

## Chapter 2: Goals and Management Guidelines

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## **Chapter 2: Goals and Management Guidelines**

### **Introduction**

All management plans are intended to accomplish certain purposes. In the case of this plan, the objective is to identify a more specific management direction for the PUA, while implementing the statutory purposes of the legislation described in AS 41.23.180-41.23.230. This more specific management direction is intended to provide guidance to DNR for the management of this important recreational and ecological area. Management direction is usually expressed through goals and management guidelines in plans prepared by DNR.

To implement the overall intent of statutory purposes of the PUA, this chapter presents goals and land management guidelines for major resources and uses. These include: access; commercial use; coordination; facilities; fees; fish and wildlife habitat; forestry; health and safety; heritage/cultural; materials; mitigation; parcel acquisition; public use sites; recreation; subsurface resources; trails; and, waterbodies.

### **Definitions**

#### **Goals**

Goals are general desired conditions that DNR attempts to achieve through management actions.

#### **Management Guidelines**

Management guidelines are intended to provide specific management direction for decisions DNR makes about the planning area. Guidelines range from giving general guidance for decision-making to identifying specific factors that need to be considered when making on-the-ground-decisions. In particular, DNR will use the guidelines when adjudicating applications for the use of state lands within the planning area. In most cases, these guidelines can be implemented through the authorization of applications for proposed uses or through agency actions. In other cases, DNR may promulgate regulations to ensure that these guidelines can be implemented and are enforceable.

## **Overall Management Direction**

DNR will focus management guidelines on maintaining and enhancing access and recreational opportunities for public and commercial users, protection of resources and environment, and law enforcement and public safety. More specific management direction is provided through the management guidelines that follow. These goals and guidelines affect all of the management units within the PUA. All facilities and management actions proposed in this and subsequent chapters are dependant on adequate funding and DNR resources.

Nothing in this or subsequent chapters or appendices in this document is intended to limit access for administration/management activities, enforcement, or for public safety within the PUA.

## Access

### Background

Securing and maintaining access to the public use area (PUA) is crucial to ensuring that the public can continue to use the PUA. State controlled access includes: Maud Road Extension (ADL #206989) and the Jim Lake Parking Area; the downstream side of the old and new Glenn bridges; and, the Knik Glacier Trail (RST 17(ADL#223176)). Access on the south side of the river is primarily from the right-of-way for the Knik River Road and from adjacent federal lands managed by BLM. Many users access from private lands adjacent to the PUA. Aircraft access within the PUA occurs on unmaintained airstrips and shorelands of the Knik River. The most heavily used access occurs from adjacent borough lands via the Pavilion Parking Area located off Sullivan Road and the Sexton and Envy trails. Many users also access the PUA by trespassing on private lands on the northeast side of the Old Glenn Bridge. Substantially fewer users access from the federal lands managed by BLM on the south side of the Knik River. An access brochure has been produced and is available from DNR.

Approximately 60,000 acres of federal lands managed by BLM in Townships 15, 16 and 17N Range 4E have been selected by Eklutna Inc. and the State of Alaska (see *General Land Status* Map 1-2, page 1 - 5). It's likely that Eklutna Inc. will receive title to these lands since Native corporations receive priority over state selections. Section 17(b) of the Alaska Native Claims Settlement Act of 1971 provides for the establishment of easements across Native lands for the purpose of maintaining public access to adjacent public lands prior to the conveyance of land to Native corporations. Prior to the transfer of these lands 17(b) easements must be established to maintain access to public lands across private lands. The effect of this land conveyance on recreational use within a portion of the PUA may be significant. The wetlands west of Friday Creek are a popular destination for recreational users and hunters alike. A number of user created trails enter this area of wetlands from land that is currently federally owned or is already privately owned by Eklutna Inc. If the federally owned land is conveyed to Eklutna Inc. it will become private land. Unauthorized use of this land off of established 17(b) easement(s) could be considered trespass. Therefore, seasonal access to, and use of, the eastern portion of the Lakes and Wetlands Unit may be limited through actions outside of the scope of this plan.

### Goal

- Maintain existing access for all users to and within the PUA, provide for future development of trails and facilities, and secure public access easements from the Pavilion Parking Area and the Sexton and Envy trails.

## Management Guidelines

- Main access trails should be improved and upgraded to support increased use.
- New trails within the planning area should be developed as sustainable trails<sup>1</sup>.
- New trails and facilities should be sited and designed to avoid or minimize impacts to fish and wildlife and their habitats.
- Primary trails accessing the PUA from adjacent MSB lands should be reserved as public easements to ensure future access, in the event that the state does not acquire ownership of these lands.
- The Trails Management Process should identify existing primary trails providing access to the PUA and reserve them as public easements. All new trails authorized by DNR will be reserved and designated for specific purposes.
- The state will work with the MSB to acquire a portion of the Jim Creek parcel which includes the Pavilion Parking area and the Sexton and Envy trails.

## Goal

- Ensure that the number and location of 17(b) easements within areas to be conveyed to a Native corporation provides adequate access to adjacent state land.

## Management Guideline

- Prior to the conveyance of federal lands, DNR's Public Access Assertion and Defense Unit will be involved in the process to reserve 17(b) easements. While all currently identified 17(b) routes are important for access to adjacent public land, several are critical to maintaining access for private landowners and miners and DNR will attempt to assert these particularly.

## Goal

- Maintain and enhance access to the PUA on the south side of the Knik River.

## Management Guideline

- DNR will recommend that BLM retain PLO 3324 in federal ownership.
- DNR may identify private parcels on the south side of the Knik River for acquisition for the purpose of enhancing access to the PUA. These lands will only be acquired from willing parties.

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<sup>1</sup> A trail that conforms to its terrain and environment is capable of handling its intended use without serious degradation.

## Commercial Use

### Background

Commercial use is increasing in the Public Use Area. Commercial operators provide the public with a variety of recreational opportunities including hunting and fishing, wildlife viewing, and access to Knik Glacier. They can also provide needed services such as overnight accommodations, and food and beverage service. Commercial use occurs in the PUA at low levels.

Currently, two operators are permitted to provide OHV and snowmobile tours within the PUA. Three operators provide airboat tours on the Knik River to the terminus of the glacier. Jet boat tours of the Knik River and terminus of the glacier began in the summer of 2007. This operator is registered for commercial use of state land. As many as five hunting guides operate within PUA.

### Goal

- Authorize those commercial operations that are consistent with the purposes for which this area was designated.

### Management Guidelines

- DNR may authorize commercial uses in any area of the PUA; however, commercial uses at the terminus of the Knik Glacier should be restricted to the southern end of the moraine. Authorizations for commercial use are subject to the requirements of the management plan.<sup>2</sup>
- DNR will ensure that public access is not restricted or limited through land use authorizations issued for commercial activities.
- Land use authorizations for permanent or semi-permanent facilities for commercial use should not be issued in locations that are high-value destinations for the recreating public or where sensitive habitats or resources are present.

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<sup>2</sup> See Appendix J for specific details on see how DNR will implement this Goal.

## Coordination

### Background

There are many areas of overlapping federal, state, and borough and municipal jurisdictions within the PUA. For example, borough and municipality codes apply within their legal boundaries while Alaska Department of Environmental Conservation; ADF&G, Division of Habitat; DPOR, Office of History and Archeology; U.S. Army Corps of Engineers; and U.S. Environmental Protection Agency maintain jurisdiction in all or a portion of the PUA at the state and federal level. These entities typically have authority over a specific use or resource but taken together they can greatly affect what can occur within the PUA. In general terms they control or affect to some degree the types of uses that can occur within the PUA as well as the types and location of development.

Because of the interlocking nature of these authorities, it is necessary to coordinate with a variety of local, state, and federal agencies. It is likely that there will be two areas of focus in this coordination. These are related to the permitting requirements for new development and violations of laws or regulations. While few developments currently exist within the PUA, recommendations for the development of facilities are included in the plan and it is intended that these projects will be reviewed with other agencies at their conceptual stage. It is also likely that violations of local, state, federal law or regulations may occur, and, depending upon severity, it is intended that DNR will coordinate with state and federal regulatory agencies to determine how to best deal with these issues. Some of the current activities in the PUA may constitute violations of solid and hazardous waste disposal laws and regulations. Other activities may be contributing hazardous fluids and substances to the ground, waterbodies, and the air. Federal, state, and local agencies maintain their jurisdiction regarding these types of violations and activities.

### Goals

- Coordinate with other local, state, and federal agencies having jurisdiction within the PUA on the siting and development of future projects.

### Management Guidelines

- DNR will coordinate with appropriate federal, state, and local agencies to permit new development.
- Proposed projects will go through the appropriate Best Interest Finding (AS 38.05.035(e)) review or Alaska Coastal Management Program consistency determination prior to development, if the latter is required under DNR regulations.

- Activities below the OHWM of fish bearing water will require consultation with ADF&G and may require specific authorizations.

**Goal**

- Reduce illegal discharge of solid waste, hazardous waste, and other pollutants.

**Management Guidelines**

- Work with appropriate federal, state, or local agencies to identify and address violations of environmental laws, regulations, or ordinances.
- Consult with these agencies on implementation and enforcement programs that have been determined, through interagency review, to be necessary.
- Contact appropriate federal, state, and local agencies regarding potential violations of soil, water, and air quality.



## **Facilities**

### **Background**

Few developed facilities exist within the PUA. Facilities can be important for maintaining and enhancing uses and for mitigating the impacts of users on fish and wildlife and their habitats. The type of facility development can have major impacts on the type and level of public use. For instance, paved roads or upgraded trails can increase use levels and access, while camping facilities could increase use levels and duration of use. Benefits of facilities include a reduction in human waste and litter, and increased accessibility.

### **Goal**

- Develop facilities in areas that will maintain and enhance use and access and will serve a significant concentration of users.

### **Management Guideline**

- Facilities should be developed at major access points where use or access can be enhanced, or where the presence of facilities will decrease impacts to fish, wildlife, and their habitats.

### **Goal**

- Develop facilities that will maintain and enhance use while avoiding or minimizing the effects on fish and wildlife.

### **Management Guideline**

- Development of facilities should not occur in identified sensitive habitats unless the purpose is for educational, informational, accessibility, or management purposes or a feasible alternative does not exist.

## Fees

### Background

Consistent with the Letter of Intent provided with AS 41.23.180-230<sup>3</sup>, DNR has evaluated the institution of a fee program to pay for facilities and management of the PUA. DNR recommends that a fee schedule be implemented. It is intended that the fees collected under this program will be used for management of the PUA and the maintenance of its facilities.

### Goal

- Provide funding necessary for the development and maintenance of facilities, and the management of the PUA.

### Management Guidelines

- A fee schedule should not be implemented for use of a facility until such facilities are developed.

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<sup>3</sup> The Letter of Intent states: It is the intent of the 24<sup>th</sup> Alaska State Legislature that the Department of Natural Resources evaluate instituting user fees to pay the long term costs for management and necessary facilities associated with the public use of the Knik Public Use Area established under House Bill 307. The department should consider such fees as a component of the Management Plan that will be prepared under AS 41.23.190.

## Fish and Wildlife Habitat

### Background

The PUA has very rich and diverse habitat consisting of two general areas: the valley floor and the sub-alpine/alpine habitat. The valley floor comprises approximately 14 percent of the total land area while sub-alpine/alpine and glacier comprises the remaining 86 percent.

The floor of the valley is dominated by Knik River and associated braided channels, sloughs, and exposed shorelands and includes extensive lakes and wetlands. The lakes, wetlands, and vegetated shorelands of the valley floor provides a rich habitat for a diversity of fish and wildlife species including waterfowl, moose, bear, wolves, and many small furbearers. The extensive lakes and wetlands within the PUA are used for resting and staging during the spring and fall migrations of waterfowl and shorebirds. A number of these waterfowl stay in the PUA to nest, rear broods, or use available habitat for the summer. Waterbodies on the valley floor are important habitat for resident and anadromous fish populations. Jim Creek supports a popular coho salmon fishery. Many of the lakes are used for spawning and rearing habitat by coho, sockeye and chum salmon.

The sub-alpine and alpine habitat is used by many species including bear, moose, sheep, and goats. The lower elevations of the sub-alpine are commonly used by moose and bear for forage and rearing young. While goats and sheep tend to use the alpine habitat, sheep are commonly found at lower elevations at several locations in the PUA.

Many members of the public indicated that current uses are negatively impacting nesting swans and loons. Swan numbers and cygnet survival rates appear to be stable within the PUA. Nonetheless, a critical life stage for swans and loons exists while they are incubating their eggs and rearing their young (typically from May 15 to August 31); at this period swans and loons are highly susceptible to harassment from recreational users. If the disturbance is serious enough, swans and loons may abandon their nest sites, young, or cygnets. Once abandoned, swans and loons will not re-nest for the remainder of that year.

AS 41.23.180-41.23.230, provides direction to DNR for the protection of fish and wildlife habitat. This statute requires DNR to “perpetuate and enhance” the enjoyment of fish and wildlife, and to “protect and maintain” habitats for fish, wildlife and migratory waterfowl nesting so traditional use may continue. To achieve the mandate of perpetuating and enhancing the public use while protecting habitat, DNR has worked with ADF&G to identify areas that require special management attention. After the review of available resource data and discussions with ADF&G, DNR has concluded that there are currently no areas of critical habitat within the PUA; however, several areas of sensitive habitat within the PUA have been identified. These include: swan and loon nesting sites, waterfowl nesting areas, fish spawning and rearing locations, and moose calving concentration areas. These areas

have been determined by DNR to merit increased management priority in order to minimize impacts to fish and wildlife and other sensitive habitats.

AS 41.23.200(d)(2) specifically addresses off-road motor vehicle trails and requires DNR to “make accommodations that will provide the shortest possible route to avoid critical habitat.” Thus the statutes envisioned both continued protection and use of the habitats and provided specific direction to DNR where critical habitat was found.

Because the enabling statutes for the PUA did not provide a definition of “critical habitat,” DNR has developed a definition that is specific to the PUA and recognizes the implied importance of this type of habitat as opposed to other habitat types. DNR and ADF&G Statutes (particularly Titles 16 & 38) do not contain a definition of critical habitat; however, statutes specific to state Critical Habitat Areas (AS 16.20.500) suggest that critical habitat areas are areas that are crucial to the perpetuation of a fish or wildlife species. DNR’s definition of critical habitat for the PUA embodies this concept and is found in Appendix A.

To better understand habitat types within the PUA, DNR reviewed resource data and information developed by state and federal agencies, non-governmental organizations, and individuals<sup>4</sup>. Additionally, DNR staff had discussions and on-site meetings with ADF&G staff to discuss habitats for several fish and wildlife species. Based on the information, data, and discussions, DNR identified areas of habitat that require special management attention. These areas have been identified as “sensitive habitat” and include: swan and loon nesting sites, waterfowl nesting areas, fish spawning and rearing locations, and moose calving concentration areas. These areas have been determined by DNR to merit increased management focus in order to avoid or minimize impacts to fish and wildlife and other sensitive habitats. The definition of sensitive habitat is included in Appendix A.

For the purposes of this plan, “critical habitat” is primarily distinguished from “sensitive habitat” within the PUA in that critical habitat is essential for the perpetuation of a fish and wildlife species while sensitive habitat is important for a species of fish and wildlife during a

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<sup>4</sup> Information reviewed includes: ADF&G data showing habitat ranges of various fish and wildlife species, included as appendices to the management plan. United States Fish & Wildlife Service (USFWS) data from 2000 analyzing trumpeter swan population status. USFWS’s 2005 North American Trumpeter Swan Survey. Audubon Site Profile for Jim Creek Basin. ADF&G, Division of Wildlife Conservation, data for refuges and sanctuaries, for regional comparisons of habitat for relevant fish and wildlife species, including Palmer Hay Flats State Game Refuge and Susitna Flats State Game Refuge. Knik River Watershed Group, Baseline Water Bird Surveys. ADF&G Preliminary Assessment of Waterfowl Resources, KRPUA. William Quirk memoranda providing observations of nesting swans and cygnets within KRPUA and adjacent areas. ADF&G Catalogue of Waters Important for the Spawning, Rearing of Migration of Anadromous Fishes. Joint agency plan developed by U.S. Coast Guard, U.S. Environmental Protection Agency, U.S. Department of the Interior, and Alaska Department of Environmental Conservation: Cook Inlet Subarea Contingency Plan maps and text, identifying areas of essential habitat for waterfowl and wildlife necessary for protection during the initial stages of an oil spill event. Various agency data sheets discussing human disturbances to loons. USFWS publication “Human Disturbances of Waterfowl: Causes, Effects, and Management.” Various scientific publications funded by USFWS and USDA analyzing impacts of human activities on water birds. And, Consultations with ADF&G staff, indicating that without further study DNR could not determine current “critical” habitat within the KRPUA.

particular life stage. A key distinction between “sensitive” habitat as designated by DNR and “critical” habitat for purposes of AS 41.23.200(d)(2) is that the former term is not tied, or limited, to determining the necessity of re-routing existing off-road motor vehicle trails. Therefore, the “sensitive” habitat designation can be used prospectively as a planning tool, for example, to determine where new trails should not be allowed in the first instance. By contrast, AS 41.23.200(d)(2) restricts the function of a “critical” habitat finding to the re-routing of existing trails.

After the review of available resource data, information, and discussions with ADF&G, DNR was able to identify “sensitive habitat” but concluded that there are currently no areas of critical habitat within the PUA. This determination does not preclude a future determination of critical habitat during the more specific Trails Management Process. If DNR determines during the process, in consultation with ADF&G, that critical habitat is present, trails will be re-routed or accommodations otherwise made to avoid the critical habitat.

### **Goal**

- Protect and maintain fish and wildlife habitat while allowing for continued recreational use.

### **Management Guidelines**

- All new, up-graded, expanded, or re-routed trails or facilities within the planning area should be sited and designed to avoid impacts to fish and wildlife and their habitats. If impacts to these habitats cannot be avoided, they should be minimized.
- All trails and developed facilities should be sited and developed to minimize impacts to anadromous waterbodies. Stream crossings should be developed generally perpendicular to the stream flow.
- Within 100 feet of an anadromous waterbody, excluding the Knik River and shorelands of the Knik River, trails should not be developed parallel to the ordinary high water mark. See Figure 1-1, page 1 - 9 for a depiction of state shorelands.
- DNR will initiate an educational program to inform the public of species and habitats that are susceptible to disturbance by recreational use. It is intended that DNR will install informational signs at major access points that provide information including; sensitive fish and wildlife habitats including swan, loon, and other waterfowl nesting habitat, the location of nest sites and importance of the incubation and rearing period, the potential for disturbing these species through recreational use, and recommendations for minimizing impact to species and their habitat. These signs should be placed at principle access points as determined by DNR. Effectiveness of education and signage will be re-evaluated in 5 years from the effective date of the plan. In the event that these techniques are not found effective after a period of monitoring, regulatory controls may be necessary.

- DNR will evaluate the feasibility of annually locating and signing swan and loon nesting habitat. To accomplish this DNR will, subsequent to plan adoption:
  - Engage in discussions with ADF&G, non-profit conservations groups or other third party stakeholders to determine their interest and ability to identify and sign active swan and loon nesting sites. Because of limited resources in DNR, it is believed that the most effective means of ensuring that identification occurs on a periodic basis is to involve these groups in this effort. If this interest and capabilities exist, DNR will provide support to the selected group in the annual identification and signing process. In addition to signing, DNR will develop a map that identifies sensitive habitat locations, including nesting areas, and make it along with educational materials, available to the public.
- As new information regarding fish and wildlife populations becomes available from ADF&G, DNR should re-evaluate the habitat in the PUA to determine if areas could be identified as sensitive habitat.
- DNR should consult with ADF&G to determine if uses are impacting fish, wildlife and their habitats.
- The following guidelines apply to uses requiring an authorization from DNR.
  - Authorizations that potentially affect bald eagles will be consistent with the state and federal Endangered Species acts and the Bald Eagle Protection Act of 1940 as amended. Applicable standards are drawn from a cooperative agreement signed by the U.S. Fish and Wildlife Service and other federal agencies, 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.
    - **Siting Facilities to Avoid Eagle Nests.** Facilities determined by the U.S. Fish and Wildlife Service to cause significant disturbance to nesting eagles will not be allowed within 330 feet of any bald eagle nest site, whether the nest is currently active or not.
    - **Activities Disturbing Nesting Eagles.** Activities the U.S. Fish and Wildlife Service determines likely to cause significant disturbance to nesting eagles will be prohibited within 330 feet of active bald eagle nests between March 15 and August 31. Temporary activities and facilities that do not alter eagle nesting habitat or disturb nesting eagles, as determined by the USFWS, may be allowed at other times.
  - Portions of the PUA are important for moose calving concentration areas. Calving typically occurs from May through June, depending upon location. Uses that are likely to produce levels of acoustical or visual disturbance sufficient to disturb calving or post-calving aggregations that cannot be seasonally restricted

should not be authorized in these areas. Uses may be authorized in these areas at other times of the year. DNR authorizations should include seasonal restrictions on activities that would produce significant acoustical or visual disturbance during sensitive periods.

Moose calving areas change over time. ADF&G should be consulted prior to issuing an authorization in an area suspected to contain such concentrations in order to better determine: 1) the location of calving areas; 2) when activities within these areas should be avoided; and 3) identify appropriate mitigation measures if no feasible or prudent alternative site exists.

- In trumpeter swan nesting areas, uses that would disturb nesting swans or detrimentally alter the nesting habitat should be avoided. The siting of permanent facilities, including roads, material sites, storage areas, and other forms of permanent structures should be avoided within one-quarter mile of known nesting sites. Surface entry should also be avoided within one-quarter mile of nesting sites between April 1 and August 31. Leases or permits may require seasonal restrictions on activities to avoid disturbance to swans. Consult with ADF&G to identify current or potential nesting habitat and to determine guidelines to follow and activities to avoid.
- In waterfowl nesting habitat, activities requiring a lease, permit, or development plan, and producing habitat disturbance or high levels of acoustical or visual disturbance from sources such as boat traffic, vegetation clearing, construction, blasting, dredging, and seismic operations, should be avoided during sensitive periods such as nesting, staging, or brood-rearing periods. Where it is not feasible and prudent to avoid such activities, other mitigation measures may be required to avoid significant adverse impacts. Consult with ADF&G to identify areas of important waterfowl in addition to those identified in the Plan and to determine appropriate mitigation or avoidance measures.

# Forestry

## Background

The sub-alpine and lower elevations of the PUA are covered by boreal forest. There are six general forest cover types in the area. The first cover type consists of a predominately cottonwood/poplar forest, this type occurs mostly in the riparian areas of the PUA. The second type is a mixed cottonwood/poplar and white spruce type with cottonwood/poplar or white spruce being the predominate species depending on the location of the stand. The third forest cover type is a stand that is predominately white spruce. The fourth forest type is a mixed species type consisting of cottonwood/poplar, white spruce, paper birch and quaking aspen. The fifth type is a predominately paper birch type usually occurring on the more upland sites of the PUA and the sixth type is predominately quaking aspen and has the smallest acreage in the area, also occurring on the more upland sites. Alder and willow (spp) are present in all of the cover types but are most prevalent in the riparian areas. Many wildlife species use the forested habitat on the valley floor and sub-alpine environments. Large furbearers use forested areas for cover and forage. Birds use this habitat for nesting, feeding and roosting. Forested riparian areas provide shade to cool waterbodies and woody debris that provides fish habitat.

Although no commercial timber harvesting has occurred in recent years, some areas within the Public Use Area have been harvested in the past. Commercial timber harvesting to enhance wildlife habitat and to regenerate forests for the early successional stage species may occur in the PUA. The Division of Forestry (DOF) has not identified any firewood collection areas nor issued permits for personal or commercial firewood cutting, although some incidental harvesting of firewood does occur in the PUA. Because of high heating fuel prices, DOF may consider identifying firewood collection area(s) within the PUA in the future.

With many recreation users concentrated in one area with residences located nearby, forest fire is a major concern. Wildland fires, unattended campfires and bonfires have become a common occurrence in recent years.

## Goal

- Maintain forested areas for forest regeneration, wildlife and fish habitat, and protect users and nearby residences from wildfires.



### **Management Guideline**

- Permits for commercial or personal use firewood harvest<sup>5</sup>, may be authorized in the PUA after a collection area is identified by DOF and DMLW.
- DOF may conduct timber removal for such administrative purposes as timber salvage, habitat manipulation, fire fuel reduction, or other purposes as determined appropriate by DNR. Such operations may occur in throughout the PUA.

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<sup>5</sup> Persons may still harvest dead and down trees without prior written authorization from DNR for personal use warming and/or cooking fires.

## Health and Safety

### Background

Some members of the public avoid using the PUA during certain times or in certain areas because of unlawful activities taking place or activities that are conducted in an unsafe manner. Others, while continuing to use the area, do not feel safe while these unlawful or unsafe uses are occurring. These types of uses are, for the most part, concentrated within a small area of the PUA, mostly near access points near the Old Glenn Highway and the mouth of Jim Creek.

If it weren't for regular cleanup efforts of local residents, individuals, stakeholder groups, the state and the borough, the PUA would have a much larger accumulation of trash than it currently does. Over the years literally hundreds of vehicles have been abandoned in the PUA. These vehicles are often burned and potentially hazardous substances such as oil, battery acid, and gasoline get into the soil and waterbodies. Other trash is brought into the area for disposal whether it is household waste, for shooting practice, or left after parties and at campsites. To add to this problem, throughout the summer and fall, particularly during hunting and fishing seasons, long-term camps are set up and then abandoned at the seasons' end. Because of the large number of users in a relatively small area and the lack of sanitation facilities, human waste and toilet paper are evident throughout the western portion of the planning area. Many of the most popular campsites are too unsightly to attract campers.

Unlawful activities have become prevalent in portions of the PUA. These activities are primarily located adjacent to major access points where access for law enforcement is difficult. For example, large parties, particularly on weekends, are common with underage drinking, operating vehicles while intoxicated, unsafe shooting, use and selling of illicit drugs, bonfires and fireworks. Injuries are not uncommon. The burned and abandoned vehicles recovered in the area are sometimes stolen or in a few instances are vehicles that were vandalized while their owners were recreating in the PUA.

Solutions to many of the issues described above include: an increased DNR field presence and additional law enforcement with the assistance of the Department of Public Safety; educating the public on resources and impacts; working with the District Attorney's office on accepting cases from within the PUA; and, working closely with members of the public and users of the PUA. Regulations may need to be promulgated to ensure that the efforts of field and enforcement staff are effective in achieving compliance with PUA regulations.

### Goal

- Provide a safe environment for recreation and eliminate discharge of litter and hazardous materials.

### **Management Guidelines**

- Develop sanitary and waste disposal facilities in areas of concentrated use such as by parking and camping areas.
- Develop and employ educational strategies to change behavior.

### **Goal**

- Address safety concerns related to discharge of firearms, boat use, and unsafe or unlawful activities.

### **Management Guidelines**

- Shooting areas with specified hours/days of operation should be designated within the planning area. Areas will be located where shooting can occur in a safe manner and where impacts to fish and wildlife habitat are minimized. Although DNR will identify and designate areas for shooting range development, it is intended that local groups interested in operation of a shooting range would apply to DNR for development and operation of a facility.
- Following the adoption of the Management Plan, DNR will evaluate the Maud Road and Pavilion areas to determine the feasibility of construction of shooting facilities. It is intended that at least one of these sites will be developed over the next five years, subject to the availability of funding. The recommended shooting areas are depicted on Map 2-1, page 2 - 17. Time of use restrictions for shooting areas will be designated by DNR.
- DNR should seasonally restrict the use of motorized boats, snowmobiles, and OHV's on Manmade Lake and establish a seasonal speed limit around Manmade Lake in order to provide safe recreational opportunities.
- Develop and employ educational strategies to change behavior.

### **Goal**

- Increase DNR and law enforcement presence in the PUA and draft regulations that are necessary to implement the plan and manage state resources.

### **Management Guidelines**

- Initiate and continue DNR field presence in the PUA.
- Continue to work with the Department of Public Safety to enforce state statutes and regulations.
- Continue to work closely with users of the PUA to obtain information on violations of local, state, and federal laws and regulations.

**Goal**

- Increase public safety by reducing potential for wildfires.

**Management Guideline**


- Initiate and continue DNR field presence in the PUA.

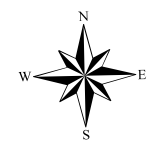
# Knik River Public Use Area

(AS 41.23.180 - 41.23.230)

## Recommended Designated Shooting Areas

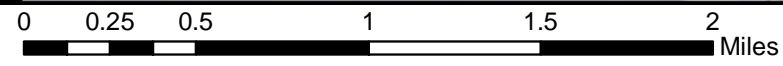
 KRP UA Planning Boundary

 Recommended Shooting Areas



This map is for graphic representation only and is intended to be used only as a guide.

Coordinate System: NAD\_1983\_UTM\_Zone\_6N



## Heritage/Cultural

### Background

The Alaska Historic Preservation Act (AS 41.35.010) states, “It is the policy of the state to preserve and protect the historic, prehistoric, and archeological resources of Alaska from loss, desecration, and destruction so that the scientific, historic, and cultural heritage embodied in these resources may pass undiminished to future generations. To this end, the legislature finds and declares that the historic, prehistoric, and archeological resources of the state are properly the subject of concerted and coordinated efforts exercised on behalf of the general welfare of the public in order that these resources may be located, preserved, studied, exhibited, and evaluated.”

The Knik River valley has been used extensively by Native Alaskans and early European settlers. Artifacts related to Alaska Natives and early non-native settlers exist in the PUA.

### Goal

- 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

- Heritage Resources Identification. Identify and determine the significance of all heritage resources on state land through heritage resource surveys or inventories. These should be conducted by the Office of History and Archaeology (OHA), contingent on funding, in areas this agency determines to have a high potential to contain important heritage sites and for which there is insufficient information to identify and protect these sites. This effort can be supplemented through:
  - Research on heritage resources on state land by qualified individuals and organizations; and
  - Cooperative efforts for planned surveys and inventories between state, federal, local, and/or Native groups.
- Heritage Resources Protection. Significant heritage resources within the PUA should be protected through the review of proposed projects by OHA as part of the process. If OHA determines that there may be an adverse effect on heritage resources, OHA will provide recommendations to minimize these effects.
- The Office of History and Archeology should be contacted during the initial planning phase of any project that involves a ground disturbing activity.

- Recreation Facilities Adjacent to Heritage Resources. Recreation facilities that might make heritage sites more susceptible to damage and disturbance because of increased public use should not be placed adjacent to the heritage sites without mitigating measures. Prior to new construction or modification of existing routes, or facilities, the OHA should be contacted to determine if historical, archeological, or pre-historic site(s) are reported. This data set is continually being updated and, should be consulted on all proposed projects.
- Reporting of Heritage Sites. Staff will report the presence of new heritage sites to OHA. OHA will add this information to the Alaska Heritage Resources Survey (AHRS) database. The AHRS database is an inventory of all reported historic and prehistoric sites within the State of Alaska.

## Materials

### Background

Significant quantities of materials including sand, gravel and rock, are found throughout the PUA. The extraction of materials may be permitted in the PUA, although there are no current authorizations for such uses. A joint mining operation between the State of Alaska and Eklutna Inc. is authorized in the North Anchorage Land Agreement (NALA<sup>6</sup>) for a small area of state shorelands downstream of the Old Glenn Highway Bridge. To date, no materials have been extracted from this site, although Eklutna Inc. has indicated an interest in the development of this materials source.

### Goal

- Provide opportunities to extract materials where that activity will minimize impacts to recreational use or fish and wildlife habitat.

### Management Guidelines

- Gravel extraction operations are an allowed use and can be authorized by DNR where such operations will not adversely affect recreational activities, fish or wildlife habitat, wetlands, or heritage or cultural resources. It is expected that most operations of this type will occur within the shorelands of the Knik River.
- Authorizations issues by DNR shall include stipulations to avoid or minimize impacts to fish and wildlife, their habitats, heritage or cultural resources, and recreational uses. Access to recreational areas shall not be impaired.
- Gravel extraction authorizations issued by DNR should, where possible, ensure that such activities are not conducted in high-use recreation areas. Timing restrictions should be considered in these authorizations. Access to recreational areas shall not be impaired.
- Materials extraction operations should be conducted in such a manner that prevents unnecessary and undue degradation of the land and water resources.
- Material sites should not be located near residential areas and other areas of high human use. Sufficient land should be allocated to the material site for such screening.

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<sup>6</sup> NALA is an agreement between the State of Alaska, Municipality of Anchorage, and Eklutna Inc. that resolves land disputes and determines future ownership of military lands if they are declared excess by the military.



*Chapter 2: Materials*

- Following cessation of use, material sites shall be rehabilitated according to AS 27.19.020 and 11 AAC 97.250.
- Prior to granting authorizations for materials sales, DNR should coordinate with MSB to determine applicable supplemental zoning requirements.

## Mitigation

### Background

When issuing permits and leases or otherwise authorizing the use or development of state lands, DNR will recognize the requirements of the activity or development and the benefits it may have to uses and habitat when determining stipulations or measures needed to protect fish and wildlife, or their habitats. When an authorization may result in significant adverse impacts to fish and wildlife or their habitats, DNR will consult with ADF&G. The costs of mitigation relative to the benefits to be gained will be considered in the implementation of this policy.

The department will enforce stipulations and measures, and will require the responsible party to remedy any significant damage to fish and wildlife, or their habitats that may occur as a direct result of the party's failure to comply with applicable law, regulations, or the conditions of the permit or lease.

### Goal

- Minimize impacts of authorized activities on fish, wildlife and their habitats.

### Management Guidelines

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

1. Avoid anticipated, significant adverse effects on fish and wildlife, or their habitats through siting, timing, or other management options.
2. When significant adverse effects cannot be avoided by design, siting, timing, or other management options, the adverse effect of the use or development will be minimized.
3. If significant loss of fish or wildlife habitat occurs, the loss will be rectified, to the extent feasible and prudent, by repairing, rehabilitating, or restoring the affected area to a useful state.
4. DNR will consider requiring replacement with other areas with like resource values or enhancement of fish and wildlife habitat when steps 1 through 3 cannot avoid substantial and irreversible loss of habitat. ADF&G will clearly identify the species affected, the need for replacement or enhancement, and the suggested method for addressing the impact. Replacement with or enhancement of similar habitats of the affected species in the same region is preferable. DNR will consider only those replacement and enhancement techniques that have either been proven to be, or are

likely to be, effective and that will result in a benefit to the species impacted by the development. Replacement or enhancement will only be required by DNR if it is determined to be in the best interest of the state either through the Best Interest Finding process AS 38.05.035(e) or permit review process. Replacement may include structural solutions, such as creating spawning or rearing ponds for salmon, creating wetlands for waterfowl; or non-structural measures, such as research or management of the species affected, legislative or administrative allocation of lands to a long-term level of habitat protection that is sufficiently greater than that which they would otherwise receive, or fire management to increase habitat productivity.

## Parcel Acquisition

### Background

Three parcels, or portions of, have been identified by DNR as priorities for acquisition. Parcel one, the Jim Creek Parcel, is currently owned by MSB and contains the Pavilion Parking Area and Sexton and Envy trails. It is the most heavily used access site into the PUA and is heavily impacted by recreational use. The second parcel is a privately owned parcel on the northeast side of the Old Glenn Highway Bridge. Access across this parcel is in trespass on an existing trail. It receives high levels of use and is heavily impacted. Parcel three shares the eastern boundary with parcel two and is currently owned by the Mental Health Trust (MHT). The third parcel is heavily used for recreation and access to the remainder of the PUA during high water levels. Access and use on this parcel is considered in trespass as well. These parcels are functionally part of the PUA and will be managed by DNR consistent with the adjacent unit in the PUA once acquired by the State. See section titled *Other Lands* in Chapter 4 beginning on page 4 - 6 and Appendix E *Special Use Area Designations* for information on these lands adjacent to the PUA.

### Goal

- Maintain access to the PUA through acquisition of access sites and/or public easements in selected areas.

### Management Guidelines

- All acquired lands will be recommended to the Legislature for inclusion in the PUA.
- Until they are included into the PUA, all acquired lands will be recommended as a SUA and will be managed consistent with the intent, guidelines and recommendations for the PUA. The SUA designation for state owned land in section 31, Township 17N, Range 3E (ADL 230206) will be amended to include these parcels when they are acquired by the state.
- SUA designations will only apply to lands acquired by the state.
- The state will work with MSB to acquire the portion of the Jim Creek Parcel that encompasses the Pavilion Parking area and the Sexton and Envy trails.
- Over time and based upon need, other private lands that provide or are capable of providing access to the PUA will be considered for acquisition from willing sellers<sup>7</sup>.

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<sup>7</sup> Currently there are no additional private parcels identified for acquisition. DNR will only purchase private land from willing sellers.

*Chapter 2: Parcel Acquisition*

- The state should acquire the private parcel on the northeast side of the Old Glenn Highway Bridge.
- If DNR does not acquire the private parcel, DNR should explore the possibility of acquiring legal access through this parcel.

## Public Use Sites

### Background

Public Use Sites are sites on state land and water that have been identified as particularly important for public access, recreation, camping, fishing, or other recreation or public use. These sites have high public value and therefore should receive a higher degree of management attention. Designation of these sites in this management plan serves to recognize the importance of these areas for continued public use. Two public use sites are identified in this plan: Jim Lake and Jim Creek. Additionally, the Jim Lake Public Use Site will be expanded to include the overlook on the bluff at the north end of the lake. See Map 2-2, page 2 - 29.

As use patterns change and more information becomes available, new sites may be designated and should be included in the plan. Such additions will be at the discretion of the Southcentral Regional Manager. The procedures for a “special exception” are to be followed in plan revisions.

### Goal

- Identify areas that have high public use values and manage them to preserve that use and their recreation values.

### Management Guidelines

- The following Public Use Sites are designated in the plan: Jim Lake and Jim Creek. The subsequent management guidelines apply to these sites and will be included in the second phase of regulations to be developed by DNR. Camps may remain in one place for up to seven days before they must be disassembled and moved to another location at least one mile away. A person may not relocate a camp, structure or facility to a site within one mile of the initial site for at least four consecutive days.
- Commercial camps can be authorized within a public use site for up to seven consecutive days. A commercial camp may not relocate to a site within one mile of the initial site for at least four consecutive days. Long-term commercial camps greater than seven consecutive days are not authorized.
- Improvements such as public facilities, docks, boat ramps, and public airstrips can be authorized.

- Within a Public Use Site, camping may be restricted to a campground, identified campsites, or within a certain distance of a developed facility when a facility is developed.<sup>8</sup> DNR will restrict recreational discharge of weapons in public use sites to protect public safety.

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<sup>8</sup> Camping outside of a Public Use Site remains subject to restrictions provided in Generally Allowed Uses of State Land.

# Knik River Public Use Area

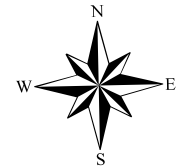
(AS 41.23.180 - 41.23.230)

## Public Use Sites

### Map 2-2

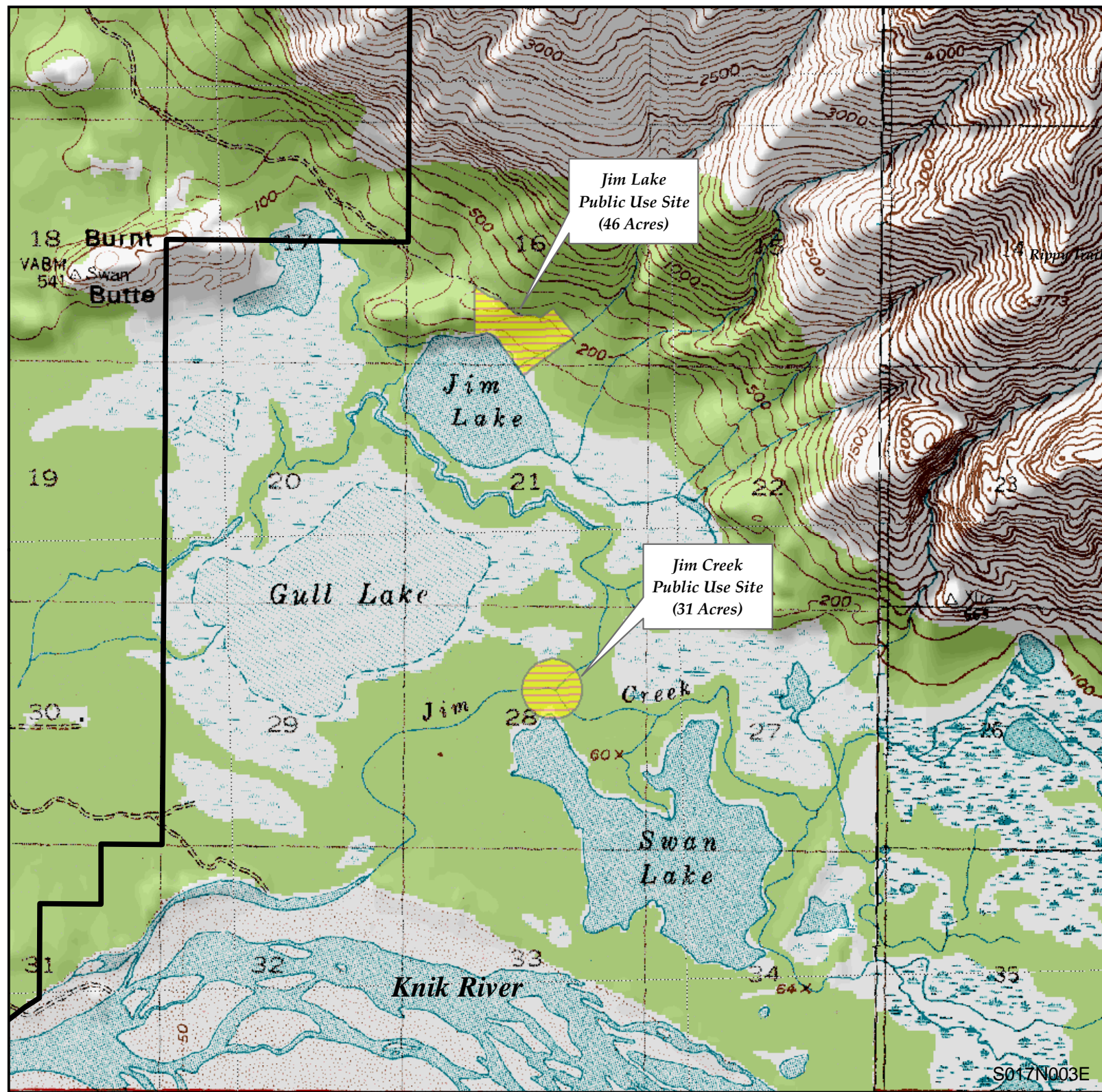
-  KRPUA Legal Boundary
-  Public Use Sites

0 0.25 0.5 1 Miles



This map is for graphic representation only  
and is intended to be used only as a guide.

Coordinate System: NAD\_1983\_UTM\_Zone\_6N



S017N003E



## Recreation

### Background

As the populations of the Municipality of Anchorage and the MSB have increased in recent years, so has the use of the Knik River valley. As a result, more users are competing for the resources available in this area.

OHV use related to recreation, hunting and fishing has increased significantly in the Knik River valley in recent years. As a result, numerous trails have been created and areas that previously received little or no motorized use are now seeing frequent use. This has resulted in numerous trails being created across wetlands, waterbodies and environmentally sensitive areas. See Map 2-4, page 2 - 37 for a depiction of wetlands within the PUA. Because of the increased use, conflicts have developed between users. While additional trails provide more opportunities to access the PUA for some, others are displaced. Developed non-motorized recreation opportunities are limited within the public use area.

Recreational use patterns have predictable spatial and temporal characteristics and seasonality of use. During the hunting and fishing seasons, use increases across the entire PUA but is highest during weekends and holidays. Areas such as the Friday and Metal creek drainages, which normally see little use, see frequent use as hunters access the area in search of moose, sheep and goats. Maude Road and Mud Lake receive higher use during fishing, waterfowl and moose hunting season. Use of expansive wetland areas increases too as hunter's traverse these areas while moose and waterfowl hunting. The area around the mouth of Jim Creek receives increased use as coho salmon return to spawn in early fall.

Outside of the hunting and fishing seasons, use is limited during the week and is the highest on weekends and holidays. During these times, the Pavilion Parking Area is often filled to capacity and the access points near the Old Glenn Highway Bridge are heavily used. The parking area at Jim Lake also receives increased use. OHV use is high in the vicinity of the mouth of Jim Creek and the Old Glenn Highway Bridge, and progressively decreases further up the valley in the direction of Knik Glacier. Low to moderate levels of OHV and highway vehicle use occurs at the Knik Glacier.<sup>9</sup>

Shooting is frequent at many locations, but primarily occurs at existing user created "shooting areas." On weekends, as evening approaches and more individuals arrive in the PUA, unlawful activities become more frequent. Such activities include the wrecking and burning of automobiles, reckless shooting, and underage drinking.

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<sup>9</sup> All levels of use discussed in this plan are relative to other use levels occurring in the PUA. A formal study of use was not conducted.

## Goal

- Protect and maintain habitats for fish and wildlife while perpetuating and enhancing recreational use.

## Management Guidelines

- The Trails Management Process<sup>10</sup> (TMP) should identify trails that have significant negative impacts to fish and wildlife habitat. The impacts of these trails should be minimized through re-routing, spatial and/or temporal restrictions, or in some cases, closure of trails.
- The TMP should identify opportunities to develop new trails within the planning area to maintain or enhance motorized and non-motorized use. These trails should be developed consistent with the following guidelines:
  - New trails within the planning area will be developed as sustainable trails and should be sited to avoid sensitive areas and be designed to minimize impacts to fish and wildlife and their habitats.
  - If new facilities or trails cannot avoid sensitive areas including waterfowl nesting habitat, fish spawning and rearing areas, moose calving concentration areas, or swan or loon nesting areas, they should be designed and developed to minimize adverse impacts to these resources.
- DNR will identify particularly sensitive habitats and provide management guidelines and recommendations that will avoid or minimize impacts to these habitats. See Trails and Fish and Wildlife Habitat sections.
- Current and expected future increases in OHV and highway vehicle uses should continue on the forested state uplands adjacent to the Pavilion Parking area, the forested uplands in Unit A, and the un-vegetated shorelands of the Knik River in units A and C. See Map 2-3, page 2 - 35 for a depiction of this area. This area should be managed for increasing use levels. Ground disturbance and rutting related to current OHV and highway vehicles use has less impact on the identified area than on the adjacent habitats. Except for impacts related to rutting and ground disturbance, uses in the area described above remain subject to all local, state, and federal authorities for other impacts associated with their use. DNR should amend regulations to allow activities that cause rutting and ground disturbance in excess of 6 inches in the area identified above.

## Goal

- Provide for the protection and use of wetlands.

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<sup>10</sup> The Trails Management Process is described in detail in Appendix D.



### **Management Guidelines**

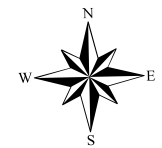
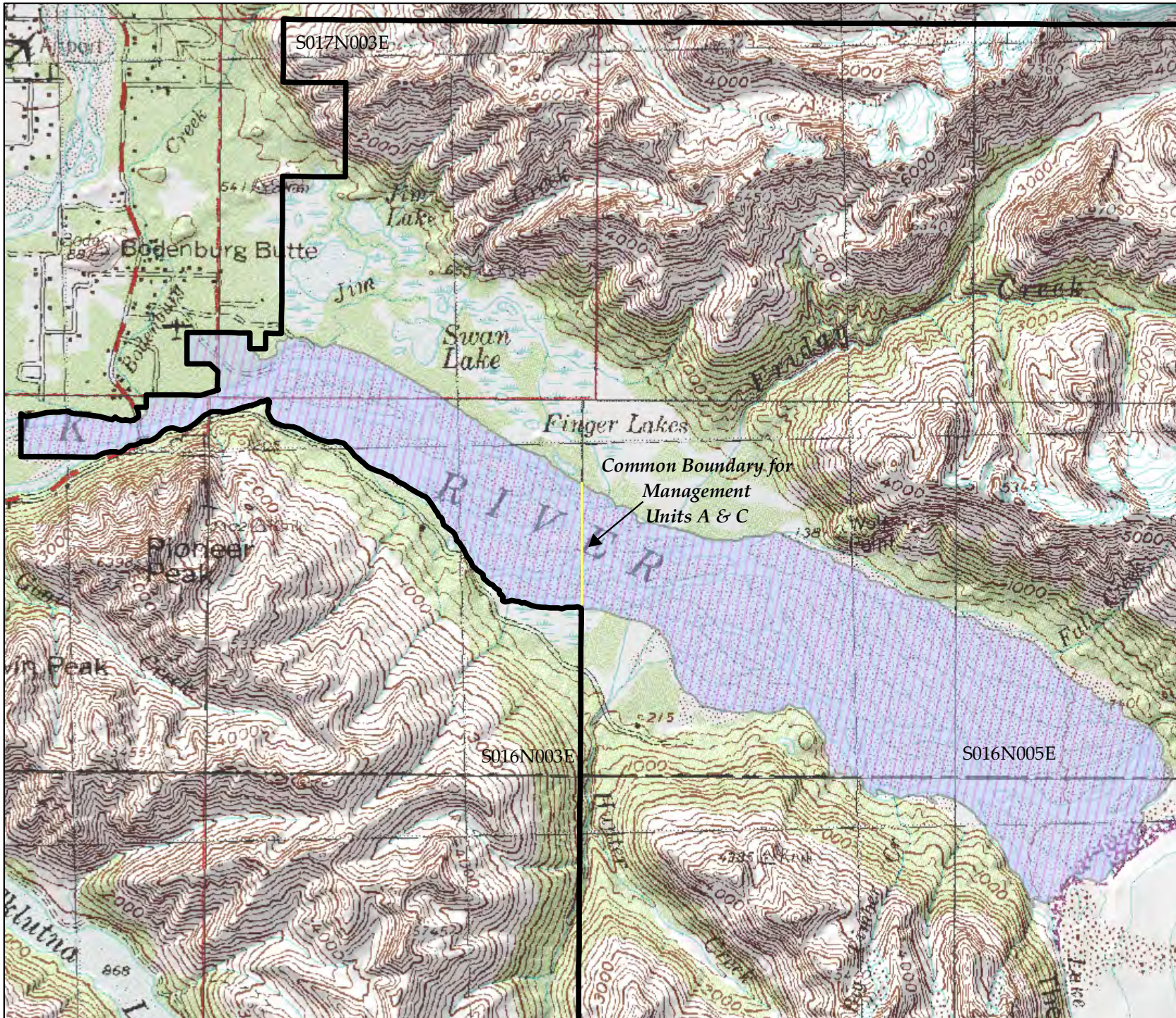
- Redundant trails or trails determined by DNR to have significant negative impacts on wetland functions should be closed to use. The closure of trails will be based upon the results of the TMP.
- New trails in wetlands should be avoided, but if no reasonable alternative location exists, they should be developed in a manner that minimizes impacts to the wetlands excluding the area depicted on Map 2-3, page 2 - 35. In all cases such trails should be developed as sustainable trails.
- Recreational public facilities and projects should avoid wetlands and areas of sensitive fish and wildlife habitat.

# Knik River Public Use Area

(AS 41.23.180 - 41.23.230)

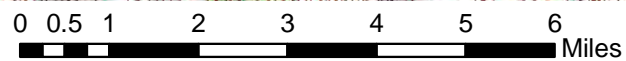
## Forested Uplands & Un-vegetated Shorelands in Management Units A & C

-  KRPUA Planning Boundary
-  Managment Area



This map is for graphic representation only  
and is intended to be used only as a guide.  
Source documents remain the official record.




Coordinate System: NAD\_1983\_UTM\_Zone\_6N

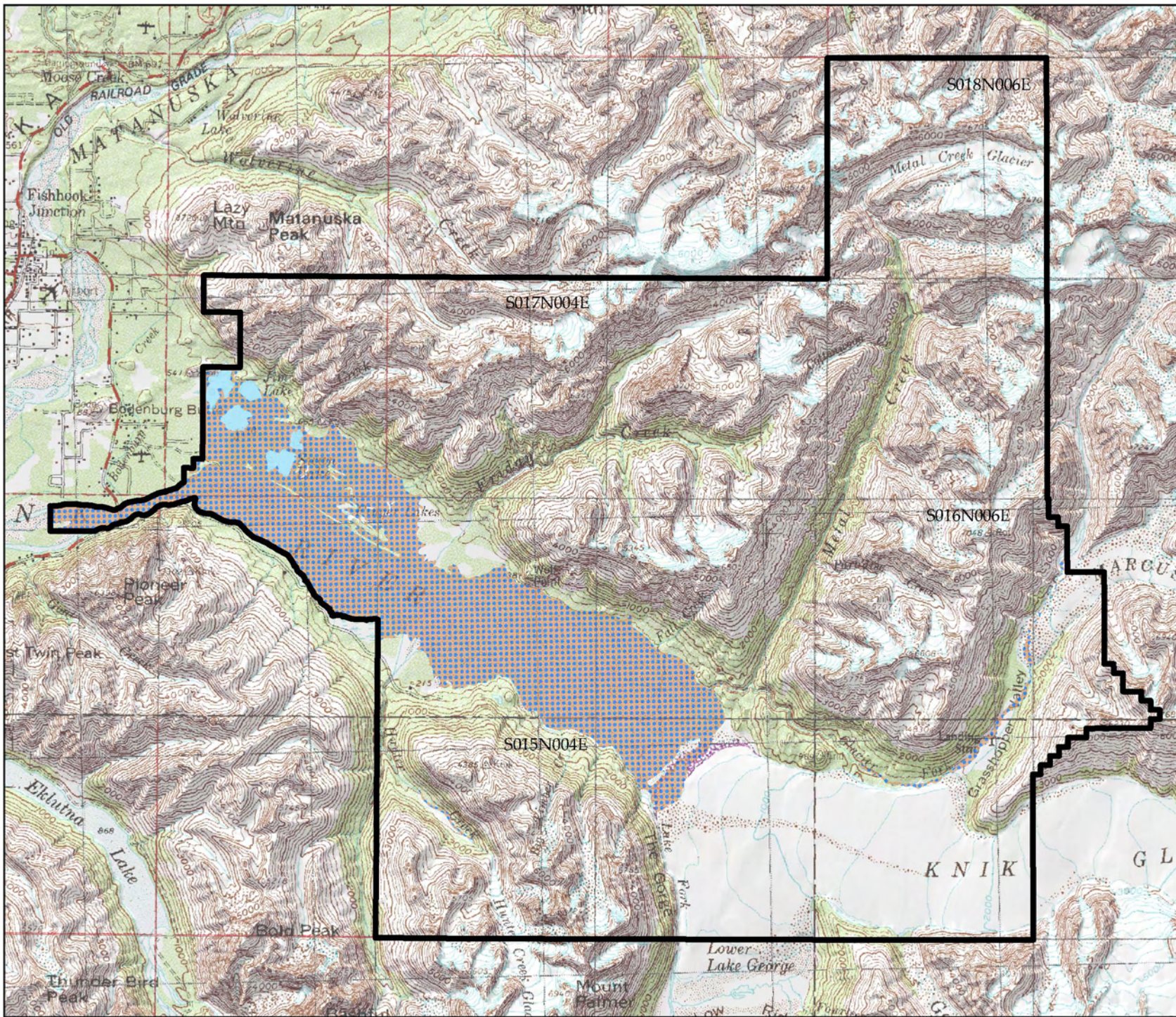


# Knik River Public Use Area

(AS 41.23.180 - 41.23.230)

## Wetlands Map 2-4

-  KRPUA Legal Boundary
-  Hydric Soils
-  Lakes



This map is for graphic representation only and is intended to be used only as a guide. Information derived from USDA & USFWS data. Source documents remain the official record.

Coordinate System: NAD\_1983\_UTM\_Zone\_6N

0 1.5 3 6 9 12 Miles

## Subsurface Resources

### Background

#### Oil and Gas Resources

The area is almost entirely in the Chugach Mountains and dominated by outcrop of Cretaceous Valdez Group and McHugh Complex with a belt of diorite, granodiorite and metamorphosed rocks along the northern boundary. These rocks are not considered to have oil and gas potential at this time. There is a very small chance for gas potential in Tertiary Kenai Group rocks in a portion of the western half of Township 17N Range 3E and the northern part of Township 16N Range 2E. This could conceivably involve coal bed methane, tight gas sands or other unconventional gas resources at shallow depths and small potential gas volumes. However, this information is inconclusive since there are no oil and gas wells in the area and no surface outcrops of the Kenai Group have been mapped there.

The Cook Inlet Areawide Oil and Gas Lease Sale boundary does not include the public use area. State land, with few exceptions, is subject to oil and gas exploration and development, either through areawide leasing under AS 38.05.180 or by exploration licensing under AS 38.05.131. 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 provision is made for payment for all damages sustained by the land owner (AS 38.05.130). In addition, geophysical exploration permits issued under 11 AAC 96 will conform to the maximum extent possible with the management guidelines in the plan, but are not prohibited.

Decisions regarding leasing for oil and gas and other energy resources will not be addressed in this plan. Oil and gas lease sales are specifically not subject to this planning process and follow the requirements of AS 38.05.180.

#### Coal Resources

Coal resources may be located in the western portion of the PUA however they are poor quality and not presently found in commercial quantities. Development of these resources is therefore unlikely.

#### Locatable Minerals

Locatable minerals (gold, silver, copper, and others) may be found in the eastern portion of the PUA, primarily in the Metal Creek drainage. There are 32 active mining claims in the area of Metal Creek. State land in the PUA is open to mineral entry but mining has not occurred outside of the Metal Creek drainage due to the sparse occurrence of locatable minerals. Expansion of the current area of the Mineral Closing Order is not considered appropriate.

## **Goal**

- Provide for the development of subsurface resources while protecting recreation, fish and wildlife and the habitats that they depend upon.

## **Management Guidelines**

Because of the low potential for the area to contain locatable minerals, additional closures to mineral entry are not proposed at this time. Nonetheless, all current mineral closing and leasehold location orders will remain and the following management guidelines apply.

- Authorizations issued by DNR shall include stipulations to minimize impacts to fish and wildlife, their habitats, and recreational uses. Access to recreational areas shall not be impaired.
- Subsurface authorizations issued by DNR should, where possible, ensure that such activities are not conducted in high-use recreation areas. Timing restrictions should be considered in these authorizations. Access to recreational areas shall not be impaired.
- Mining operations should be conducted in such a manner that prevents unnecessary and undue degradation of the land and water resources.
- Areas of mining operations, including placer mining, shall be reclaimed consistent with the requirements of DNR. Materials sales, land use permits and plans of operation will specify measures necessary to return land used in mining operations to a useful condition. In habitat areas, annual reclamation will be required concurrent with mining or material extraction.

# Trails

## Background

DNR will initiate a Trails Management Process (TMP) to identify existing trails, and assess the level of impact on resources. DNR will consult with ADF&G to assess the level of impact to fish, wildlife and their habitat related to recreational use. The TMP will also identify where additional trails are needed to enhance recreational user opportunities or reduce impacts to fisheries and wildlife habitat. The initial phase of this process will address trails in vegetated areas within the Lower Knik Flats and Lakes and Wetlands units. The second phase will address trails in the remaining units.

## Goal

- Maintain and enhance recreational opportunities while protecting fish, wildlife and their habitats.

## Management Guidelines

- Through the TMP, DNR will provide an inventory of trails, and provide an assessment of trail conditions. This assessment will identify existing trails that may have significant impacts on fish and wildlife habitat, particularly within waterfowl nesting areas, fish spawning and rearing areas, moose calving concentration areas, and nesting areas for trumpeter swans or loons. Trails in wetland areas, or other sensitive areas will be assessed to determine if they are having an unacceptable level of impact on the wetlands. Trails impacting other state resources will also be assessed.
- Based on those assessments, existing trails determined to be negatively impacting fish, wildlife, habitat, or other state resources may be closed, re-routed, or have another use or time restriction.
- DNR will identify potential new trails (non-motorized and motorized) for development and identify existing trails consistent with this plan that can be developed to a higher standard or expanded. Trails may also be identified for reservation as public easements for specific purposes.
- Not all existing routes within the PUA will be identified as a trail. Routes resulting from single vehicle passage or infrequent use by highway and off-highway vehicles may not be identified as a trail by DNR.
- Individuals may nominate new trails and DNR may accept applications and adjudicate applications to develop new trails or to re-route, or expand existing trails. DNR will reserve easements on trails developed with an authorization.



- DNR may consider Trail Management Agreements with organizations or individuals for the maintenance of trails or segments of trails.
- When siting a new trail or re-routing an existing trail adjacent to an anadromous waterbody DNR will consider the impact associated with the use of that trail on the waterbody.
- All trails (new and up-graded, expanded or re-routed) or facilities within the planning area should be sited and designed to avoid impacts to fish and wildlife and their habitats. If impacts to these habitats cannot be avoided, they should be minimized.
- All trails and developed facilities should be sited and developed to minimize impacts to anadromous waterbodies. Stream crossings should be developed generally perpendicular to the stream flow.
- Within 100 feet of an anadromous waterbody, excluding the Knik River and shorelands of the Knik River, trails should not be developed parallel to the ordinary high water mark. See Figure 1-1, page 1 - 9 for a depiction of state shorelands.
- New trails proposed within or adjacent to waterfowl nesting habitat, fish spawning and rearing areas, moose calving concentration areas, or swan or loon nesting areas should be sited and developed to avoid impacts to these areas. If these identified sensitive areas cannot be avoided, the impacts to these areas should be minimized.
- Following standard SCRO procedures for adjudication of easements, the public will be allowed to review and comment on recommendations involving the establishment of easements.

## Waterbodies

### Background

Waterbodies provide important habitat for fish and wildlife. The productive fish spawning and rearing habitat contributes to the upper Cook Inlet commercial fishery and supports a popular coho salmon fishery. Waterbodies are used by motorized and non-motorized users for recreation, hunting and fishing and as access to other areas.

Conflicts between users of waterbodies exist at some locations. Many users indicated that a potentially dangerous situation exists between motorized and non-motorized boaters on McRoberts Creek, due to limited sight distances and narrow stream channels. Another site where user conflicts occur is at Manmade Lake. This small waterbody is frequently used for family oriented recreation, primarily swimming. Use of motorized vehicles or boats on this small waterbody presents a safety hazard for swimmers.

Members of the public commented on uses occurring on Jim Lake. During ice-free periods, Jim Lake is typically used for non-motorized recreation, however, limited motorized boating use does occur and is primarily related to access for fishing and hunting. Watercraft typically operating on Jim Lake includes canoes, kayaks, and small boats with low horsepower motors. The wetlands connected to Jim Lake have been identified as sensitive waterfowl nesting habitat and provide habitat for duck and grebe nesting.

### Goal

- Provide for the continued use of waterbodies while avoiding/minimizing impacts to resources and providing for the safety of the recreating public.

### Management Guideline

- Use of waterbodies should be unrestricted unless that use is determined by DNR to be significantly impacting fish and wildlife or their habitats, public safety or to provide or maintain a certain recreational experience.
- DNR should propose regulations to address safety concerns on a segment of McRoberts Creek and on Manmade Lake.
- DNR should draft regulations to maintain current recreational opportunities and protect loon, duck and grebe nesting on Jim Lake and the connected wetlands.
- DNR should consult with ADF&G to determine if uses are impacting fish, wildlife and their habitats.
- If a use is found to have significant negative impacts as determined by DNR, it should be restricted or prohibited.