitive areas in order to protect other resources within the staking area. Staking areas generally coincide with the areas designated as ‘Remote Settlement Areas.’ In certain instances, the CRBAP 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.

C. Isolated Parcels of State Land. The state has acquired and will continue to acquire isolated parcels of land through foreclosure, escheat, and other methods. The following guidelines apply to management and possible disposal of these parcels. See also the section on Applicability of Plan Designations/Classifications to State Lands not Identified in the Plan Text or Plan Maps in Chapter 4.

- 1. In or Near Existing Communities.** If the parcel is in or immediately adjacent to an existing community or past state land offering, the parcel can be offered for settlement unless it is appropriate as a site(s) for schools, material sites, roads, parks, or other public facilities.
- 2. Parcels Not Near Other State Land.** If the parcel adjoins or is surrounded by other state land, it should be managed according to the management intent and guidelines applicable to adjacent lands.
- 3. Parcels Not Near Other State Land.** Parcels, such as mining claims acquired by foreclosure in the middle of a federal conservation system unit, may be considered for exchange or sale to the adjacent property owner.

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

- 1. Protect Life and Property.** ADNR 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, ADNR 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, ADNR 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, ADNR 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.** ADNR 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. Mineral closing orders are recommended for use at the time that an area is being considered for disposal for purposes of settlement or other forms of development that would be inconsistent with mining activity. The timing of

the closure is at the discretion of the ADNR but should be early enough in the process to avoid the inadvertent staking of mining claims. The current mineral closing orders affecting existing areas of settlement or proposed settlement will be retained. The CRBAP recommends one mineral order closing the remaining lands designated as settlement to mineral entry.

- 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 rights-of-way. The elective harvesting of timber before subdivision development is considered appropriate, after consultation with the Land Conveyance Section and if authorized by the Regional Manager, SCRO. 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.** ADNR 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.

E. Design.

- 1. Provide State Land for Important Environmental and Resource Development Purposes.** ADNR, 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, ADNR 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, ADNR 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

1 or expected. Wildfire management costs that result from settlement will be
2 considered and minimized to the extent feasible.

3 **3. Ensure Access.** ADNR should ensure that legal, practical public access (roads, trails,
4 or other options most appropriate to the particular situation) is identified and reserved
5 to and within land offerings. However, the state is not legally obligated to construct
6 roads. In instances where a subdivision or other development is to abut a major
7 arterial, the location of driveway and main road access is to be coordinated with
8 ADOT/PF and other approving agencies. Section line or other easements should not
9 be relied on for access without field inspection of the practicality of such routes,
10 where topography or other conditions might make the practicability of the section line
11 location suspect. Identified access routes should be described in the land-offering
12 brochure. Where needed to reduce the likelihood of conflicts with existing private
13 owners, ADNR may brush or flag public access routes to land offering projects.

14 **4. Subdivision Design.** Subdivisions will be designed to preserve and enhance the
15 quality of the natural setting and the recreational opportunities that make an area
16 attractive to potential buyers. State subdivision design will take account of site
17 limitations and opportunities such as slope, drainage, soils, erosion, riparian zone and
18 coastal buffer, and other features to ensure that sites offered are buildable and can be
19 developed without the need for extensive public infrastructure. Riparian buffers or
20 building setbacks shall be imposed on all disposals where important riparian areas
21 have been determined to exist. If there is some question as to whether a riparian
22 protection area should be imposed, consult ADF&G. ADNR should review any
23 applicable subdivision requirements of local government prior to the initiation of
24 subdivision design.

25
26 **F. Other Guidelines Affecting Settlement.** Other guidelines will affect management
27 practices for settlement. See other sections of this chapter.
28

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, ADNR 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. ADNR 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, ADNR, 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.

C. Public Access Adjacent to Waterbodies. 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. Certain

types of motorized uses may also be appropriate if consistent with 11 AAC 96.020 and 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. See Table 2-1 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 details. 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 waterbody 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. Adjudicators should consult with ADF&G.

E. Access Easements Adjacent to Navigable or Public Water Waterbodies. Under AS 38.05.127, upon a finding that a body of water or waterway is navigable or public water, provide for easements or rights-of-way necessary to ensure free access to and along the body of water, unless it is determined that regulating or limiting access is necessary for other beneficial uses or public purposes.

The public rights retained in an easement shall be identified and noted in the ADNR 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

1 areas of state retained sensitive land or provide access corridors between lots or parcels
2 within the subdivision.
3

4 **F. Protection Easements and Setbacks Adjacent to Non-Anadromous Waterbodies.**

5 Easements or building setbacks may be used in those instances where public recreation use is
6 moderate or where sensitive habitat or other environmental resources exist but are not of the
7 same importance as described under Management Guideline D.¹⁶ See the requirements for
8 ‘Sensitive Environmental Features Buffer’ in Table 2-1 when an easement is to be applied.
9 The purpose of the easement or setback should be noted in the ADNR decision document and
10 on the subdivision plat. Where a protection easement or setback is to be applied, vehicular
11 use within the area of the easement is inappropriate and should not be authorized. Building
12 setbacks may be used in lieu of a protection easement in those instances where it is not
13 appropriate or necessary for the state to retain any easement rights *or* they may be used in
14 combination with buffers, access easements, and protection easements. Building setbacks
15 used in this fashion provide an added level of protection. See the requirements for ‘Building
16 Setback’ in Table 2-1.
17

18 **G. Lakeshore Public Access.** A portion of the lakefront on lakes greater than 10 acres that
19 have or may be expected to have public recreation and all inlets and outlets of lakes of this
20 size and capable of sustaining year-round natural or stocked game fish species shall remain in
21 public ownership for habitat protection and public recreation. Adequate public access to
22 these lakes shall also remain in public ownership or is to be provided through section line,
23 ‘to-and-along’, or other types of public access easements. The amount of public ownership
24 may vary on a site specific basis, but, at a minimum, some portion of these lakes shall remain
25 public. The size of the public reservation shall be appropriate to its expected long range
26 recreational use and relative to the size of the lake. A width of 150’ or more measured from
27 OHW is to be retained or protected through an easement along inlet and outlet streams.¹⁷
28 Public use sites, created through the land disposal program, on lakes of 10-20 acres shall
29 have at least 4 contiguous acres reserved for public access. For lakes larger than 20 acres a
30 public use site of at least 6 acres shall be provided.
31

32 **H. Buffer, Easement, and Building Setback Widths.**

- 33
- 34 1. The width of state retained land, access and protection easements, and building
35 setbacks adjacent to waterbodies (lakes and streams) will vary, depending on whether
36 the area is a retained parcel or easement, and according to management intent and the
37 specifics of the parcel under consideration. In addition, this width may vary along the
38 area of the stream, or lake that is to be protected. Establishing widths, especially for
39 publicly retained lands, will be based on the following considerations: recreational
40 activities to be accommodated, floodway and floodplain widths, habitat protection

¹⁶ These areas are often referred to as ‘protection areas’ in the management units described in the Resource Allocation Tables in Chapter 3.

¹⁷ As measured from each bank of the inlet/outlet stream. This requirement applies whether or not the stream is anadromous.

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 used in areas of sensitive environmental features¹⁸: 50 feet on each side of important environmental features, such as high value wetlands. Distances greater than 50 feet (up to 100 feet) 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 feet 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 are 50 feet.¹⁹
- 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. Riparian buffers preclude principal and most accessory structures within the

¹⁸ These areas are sometimes referred to as ‘protection areas’ in management unit descriptions in Chapter 3.

¹⁹ Other types of utility easements may be less than this width, depending on the purposes of the easement.

1 riparian area; only water dependent uses are authorized in these areas. For more
2 detail see 'riparian buffer' in Table 2-1.
3

4 **I. Guideline/Application Requirements for Easements and Buffers Along Waterbodies**
5 **and Related Environmental Features.** Table 2-1 specifies widths and other requirements
6 for easements, buffers and public access in order to ensure consistency between
7 authorizations along waterbodies and related environmental features. The table captures the
8 information provided in Management Guideline H but also provides guidance on when these
9 requirements are to be applied as well as aspects related to types of uses that may be
10 appropriate.
11

12 On a case-by-case basis, widths may be wider in order to accommodate floodplain width,
13 bank characteristics, size of the waterbody, extent of present or expected future public use,
14 the need to protect important environmental features, or other relevant factors. Similarly,
15 widths can be narrower on a case-by-case basis if it is determined that the harm intended to
16 be avoided by the requirement is not likely to occur because of site-specific circumstances.
17 However, the strip of land must be of sufficient width to allow for public access as well as to
18 screen the waterbody from development, where possible, with an undisturbed strip of
19 vegetation. In all instances, requirements for easements shall be noted on the lease, patent or
20 subdivision plat. This requirement also applies to easements described in Management
21 Guideline H.
22

23 **J. Other Guidelines for Shorelines and Stream Corridors.** Other guidelines will affect
24 shorelines and stream corridors. See other sections of this chapter.
25

1 Table 2-1: Minimum Width Guidelines for Easements and Buffers Along Waterbodies and Related Environmental Features

Guideline/ Application	Minimum Width/ Measured from	Where it 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. ²⁰	50 feet * Landward from ordinary high-water line.	Along: * Lakes * Streams	Provide public access along navigable and other waterbodies.	- Prohibited: Water Dependent²¹ or Water Related²² 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 ADNR 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 can function as a 'To' easement if it provides a practical route to the shore or a river. See 11 AAC 51.045.
2. Riparian Buffers Adjacent to anadromous waterbodies and high value fish streams.	100 feet * Landward from ordinary high-water line.	Along: * 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 feet of OHW.
3. Freshwater Waterbodies Buffer Adjacent to waterbodies that are not protected under #2 but where a significant public use or resource is determined to	100 feet * Landward from ordinary high-water line along streams and lakes that are not covered in item #2 but are considered to have public significance or from the edge of the	Along freshwater waterbodies that are determined to have public significance but where the requirements of #2 do not apply.	Protect areas adjacent to freshwater waterbodies that are important riparian areas or 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 feet 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

²⁰ 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.

²¹ 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.

²² 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 waterbody, 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
exist.	waterbodies, including wetlands, that are to be protected.			- 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.
4. Sensitive Environmental Features Buffer	50 feet *** 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 feet) may be imposed on a case-by-case basis.
5. Building Setback Adjacent to all waters <u>except</u> anadromous and high-value resident fish waters (see guideline 6 below).	50 feet * 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 preferred 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.	100 feet * 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. - Does not apply to exceptions listed at bottom of table. - It is preferred 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

*** Sensitive Environmental Features

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.

Subsurface Resources

Goals

Opportunities for Subsurface Resource Exploration and Development. Provide opportunities through state land management for the exploration and development of non-metallic minerals such as coal, potassium and sodium, oil and gas, geothermal, and oil shale.

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

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

Management Guidelines

A. Oil and Gas Resources. The planning and decision-making processes for oil, gas, and geothermal 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 ADNR's existing licensing and leasing processes. The land use designations of the plan are multiple use in character and do not preclude oil and gas development.

1. All state land is available for oil and gas exploration leasing except for state owned shorelands under the Gulkana River. The Gulkana River is a component of the National Wild and Scenic Rivers System established under ANILCA. Adjacent federal lands are withdrawn from leasing.
2. It should be noted that mineral closing orders under AS 38.05.185 do not apply to oil and gas exploration and leasing, nor do they preclude reasonable surface access to these resources. However, rights reserved under AS 38.05.125 may not be exercised until the provision is made for payment for all damages sustained by the landowner in accordance with AS 38.05.130.
3. Geophysical exploration permits issued under 11 AAC 96 will conform to the maximum extent possible with the management guidelines in the applicable plans.

B. Access for Subsurface 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

1 requirements of applicable administrative regulations, including 11 AAC 96.010 and
2 11 AAC 96.025.

3
4 **C. Geothermal Resources.** The presence of geothermal resources, to support renewable
5 energy development, may be likely within the planning area. The exploration and
6 development of geothermal resources follows the planning processes under AS 41.06, and
7 38.05.181. The land use designations of the plan are multiple use in character and do not
8 preclude geothermal leasing and resources development.

9
10 **D. Coal Resources.** The coal potential within the planning area is not fully understood. It
11 is possible that such resources may be exploited in the future, and it is therefore appropriate
12 to identify current regulatory requirements that affect coal extraction. Coal exploration,
13 development, and extraction are governed by a mix of statutory (AS 38.05.150 and
14 AS 27.21.010-.260) and administrative (11 AAC 85) requirements, which must be followed
15 for exploration and for subsequent extraction to be authorized. This plan does not impose
16 additional requirements of coal exploration and extraction to those cited in statute and
17 regulation. All areas, except within areas closed to such activity in legislatively designated
18 areas, are open to coal exploration, development, and extraction.

19
20 **E. Other Leaseable Minerals.** State land within the planning area may be leased or opened
21 for non-metallic mineral or coal exploration and development if the ADNR determines it is in
22 the best interest of the state to enter into a lease for such resources. Before authorization of a
23 lease, the ADNR will determine if the surface values are significant enough to warrant
24 restricting surface entry. The surface impacts of proposed underground mining shall be fully
25 considered as part of the permitting process.

26
27 **F. Other Guidelines Affecting Subsurface Resources.** Other guidelines will affect
28 subsurface resources. See other sections of this chapter.
29

Transportation and Infrastructure

Background

The majority of the infrastructure within the planning area is around the Richardson and Glenn Highways and along the Trans Alaska Pipeline System (TAPS). The infrastructure present along these corridors are primarily supporting and maintenance facilities for the highway and pipeline system, including paved and unpaved roads and airport runways. Maintenance of transportation infrastructure is year-round in most places and is focused primarily around population centers within the region, including but not limited to Glennallen, McCarthy, and Chistochina.

Ground transportation throughout the planning area is centralized around the Glenn, Richardson, and Tok Cutoff Highways; the Lake Louise, Nabesna, and Edgerton Roads; and a number of small industry associated roads. The Glenn Highway was extended from the existing Palmer Road during WWII to establish military roads and bases along the road system from Palmer to Glennallen. The Richardson Highway was originally a trail established in the 1800s to access gold camps. In the 1920s roads were built to suit modern automobile standards and the growing freight demand in interior Alaska. The Alaska Department of Transportation and Public Facilities (ADOT/PF) is responsible for maintaining the highway and its associated structures. The highways and roads serve as an important transportation link for residents of local communities and access to recreational activities.

Portions of the land surrounding the Richardson Highway is federally owned lands managed by BLM. These lands are subject to Public Land Order (PLO) 5150 and were unavailable for State selection under its statehood entitlement. Section 906(e) of the Alaska National Interest Lands Conservation Act (ANILCA) allowed the State to file future selection applications (so called top filings) on lands previously unavailable for selection which the state did on the lands subject to PLO 5150. The lands within PLO 5150 are the highest priority selections for the state. This plan establishes management intent for these lands in anticipation of their conveyance to the state.

The 800-mile Trans-Alaska Pipeline System (TAPS) originates at Pump Station 1 in Prudhoe Bay and transports oil to the Valdez Marine Terminal. This pipeline runs generally parallel to the Richardson Highway and traverses a variety of terrain, crossing the Brooks, Alaska, and Chugach Ranges, with the highest point found at Atigun Pass. Of the 800-miles of pipeline, some 380 miles are buried while the remaining 420 miles are found above ground due to the presence of permafrost. Of those 800 miles, nearly 180 miles traverse the Copper River Basin Planning Area. Since TAPS was completed in May 1977, over 18 billion barrels of North Slope crude oil have passed through the pipeline. Oil and gas activity trends indicate that development throughout the region will likely increase in the future.

Goals

Support Plan Designations. Through coordination with other state agencies and local governments, devise transportation routes that integrate areawide transportation needs.

Minimize Costs. Encourage a transportation system, where appropriate, that should have the lowest possible long-range costs, including construction, operations, and maintenance. Avoid unnecessary duplication of transportation facilities.

Minimize Adverse Effects. The transportation system vehicle uses should have minimal adverse impacts on local residents, the environment, fish and wildlife resources, and aesthetic and cultural features.

Promote Efficiency. A transportation system should use land and energy resources efficiently and encourage compact, efficient development patterns.

Ensure Public Safety. The transportation system should have a high standard of public safety.

Management Guidelines

A. Access Plans for Land Offerings or Resource Development Projects. Before a land offering or the start of a resource development project, ADNR should consult with ADOT/PF to identify appropriate locations, if any are needed, for access and will also identify responsibilities for design, construction, and maintenance of any proposed transportation facilities. Access plans will be developed in consultation with affected local governments.

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

C. Protection of Hydrologic Systems. Transportation facilities will, to the extent feasible and prudent, be located to avoid significant effects on the quality or quantity of adjacent surface water resources or detracting from recreational use of the waterway. The following guidelines apply:

- 1. Minimize Stream Crossings.** Stream crossings should be minimized. Crossings in specified anadromous fish streams or construction of a structure crossing a specified anadromous stream require permits from ADF&G. Where stream crossings are planned, they should be located within a stable reach of the stream. All crossings should be located so that they intersect the stream channel at the right angle and be sited to avoid adverse grades on either approach to prevent runoff from entering the

stream. Bridges are the preferred alternative to culverts and should be designed and constructed so that abutments, fill, or other materials are not located below the ordinary high-water line (OHW) of the stream and do not constrict the floodplain of the stream.

2. Minimize Construction in Wetlands. Construction in wetlands, floodplain, and other poorly drained areas should be minimized and existing drainage patterns maintained. Culverts should be installed where necessary to enable free movement of fluids, mineral salts, and nutrients.

3. Rehabilitate Disturbed Stream Banks. Disturbed stream banks should be recontoured, restored, and revegetated employing bio-engineering techniques, or other protective measures taken to prevent soil erosion in adjacent waters.

D. Rehabilitating Disturbed Stream Banks. Disturbed stream banks shall be restored and revegetated employing bio-engineering techniques to adequately stabilize banks and prevent soil erosion into adjacent waters.

E. Winter Stream, Lake, and Wetland Crossing. During winter, snow ramps, snow bridges, or other methods should be used to provide access across frozen rivers, lakes, wetlands, and streams to avoid cutting, eroding, or degrading of banks. These facilities should be removed immediately after final use.

F. Protection of Fish and Wildlife Resources. Important fish and wildlife habitats such as riparian areas, wildlife movement corridors, important wintering or calving areas, and threatened or endangered species habitat or other important habitat areas should be avoided in siting transportation routes unless no other feasible and prudent alternatives exist. Location of routes and timing of construction shall be determined in consultation with ADF&G. ADF&G should be consulted for any projects that may affect anadromous or resident fish habitat.

G. Road Pullouts. Where road corridors intersect streams, habitat corridors, or other areas of expected recreational use and tourism, sufficient acreage should be retained in public ownership to accommodate public access, safety requirement, and expected recreational and tourism use. The size and location of pullouts should be determined in consultation with the DPOR, ADOT/PF, and ADF&G.

H. Timber Salvage from Rights-of-Way. All timber having high value for commercial or personal use should be salvaged on rights-of-way to be cleared for construction.

I. Roadless Areas. Some areas may be designated by the state or future local governments as roadless and managed to exclude construction of new roads to protect particular resources or forms of resource use. Settlement projects may be included in roadless areas. Roadless areas would be designated during transportation planning, the disposal project review process, or other interagency decision process conducted with public participation.

1 **J. Roads Near Wetlands.** To minimize impacts on riparian areas or wetlands, summer use
2 roads that do not use fill shall be located away from riparian zones and wetlands to
3 discourage the formation of parallel trails and very wide river crossings. Riparian and
4 wetland zones are defined in Table 2-1 in the *Shorelands and Stream Corridors* section in
5 this chapter. ADNR may authorize trails or roads across wetlands if it is determined that the
6 proposed activity will not cause significant adverse impacts to important fish and wildlife
7 habitat, important ecological processes, or scenic vistas, a feasible and prudent alternative
8 does not exist, and it is determined to be in the state's best interest.

9
10 **K. Other Guidelines Affecting Transportation and Infrastructure.** Other guidelines
11 affect transportation and infrastructure. See other sections of this chapter.
12
13

