

CHUGACH STATE PARK MANAGEMENT PLAN



Adopted February 2016



CHUGACH STATE PARK MANAGEMENT PLAN

Adopted February 2016

Alaska Department of Natural Resources
Division of Parks and Outdoor Recreation

Cover photos courtesy of:

Bull Moose Fight by: Donna Dewhurst

Northern Lights Rainbow by: Larry Anderson

Falls Creek- Turnagain by: Stephen Nickel

Bird Ridge by: Wayne Todd

Lupine At Chugach and Eklutna Lake by: Jeff Nelson

Evening Beaver Ponds by: Jim Wood



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Natural Resources

Office of the Commissioner
550 West 7th Avenue, Suite 1400
Anchorage, Alaska 99501-3650
Main: 907.269.8431
Fax: 907.269.8918

**ADOPTION OF THE CHUGACH STATE PARK
MANAGEMENT PLAN AND CHUGACH
STATE PARK TRAIL MANAGEMENT PLAN
February 2016**

The Commissioner of the Department of Natural Resources finds that the Chugach State Park Management Plan and Chugach State Park Trail Management Plan, which prescribe management of state lands within the boundaries of the park unit, including permitting and other department programs and activities, meet the requirements of AS 41.21.121–41.21.125 and hereby adopts these plans as policy for the Department of Natural Resources. These plans supersede the 1980 Chugach State Park Master Plan and the 1986 Chugach State Park Trail Plan.

A handwritten signature in black ink, appearing to read "Mark D. Myers", written over a horizontal line.

Mark D. Myers
Commissioner
Alaska Department of Natural Resources

2-29-2016
Date

Credits and Acknowledgements

Planning Team

Monica Alvarez, Project Manager/Planner, Alaska Department of Natural Resources,
Division of Mining, Land & Water
Amanda Hults, Planner, Alaska Department of Natural Resources, Division of Mining,
Land & Water
Thomas Harrison, Chugach State Park Superintendent, Alaska Department of Natural
Resources, Division of Parks and Outdoor Recreation
Matthew Wedeking, Chugach State Park Chief Ranger, Alaska Department of Natural
Resources, Division of Parks and Outdoor Recreation
Ruth Booth, Publisher, Alaska Department of Natural Resources, Division of Mining,
Land & Water

Plan Contributors

Acknowledgements are gratefully due to the following Division of Parks and Outdoor Recreation staff for their help in the planning process and contributions to the plan:

Thomas Crockett, Kurt Hensel, Preston Kroes, Ian Thomas, and Keith Wilson- Former and Present Chugach State Park Rangers; Blaine Smith- Chugach State Park Specialist; Bill Evans- Former Landscape Architect; Lucille Baranko- Landscape Specialist; Claire Leclair- Chief of Field Operations; Ben Ellis- Director; Chris Degernes- Former Chief of Field Operations; Penny Bauder- Former Planner; Al Meiners- Former CSP Park Superintendent

Current and Former Chugach State Park Citizen Advisory Board Members: Adrienne Lindholm, Anna Hilbruner, Brian Goodman, Deb Ajango, Frank Wesser, Gary Gustafson, Gary Otts, Jennifer Johnston, John Scudder, Judy Caminer, Julian Mason, Mark Miraglia, Mark Smith, Melissa Bartley, Niel Thomas, Pat Athey, Patrick Kuckertz, Pat Pourchot, Pete Panarese, Rebecca King, Ronald Lurk, Sarah Leonard, Terri Morganson, George Pollock

Other Contributors and Technical Assistants

Birds

Thede Tobish- Municipality of Anchorage
Melanie Smith and Eric Meyers- Audubon Alaska

Climate

Sam Albanese, Sam Shea, and Debbie Brown- NOAA

Cultural History

Jo Antonson- DNR, Office of History and Archaeology

Fish

Dan Bosch- ADF&G

Geology

Chad Hults- U. S. Geological Survey

Soils

Mark Clark- USDA, Natural Resources Conservation Service

Sportfish Stocking Program

Marla Carter and Diane Loopstra- ADF&G, Sport Fish Division

Wildlife

Jessi Coltrane and Rick Sinnott- ADF&G, Division of Wildlife Conservation Anchorage

Finally, the participation of the public has been a tremendous asset to this planning process.

Table of Contents

Chapter 1: Introduction	1
Chapter 2: Park Goals and Objectives	9
Chapter 3: Natural and Cultural Resources	11
Natural History.....	11
Cultural History	25
Chapter 4: Park Use and Issues.....	29
Recreational Use and Trends	29
Nonrecreational Uses	30
Land Management	30
Resource Management.....	33
Funding	34
General.....	35
Chapter 5: Areawide Management Direction and Guidelines	37
Land Use Designations	37
Guidelines for Activities & Facilities Within Land-Use Designations in	
Chugach State Park.....	43
Watershed Management.....	57
Vegetation Management	58
Fish and Wildlife Management.....	59
Trail Management.....	60
Infrastructure Development and Management.....	60
Proposed Park Additions, Land Acquisitions, and Boundary Adjustments	62
Management Agreements	65
Management and Staffing Efficiencies	70
Chapter 6: Management for Each Unit	73
Eklutna-Peters Creek Planning Unit	73
Eagle River Planning Unit	85
Ship Creek Planning Unit	95
Hillside Planning Unit.....	101
Turnagain Arm Planning Unit	109
Chapter 7: Implementation	123
Appendix A: Glossary.....	127
Appendix B: Statutes & Regulations for Chugach State Park.....	133
Appendix C: Boundary Adjustment Package for Chugach State Park	141
Appendix D: Plants, Mammals, Fish and Birds of Chugach State Park.....	143
Appendix E: Planning Units & ADF&G Special Management Areas	149
Appendix F: Bibliography	151

Tables

Table 5.1: Resource Management.....	44
Table 5.2: Public Uses	47
Table 5.3: Other Uses	52
Table 5.4: Facilities.....	53
Table 5.5: Commercial Uses/Other.....	55

Figures and Maps

Figure 1: Generalized Land Ownership.....	5
Figure 2: Planning Units	7
Figure 3: Geology	19
Figure 4: Vegetation	21
Figure 5: Anadromous Fish & Large Game Distribution	23
Figure 6: Land Use Designations.....	41
Map 6.1: Eklutna-Peters Creek Unit.....	81
Map 6.2: Eklutna-Peters Creek Unit.....	83
Map 6.3: Eagle River & Ship Creek Units	93
Map 6.3: Eagle River & Ship Creek Units	99
Map 6.4: Hillside Unit	107
Map 6.5: Turnagain Arm Unit	119
Map 6.6: Turnagain Arm Unit	121

Chapter 1: Introduction

Park Overview and Regional Characteristics

Chugach State Park is located in Southcentral Alaska mostly within the Municipality of Anchorage. The park contains approximately 495,000 acres of land and is one of the four largest state parks in the United States. Southcentral Alaska is an area of diverse land forms and rugged topography, bounded on the north and west by the Alaska Range, and on the east by the Chugach and Wrangell Mountains and Prince William Sound. The region contains extensive ocean shoreline, abundant lakes, massive glaciers and ice fields. The park's westernmost boundary lies in the western foothills of the Chugach Mountain Range and is a mere seven miles to the east of downtown Anchorage. The park is further defined by Knik Arm on the north, Turnagain Arm on the south, and Upper and Lower Lake George and the Chugach National Forest on the east. Within minutes of the park are the communities of Palmer, Eagle River, Chugiak, Indian, Bird Creek, and Girdwood, the village of Eklutna, and Joint Base Elmendorf-Richardson (JBER).

Although vast portions of the Southcentral Alaska region are sparsely populated, almost half of the State's population resides in or near Anchorage. Anchorage represents the most highly developed urban area of Alaska. Over 286,000 people reside within the Municipality of Anchorage (MOA) where the median age is 33. The diversity of cultures within the MOA is increasing with roughly 30% of the MOA's population represented by different ethnicities and over 95 different languages spoken among students within the Anchorage School District. This increased diversity among the population has led to new family structures and trends in how outdoor spaces are being used in the Anchorage area.

Chugach State Park Management Plan Scope and Purpose

The Chugach State Park Management Plan is the basis for the management and development of the state-owned land and water within the legislatively designated boundary of the park as well as for areas managed by the park under special agreement. This plan is based on an analysis of the park's natural and cultural environment, current and anticipated trends in use and human demands on resources in keeping with the park's enabling legislation and guiding principles. The primary purposes of this plan are to provide a land use plan that allows for optimum recreational use of the area while protecting the natural and cultural resources, and to provide a consistent set of principles and policies for park management and a listing of development projects to facilitate future funding requests and project phasing.

Park's Enabling Legislation

In 1970 the legislature restricted the state-owned land and water described in Alaska Statutes (AS 41.21.120-41.21.125) to use as Chugach State Park. In doing so, this land was closed to multiple purpose use and designated as a special purpose site in accordance with Article 8, section 7 of the Constitution of the State of Alaska. Because these lands are not available for multiple purpose use, leasing and subsurface development is precluded. Five primary purposes were outlined for Chugach State Park in statute:

- To protect and supply a satisfactory water supply for the use of the people.
- To provide recreational opportunities for the people by providing areas for specified uses and constructing the necessary facilities in those areas.
- To protect areas of unique and exceptional scenic value.
- To provide areas for the public display of local wildlife.
- To protect the existing wilderness characteristics of the easterly interior area.

Additionally, the statute provided that “the eastern area of the park shall be operated as a wilderness area, the central area as a scenic area, and the periphery areas as recreational areas.”

Management responsibility for the park, described in AS 41.21.122, is assigned to the Department of Natural Resources for control, development and maintenance, except that the Department of Transportation and Public Facilities is responsible for the repair and maintenance of all existing public roads within the park. The control of highway access and roadside structures within the Chugach State Park is the responsibility of the Department of Natural Resources. Statute states that the Department of Fish and Game shall cooperate with the Department of Natural Resources for the park purposes described above (AS 41.21.121) relevant to the duties of the Department of Fish and Game.

Additionally, statute guides park boundary adjustments and purchase authority:

If, in the exercise of management responsibility under this section, conflicts of land ownership, jurisdiction, or authority are unreconcilable or unmanageable other than at an unreasonable cost and expense to the state, the commissioner after public hearing in accordance with AS 44.62 may modify, subject to the approval of the legislature, the boundaries of the Chugach State Park not to exceed 20 percent of the total acreage described in AS 41.21.121.

The commissioner may acquire, by purchase in the name of the state, title to or interest in real property lying within or abutting the boundaries of Chugach State Park (AS 41.21.125).

Finally, provisions for incompatible uses in this park are also provided for in statute under AS 41.21.123 which states that the commissioner shall designate by regulation incompatible uses within the boundaries of the park. Those incompatible uses are prohibited or restricted by regulation.

Plan Study Area and Park Boundary

The legislative boundary of Chugach State Park, described in AS 41.21.121, encompasses a mix of land ownership patterns including state, federal and private. The recommendations in this plan apply to state-owned lands and water within the legislative boundary of the park as well as those lands managed by the park under special agreement. Figure 1 depicts the legislatively designated boundary of the park as well as the state-owned and managed land. Recommendations are at times given in this plan for areas that are anticipated to be acquired or managed by the park within the planning outlook for this document. The recommendations attach after acquisition or the promulgation of a management agreement.

Reason for Plan Revision

Since the last plan was adopted in 1980, much has changed. The population of Anchorage and surrounding areas has grown resulting in increased use of the park. This use has stressed park facilities that are often beyond capacity and caused access impacts to neighboring communities. Recreational uses and technology have changed since the park was established placing new demands on park facilities that could not have been previously anticipated. The previous plan was published with the knowledge that nearly 10% of the park area was selected by Eklutna Inc. and there would be land management implications associated with their selections. Land selection decisions have been made and management implications need addressing. Additionally, as with all management plans, continuous review is necessary to ensure that the concepts and recommendations reflect the changing needs of the public and the purposes for which the park was created.

Planning Process

The Department of Natural Resources began a comprehensive planning process to revise this plan in the Spring of 2008. The planning process not only included a revision of the 1980 Master Plan but also a revision of the 1986 Trails Plan for the park and the development of a joint State/Municipality of Anchorage Chugach Access Plan. Public scoping workshops were held in Anchorage, Eagle River and Indian to gather information and identify issues and concerns. Over 170 people participated in these workshops and over 135 written comments were received during the scoping period. To learn more specifically how people wanted to use and develop the park, additional focus group meetings were held throughout the remainder of 2008 with a variety of user groups.

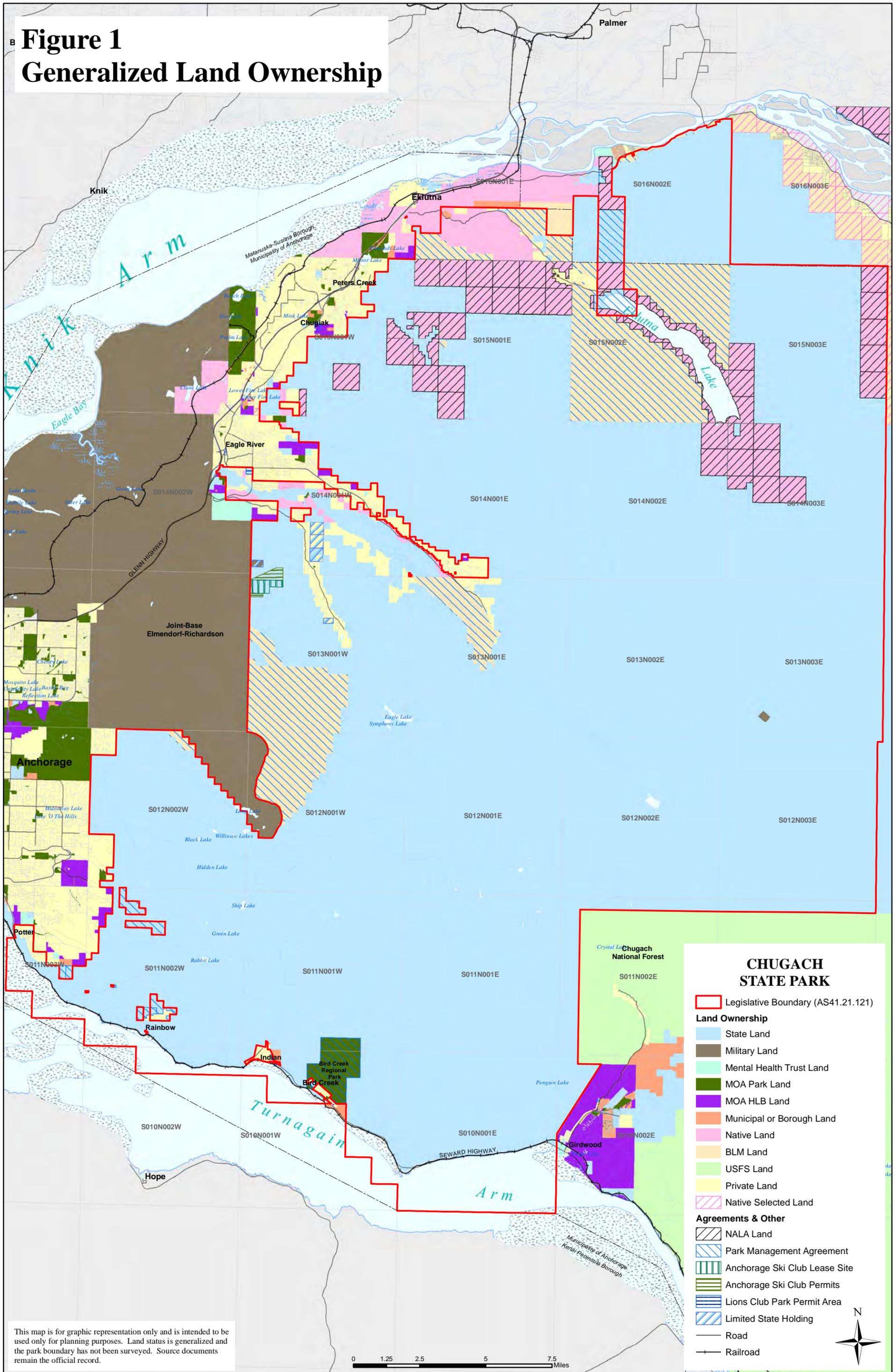
The Department decided after the scoping phase to focus on the development of the trail management and access plans initially. The thinking was that the input received on these plans would help inform the development of the overall management plan and ultimately make it a more comprehensive document. The draft trail management plan was issued for public review in August of 2009 and the comment period extended until mid October 2009. The draft access plan was released for review in January of 2010 and the comment period ended the beginning of May 2010. Public meetings were again held during each comment period in a variety of communities and a tremendous amount of input was received. The input resulted in a clearer vision for access and park trails as well as for the management concepts and facility proposals contained in this document.

This plan was issued for public review in May of 2011 and the comment period extended until October of 2011. Public meetings were held in Eagle River, Anchorage and Indian during the comment period and during this time, planning staff also attended a variety of community council meetings and advisory board meetings. Over 400 timely comments were received on the draft plan. The public input received informed a list of recommended revisions that were adopted by the Commissioner of the Department of Natural Resources and along with the draft plan and incorporated here as the final plan.

Plan Organization

The first portion of this plan provides a set of goals and objectives, background information on the natural and cultural resources within the park, and a discussion of special management issues. The second part of this plan provides the management recommendations, facility proposals, and implementation directives. Park lands have been classified into three land use zones which direct the establishment of uses and facilities. These land use zones are explained in the second part of the plan along with the area-wide management recommendations. The plan also divides the park into five planning units (see Figure 2) by hydrographic boundaries: Eklutna-Peters Creek, Eagle River, Ship Creek, Hillside, and Turnagain Arm for planning and management purposes. Recommendations for facility development, use, and special management considerations are also made for each of these units in the second part of the plan.

Figure 1 Generalized Land Ownership

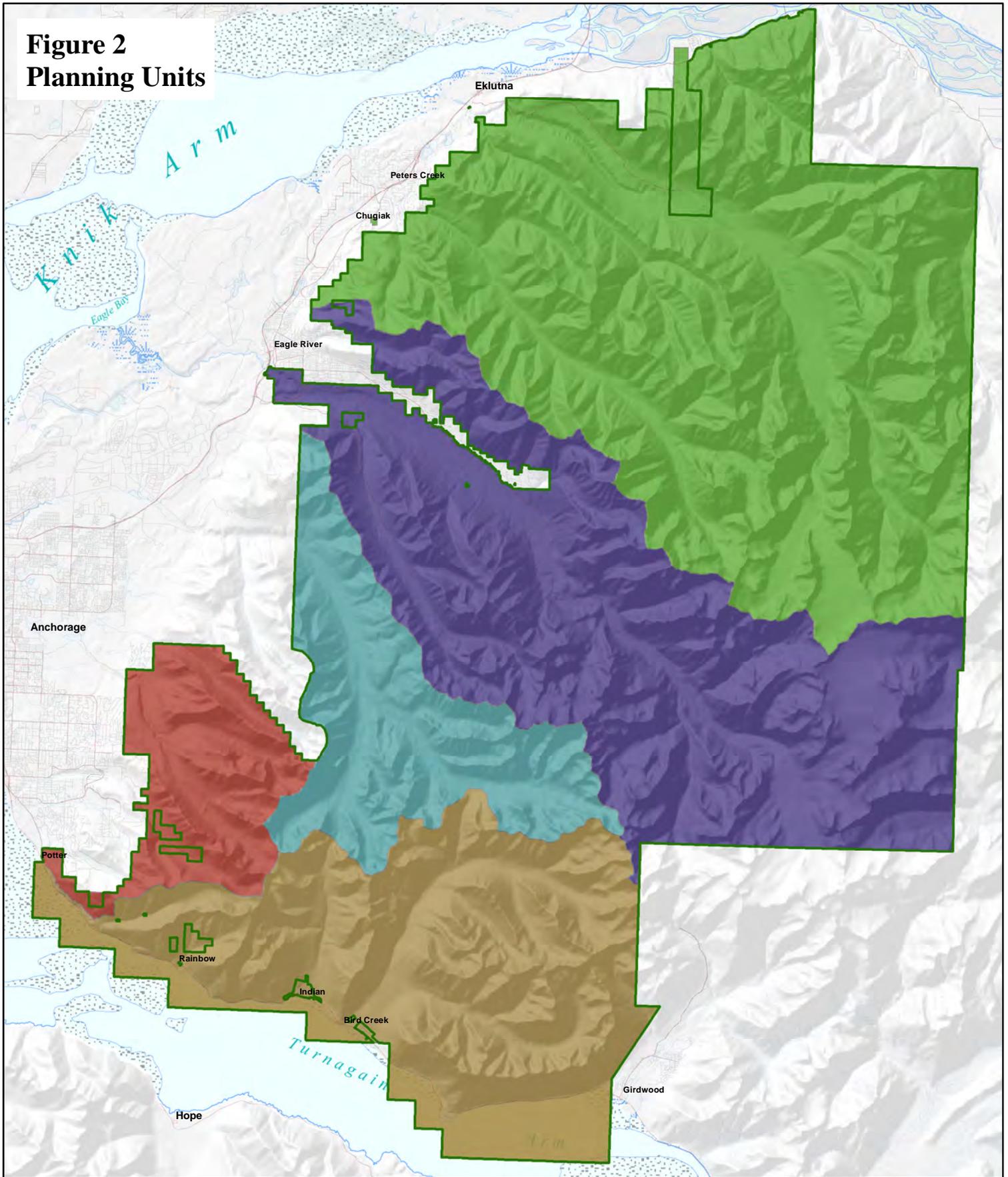


This map is for graphic representation only and is intended to be used only for planning purposes. Land status is generalized and the park boundary has not been surveyed. Source documents remain the official record.

0 1.25 2.5 5 7.5 Miles



**Figure 2
Planning Units**



Planning Units

- Eklutna-Peters Creek Unit
- Eagle River Unit
- Ship Creek Unit
- Hillside Unit
- Turnagain Arm Unit
- CSP Legal Boundary (AS41.21.121)

CHUGACH STATE PARK



Chapter 2: Park Goals and Objectives

There are a number of goals and objectives to be achieved in the management and development of Chugach State Park. They are designed to provide for a spectrum of outdoor experiences while protecting park resources. This section presents a list of goals, organized into three groups: Recreation, Resources and Access. Each goal statement is followed by specific objectives that are not ranked in terms of priority. These objectives, along with the park purposes, establish values and guidelines used in making management decisions.

Recreation Goal: Provide recreational opportunities and complimentary facilities to keep pace with the needs and diversity of Alaskans and visitors.

Objectives:

- Provide a variety of recreation facilities and opportunities equitably distributed for all capabilities.
- Foster community health by promoting outdoor exercise through the wise development and maintenance of trails and facilities that link the community with the park.
- Design and construct sustainable park facilities that are appropriate to the park setting and enrich the park experience.

Resource Goal: Protect park resources to allow for diverse visitor experiences and the understanding of the unique features of Chugach State Park.

Objectives:

- Protect and encourage a better understanding of the park's natural and cultural features.
- Protect and provide for a satisfactory water supply.
- Protect areas of unique and exceptional scenic value, existing wildlife habitat and encourage opportunities for wildlife viewing throughout the park.
- Minimize the impact of human presence and promote "leave no trace" principles, particularly in fragile and wilderness areas.
- Develop criteria for using land acquisitions, land trades, and management agreements to maintain the park's integrity, natural values and processes and to expand the potential for outdoor recreation.

Access Goal: Enhance and secure public access to Chugach State Park for the benefit of all Alaskans and visitors.

Objectives:

- Designate a variety of well-defined access points along the park's perimeter and provide appropriate facilities.
- Enhance the visitor experience through management of access points and promoting of access etiquette to ensure that there is a balance between the demand for an area and its capacity.

Chapter 3: Natural and Cultural Resources

This chapter describes the natural and cultural resources within Chugach State Park and is included because of the influence these resources have on planning for and managing park use. Natural and cultural resource implications were considered when making the management and facility recommendations in this plan.

Natural History

Geographic Location and Physiographic Features

Chugach State Park occupies much of the west end of the Chugach Mountain Range. Within the park, rugged peaks rise from sea level to over 8,000 feet with local relief frequently varying in excess of 5,000 feet. The landscape within the park is a conspicuous result of glacial action, although undoubtedly the action of glaciers only remodeled previously existing stream valleys and mountain slopes. At higher elevations in the park, ice fields and glaciers remain, many of which are large and vigorous. Most of the remaining major glaciers, Eklutna, Whiteout, and Eagle are restricted to the eastern portion of the park and are currently receding. The most prominent non-ice physiographic features are found in the high, hard bedrock area which extends roughly in a band from the slopes along the north fork of Ship Creek northeasterly to the area around the headwaters of Hunter Creek just outside the park boundary. Within this general area, active rock glaciers are found in the heads of most of the small valleys and in the cirques of the rugged peaks.

Within the park are a series of northwest-southeast trending glacial valleys. These U-shaped troughs, such as Eklutna River Valley, Eagle River Valley and Ship Creek Valley generally parallel the axis of the Chugach Mountain Range. These and other similarly oriented glacial valleys terminate in the plain of glacial deposits upon which the city of Anchorage is situated. Along the southern edge of the park is another series of glacial valleys, somewhat smaller than the valleys to the north and normal to the axis of the Chugach Range. Bird and Indian creeks trend northeast-southwest and drain into Turnagain Arm. The valley floors are mantled with stream and glacial deposits. The divides separating these valleys are sharp glacially cut ridges with cols, aretes, horns and other typical ice erosional features.

Hydrology

Chugach State Park is drained primarily by two major rivers, Eklutna and Eagle rivers, and by several streams of smaller proportion. The principal streams in the park are Bird, Indian, Campbell, Ship, Peters, Thunder Bird and Goat creeks. Local drainage patterns and

hydrological features in the park have been shaped, and are still being modified, by mountain valley glaciation that occurred during the Pleistocene. Most stream valleys are the classic U-shape formed by valley glaciations. The streams are characteristically shallow, fast flowing braided streams and are still in the youthful cycle of stream erosion. A significant portion of the southeastern portion of the park is covered by glaciers and ice fields. The rivers and streams draining this area constitute a significant portion of the total runoff from the area. Surface runoff from streams in Chugach State Park reaches peak discharge levels during June, July and August when the glaciers and ice fields begin their annual melt. The period of low flow is during January, February and March when precipitation and glacial melt is at a minimum.

Other hydrological features in the park that have been shaped, and are still being modified, by mountain valley glaciations are the numerous lakes. Eklutna Lake, at nearly 7 miles long and 1 mile wide, is the largest lake within the park boundary and probably the most well-known. This natural lake and the surrounding Eklutna Valley watershed, in addition to the Ship Creek Valley watershed, presently provide 93 percent of the Municipality of Anchorage's domestic water supply. Drainage from the Chugach State Park Hillside Unit, primarily from the Campbell Creek watershed, recharges aquifers under Anchorage used for drinking water. Protection of the Anchorage water supply which originates in the park is one of the mandates of the legislation which created Chugach State Park.

Geology

Chugach State Park and the Chugach Mountains have a complex geologic history and include parts of several terranes. Terranes are blocks of rock units that did not form at the same time or place but were subsequently juxtaposed along faults. The Chugach Mountains are part of a 1,000-mile belt of rock called the Chugach terrane. The Chugach terrane runs from Kodiak Island south of Cook Inlet, up through the Kenai Mountains across Turnagain Arm, curving past Palmer then eastward toward the Wrangell Mountains. The Chugach terrane is composed of two rock units- the McHugh Complex and the Valdez Group.

The landward side of the Chugach terrane is the older McHugh Complex, which is a convoluted formation known as a *mélange* which formed from Late Triassic through mid-Cretaceous time (235-90 m.y.a. - million years ago). It consists of metamorphosed fragments of ocean crust (basalt, chert, and limestone) and turbidites (conglomerate, sandstone, and mudstone). Much of this rock has been metamorphosed and sheared in a long lasting subduction zone similar to the Aleutian trench of today. The McHugh Complex *mélange* can be seen in outcrops running from McHugh Creek to Eklutna Lake.

The seaward side of the Chugach terrane is the younger Valdez Group, which is Late Cretaceous (~70 m.y.a.). It consists of metamorphosed turbidites. The Valdez Group is metamorphosed and sheared but not as much as the McHugh Complex. Other terms for the turbidites are greywacke and flysch. These turbidites are made of pieces of rock eroded from a volcanic arc to the north (present day coordinates) that were deposited in a subduction

trench. Few fossils have been found in the Valdez Group, primarily the fossil bivalve *Inoceramus*. Between Indian Creek and Girdwood there are fine examples of turbidites of the Valdez Group.

Along Turnagain Arm the *mélange* of the McHugh Complex and the flysch of the Valdez Group are separated by the Eagle River thrust fault, which crosses the road near Indian Creek and continues across Turnagain Arm and up Resurrection Creek. The fault zone is several hundred yards wide. Breccia (angular fragments of broken rock) and slickensides (a polished and grooved surface formed when two masses of rock move past each other under pressure) can be seen along the fault.

The northern boundary of the Chugach terrane is the Border Ranges fault, which defines the break in slope between the flat lands of Anchorage and the foot of the mountains. The fault runs north along the front of the Chugach Mountains to Pioneer Peak where it curves eastward along the north side of the Chugach Mountains. The fault separates the Chugach terrane on the southeast from the Peninsular terrane on the northwest and forms the eastern margin of Cook Inlet. The fault is considered active even though no large earthquake has yet been recorded along its length, but the records don't go back very far.

Major uplift of the Chugach Mountains started in the Tertiary (~60 m.y.a.). Cook Inlet is filled with over 50 kilometers of Tertiary (65-2.5 m.y.a.) river deposits. No Tertiary rocks are found in Chugach State Park because the Chugach Mountains were being uplifted and eroded while Cook Inlet was subsiding and filling. Evidence from the Tertiary rocks in the region hint of temperate and subtropical climates as well as pre-Pleistocene glaciations. During the Quaternary (2.5 m.y.a. through today) a change in climate resulted in the onset of a major glaciation. Throughout the Pleistocene, glaciers were the dominant force shaping the mountains we see today. They formed the U-shaped valleys, moraines, erratics, and tarn lakes found throughout the park. Southcentral Alaska is still under great pressures from plate motions causing continued uplift of the Chugach Mountains, volcanoes of the Aleutian Range, and frequent earthquakes.

Mineralization

There appear to be no economically significant mineral resources in Chugach State Park. However, chromite and cinnabar occurrences have been noted in the Eklutna area, and a number of placer gold and hardrock gold prospects are located at the headwaters of Peters Creek and along Indian, Rainbow, and Bird creeks. Minor outcrops of marble and travertine occur in the Peters Creek and Eagle River drainages and minor jasper is found along the shoreline of Eklutna Lake.

Soils

Major soils within Chugach State Park are the product of topography, vegetation, climate, and geologic materials altered by natural processes over time. These soils formed in gravelly materials either deposited by glaciers (glacial drift) or materials transported down steep slope by gravity (colluvium). Overlying these deposits is a mantle of windblown deposits and volcanic ash of varying depths but generally less than 20 inches thick. Along small streams within the park, soils are formed in gravelly and loamy alluvial materials deposited by water. The alpine life zone includes elevations above about 2,500 feet within the park. Soils consist of a thin mantle of windblown deposits and volcanic ash over gravelly colluvium and bedrock. Typic Eutrocryepts and Lithic Eutrocryepts are the major subgroups as defined by USDA Soil Taxonomy. These soils are found interspersed with areas of non-vegetated rock outcrop, talus slopes and permanent snow and ice fields. On mid to lower mountain slopes within the boreal and subalpine life zones between 1,000 and 2,500 feet elevation, the major soil subgroup includes well drained, forested Typic Humicryods on smooth or convex positions on mountains. To a lesser extent, poorly drained, forested Typic Cryaquands occupy concave positions and drainages.

Landforms below 1,000 feet elevation include glaciated valley bottoms, plains, hills and flood plains. Soils include well drained Typic Haplocryods on well drained, convex positions with relatively productive hardwood and conifer forest vegetation. Depressions consist of poorly drained organic soils, primarily Typic Cryofibrists and Typic Cryohemists, with shrub and sedge vegetation and these areas are referred to locally as muskegs.

Bore Tide

A “bore” is an abrupt rise of tidal water moving rapidly inland from the mouth of an estuary into a constricted inlet. The only locations in the United States where tidal bores occur regularly are Turnagain and Knik arms, two arms of the giant Cook Inlet tidal estuary. Cook Inlet has one of the largest fluctuating tides in the world, ranging as high as 35 feet. The extreme range of Cook Inlet tides can be attributed to the natural resonance of the inlet being nearly equal to the daily tidal interval of 12 hours and 25 minutes. Every basin of water has a natural resonance, that is, a natural vibration associated with the time it takes the water to slosh back and forth from one end of the basin to the other. Cook Inlet’s tidal ranges are amplified to phenomenal heights due to the combined tide and resonant effects.

Turnagain and Knik arms are uniquely suited for the formation of tidal bores because they are both adjacent to a body of water with a large range in tide (Cook Inlet) and their configurations are, by comparison to Cook Inlet, narrow, shallow, and gently sloping, forcing the rapidly rising tide waters to form a tidal flood with a raised abrupt front. The Turnagain Arm bore tide is a daily occurrence and can be seen nearly every day somewhere in Turnagain Arm just after low tide. Its size depends on the range of the tide for that day. In

Turnagain Arm, bores range in size from ½ foot to 6 feet high and travel at speeds between 10 and 15 mph. The most dramatic bore tides occur during days with extreme minus tides (between -2.0 feet and -5.5 feet).

The ever-changing channels throughout the Arm dictate the size of the bore tide and the best points from which to view them. Typically, Turnagain's bore tides can be viewed along the Seward Highway between Bird Creek and Girdwood. Surfing the bore tides in the choicest locations around the world, among them Turnagain Arm, is a dangerous, yet growing sport.

Climate

The park, located in the southcentral region of Alaska, is considered to have subarctic climate with a strong maritime influence. The mountainous terrain within the park can produce local weather patterns that can change rapidly. Snowfall in the park ranges from an average of 150-200 inches at sea level along the windward areas, south and east facing terrain, to 600-700 inches at 2,500-3,500 feet MSL - Mean Sea Level. Leeward areas average far less snowfall; typically, around 50-70 inches at sea level to 150-200 inches at 2,000-3,000 feet MSL. Snow depth and loading will vary significantly with areas having an average spring snow pack as low as 10-20 inches in the leeward low elevation areas to 20-60 feet or greater along windward high elevations of 3,000 feet and higher. A major contributor to the heavy snow loading will be the terrain and predominant wind flow that produce the snow loading. It would not be unreasonable to expect snow depths much greater than 60+ feet in the loading prone areas of the park.

The rain pattern is very similar to the snow pattern with much higher rainfall along the windward side of the mountains than the leeward side. Average annual precipitation ranges from 70 to 200+ inches water equivalent along the windward side of the mountains to 15-20 inches of water equivalent on the leeward side of the mountains. Summer (May or June through September) rainfall averages from 70+ inches along windward terrain to as low as 9 inches on the leeward side of the mountains.

Wind is far more variable than precipitation. Strong wind events are common in the spring, fall and winter. The strongest and most common wind storms are east to southeast wind events that can produce wind gusts over 120 mph through mountain gaps and passes. Ridge top wind in the fall, winter and spring can easily exceed 50-70 mph with any given storm system that moves into the Gulf of Alaska. Summer wind will be lighter in general and tend to be terrain driven. They will typically be the classic up slope and up valley afternoon wind of 5-10 mph and light drainage type down slope and down valley of 2-4 mph in the late evening to early morning hours. The gap and pass winds can and do occur in the summer, but they are much lighter, typically not exceeding 40-50 mph.

Vegetation

The geographic distribution of Alaska vegetation, particularly trees, is tied very closely to the climatic variations found in the state. Soil, topography and water also determine vegetation distribution. In the Chugach State Park area, the marine influence decreases as one moves inland and continental weather with lower rainfall and lower temperatures begins to dominate. Under this climatic influence, coastal forests give way to interior forest species where white spruce, paper birch, and poplars dominate. As one moves out from the Turnagain Arm and up the Knik Arm, the vegetative transition becomes complete and the forest becomes the typical interior type.

Both of these forest types range up the slope until the limiting factors of soil depth and temperature preclude tree growth and a subalpine transition zone takes over. This zone is dominated by alder and willow. Above this zone is the true alpine vegetation. Where soil is available in the alpine zone, an association of small plants, mosses and lichens form some of the most beautiful plant communities found. Where more severe environmental conditions exist in this zone, rocks, sometimes covered by lichens and ice, dominate the landscape.

On the north side of the park, the treeline rises to almost 3,000 feet, spreading up the valleys deep in the mountains. On the south side of the park, the treeline generally follows the 1,500 foot contour of Turnagain Arm, but zig-zags up and down drainages along the front range as it passes above Anchorage. Between sea level and 1,500 feet, most of the park is heavily forested. In the southern area adjacent to Turnagain Arm, a typical Sitka spruce-mountain hemlock forest dominates. This is thought to be the farthest northern occurrence in North America of these forest species. The remainder of the forested part of the park is a mixture of white spruce, black spruce, Alaska paper birch, balsam poplar, black cottonwood, aspen, mountain ash, alder, and dwarf mountain hemlock. Localized areas of poor drainage create areas of black spruce and muskeg while above the treeline dense brush composed of willow and alder, and alpine tundra dominates. There are approximately 430 vascular plants known to occur in the park. Some of the most common can be seen in Appendix C.

Fish and Wildlife

Mammals are not as abundant in Alaska as they are in more temperate regions of North America. Most of the mammals found in Alaska however, also reside in Chugach State Park, including some of the largest most visible species. The park has approximately 40 naturally occurring species of mammals (see Appendix D for a listing), and most can be seen year-round. Moose are found throughout most of the area and are driven down into the spruce and hardwood stands by winter snows. Dall sheep and mountain goats range over the higher peaks and black and brown bears are found throughout the area. Marine mammals, especially beluga whales are known to use Turnagain Arm at various times of year and are frequently observed along the coastal areas of the park.

Over 135 species of birds (see Appendix D for a listing) are known to exist in the park. Golden eagles and bald eagles are park residents, as well as hawks, owls, woodpeckers, grouse, ducks, and many species of warblers and other songbirds. The Coastal and Pacific migratory routes straddle the park and birds can be viewed following Cook Inlet north or going down Turnagain Arm or the Knik River drainage during peak migration times.

Only eleven species of fish are found within the lakes and streams of Chugach State Park. Fish are not abundant in the park because the numerous glacially-fed streams create silty gray water in lakes and waterways. Bird Creek and Eagle River are the primary salmon spawning streams, containing king, silver, pink, red, and chum salmon. Penguin, Indian, Rabbit, Campbell, Ship, Peters, Thunder Bird, and Hunter creeks also have fish, while Rabbit, Symphony and Eklutna lakes support small fish populations. Numerous sea run species are found in Cook Inlet.

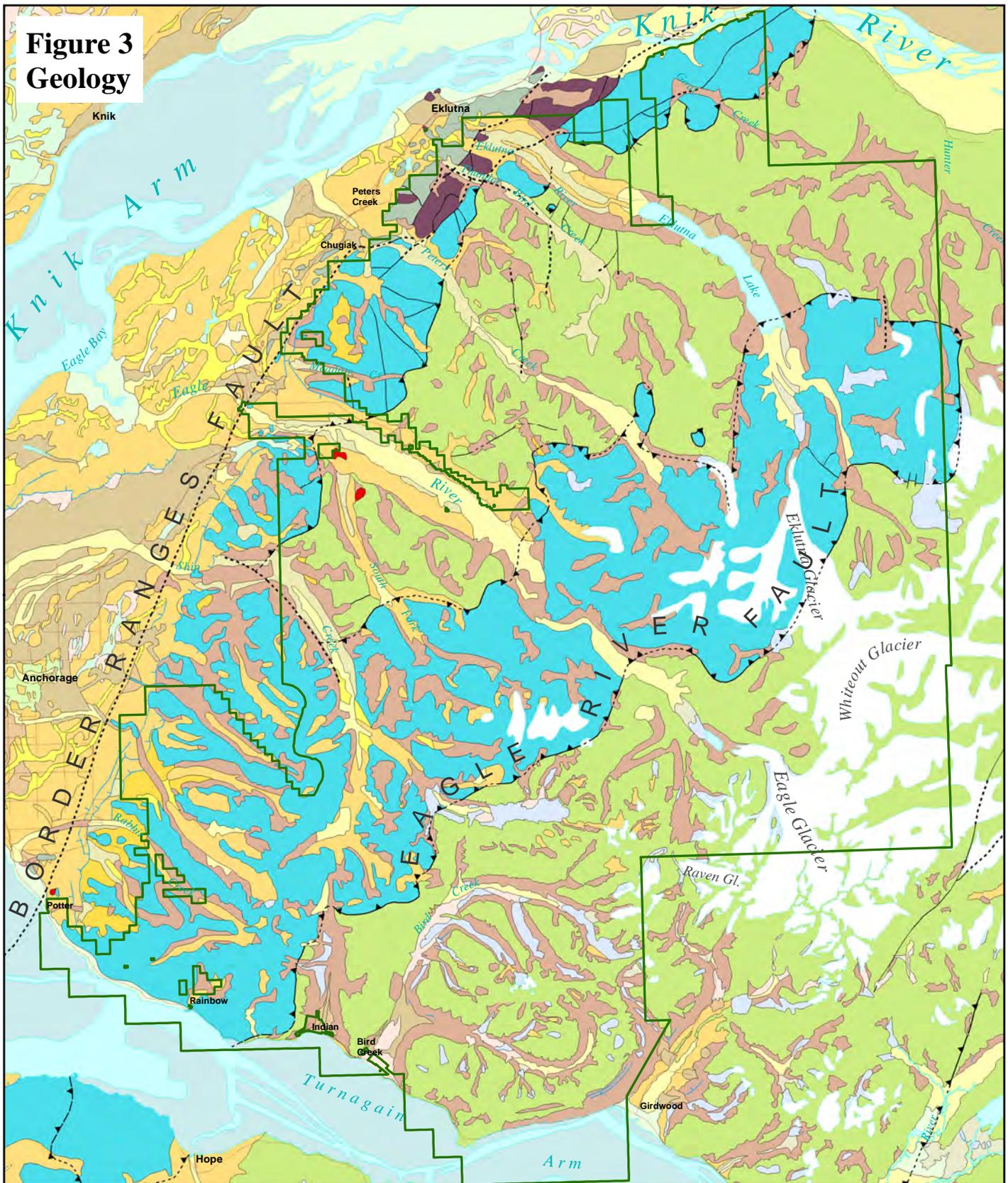
Sport Fishery Enhancement

Many of the lakes and streams within Chugach State Park have been subject to numerous sport fisheries enhancement efforts undertaken by ADF&G. Formal objectives for the lake and river stocking within the park are contained in ADF&G's Statewide Stocking Plan for Recreational Fisheries, which is subject to internal and public review on an annual basis. In lieu of future changes to the statewide stocking plan, ADF&G plans to continue efforts to enhance the sport fisheries within the park. The stocking history of Chugach State Park is chronicled in the following table.

Chapter 3: Natural and Cultural Resources

Location	Year(s)	Species	Currently Stocked or Planned
Eklutna Lake	1992	Chum salmon*	no
	1996	Coho (Silver) salmon*	no
	1987-1997	Rainbow trout*	no
*The Chum and Coho salmon were from the Eklutna Hatchery and were only stocked 1 time each. The Rainbow trout were from Fort Richardson Hatchery and were often fry surplus to program needs.			
Symphony Lake	2001-2003	Arctic grayling	no*
*The population appears to be self-sustaining and will not be stocked again.			
Rabbit Lake	1996-2005	Rainbow trout	yes*
*Stocking is scheduled to resume in 2012 when catchable Rainbow trout are produced at the William Jack Hernandez Sport Fish Hatchery. Plan is to stock every 3 years.			
Eagle River*	1991-1994	Chinook (King) salmon	no
	1990-1998	Rainbow trout	no
*Stocking discontinued after poor returns to fishery.			
Bird Creek	1992-2010*	Coho (Silver) salmon	yes
*Fish not released from 2001-2003 due to local construction safety concerns.			
Streams with upper reaches within CSP, but fish released downstream of park boundary.			
Ship Creek*	1966-2010	Chinook (King) salmon	yes
	1968-2010	Coho (Silver) salmon	yes
	1969	Rainbow trout	no
*Fish are released at or below the Elmendorf Hatchery and a dam just upstream of the hatchery prevents fish from moving up stream.			
Campbell Creek*	1992-2010	Coho (Silver) salmon	yes
	1984-2006	Rainbow trout	yes
	1985-1986	Steelhead trout	no
*Coho salmon stocked at Folker Street below the CSP boundary. Poor returns of hatchery fish to Campbell Creek in recent years, most likely due to small amount size due to the loss of warm water rearing at hatchery. Rainbow trout stocked near Folker Street and Taku Campbell Lake, and stocking is scheduled to resume in 2012.			

**Figure 3
Geology**



Map Units

- | | | | |
|--|------------------------------|--|----------------------------------|
| | Alluvial fan deposit | | Young moraine deposit |
| | Alluvial and terrace deposit | | Intermediate age glacial deposit |
| | Glacio-alluvium | | Glacial deposit |
| | Outwash in plain and fans | | Tidal flat and estuarine deposit |
| | Younger outwash | | Landslide and colluvial deposit |
| | Deltaic deposit | | Dike and sill |
| | Estuarine deposit | | Mafic and ultramafic rock |
| | Glacio-estuarine deposit | | Valdez Group |
| | Glaciolacustrine deposit | | McHugh Complex |
| | Lacustrine, swamp and silt | | Greenschist and blueschist |

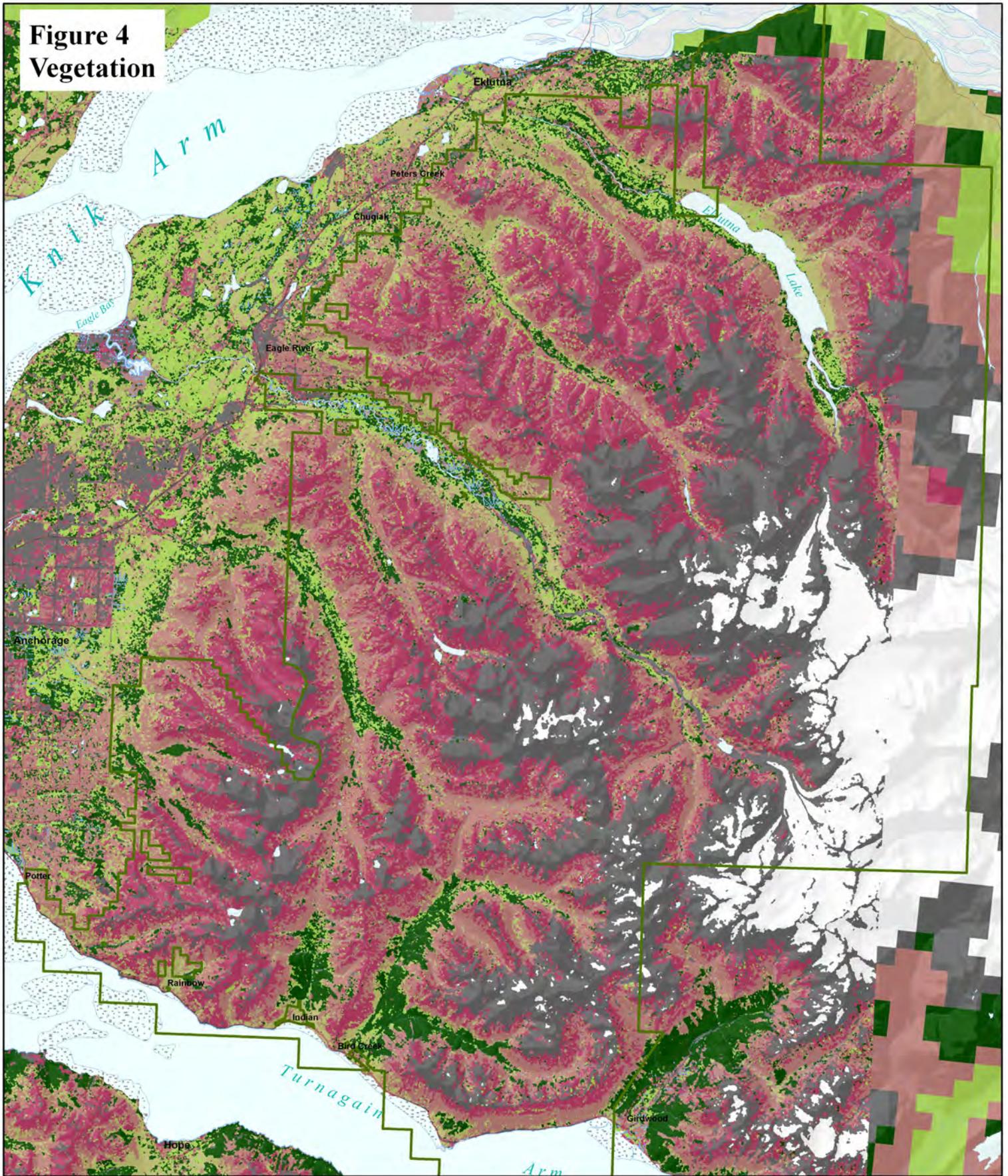
CHUGACH STATE PARK

0 2 4 8 Miles

Geology Data Source: Wilson, F.H. et al 2009.



**Figure 4
Vegetation**



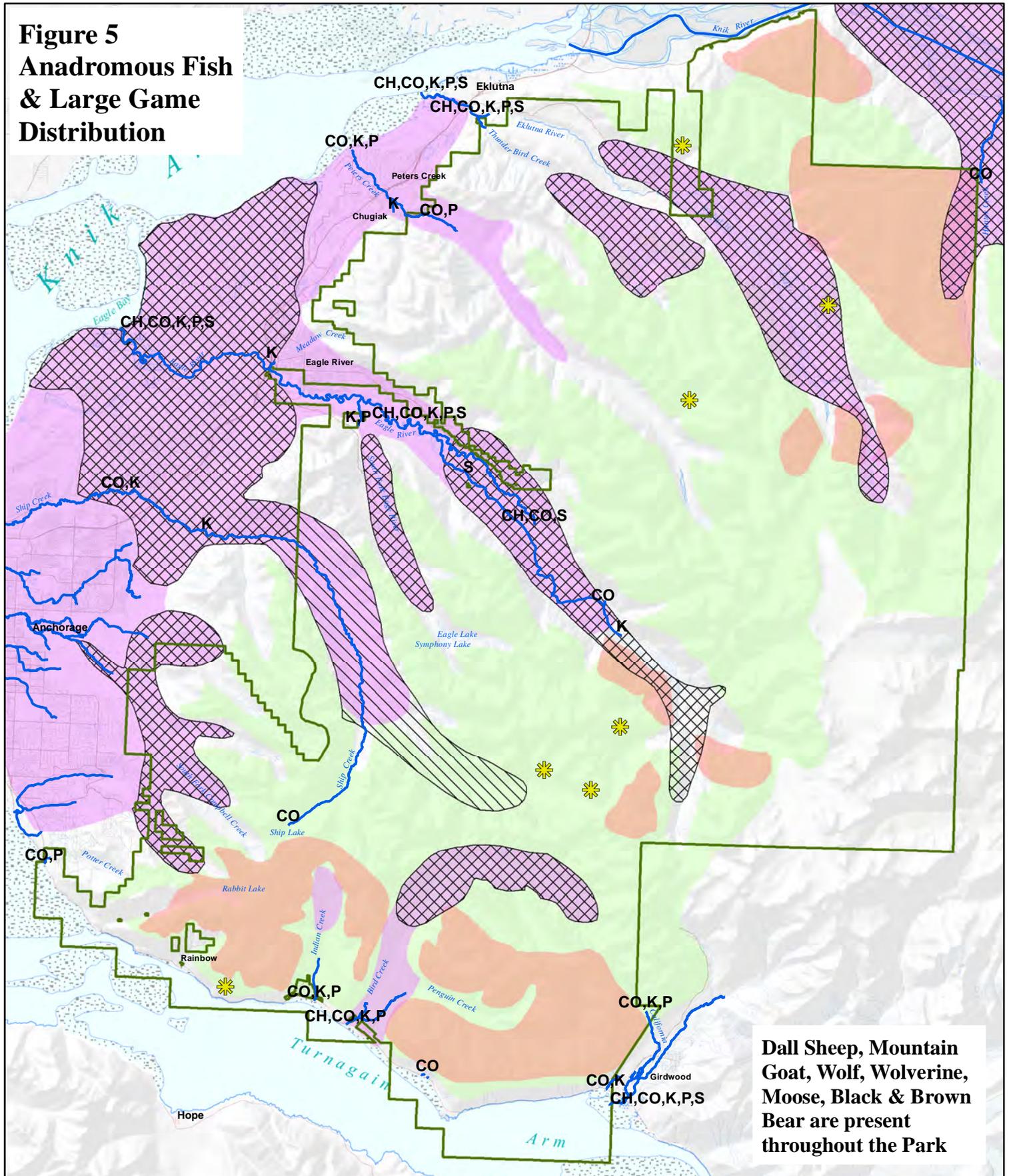
- | | |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
|  Conifer |  Alpine |
|  Mixed Forest |  Barren |
|  Hardwood |  Snow |
|  Shrub |  Water |

CHUGACH STATE PARK

0 2 4 8 Miles



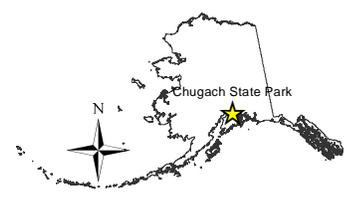
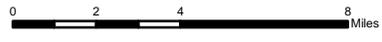
Figure 5
Anadromous Fish
& Large Game
Distribution



Dall Sheep, Mountain Goat, Wolf, Wolverine, Moose, Black & Brown Bear are present throughout the Park

- Mountain Goat
- Dall Sheep *Sheep*
- Moose Wintering Area
- Moose Calving Area
- Moose Rutting Area
- Mineral Lick
- Anadromous Stream
- CH Chum Salmon
- CO Coho Salmon
- K King Salmon
- P Pink Salmon
- S Sockeye Salmon

CHUGACH STATE PARK



Cultural History

The First Alaskans

It is not known how the first people arrived in the upper Cook Inlet region, but evidence shows they entered the territory about 10,000 years ago. Artifacts show that Beluga Point, which offered access to the uplands as well as protection from prevailing east winds, was repeatedly inhabited for almost 10,000 years. Around 2,500 years ago, Pacific Eskimos arrived from the Bering Sea, displacing earlier arrivals. Well adapted to life on the sea, Pacific Eskimos paddled the waters off Chugach State Park as late as 1700. At Beluga Point, Eskimo hearths date back to 1300.

Sometime between 1650 and 1780, the Dena'ina supplanted the Eskimo and spread across most of Cook Inlet. Why the Eskimo population in Cook Inlet left is still a mystery. Lack of marine mammals might have pushed them out. Whatever the cause, the Dena'ina mountain people moved from west of the Alaska Range, to upper Cook Inlet by 1700. The Knik Arm group, one of three different Dena'ina societies that occupied the Cook Inlet basin, used the area in and around Chugach State Park. They settled into semi-permanent villages, fishing from streams and hunting in the mountains. Their lives were closely attuned to the natural cycles of the land—a plentiful supply of salmon and other fish and wildlife provided them with food throughout the year. Elements of their traditional culture are reflected in the many Dena'ina place names located within the park.

European Exploration

The Russians reached Alaska in the mid-1700s but didn't enter Dena'ina territory until the late 1700s. An Englishman, Captain James Cook was the first European known to write about contact with the Upper Cook Inlet Dena'ina. Cook sailed up Cook Inlet in 1778 hoping to find the Northwest Passage, but had to “turn again,” leading him to name the water body “River Turnagain.” As his ship was at anchor off the mouth of the “River Turnagain,” he wrote the following description:

“On the north side of the river the low land again begins, and stretches out from the foot of the mountains, down to the banks of the great river; so that, before the River Turnagain, it forms a large bay, on the south side of which we are now at anchor; and where we had from twelve to five fathoms, from half-flood to highwater.”

By 1800, the Russian-American Company was given exclusive rights by the Russian tsar to obtain furs in the Alaskan territory; collecting sea otter pelts was their primary objective. The Upper Cook Inlet Dena'ina escaped the repressive acts of Russian occupation that befell other Native peoples of Alaska. In 1867, the United States purchased Alaska, ending Russian occupation.

The Gold Rush

The discovery of gold on the Kenai Peninsula in the late 1890s brought new attention to Turnagain Arm. In 1895, prospectors crossed to the north side of Turnagain Arm from mining camps at Hope and Sunrise and discovered gold along California Creek. Soon, miners worked Glacier, Crow, Winner, Bird, Indian and Rainbow creeks. A ferry was established in 1898 to transport people and supplies from the Hope and Sunrise area to Bird Point to reduce the time and trouble to traverse overland.

By 1908, most of the gold-bearing streams were mined out. The thousands of men and women drawn to Turnagain Arm moved on, but the legacy they left was the permanent settlement of the region by Americans. Roads and clearings exist throughout the park where people homesteaded. Other reminders of gold rush history are the trails over Crow Pass and Indian Pass, remnants of a telegraph, the old mail trail (much of which has been replaced by highway construction), rusted mining machinery, and cabin and roadhouse foundations.

Approximately twenty-five mining claims existed within the park boundary when it was created in 1970. Most of these claims have lapsed by becoming inactive. A couple operating under valid claims remain near Bird Point. The nearby Crow Creek Mine in Girdwood is now a tourist attraction and it along with the Indian Valley Mine are listed in the National Register of Historic Places.

Iditarod Trail

The Iditarod Trail, marked by the Alaska Road Commission in 1910 and 1911, connected Native villages, trading posts, and trapper and miner trails into a route from Seward to Nome that also went to the Iditarod mining district. From Seward, the trail wound along Turnagain Arm, over Crow Pass, down Eagle River Valley, northward to the community of Knik and beyond. In the fall of 1908, a new alternative trail was completed from Girdwood through Indian Pass to bypass the steep, avalanche-prone Crow Pass Trail. The Indian Pass route was three miles longer, and although less steep still crosses potential avalanche areas.

With completion of the railroad between Seward and Anchorage in 1918, the Iditarod Trail through the park fell into disuse. It would be many years before these trails became popular thoroughfares again—this time for recreation. The Crow Pass section (28 miles) of the Iditarod Trail was restored to recreational hiking by the Susitna Girl Scouts in 1974/1975 as a bi-centennial celebration of our Country's 200th anniversary. That led to the 1978 Congressional designation of the Iditarod Trail as a National Historic Trail, still today the only Alaskan trail with this designation.

Alaska Railroad

In 1903, the Alaska Central Railway began building a railroad from Seward to Fairbanks. The company cut a telegraph trail and established a line along Turnagain Arm to facilitate the project. The company soon went bankrupt as did its successor, the Alaska Northern Railway. The United States Government bought the railroad in 1915 and improved the trail to handle the horse and wagon traffic needed for railroad construction. The trail was also used to deliver mail between Anchorage and Seward. Construction crews worked for three years from Anchorage to Girdwood on the rugged section on the north side of Turnagain Arm. By 1918 the railroad extended from Seward to Anchorage, with flag stops at Bird Creek, Indian, Rainbow and Potter. Part of the trail is now covered by the Seward Highway, which was completed in 1950, paved in 1954, and subsequently realigned in sections. Remnants of railroad construction camps remain along the trail but are barely discernible.

The Potter Section House State Historic Site helps tell the story of the Alaska Railroad in the early 1930s. The house, listed in the National Register of Historic Places, was built in 1929 and is the only one of 14 section houses remaining. The site has the restored house and outbuildings that were once part of a railroad section camp and currently functions as the Chugach State Park Headquarters. Interpretive displays include the huge rotary snowplow used by trains to clear the tracks.

After the railroad was completed, some people homesteaded along the north side of Turnagain Arm. To access their sites, the homesteaders cut trails and cleared short roads. Only a few of the homesteads were patented because the area is rugged. When the park was created, the valid inholdings were respected. Several homesteader access routes are now trails in the park, powerlines and pipelines supplying power for Anchorage and fuel in the past for the military and now natural gas to residents.

The Eklutna Dam

In the 1920s a diversion dam was constructed at Eklutna River not far below the Eklutna Lake outlet. This dam was part of the system that generated the major source of power for Anchorage for many years. The dam was upgraded several times. In 1955, a new dam was constructed and it raised the level of Eklutna Lake to an elevation of 875 feet above sea level. The 1964 Earthquake severely damaged the new system. Because of this, a new storage dam was built downstream—an earth and rockfill structure 815 feet long and 51 feet high. As this dam impounds 100% of the flow from Eklutna Lake, the river's volume immediately downstream is zero.

Commercial Logging

Formerly, timber rights in the Bird and Indian valleys had been leased to various logging contractors and the logs from the area were milled at two small spruce mills: one in the Bird Valley and one in the Indian Valley. In 1969, the tentative sale of the logging rights to the Bird and Indian valleys threatened to disrupt a rugged, forested retreat enjoyed by many local residents. A group of citizens filed suit against the State of Alaska to prevent private logging operations from harvesting timber from this region. Claiming “grandfather” rights, they won their suit to preserve this area. Several miles of road in the Bird and Indian valleys remain as evidence of the commercial logging that occurred until 1973- when the timber rights to the parcels in the valleys expired.

Establishment of the Park

The region’s close proximity to Anchorage, Alaska’s largest urban center, soon awakened interest in its recreational potentialities for large numbers of city dwellers. Members of relatively small, special interest groups such as the Nordic Ski Club and the Mountaineering Club of Alaska had used the area already for some years. The explosive growth of the Anchorage metropolitan area, however, soon posed a variety of problems. Private acquisitions of lands blocked public access into the Chugach Mountains and the accumulation of garbage at various entrance points became an eyesore to many, newly environmentally conscious, citizens. Despite pressures for wider recreational opportunities, little or no maintenance of foot paths and trails existed, nor were sorely needed camping places developed. In addition, haphazard use and development threatened the watershed which supplies Anchorage with this vital commodity.

The varying interests seeking to use the Chugach Mountains and surrounding areas and the difficulties they encountered trying to use what appeared to be available land led to the formation of the Chugach State Park Ad Hoc Committee. Despite the diversity of interests (conservation, hunting, hiking, equestrian use, historical preservation, wilderness, dog sledding and snowmobiling, among others) among this group, they built support for the formation of a state park that would protect the mountains they felt belonged to the people. A number of State legislators, among them Lowell Thomas, Jr., Helen Beirne, Joe Josephson, Brad Phillips, John Rader, Tom Koslosky and Nick Begich, took an interest in 1970 and worked to pass SB 388, “an act creating Chugach State Park”, found in Chapter 112 of Alaska’s Session Laws (AS 41.20.200-240). On August 6, 1970 the legislation establishing Chugach State Park became a reality when Governor Keith Miller signed it onto law.

Chapter 4: Park Use and Issues

This chapter lists and briefly discusses issues and uses raised during the planning process that affect park management. The recommendations in Chapters 5 and 6 address many of these issues.

Recreational Use and Trends

Activities and Trends

According to the latest Statewide Comprehensive Outdoor Recreation Plan 2009-2014 (SCORP), Alaskans place a high value on the availability and quality of outdoor recreation opportunities. Hiking, fishing, hunting, snowmachining, and cross-country skiing were identified as the top five outdoor recreational activities enjoyed by Alaskans in the last SCORP. For many, the availability of recreation opportunities is a strong reason for their residence in Anchorage. Major activities occurring within Chugach State Park are camping, picnicking, berry picking, photography, wildlife viewing, backpacking, hiking, summer and winter biking, nature study, sightseeing, rock and ice climbing, hang gliding, boating, ATVing, fishing, hunting, cross-country skiing, and snowmachining.

The population of Anchorage and surrounding communities continues to grow and visitor counts indicate increasing use of the park. This use is increasing resource degradation, stressing park facilities and crowding established access points. Public demand for park access and use is strong and this trend will likely continue whether or not facilities are improved or new access and facilities are established. The increased demand on outdoor recreation facilities is reflected by the outdoor recreation equipment industry and Alaskan's willingness to purchase outdoor recreation equipment. The SCORP indicates that equipment ownership has increased in almost all areas since the previous 2004 survey.

Recreation User Conflicts

Chugach State Park is a source of recreation for a wide variety of park users, including hikers, bikers, equestrians, runners, snowmachiners, skiers, wildlife/birdwatchers, anglers, hunters, ATV riders, boaters, sightseers, and others. The demand for organized events and increased participation in events within the park continues to grow as does commercial interests in use of the park. People participate in outdoor recreation activities for many reasons, but mostly because they hope to gain certain rewards or outcomes. Each individual has a set of experiences or elements that make a recreation activity enjoyable or satisfying. These outcomes can consist of a wide variety of experiences including solitude, challenge,

experiencing nature, being with friends and family, or exercise. Certain recreational activities have inherent conflicts with others that can be mitigated, but sometimes with limited success. These include different modes of travel on trails and the varying speeds associated with the mode, crowding and aesthetic concerns. Existing park regulations and trail and facility development try to minimize some of the conflicts; however, as use increases and new recreational activities are introduced, conflicts too are likely to increase.

Resource impacts such as soil erosion, damaged vegetation, litter, vandalism, and other indications of the presence of others such as noise, dust and fumes, and footprints can also lead to feelings of conflict. These perceptions can occur even when there is no actual contact among different park users. Chugach State Park is largely undeveloped, which makes it particularly attractive to wilderness advocates and others who enjoy self-sufficient recreation. Others argue for a greater level of facility development within the park. It will continue to be challenging to determine the appropriate level of facility development that will continue to support existing uses while providing new opportunities.

Nonrecreational Uses

Development Pressure

The land that is now Chugach State Park was used in a variety of ways before becoming protected as a legislatively designated area. The signs of this prior use can be seen in some of the existing infrastructure in the park such as driveways, roads, utility lines and easements, and power and water generation structures. In recent years, the private land surrounding the park has experienced a lot of development putting more pressure on park resources and affecting the viewshed. There is more demand for water and power infrastructure within the park and pressure to upgrade and maintain roads within the park boundary that also serve residential areas. Trespass issues associated with driveways and portions of private development continue. Drainage into the park from neighboring subdivisions threatens not only the character of the park but also the resources themselves that are being altered by erosion and potential pollution as a result of these activities.

Land Management

Park Access

Access to the Chugach Range has long been an issue and one of the reasons that led to the establishment of Chugach State Park. As public use of park resources increases, the demand for additional and improved access to the park also increases stressing park facilities and crowding established access points. The unwanted side-effects of this type of demand are being seen as certain areas along the boundary are experiencing illegal parking, trespass and increased traffic volume. In an effort to address access to the park, the Division of Parks and

Outdoor Recreation with the Municipality of Anchorage engaged in a joint planning process to develop the Chugach Access Plan. This joint plan will guide both agencies as they work to establish frequent, secure access to Chugach State Park. Ultimately, the ideal situation would be to establish a mix of different types of access points along the boundary of the park to connect neighborhoods and to accommodate recreational use demands.

Land Status

When Chugach State Park was legislatively designated in 1970 the focus was to protect a vast natural area for people to enjoy and use for recreation. The final legislative boundary of the park took in large areas of land that were not in state ownership. The inholdings consisted of existing homestead sites, other types of private land, and large portions of federal land that had yet to be conveyed to the state or native corporations. With this complicated fabric of ownership, came various land disputes and new pressures on the newly created park. Over the years some of the private inholdings were purchased and some of the federal land conveyed to various entities creating new inholders and new management challenges.

Understanding the restrictions on certain properties within the park can also be a management challenge. Certain park acquisitions have come to the park with deed restrictions or conservation easements. Keeping track of all of the deed and easement restriction terms on the various properties can be difficult and does not lend itself to holistic management of area resources. Additionally, the boundary of Chugach State Park has never been fully surveyed or marked because doing so has proven to be prohibitively costly. There are areas of the park where boundary determinations will need to be made in the future to resolve ownership issues and trespass disputes. Some of the newly acquired parcels that are intended to be part of Chugach State Park are outside of the legislatively designated boundary and require agreements from other agencies to allow the park to manage them. There are a multitude of land management agreements with various stipulations and expiration dates between the park and other entities. Tracking the terms of these agreements and their expiration dates to remain in compliance has also proven to be challenging.

Land and Water Conservation Fund

The Land and Water Conservation Fund (LWCF) is a grant program that was used in Chugach State Park to partially fund the acquisition of outdoor recreation lands and development of outdoor recreation facilities. LWCF is a 50/50 federal matching grant program established to provide a nationwide legacy of high quality outdoor recreation. While this funding source has benefited the park since it was first used in the early 1970's, it has also placed significant restrictions on how the park can be managed that are important to understand.

The program requires that property acquired or developed with LWCF funding be retained and used solely for outdoor recreation in perpetuity. All of Chugach State Park is considered an LWCF protected area and is subject to the program provisions. Any property within an LWCF protected area may not be wholly or partly converted to anything other than public outdoor recreation uses without the prior approval of the Secretary of the U.S. Department of the Interior. If for some reason the recreational nature of the property is lost, it represents a conversion of use requiring mitigation in the form of acquisition of other recreational properties or outdoor recreational enhancement as approved by the National Park Service, the LWCF program administrators.

Actions that may represent a conversion of use include installation of cell towers or above ground utilities, development of roads for primary purposes other than recreation, creation of indoor recreation facilities or private development encroachments such as driveways. The complicated land status within the park and development pressures associated with Alaska's largest population center have made for many conversion situations within the park over the years that threaten continued federal funding and make complying with the program difficult. Additionally, the program requires a 50% match which can be difficult to get and no other federal program or funding is eligible to provide the match.

North Anchorage Land Agreement (NALA)

Lands in the northern portion of the park, depicted on Figure 1, are affected by the North Anchorage Land Agreement (NALA). This agreement, whose authority is found in the Alaska National Interest Lands Conservation Act (ANILCA), provides resolution of longstanding land ownership and management issues between the State of Alaska, the Municipality of Anchorage and Eklutna Inc. by establishing future ownership of military lands if and when those lands are declared excess by the military and by setting up a system by which lands within the park owned by Eklutna Inc. are transferred to the State. Because the provisions of the NALA are ongoing and will likely only be realized in the long term, there has been frustration among the parties over the years that are unable to capitalize on their eventual land holdings. It is important to realize however, that the agreement was considered by all parties at the time to be the best and perhaps only opportunity to settle these land disputes without complicated litigation that could have resulted in a winner takes all solution for one of the parties.

Military

Substantial portions of the park share a boundary with the Joint Base Elmendorf-Richardson (JBER) and the military presence as a major park neighbor presents interesting challenges particularly to park access. The public has been accessing the park, often unknowingly, via military lands. Depending on the military mission at the time, these lands have, and in the future may be, restricted from public use. For instance, the main vehicular access for the Ship Creek Unit that leads to the Arctic Valley Ski Area is maintained, owned, and operated

by the military and subject to closure by order of the Base Commander without warning. In recent years the military has proposed activities such as Stryker vehicle training, moving or adding firing ranges, expansion of drone training areas, and erecting a boundary fence, all of which would have significant impact on how the public access the park and the quality of their park experience.

Additionally, the military maintains an inholding in the park that was used for ordinance training purposes. They have in the past used the park and maintain interest for future use of park lands for some of their training needs. Some of the existing infrastructure in the park such as driveways, roads, and gasline and pipeline easements are a result of past military activities and under certain circumstances the military still has patent to certain portions of the land estate.

Resource Management

Fish & Wildlife Management

One of the purposes for establishing Chugach State Park was to provide areas for the public display of local wildlife, but fish and wildlife management can be challenging within the park due to its proximity to Alaska's largest population center, the heavy use the park receives, and the diverse understanding of wildlife behavior by park users. Negative wildlife-human interactions are not common within the park, but public safety is a concern as visitors seek to view wildlife and use park resources for recreational pursuits. Most visitors seem to be aware of the potential threats that come with recreating along side wildlife and encountering bear or moose has not prevented the overwhelming majority of residents from using area parks and trails.

Recognizing the desire for park users to view fish and wildlife, the park has had to react by building facilities commensurate with the demand and appropriate to the setting. This is especially evident in areas of the park such as Bird Creek where the Department of Fish and Game enhances the fishery through their stocking program and as a result, fishing has become popular and the potential for bear-human interaction has increased. In order to protect park resources from heavy use, facilities have had to be developed to help appropriately accommodate public use.

Certain activities occurring within the park such as fishing, trapping and hunting have been the source of public contention over the years because of individual personal recreational perspectives. The Division of Parks and Outdoor Recreation manages public safety as well as the land and recreation resources within the park and the Department of Fish and Game is responsible for the management of fish and game resources. The Boards of Game and Fish determine harvest levels and limitations to harvest method and means. Coordination and agreement between the agencies and Boards can be challenging because missions and responsibilities guiding their actions differ as do their constituents. While fish and game

management decisions have been contentious over the years, for the most part current regulations reflect an understanding of the importance of the recreation resources within the park.

Watershed Protection

Approximately 248,000 people from Eklutna south to Girdwood are supplied drinking water from Eklutna Lake, Ship Creek, and a number of groundwater wells in Anchorage, Eagle River, and Girdwood. Water safety and distribution are managed by the Anchorage Water and Wastewater Utility. One of the purposes of the park and reasons for its establishment was due to concerns regarding the protection of the watershed and the delivery of a satisfactory water supply to the people of the State of Alaska. Source water protection is a major concern because water resources are vulnerable to contamination from activities occurring in the watersheds within Chugach State Park supplying these sources. Additionally, storm water drainage into the park from sources along the park boundary is of concern and has been heightened in recent years as development increases along the park boundary. The way in which water is shed into the park creates the potential to threaten the watershed and change the character of a vital park resource.

Vegetation Management

One of the main park assets is the diversity of plant life from coastal forests to alpine areas but this resource is also being impacted by increased use of the park. Threats to park vegetation include development, climate change, pests and disease, invasive species, and wildfire. One of the most noticeable concerns is the spruce bark beetle outbreak that has increased the risk for wildfire with the potential to impact park facilities and private land in the urban interface. Efforts to mitigate the risk and hazard of wildfire in the urban interface and within the park involve staff commitments and added expenses. Invasive plant species and noxious weeds are also becoming more pervasive within the park and controlling their spread is difficult. Additionally, greater use and harvesting of forest products can directly impact vegetation as well as the availability and sustainability of wildlife food sources.

Funding

Fees

User fees are collected in the park for day parking, cabin use, recreation site use, and camping. Permit fees are collected from commercial operators and from those required to obtain park use permits for various activities. Over the years the legislature has emphasized increased fee collection as a way of funding the Division of Parks and Outdoor Recreation as general fund contribution have decreased. As a result, many of the areas that were once

available for day use without a payment of a day use fee within the park have been converted to fee areas. Because a substantial portion of the Division's budget derives from fees, a dependency on fee collection has become the norm. Chugach State Park staff spends a considerable amount of time collecting and processing fees associated with day use and permits. Additionally, the administrative cost of collecting, sorting and counting these fees is burdensome and requires substantial investments of staff time.

Funding Shortfalls

Despite increases in fee collection and legislative budgetary contributions over the years, the Division of Parks and Outdoor Recreation's budget has not kept pace with inflation. Increased use threatens to damage park resources and challenges the Division's ability to sustain facilities and programs at acceptable levels. This trend is especially noticeable in parks that border large population centers like Chugach State Park that once had thirteen rangers on staff managing public safety and park resources and now only has four. The Division's small staff and budget make it particularly difficult to respond to changing budgets and a reliance on the use of volunteers and grant funding over the years has emerged.

Deferred Maintenance

The Division of Parks and Outdoor Recreation's deferred maintenance backlog for park facilities is just under \$60 million. Over the years as little as \$50,000 has been allocated to address these issues which contributes to rapid growth in the backlog and shortens the useful lifespan of facilities. Chugach State Park has the largest deferred maintenance backlog of any single park within the Division with approximately \$7 million needed to address facility upkeep. In recent years new strategies have been employed that have helped to reduce maintenance needs but much still remains to be addressed.

General

Park Hazards

Snow avalanches present a major hazard to park visitors. Although avalanches can occur any time of the year or on any slope given the right conditions, avalanches are most likely to occur on steep slopes during and after a heavy prolonged snowfall. Terrain traps such as gullies and areas below steep ridges can also be hazardous. Backcountry recreationists are most likely to trigger avalanches as they cross hazardous terrain, while non-recreational injuries and deaths are often caused when a naturally released avalanche buries structures or roads. Winter activities in the park offer additional hazards associated with reduced daylight, cold temperatures, and the effects of wind chill.

Other potential natural hazards within the park include landslides, falling rocks, glaciers with their hidden crevasses, turbid air currents, and sudden and severe inclement weather year-round. The mudflats in the intertidal areas along Turnagain Arm are dangerous due to extreme and rapid tidal variations and the possibility of becoming mired in the mud and drowning with the incoming tide. Also, the rapidly advancing tide can trap unwary hikers along the Arm who venture too far out on rocks or spits of land and become cut off from the land.

Water hazards exist within the park as a result of the icy cold temperatures, fluctuating water levels, difficulty seeing sweepers/strainers and underwater obstacles, changing channels, and heavy loads of silt and rock that are present in most of the bodies of water. Some of the hazards to hikers, boaters, and anglers include the fording of glacial rivers along the numerous un-bridged trail segments, the swelling of rivers and streams during spring, summer, and fall afternoons as the sun and warming temperatures increase the melt of ice and snow or during big rain events, and issues relating to unprepared boaters and cold water immersion.

Hypothermia as well as frostbite and frostnip are possible risks to park visitors throughout the year. Hypothermia generally results from unanticipated exposure in an inadequately prepared person. However, it can happen to anyone under the right conditions. Additional hazards to park visitors are created by careless use of firearms while hunting, target shooting (prohibited throughout the park), setting traps carelessly or in areas subject to heavy use, and by the careless building of fires. Slips, trips, and falls are major causes of serious injury and death within the park and can occur even on the easiest of hikes.

Chugach State Park is home to a variety of wildlife, including large mammals like moose and black and brown bears and smaller mammals such as lynx, wolverines, and wolves, which park visitors have the potential of encountering. Negative encounters with wildlife are rare and most are the result of people getting too close to a wild animal either by accident or design. At least half of the 12 people injured or killed by bears in Chugach State Park since its establishment were within 100 yards of salmon spawning streams. Salmon-spawning streams represent a minute portion of the entire park; however, the odds of surprising a brown bear near a salmon-spawning stream are relatively high.

The Seward Highway and railroad right-of-way along Turnagain Arm can present a variety of hazards to park visitors. Especially dangerous is the close proximity of visitors, using trailheads and pullouts along the road for access and sightseeing, to the fast-moving traffic that is traversing this major transportation corridor. A number of pullouts and scenic overlooks are physically separated from the waterfront by the railroad tracks which results in the risky behavior of visitors trespassing across the tracks to gain access to the water's edge.

Chapter 5: Areawide Management Direction and Guidelines

Land Use Designations

The lands within the park have been classified using land use designations to define their long-term management direction. The general intent for the establishment of these designations derives from the Alaska State Park System: Statewide Framework (1982) which established a system to help standardize the language that facilitates the consideration of park issues and concerns by establishing a land use designation system for management and development of land and resources within all state park units. Additionally, the park's enabling legislation provides management intent. It states: "The eastern area of the park shall be operated as a wilderness area, the central area as a scenic area, and the periphery areas as recreational areas". Three designations: Recreational Development, Natural¹ and Wilderness, have been applied to lands within the park to meet this intent. The descriptive designations, and possible activities within each designation area or zone are described below. Tables 5.1 through 5.5 provide specific guidance for activities and facilities within each of the land use designations and Figure 6 depicts the location of areas with these designations.

Recreation Development

Purpose & Characteristics

Recreation development zones are established to meet the more intensive recreational needs of the public by providing easy and well-defined access points into the park, and by developing appropriate facilities. The most intensive activities and developments are meant to occur in these zones, including, developed parking facilities and trailheads, vehicle and tent camping, developed picnic and group areas, toilet facilities, visitor and interpretive centers, high-standard trails for all ages and abilities, and park management facilities.

The landscape within these zones can be modified to support educational and recreational activities and/or enhance wildlife habitat and scenic qualities. These zones are established where soils, slope, drainage and vegetation can support commensurate or more intensive

¹ The use of "natural" in place of "scenic" was employed in the 1980 version of the park plan and is also used in the Alaska State Park System Statewide Framework (June 1982). The term "natural" has the same meaning as the "scenic" term. The terminology was used to avoid confusion between plan versions and to stay consistent with existing Division of Parks and Outdoor Recreation policy documents.

recreational activities. A recreational development designated area may already have been influenced by prior developments and usage and is intended to provide a transition area to absorb heavy human impacts.

Application

This designation typically applies to front country or periphery areas of the park and to areas along major roads and highways. In the Eklutna-Peters Creek Unit this designation applies to areas adjacent to the Knik Road, the western edges of the unit along Peters Creek and Chugiak and areas adjacent to the Eklutna Lake Road and the developed areas adjacent to Eklutna Lake. Within the Eagle River Unit recreation development has been applied to areas adjacent to the Eagle River Road along Eagle River from the campground to the Eagle River Nature Center and along the South Fork of Eagle River. The only area of recreation development land in the Ship Creek Unit coincides with the developments and land base associated with the Arctic Valley ski area and the Nike Site. The entire western edge of the Hillside Unit and areas associated with trailheads and residential development are designated recreation development. In the Turnagain Arm Unit the areas adjacent to the Seward Highway, Bird Regional Park, and portions of Indian are designated Recreation Development.

Natural

Purpose & Characteristics

Natural environment zones are established to provide for moderate-to-low impact and dispersed forms of recreation and to act as buffers between the recreation development areas and the wilderness areas. Natural environment zones may be relatively undeveloped and minimally disturbed, have high scenic qualities, and are intended to provide intrinsic natural outdoor setting for visitors to recreate. Developments are intended to provide for the safety of park visitors and to provide for a moderate level of convenience. Back country shelters, public use cabins, high standard trails and bridges are examples of suitable developments in this zone.

Application

This designation applies to large areas between the recreation development and wilderness zones in all of the units of the park. The Crow Pass Trail and a buffer of 75 feet on each side of the trail has also been designated natural because of the level of development and use it receives.

Wilderness

Purpose & Characteristics

Wilderness² zones are established to promote, perpetuate and, where necessary, restore the wilderness character of the land and its specific values of solitude, physical and mental challenge, scientific study, inspiration and primitive recreational opportunities. Wilderness areas are of such size as to maintain the area's wilderness character, are tailored to protect the associated values and, if possible, are defined by watershed boundaries. They are characterized by natural landscape, its vegetation and its geologic forms. Resource modification can occur in this area to restore areas to a natural state. Natural processes will be allowed to operate freely to the extent that human safety and public and private property are protected.

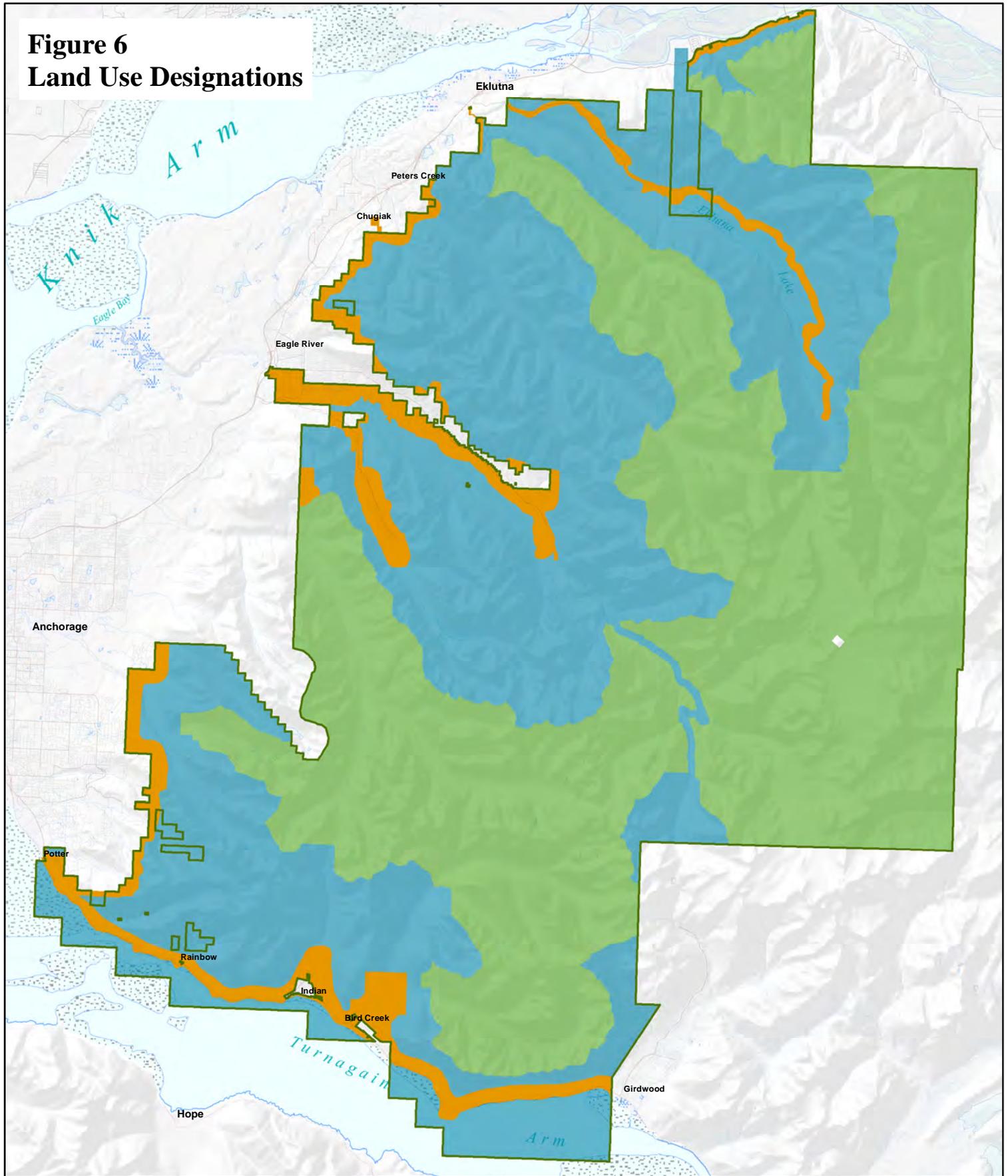
Access to and within this designation, for other than management, research or emergency purposes, will be by foot or other non-motorized means except for aircraft and boats consistent with park regulations and tables 5.1 through 5.5, and circumstances specifically allowed by law. Aircraft landing may be allowed in certain areas or when authorized by the Director. In these areas no human-made improvements should be provided except for the most rudimentary trails, bridges and signing. Developments or other improvements will be undertaken only for the purpose of public safety or to minimize adverse impact on the area's resources. Activities which may threaten the character of the wilderness zone will be monitored and if need be, prohibited or restricted. Methods of restriction may include implementation of use permits, time and space allocation or use area rotation schemes.

Application

This designation applies to the more remote areas and the eastern-most portions of the park consistent with the park's enabling legislation. The designation also applies to the land that is adjacent to the military property in the Ship Creek Unit and portions of the Hillside Unit. The designation has also been used in areas of remote and steep terrain throughout all of the units.

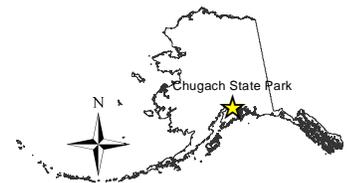
² "Wilderness" as it is used in this plan refers to a State Park administrative designation and has no relationship to federal lands designated "Wilderness" under the Wilderness Act or the Alaska National Interest Land Conservation Act (ANILCA) or any other type of federal wildland designation.

Figure 6
Land Use Designations



-  Recreation Development Zone
-  Natural Zone
-  Wilderness Zone
-  CSP Legislative Boundary (AS41.21.121)

CHUGACH STATE PARK



Guidelines for Activities & Facilities Within Land-Use Designations in Chugach State Park

These are general guidelines to be used when evaluating permit applications or considering undertaking activities within the various park zones. The information below provides the basis for determining incompatibility under AS 41.21.123 in accordance with AS 41.21.120 – 41.21.125 and supplements the requirements in 11 AAC 18.010 – 18.040, and AS 41.21.027. The recommendations made below are done by subject matter and by land use designation. They are listed by use categories such as resource management, public uses, and commercial uses. In the case of conflict between these guidelines and the specific recommendations in this plan, the specific recommendations will prevail. In permitting some of the activities listed below, an additional process may be required as a result of the action. In cases where the activity permitted on a long-term basis constitutes a conversion of use under the Land and Water Conservation Fund (LWCF) grant program, the park is required to go through a LWCF approved process to document and mitigate for the conversion prior to the conversion action. These cases should be very limited since the overall intent is to preserve the recreational value of park land, but at times, the benefit derived from permitting such an activity may outweigh the cost of the land conversion. Activities that support the Division of Parks and Outdoor Recreation’s mission, are consistent with park purposes and the Statewide Framework document are considered to provide a park benefit for the purposes of permitting.

Resource Management

The following guidelines address resource management related activities and permitting. While the following guidelines apply, the Division of Parks and Outdoor Recreation also recognizes the authority of the Board of Fisheries, Board of Game, and the Department of Fish and Game to regulate fish and game management. AS 41.21.122 further guides management responsibility within the park to park purposes for the duties of the Department of Fish and Game. For activities that the Department of Fish and Game may conduct within the park, a permit may not always be required, but the requirement remains to coordinate with and notify park staff to sort out potential disparate activities. Additional permits may be required from the Department of Fish and Game for some of the activities listed in the table below.

Table 5.1: Resource Management

Activity/Facility	Recreation Development	Natural	Wilderness
<p><u>Research, Monitoring and Management Studies.</u> Collection of data necessary for park management decisions or to further science. Priority will be given to studies that contribute to the use and management of native fish and wildlife populations and their habitats. Studies may be conducted by the Division or by other researchers under Division permit. A permit is required if natural objects will be disturbed, aircraft are involved or structures, temporary or semi-permanent, are required.</p>	<p>Will be encouraged when in accord with established principles and when consistent with the purposes of the park.</p>	<p>Same as Recreation Development</p>	<p>Same as Recreation Development</p>
<p><u>Ecological Monitoring.</u> Activities or studies that address how habitats are changing due to either natural or human causes.</p>	<p>Will be practiced as part of normal park operations in cooperation with the Department of Fish and Game, U.S. Fish and Wildlife Service, and other agencies or organizations.</p>	<p>Same as Recreation Development</p>	<p>Same as Recreation Development</p>
<p><u>Fish and Wildlife Inventories.</u> Using acceptable inventory techniques to obtain information on species distribution, harvests, abundance, habitats, and population dynamics to meet park management objectives.</p>	<p>Compatible</p>	<p>Same as Recreation Development</p>	<p>Same as Recreation Development</p>
<p><u>Fish and Wildlife Introduction.</u> Introduction of non- indigenous or exotic species.</p>	<p>Incompatible</p>	<p>Same as Recreation Development</p>	<p>Same as Recreation Development</p>
<p><u>Fisheries Enhancement.</u> Action taken to increase fishery stocks above historical levels, such as building fish passages, artificially incubating or stocking fish in streams, and fertilizing lakes.</p>	<p>May be authorized under 11 AAC 18.010 only if it enhances recreation.</p>	<p>Same as Recreation Development</p>	<p>Same as Recreational Development provided wilderness values are maintained.</p>
<p><u>Fisheries Restoration.</u> Action taken to restore native fish access to spawning and rearing habitat or actions taken to restore populations to historical levels. May include fish ladders, fish passages, fish stocking and lake fertilization.</p>	<p>May be authorized under 11 AAC 18.010 in limited circumstances in conjunction with ADF&G.</p>	<p>Same as Recreation Development</p>	<p>Same as Recreation Development</p>

Activity/Facility	Recreation Development	Natural	Wilderness
<u>Wildlife Habitat Manipulation.</u> Modification of habitat to increase or decrease target wildlife populations. Includes both enhancement and restoration activities, such as prescribed burning and mechanical manipulation.	In general habitat manipulation is discouraged but may be considered and authorized under 11 AAC 18.010 on a case-by-case basis in consultation with the Department of Fish and Game.	Same as Recreation Development	Same as Recreation Development
<u>Wildlife Restoration.</u> Used to re-establish native species within their original breeding range.	Compatible, in consultation with ADF&G.	Same as Recreation Development	Same as Recreation Development
<u>Predator Control.</u> Relocation or removal of predators to favor other wildlife species or populations, and the protection of re-introduced species.	May be allowed consistent with ADF&G policies and regulations. Implementation may be affected by land use conditions and restrictions consistent with park purposes.	Same as Recreation Development	Same as Recreation Development
<u>Vegetation Introduction.</u> Introduction of non-indigenous or exotic plants or trees.	Compatible only adjacent to developed facilities for species used in landscaping such as grass for lawns, historical landscaping or other similar plantings.	Incompatible	Incompatible
<u>Pest and Disease Control.</u> The use of poisons or chemicals or other means to control or eradicate invasive or noxious weeds, insect pests and/or diseases to indigenous animals, plants, or forests. Any measure taken will account for protection of the water supply.	Incompatible, except to control species not indigenous to the area.	Same as Recreation Development	Same as Recreation Development
<u>Tree Felling and/or Personal-Use Timber Harvest.</u> Actions taken to eradicate pests such as spruce bark beetle, remove fire hazards adjacent to developed areas, improve views from developed waysides, or for public safety.	Compatible as managed by DPOR.	Same as Recreation Development	Compatible as managed by DPOR and only to protect public safety and property.
<u>Fire Suppression and Mitigation.</u> Actions taken to suppress wildfires and the potential for wildfire.	Compatible consistent with the Alaska Interagency Wildland Fire Management Plan and other interagency agreements.	Same as Recreation Development	Compatible, if in keeping with park purposes or to protect human safety.
<u>Waterbody Modification.</u> Changing a waterbody to alter or improve navigability.	Incompatible but may be authorized under 11 AAC 18.010 to improve waterbody safety and accessibility.	Same as Recreation Development	Incompatible

Activity/Facility	Recreation Development	Natural	Wilderness
<u>Storm Water Drainage.</u> Causing the shedding of storm water into the park from activities that are inconsistent with the Clean Water Act and Municipality of Anchorage storm water standard design criteria conditions.	Incompatible	Same as Recreation Development	Same as Recreation Development
<u>Other Drainage or Discharge.</u> Allowing or causing drainage or discharge into the park associated with sewage, gray water, or other waste water/materials.	Incompatible	Same as Recreation Development	Same as Recreation Development

Public Uses

Special park use permits are required for activities that are incompatible as defined by statute or regulation or which do not otherwise have lawful recreation as its primary purpose³. The following table guides park activities and permitting of public uses and activities. Administrative activities carried out by park management in support of daily park operations do not require a permit. The park may issue permits for activities not listed in the following table as a means of determining if a new type of activity will be compatible in an area in the long term or for future activities that could not be anticipated at the time of this planning effort. When issuing these types of permits, consideration will be given to the unit’s management intent and the nature of each of the land use zones for determining the appropriateness of the activity in a given area.

Table 5.2: Public Uses

Activity/Facility	Recreation Development	Natural	Wilderness
<u>Walking, Skiing, Snowboarding, Snowshoeing, and Mountaineering.</u>	Compatible	Same as Recreation Development	Same as Recreation Development
<u>Use of Motorized Boats.</u> Includes use of inboard and outboard motorized boats and jet boats on rivers and lakes. Does not include small boats with electric trolling motors on Eklutna Lake. See below for personal watercraft, hovercraft, and airboat restrictions. This does not include the use of motorized boats by authorized personnel for emergency rescue.	Incompatible unless authorized under 11 AAC 18.010 only for park management purposes and research, or as allowed under 11 AAC 20.025.	Same as Recreation Development	Incompatible
<u>Use of Airboats.</u>	Incompatible	Same as Recreation Development	Same as Recreation Development
<u>Use of Personal Watercraft (jet skis) and Hovercraft.</u> This does not include the use of personal watercraft by authorized personnel for emergency rescue.	Incompatible	Same as Recreation Development	Same as Recreation Development
<u>Non-motorized Boating.</u> Includes canoes, rafts, rowboats, kayaks, pack rafts, sailboats, and sailboards.	Compatible	Same as Recreation Development	Same as Recreation Development

³ Refer to 11 AAC 18.010 for a list of activities requiring a permit.

Activity/Facility	Recreation Development	Natural	Wilderness
<u>Use of Land-Based Motorized Vehicles.</u> Includes motorized devices for carrying persons or objects over land and includes automobiles and off-road vehicles. See other sections that address snowmobiles, aircraft, bicycles, and motorized boats. This does not include land-based motorized vehicle use by authorized personnel for emergency rescue.	Incompatible off roads and parking areas except as allowed in 11 AAC 20.015. May be authorized under 11 AAC 18.010 in areas in addition to those in 11 AAC 20.015 (a-b) only for park management purposes, research, or in support of authorized or other permitted activities where there is park benefit.	Same as Recreation Development	Incompatible
<u>Use of Other Power-Driven Mobility Devices.</u> Any mobility device powered by batteries, fuel, or other engines used by individuals for the purpose of locomotion including golf carts or electronic personal assistance mobility devices such as Segways. This does <u>not</u> include the use of power-driven wheelchairs for use by a mobility-impaired individual.	Incompatible but may be authorized under AAC 18.010 for park management purposes, research, or in support of authorized or other permitted activities where there is park benefit.	Incompatible	Incompatible
<u>Use of Snowmobiles.</u> This does not include the use of snowmobiles by authorized personnel for emergency rescue.	Incompatible except as allowed in 11 AAC 20.040. May be authorized under 11 AAC 18.010 in areas in addition to those listed in 11 AAC 20.040 (1-8) only for park management purposes, research, or in support of authorized or other permitted activities.	Same as Recreation Development	Same as Recreation Development
<u>Use of Bicycles.</u>	Incompatible except as allowed in 11 AAC 20.050. May be authorized under 11 AAC 18.010 in areas in addition to those listed in 11 AAC 20.050(a)(1-14), 11 AAC 20.050(b) and 11 AAC 20.050(c)(1-3) if in keeping with park purposes and after evaluating possible resource impacts.	Same as Recreation Development	Incompatible except as allowed in 11 AAC 20.050. May be authorized under 11 AAC 18.010 in areas in addition to those listed in 11 AAC 20.050(a)(1-14), 11 AAC 20.050(b) and 11 AAC 20.050(c)(1-3) if in keeping with park purposes, only under winter conditions where the snow or frost cover is adequate to protect underlying park resources.

Activity/Facility	Recreation Development	Natural	Wilderness
<u>Fishing.</u>	Compatible, subject to state fishing regulations.	Same as Recreation Development	Same as Recreation Development
<u>Use of Weapons.</u> Includes a bow and arrow, slingshot, crossbow, or firearm (firearm definition includes air guns and paint guns).	Incompatible except as allowed in AAC 20.010 for the purpose of lawful hunting or trapping.	Same as Recreation Development	Same as Recreation Development
<u>Hunting.</u>	Compatible, subject to state hunting regulations.	Same as Recreation Development	Same as Recreation Development
<u>Trapping.</u> Trapping of fur-bearers for private or commercial use.	Compatible, subject to state trapping regulations.	Same as Recreation Development	Same as Recreation Development
<u>Gathering.</u> Gathering of berries, fruits, mushrooms, and similar edibles for personal consumption, but not for sale or distribution. The gathering of dead wood lying on the ground for lawful personal use in the park.	Compatible if consistent with 11 AAC 12.170.	Same as Recreation Development	Same as Recreation Development
<u>Use of Motorized Equipment.</u> Includes all internal combustion equipment (e.g. chainsaws and generators).	Incompatible except as allowed in 11 AAC 12.230(f).	Same as Recreation Development	Same as Recreation Development
<u>Camping in Undeveloped Areas Without Designated or Improved Sites.</u>	Compatible except as restricted in 11 AAC 20.055 and 11 AAC 12.230(l) and (m). May be authorized under 11 AAC 18.010 for longer periods of time or within 300' of a public use cabin or within the first 3 miles or within 300 yards of the Eklutna Lakeside Trail, only for park management purposes, research, or in support of other authorized or permitted activities.	Same as Recreation Development	Same as Recreation Development
<u>Camping in Developed Campgrounds or Campsites.</u>	Compatible except as restricted in 11 AAC 12.230. Under 11 AAC 18.010, a permit is required for camping beyond 15 days.	Not Applicable	Not Applicable

Activity/Facility	Recreation Development	Natural	Wilderness
<u>Campfires.</u>	Incompatible except as allowed in 11 AAC 20.035 and 11 AAC 12.180. May be authorized under 11 AAC 18.010 in areas in addition to those listed in 11 AAC 20.035(1-4) provided the fire danger is low, safe fire practices are used, and there is no significant resource damage.	Same as Recreation Development	Same as Recreation Development
<u>Fireworks or Other Explosives.</u> Includes discharge of fireworks or other explosive or similar device.	Incompatible except for fireworks authorized under 11 AAC 18.010 only for public displays in conjunction with an organized community event by groups authorized to discharge fireworks by the MOA.	Incompatible	Incompatible
<u>Rock Climbing.</u> Includes any type of climbing, with or without gear, on the rocky bluffs of the park.	Compatible, if consistent with 11 AAC 12.170.	Same as Recreation Development	Same as Recreation Development
<u>Ice Climbing.</u>	Compatible	Same as Recreation Development	Same as Recreation Development
<u>Dog Sledding and Skijoring.</u> Use of dog teams and sleds or skis as a means of winter access and recreation.	Compatible	Same as Recreation Development	Same as Recreation Development
<u>Wildlife Observation.</u> Viewing wildlife and its habitat in natural conditions. Includes photography, bird watching, and educational, interpretive activities, and programs.	Compatible	Same as Recreation Development	Same as Recreation Development
<u>Recreational Gold Panning.</u> Use of simple, non-motorized tools for gold prospecting.	Incompatible except as allowed in 11 AAC 20.045.	Same as Recreation Development	Same as Recreation Development
<u>Horses and Pack Animals.</u> Use of horses, mules, burros, for riding or packing supplies and gear.	Incompatible except as allowed in 11 AAC 20.030. Because of concerns related to the transmission of diseases, the use of goats as pack animals is prohibited in the park.	Same as Recreation Development	Same as Recreation Development
<u>Pets.</u>	Compatible except as restricted in 11 AAC 12.130 and 11 AAC 20.060.	Same as Recreation Development	Same as Recreation Development

Activity/Facility	Recreation Development	Natural	Wilderness
<u>Fixed-Wings Landing.</u> Fixed-wing aircraft that provide access to the park. This does not include fixed-wing aircraft use by authorized personnel for emergency rescue.	Incompatible except as allowed in 11 AAC 20.020 and may be authorized under 11 AAC 18.010 in areas in addition to that listed in 11 AAC 20.020(a) if for park management purposes or research.	Same as Recreation Development	Incompatible but glacier landings may be authorized under 11 AAC 18.010 only for park management and research that benefits the park.
<u>Helicopter Operations.</u> Landing and take-off of rotary-blade aircraft to provide access to the park if authorized by the Director. This includes the use of unmanned aerial systems (UAS) within the park. This does not include the use of rotary-blade aircraft by authorized personnel for emergency rescue.	Incompatible except as allowed in 11 AAC 20.020 and may be authorized under 11 AAC 18.010 if for park management purposes and research. The use of UAS will be considered separately from other rotary-blade aircraft and may be authorized under 11 AAC 18.010.	Same as Recreation Development	Incompatible but may be authorized under 11 AAC 18.010 in support of park management activities or for research that benefits the park.
<u>Geo-caching.</u> The activity where participants use a Global Positioning System receiver or other navigational techniques to hide and seek containers or caches.	Incompatible but may be authorized under 11 AAC 18.010 and caches must be limited to micro-cache size.	Same as Recreation Development	Incompatible
<u>Paragliding/Hang Gliding.</u>	Compatible	Same as Recreation Development	Same as Recreation Development

Other Uses

Table 5.3: Other Uses

Activity/Facility	Recreation Development	Natural	Wilderness
<u>Outdoor and/or Military Training, Drills or Exercises.</u>	May be authorized under 11 AAC 18.010 if consistent with park purposes after considering the impacts on park resources and values, social impacts related to other visitors to the park, and administrative impacts including scheduling, workload, and staffing.	Same as Recreation Development	May be authorized under 11 AAC 18.010 only if there is a park benefit or the level and type of use is consistent with wilderness values.
<u>Access to Inholdings or Adjacent Private Land.</u>	Compatible, provided the method of travel is consistent with regulation.	Same as Recreation Development	Not Applicable
<u>Memorials.</u> The construction or erection of any type of permanent memorial, such as a plaque or monument.	May be authorized under 11 AAC 18.010 if it serves a recreational or historical purpose or under certain exceptions described in Division policy guidelines.	Same as Recreation Development	Incompatible
<u>Trail Grooming.</u> The use of tools or equipment to enhance the snow surface.	Compatible, provided the group or entity grooming has an established agreement with the park.	Same as Recreation Development	Incompatible
<u>Organized Events.</u> Any promotional or entertainment event, including an organized athletic event, competitive recreational event, or spectator event, or an organized or promoted assembly of more than 20 people.	Incompatible unless authorized under 11 AAC 18.010.	Same as Recreation Development	Incompatible unless authorized under 11 AAC 18.010. Any permits issued under 11 AAC 18.010 will be subject to heightened scrutiny to protect wilderness values and public safety.

Facilities

No person may construct or maintain structures in a state park unless authorized by the Director under 11 AAC 18.010.⁴ Special park use permits may not be required for park staff or other authorized personnel working on approved park projects though other types of permits may be required.

Table 5.4: Facilities

Activity/Facility	Recreation Development	Natural	Wilderness
<u>Improved Campsites.</u> Permanent site clearings that may include tent platforms, hardened campsites, fire pits, shelters, picnic tables, sanitary facilities, and interpretive displays.	Compatible as developed and maintained or concessioned by DPOR.	Same as Recreation Development	Compatible, if developed for public safety, resource protection, or to avoid conflicts with wildlife.
<u>Public Use Cabins, Yurts, and Shelters.</u> Small, permanent or temporary structures available for use by the general public. Typically, these are available on a reservation system.	Compatible as developed and maintained or concessioned by DPOR. Public use cabins are not compatible in alpine vegetated areas. Structures associated with activities under 11 AAC 18.040 are compatible if removable upon revocation of the authorizing permit and if consistent with park management intent for the area.	Same as Recreation Development	Compatible only if developed for public safety, or to reduce adverse impacts on area resources and values.
<u>Visitor Information Facilities and Signage.</u> Structures where the public can learn about and obtain information on the park, its resources, recreation opportunities, advisories and regulations.	Compatible as developed and maintained or concessioned by DPOR.	Same as Recreation Development	Incompatible, except for directional or informational signs.
<u>Trails.</u> Designated, maintained trails described in the park’s trail management plan including foot, motorized, equestrian, bike and other multipurpose trails.	Compatible as developed and/or maintained by DPOR. See the Chugach State Park Trail Management Plan for more detailed guidance.	Same as Recreation Development	Compatible as developed by DPOR except for motorized trails.
<u>Boat Launch Sites.</u> Designated access sites where boats may be put into lakes and rivers.	Compatible as developed and maintained or concessioned by DPOR.	Same as Recreation Development	Compatible only for non-motorized boat access on park lakes and rivers.

⁴ From 11 AAC 12.140

Activity/Facility	Recreation Development	Natural	Wilderness
<u>Gates and Traffic Control Devices.</u> Placements to control or limit certain means of access on park lands.	Compatible as developed and maintained by DPOR.	Same as Recreation Development	Incompatible
<u>Landscape Barriers.</u> Includes large rocks, vegetation, earth berms and depressions.	Compatible as managed by DPOR or as authorized by permit for private entities on park land only if there is a park benefit.	Same as Recreation Development	Incompatible
<u>Roads and Driveways.</u> Corridors that provide access to private land. May include cleared areas, gravel or asphalt roads, pullouts, or driveways. This does not include roads developed or maintained by DPOR for recreation purposes or existing roads or ROWs maintained by ADOT/PF within the park.	Incompatible unless authorized under AS 41.21.024.	Same as Recreation Development	Incompatible
<u>Alternative Power Development.</u> Includes wind, solar, geothermal, tidal, and hydroelectric power development for noncommercial purposes (personal/community) including a dam, impoundment area, powerhouse, tower, panel, and other forms of associated facilities.	Compatible if developed primarily for park use or if there is a park benefit. Incompatible for exclusive private or commercial use.	Same as Recreation Development	Incompatible

Commercial Uses

Park regulations 11 AAC 12.300 and 11 AAC 21.100 prohibit commercial activities, defined in 11 AAC 12.340(19), within State Park Units unless permitted under 11 AAC 18.030, 11 AAC 18.040, AS 41.21.027 or other legal means. Prior to issuing these permits, a determination must be made that the park facilities and natural and cultural resources will not be adversely affected; the park is protected from pollution; public use values will be maintained and protected; public safety, health and welfare will not be adversely affected; the activity is consistent with planning efforts affecting the park, including adopted park and local plans; and the activity will not result in an exclusive use of park land and water meaning that it will neither exclude other commercial operators by virtue of location, timing, or type of service permitted, nor will it exclude the public by long-term occupation of the park land and water. There are a number of commercial operators using Chugach State Park offering services such as guided hikes, hunting guides, and ATV tours that are permitted as commercial operators. A commercial permit requires operators to carry liability insurance, possess appropriate professional licenses and certificates, and provide basic equipment.

These activities usually must be limited in number and location and therefore can only be permitted through competitive process under 11 AAC 18.040. Staff or cooperating organizations may sell educational and informational materials and firewood per AS 41.21.026.

Table 5.5: Commercial Uses/Other

Activity/Facility	Recreation Development	Natural	Wilderness
<u>Commercial Lodges, or Other Recreation-Oriented Facilities.</u> Privately-owned and operated facilities on park lands including ski areas and equipment rental facilities.	May be authorized under AS 41.21.027 or 11 AAC 18.040 if compatible with park purposes, the provisions in the plan, if it enhances public use and enjoyment of the park and if it does not require disposal of a property interest.	Incompatible	Incompatible
<u>Commercial Power Development.</u> Includes wind, solar, tidal, geothermal, and hydroelectric power development for commercial purposes and any associated support facilities including a dam, impoundment area, powerhouse, tower, panels, and other forms of associated facilities.	Incompatible	Same as Recreation Development	Same as Recreation Development

Activity/Facility	Recreation Development	Natural	Wilderness
<u>Guiding and Outfitting.</u> Licensed big game hunting, fishing, mountaineering, water sports, and backcountry guiding, outfitting, and all other commercial operations providing services to park users for compensation.	Compatible if authorized under AS 41.21.027 or 11 AAC 18.030 or 11 AAC 18.040.	Same as Recreation Development	Same as Recreation Development
<u>Grazing.</u> Grazing or loose herding of domestic or wild animals for personal or commercial purposes. ⁵	Incompatible	Same as Recreation Development	Same as Recreation Development
<u>Resource Extraction.</u> Extraction for commercial use. Removal of timber, gravel, rock, sand, minerals, plants, or other park resources.	Incompatible but may be authorized under 11 AAC 18.010 for public projects that benefit the park, enhance public safety and are in keeping with park purposes. Every effort should be made to ensure that materials removed from the park are used for projects within the park.	Incompatible	Incompatible
<u>Resource Extraction for State Parks.</u> Removal of timber, gravel, rock, sand, plants, or other park resources for use by State Parks in the park.	Compatible	Compatible	Compatible, provided it directly supports park purposes.
<u>Utilities, Transmission Lines, and Pipelines.</u> Includes telephone and electrical power lines, oil and gas pipelines, water utility structures, communication and wind generation towers and other associated or similar facilities.	Incompatible except for utilities associated with park facilities and temporary structures that are removable upon revocation of the authorizing permit if there is a park benefit associated with the authorization.	Same as Recreation Development	Incompatible

⁵ From 11 AAC 20.030

Watershed Management

One of the reasons for establishing Chugach State Park was to protect and provide a satisfactory water supply for the use of the people of the State of Alaska. Most of the Municipality of Anchorage is supplied water by the Anchorage Water and Wastewater Utility (AWWU), a department of the Municipality of Anchorage. In May of 2001, AWWU entered into a Cooperative Agreement with Chugach State Park to facilitate management and protection of the important watersheds within the park. Any planning or other activities that could affect park watersheds will be conducted in accordance with this agreement. The agreement includes the following provisions:

PARKS/DNR WILL:

- Under the authority AS 41.21.121, manage Ship Creek and Eklutna Lake Valley watersheds with watershed protection as the highest land and water resource management goal.
- Monitor all public use in both watersheds to identify and correct problems that could lead to a lowering of water quality.
- Use Best Management Practices in the construction, operation and maintenance of trails and other recreational facilities to avoid or minimize contamination of the public water supply.
- Support, to the extent possible, activities of AWWU staff who are in the park to monitor water quality in the two watersheds.
- Consult with AWWU staff prior to authorizing or conducting any significant land use activities in the two watersheds.
- Notify AWWU and ADEC of any fuel spills or other contaminants on parklands in the watersheds.
- Prepare, in consultation with AWWU, a spill response plan for the Eklutna Lake and Ship Creek Watersheds.

AWWU WILL:

- Monitor water quality at the Eklutna and Ship Creek Water Treatment Plants and, if necessary, in the two watersheds.
- Assist and train park staff in techniques for monitoring water quality.
- Advise park staff on Best Management Practices for managing land use activities in domestic watersheds.
- Consult with park staff about land use issues as they relate to water quality concerns.
- Assist park staff in developing a spill response plan for the Eklutna Lake and Ship Creek Watersheds

Vegetation Management

Clearing and Thinning

Clearing or selective thinning and pruning may be done in association with forest management activities, trail and facility development, to remove hazard trees adjacent to developed areas, for wildfire mitigation, or to improve or maintain views in keeping with park purposes and as guided by the park land use designations. Additionally, clearing and thinning may be needed in areas to take advantage of sunny or breezy areas and to enhance open field activities. Clearing needed as a result of trail building will conform to the trail class and design parameter specifications assigned to a particular trail. See the Chugach State Park Trail Management Plan for additional information and guidance.

Re-Vegetation

Re-vegetating disturbed areas may be required as a result of trail building, rerouting, or upgrading, or as a result of other facility construction and development activities within the park to help stabilize slopes and provide screening. Native and/or self-sustaining plant materials shall be used for re-vegetation and efforts should be made to create the diversity of native tree and plant species similar to that existing at the site prior to clearing or other disturbance activities. Mulch is an acceptable alternative to seeding, but re-vegetation is preferable. Where possible, construction techniques that preserve vegetation or minimize visual intrusion shall be used. Plants that are removed as a result of construction activities should be used in other park locations where re-vegetation may be needed. The Revegetation Manual for Alaska⁶ should be consulted for additional guidance.

Invasive & Noxious Plants

Invasive or noxious weeds are a growing problem in Chugach State Park and throughout the State. Reasonable measures shall be taken to prevent the introduction of these species in the park. Invasive species are introduced in a variety of ways including on vehicles, shoes, gravel, topsoil, and pets. Efforts should be made to monitor invasive and noxious species throughout the park, but those areas that are more susceptible than others shall be made a priority. These include trailheads, wetland systems within the park or that drain into the park from adjacent neighborhoods, and areas of disturbed soils such as along trails or roadsides. Early detection and rapid response is the ideal way to manage invasive species in an area before they become problematic. The park shall manage these species consistent with the Division of Agriculture's policies for invasive weeds and agricultural pest management and prevention⁷ and other applicable state guidelines.

⁶ Available on the DNR, Division of Agriculture website.

⁷ Consult the DNR, Division of Agriculture website for more specific information.

Fish and Wildlife Management

Coordination with the Department of Fish & Game

AS 41.21.122 states that the Department of Fish and Game (ADF&G) shall cooperate with the Department of Natural Resources (DNR) for the purposes described in AS 41.21.121 relevant to the duties of ADF&G. This restriction insures that ADF&G management of fish and game resources within the legislatively designated boundary is consistent with park purposes. While DNR recognizes the authority of ADF&G over fish and game resources, it is important that the agencies closely coordinate their management efforts to maximize efficiencies, protect park resources and public safety. In 2000, ADF&G entered into a Memorandum of Understanding regarding a comprehensive wildlife management plan for Anchorage with DNR and other local agencies in an effort to maintain and enhance the benefits of wildlife and fish resources in the Municipality of Anchorage while seeking to reduce human-wildlife conflicts. Consult the [Living with Wildlife in Anchorage: A Cooperative Planning Effort](#)⁸ for additional guidance.

Hunting and trapping inside the park is controlled by fish and game regulations that restrict areas and dates, and establish method and means to conserve wildlife resources as well as protect visitors and landowners. There are five special management areas⁹ within game management unit 14C that affect the park, each with varying regulations governing take, method and means, which can be the source of some confusion. Park staff should work with ADF&G to provide better information to those interested in hunting or trapping in the park including the development of fact sheets, enhanced maps, and other ways of communicating season, bag limits, and permit or notification requirements to users.

Wildlife Viewing Areas

Park purposes mandate that areas of the park be set aside for the “public display of local wildlife”. There are many additional areas within the park that would be suitable for wildlife viewing enhancements in addition to existing viewing platforms. Additional areas in the Eagle River, Hillside, and Turnagain Arm units are particularly desirable for the establishment of enhancements that would facilitate wildlife viewing, because of the frequency and proximity of wildlife such as bears, sheep, and moose. The Division shall continue to work with ADF&G and the Board of Game to establish management practices that may lead to enhanced wildlife viewing. This may include partial closures and/or limited takes in designated areas. Efforts will be made to facilitate the viewing of wildlife in its natural habitat without significant impacts to the wildlife or hazard to the viewers.

⁸ Available on the ADF&G website.

⁹ See Appendix E for a map that depicts the park units and how they coincide with the special management units.

Wildlife-Human Conflicts

Chugach State Park's close proximity to the major population center of Anchorage presents unique management challenges. The park is popular with recreationalists because of the diversity of opportunities available, but it also provides habitat to a variety of fish and wildlife species. Negative wildlife-human interactions, while rare within the park, are an inherent risk visitors must be aware of and educated about. Temporary closures, signage, and other measures may be employed as needed to help protect public safety during certain times or in areas that are prone to increased wildlife activities that could lead to negative interactions with humans.

The Anchorage Bear Committee (ABC) was established by the Alaska Department of Fish and Game (ADF&G) in 2001 to minimize conflicts between humans and bears in the Municipality of Anchorage. Member agencies include the ADF&G, Municipality of Anchorage parks, planning and police departments, Joint Base Elmendorf-Richardson (JBER), Alaska State Troopers, Chugach State Park, U.S. Forest Service, Bureau of Land Management, and Alaska Waste. The group meets to discuss bear-human incidents and methods to avoid or minimize adverse encounters through information, education, solid waste storage, regulation, enforcement, or land use policies. Park managers shall continue to participate on the ABC to maintain coordination and consistency on bear-human issues.

Trail Management

See the Chugach State Park Trail Management Plan, a companion plan to this overall park management plan, for specific trail management guidance and sustainability standards.

Infrastructure Development and Management

Coordination with Department of Transportation and Public Facilities

Per AS 41.21.122 the Department of Transportation and Public Facilities (ADOT/PF) is responsible for the repair and maintenance of all existing public roads within the park while the park controls highway access and roadside structures within the park. This assignment of management responsibility is intended to provide for road safety, access, recreation and scenic viewing. There are various levels of coordination between the agencies ranging from day-to-day operational needs done at the field level to larger project level planning done at the Division level. Through cooperation each agency is able to be efficient in providing service in their area of expertise. Additionally, the park has agreements with ADOT/PF for planning, managing, and maintaining the Seward Highway. Similar agreements may be needed in the future to further define agencies roles for other roads that traverse park land.

Park Facility Development

In 2007 the Division of Parks and Outdoor Recreation produced a Ten-Year Strategic Plan that provides the Division a tool to help improve policy analysis and priority setting. The Strategic Plan provides overall direction to the Division and clear purpose and guidance through identification of core values. One of the Division responsibilities lies in reducing the deferred maintenance back log and developing a means to achieve sustainability in both funding and facilities. The Division has a responsibility to Alaskans as well as the recreating public to provide facilities that are well maintained, safe, and sustainable so as to maximize their usable life.

This management plan applies sustainable development principals to lower long-term maintenance and operating costs and improve the overall experience of visitors. Recreation areas and important environmental features and processes shall be identified and considered in planning park facilities. New facilities shall be developed to not only be sustainable and fit park needs but also to be in keeping with the character and purpose of the site. Responsible development will include stressing the need to reuse or repurpose waste materials as opposed to disposing of waste off site. Larger projects shall adequately consider and plan for future material needs to help minimize future permitting and reduce overall costs. Site reclamation will also be done in a manner that is in keeping with the park's character and enhances the microclimates of the surrounding area to provide a variety of plant communities for the area being reclaimed.

The Division will seek opportunities to coordinate with neighboring landowners to link open spaces and take into account joint management objectives where feasible and appropriate. State-owned or managed lands should be considered first for new facility development to minimize the need for establishing new management agreements with other entities. This plan also recommends replacing or removing facilities that are not sustainable if suitable repairs cannot be made. Deferred maintenance facility replacement can occur at a different location than where a facility was originally sited if it better fits an operational need, is more efficient, or takes advantage of existing infrastructure. Staff will regularly evaluate facilities, their condition, and need for replacement or removal. Ultimately the goal is to have a network of sustainable park facilities that serve the needs of the public and are easily maintained.

Americans with Disabilities Act Considerations

The Division of Parks and Outdoor Recreation applies Americans with Disabilities Act (ADA) standards and Accessibility Guidelines for Outdoor Developed Areas to all recreational programs and facilities within units of the state park system. The intent is to make the wide variety of outdoor recreational programs within the system accessible and give all visitors the opportunity to experience park resources. All constructed facilities within Chugach State Park such as parking, access routes, restrooms, and trail information kiosks will apply ADA standards using Universal Design to make them barrier-free to all

visitors. If the terrain, environment, natural or cultural resources, are impacted to the extent that the character of the site is lost, the individual facility (trail, river access, boat launch or public use cabin) may not be made fully accessible. Each area needs to be evaluated for what can be made sustainable and fully accessible to meet ADA standards without changing the character and uniqueness of the site. The design criteria need to facilitate a percentage of the program that is fully accessible giving visitors a range of recreational opportunities and experiences within the park.

Private Development Proposals

Development proposals for private lands in or near the park should be reviewed to insure compatibility of proposed land uses with the statutory purposes of the park and other legal mandates. Since Federal Land and Water Conservation Fund (LWCF) monies have been spent in Chugach State Park (as a designated project area), proposals involving prospective land trades, rights-of-way applications or other conversion of land use must be consistent with the purposes of Chugach State Park and the terms of the LWCF program.

Utilities

Because of the growing use of various areas of the park where above-ground utilities are present, public objection has been expressed concerning the obtrusiveness of utility poles, towers, wire, and pipe. The Division of Parks should work with the appropriate utility owner to reduce or eliminate objectionable aspects of the utility. Appropriate measures include burying utilities, re-vegetating, rerouting, removing unneeded utilities, or otherwise screening or disguising a utility line so as to reduce the visual impact of its presence. These same considerations should be taken into account wherever new utilities are contemplated not only for aesthetic purposes but also to maintain compliance with LWCF grant program provisions.

Proposed Park Additions, Land Acquisitions, and Boundary Adjustments

Over the years park management has been in the position to acquire land or interests in land resulting from a gift or donation, exchange, or purchase. Acquisitions and adjustments will continue to be important options to aid in park management and to enhance recreation. All acquisitions will be considered on a case-by-case basis in order to enhance or protect public access, viewsheds, forest communities, wildlife corridors, and to secure inholdings. A priority shall be placed on acquiring land that will help connect neighborhoods to the park and enhance access. The land should complement the park and be managed consistent with the purposes described in the park's enabling legislation.

Land should not be accepted with restrictions, requirements, covenants, or conditions that create a fragmented management pattern or conflict with park purposes. A detailed understanding of the reservations, conditions, and easements encumbering the property shall be gained and documented prior to accepting land to ensure compliance with the terms of the LWCF program and for future research purposes. Consideration should be given to land acquisition proposals to assure that adequate resources are available or will be available to manage new land so as not to unduly burden the park or detract from the ability to manage other park lands.

Some boundary adjustments are also recommended to ease day-to-day administrative problems and to expand the recreational opportunity offered by the park. Below you will find a listing of the current priority land acquisitions, additions, and boundary adjustment recommendations. There may be additional needs identified in the future that are not specifically recognized below. For more detailed information and guidance related to access reference the Chugach Access Plan. Any additional modifications should follow the consideration criteria listed above.

Proposal	Management Objective	Justification
Boundary Adjustment Package ¹⁰	Seek to include past boundary modifications and correct errors and/or typos in the legal description portion of AS 41.21.121 through legislation.	This would correct discrepancies and protect land that was originally intended to be included in the park.
Park Additions Package ¹¹	Work with the legislature to adjust the park boundary to include parcels of land that have been acquired over the years but lie outside of the legislatively designated boundary.	Some parcels acquired over the years are outside of the legislatively designated boundary and as a result have been administratively designated and managed by the park under interagency land management agreement and management rights. These areas were acquired for park purposes and should be officially incorporated into the boundary to clarify jurisdictional concerns.
Peters Creek Access ¹²	Acquire either the 40 acre private parcel surrounded on three sides by Chugach State Park or an easement across the parcel leading to the park boundary to secure access to the Peters Creek Valley.	This trailhead is increasing in popularity and the parking and access is not adequate to serve current needs. To improve access and decrease neighborhood impacts, this action would provide the land needed to establish a vehicular trailhead and/or a road into the park where a trailhead can be developed.

¹⁰ See Appendix C for a description of these lands.

¹¹ See Figure 1

¹² See the Chugach Access Plan for recommendations and location information.

*Chapter 5: Areawide Management
Direction and Guidelines*

Proposal	Management Objective	Justification
Mount Baldy ¹³	Acquire land from the Municipality of Anchorage (MOA) or obtain a management agreement for the site that provides access to Mt. Baldy and other areas within the park.	This site was purchased by the MOA recently to provide legal parking and access to Mt. Baldy and Chugach State Park. The park is probably best suited to manage and enhance this type of facility.
Lions Club Community Park ¹⁴	Exchange these lands with an entity that is better suited to support the types of recreational facilities present at this site.	This park is part of Chugach State Park and is managed by the Lions Club under a permit issued by the State prior to the formation of Chugach State Park. Another entity is probably best suited to support the type of recreation that exists at this site.
Ram Valley ¹⁵	Acquire land near the Ram Valley area that would be suitable for the development of a trailhead with parking and reasonable trail access to the valley.	This area has consistently been identified by the public as a priority for securing access. Ram Valley is very scenic and offers a variety of recreational opportunities. Development has blocked many traditionally used ways of accessing the valley.
Harp Mountain ¹⁶	Acquire land in this area suitable to provide parking and a trail easement that provides access to the park.	This site offers a variety of recreational opportunities and would provide additional access to destinations in the South Fork of Eagle River.
McHugh Peak- Upper Potter Creek Valley ¹⁷	Acquire land in the Upper Potter Creek Valley south of the Northwest Rib of McHugh Peak suitable for the development of a large regional trailhead.	There is currently no secured access to this underserved portion of the park that has been traditionally used to access the McHugh Peak Complex for a wide variety of recreational activities.
Bird Creek Regional Park ¹⁸	Acquire 2,200 acres of land owned by the Municipality of Anchorage (MOA) along the valley floor of Bird Creek and part of Penguin Creek.	The park already manages this land under a cooperative agreement with the MOA. Bird Regional Park is difficult for the MOA to manage since it lies outside of its park and recreation boundary jurisdiction.
Wallace Homestead	Acquire the Wallace Homestead above Skyline Drive.	This would provide an opportunity for additional access to Mt. Baldy and the surrounding area.

¹³ See the Chugach Access Plan for recommendations and location information.

¹⁴ See Figure 1 for location.

¹⁵ See the Chugach Access Plan for recommendations and location information.

¹⁶ See the Chugach Access Plan for recommendations and location information.

¹⁷ See the Chugach Access Plan for recommendations and location information.

¹⁸ See Figure 1 for location.

Management Agreements

Cooperative agreements provide a common framework that encourages land management and regulatory agencies to inform others of their activities and avoid incompatible or duplicative efforts. Management agreements should be maintained and/or established between State Parks and the large land owners in the vicinity of the park including the Alaska Railroad Corporation (ARRC), the Municipality of Anchorage (MOA), the DNR Division of Mining, Land and Water (DMLW), Eklutna Inc., the Military, the Bureau of Land Management (BLM), and the Alaska Department of Transportation and Public Facilities (ADOT/PF).

All written cooperative agreements, memorandums of understanding, management agreements, joint use agreements, or agreements with private landowners, interest groups, individuals, state agencies, local government, or federal agencies should be reviewed and signed by the Director or as otherwise directed by Division policy. Agreements with federal and local agencies may require the review and signature of the Commissioner. Some agreements may require annual approval of work plans. The work plans may be approved by the park Superintendent.

Existing Management Agreements			
Agreement Type	Area	Agencies	Management Objective/Purpose
Management Right	Rainbow Valley	DPOR DMLW	Site managed as part of Chugach State Park (CSP) by the DPOR through an agreement with the DMLW. <i>ADL 221474, ADL 221476</i>
Management Right	Potter Valley	DPOR DMLW	Site managed as part of CSP by the DPOR through an agreement with the DMLW. <i>ADL 221475, ADL 221477</i>
Management Right	Rabbit Valley	DPOR DMLW	Site managed as part of CSP by the DPOR through an agreement with the DMLW. <i>ADL 200623, ADL 230077, ADL 230078, ADL 230079</i>
Management Right	South Eagle River Falls & Easement	DPOR DMLW	Site managed as part of CSP by the DPOR through an agreement with the DMLW. <i>ADL 225522</i>
Management Right	Eklutna Lake Area	DPOR DMLW	Site managed as part of CSP by the DPOR through an agreement with the DMLW. <i>ADL 231303</i>
Interagency Land Management Agreement (ILMA)	California Creek Trailhead	DPOR DMLW	Site managed as part of CSP by the DPOR through an agreement with the DMLW. <i>ADL 203859</i>
ILMA	Upper McHugh Creek	DPOR DMLW	Site managed as part of CSP by the DPOR through an agreement with the DMLW. <i>ADL 225945</i>
ILMA	Rainbow Valley	DPOR DMLW	Site managed as part of CSP by the DPOR through an agreement with the DMLW. <i>ADL 231354</i>

Chapter 5: Areawide Management
Direction and Guidelines

Existing Management Agreements			
Agreement Type	Area	Agencies	Management Objective/Purpose
ILMA	Rainbow Valley	DPOR DMLW	Site managed as part of CSP by the DPOR through an agreement with the DMLW. <i>ADL 231719</i>
Memorandum of Understanding	Potter Section House	DPOR ARRC MOA Historic Landmarks Preservation Commission	DPOR accepts ownership of the Potter Section House and agrees to maintain the house in accordance with the recommended procedures in <i>The Secretary of the Interior's Standards for Historic Preservation Projects with Guidelines for Applying the Standards.</i>
Land Lease	Potter Section House Historical Site	DPOR ARRC	Site leased to the DPOR for public parking area and visitor facilities, historical interpretive kiosk panels and display rail cars within railroad ROW. <i>ARRC Contract No. 5775</i>
Land Use Permit	Indian Trailhead & Community Ballfield	DPOR ARRC	Permit issued to the DPOR to utilize and maintain site and construct and reconstruct park facilities within railroad ROW in vicinity of ARRC MP 88. <i>ARRC Contract No. 6856</i>
Land Use Permit	Bird Point to Girdwood Bike Pathway	DPOR ARRC	Permit issued to the DPOR to construct, reconstruct, operate and maintain recreational pathway and park facilities along pathway within railroad ROW between ARRC MP 74.5 – 82. <i>ARRC Contract No. 7493</i>
Land Use Permit	Bird Creek Parking, Scenic Overlook & Pedestrian Access	DPOR ARRC	Permit issued to the DPOR to operate and maintain site and construct and reconstruct park facilities within railroad ROW in vicinity of ARRC MP 86.6. <i>ARRC Contract No. 6856, Supplement No. 1 & Supplement No. 2</i>
Maintenance Certification	Bird Creek Scenic Overlook & Pedestrian Access	DPOR ADOT/PF	DPOR agrees to perform all maintenance and management of site and park facilities within transportation ROW. <i>ADOT Project No. SB-AK-93-01/50940</i>
Maintenance Certification	Bird Point to Girdwood Bike Pathway	DPOR ADOT/PF	DPOR agrees to perform management and maintenance of recreational pathway and park facilities along pathway within transportation ROW between MP 90 – 96. <i>ADOT Project No. TEA-0A3-1(23)/52497</i>
Maintenance Agreement	Bird Creek Campground	DPOR ADOT/PF	DPOR agrees to maintain and operate federally funded park amenities and facility improvements consistent with applicable portions of 23 CFR 1.27 and AHMOM.
Memorandum of Agreement	Little Penguin Creek Rest Stop, Seward Highway	DPOR ADOT/PF	DPOR accepts management of site and related park facilities within transportation ROW. <i>ADOT Project No. 54433</i>

Existing Management Agreements			
Agreement Type	Area	Agencies	Management Objective/Purpose
Memorandum of Understanding	Seward Highway Easement and Recreational Facilities, Potter Marsh to Girdwood	DPOR ADOT/PF	Fix location of transportation ROW through CSP and encourage cooperation in planning, design, construction, maintenance and operation of facilities along transportation ROW between agencies.
Memorandum of Agreement	Seward Highway Corridor, Potter Station to Girdwood	DPOR ARRC ADOT/PF	Foster cooperation between agencies for the multi-phased highway improvement project and in the overall planning, development, operation and maintenance of the Seward Highway and railroad corridors within and adjoining CSP in a manner compatible with the scenic and recreational values of the corridor. ADOT/PF agrees to construct and maintain pullouts such as snow removal, maintenance of asphalt surface and other facilities installed by them such as guardrails, culverts.
Management Agreement	Bird Creek Regional Park	DPOR MOA	Interim management authority delegated to DPOR to manage, as part of CSP, lands in Bird Creek owned by the municipality. <i>079855</i>
Land Lease	Ptarmigan Valley Trailhead	DPOR MOA HLB	Site leased to the DPOR for public parking facilities and a trailhead to access the park. Site to be managed as part of CSP. <i>LSH 417 & HLB LT 289</i>
Cooperative Recreation Management Agreement	Federal Land within CSP	DPOR BLM	Interim management authority granted to DPOR for the purpose of managing public recreation on BLM lands within designated confines of CSP as contained in Alaska Statute.
North Anchorage Land Agreement	Eklutna Inc. Land within CSP	DNR MOA Eklutna Inc.	DPOR receives management authority, in perpetuity, for approximately 27,000 acres of Eklutna Inc. lands within CSP. Lands to be managed as part of CSP.
Cooperative Agreement	Iditarod National Historic Trail	DNR ADF&G ARRC ADOT/PF DOI	DNR, as the result of the comprehensive management plan, agrees to designate, include and develop segments of the trail on state land as part of the National Trail System.
Cooperative Agreement	Ship Creek & Eklutna Valleys Watershed	DPOR AWWU	Agencies cooperatively manage and protect CSP watersheds to insure the continued production of a safe and clean public water supply.
Memorandum of Understanding	Hand-Pumped Wells within CSP	DPOR ADEC	Agencies cooperatively agree to ensure the protection of public health of persons utilizing hand-pumped wells for potable water.

Chapter 5: Areawide Management
Direction and Guidelines

Existing Management Agreements			
Agreement Type	Area	Agencies	Management Objective/Purpose
Memorandum of Understanding	Wildlife Management in the Municipality of Anchorage	DPOR ADF&G MOA USFW BLM USFS US Air Force US Army	Agencies recognize the cooperative planning effort which resulted in a comprehensive plan for managing wildlife in Anchorage, accept the overall purpose of the comprehensive wildlife plan to minimize human-wildlife conflicts and maintain and enhance the benefits of wildlife in Anchorage, and affirm intent to implement actions recommended in the plan to the greatest extent possible.
Memorandum of Understanding	Eagle River and Anchorage Shop & Warehouse Facilities	DPOR DCRA	Agencies jointly use and maintain warehouse facilities and yard in Eagle River and Anchorage.
Conservation Easement	Moon Homestead, South Fork Eagle River Valley	DPOR The Great Land Trust	Conservation easement within CSP boundary assigned to the DPOR. <i>LSH 597</i>
Conservation Easement	South Fork Eagle River- Carroll	DPOR The Nature Conservancy	Conservation easement within CSP boundary assigned to the DPOR. <i>LSH 380</i>
Conservation Easement	South Fork Eagle River- Delin	DPOR The Nature Conservancy	Conservation easement within CSP boundary assigned to the DPOR. <i>LSH 356</i>
Conservation Easement	South Fork Eagle River- Martin	DPOR The Nature Conservancy	Conservation easement within CSP boundary assigned to the DPOR. <i>LSH 357</i>

Recommendations for New Management Agreements		
Proposal	Management Objectives	Justification
<u>Management Agreement.</u> Establish a management agreement between DPOR and the MOA HLB for the maintenance and management of the segment of the Bird to Gird National Trail located outside the park boundary on MOA land in Bird Creek (S010N001W, Sec 15).	This would consolidate management of the highly used recreational facility under one agency and provide management efficiencies.	DPOR is best suited to manage this segment of the recreational trail in conjunction with the remainder of the trail currently under DPOR management.
<u>Management Agreement.</u> Establish a management agreement between DPOR and the MOA HLB for the maintenance and management of the segment of the Ptarmigan Valley Trail located outside of the lease area and outside the park boundary on MOA land in Chugiak (S015N001W, Sec 16).	This would consolidate management of the recreational trail under one agency and provide management efficiencies.	DPOR is best suited to manage this segment of the recreational trail in conjunction with the remainder of the trail currently under DPOR management.
<u>Management Agreement.</u> Establish a management agreement between DPOR and the BLM for the maintenance and management of the segment of the Thunder Bird Falls Trail located outside the park boundary in Eklutna (S016N001W, Sec 25).	This would make management responsibilities and jurisdiction clearer to all parties and consolidate management of the recreational facility under one agency to provide management efficiencies.	DPOR is best suited to manage this segment of the recreational trail in conjunction with the remainder of the trail currently under DPOR management.
<u>Management Agreement.</u> Establish a management agreement between DPOR and the MOA for the management of the Mt. Baldy Trailhead and trail segment located on MOA land within the park boundary in Eagle River (S014N001W, Sec 5 & 6).	This would promote orderly development of the site and associated facilities and would consolidate management of the highly used recreational area under one agency to provide management efficiencies.	This would use DPOR expertise and resources to improve and maintain the facilities and to manage the site as part of the surrounding CSP if a land exchange for the area is delayed or not successful.
<u>Management Right.</u> Develop a management agreement between DPOR and the DMLW for management of the Sultana Drive ROW/easement.	This would provide management clarity and insure that the area is protected consistent with the LWCF grant program.	This ROW/easement was purchased with LWCF grant monies for inclusion into CSP and for access to park land.
<u>Memorandum of Understanding (MOU).</u> Amend the MOU between DPOR and ADOT/PF for clarity on maintenance responsibility of the pullouts within the Seward Highway ROW.	This would provide management clarity and efficiency for both agencies.	The MOU was drafted prior to some of the major Seward Highway upgrades and lacks clarity as to the extent of the maintenance responsibilities for either party.

Recommendations for New Management Agreements		
Proposal	Management Objectives	Justification
<u>Cooperative Agreement.</u> Establish a long-term agreement between DPOR and ADOT/PF concerning management and maintenance of improvements and pullouts affected by future realignment/relocation of the portions of the Seward Highway through CSP.	Develop efficiencies between DPOR and ADOT/PF efforts.	As upgrades to the highway corridor continue, it will be necessary to establish an agreement that addresses the entirety of the corridor within the park to assure a more holistic management approach and outline clear responsibilities between the agencies.
<u>Cooperative Agreement.</u> Develop a cooperative agreement between DPOR and ADF&G for better coordination of hunter education regarding requirements for use of state park lands.	This would help prevent misunderstanding of park regulations and user conflicts.	The current hunting and trapping regulations within the park can be confusing because of the number of special management areas and differing regulations depending on where you are in the park.

Management and Staffing Efficiencies

Adequate staffing is required to ensure public safety, protection of natural and cultural resources, provide information to the public, operate and maintain the park facilities, and supervise contracted and volunteer help. The information provided below begins to address the needs and functions that are currently either partially covered by current staff or not being done at all. If the positions identified below prove difficult to establish, a staffing analysis should be conducted to determine how these functions can be covered in other ways. There needs to be the recognition that partially establishing these positions will also result in the need to redistribute duties and responsibilities.

Proposal	Management Objectives	Justification
<u>Staffing Needs.</u> <ul style="list-style-type: none"> • Another field Ranger to allow better coverage of the park units • Two front country technician positions to help collect fees and address trailhead issues • Technician positions for a trail crew instead of using Alaska Conservation Corps (ACC) • A volunteer coordinator and supervisor • A public outreach position to provide more interpretation and guidance • Visitor center staff to provide 	Provide an increased management presence to improve public safety. Provide better public services including improved maintenance and repair of facilities and more opportunities for the public to receive information about the park.	<p>Currently there are only 4 rangers, including the chief ranger, to patrol 5 units of a park with very high visitation. Rangers are responsible for fee collection and all aspects of managing the front and back-country facilities and areas of the park. Additional positions will be used for increased visitor services and more effective use of staff.</p> <p>The park's trail crew is comprised of only ACC staff funded through grant and capital improvement project funding making it difficult to establish and provide long-term employee development. Considerable time and money is</p>

Proposal	Management Objectives	Justification
<p>public information if a new visitor contact facility is established or at the headquarters office</p> <ul style="list-style-type: none"> • A land/realty specialist to address land records research & requests 		<p>spent training and outfitting new ACCs from year-to-year resulting in less time spent on trail projects.</p> <p>Volunteers provide tremendous assistance to the park, but require training, supervision, and management. A coordinator will help maximize volunteer time.</p> <p>There is no staff dedicated to provide public information or outreach. Currently information is provided ad hoc by staff in addition to their normal duties.</p> <p>Many of the issues the park faces are land status related requiring in depth knowledge of and the ability to research land records.</p>
<p><u>Volunteers.</u> Continue to utilize campground hosts, park caretakers, park volunteers, and other service organizations to staff park facilities and assist with construction and maintenance. Seek additional volunteers as facilities are developed and become more popular.</p>	<p>Enhance the visitor experience and provide a high quality of service.</p>	<p>Volunteers are an invaluable park resource that supplement staff and allow for more projects to be accomplished and services to be provided.</p>
<p><u>Aircraft.</u> Acquire dependable access to a staffed aircraft, preferable rotor winged, for law enforcement, emergency response and other backcountry needs.</p>	<p>Allow for increased ability to monitor park activities, provide logistical support, and respond to park emergencies and rescue situations.</p>	<p>Currently, staff has limited abilities to monitor backcountry use, provide logistical support, and assist visitors during emergencies. Having aircraft support available would allow for shorter response times and better backcountry services.</p>
<p><u>Visitation Trends.</u> Improve visitation estimation techniques for accuracy.</p>	<p>Accurate assessment of park visitation patterns and recreational use throughout the park is necessary to accurately project future demand and match commensurate facilities and services into the future.</p>	<p>These figures will aid in developing future revisions to this management plan, establishing appropriate priorities, and in substantiating funding requests for facility development, operations and maintenance.</p>

Chapter 6: Management for Each Unit

Planning Units

Due to Chugach State Park's large size and landscape diversity, the area has been divided into five geographical planning units to facilitate planning and management. They are Eklutna-Peters Creek, Eagle River, Ship Creek, Hillside, and Turnagain Arm units (see Figure 2). The planning units are defined by major drainages and have characteristics which are unique unto themselves. Each will be described in this chapter individually regarding its setting, special considerations, existing facilities, and recommendations for management and development. The facility recommendations made in this chapter reflect only the proposals for new facilities or changes and/or enhancements to existing facilities. Routine maintenance needs are assumed to be required and are not addressed as specific facility recommendations.

Eklutna-Peters Creek Planning Unit

Setting

This northernmost area of the park contains approximately 193,100 acres and is composed of three major drainages and two smaller ones. On the northwest side of the park, Goat Creek, Eklutna River, Thunder Bird Creek, Peters Creek, and Little Peters Creek flow from a series of rugged mountain peaks and glaciers. The West Fork of Hunter Creek flows abruptly north from the northeast corner of the park. A portion of the park's ice field, located in the southeastern corner of the park dips into the lowlands in the form of Eklutna Glacier, one of the park's major valley glaciers. The carved Eklutna Valley contains the park's largest lake, Eklutna Lake, which is fed by glacial and freshwater streams flowing into the 7-mile-long lake.

All of the unit's drainages are heavily wooded with white spruce-birch forests in the lower elevations or with dense stands of balsam poplar. Intermittent wet areas are dominated by black spruce bogs and muskeg. Between 2,000 and 3,000 feet in elevation, forest species become dwarfed and random patches of dense willow and alder grow where underground water is adequate. Above this level, tundra species and bare rock dominate the landscape. Particularly significant for wildlife is the existence of three natural mineral licks, two north of Eklutna Lake and the other north of Peters Creek along an unnamed tributary.

The valleys and towering mountains of this unit provide a striking visual setting for recreation enthusiasts. Some of the most popular scenic destinations for visitors of this unit include the Eklutna Valley, Thunder Bird Creek drainage, Peters Creek and Little Peters Creek valleys. Other less frequented areas of the park where visitors have traditionally gained access to the park's northern boundary are the Hunter Creek drainage, Pioneer Ridge, and the Goat Creek drainage. The portion of the Hunter Creek drainage that is located within the park is approximately two miles from the Knik River Road and receives light use primarily by hunters in the fall. Pioneer Peak and Ridge, used mainly by hikers in the summer, are accessed via a trailhead and trail easement maintained through a cooperative effort between the Matanuska-Susitna Borough's Parks and Recreation Department, the Bureau of Land Management, Eklutna Inc., the Alaska Department of Natural Resources, and the Palmer-Wasilla Trail Association. The Goat Creek drainage has been used traditionally by hunters and mountain climbers seeking access to the high country.

The Eklutna Valley is one of the heavily used areas of the park and is known for its scenic qualities and diverse recreational opportunities. A trail leading from the Eklutna Lake access parallels the lake on an old road bed that leads to the West Fork of Eklutna River. This trail, the Lakeside Trail, is used to provide access to the Eklutna Glacier, but because the glacier has receded it is more difficult now to reach its terminus. The Lakeside Trail is open during specified time frames to ATV and snowmachine use and the snowmachines are allowed on the valley floor when snow conditions are adequate to protect the underlying vegetation.

Eklutna Lake is used by boaters even though alternating water levels (often exposing extensive mud flats) and frequent strong winds can make boating difficult. The main campground in the area is located at the north end of the lake and various campsites exist at the smaller more primitive campgrounds at the other end of the lake. The Yuditnu Creek Public Use Cabin is located midway along the lakeside trail and the Serenity Falls Public Use Hut exists nearer the terminus of the trail and is one of a series of mountaineering huts along the historical Eklutna Traverse. The Kokanee Public Use Cabin is located on the southern side of the lake at about the halfway point, due east across the lake from where the Bold Ridge Trail intersects with the Lakeside Trail. Many trails and routes lead from the basin, including the Mount POW hike leading from the Eklutna Lake Road.

Thunder Bird Creek drainage receives very heavy use due to the popular Thunder Bird Falls viewing area located just off the Glenn Highway. A parking lot and a one-mile trail lead to the Thunder Bird Falls overlook and many private lots and homes line the trail initially to the falls. Few people continue beyond the falls overlook due to rough terrain. The difficulty of access to Thunder Bird Creek up stream of Thunder Bird Waterfalls has kept this area in a primarily untouched state. During the fall, hunters enter the upper parts of the drainage area from adjacent valleys by crossing unnamed passes seeking moose and Dall sheep.

Peters Creek drainage is receiving increasing use, primarily by hunters and nearby residents from the Chugiak and Birchwood communities that have limited options to access the park. A trail along the valley floor leads from a trailhead located within a road right-of-way. The valley and trail are open to snowmachine use when snow cover is sufficient to protect

vegetation. The scenic valley receives moderate use year-round and is popular in the fall with hunters seeking moose, Dall sheep, and black bear. Little Peters Creek drainage is also known as Ptarmigan Valley and is another popular recreation destination year-round. The access to this valley is located off the Old Glenn Highway on Municipality of Anchorage land currently under lease by the park. A trail easement leads from the parking lot up the valley, which is open to snowmachine use when snow conditions are adequate to protect the underlying vegetation.

Management Intent

Protect the unit's watershed properties and drinking water sources. Manage this unit to protect its scenic qualities and enhance its diverse recreational opportunities. Increase public understanding and appreciation through the interpretation of unique natural and cultural features. Maintain the wildlife viewing area in the Eklutna Basin.

Special Management Considerations

Watershed Management

Eklutna Lake is the major source of drinking water for residents of the Municipality of Anchorage (MOA). Anchorage Water and Wastewater Utility (AWWU), the utility that manages the drinking water supply for the MOA, has a cooperative agreement¹ with the park to facilitate management and protection of the important watersheds within the park that provide the bulk of the MOA water supply. Any development or other activities within the park shall be conducted in accordance with this cooperative agreement. Snowmachine use on Eklutna Lake should be monitored and evaluated to understand if their use may affect water quality. Through this agreement, the park is charged with monitoring public use and identifying and correcting problems that could lead to a lowering of water quality, using Best Management Practices in the construction, operation and maintenance of trails and other recreational facilities to avoid or minimize contamination of the public water supply, and consulting with AWWU staff prior to authorizing or conducting significant land use activities in the watersheds.

Existing Management Areas

Snowmobiles are presently allowed in Little Peters Creek, Peters Creek and the lake area of the Eklutna basin with adequate snow cover². More information should be gathered and evaluated related to the effects of snowmobile use on Eklutna Lake. Summer off-road vehicles are allowed during certain times on the Eklutna Lakeside Trail³. Non-motorized boats and boats powered by an electric motor are allowed on Eklutna Lake⁴. The Four Mile

¹ See Anchorage Water and Wastewater Utility and Chugach State Park Cooperative Agreement, Management and Protection of Chugach State Park Public Watersheds and the information in Chapter 5.

² See 11 AAC 20.040 for restrictions.

³ See 11 AAC 20.015 for restrictions.

⁴ See 11 AAC 20.025

Creek property acquired in 2000 within the Peters Creek drainage is closed to the use of motorized vehicles including snowmobile use as a result of a deed restriction. This restriction does not apply to park staff use of motorized vehicles for management and safety related purposes. Most of the Eklutna drainage is in the Eklutna Lake Management Area⁵ which closes the area to all hunting except for black bear and small game by bow and arrow only. The taking of moose, brown bear and sheep is allowed by permit only but methods and means are restricted to bow and arrow. The Eklutna management area is currently closed to trapping. The remainder of the planning unit is in the Chugach State Park Management Area where hunting is allowed for black bear, bull moose, hare, grouse, ptarmigan, and waterfowl. The taking of brown bear, moose, Dall sheep and goat is allowed in this area by permit only⁶.

North Anchorage Land Agreement

Most of the lands affected by the North Anchorage Land Agreement (NALA) are found in this unit primarily around Eklutna Lake and in the Peters Creek drainage. NALA gave the State management authority in perpetuity to Eklutna Inc. owned lands within the park boundary in exchange for sharing in the military development lands in the future. These lands are to be managed as part of the park and in the same manner as other park lands are managed. Any new development on these managed lands that was not contemplated in the previous 1980 Chugach State Park Master Plan is subject to Eklutna Inc. concurrence if more than one-half acre of clearing is required.

Hazards

Eklutna Lake is the park's largest lake at 7 miles in length and 1 mile in width. Although the surface freezes in winter, fluctuating water levels create variations in ice thickness and cause surface irregularities which can result in unsafe ice conditions. Down-canyon winds can rise in the basin with little notice and often have sufficient force to create white-capped waves on the lake. To the unprepared boater, they can represent a hazardous situation. Avalanches and rock slides can occur at various times and locations within the Eklutna-Peters Creek Unit and can present a potential hazard to recreationalists.

Eklutna/Whiteout Traverse Mountaineering Huts

Three A-frame huts that were constructed by the Mountaineering Club of Alaska (MCA) before Chugach State Park was established in 1970 exist along the historic Eklutna/Whiteout Traverse. The huts are known as Pichler's Perch, Hans', and Rosie's Roost huts. The huts are considered to be publicly owned structures and are to be managed as public facilities within the park that are important for public safety. They must remain open to all glacier travelers on the traverse and must be shared by groups. Commercially guided parties may use the huts; however, they may not attempt to exclude other travelers from sharing the huts. The MCA performs maintenance work on the huts and because of their involvement, the state will give MCA one years notice regarding any plans to remove or not allow the reconstruction of a damaged hut.

⁵ See Appendix E for a map depicting how the special management areas coincide with park planning units.

⁶ Consult the latest version of the hunting regulations for details.

Existing Facilities

Below you will find a list of the existing park facilities within this unit and the basic amenities available at each of them.

Facility	Campsite(s)	Picnic Table(s)/ Shelter(s)	Latrine(s)	Boat Access	Public Use Cabin(s)/ Yurt	Interpretive Display(s)/ Trailhead Kiosk/ Bulletin Board	Water (i.e. drinking fountains, hand pumps, toilets)	Fire ring/Grill(s)	Ranger Office/ Maintenance Yard	Visitor Contact Center	Scenic Overlook	Trailhead/ Parking Lot	Historic Feature	Fishing Access	Residential Cabin	Fee Station/Booth	Other (e.g. ballfield, playground, dump station)
Eklutna Lake Canyon Site	x	x						x									
Eklutna Lake ATV Trailhead			x			x			x	x		x			x	x	
Eklutna Maintenance Yard									x								
Eklutna Lake Campground	x	x	x				x	x								x	
Eklutna Lake Picnic Area		x	x			x	x	x				x				x	
Eklutna Lake Group Area	x	x	x			x	x	x									
Eklutna Lake Day Use Trailhead			x	x		x	x					x		x		x	
Yuditnu Creek Cabin		x	x	x	x			x						x			
Eklutna Lake South Backcountry Campgrounds (Bold Airstrip, Eklutna Alex, Kanchee)	x	x	x			x		x									
Serenity Falls Hut		x	x		x			x									
Eklutna Traverse Huts ⁷ (Pichler's Perch, Hans' Hut, Rosie's Roost)					x ⁸								x				
Thunder Bird Falls Trailhead & Overlook			x			x					x	x				x	
Peters Creek Trailhead						x											
Ptarmigan Valley Trailhead						x						x					
Kokanee Cabin		x	x	x	x			x						x			

⁷ Maintained by the Mountaineering Club of Alaska.

⁸ Not reservable.

Facility Recommendations

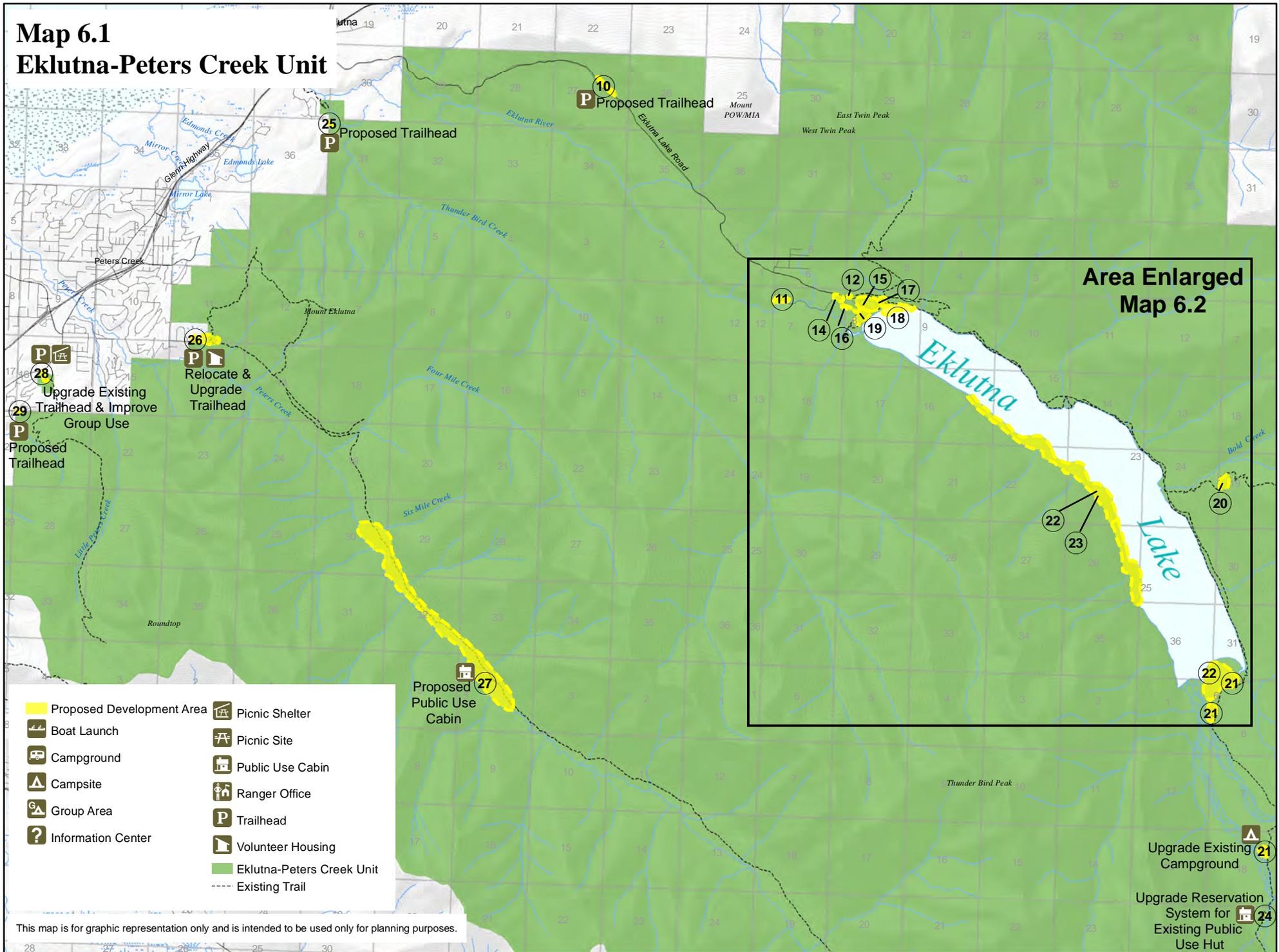
Below you will find a listing of the new facilities or new upgrades to existing facilities.

ID	Map #	Proposal	Scope/Management Objective	Justification
10	6.1	Mount POW Trailhead	Develop a small vehicular trailhead in the vicinity of Mile 5 of the Eklutna Lake Road and Mount POW. The area should be developed in conjunction with a sustainable trail to the summit.	Mount POW is climbed each Veterans Day to honor POW/MIAs. Currently parking occurs in the Eklutna Lake Road ROW and access to Mount POW traverses a steep hillside initially. Work with veterans group to site a sustainable trail to the summit and associated parking area to serve the trail.
11	6.1 & 6.2	Eklutna Lake Canyon Group Recreation Site	Separate area into multiple sites that can be combined as needed. Add picnic pavilions, water and toilet facilities.	The current site has no amenities yet gets some use. The site has potential to provide a much needed area for larger gatherings.
12	6.1 & 6.2	Eklutna Lake ATV Trailhead	Redesign, pave and enlarge parking area.	This trailhead provides ATV and snowmachine users year-round access to the scenic Eklutna Basin and Lakeside Trail. The parking area is poorly designed and needs upgrading to better accommodate vehicles with trailers.
14	6.1 & 6.2	Volunteer Housing	Replace volunteer housing and site near ranger station.	The current volunteer cabin is inadequate and does not meet the park's basic necessities.
15	6.1 & 6.2	Eklutna Lake Campground	Redesign campground and upgrade as needed. Include picnic pavilions, cooking area and animal resistant food storage area, and provisions to facilitate winter camping.	The Eklutna Lake Campground has long been a popular destination that has a lot of potential to better accommodate future use if demand continues to grow. Some upgrades particularly for winter use are needed in the short term to enhance recreational opportunities.
16	6.1 & 6.2	Eklutna Lake Group Area	Add picnic pavilions.	This area should be enhanced in conjunction with campground upgrades to better facilitate group use.
17	6.1 & 6.2	Eklutna Lake Day Use Trailhead	Monitor use of the area and upgrade or enlarge trailhead as needed. Ensure that any upgrades are coordinated with surrounding facilities. Open up and maintain views of the lake.	This serves as the main trailhead for the Eklutna day use facilities. The site contains over 75 parking spaces, latrines, and interpretative signage. It provides direct access to the Eklutna Lakeside Trail and Eklutna Lake.
18	6.1 & 6.2	Eklutna Lake Boat Access	Upgrade to provide safe, readily accessible drop-off and pick-up location to facilitate boat launch and retrieval and better integrate into surrounding facilities.	The current hand carried boat launch is not well designed, provides poor access to the water and is usually quite some distance from the actual lake shore. New boat access should accommodate fluctuating water levels.

ID	Map #	Proposal	Scope/Management Objective	Justification
19	6.1 & 6.2	Eklutna Lake Picnic Area	Redesign area adjacent to the campground to include pavilions, and associated facilities, of various sizes including at least one suitable for larger groups. Ensure that any upgrades are coordinated with surrounding facilities. Open up and maintain views of the lake.	The picnic area is a poorly designed and underutilized resource with the potential to better serve visitor needs. Group use areas are needed throughout the park. Vegetative growth prevents scenic viewing of Eklutna Lake.
20	6.1 & 6.2	Bold Ridge Backcountry Campsite	Harden a camp site on Bold Ridge and enhance as needed.	This site would provide a needed formalized area to camp on the ridge while minimizing resource impacts.
21	6.1 & 6.2	Eklutna Lake South Backcountry Campgrounds (Bold Airstrip, Eklutna Alex, Kanchee)	Upgrade latrines at campgrounds and sites as needed. Increase the number of campsites at the Bold Airstrip and Kanchee campgrounds. Add animal-resistant food storage and cooking area.	These campgrounds were established long ago when visitors were able to drive a road back to use them. Over time the road was washed out and the areas are now served by a trail. The campsites have not seen any upgrades or serious maintenance since the 1970s. Some upgrades and expansion will make these areas more desirable and help distribute use.
22	6.1 & 6.2	South End & West Side Eklutna Lake Public Use Cabins	Establish public use cabins on the south end and west side of Eklutna Lake. Use a site planning process to determine locations and appropriate number for the area.	Public use cabins are popular, easy to maintain, and enhance the recreational experience. The west side of Eklutna Lake could be well served with the careful addition of some cabins.
23	6.1 & 6.2	West Side Eklutna Lake Backcountry Campsites	Harden camp sites on the west side of Eklutna Lake and enhance as needed.	Formalizes hardened spots to minimize resource impacts and provide for visitor use.
24	6.1	Serenity Falls Hut	Maintain hut and monitor use. Work on a better reservation system for the hut to maximize its use.	This is an underutilized park resource. Currently the only way to reserve space in this hut is to visit the Public Information Center in Anchorage in person.
25	6.1	Thunder Bird Creek Drainage Trailhead	Look for opportunities to establish a small to medium parking lot trailhead in the area to disperse use and provide additional access.	There is limited access to this part of the park but the area has been traditionally used by those seeking access to the Thunder Bird Creek drainage, Mount Eklutna and the surrounding alpine terrain. There is currently no road access to the park boundary in this area but people have accessed the park using informal trails in the vicinity.
26	6.1	Peters Creek Trailhead	Improve access and build a road into the park where a medium parking lot can be developed and perhaps a caretaker cabin. The parking area needs to accommodate vehicles with trailers.	This site is becoming more popular for year-round use and alternative access in the area is very limited. Parking currently is within the right-of-way and is not adequate for the level of use the site receives. Upgrades would reduce neighborhood impacts and provide more security for the area.

ID	Map #	Proposal	Scope/Management Objective	Justification
27	6.1	Peters Creek Valley Public Use Cabin	Establish a public use cabin in the valley. The cabin shall be located where both motorized and non-motorized activities will be served.	This area is becoming more popular for year-round use and a public use cabin in the valley would enhance the recreational experience.
28	6.1	Ptarmigan Valley Trailhead	Landscape trailhead and pave road and parking lot. Enhance site with picnic shelters and a group use area. Parking upgrades will need to include space for vehicles towing trailers.	The site provides year-round access to the Little Peters Creek drainage via the Ptarmigan Valley Trail. Trailhead enhancements would make the poorly designed area more usable and desirable.
29	6.1	Canyon Drive Trailhead	Develop a small parking lot trailhead with trailhead kiosk.	This site is popular for hikers seeking quick access to a hidden lake and the surrounding forest and alpine terrain. Parking currently is within the right-of-way and is not adequate for the level of use the site receives. Upgrades would reduce neighborhood impacts and provide clearer management authority at the site.

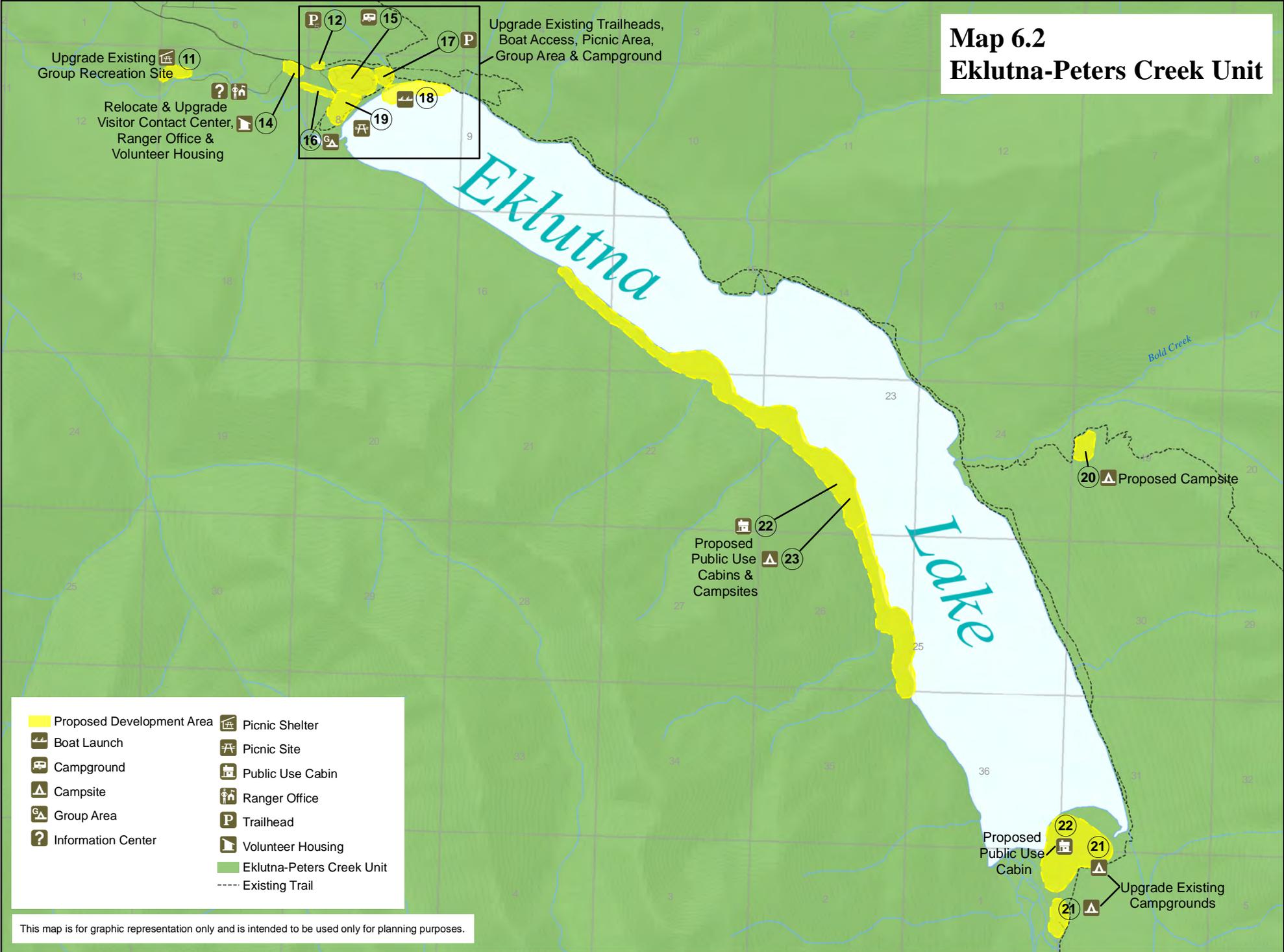
Map 6.1 Eklutna-Peters Creek Unit



- | | |
|---------------------------|---------------------------|
| Proposed Development Area | Picnic Shelter |
| Boat Launch | Picnic Site |
| Campground | Public Use Cabin |
| Campsite | Ranger Office |
| Group Area | Trailhead |
| Information Center | Volunteer Housing |
| | Eklutna-Peters Creek Unit |
| | Existing Trail |

This map is for graphic representation only and is intended to be used only for planning purposes.

Map 6.2 Eklutna-Peters Creek Unit



This map is for graphic representation only and is intended to be used only for planning purposes.

Eagle River Planning Unit

Setting

Dominated by the broad U-shaped valley of Eagle River, this planning unit spans the park from east to west and is approximately 138,100 acres in size. Composed of Eagle River and its main tributaries, the South Fork of Eagle River, and Meadow and Raven creeks, the area contains landscapes ranging from broad flat valley bottoms to rugged mountains and glaciers. Eagle River meanders back and forth across its broad flood plain leaving numerous old channels and gravel bars. Above the flood plain, the area is heavily forested with white spruce-birch forests. Steep-sided mountains rise abruptly from the valley floor, and a definite brush line of willow and alder grows above the forested areas. At higher elevations, tundra, bare rock and ice dominate. At the far end of the valley, one of the park's major valley glaciers, Eagle Glacier, winds downhill. At the glacier's terminus lies a lake referred to locally as Glacier Lake. The glacier itself is part of the park's larger glacial system to the south and east where higher elevations and dramatically increased levels of precipitation feed snow into the system which sustains the lower-lying portions of the glaciers.

The Eagle River drainage is a prime area for wildlife viewing. Dall sheep can be seen foraging on nearby mountainsides, moose and bear are occasionally sighted along the river corridor, and beaver and spawning salmon can be observed from the viewing decks located at the Eagle River Nature Center. A natural mineral lick, important for wildlife, exists in this unit south of Eagle River along an unnamed tributary. Recreational use in the main Eagle River valley is considered heavy although exact figures are difficult to establish because of the lack of defined access points along the approximate 12 miles of road. Throughout its length, people regularly stop to seek out the nearby woods, the river, ponds, and scenic views of the valley.

Eagle River itself offers good recreational opportunities and has long been a popular float for canoeists, rafters, and kayakers even though segments of the river are rated difficult. Boaters gain access to the river via the Eagle River Campground, the Eagle River Greenbelt Trailhead, the North Fork Eagle River Trailhead, or the Eagle River Nature Center. Due to a shift in Eagle River's course, the North Fork Trailhead is less desirable as a launching point since one must now traverse a slough to gain river access. The water course and gravel bars downstream of the confluence of Icicle Creek and Eagle River and a corridor from the Nature Center are open to snowmachine use when snow cover is sufficient to protect vegetation. The Eagle River Campground is located on the east side of the Glenn Highway and provides a variety of camping and day use opportunities.

Some of the most popular scenic destinations in the main drainage provide visitors access to the alpine uplands including Mount Baldy and the Meadow Creek drainage, the Mile Hi-Mount Magnificent ridgeline, and Ram Valley. Access in this area is particularly challenging due to the steep-sided mountain terrain, complex land ownership, and the loss of traditionally used access points and trails resulting from residential development. The Eagle

River Nature Center and its associated trail system is a main attraction to school groups and residents of the municipality. The facility is open year-round and provides visitor information, outdoor and interpretive programs, viewing decks, and public-use overnight facilities. The Crow Pass Trail (a segment of the Iditarod National Historic Trail) is accessed via the Nature Center.

Adjacent to Eagle River, lie numerous tributaries, many of them coming out of hanging valleys whose waters fall precipitously into the main drainage. Eagle River's South Fork valley represents significant opportunities within the unit due to its large size, numerous attractions, and more subtle terrain than the main drainage. At the head of the valley lie Eagle and Symphony Lakes. Eagle Lake is milky colored while Symphony Lake has a clear deep crystal blue color creating a striking contrast. The lakes and surrounding hanging valleys are accessed via a trail leading from the South Fork Eagle River Trailhead. This access receives considerable use year-round and frequently exceeds the capacity of parking spaces available. Also within the valley is Harp Mountain, which has been used traditionally by skiers and mountain climbers seeking access to the high country. The South Fork Waterfalls located approximately one mile south of the confluence of the South Fork and the main Eagle River drainage is considered by some to be one of the most spectacular natural features within the area but lacks appropriate access and park facilities.

Management Intent

Protect the recreational opportunities by developing and supporting outreach and education efforts that enhance park user's understanding and experience. Work to establish, protect and develop as appropriate⁹ access to park lands. Protect the scenic qualities of the valley. Establish a wildlife viewing area in the Eagle River drainage.

Special Management Considerations

Existing Management Areas

Snowmachines are allowed in the main drainage of the Eagle River valley up to the confluence of Icicle Creek with adequate snow cover¹⁰. Currently, the Eagle River drainage, which includes Meadow Creek and the South Fork of Eagle River, is closed to hunting except sheep, goat, black bear and small game by permit only. There are some method and means restrictions for these species.¹¹ The Eagle River management area is currently closed to trapping.

⁹ See the Chugach Access Plan for access recommendations.

¹⁰ See 11 AAC 20.040 for restrictions.

¹¹ Consult the latest version of the hunting regulations for details.

Private Lands (inholdings)

Approximately 6,200 acres of private land exist within this unit, mostly in the South Fork of Eagle River and along the south side of the main fork of Eagle River. A number of smaller private parcels are located along Eagle River Road on the north side of Eagle River. While most of the parcels along Hiland Road in the South Fork, near the terminus of Eagle River Road, and near the community of Eagle River have already been subdivided, there are still a number of large tracts of undeveloped private land where residential subdivision may still occur. Development of these parcels should be monitored closely to assure that future access is secured to the park boundary.

Park Access

Recreational use in the Eagle River valley and its tributaries is increasing as the population of Eagle River grows. Virtually every form of activity is experiencing increased participation yet suitable areas to access park lands for these activities is challenging. A major management focus in this unit will be to secure and develop, as appropriate, additional access to park lands including to and along the Eagle River corridor. During the plan development process, the public identified securing access to Ram Valley and Harp Mountain areas as top priorities in this unit. The Chugach Access Plan¹² provides additional information and guidelines to aid in securing and providing for access along the Eagle River corridor.

Lions Club Community Park (ADL 21759)

Lions Park is located adjacent to a school surrounded by residential subdivisions and commercial retail outlets. This area of the park is managed by the local Lions Club under a permit issued by the State prior to the formation of the legislatively designated park unit. The park includes ball fields, tennis and basketball courts, a playground and a clubhouse facility. The character of this area is quite different than the majority of Chugach State Park and has long presented unique management questions.

Eagle River Nature Center

The Eagle River Nature Center is a very popular destination that receives heavy visitation by a variety of users and serves as a major launching point to areas within the unit. The center is currently managed and maintained by a non-profit group, Friends of Eagle River Nature Center Inc., through a concessions contract from the Division of Parks and Outdoor Recreation. The center's popularity has led to the need to expand the facilities and parking associated with the center.

Eagle River Greenbelt

The Eagle River Greenbelt refers to the land adjacent to Eagle River extending from the Eagle River Campground to the Eagle River Nature Center acquired in 1987 through a land exchange with Eklutna, Inc. This area is popular for recreation and over the years, there have been various trail development plans for the area. Private land borders much of the greenbelt corridor creating management challenges due to the lack of adequate public access and issues

¹² The Chugach Access Plan provides information on the distribution, establishment and development of access areas along the park boundary.

associated with residential development so close to the riparian zone. Developments near the greenbelt should be closely monitored to assure proper access is secured, the recreational nature of the greenbelt is maintained, and the riparian zone is protected.

Conservation Easements

The Division of Parks and Outdoor Recreation has been assigned the responsibility of enforcing the terms of four conservation easements located in the South Fork Eagle River valley. Conservation easements are legally binding agreements that place restrictions related to uses and development on a piece of property to protect ecological or open-space values and conserve natural habitat for native plants and wildlife. Park managers must be aware of the specific terms of these easements and monitor the area and enforce the terms as needed.

Wildlife-Human Conflicts

The Department of Fish and Game (ADF&G) has raised concerns over the potential for wildlife-human conflicts in this unit associated with Eagle River itself, particularly in the Eagle River Greenbelt area, South Fork confluence, and near the Eagle River Nature Center. As access is secured and developed in the unit, it will be necessary to consult with ADF&G so that facilities are designed in a fashion to mitigate these concerns.

Hazards

Because of the nature of the terrain, portions of the Eagle River valley are particularly susceptible to avalanches including the Meadow Creek, Mount Magnificent, and South Fork of Eagle River areas. Facilities shall be carefully sited to avoid hazard areas or shall be made available on a seasonal basis to avoid avalanche prone times. Eagle River is a glacially fed river and portions of the river can be quite technical and challenging to negotiate and should only be used by a knowledgeable and experienced individual.

Existing Facilities

Below you will find a list of the existing park facilities within this unit and the basic amenities available at each of them.

Facility	Campsite(s)	Picnic Table(s)/ Shelter(s)	Latrine(s)	Boat Access	Public Use Cabin(s)/ Yurt	Interpretive Display(s)/ Trailhead Kiosk/ Bulletin Board	Water (i.e. drinking fountains, hand pumps, toilets)	Fire ring/Grill(s)	Ranger Office/ Maintenance Yard	Visitor Contact Center	Scenic Overlook	Trailhead/ Parking Lot	Historic Feature	Fishing Access	Residential Cabin	Fee Station/Booth	Other (e.g. ballfield, playground, dump station)
Eagle River Lions Club Community Park ¹³			X				X					X					X
North Fork Eagle River Access/Day-Use Area			X	X		X						X		X		X	
Eagle River Nature Center (ERNC)		X	X			X	X			X	X	X			X	X	X
ERNC Public Use Cabin & Yurts			X		X ¹⁴												
Crow Pass Trail Campsites (Rapids, Echo Bend, Heritage Falls, Twin Falls, Thunder Gorge, Raven Gorge, Surprise Creek)	X							X					X				
Eagle River Campground	X	X	X			X	X	X				X		X	X	X	X
Eagle River Campground Day-Use Area		X	X	X		X		X				X		X		X	
Eagle River Group Campground	X							X									
Eagle River Maintenance Compound							X		X								
Eagle River Greenbelt Trailhead/River Access		X	X	X		X						X		X		X	
South Fork Eagle River Trailhead			X			X						X					

¹³ Area is operated and maintained by the Lions Club.

¹⁴ Maintained and operated by the Eagle River Nature Center and not reserved through the State public use cabin online system.

Facility Recommendations

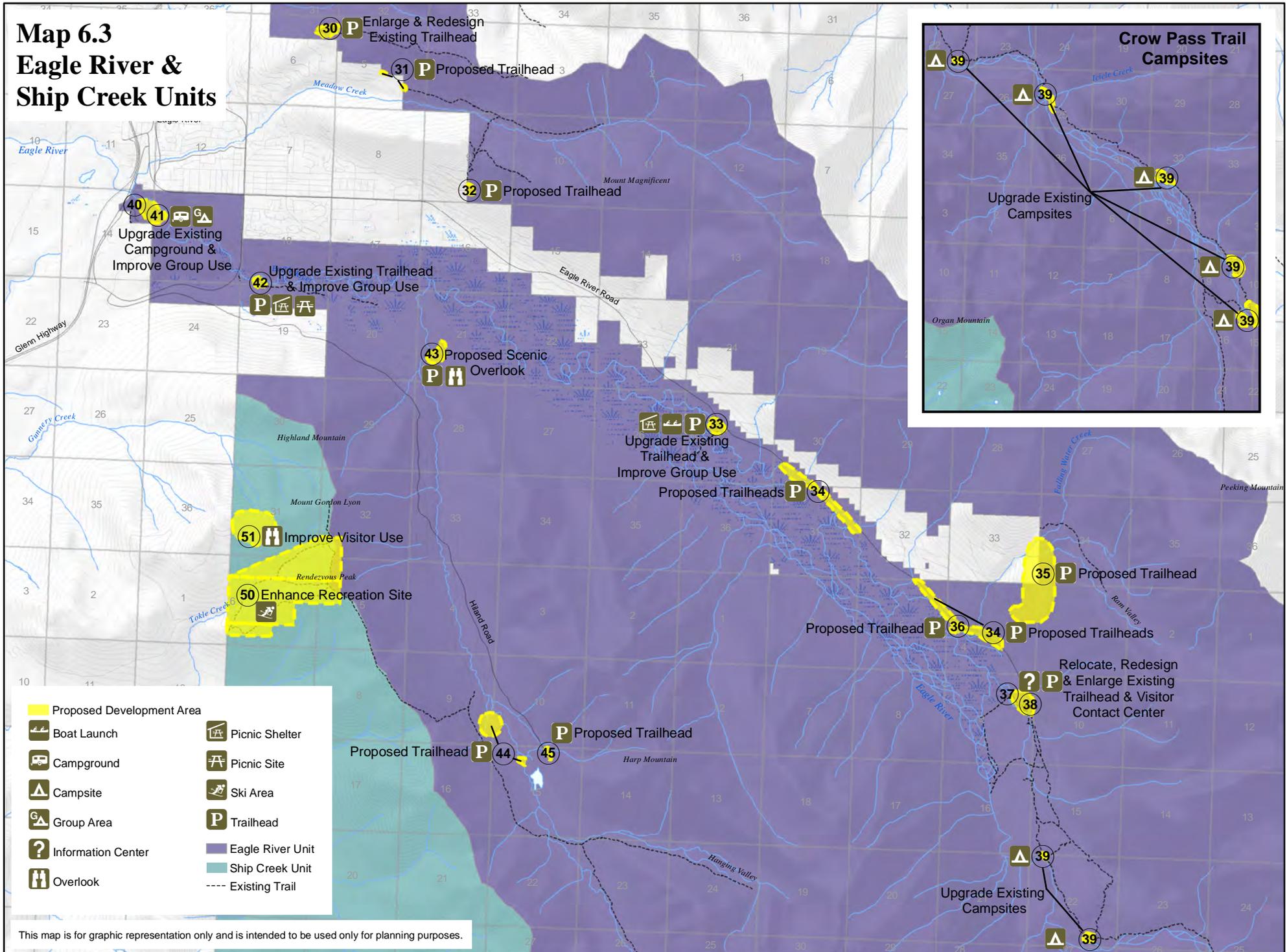
Below you will find a listing of the new facilities or new upgrades to existing facilities.

ID	Map #	Proposal	Scope/Management Objective	Justification
30	6.3	Mt. Baldy Trailhead	Work with the Municipality of Anchorage (MOA) to either acquire or manage the site. Redesign to accommodate additional use, include latrines and a trailhead kiosk and upgrade as needed.	Mt. Baldy is a very popular destination for those seeking access to alpine terrain and good views of Eagle River, Knik Arm and the distant mountains across the inlet. The MOA acquired land to provide legal trail access to the park and Mt. Baldy.
31	6.3	Meadow Creek Trailhead	Work to resolve access issues and develop a small parking area.	The area provides access to the Meadow Creek drainage and surrounding alpine areas that are popular for hiking and skiing.
32	6.3	Mile Hi Trailhead	Develop a small parking area with a trailhead kiosk inside the park boundary to serve the Mile Hi Saddle and Mt. Magnificent trails. Upgrade as needed.	This trailhead would provide access to the Mile Hi Saddle, Mount Magnificent, Mount Significant, and the Meadow Creek drainage. Access to these areas is very limited and there is great public desire to recreate in them.
33	6.3	North Fork Eagle River Trailhead/River Access	Pave and upgrade parking lot and add picnic shelters in view of the river. Enhance area interpretation and river access. After evaluating the feasibility, consider accommodating camping opportunities at this site.	The site provides year-round access to the Eagle River Greenbelt and the north stem of Eagle River. Since the river has changed its course at this site, the river access to launch boats and the site itself is not desirable and is consequently underutilized.
34	6.3	Eagle River Road	Look for opportunities as development and road upgrades occur to enhance access to the park by accommodating some pullouts, trailheads and trails in the area. Work and coordinate efforts with ADOT/PF.	The road currently offers opportunities for wildlife viewing and provides access to the Eagle River Greenbelt. With increased residential development, the sections of the undeveloped roadway will become more unique and valuable. Establishing a trailhead along the road to provide legal access to Ram Valley is of particular importance.

ID	Map #	Proposal	Scope/Management Objective	Justification
35	6.3	Ram Valley Trailhead	The access plan has identified several options to acquire access to the area. Monitor residential development, subdivision plats, and road upgrades and look for opportunities to site a parking area and trailhead to serve the valley. A separate site planning process will be needed to determine the size and type of facilities needed depending on the area secured for access.	Ram Valley is an important alpine valley and park destination that can only legally be accessed via difficult and lengthy routes from the Eagle River Road or the Mount Magnificent and Mount Significant ridgelines. The public has consistently identified acquiring access to this area as a high priority.
36	6.3	Falling Water Creek Trailhead	Develop a small parking lot trailhead with a trailhead kiosk.	No access facilities currently exist at this site. The site provides scenic views and good wildlife viewing.
37	6.3	Eagle River Nature Center	Redesign, rebuild and possibly relocate the ERNC to be a more functional and efficient space for educational programs and visitor services. Increase and redesign the parking lot to accommodate school groups and the heavy traffic the center receives.	The ERNC provides outdoor educational and interpretive programs, visitor information, camping and access to a variety of trails. It is a heavily used site that currently occupies a building that was once the Paradise Haven Lodge. While this building has served its purpose over the years, it was never designed to be an educational facility. Additionally, the building itself is in need of major repairs. A master site development plan was completed for the site but funding the upgrades has proven to be problematic.
38	6.3	Eagle River & Iditarod Trail Trailhead	Construct a medium trailhead area with a trailhead kiosk and trailhead signs leading toward the trails which begin here.	The site is already a trailhead for the Iditarod Trail. It will also serve as trailhead for a nature trail and canoe portage to Eagle River Water Trail.
39	6.3	Crow Pass Trail Backcountry Campsites (Rapids Camp, Echo Bend, Heritage Falls, Twin Falls, Thunder Gorge, Raven Gorge, Surprise Creek)	Include fire pits and enhance campsites as needed to meet the demand.	These campsites are popular and will need some minimal upgrades, such as sanitation facilities, to reduce resource impacts and better serve visitor use at some sites.
40	6.3	Eagle River Campground	Add animal-resistant food storage and cooking areas.	Food storage areas would help reduce wildlife-human interactions.
41	6.3	Eagle River Group Campground	Upgrade to include fire pits, latrines, group use picnic pavilions and a kids' bike course.	This is a large, poorly designed area of the campground meant to facilitate group use and camping and day use activities. The area needs additional amenities to maximize its potential and become a community asset.

ID	Map #	Proposal	Scope/Management Objective	Justification
42	6.3	Eagle River Greenbelt Trailhead/River Access	Enhance the area with amenities to facilitate winter use. Redesign the picnic area and add pavilions.	The trailhead provides access to Eagle River and the Greenbelt. The area is popular for non-motorized boating, walking, fishing, and sightseeing.
43	6.3	South Fork Waterfalls Overlook	Develop a day use viewing area near the scenic falls. Parking and access to the area will be determined through a future site planning process. The viewing facility should be situated and designed to minimize human-wildlife conflicts and protect sensitive areas.	This site has long been recommended in numerous plans for the development of a day use area. The lower falls, known as Barbara Falls, are close to 60 feet in height and are known as one of the most remarkable natural features in the area. Area development can help disperse use and provide new recreational opportunities.
44	6.3	South Fork Valley/ Headwaters Trailhead- (additional options in the area to existing TH)	Look for opportunities to establish additional trailheads in the South Fork Valley to disperse use and relieve pressure from the existing South Fork Trailhead. A site planning process should be used to determine the appropriate size and facilities needed for subsequent trailheads in this valley.	The area experiences heavy use for hiking, berry picking, climbing, skiing, and snowshoeing. It is also used as the jumping off point for more remote areas of the park.
45	6.3	Harp Mountain Trailhead	Develop a small parking lot trailhead with trailhead kiosk.	No access facilities currently exist at this site. The public has consistently identified acquiring access to this area as a high priority.

Map 6.3 Eagle River & Ship Creek Units



Ship Creek Planning Unit

Setting

The Ship Creek planning unit encompasses an area of 47,000 acres. The unit has two main valleys surrounded by peaks and ridges of the South Fork of Eagle River and the Hillside and Turnagain Arm areas. The valleys contain numerous small lakes and tributaries. The entire unit has been zoned as “watershed” by the Municipality of Anchorage. It is one of the primary sources of water for the Anchorage military and civilian population. The main fork of Ship Creek begins at Ship Lake in the extreme southwestern corner of the unit and flows northwest for 13 miles where it exits the park and eventually flows into Cook Inlet. The North Fork headwaters are in the extreme eastern corner of the unit and flow northwesterly for 9.5 miles where they join the main creek.

There are numerous areas of muskeg and bog along the course of the creek, particularly at elevations below 1,500 feet. Tundra and rock predominate in two-thirds of the drainage. In the remaining third, and in close proximity to the main creek bed, are heavy stands of cottonwood, birch and white and black spruce. Farther from the wet areas, there is an abundance of alder, dwarf birch and dwarf mountain hemlock. Many varieties of edible berries and wild flowers complete the transition from forest to tundra. Wildlife is plentiful in the Ship Creek drainage, due in part to the limited number of visitors. There are frequent sightings of black and grizzly bear, moose, wolves, and Dall sheep. Two natural mineral licks located near the headwaters of the North Fork of Ship Creek are important for wildlife. Dolly Varden and rainbow trout are present in small numbers in Ship Creek.

Of historical significance is a branch of the Iditarod National Historic Trail which passes through this unit (see Chapter 3 for more information) and is one of three segments of the Iditarod Trail which traverse Chugach State Park. Also in this unit is the Nike Site Summit, an abandoned Nike Hercules Missile site, located on the eastern edge of Fort Richardson adjacent to Chugach State Park. The site was listed in the National Register of Historic Places as an outstanding example of a Cold War-era missile installation.

The only existing vehicle access to this unit is the Arctic Valley Road which is owned, controlled and maintained by the military. The Anchorage Ski Club has a contract with the military for road maintenance and helps pay for snowplowing in the winter. Arctic Valley ski area, located at the end of this road, is operated by the Anchorage Ski Club, Inc. Downhill skiing is available at this site and it also serves as a year-round access point to the alpine terrain within the park. The unit receives moderate use by hikers and backpackers in the summer, berry pickers and hunters in the fall, and cross-country and downhill skiers in the winter. Access to and activities within the Ship Creek drainage will continue to be carefully controlled to protect its value as watershed lands.

Management Intent

Protect the unit's wilderness values and water quality. Manage for low intensity recreational use. Work with the military to maintain access to Arctic Valley. Work with the Anchorage Ski Club, Inc. to enhance recreational opportunities at their lease site.

Special Management Considerations

Watershed Management

Ship Creek is another major water source for residents of Anchorage. Activity within the watershed is monitored by both the Anchorage Water and Wastewater Utility (AWWU) and Chugach Park rangers to insure the purity of the Anchorage water supply. AWWU, the utility that manages the drinking water supply for the MOA, has a cooperative agreement¹⁵ with the park to facilitate management and protection of the important watersheds within the park that provide the bulk of the MOA water supply. Any development or other activities within the park shall be conducted in accordance with this cooperative agreement. Through this agreement, the park is charged with monitoring public use and identifying and correcting problems that could lead to a lowering of water quality, using Best Management Practices in the construction, operation and maintenance of trails and other recreational facilities to avoid or minimize contamination of the public water supply, and consulting with AWWU staff prior to authorizing or conducting significant land use activities in the watersheds.

Existing Management Areas

The Ship Creek unit lies almost completely within the zone designated wilderness. There are no private lands within the unit. Hunting is not allowed in the Arctic Valley ski area but is currently allowed in the remainder of the unit for black bear, bull moose, hare, grouse, ptarmigan and waterfowl and a permit is required for the harvest of brown bear, moose, Dall sheep and goat¹⁶. Trapping is currently allowed within the unit.

Access

Improve vehicular parking along Arctic Valley Road and pedestrian access to and through the area with appropriate signing and interpretation, to the extent that watershed protection and wilderness classification allow. There should be an agreement for recreational uses of military lands adjacent to the park. Currently, a military recreation access permit and the subsequent checking in/out of an automated system are required to use military lands for access or recreation. Arctic Valley Road is currently only open daily from 6AM to 10PM and is subject to closure by order of the Base Commander without warning.

¹⁵ See Anchorage Water and Wastewater Utility and Chugach State Park Cooperative Agreement, Management and Protection of Chugach State Park Public Watersheds and the information in Chapter 5.

¹⁶ Consult the latest version of the hunting regulations for details.

Anchorage Ski Club Lease Site (ADL 32018 and Permit)

This area is operated by the Anchorage Ski Club, Inc. through a 55-year lease from the State that expires in the year 2022. The 320 acre lease site and 277 acre permit area includes a ski lodge, lifts and associated downhill skiing facilities, as well as; a trailhead, picnic shelters, toilets, a kiosk and a tube park and coffee shop. The lease for this area has been in effect prior to the establishment of Chugach State Park and has been allowed to continue within the park until its expiration. Since the legislature, in forming Chugach State Park, withdrew state lands within the boundary from the public domain,¹⁷ the lease, once it expires, must be converted to another form of authorization such as a concessions contract that allows for services and facilities of this nature within a park unit. Special purpose sites¹⁸ preclude activities that are usually allowed on public domain lands such as leasing and mineral entry.

¹⁷ Article 8, Section 8 of the Alaska Constitution allows for leasing on public domain lands.

¹⁸ Article 8, Section 7 of the Alaska Constitution provides for legislatively designated areas to be withdrawn from the public domain for specific purposes.

Existing Facilities

Below you will find a list of the existing park facilities within this unit and the basic amenities available at each of them.

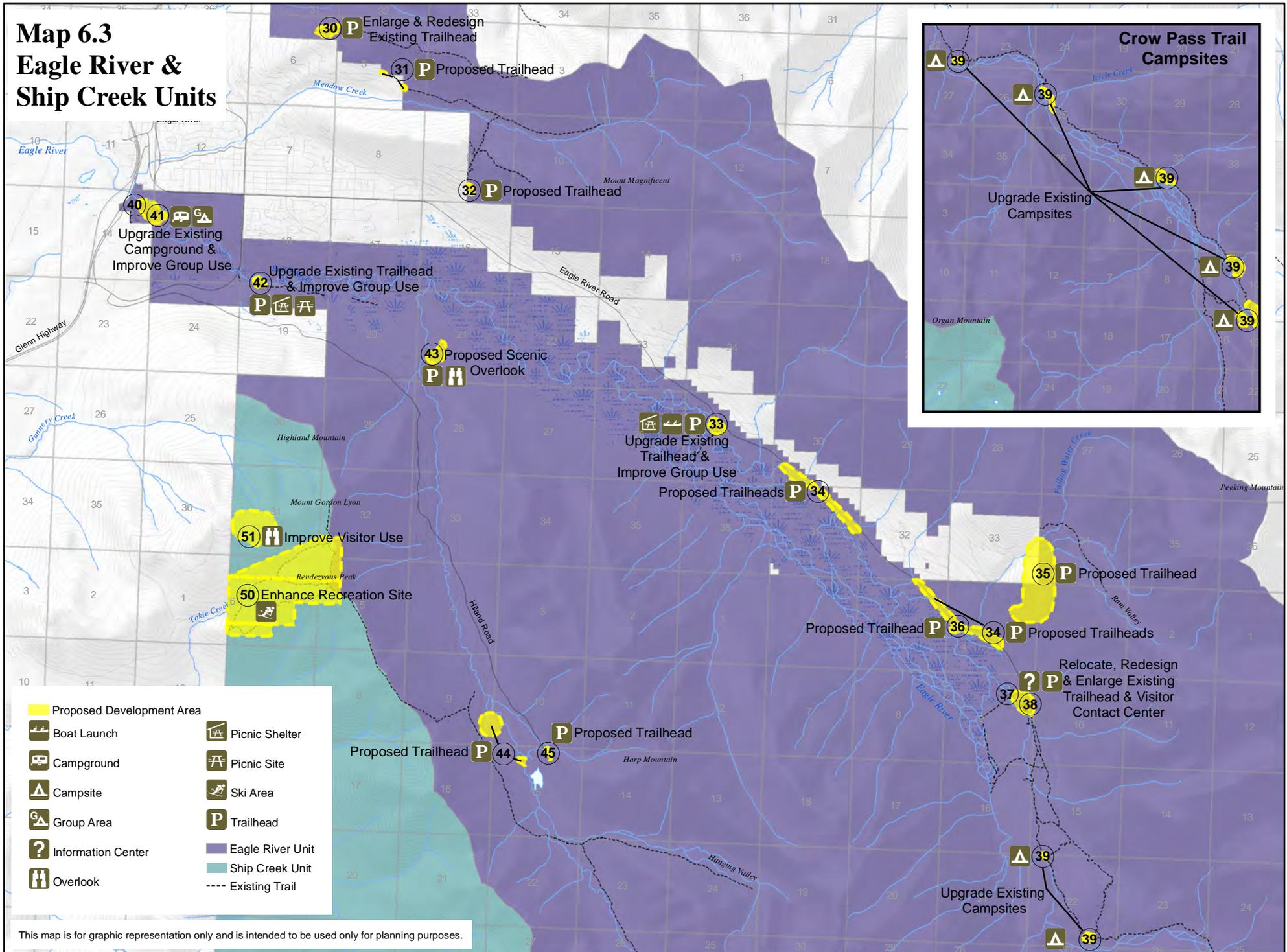
Facility	Campsite(s)	Picnic Table(s)/ Shelter(s)	Latrine(s)	Boat Access	Public Use Cabin(s)/ Yurt	Interpretive Display(s)/ Trailhead Kiosk/ Bulletin Board	Water (i.e. drinking fountains, hand pumps, toilets)	Fire ring/Grill(s)	Ranger Office/ Maintenance Yard	Visitor Contact Center	Scenic Overlook	Trailhead/ Parking Lot	Historic Feature	Fishing Access	Residential Cabin	Fee Station/Booth	Other (e.g. ballfield, playground, dump station)
Arctic Valley Ski Area/Trailhead		X	X			X						X				X	X

Facility Recommendations

Below you will find a listing of the new facilities or new upgrades to existing facilities.

ID	Map #	Proposal	Scope/Management Objective	Justification
50	6.3	Anchorage Ski Club Lease Site	Once the area has been converted to a concessions contract, upgrade the area to enhance recreational opportunities. A separate site planning process may likely be needed to evaluate the potential uses of the site.	This property is currently under lease until the year 2022 and the Anchorage Ski Club is responsible for the facilities in place until that time. Any facility enhancements or upgrades shall be made in keeping with park standards and in consultation with park staff. Once the lease expires, a planning process will be needed to address how the area can best be used.
51	6.3	Nike Site	Secure access to the site and work with non-profit group to expand recreation and visitor use to at a minimum provide parking and area interpretation.	The historic site is located on military property surrounded on three sides by Chugach State Park. The site would provide a great overlook and alpine access. A local non-profit group is working with the military to preserve the site and open the area for public tours.

Map 6.3 Eagle River & Ship Creek Units



Hillside Planning Unit

Setting

The Hillside planning unit consists of approximately 28,600 acres located in the southwest corner of the park. The area has several mountain peaks over 5,000 feet high and contains the drainages of Campbell and Rabbit creeks, Rabbit Lake, Long Lake, the Williwaw Lakes and numerous others. The primary vegetation in this unit is willow, alder, and white spruce, with some cottonwood and mountain hemlock stands in scattered areas. Soil is generally well drained but thin, with no significantly large areas of bog. Above the tree line typical alpine tundra, including edible berries and wild flowers are found.

The mountains of this unit have high aesthetic value for Anchorage residents and visitors. Some of the popular peaks providing the scenic backdrop to Anchorage and destinations for hikers are Near Point, Wolverine Peak, Flattop, O'Malley Peak, The Ramp, and McHugh Peak. Because of its proximity, visibility and accessibility with respect to Anchorage, the area experiences heavy use. It is used by climbers, hikers, bikers, berry pickers, photographers, sightseers, skiers, snowmachiners, and others. Visitors gain access to the park's western boundary via numerous access areas including Rabbit Valley, Glen Alps, Upper Huffman, Upper O'Malley, Prospect Heights, and Basher Drive Trailheads.

Despite the intensity of recreational use and nearby development pressures, wildlife viewing, and scenic viewing are popular activities in the Hillside unit. Moose may be found wintering in the lower portions of the North, Middle and South Forks of Campbell Creek and in the Rabbit Creek area. Sheep and bear are also sighted in this area. Small game is found off the beaten path. There are grayling in the lakes at the headwaters of the North Fork of Campbell Creek and Rabbit Creek. Dolly Varden can be found in Rabbit Creek and Rabbit Lake.

Basher Drive is the northernmost trailhead in the Hillside unit offering access to the Far North Bicentennial Park and Chugach State Park trail system. This trailhead receives moderate use, mostly by residents of East Anchorage that have few options to access the park. The Prospect Heights Trailhead allows for immediate access to the hillside trail system and Far North Bicentennial Park. This area receives considerable use in both summer and winter and frequently exceeds the parking lot capacity. The Upper O'Malley access point experiences moderate use year-round, mainly by local residents, and provides parking for approximately six cars. Access to the park from this point requires a climb in all directions since the surrounding terrain is moderately steep.

In spite of the difficulty in driving the steep and narrow road to the Glen Alps Trailhead, it receives the heaviest year-round use, frequently exceeding the capacity of parking spaces available. Once at this access point, a variety of different recreational opportunities are available. The Upper Huffman trailhead is located several hundred feet lower and approximately one mile northwest of Glen Alps. A trail leads southeast from the parking lot up the South Fork of Campbell Creek to a snowmachine area in the Campbell Creek

watershed. When snow cover is sufficient to protect the vegetation, the area is opened for snowmachine use. Rabbit Creek is the southernmost access and is via poorly maintained private roads which cross private and park lands. There are presently no park facilities at this access point, and the road is impassable during much of the year. In spite of the poor road, there is considerable traditional use of Rabbit Creek Valley.

Management Intent

Manage this unit for high recreational use and development. Protect the Campbell Creek watershed and the multi-use characteristics of the unit's trail system.

Special Management Considerations

Watershed Management

The drainages of the Chugach State Park Hillside unit, primarily the Campbell Creek drainages, are an important watershed area supplying underground aquifers which in turn are a major source of water for Anchorage, via deep wells located outside the park. Activity within the watershed is monitored by both the Anchorage Water and Wastewater Utility (AWWU) and Chugach Park rangers to insure the purity of the Anchorage water supply. AWWU, the utility that manages the drinking water supply for the MOA, has a cooperative agreement¹⁹ with the park to facilitate management and protection of the important watersheds within the park that provide the bulk of the MOA water supply. Any development or other activities within the park shall be conducted in accordance with this cooperative agreement. Through this agreement, the park is charged with monitoring public use and identifying and correcting problems that could lead to a lowering of water quality, using Best Management Practices in the construction, operation and maintenance of trails and other recreational facilities to avoid or minimize contamination of the public water supply, and consulting with AWWU staff prior to authorizing or conducting significant land use activities in the watersheds.

Existing Management Areas

Snowmachines are permitted in the unit with adequate snow cover in the south fork of Campbell Creek and on a designated corridor from the Upper Huffman Trailhead²⁰. Hunting is currently closed except for moose by permit only²¹. The Anchorage management area is closed to trapping.

¹⁹ See Anchorage Water and Wastewater Utility and Chugach State Park Cooperative Agreement, Management and Protection of Chugach State Park Public Watersheds and the description in Chapter 5.

²⁰ See 11AAC 20.040

²¹ Consult the latest version of the hunting regulations for details.

Glen Alps Trailhead

The Glen Alps Trailhead receives the heaviest year-round use of any other trailhead in the unit due to the variety of opportunities available from this single location including access to Flattop, the Anchorage Overlook, and the Hillside trail system. The trailhead was recently upgraded with the addition of a caretaker facility, paving of the parking lot and additional satellite lot established. While crowding and use exceeding the capacity of the site continue to be a problem, additional parking lot expansion and enhancing of recreational opportunities at this trailhead is not the preferred solution. Instead opportunities for taking the pressure off of this area by dispersing use and creating new opportunities in other portions of the unit will be a priority and the policy this plan advocates. See the facility recommendation section for more specific proposals.

Park Access

Residential development and public access along the western edge of this unit and the close proximity of metropolitan Anchorage place pressures upon the watershed, trails, vegetation, wildlife and facilities of this unit. Resource protection is important but must be balanced with the unit's focus and intent to accommodate high density use and offer diverse recreational opportunities. Securing and developing more access to the park with adequate facilities to sustain and disperse the use will remain a priority in this unit.

During the plan development process, the public identified certain areas where access could be enhanced within the unit. The Campbell Canyon area within the legislatively designated boundary of the park and adjacent to the Stuckagain neighborhood is one such area. In 2008, The Conservation Fund purchased the approximately 150 acre private parcel with the intention of transferring it to the park to provide additional access. The transfer was completed during the plan process. Future development of this area will be important to distribute use and provide access to underserved East Anchorage residents. Neighborhood concerns should be addressed through the site design process. Additionally, access to the Upper Potter Valley and the McHugh Peak Complex area from this unit is very limited yet the recreational opportunities in these areas abound. Development of a large regional trailhead in the area should be a major priority for the park as a means of dispersing use. The Chugach Access Plan²² contains more detailed information related to enhancing access to these sites and others along the boundary of the park.

²² The Chugach Access Plan, issued for public review in 2010, guides access development and distribution.

Existing Facilities

Below you will find a list of the existing park facilities within this unit and the basic amenities available at each of them.

Facility	Campsite(s)	Picnic Table(s)/ Shelter(s)	Latrine(s)	Boat Access	Public Use Cabin(s)/ Yurt	Interpretive Display(s)/ Trailhead Kiosk/ Bulletin Board	Water (i.e. drinking fountains, hand pumps, toilets)	Fire ring/Grill(s)	Ranger Office/ Maintenance Yard	Visitor Contact Center	Scenic Overlook	Trailhead/ Parking Lot	Historic Feature	Fishing Access	Residential Cabin	Fee Station/Booth	Other (e.g. ballfield, playground, dump station)
Basher Drive Trailhead												X					
Prospect Heights Trailhead		X	X			X						X				X	
Upper O'Malley Trailhead						X						X					
Upper Huffman Trailhead		X	X			X		X				X				X	
Glen Alps Trailhead			X			X			X	X	X	X			X	X	
Rabbit Valley Trailhead												X					

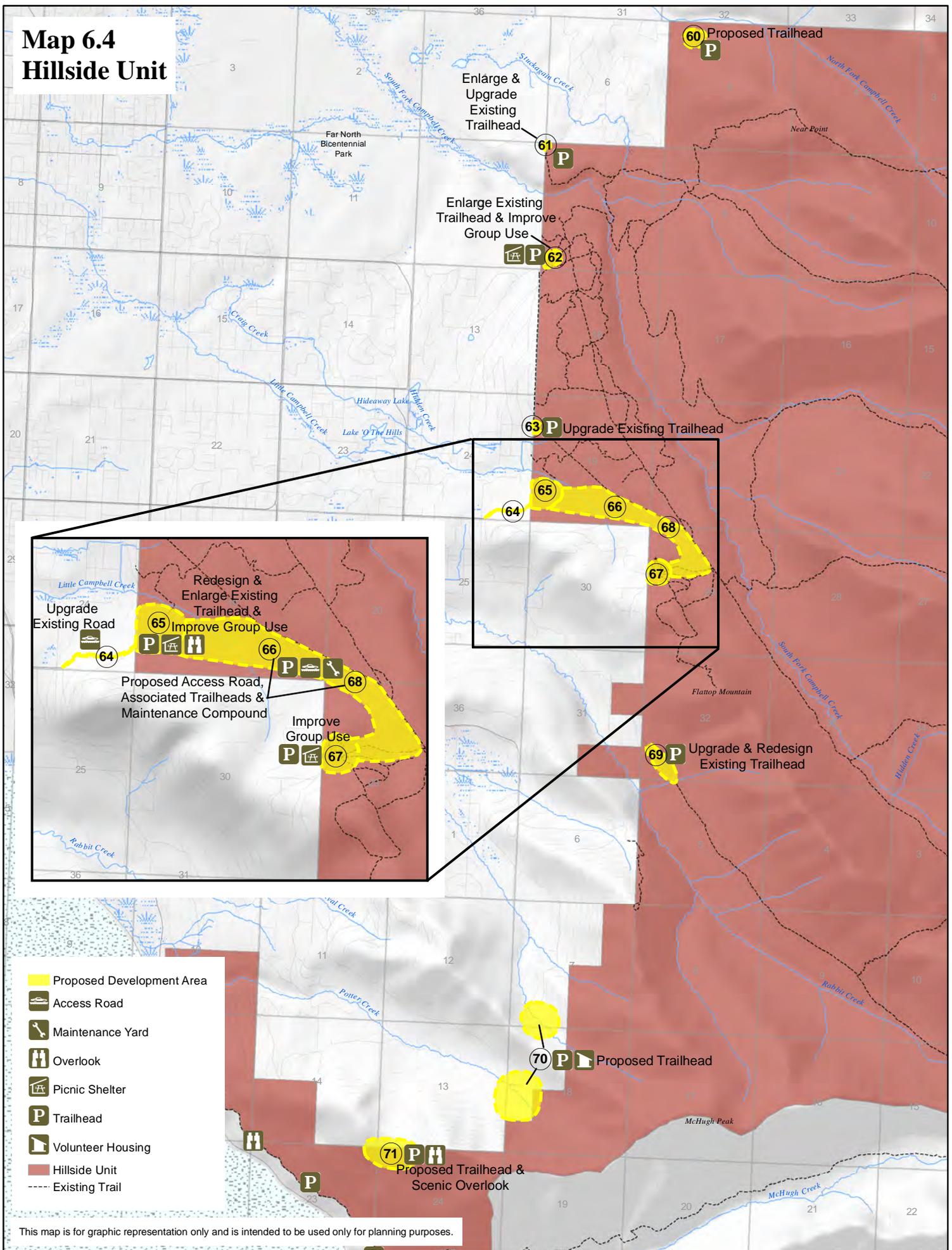
Facility Recommendations

Below you will find a listing of the new facilities or new upgrades to existing facilities.

ID	Map #	Proposal	Scope/Management Objective	Justification
60	6.4	Near Point Access	Establish a small trailhead that could be upgraded in size if warranted by use. The trailhead should include parking, trailhead kiosk, latrine, fee station and perhaps a caretaker facility if needed.	There are few options for nearby, legal vehicular access to the park in this area. This trailhead would provide access to the North Fork of the Campbell Creek drainage, Near Point and surrounding alpine terrain.
61	6.4	Basher Drive Trailhead	Expand and redesign to better accommodate parking adding complementary facilities as appropriate perhaps including a fee station, latrines and trailhead kiosk.	This site experiences moderate year-round use by hikers and skiers wanting access to area trails. Currently the site has no amenities. A redesign will make the trailhead more desirable and will help distribute park use.
62	6.4	Prospect Heights Trailhead	Expand parking as needed. Add winter shelter and picnic pavilions.	This is a popular trailhead that often experiences use beyond its capacity and could benefit from some expansion and additional amenities to facilitate winter use.
63	6.4	Upper O'Malley Trailhead	Redesign trailhead to accommodate more vehicles and/or evaluate the desirability of moving the trailhead further into the park away from residential neighbors.	Conservative expansion of parking in this area could help disperse use and alleviate pressure on other hillside trailheads.
64	6.4	Sultana Drive	Upgrade road as needed to facilitate the connection (described below) with the Glen Alps Trailhead.	Sultana Drive is a park-owned right-of-way acquired using LWCF funding to provide access to the Upper Huffman Trailhead and park beyond. The road can only be upgraded to facilitate recreational use in order to be in compliance with LWCF program terms.
65	6.4	Upper Huffman Trailhead	Redesign and enlarge parking area to better accommodate winter use and future connection through the park to the Glen Alps Trailhead. Include winter shelter, picnic pavilions, trailhead kiosks, and scenic overlook enhancements.	This large parking area is currently the only designated snowmachine access point into the Campbell Creek drainage but is poorly designed and does not accommodate vehicles with trailers well. The site has the potential to help spread use and take the pressure off other popular trailheads with some upgrades. Improvements should be made with the long term vision of connecting this trailhead with Glen Alps (see below) via a road through the park.

ID	Map #	Proposal	Scope/Management Objective	Justification
66	6.4	Glen Alps Access Road & Associated Parking Areas	A road approximately 2½ miles long between the Upper Huffman and Glen Alps trailheads. Various smaller parking areas, and at least one that can accommodate vehicles with trailers, should be established along this road to disperse use.	This proposed road would bypass the steepest and most hazardous portions of the existing road (Toilsome) to Glen Alps and would help disperse use in one of the most popular areas of the park. Establishing this road would also help eliminate neighborhood impacts and jurisdictional concerns that exist now with the parking that occurs outside of the park boundary.
67	6.4	Glen Alps Day Use Trailhead	After the Glen Alps access road is completed, establish a group use area and picnic pavilions at this trailhead.	This trailhead experiences heavy use and has been expanded to its capacity. Once the access road and associated parking areas are established (see above proposal) this area could be repurposed to compliment facilities and serve as overflow parking.
68	6.4	Glen Alps Maintenance Compound	Develop a maintenance compound in the vicinity of the Glen Alps Trailhead to service the area once the connector access road (see above) is developed. The maintenance area should include secured storage for tools and equipment.	When the access road and associated parking areas are in place, there will be greater service needs in the area and more equipment storage will be necessary in the vicinity of the connected facilities. Currently there is minimal storage available and equipment must be mobilized from afar to service the area.
69	6.4	Rabbit Valley Trailhead	Upgrade and redesign trailhead to improve parking. Add latrines, fee station, trailhead kiosk, and caretaker facility if needed.	This trailhead has a long history of traditional use and has become more popular as park users are crowded out of neighboring trailheads. There is currently inadequate parking and facilities to support the use and as a result park resources are being compromised.
70	6.4	McHugh Peak Trailhead	Develop a trailhead to serve the McHugh Peak Complex to include a large parking area, latrines, trailhead kiosk, and caretaker facilities.	The McHugh Peak Complex is currently an underserved portion of the park that could benefit from trailhead development that would help distribute park use. There is currently no road access to the park boundary in this area but people have traditionally accessed the park using informal trails in the vicinity. This trailhead could provide access to alpine areas in the park with views of Turnagain Arm and the Kenai Mountains.
71	6.4	Potter Creek Valley Trailhead	Establish a medium trailhead to include parking, scenic overlook, trailhead kiosk, latrines and fee station.	There is limited access to this part of Potter Valley but the area has been traditionally used by those seeking views of Turnagain Arm and the Kenai Mountains.

Map 6.4 Hillside Unit



This map is for graphic representation only and is intended to be used only for planning purposes.

Turnagain Arm Planning Unit

Setting

This southernmost unit contains approximately 98,000 acres including approximately 15,000 acres of tidelands and waters of Turnagain Arm. Near the southern boundary are the communities of Rainbow, Indian, Bird Creek, and Girdwood. Near Girdwood and just outside the park's boundary is the State's largest downhill ski area, Alyeska Resort. Chugach National Forest and Municipal lands form the eastern boundary of this unit. Annual precipitation is more abundant and winter temperatures are higher along Turnagain Arm than other areas of the park due primarily to the flow of marine air from the Gulf of Alaska and Prince William Sound. Winds are typically strong and persistent as they flow down Turnagain Arm toward Anchorage. Nearly all creeks flow in a southerly direction beginning and ending within the planning unit. Beginning with the most westerly drainage, they include Potter, McHugh, Rainbow, Falls, Indian, Bird, and California creeks.

Mountain hemlock, Sitka spruce, Alaska paper birch, and cottonwood are the dominant tree species along the Arm. This unit's Sitka spruce forests are normally identified with the moderate temperatures and high rainfall of Southeast Alaska. Vegetation patterns and species throughout the rest of the unit are typical of the remainder of the park. Bird and Penguin creeks are spawning streams and ADF&G currently stocks Bird Creek, which causes the area to receive very heavy seasonal sport fishing pressure during the summer. In the summer, occasional beluga whales, harbor seals, and sea lions enter Turnagain Arm in search of eulachon, a small marine fish related to smelt, also called candlefish or hooligan. Large mammals in this unit include mountain goat, Dall sheep, brown and black bear, and moose. There are frequent sightings of Dall sheep along the Seward Highway between late spring and fall where south-facing slopes and meadows provide good habitat. A natural mineral lick, important for wildlife, occurs in the vicinity of Windy Corner.

The Seward Highway, a State Scenic Highway, a National Scenic Byway, and an All-American Highway, is part of a transportation corridor which extends for 25 miles through the southern part of this unit. In May of 2006, the Seward Highway was designated as a Safety Corridor. The Alaska Railroad right-of-way also shares this corridor. There are numerous vehicle turnouts along the highway where motorists gain access to the park and are treated to spectacular views of the mountains, inlet, and the famous bore tide. Several locations along the highway are designated as official access points to the park. These include Potter, McHugh Creek, Rainbow, Falls Creek, Indian Creek, Bird Ridge, Bird Creek, and Bird Point.

The historic Turnagain Arm Trail runs along the north shore of Turnagain Arm from the Potter Creek access to Windy Corner and is a popular spring hiking opportunity in the park. McHugh Creek is one of the most highly developed trailheads in the unit and being a mere 20 minute drive from Anchorage, it consequently receives heavy use during the summer and winter months. Beluga Point is one of many rocky points along Turnagain Arm that affords

views of beluga whales as they make their way up and down the inlet chasing eulachon and salmon. The Rainbow access is a popular entry for the Turnagain Arm Trail and a trail leading to Rainbow Peak. Windy Corner provides grand vistas and one of the best Dall sheep viewing opportunities in Alaska and as a result, a significant traffic hazard exists in this area. Falls Creek access is little more than a wide spot in the highway where a few cars can pull off. There is a trail up Falls Creek leading to one of many waterfalls along this creek. The Upper Indian Creek access serves as an access point for hikers and cross-country skiers using Powerline Pass between Indian and Glen Alps or the Iditarod Trail between Indian and Ship Creek near Arctic Valley ski area. The Indian Creek Trailhead located on the south side of the highway provides access to the Indian to Girdwood Pathway and a baseball field.

The Bird Creek-Bird Ridge area has a variety of parking lots on the north side of the road to accommodate the sport fishery and access to Bird Ridge. Bird Creek Campground is located on the south side of the highway and has overnight camping and picnicking facilities and provides access to the Indian to Girdwood Pathway. This is the only camping area in the Turnagain Arm planning unit and it receives heavy use throughout the summer. Across the Seward Highway to the north of the Bird Creek Campground is a 2,200 acre wooded area owned by the Municipality of Anchorage and managed under an agreement as part of Chugach State Park. Presently, there is an extensive system of old roads and trails in this area which now serve as off-road vehicle trails in the summer and snowmachine trails in the winter.

Bird Point is a popular, developed site that provides scenic viewing opportunities of the Arm and the Chugach Mountains for residents and tourists alike. Bird Point also provides access to the Indian to Girdwood National Recreation Pathway, which is a 13 mile scenic path that parallels the Seward Highway along the north shore of Turnagain Arm. The separated pathway connects the communities of Indian, Bird, and Girdwood and is popular for biking, walking, running, and sightseeing. The California Creek headwaters are located within the park and are accessed via a trail easement across MOA land that leads from a trailhead off Crow Creek Road in Girdwood.

Management Intent

Manage the unit to protect the scenic properties of the transportation corridor and encourage developments along and within the corridor which will provide for optimum enjoyment, access to the park, outdoor recreation opportunities and safety of all visitors along this route. Coordinate recreational development with highway upgrades when possible. Preserve and interpret the historic, archaeological, and natural values of Turnagain Arm including the route of the Iditarod Trail.

Special Management Considerations

Existing Management Areas

Snowmachines are presently allowed in the Bird Creek drainage south of the Quartz Creek Ford with adequate snow cover²³. Summer off-road vehicles are allowed on the logging trails in the Bird Creek Valley²⁴. Trapping is currently allowed subject to Fish and Game regulations. Hunting is allowed for black bear, bull moose, hare, grouse, ptarmigan, and waterfowl and a permit is required for the harvest of brown bear, moose, Dall sheep, and goat²⁵. The cliffs adjacent to the McHugh Creek Trailhead from the Seward Highway upstream along McHugh Creek including the cliffs around the pond are closed to climbing and rappelling.

Seward Highway Reconstruction & Scenic Corridor Enhancements

Due to the existence of a major road and rail transportation corridor through this unit, many experience the park only visually. Recognizing the scenic, natural, historical, and recreational values of the corridor, the Seward Highway has been designated a State Scenic Highway, a National Scenic Byway, and All-American Road. Any upgrades or alterations within this transportation corridor shall complement and enhance visual experiences along this route. The corridor should be accessible and safely useable by bicyclists and pedestrians. Bicycle use along the corridor is increasing. This is due to the increased interest in bicycling in general, the bike trail construction programs of the State Department of Transportation and the Municipality of Anchorage, and the scenic attractions along Turnagain Arm.

Hazards

Avalanches and rock slides occur at various times along the Seward Highway and along the drainages near the highway. There are numerous places along the highway where motorists use inadequate pull-outs and road shoulders for parking. This is a dangerous practice and should be discouraged by proper redesign and minimal signing of the most dangerous areas. The exposed mud flats along Turnagain Arm are also dangerous due to extreme and rapid tidal variations and the possibility of becoming mired in the mud and drowning with the incoming tide. The rapidly advancing tide can also trap unwary hikers along the Arm who venture too far out on rocks or spits of land and become cut off from the land. Use of these areas should be discouraged and education efforts should be pursued. Turnagain Arm can also present a hostile environment for small boats which are easily capsized by rough water. The bore tide is a popular but potentially dangerous tidal phenomenon that occurs in Turnagain Arm.

²³ See 11 AAC 20.040

²⁴ See 11 AAC 20.015

²⁵ Consult the latest version of the hunting regulations for details.

Existing Facilities

Below you will find a list of the existing park facilities within this unit and the basic amenities available at each of them.

Facility	Campsite(s)	Picnic Table(s)/ Shelter(s)	Latrine(s)	Boat Access	Public Use Cabin(s)/ Yurt	Interpretive Display(s)/ Trailhead Kiosk/ Bulletin Board	Water (i.e. drinking fountains, hand pumps)	Fire ring/Grill(s)	Ranger Office/ Maintenance Yard	Visitor Contact Center	Scenic Overlook	Trailhead/ Parking Lot	Historic Feature	Fishing Access	Residential Cabin	Fee Station/Booth	Other (e.g. ballfield, playground, dump station)
Potter Section House SHS			x			x	x		x	x		x	x		x	x	
Potter Maintenance Yard			x				x		x								
Potter Creek Trailhead			x			x					x	x				x	
McHugh Creek Trailhead		x	x			x	x	x			x	x				x	
Beluga Point Viewpoint						x					x	x					
Rainbow Trailhead												x					
Windy Corner Trailhead												x					
Falls Creek Trailhead												x					
Indian Valley Trailhead						x						x					
Indian Maintenance Compound							x		x								
Indian Creek Trailhead & Ballfield			x			x					x	x					x
Indian to Girdwood National Recreation Pathway		x	x			x					x		x				
Bird Ridge Trailhead						x						x					x
Bird Creek Access & Trailhead			x			x						x		x			x
Bird Creek Overflow Parking & Campground	x		x			x	x	x				x		x			x
Bird Creek Campground & Trailhead	x	x	x				x	x				x					x
Bird Creek Valley Trailhead						x						x					
Little Penguin Creek Rest Stop												x					

Facility	Campsite(s)	Picnic Table(s)/ Shelter(s)	Latrine(s)	Boat Access	Public Use Cabin(s)/ Yurt	Interpretive Display(s)/ Trailhead Kiosk/ Bulletin Board	Water (i.e. drinking fountains, hand pumps)	Fire ring/Grill(s)	Ranger Office/ Maintenance Yard	Visitor Contact Center	Scenic Overlook	Trailhead/ Parking Lot	Historic Feature	Fishing Access	Residential Cabin	Fee Station/Booth	Other (e.g. ballfield, playground, dump station)
Bird Point Viewpoint		X	X			X					X	X			X	X	
Seward Highway Bird-to-Girdwood Access & Turnouts						X						X					

Facility Recommendations

Below you will find a listing of the new facilities or new upgrades to existing facilities.

ID	Map #	Proposal	Scope/Management Objective	Justification
80	6.5	Chugach State Park Headquarters & Ranger Station	Build a headquarters facility and ranger station near the existing Potter Section House to include offices, living quarters, information/interpretive facilities, toilets, and operational storage.	The Seward Highway upgrades may cause the ROW to move from its current alignment providing the park with new disturbed lands suitable for this type of development. The current park headquarters is situated in the historic Potter Section House. The current facility was never meant to be used for this purpose and as a result does not meet park needs as well as it could.
81	6.5	Potter Section House SHS	If the above proposal is constructed, return the section house to museum status interpreting the history of the Alaska Railroad.	The Potter Section House is on the National Register of Historic Places and was once operated as a museum. It currently houses the park headquarters offices but should be returned to museum status when a new headquarters building is established.
82	6.5	Potter Maintenance Yard	Upgrade area to include covered parking, trailer storage, and vehicle turnaround area.	This site serves much of the park's maintenance needs but needs some minimal upgrades to better protect equipment and facilitate turning vehicles with trailers around.
83	6.5	Potter to Indian Trail Access Sites & Facilities	Establish access points that complement the Potter to Indian trail extension once it is built. All facilities will likely be built on the mountainside portion of the road with periodic access to the water and scenic overlooks. A separate site planning process will be needed.	A coastal trail that runs along the coastline of Knik and Turnagain arms has long been recommended for development. The Seward Highway and the Indian to Girdwood Pathway has become an important bike route for tourists and residents linking the Turnagain Arm communities. Once the remainder of the continuous, separated, paved pathway is completed between Potter Marsh and Indian, a number of access points and amenities will be needed along the scenic corridor for improved visitor enjoyment. Portions of the trail in this area may coincide with portions of the Iditarod Trail.
84	6.5	Picnic Rock Scenic Overlook	Create a scenic overlook at this location and a large parking area with a safe clear zone between the highway and the parking area.	This is currently a place of interest along the Seward Highway that gets some use but has no facilities. As highway improvements occur in the area, preserving the rock for a scenic overlook and adding amenities that allow for safer access and use would enhance the visitor experience.

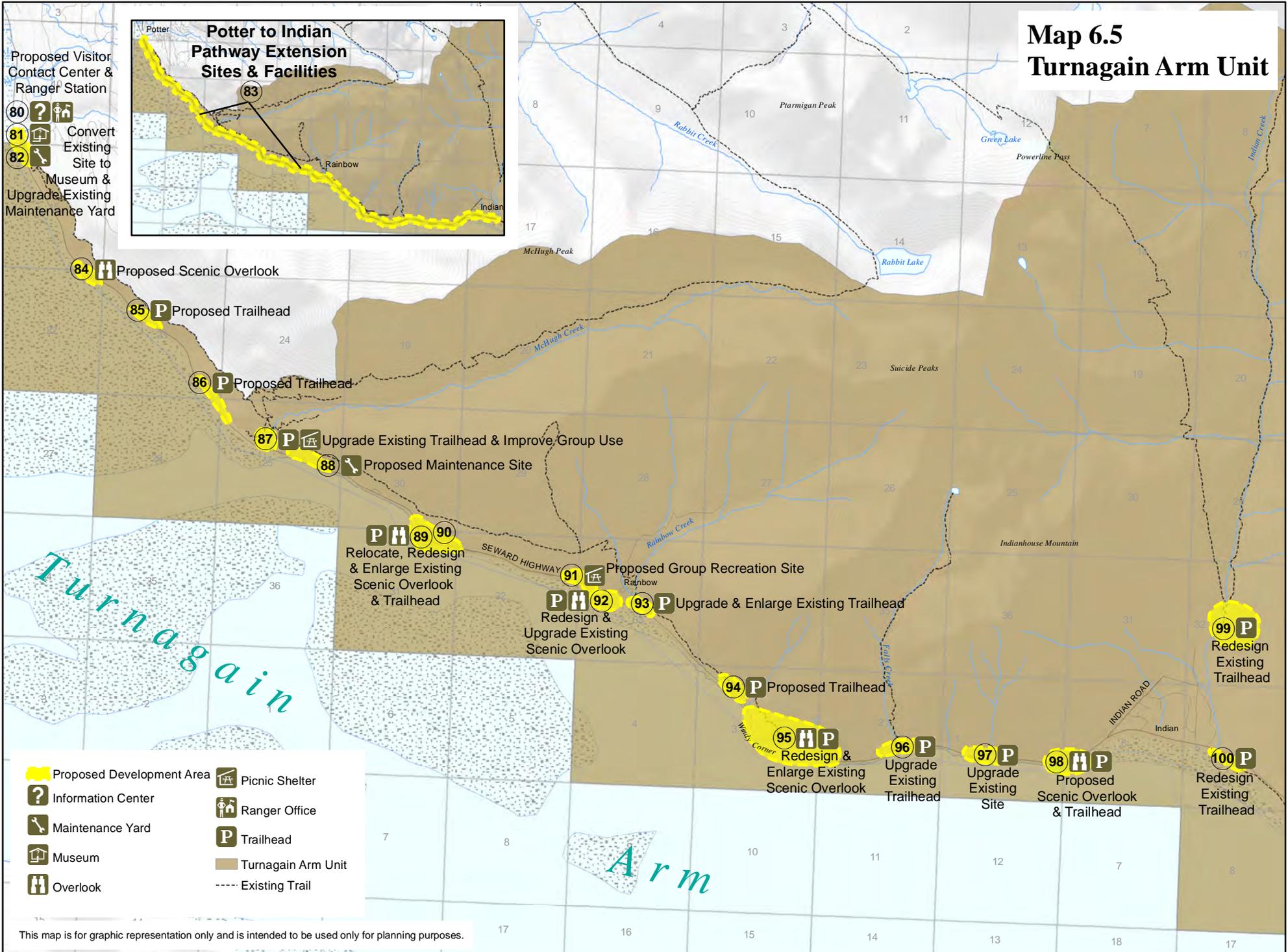
ID	Map #	Proposal	Scope/Management Objective	Justification
85	6.5	Grunge Wall Pullout	Construct a pullout in the area to provide safe parking off of the Seward Highway.	The area is popular for rock climbing and bouldering. Currently, climbers park along the shoulder of the highway which poses safety concerns.
86	6.5	Crack-in-the-Woods	Construct a pullout in the area to provide safe parking off of the Seward Highway.	The area is popular for rock climbing and bouldering. Currently, climbers park along the shoulder of the highway which poses safety concerns.
87	6.5	McHugh Creek Trailhead	Create additional group use area with picnic pavilions and associated facilities. Upgrade the trailhead as needed to enhance the visitor experience and to meet visitor demand. Work with ADOT/PF to provide a highway turning lane to the site to facilitate access.	The site currently has limited group use amenities and receives heavy use. The potential exists at the site to provide additional group use areas needed for large gatherings that are very limited in this section of the park.
88	6.5	McHugh Quarry	Establish a maintenance site at this location with limited access and screened from the highway.	This is a potential materials site for the Seward Highway upgrades. Should this site be used it can serve as a storage area for rock or other highway debris.
89	6.5	Beluga Point Scenic Overlook (Waterside)	Establish a scenic viewing area with ADA accessible beach access, trail access, and a large parking area with a safe clear zone between the highway and the parking area.	Beluga Point is a major focal point along the highway but the site has minimal amenities currently available to the public. Upgrades would enhance the visitor experience by providing landscape viewing that is accessible to users of all abilities while providing a safer pedestrian-highway interface. Beluga Point also provides a unique opportunity to interpret local archaeology.
90	6.5	Beluga Point Trailhead (Mountainside)	This is the existing trailhead that should be eliminated when the above facility is created since it will incorporate trail access.	Once highway upgrades are made and the above area is established, this trailhead will no longer be needed.
91	6.5	Rainbow Point Group Recreation Site	Create a group use site in the quarry area that is established for highway upgrades. Include latrines, pavilions and parking.	As safety upgrades are made to the Seward Highway material is needed and usually found locally by creating a quarry using park resources. A group use site can be sited in this quarry site. The size and shape of this site would be dependent on the reclamation area.
92	6.5	Rainbow Point Scenic Overlook	Redesign parking. Upgrade turnaround to include a viewing area and a buffer between the highway and the parking area. Coordinate development with highway upgrades.	This is a popular pullout that should be enhanced in conjunction with the highway upgrades, capacity upgrades, or highway preservation projects to better facilitate visitor use and enjoyment.

ID	Map #	Proposal	Scope/Management Objective	Justification
93	6.5	Rainbow Trailhead	Upgrade and expand the existing parking area. Add a latrine and trailhead kiosk. Coordinate development with highway upgrades.	The current lot is small and can be difficult to access safely from the busy Seward Highway. As the highway gets upgraded there are opportunities to expand and provide a safer pull in/out.
94	6.5	Seward Highway Mile 107 Pullout-Mountainside	Depending on the highway upgrades and reclamation area at this site, the area could be suitable to relocate the current Windy Corner mountainside trailhead and trail from the sheep habitat area.	This area may be used as a materials site for highway upgrades to the Windy Corner area. If so, the reclamation area could serve to provide trailhead parking to the current trail.
95	6.5	Windy Corner Sheep Viewing Area	Upgrade existing pullout to create a safe sheep viewing area. Expand parking to a large lot with a buffer between the highway and the parking area. Include interpretive displays and spotting scopes. Coordinate development with highway upgrades. Consult with ADF&G and the Board of Game to establish management practices that may lead to enhanced wildlife viewing.	This area of the highway poses safety concerns as visitors try to view the sheep that congregate in the area. Parking is limited and there is significant traffic congestion when animals are present.
96	6.5	Falls Creek Trailhead	Upgrade trailhead parking to separate from the highway and more safely serve the trail.	This is a very popular trail and parking at this site is limited and can be difficult to access from the busy highway.
97	6.5	The Grotto	Upgrade the current small pullout to include a buffer between the highway and the parking area on the mountainside of the road.	This is a popular pullout that can be difficult to access from the busy highway. Upgrades will help make the area safer.
98	6.5	Indian Point Scenic Overlook & Trailhead	Create a scenic overlook on the point with a large parking area with a buffer between the highway and the parking lot and ADA accessible beach access. Coordinate development with highway upgrades.	This overlook would provide great views of Turnagain Arm, the Kenai Mountains and Chugach Mountains including Bird Ridge and Bird Point.
99	6.5	Indian Valley Trailhead	Redesign the parking area to better facilitate parking and park use. Add latrines.	This trailhead receives moderate use and is poorly designed promoting haphazard parking. With minimal upgrades and some redesigning, the area could be made more desirable.

ID	Map #	Proposal	Scope/Management Objective	Justification
100	6.5	Indian Creek Trailhead & Ballfield	Relocate trailhead outside of the road and railroad right-of-way to better accommodate access to the trail. Coordinate development with any highway upgrades.	Currently the park leases railroad property in this area that includes a ball field and parking area that provides access to the trail. There is enough of a land base at this location however, to better accommodate parking and park access outside of the rights-of-way on park land.
101	6.6	Bird Creek Campground & Trailhead	Redesign and expand as much as Seward Highway upgrades will allow. Add food storage provisions, group area and possibly a public use cabin or overnight shelters. Should a campground be established in Bird Valley (see below), consider converting this area to a day use site.	This is a very popular campground for residents and tourists alike. Some redesign plans have been approved and completed because of the planned highway upgrades in the area. Future planning will be needed if the campground is converted to a day use site or if the continued highway realignment and upgrade further removes useable land from the campground.
102	6.6	Bird Valley Public Use Cabin	Add one public use cabin in the Bird Valley to the current system for year-round use.	Public use cabins are popular and enhance the recreational experience. This area gets year-round use and the valley could be well served with the addition of a cabin.
103	6.6	Bird Valley Campground & Day Use Area	Establish a campground in the valley that can better facilitate RVs and can be available for year-round use near the valley trail system. Include a group area, tent & RV sites, pull-through parking spots for vehicles towing trailers, picnic pavilions and day use area. A caretaker facility may be developed if necessary. Developments should be situated and designed to minimize human-wildlife conflicts and protect sensitive areas.	This area has long been recommended for the development of a campground and a day use area. By providing a campground and day use area in proximity to the valley's existing extensive, year-round trail system, the park is more accessible to a wider range of users. Group areas are popular and very limited in this part of the park. These facilities would provide new recreational opportunities, in addition to becoming a community asset.
104	6.6	Bird Creek Valley Trailhead	Redesign and perhaps relocate existing trailhead to better accommodate vehicles towing trailers. Include latrines and trailhead kiosk.	This popular site provides year-round access to the Bird Creek Valley via the extensive trail system. The parking area is poorly designed and needs upgrading to make it more useable and to better accommodate vehicles with trailers.
105	6.6	Bird Flats Scenic Overlook & Trailhead	This area has the potential as an overlook that incorporates two of the existing pullouts at mile 99 and would provide access to the trail.	As road upgrades occur in this area, opportunities to enhance this segment of the highway may be provided. Adding an overlook and parking amenities would allow for improved trail access and visitor enjoyment.

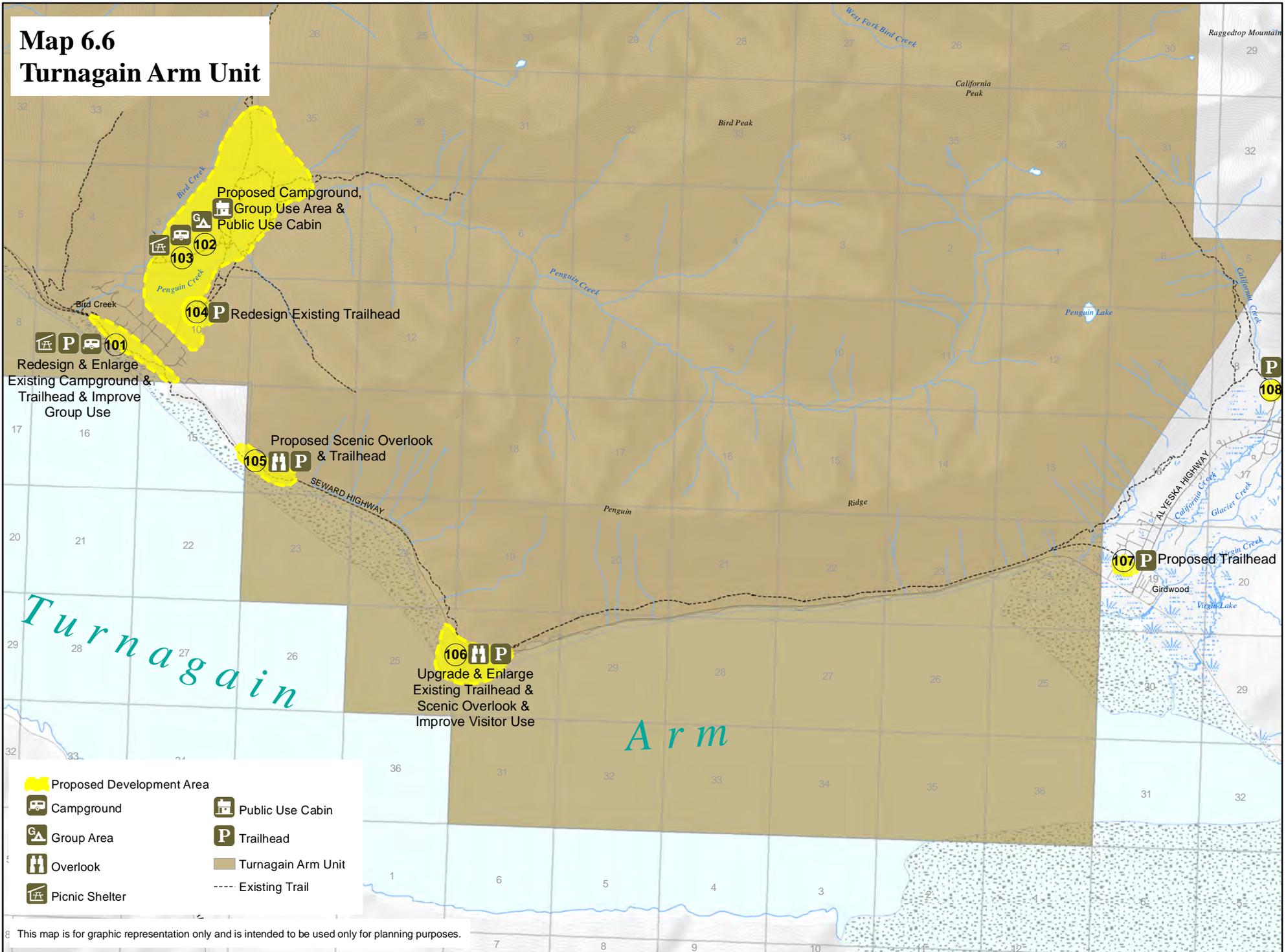
ID	Map #	Proposal	Scope/Management Objective	Justification
106	6.6	Bird Point Viewpoint & Trailhead	Enhance viewpoint with the addition of interpretive trail system and safe access across the railroad tracks. Develop trailhead if needed. The site is approximately one mile outside the park boundary. It would be desirable to work with existing landowners to maintain connectivity and preserve access to the park.	The existing viewpoint gets high use by those wanting views of the inlet and Kenai Mountains and by those wanting to view wildlife. There is a land base at the site available for parking expansion if needed. A small interpretive trail system that allows for safe access to the beach would enhance the visitor experience and finish the last phase of this viewpoint upgrade. This location provides access to Penguin Ridge, a popular hiking route within the park.
107	6.6	Bird to Gird, Girdwood Trailhead	Establish a small parking lot at the trail's start to provide trail access from the south.	There is currently no parking near the Bird to Gird trail for visitors wanting to access the trail from the south. There is some state, MOA, and/or ARRC land in the area that could be suitable for this purpose.
108	6.6	California Creek Trailhead	Work with the Girdwood trail committee to reestablish a trailhead.	This trailhead would provide access to the park via ABE's trail.

Map 6.5 Turnagain Arm Unit



This map is for graphic representation only and is intended to be used only for planning purposes.

Map 6.6 Turnagain Arm Unit



This map is for graphic representation only and is intended to be used only for planning purposes.

Chapter 7: Implementation

The guidelines in this plan are intended to be flexible so as to respond to changing conditions, shifts in demand and use patterns, and availability of funds. Regular review is essential throughout the implementation of this plan to continuously analyze public needs and insure that those needs are being met.

Phasing

Implementation of management recommendations should begin immediately and proceed as opportunities allow. Facility recommendations are intended to be implemented in phases over the next several years as staffing and funding allow. Specific phased project steps for the facility recommendations are not listed in this document since its focus is to provide broad policy direction and this type of phasing is more appropriate for the more detailed site planning process. Throughout the planning process however, the public consistently identified certain areas of interest that need to be considered as implementation priorities.

The Glen Alps Trailhead is burgeoning with use since there are many park opportunities available at a single access point. A remedy to this situation should be considered a major implementation priority because of the affect it has on a great number of people and the resources of the park. Additional convenient access to the park in general is a priority but particularly in the Ram Valley and Harp Mountain areas of the Eagle River Unit, and the Stuckagain Heights and McHugh Peak Complex areas within the Hillside Unit. Upgrading and maintaining the existing trail network and providing additional recreational opportunities shall always be a priority.

Site Planning

Prior to the construction of major facilities proposed in this plan, site planning will need to occur. During the site planning process, a detailed site analysis will be performed which may suggest minor revisions of the numbers and locations of the facilities recommended in this plan.

Plan Review, Modifications

Due to changes in use patterns and demands, funding realities as well as changes in data associated with specific plan recommendations, adjustments to the plan will have to be made over time. If proposed adjustments are a major departure from the plan's intent, the Director may determine the need to initiate a public review process.

This plan reflects the best efforts of the Division of Parks and Outdoor Recreation to analyze the resources of the park and to provide recreational/interpretive opportunities that do not significantly compromise the park's cultural and natural resources or character.

The planned outlook for the document is 20 years, with the realization that intermediate reviews and modifications may be warranted and are appropriate. The Director may initiate a review at any time and it is strongly recommended that the plan be reviewed via a public process at least every 10 years.

The following procedure will be used for plan deviations and modifications:

1. Periodic Review. The Division will coordinate periodic review of the Management Plan when the Director considers it necessary and so directs. The decision to review the Management Plan may be triggered by:

- written public or agency requests for review;
- policy changes within the Division of Parks and Outdoor Recreation;
- availability of new data;
- availability of new technology; or
- changing social or economic conditions that place different demands on the park or affect the Division's capabilities.

The Management Plan review will include meetings, as appropriate, with the local advisory board, interested groups, the general public, affected agencies, the area superintendent and other Division of Parks and Outdoor Recreation personnel. The periodic review will lead to one of the following actions:

- no modification of the plan;
- modification of the plan; or the
- granting of a special exception.

2. Modification of the Plan. Plan modifications are of two types:

- Minor changes – These are changes which, if accomplished, would not cause a deviation from the original intent of the Management Plan. Minor changes may be necessary for clarification, consistency, or to facilitate plan implementation. Minor changes do not require public review but should be coordinated with the area superintendent and appropriate staff.
- Major changes – These are changes which, if accomplished, would cause a deviation from the original intent of the Management Plan. Major changes require public notice and review prior to adoption.

3. Granting of a Special Exception. Exceptions to the provisions of the Management Plan may be made without modification of the plan. Special exceptions shall occur only when compliance with the plan is excessively difficult or impractical, and an alternative procedure can be implemented which adheres to the purposes and spirit of the plan.

The Division of Parks and Outdoor Recreation may make a special exception in the implementation of the plan through the following procedure.

- A. The person or agency requesting the special exception shall prepare a written finding which specifies:
 - the nature of the special exception requested,
 - the extenuating conditions which require a special exception,
 - the alternative course of action to be followed, and
 - how the intent of the plan will be met by the alternative.
- B. The Director will review the findings and issue a determination. If warranted by the degree of controversy or the potential impact, the Director will hold a public hearing before reaching a decision.
- C. The decision of the Director may be appealed to the Commissioner of the Department of Natural Resources, whose decision will be final.

Appendix A: Glossary

AAC. Alaska Administrative Code that includes state regulations.

ACC. Alaska Conservation Corps.

Access. A way or means of approach. Includes transportation, trail, easements, rights of way, and public use sites.

ADA (Americans with Disabilities Act of 1990). A federal law prohibiting discrimination against people with disabilities. Requires public entities and public accommodations to provide accessible accommodations for people with disabilities.

ADEC. The State of Alaska Department of Environmental Conservation.

ADF&G. The State of Alaska Department of Fish and Game.

ADOT/PF. The State of Alaska Department of Transportation and Public Facilities.

Airboat. A shallow draft boat driven by an airplane propeller and steered by a rudder (11 AAC 20.990).

Aircraft. Any motorized device under 12,500 pounds gross weight that is used or intended for flight or movement of people or goods in the air (11 AAC 12.340 and 11 AAC 20.990).

All-Terrain Vehicle (ATV). See Off-Road Vehicle.

Anadromous Stream. Those water bodies identified in the atlas or catalog of waters important for spawning, rearing or migration of anadromous fishes as provided by the Department of Fish and Game under 5 AAC 95.011.

ANCSA. The Alaska Native Claims Settlement Act.

ANILCA. Alaska National Interest Lands Conservation Act (1980).

ARRC. The Alaska Railroad Corporation.

AS. Alaska Statutes.

Assembly. The gathering or meeting of a group of people for a common purpose (11 AAC 12.340 and 11 AAC 18.200).

AWWU. Anchorage Water and Wastewater Utility.

BLM. The United States Bureau of Land Management.

Boat or Vessel. A device that is used or designed to be used for the movement of people or goods in or on the water, whether manually or mechanically propelled, but does not include personal floatation devices or other floats such as inner tubes, air mattresses, or surf boards (11 AAC 20.990).

Camp and Camping. To use a vehicle, tent, or shelter, or to arrange bedding, or both, with the intent to stay overnight in a park (11 AAC 12.340).

Campground. An area developed and maintained by the division which contains one or more campsites (11 AAC 12.340).

CAP. Chugach Access Plan.

Citizen Advisory Board. Appointed by the Director of the Alaska Division of Parks and Outdoor Recreation, this board assists park staff with management and development issues.

Commercial Activity. The sale of, delivery of, or soliciting to provide, goods, wares, edibles, or services in exchange for valuable consideration through barter, trade, or other commercial means; a service offered in conjunction with another sale of goods, wares, edibles, or services, which service involves the use of state park land or water, is a commercial activity whether or not it is incidental to, advertised with, or specifically offered in the original sale; all guide, outfitter, and transportation services are commercial activities if any payment or valuable consideration through barter, trade, cash, or other commercial means is required, expected, or received beyond the normal and customary equally shared costs for food and fuel for any portion of the stay in the park (11 AAC 12.340).

Commissioner. The Commissioner of the Department of Natural Resources.

Conservation Easement. A restriction placed on a piece of property to protect its associated resources. As defined in statute, a conservation easement is: A nonpossessory interest of a holder in real property imposing limitations or affirmative obligations to retain or protect natural, scenic, or open space values of real property, ensure its availability for agricultural, forest, recreational, or open space use, protect natural resources, maintain or enhance air or water quality, or preserve the historical, architectural, archaeological, or cultural aspects of real property (AS 34.17.060).

CSP. Chugach State Park.

Developed Facility. Includes a building, boat ramp, campground, picnic area, rest area, visitor information center, swim beach, trailhead, parking area, and a developed ski area (11 AAC 12.340 and 11 AAC 20.990).

DMLW. The State of Alaska Department of Natural Resources, Division of Mining, Land and Water.

DNR or Department. The State of Alaska Department of Natural Resources.

DPOR or Division. The State of Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation.

Director. The Director of the Division of Parks and Outdoor Recreation, Department of Natural Resources, or the Director's authorized agent (11 AAC 12.340).

Easement. An interest in land owned by another, that entitles its holder to a specific limited use.

Eklutna Inc. The Eklutna Native Corporation, an ANCSA village corporation.

Firearm. Includes a pistol, rifle, shotgun, revolver, mechanical, gas or air-operated gun (11 AAC 12.340 and 11 AAC 20.990).

FNBP. The Municipality of Anchorage's Far North Bicentennial Park.

Guideline. A specific course of action that must be followed when a DPOR resource manager permits, leases, or otherwise authorizes use of state lands. Guidelines range from giving general guidance for decision-making or identifying factors that need to be considered, to setting detailed standards for on-the-ground decisions.

HLB. The Municipality of Anchorage's Heritage Land Bank.

ILMA. Interagency Land Management Agreement.

Latrine. Vault toilet or bathroom facility.

Legislative Designation. An action by the state legislature that sets aside a specific area for special management actions and ensures the area is kept in public ownership.

LWCF. Land and Water Conservation Fund. A federal program which provides monies and matching grants to federal, state, and local governments for the acquisition and/or development of land and water for public outdoor recreation use.

May. Same as "should", see Should.

MOA. The Municipality of Anchorage. The local government for the Anchorage Bowl and communities of Chugiak, Birchwood, Eagle River, Peters Creek, Rainbow, Indian, Bird, Girdwood, and Portage, and the village of Eklutna.

Motorized Vehicle. A motorized device for carrying persons or objects over land, water, or through the air, and includes automobiles, snowmachines, bicycles, off-road vehicles, boats, and aircraft (11 AAC 21.290).

MSB. The Matanuska-Susitna Borough.

NALA. The North Anchorage Land Agreement. An agreement between the State of Alaska, the Municipality of Anchorage, and Eklutna Inc. pursuant to the provisions of Section 1425 of the Alaska National Interest Lands Conservation Act (ANILCA).

National Register of Historic Places. The nationwide catalog of significant historic districts, sites, buildings, structures and objects established by the National Historic Preservation Act of 1966 and maintained by the U.S. Secretary of the Interior (11 AAC 16.900).

Off-Road Vehicle (ORV). A motorized vehicle designed or adapted for cross-country operation over irregular terrain, consisting of more than one drive wheel or track, having a gross vehicle weight less than 1,500 pounds or exerting less than eight pounds per square inch ground pressure, and that is 64 inches wide or less, and does not include snowmobiles (11 AAC 20.990). May also be referred to as: All-Terrain Vehicle (ATV).

Permit. A written authorization to engage in uses or activities that are otherwise prohibited or restricted (11 AAC 18.200).

Personal Watercraft. A vessel that is less than 16 feet in length, propelled by a water-jet pump or other machinery as its primary source of motor propulsion, and designed to be operated by a person sitting, standing, or kneeling on the vessel, rather than by a person sitting or standing inside it. (11 AAC 20.990).

ROW. Right-of-way. The legal right to cross the land of another.

RV. Recreational Vehicle, such as a motor home or camper.

SCORP. Statewide Comprehensive Outdoor Recreation Plan.

Shall. Same as “will”, see Will.

Shelter. A structure that provides cover or protection.

Should. States intent for a course of action or a set of conditions to be achieved. Guidelines modified by the word “should” state the plan’s intent and allow the manager to use discretion in deciding the specific means for best achieving the intent or whether particular circumstances justify deviations from the intended action or set of conditions.

Snowmobile (snowmachine). A self-propelled vehicle intended for off-road travel on snow, having a maximum width of 50 inches and a curb weight of not more than 1,000 pounds, driven by one or more tracks in contact with the snow, and steered by one or more skis in contact with the snow (11 AAC 20.990).

State. The State of Alaska.

Sustainable. Capable of being continued with minimal long-term effect on the environment and meets the needs of the present generation without compromising the ability of future generations to meet their needs.

Tethering. Fastening or restraining an animal so that it can range only within a set radius (11 AAC 20.990).

Traffic Control Device. Any physical barrier, including a boulder, ditch, berm, railing, fence, post, or gate (11 AAC 12.340).

Trailhead. The point at which a trail starts.

Universal Design. The design of products and environments to be usable by all people to the greatest extent possible, without adaptation or specialized design. A user-friendly approach to design in the living environment where people of any culture, age, size, weight, race, gender and ability can experience an environment that promotes their health, safety and welfare today and in the future.

USFS. The United States Forest Service.

Vehicle. A mechanical device for carrying persons or objects over land, water, or through the air, including automobiles, motorcycles, snowmobiles, bicycles, off-road vehicles, motorized boats, and aircraft. Vehicle does not include non-motorized sailboats, canoes, kayaks, rafts, sailboards, hang gliders, gliders, or parasails (11 AAC 12.340 and 11 AAC 20.990).

Vessel or Boat. A device that is used or designed to be used for the movement of people or goods in or on the water, whether manually or mechanically propelled, but does not include personal flotation devices or other floats such as inner tubes, air mattresses, or surf boards (11 AAC 20.990).

Weapon. Includes a bow and arrow, slingshot, crossbow, and firearm (11 AAC 12.340 and 11 AAC 20.990).

Will. Requires a course of action or a set of conditions to be achieved. A guideline modified by the word “will” must be followed by land managers and users. If such a guideline is not complied with, a written decision justifying the noncompliance is required.

Appendix B: Statutes & Regulations for Chugach State Park

Park Enabling Legislation

Sec. 41.21.120. Purpose of AS 41.21.120 – 41.21.125.

The purpose of AS 41.21.120 – 41.21.125 is to restrict state-owned land and water described in AS 41.21.121 to use as a state park. Under AS 38.05.300, state land, water, or land and water containing more than 640 acres may be closed to multiple purpose use only by act of the legislature. Because the area described in AS 41.21.121 exceeds 640 acres, AS 41.21.120 – 41.21.125 are intended to provide for the closing of the described land and water to multiple purpose use in conformity with AS 38.05.300 and its subsequent designation as a special purpose site in accordance with art. VIII, Sec. 7, of the Constitution of the State of Alaska. (§ 1 ch 112 SLA 1970)

Sec. 41.21.121. Chugach State Park established.

The presently state-owned land and water, and all that acquired in the future by the state, lying within the parcels described in this section are designated as the Chugach State Park. The park is established to protect and supply a satisfactory water supply for the use of the people, to provide recreational opportunities for the people by providing areas for specified uses and constructing the necessary facilities in those areas, to protect areas of unique and exceptional scenic value, to provide areas for the public display of local wildlife and to protect the existing wilderness characteristics of the easterly interior area. The eastern area of the park shall be operated as a wilderness area, the central area as a scenic area, and the periphery areas as recreational areas. The land and water designated as the Chugach State Park and reserved from all uses incompatible with its primary function as a state park is that within the following described parcels excluding valid entries:

- (1) Township 11 North, Range 3 West, Seward Meridian
Section 10: Lots 19 - 22, 24, 25, 28, 29, 33, 34, 37; and SE1/4, and E1/2 E1/2 SW1/4
Section 14: SW1/4
Sections 15, 22, 23, 25 and 26
Section 24: S1/2 and NE1/4;
- (2) Township 10 North, Range 2 West, Seward Meridian
Sections 1 - 4;
- (3) Township 11 North, Range 2 West, Seward Meridian
Sections 1 - 3
Section 4: Lots 1 - 4, and S1/2 N1/2, SE1/4, NW1/4 SW1/4, NE1/4 SW1/4 and SE1/4 SW1/4
Section 5: Lots 1, 2, 4, and S1/2 NE1/4, SW1/4 NW1/4, W1/2 SW1/4 and SE1/4 SW1/4
Section 7: E1/2 NE1/4 and SE1/4
Section 8: S1/2, NW1/4, and N1/2 NE1/4
Section 9: N1/2 N1/2, SW1/4, and S1/2 SE1/4
Section 10 - 17

*Appendix B: Statutes & Regulations
for Chugach State Park*

Section 18: Lot 4; and NE1/4, SE1/4, and E1/2 SW1/4

Section 19, except Lot 1 USS 4909

Section 20, except Lot 2 USS 4909

Sections 21 - 26

Section 27: E1/2, NW1/4, and SE1/4 SW1/4

Section 28: NE1/4 NE1/4, NW1/4, and E1/2 SW1/4

Sections 29 - 32

Section 33 except USS 2891 and USS 3384

Sections 34 - 36;

(4) Township 12 North, Range 2 West, Seward Meridian

Section 3: W1/2, SE1/4, and SW1/4 NE1/4

Sections 4, 5, and 7 - 10

Section 11: SW1/4, W1/2 NW1/4, SE1/4 NW1/4, and SW1/4 SE1/4

Section 13: SW1/4 NW1/4, SW1/4, and SW1/4 SE1/4

Sections 14 - 29

Section 31: S1/2 SE1/4 and SE1/4 NE1/4

Sections 32 - 36;

(5) Township 14 North, Range 2 West, Seward Meridian

Section 11: Lots 74 and 75

Section 13

Section 14: Lots 1 - 3, 13 - 16, 31, 32; and NE1/4 NE1/4 NE1/4, SE1/4 NE1/4 NE1/4, and SW1/4 NE1/4 NE1/4

Section 24: N1/2 N1/2;

(6) Township 10 North, Range 1 West, Seward Meridian

Sections 1 - 4

Section 5, except USS 3215 and Indian Valley Subdivision

Section 6, except USS 1868 and USS 3200

Section 8

Section 9, except USS 3680, USS 3382, and USS 1069

Section 10, except USS 3201, USS 3202, and USS 3382

Sections 11 - 14 and 23 - 25

USS 3680: Lot 1;

(7) Township 11 North, Range 1 West, Seward Meridian

Sections 1 - 30

Section 31, except USS 3200, USS 1868 and First Addition Indian Valley Subdivision

Sections 32 - 36;

(8) Township 12 North, Range 1 West, Seward Meridian, except lands covered by PLO 2029;

(9) Township 13 North, Range 1 West, Seward Meridian;

(10) Township 14 North, Range 1 West, Seward Meridian

Sections 1 - 4

Section 5: Lots 1 - 4; and S1/2 NE1/4, SE1/4 NW1/4, N1/2 SW1/4 NW1/4, SE1/4 SW1/4 NW1/4, E1/2 SW1/4 SW1/4 NW1/4, E1/2 SE1/4, and N1/2 NW1/4 SE1/4

Section 6: Lots 1 - 3

Section 9: E1/2

Sections 10 - 13

Section 14 N1/2, E1/2 SE1/4, and N1/2 SW1/4

Section 15: NE1/4, N1/2 NW1/4, SE1/4 NW1/4, and SW1/4 SW1/4

Section 16: SW1/4, S1/2 SE1/4, and NW1/4 SE1/4

Section 17: S1/2

Section 18: S1/2
Section 19: N1/2 N1/2
Section 20: N1/2 and SW1/4
Section 21, except NW1/4 SW1/4
Section 22, except E1/2 NE1/4
Section 23: SW1/4 NW1/4, SW1/4, SW1/4 SE1/4, SW1/4 NE1/4 SE1/4, and S1/2 SE1/4 SE1/4
Section 24: N1/2, E1/2 SE1/4, NW1/4 SE1/4, W1/2 SW1/4 SW1/4 SW1/4, SE1/4 SW1/4 SW1/4 SW1/4, and W1/2 NW1/4 SW1/4
Section 25: S1/2 except N1/2 NE1/4 NE1/4 SE1/4; and SW1/4 SW1/4 NE1/4, SW1/4 SE1/4 SW1/4 NE1/4, SW1/4 NW1/4 SW1/4 NE1/4, S1/2 NW1/4, NW1/4 NW1/4, SW1/4 NE1/4 NW1/4, S1/2 SE1/4 NE1/4 NW1/4, and SW1/4 NW1/4 NE1/4 NW1/4
Sections 26 - 36;
 (11) Township 15 North, Range 1 West, Seward Meridian
Section 1
Section 2: SE1/4
Section 11: E1/2, N1/2 SW1/4, E1/2 NW1/4, and SW1/4 NW1/4
Sections 12 and 13
Section 14: S1/2, NE1/4, E1/2 NW1/4, and SW1/4 NW1/4
Section 15: SE1/4 and S1/2 NE1/4
Sections 21 - 28
Section 29: E1/2, E1/2 SW1/4, and SW1/4 SW1/4
Section 31: E1/2 and E1/2 SW1/4
Section 32: N1/2, E1/2 SE1/4, and S1/2 SW1/4
Sections 33 - 36;
 (12) Township 16 North, Range 1 West, Seward Meridian
Section 25: NE1/4 SE1/4 SE1/4 and N1/2 SE1/4 SE1/4 SE1/4; and Tract B, Thunderbird Heights Subdivision, as shown on Plat 77-226, Anchorage Recording District, October 10, 1977;
 (13) Township 10 North, Range 1 East, Seward Meridian;
 (14) Township 11 North, Range 1 East, Seward Meridian;
 (15) Township 12 North, Range 1 East, Seward Meridian;
 (16) Township 13 North, Range 1 East, Seward Meridian;
 (17) Township 14 North, Range 1 East, Seward Meridian
Sections 1 - 29
Section 30: Lots 2, 4; and N1/2, N1/2 SE1/4, N1/2 SE1/4 SE1/4, N1/2 NE1/4 SW1/4, SW1/4 SW1/4 SW1/4 SE1/4, S1/2 SE1/4 SW1/4, S1/2 NW1/4 SE1/4 SW1/4, and NW1/4 NW1/4 SE1/4 SW1/4
Section 31: Lots 1, 2, 3, 5; and E1/2 W1/2, SE1/4, S1/2 NE1/4, S1/2 NW1/4 NE1/4, NW1/4 NW1/4 NE1/4, W1/2 NE1/4 NW1/4 NE1/4, SE1/4 NE1/4 NW1/4 NE1/4, SW1/4 NE1/4 NE1/4, and SW1/4 SE1/4 NE1/4 NE1/4
Section 32: N1/2 NE1/4, W1/2 SE1/4 NE1/4, NE1/4 SE1/4 NE1/4, SW1/4 SW1/4, S1/2 SE1/4 SW1/4, S1/2 NE1/4 SE1/4 SW1/4, W1/2 NW1/4 SE1/4 SW1/4, SE1/4 NW1/4 SE1/4 SW1/4, SW1/4 SW1/4 SE1/4, SW1/4 SE1/4 SW1/4 SE1/4, W1/2 SW1/4 NW1/4 SE1/4 SE1/4, S1/2 NW1/4 SW1/4, NW1/4 NW1/4 SW1/4, W1/2 NE1/4 NW1/4 SW1/4, SE1/4 NE1/4 NW1/4 SW1/4, SW1/4 SW1/4 NW1/4, SW1/4 NW1/4 SW1/4 NW1/4, and W1/2 SE1/4 SW1/4 NW1/4
Section 33: N1/2 NE1/4, NE1/4 NW1/4, and N1/2 NW1/4 NW1/4
Sections 34 - 36;
 (18) Township 15 North, Range 1 East, Seward Meridian;
 (19) Township 16 North, Range 1 East, Seward Meridian
Sections 26 - 29 and 31 - 36
Section 30: SW1/4 SW1/4;

*Appendix B: Statutes & Regulations
for Chugach State Park*

(20) Township 10 North, Range 2 East, Seward Meridian
Sections 4 - 6, except Chugach National Forest
Section 7
Section 8: W1/2, W1/2 NE1/4, NE1/4 NE1/4, and N1/2 SE1/4 NE1/4, except USS 3045
Section 9: N1/2
Section 18: N1/2 and SW1/4, except USS 3043 and USS 3042;
(21) Township 11 North, Range 2 East, Seward Meridian
Sections 1 - 7, 18, 19, 30, and 31, except Chugach National Forest;
(22) Township 12 North, Range 2 East, Seward Meridian;
(23) Township 13 North, Range 2 East, Seward Meridian;
(24) Township 14 North, Range 2 East, Seward Meridian;
(25) Township 15 North, Range 2 East, Seward Meridian
Sections 1 - 4, 6, 7, and 10 - 36
Section 9: E1/2;
(26) Township 16 North, Range 2 East, Seward Meridian
Section 1: S1/2 except USS 3527, USS 3914, USS 4789, and USS 3282
Sections 2 and 9 - 11: that portion south of the Glenn Highway
Sections 12 - 16
Section 17: that portion of the E1/2 south of the Glenn Highway
Section 19: S1/2
Section 20: NE1/4
Sections 21 - 28
Sections 30 and 31
Sections 33 - 36;
(27) Township 11 North, Range 3 East, except Chugach National Forest;
(28) Township 12 North, Range 3 East, Seward Meridian;
(29) Township 13 North, Range 3 East, Seward Meridian;
(30) Township 14 North, Range 3 East, Seward Meridian;
(31) Township 15 North, Range 3 East, Seward Meridian. (§ 1 ch 112 SLA 1970; am § 3 ch 39 SLA 1987)

Cross references.— For 1974 modifications to the boundaries of the park under AS 41.21.122, see the revisor's notes to that section. For provision authorizing land transfers and conveyances by the commissioner of natural resources affecting relocation or widening of the Seward Highway or relocation of facilities of the Alaska Railroad Corporation within the Chugach State Park, see sec. 6, ch.116, SLA 2000.

Sec. 41.21.122. Management responsibility.

The state land and water described in AS 41.21.121 as the Chugach State Park is assigned to the department for control, development and maintenance, except that the Department of Transportation and Public Facilities is responsible for the repair and maintenance of all existing public roads within the park. The control of highway access and roadside structures within the Chugach State Park is the responsibility of the department. The Department of Fish and Game shall cooperate with the department to provide for those purposes under AS 41.21.121 relevant to the duties of the Department of Fish and Game. If, in the exercise of management responsibility under this section, conflicts of land ownership, jurisdiction, or authority are unreconcilable or unmanageable other than at an unreasonable cost and expense to the state, the commissioner after public hearing in accordance with AS 44.62 may modify, subject to the approval of the legislature, the boundaries of the Chugach State Park not to exceed 20 percent of the total acreage described in AS 41.21.121. (§ 1 ch 112 SLA 1970)

Revisor's notes.— Under the authority of this section, the commissioner of natural resources held public hearings and modified the boundaries of the park. By adopting HCR 75 am in 1974, the legislature gave the required approval. The action removed the following land from the park: (1) land lying within the city limits of Girdwood in T10N, R2E, S.M.; (2) land in Sec. 10, T11N, R3W, S.M. south and west of and adjacent to the toe of the bluff that extends from Campbell Point southeasterly to Potter Creek that has been designated as the Potter Point State Game Refuge; (3) USS 3070 in Sec. 9, T16N, R2E, S.M., which is an isolated parcel of foreclosed land not contiguous to the park.

Sec. 41.21.123. Incompatible uses.

(a) The commissioner shall designate by regulation, adopted in accordance with AS 44.62 (Administrative Procedure Act), incompatible uses within the boundaries of the Chugach State Park in accordance with AS 41.21.120 - 41.21.125, and those incompatible uses designated are prohibited or restricted as provided by regulation.

(b) In adopting regulations under this section and in complying with AS 44.62.210, the commissioner shall provide the opportunity for the oral presentation of statements, arguments or contentions. (§ 1 ch 112 SLA 1970)

Sec. 41.21.125. Purchase authorized.

The commissioner may acquire, by purchase in the name of the state, title to or interest in real property lying within or abutting the boundaries of the Chugach State Park. (§ 1 ch 112 SLA 1970)

Other Statutes that Apply Specifically to the Park

Sec. 41.21.022(3). Discharge of firearms.

The discharge of firearms during lawful hunting, trapping, and fishing is permitted within the boundaries of Chugach State Park except that all or part of a state park, marine park, wildlife preserve, or recreation area may be closed to the discharge of firearms by regulations adopted by the department for purposes of public safety or, with the concurrence of the Board of Game, for limited areas of Chugach State Park for public display of local wildlife under AS 41.21.121.

Regulations that Apply Specifically to the Park

11 AAC 20.010. Use of weapons.

(a) Except as provided by (b) of this section, the use and discharge of a weapon for the purpose of lawful hunting or trapping is allowed in Chugach State Park, except within one-half mile of a developed facility or within one-half mile of the New Seward Highway between Mile 90 and Mile 115.

(b) The use and discharge of a firearm is prohibited within the following drainages:

- (1) Eklutna River excluding the east fork of Eklutna River and Thunderbird Creek above Thunderbird Falls;
- (2) Eagle River and all tributary drainages downstream from the confluence of Icicle Creek and Eagle River located in Section 25, T13N, R1E, S.M.;
- (3) all forks of Campbell Creek;
- (4) Rabbit Creek;

*Appendix B: Statutes & Regulations
for Chugach State Park*

- (5) McHugh Creek; and
- (6) Rainbow Creek.

11 AAC 20.015. Off-road vehicles.

- (a) The use of off-road vehicles is allowed in Chugach State Park only on Eklutna Lakeside Trail and logging trails in Bird Creek Valley.
- (b) Unless authorized by the director under 11 AAC 18.010, a person may not operate an off-road vehicle on Eklutna Lakeside Trail
 - (1) from 12:01 a.m. Thursday through 11:59 p.m. Saturday, during the period from April 1 through November 30; or
 - (2) from December 1 through March 31.

11 AAC 20.020. Aircraft.

- (a) Except as provided in (b) of this section, the use of aircraft is allowed in Chugach State Park on Bold airstrip located at the inlet of Eklutna Lake.
- (b) The use of aircraft for the purpose of practice landing is prohibited.

11 AAC 20.025. Motorized boats.

The use of a boat powered by an electric motor is allowed in Chugach State Park on Eklutna Lake.

11 AAC 20.030. Horses.

- (a) The use of horses, mules, and burros is allowed in Chugach State Park, except for
 - (1) designated campgrounds, swim beaches, and picnic areas;
 - (2) the Eagle River Valley from Crow Pass to the Eagle River Visitor Center, except by permit from the director under 11 AAC 18.010;
 - (3) Meadow Creek Drainage;
 - (4) the Old Johnson Trail from Potter to Indian;
 - (5) Section 29, T12N, R2W, S.M., west of the powerline easement, except that one trail between the powerline easement and the Glen Alps parking lot will be designated for summer use of horses;
 - (6) Flattop Mountain Trails;
 - (7) all trails in the Hillside Trail System (North Fork of Campbell Creek to and including Rabbit Creek), which may be closed seasonally to horse use to control break-up problems and use conflicts with ski trails;
 - (8) trails in the Indian Creek Valley, may be closed seasonally to horse use to control break-up problems or during periods of excessive rain; and
 - (9) trails accessible from the South Fork Eagle River Trailhead, which may be closed seasonally to horse use to control break-up problems or during periods of excessive rain.
- (b) The use of horses, mules, and burros is subject to the following conditions:
 - (1) groups using 10 or more animals must obtain authorization from the director under 11 AAC 18.010 before entering the state park;
 - (2) tethering horses, mules, or burros within 100 feet of fresh water is prohibited;
 - (3) loose herding of animals is prohibited.

(c) The director may, by order, close a trail or area listed in (a) of this section to the use of horses to protect soils or vegetation, to reduce or eliminate user conflicts, or to further management of Chugach State Park. A closure under this section shall be posted at entrances to the affected trail or area.

11 AAC 20.035. Campfires.

Open fires are allowed on gravel bars below timberline in the following drainages:

- (1) Eklutna Valley;
- (2) Peters Creek;
- (3) Eagle River (excluding the south fork of Eagle River and Meadow Creek); and
- (4) Bird Creek.

11 AAC 20.040. Snowmobiles.

If the director finds that the snow depth is adequate to protect underlying vegetation, the director shall post the following areas as open to the use of snowmobiles:

- (1) the Eklutna Lake Basin from the Eklutna Lake Campground to the wilderness boundary, excluding the Twin Peaks Trail, the Bold Ridge Trail, and the East Fork of the Eklutna drainage;
- (2) Peters Creek drainage down valley from the small creek that enter Peters Creek from the north within Sec. 19, T14N, R2E, Seward Meridian;
- (3) Little Peters Creek or Ptarmigan Valley drainage and adjacent land north of Meadow Creek drainage, except for the NW 1/4 of Section 21, T15N, R1W, Seward Meridian;
- (4) the Ptarmigan Valley Trail from the Old Glenn Highway to Ptarmigan Valley;
- (5) the Eagle River water course and gravel bars downstream of the confluence of Icicle Creek and Eagle River located in Section 25, T13N, R1E, Seward Meridian, excluding the South Fork and Meadow Creek;
- (6) the snowmobile corridor from the Eagle River Nature Center located at Mile 12 of the Eagle River road;
- (7) south fork of Campbell Creek on the designated corridor from Upper Huffman Trailhead to south of Sections 28 and 29, T12N, R2W, Seward Meridian;
- (8) Bird Creek drainage south of the Quartz Creek Ford.

11 AAC 20.045. Recreational gold panning.

Recreational gold panning is allowed in Chugach State Park with the following stipulations:

- (1) no motorized equipment is used;
- (2) a person uses no more equipment than a gold pan and a shovel;
- (3) no chemicals are used;
- (4) anadromous fish streams are only open to recreational gold panning between May 16 and July 14 annually;
- (5) no person may stake or file a mining claim or leasehold location in a state park; and
- (6) no person may extract or disturb natural material for the purposes of recreational gold panning above the ordinary high water line or where live vegetative matter exists.

11 AAC 20.050. Bicycles.

(a) Except as provided in (b) of this section, the use of bicycles in Chugach State Park is allowed only in campgrounds, picnic areas, and in the following areas:

- (1) Eklutna Lakeside Trail;

*Appendix B: Statutes & Regulations
for Chugach State Park*

- (2) the gasline service road from Prospect Heights Trailhead to Indian Trailhead;
 - (3) the Glen Alps Trail Head to Powerline Trail on the designated trail;
 - (4) Bird Creek logging trails south of the Quartz Creek ford;
 - (5) Peters Creek road from Malcom Drive to the state park motorized vehicle barrier;
 - (6) Powerline Trail, including the access trail from the Prospect Heights Trailhead to the Powerline Trail;
 - (7) Wolverine Bowl Trail from the Prospect Heights Trailhead to the overlook at the north end of the homestead roadbed;
 - (8) Middle Fork Loop Trail from the intersection of the Near Point Trail to the south end of the homestead roadbed;
 - (9) the 1D9 trail in the Eagle River Greenbelt;
 - (10) a trail or area that is open to the use of snowmobiles under 11 AAC 20.040;
 - (11) the South Fork Rim Trail, the Silver Fern Trail, the White Spruce Trail, and the Llama Trail of the Hillside Trail System;
 - (12) the paved pathway along Turnagain Arm, from Indian Creek to the state park boundary at Girdwood;
- (b) The director may, by order, close a trail or area listed in (a) of this section to the use of bicycles to protect soils or vegetation; to reduce or eliminate user conflicts; or to further management of Chugach State Park. Closures under this section shall be posted at entrances to the affected trail or area.

11 AAC 20.055. Camping.

A person may not camp within the first three miles or within 300 yards of the Eklutna Lakeside Trail, except in a site designated for overnight camping.

11 AAC 20.060. Pets.

- (a) A person may not have a dog or other pet on the Albert Loop Trail, the Rodak Nature Trail, the River Trail, or the Iditarod Trail between the Eagle River Nature Center and the Four Corners Junction, unless the dog or other pet is on a leash not exceeding nine feet in length, and is under control by a person at all times.
- (b) The restriction in (a) of this section does not apply to a person engaged in skijoring or mushing sled dogs during the winter months, if the dog or other pet is attached via a line and harness to the skier or sled and is under control by a person at all times.

Appendix C: Boundary Adjustment Package for Chugach State Park

The text in bold and underlined denotes additions and brackets denote deletions.

Chugach State Park established

Sec. 41.21.121 (1), (6), (20), (26) should be amended to read:

(1) Township 11 North, Range 3 West, Seward Meridian

Section 10: Lots 19[- 22], 24, 25, 28, 29, 33, 34, 37; and SE1/4, and E1/2 E1/2 SW1/4

Section 14: SW1/4

Sections 15, 22, 23, 25 and 26

Section 24: S1/2 and NE1/4;

...

(6) Township 10 North, Range 1 West, Seward Meridian

Sections 1 - 4

Section 5, except USS 3215 and Indian Valley Subdivision

Section 6, except USS 1868 and USS 3200

Section 8

Section 9, except USS 3680, USS 3201[3382], and USS 1069

Section 10, except USS 3201, USS 3202, and USS 3382

Sections 11 - 14 and 23 - 25

USS 3680: Lot 1;

...

(20) Township 10 North, Range 2 East, Seward Meridian

Sections 5[4] - 6, except Chugach National Forest **and Tract A of ASLS 81-149**

Section 7, **except Tract A of ASLS 81-149**

Section 8: W1/2[,] W1/2 [NE1/4, NE1/4 NE1/4, AND N1/2 SE1/4 NE1/4, EXCEPT USS 3045], **except Tract A of ASLS 81-149**

[SECTION 9: N1/2]

Section 18: N1/2 and SW1/4, except USS 3043 and USS 3042, **and Tract A of ASLS 81-149;**

...

*Appendix C: Boundary Adjustment
Package for Chugach State Park*

(26) Township 16 North, Range 2 East, Seward Meridian
Section 1: S1/2 except USS 3257[3527], USS 3914, USS 4789, and USS 3289[3282]
Section[s] 2 [AND 9 – 11]: that portion south of the Glenn Highway
Section 9: that portion south of the Glenn Highway except USS 3070
Sections 10 - 11: that portion south of the Glenn Highway
Sections 12 - 16
Section 17: that portion of the E1/2 south of the Glenn Highway
Section 19: S1/2
Section 20: NE1/4
Sections 21 – 28
Sections 30 and 31
Sections 33 – 36;

...

Appendix D: Plants, Mammals, Fish and Birds of Chugach State Park

Plants¹

Flowering Plants

APIALES-Family Apiaceae: Parsley	LILIALES-Family Liliaceae: Lily
<i>Angelica lucida</i> wild celery	<i>Lloydia serotina</i> common alplily
<i>Heraclium lanatum</i> cow parsnip	<i>Veratrum viride</i> green false hellebore
ASTERALES-Family Asteraceae: Aster	MYRTALES-Family Onagraceae: Evening Primrose
<i>Achillea borealis</i> boreal yarrow	<i>Epilobium angustifolium</i> fireweed
<i>Arnica frigida</i> snow arnica	<i>Epilobium latifolium</i> dwarf fireweed
<i>Arnica latifolia</i> meadow arnica	POLYGONALES-Family Polygonaceae: Buckwheat
<i>Erigeron peregrinus</i> subalpine fleabane	<i>Polygonum viviparum</i> alpine bistort
<i>Senecio triangularis</i> arrowleaf ragwort	PRIMULALES-Family Primulaceae: Primrose
<i>Solidago lepida</i> Canada goldenrod	<i>Dodecatheon frigidum</i> arctic shootingstar
CAMPANULALES-Family Campanulaceae: Bellflower	<i>Dodecatheon pulchellum</i> darkthroat shootingstar
<i>Campanula lasiocarpa</i> mountain harebell	<i>Trientalis europaea</i> arctic starflower
CARYOPHYLLALES-Family Caryophyllaceae: Pink	RANUNCULALES-Family Ranunculaceae: Buttercup
<i>Minuartia arctica</i> arctic stitchwort	<i>Aconitum delphinifolium</i> monkshood
<i>Silene acaulis</i> moss campion	<i>Anemone parviflora</i> windflower
CARYOPHYLLALES-Family Portulacaceae: Purslane	<i>Anemone richardsonii</i> yellow thimbleweed
<i>Claytonia sarmentosa</i> Alaska springbeauty	<i>Aquilegia formosa</i> western columbine
CORNALES-Family Cornaceae: Dogwood	<i>Delphinium glaucum</i> larkspur
<i>Cornus canadensis</i> dwarf dogwood	<i>Ranunculus occidentalis</i> western buttercup
DIPSACALES-Family Caprifoliaceae: Honeysuckle	ROSALES-Family Crassulaceae: Stonecup
<i>Linnaea borealis</i> twinflower	<i>Sedum rosea</i> roseroot
DIPSACALES-Family Valerianaceae: Valerian	ROSALES-Family Rosaceae: Rose
<i>Valeriana capitata</i> capitate valerian	<i>Luetkea pectinata</i> partridgefoot
ERICALES-Family Ericaceae: Heath	ROSALES-Family Saxifragaceae: Saxifrage
<i>Loiseleuria procumbens</i> alpine azalea	<i>Saxifraga oppositifolia</i> purple mountain saxifrage
ERICALES-Family Pyrolaceae: Shinleaf	<i>Saxifraga tricuspidata</i> three toothed saxifrage
<i>Pyrola asarifolia</i> liverleaf wintergreen	SCROPHULARIALES-Family Orobanchaceae:
FABALES-Family Fabaceae: Pea	Broom-rape
<i>Astragalus alpinus</i> alpine milkvetch	<i>Boschniakia rossica</i> northern groundcone
<i>Lupinus nootkatensis</i> Nootka lupine	SCROPHULARIALES-Family Scrophulariaceae: Figwort
<i>Oxytropis nigrescens</i> blackish oxytrope	<i>Castilleja unalaschensis</i> coastal paintbrush
GENTIANALES-Family Gentianaceae: Gentian	<i>Mimulus guttatus</i> seep monkeyflower
<i>Gentiana glauca</i> pale gentian	<i>Pedicularis capitata</i> capitate lousewort
GERANIALES-Family Geraniaceae: Geranium	<i>Pedicularis kanei</i> woolly lousewort
<i>Geranium erianthum</i> woolly geranium	SOLANALES-Family Polemoniaceae: Phlox
LAMIALES-Family Boraginaceae: Borage	<i>Polemonium acutiflorum</i> tall Jacob's-ladder
<i>Mertensia paniculata</i> bluebells	
<i>Myosotis alpestris</i> alpine forget-me-not	

¹ Refer to "A Floristic Study of the Eklutna Valley, Chugach State Park, Alaska" by LuDean C. Marvin.

**Appendix D: Plants, Mammals, Fish
and Birds of Chugach State Park**

Trees and Shrubs

APIALES-Family Araliaceae: Ginseng	RHAMNALES-Family Elaeagnaceae: Oleaster
<i>Oplopanax horridus</i> devil's-club	<i>Shepherdia canadensis</i> soapberry
DIAPENSIALES-Family Diapensiaceae: Diapensia	ROSALES-Family Grossulariaceae: Currant
<i>Diapensia lapponica</i> Lapland diapensia	<i>Ribes triste</i> red currant
DIPSACALES-Family Caprifoliaceae: Honeysuckle	ROSALES-Family Rosaceae: Rose
<i>Sambucus racemosa</i> red elderberry	<i>Amelanchier alnifolia</i> Pacific serviceberry
<i>Viburnum edule</i> highbush cranberry	<i>Dasiphora fruticosa</i> shrubby cinquefoil
ERICALES-Family Empetraceae: Crowberry	<i>Dryas octopetala</i> eightpetal mountain-avens
<i>Empetrum nigrum</i> black crowberry	<i>Potentilla uniflora</i> oneflower cinquefoil
ERICALES-Family Ericaceae: Heath	<i>Rosa acicularis</i> prickly rose
<i>Andromeda polifolia</i> bog rosemary	<i>Sorbus scopulina</i> Greene's mountain ash
<i>Arctostaphylos alpina</i> alpine bearberry	<i>Spiraea stevenii</i> beauverd spirea
<i>Arctostaphylos uva-ursi</i> kinnikinnick	SALICALES-Family Salicaceae: Willow
<i>Cassiope tetragona</i> arctic bell-heather	<i>Populus balsamifera</i> balsam poplar
<i>Ledum groenlandicum</i> Labrador tea	<i>Populus tremuloides</i> quaking aspen
<i>Menziesia ferruginea</i> rusty menziesia	<i>Populus trichocarpa</i> black cottonwood
<i>Phyllodoce glanduliflora</i> yellow mountain heather	<i>Salix alaxensis</i> felt-leaf willow
<i>Vaccinium caespitosum</i> dwarf blueberry	<i>Salix arctica</i> arctic willow
<i>Vaccinium uliginosum</i> bog blueberry	<i>Salix arbusculoides</i> little-tree willow
<i>Vaccinium vitis-idaea</i> lingonberry	<i>Salix barclayi</i> Barclay's willow
FAGALES-Family Betulaceae: Birch	<i>Salix bebbiana</i> Bebb's willow
<i>Alnus crispa</i> mountain alder	<i>Salix brachycarpa</i> barren-ground willow
<i>Alnus sinuata</i> Sitka alder	<i>Salix fuscescens</i> Alaska bog willow
<i>Alnus tenuifolia</i> thinleaf alder	<i>Salix glauca</i> gray-leaf willow
<i>Betula nana</i> dwarf birch	<i>Salix hastata</i> Halberd willow
<i>Betula papyrifera</i> paper birch	<i>Salix ovalifolia</i> oval-leaf willow
PINALES-Family Cupressaceae: Cypress	<i>Salix planifolia</i> diamondleaf willow
<i>Juniperus communis</i> common juniper	<i>Salix reticulata</i> netleaf willow
PINALES-Family Pinaceae: Pine	<i>Salix richardsonii</i> Richardson's willow
<i>Picea glauca</i> white spruce	<i>Salix rotundifolia</i> least willow
<i>Picea mariana</i> black spruce	<i>Salix scouleriana</i> Scouler's willow
<i>Picea sitchensis</i> Sitka spruce	<i>Salix sitchensis</i> Sitka willow
<i>Tsuga heterophylla</i> western hemlock	
<i>Tsuga mertensiana</i> mountain hemlock	

Mammals

ARTIODACTYLA-Family Bovidae: Goats and Sheep		CETACEA-Family Phocoenidae: Porpoises	
<i>Oreamnos americanus</i>	mountain goat	<i>Phocoena phocoena</i>	harbor porpoise
<i>Ovis dalli</i>	Dall's sheep	CHIROPTERA-Family Vespertilionidae: Bats	
ARTIODACTYLA-Family Cervidae: Deer		<i>Myotis lucifugus</i>	little brown bat
<i>Alces alces</i>	moose	INSECTIVORA-Family Soricidae: Shrews	
CARNIVORA-Family Canidae: Coyotes, Foxes, and Wolves		<i>Sorex cinereus</i>	Common shrew
<i>Canis latrans</i>	coyote	<i>Sorex hoyi</i>	pygmy shrew
<i>Canis lupus</i>	wolf	<i>Sorex monticolus</i>	dusky shrew
<i>Vulpes vulpes</i>	red fox	<i>Sorex palustris</i>	water shrew
CARNIVORA-Family Felidae: Cats		<i>Sorex tundrensis</i>	tundra shrew
<i>Lynx canadensis</i>	lynx	LAGOMORPHA-Family Leporidae: Hares	
CARNIVORA-Family Mustelidae: Badgers, Otters, Weasels, etc.		<i>Lepus americanus</i>	snowshoe hare
<i>Gulo gulo</i>	wolverine	LAGOMORPHA-Family Ochotonidae: Pikas	
<i>Lontra canadensis</i>	northern river otter	<i>Ochotona collaris</i>	collared pika
<i>Martes americana</i>	American marten	RODENTIA-Family Castoridae: Beaver	
<i>Mustela erminea</i>	ermine	<i>Castor canadensis</i>	American beaver
<i>Mustela nivalis</i>	least weasel	RODENTIA-Family Dipodidae: Jumping Mice	
<i>Neovision vison</i>	American mink	<i>Zapus hudsonius</i>	meadow jumping mouse
CARNIVORA-Family <u>Otariidae</u> : Fur Seals and Sea Lions		RODENTIA-Family Erethizontidae: Porcupine	
<i>Eumetopias jubatus</i>	Steller sea lion	<i>Erethizon dorsatum</i>	porcupine
CARNIVORA-Family Phocidae: Seals		RODENTIA-Family Cricetidae: Lemmings, Muskrat, and Voles	
<i>Phoca vitulina</i>	harbor seal	<i>Clethrionomys rutilus</i>	northern red-backed vole
CARNIVORA-Family Ursidae: Bears		<i>Microtus miurus</i>	singing vole
<i>Ursus americanus</i>	black bear	<i>Microtus oeconomus</i>	tundra vole
<i>Ursus arctos</i>	brown bear	<i>Microtus pennsylvanicus</i>	meadow vole
CETACEA-Family Balaenopteridae: Whales		<i>Ondatra zibethicus</i>	muskrat
<i>Balaenoptera acutorostrata</i>	minke whale	<i>Synaptomys borealis</i>	northern bog lemming
CETACEA-Family Delphinidae: Dolphins and Killer Whales		RODENTIA-Family Sciuridae: Squirrels	
<i>Orcinus orca</i>	killer whale	<i>Glaucomys sabrinus</i>	northern flying squirrel
CETACEA-Family <u>Monodontidae</u> : Beluga		<i>Marmota caligata</i>	hoary marmot
<i>Delphinapterus leucas</i>	beluga	<i>Spermophilus parryii</i>	Arctic ground squirrel
		<i>Tamiasciurus hudsonicus</i>	red squirrel

Fish

GASTEROSTEIFORMESFamily Gasterosteidae:		SALMONIFORMESFamily Osmeridae: Smelt	
Sticklebacks		<i>Thaleichthys pacificus</i>	eulachon or hooligan
<i>Gasterosteus aculeatus</i>	threespined stickleback	SCORPAENIFORMESFamily Cottidae: Sculpin	
SALMONIFORMESFamily Salmonidae: Salmon and Trout		<i>Sculpin sp.</i>	sculpin
<i>Oncorhynchus gorboscha</i>	pink or humped-back salmon		
<i>Oncorhynchus kisutch</i>	silver or coho salmon		
<i>Oncorhynchus nerka</i>	red or sockeye salmon		
<i>Oncorhynchus keta</i>	chum or dog salmon		
<i>Oncorhynchus tshawytscha</i>	king or chinook salmon		
<i>Salvelinus malma</i>	Dolly Varden		
<i>Salmo gairdneri</i>	rainbow trout		
<i>Thymallus arcticus</i>	Arctic grayling		

Appendix D: Plants, Mammals, Fish
and Birds of Chugach State Park

Birds

Status

C	Common
U	Uncommon
R	Rare
CA	Casual or accidental
*	Known or probable breeder

ANSERIFORMES-Family Anatidae: Geese, Swans,
and Ducks

Geese

<i>Anser albifrons</i>	Greater White-fronted (CA)
<i>Chen caerulescens</i>	Snow Goose (CA)
<i>Branta hutchinsii</i>	Cackling Goose (R)
<i>Branta canadensis</i>	Canada Goose (C*)

Swans

<i>Cygnus buccinator</i>	Trumpeter Swan (R*)
<i>Cygnus columbianus</i>	Tundra Swan (R)

Dabbling Ducks

<i>Anas strepera</i>	Gadwall (R)
<i>Anas americana</i>	American Wigeon (U*)
<i>Anas platyrhynchos</i>	Mallard (C*)
<i>Anas clypeata</i>	Northern Shoveler (R*)
<i>Anas acuta</i>	Northern Pintail (U*)
<i>Anas crecca</i>	Green-winged Teal (C*)

Diving and Seaducks

<i>Aythya collaris</i>	Ring-necked Duck (R)
<i>Aythya marila</i>	Greater Scaup (U*)
<i>Aythya affinis</i>	Lesser Scaup (R)
<i>Histrionicus histrionicus</i>	Harlequin Duck (R*)
<i>Bucephala albeola</i>	Bufflehead (R)
<i>Bucephala clangula</i>	Common Goldeneye (U*)
<i>Bucephala islandica</i>	Barrow's Goldeneye (U*)

CHARADRIIFORMES-Family Charadriidae: Plovers

<i>Pluvialis dominica</i>	American Golden Plover (R)
<i>Charadrius semipalmatus</i>	Semipalmated Plover (U*)

CHARADRIIFORMES-Family Scolopacidae: Sandpipers,
Phalaropes, and Allies

<i>Actitis macularius</i>	Spotted Sandpiper (U*)
<i>Tringa solitaria</i>	Solitary Sandpiper (U*)
<i>Tringa incana</i>	Wandering Tattler (R*)
<i>Tringa melanoleuca</i>	Greater Yellowlegs (U)
<i>Tringa flavipes</i>	Lesser Yellowlegs (U*)
<i>Numenius phaeopus</i>	Whimbrel (R)
<i>Aphriza virgata</i>	Surfbird (R*)
<i>Calidris minutilla</i>	Least Sandpiper (U*)
<i>Calidris bairdii</i>	Baird's Sandpiper (R*)
<i>Limnodromus griseus</i>	Short-billed Dowitcher (R)
<i>Gallinago delicata</i>	Wilson's Snipe (C*)
<i>Phalaropus lobatus</i>	Red-necked Phalarope (U*)

CHARADRIIFORMES-Family Laridae: Skuas, Gulls,
and Terns

<i>Larus philadelphia</i>	Bonaparte's Gull (U*)
<i>Larus canus</i>	Mew Gull (C*)
<i>Larus argentatus</i>	Herring Gull (U)
<i>Larus glaucescens</i>	Glaucous-winged Gull (U)
<i>Sterna paradisaea</i>	Arctic Tern (U*)

CORACIIFORMES-Family Alcedinidae: Kingfishers

<i>Megasceryle alcyon</i>	Belted Kingfisher (U*)
---------------------------	------------------------

FALCONIFORMES-Family Accipitridae: Hawks,
Eagles, and Allies

<i>Pandion haliaetus</i>	Osprey (CA)
<i>Haliaeetus leucocephalus</i>	Bald Eagle (U*)
<i>Circus cyaneus</i>	Northern Harrier (U*)
<i>Accipiter striatus</i>	Sharp-shinned Hawk (U*)
<i>Accipiter gentilis</i>	Northern Goshawk (U*)
<i>Buteo jamaicensis</i>	Red-tailed Hawk (U*)
<i>Buteo lagopus</i>	Rough-legged Hawk (U)
<i>Aquila chrysaetos</i>	Golden Eagle (R*)

FALCONIFORMES-Family Falconidae: Falcons

<i>Falco sparverius</i>	American Kestrel (CA)
<i>Falco columbarius</i>	Merlin (U*)
<i>Falco rusticolus</i>	Gyrfalcon (R)
<i>Falco peregrinus</i>	Peregrine Falcon (R)

GALLIFORMES-Family Phasianidae: Grouse

<i>Falcapennis canadensis</i>	Spruce Grouse (C*)
<i>Lagopus lagopus</i>	Willow Ptarmigan (C*)
<i>Lagopus muta</i>	Rock Ptarmigan (R*)
<i>Lagopus leucura</i>	White-tailed Ptarmigan (U*)

GAVIIFORMES-Family Gaviidae: Loons

<i>Gavia pacifica</i>	Pacific Loon (R*)
-----------------------	-------------------

GRUIFORMES-Family Gruidae: Cranes

<i>Grus canadensis</i>	Sandhill Crane (R*)
------------------------	---------------------

PASSERIFORMES-Family Alaudidae: Larks

<i>Eremophila alpestris</i>	Horned Lark (U*)
-----------------------------	------------------

PASSERIFORMES-Family Bombycillidae: Waxwings

<i>Bombycilla garrulous</i>	Bohemian Waxwing (U*)
-----------------------------	-----------------------

PASSERIFORMES-Family Certhiidae: Creepers

<i>Certhia americana</i>	Brown Creeper (U*)
--------------------------	--------------------

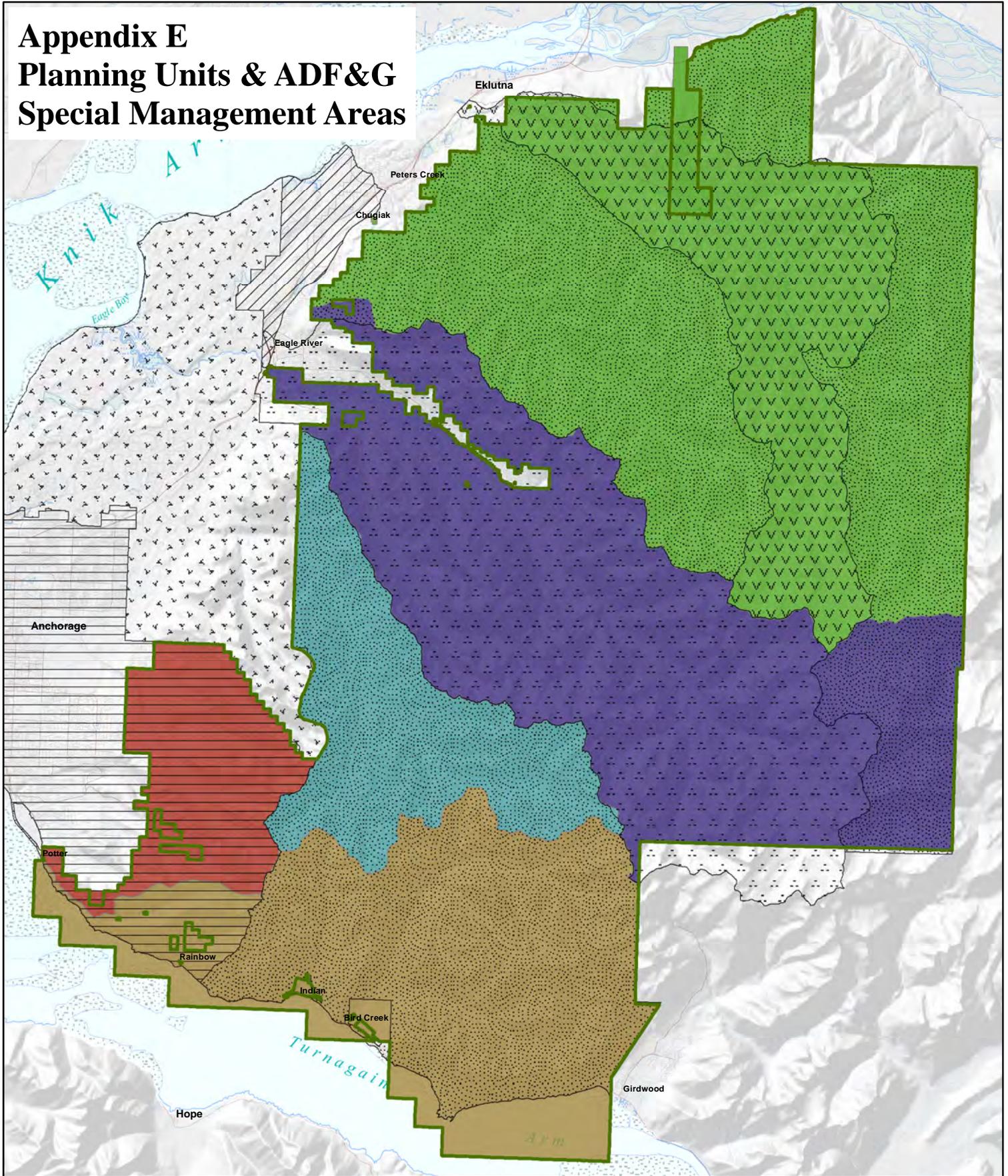
PASSERIFORMES-Family Cinclidae: Dippers

<i>Cinclus mexicanus</i>	American Dipper (R*)
--------------------------	----------------------

Appendix D: Plants, Mammals, Fish
and Birds of Chugach State Park

PASSERIFORMES-Family Corvidae: Crows and Jays		PASSERIFORMES-Family Sittidae: Nuthatches	
<i>Perisoreus canadensis</i>	Gray Jay (U*)	<i>Sitta canadensis</i>	Red-breasted Nuthatch (U*)
<i>Cyanocitta stelleri</i>	Steller's Jay (U*)	PASSERIFORMES-Family Sylviidae: Wood-Warblers	
<i>Pica hudsonia</i>	Black-billed Magpie (C*)	<i>Vermivora celata</i>	Orange-crowned Warbler (C*)
<i>Corvus corax</i>	Common Raven (C*)	<i>Dendroica petechia</i>	Yellow Warbler (U*)
PASSERIFORMES-Family Emberizidae: Emberizids		<i>Dendroica coronata</i>	Yellow-rumped Warbler (C*)
<i>Spizella arborea</i>	American Tree Sparrow (R*)	<i>Dendroica townsendi</i>	Townsend's Warbler (U*)
<i>Passerculus sandwichensis</i>	Savannah Sparrow (C*)	<i>Dendroica striata</i>	Blackpoll Warbler (R*)
<i>Passerella iliaca</i>	Fox Sparrow (U*)	<i>Seiurus noveboracensis</i>	Northern Waterthrush (R*)
<i>Melospiza melodia</i>	Song Sparrow (R*)	<i>Wilsonia pusilla</i>	Wilson's Warbler (U*)
<i>Melospiza lincolni</i>	Lincoln's Sparrow (C*)	PASSERIFORMES-Family Turdidae: Thrushes	
<i>Zonotrichia leucophrys</i>	White-crowned Sparrow (U*)	<i>Oenanthe oenanthe</i>	Northern Wheatear (R*)
<i>Zonotrichia atricapilla</i>	Golden-crowned Sparrow (C*)	<i>Myadestes townsendii</i>	Townsend's Solitaire (R*)
<i>Junco hyemalis</i>	Dark-eyed Junco (C*)	<i>Catharus minimus</i>	Gray-cheeked Thrush (R)
<i>Calcarius lapponicus</i>	Lapland Longspur (U)	<i>Catharus ustulatus</i>	Swainson's Thrush (U*)
<i>Plectrophenax nivalis</i>	Snow Bunting (R*)	<i>Catharus guttatus</i>	Hermit Thrush (U*)
PASSERIFORMES-Family Fringillidae: Fringilline and Cardueline Finches		<i>Turdus migratorius</i>	American Robin (C*)
<i>Fringilla montifringilla</i>	Brambling (CA)	<i>Ixoreus naevius</i>	Varied Thrush (U*)
<i>Leucosticte tephrocotis</i>	Gray-crowned Rosy-Finch (R*)	PASSERIFORMES-Family Tyrannidae: Tyrant Flycatchers	
<i>Pinicola enucleator</i>	Pine Grosbeak (U*)	<i>Contopus cooperi</i>	Olive-sided Flycatcher (U*)
<i>Loxia curvirostra</i>	Red Crossbill (CA)	<i>Contopus sordidulus</i>	Western Wood-Pewee (R*)
<i>Loxia leucoptera</i>	White-winged Crossbill (U*)	<i>Empidonax alnorum</i>	Alder Flycatcher (C*)
<i>Carduelis flammea</i>	Common Redpoll (C*)	<i>Sayornis saya</i>	Say's Phoebe (R*)
<i>Carduelis hornemanni</i>	Hoary Redpoll (CA)	PICIFORMES-Family Picidae: Woodpeckers and Allies	
<i>Carduelis pinus</i>	Pine Siskin (U*)	<i>Picoides pubescens</i>	Downy Woodpecker (C*)
PASSERIFORMES-Family Hirundinidae: Swallows		<i>Picoides villosus</i>	Hairy Woodpecker (U*)
<i>Tachycineta bicolor</i>	Tree Swallow (U*)	<i>Picoides dorsalis</i>	American Three-toed Woodpecker (U*)
<i>Tachycineta thalassina</i>	Violet-green Swallow (C*)	<i>Picoides arcticus</i>	Black-backed Woodpecker (R*)
<i>Riparia riparia</i>	Bank Swallow (U)	<i>Colaptes auratus</i>	Northern Flicker (U*)
<i>Petrochelidon pyrrhonota</i>	Cliff Swallow (R*)	PODICIPEDIFORMES-Family Podicipedidae: Grebes	
PASSERIFORMES-Family Icteridae: Blackbirds		<i>Podiceps auritus</i>	Horned Grebe (R*)
<i>Euphagus carolinus</i>	Rusty Blackbird (U*)	<i>Podiceps grisegena</i>	Red-necked Grebe (R*)
PASSERIFORMES-Family Laniidae: Shrikes		STRIGIFORMES-Family Strigidae: Typical Owls	
<i>Lanius excubitor</i>	Northern Shrike (U*)	<i>Bubo virginianus</i>	Great Horned Owl (U*)
PASSERIFORMES-Family Motacillidae: Wagtails and Pipits		<i>Bubo scandiacus</i>	Snowy Owl (CA)
<i>Anthus rubescens</i>	American Pipit (U*)	<i>Surnia ulula</i>	Northern Hawk Owl (R)
PASSERIFORMES-Family Paridae: Chickadees		<i>Asio flammeus</i>	Short-eared Owl (R*)
<i>Poecile atricapillus</i>	Black-capped Chickadee (C*)	<i>Aegolius funereus</i>	Boreal Owl (R*)
<i>Poecile hudsonica</i>	Boreal Chickadee (C*)	<i>Aegolius acadicus</i>	Northern Saw-whet Owl (R*)
PASSERIFORMES-Family Regulidae: Kinglets			
<i>Regulus satrapa</i>	Golden-crowned Kinglet (U*)		
<i>Regulus calendula</i>	Ruby-crowned Kinglet (C*)		

Appendix E Planning Units & ADF&G Special Management Areas



Planning Units

- Eklutna-Peters Creek Unit
- Eagle River Unit
- Ship Creek Unit
- Hillside Unit
- Turnagain Arm Unit
- Legislative Boundary (AS41.21.121)

Special Management Areas

- Anchorage MA
- Birchwood MA
- Chugach St. Park MA
- Eagle River MA
- Eklutna Lake MA
- JBER MA

CHUGACH STATE PARK



Appendix F: Bibliography

Alaska Department of Fish and Game, Sport Fish Division. Statewide Stocking Plan for Recreational Fisheries, 2011.

Responsive Management for the Alaska Department of Fish and Game. 2010. Anchorage Residents' Opinions on Bear and Moose Population Levels and Management Strategies.

Alaska Department of Fish and Game. 2010. Anadromous Waters Catalog GIS Dataset. Anchorage, AK.

Alaska Department of Fish and Game, Sport Fish Division. 2008. Lake Stocking Policy for Sport Fish Division.

Alaska Department of Fish and Game. 2004. Anchorage Wildlife Viewing Hot Spots. Anchorage, AK.

Alaska Department of Fish and Game. 2000. Living with Wildlife in Anchorage: A Cooperative Planning Effort.

Alaska Department of Fish and Game, Division of Habitat. 1985. Alaska Habitat Management Guide, Southcentral Region Map Atlas.

Alaska Department of Fish and Game. 1973. Alaska's Wildlife and Habitat.

Alaska Department of Fish and Game. Resource Data Inc. Fish and Wildlife Habitat GIS Dataset. Anchorage, AK.

Alaska Department of Natural Resources. Division of Mining, Land and Water and Division of Parks and Outdoor Recreation. Land Records and Case Files.

Alaska Department of Natural Resources, Division of Agriculture. 2011. Draft Strategic Plan for Invasive Weeds and Agricultural Pest Management and Prevention.

Alaska Department of Natural Resources, Division of Agriculture. 2008. A Revegetation Manual For Alaska.

Alaska Department of Natural Resources, Division of Forestry. 2010. Statewide Assessment of Forest Resources.

Appendix F: Bibliography

- Alaska Department of Natural Resources, Division of Land. 1994. Turnagain Arm Management Plan for State Lands.
- Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation. 2009. Alaska's Outdoor Legacy, Statewide Comprehensive Outdoor Recreation Plan (SCORP) 2009-2014.
- Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation. 2007. Ten-Year Strategic Plan 2007-2017.
- Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation. 2002. Chugach State Park Access Inventory Analysis and Recommendations.
- Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation. 1992. Management Plan for the Eagle River Greenbelt in Chugach State Park.
- Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation. 1986. Chugach State Park Trail Plan.
- Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation. 1982. Alaska State Park System: Statewide Framework.
- Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation. 1980. Chugach State Park Master Plan.
- Alaska Department of Natural Resources. 1972. Chugach State Park- A Summary Development Guide For The Park. The Alaska Environmental Group.
- Connor, C. and O'Haire, D. 1988. Roadside Geology of Alaska. Mountain Press Publishing Co., Missoula, MT.
- Greater Anchorage Area Borough- Department of Environmental Quality, Division of Parks and Recreation. 1973. Master Plan of Park Development for Bird Creek. Anchorage, AK.
- Marvin, L.C. 1986. A Floristic Study of the Eklutna Valley Chugach State Park, Alaska. Brigham Young University – Department of Botany and Range Sciences, Provo, UT.
- Molchan-Douthit, M. 2007. Alaska Bore Tales- A Local Guide to Bore Tide Sightings. NOAA., Anchorage, AK.
- Municipality of Anchorage. 2010. Anchorage Forestland Assessment and Management Plan (draft). Anchorage, AK.
- Municipality of Anchorage. Far North Bicentennial Park Trails GIS Dataset. Anchorage, AK.

Municipality of Anchorage. Hillside District Plan Trails and Trailheads GIS Dataset. Anchorage, AK.

Municipality of Anchorage. Heritage Land Bank Property GIS Dataset. Anchorage, AK.

Municipality of Anchorage- Information Technology Department- GIS Services. Municipality of Anchorage Avalanche Zones, Land Cover, Lakes, Marine, MOA Boundary, MOA Parks, Parcels, Railroad, Roads, Streams, Trails, and Wetlands GIS Datasets. Anchorage, AK.

Municipality of Anchorage- Parks and Recreation Department. 2011. Far North Bicentennial Park Trail Improvements Plan. Anchorage, AK.

Municipality of Anchorage- Planning Department. 2010. Hillside District Plan. Anchorage, AK.

Municipality of Anchorage- Planning Department. 2009. Turnagain Arm Comprehensive Plan. Anchorage, AK.

Municipality of Anchorage- Planning Department. 2006. Anchorage Bowl Park, Natural Resource, and Recreation Facility Plan. Anchorage, AK.

Municipality of Anchorage- Planning Department. 2001. Anchorage 2020/Anchorage Bowl Comprehensive Plan. Anchorage, AK.

Municipality of Anchorage- Planning Department. 1997. Areawide Trails Plan. Anchorage, AK.

Municipality of Anchorage- Planning Department. 1987. Rabbit Creek Greenbelt Plan. Anchorage, AK.

Municipality of Anchorage- Planning Department. 1985. Anchorage Park, Greenbelt and Recreation Facility Plan. Anchorage, AK.

Municipality of Anchorage- Planning Department. 1985. Eagle River Greenbelt Plan. Anchorage, AK.

Municipality of Anchorage. 1981. Anchorage Coastal Management Plan- Seward Highway Scenic Corridor Plan. Chin Kramer and Mayo, Inc.

Municipality of Anchorage, Alaska Department of Natural Resources, Bureau of Land Management, USDA Forest Service, and National Park Service. 1997. The Girdwood-Iditarod Trail Route Study. Anchorage, AK.

Appendix F: Bibliography

Pease, N. 1989. Backcountry Shelter in Chugach State Park: Program Recommendations. Professional Project, University of California, Berkeley.

Sydeman, M. and Lund, A. 1996. Alaska Wildlife Viewing Guide. Falcon Press Publishing Co., Inc., Helena, MT.

U.S. Census Bureau. 2009 Population Estimates. Web-based report.
URL:www.census.gov/.

U.S. Department of Agriculture, Natural Resources Conservation Service. Soil Survey of Anchorage Area, Alaska.

U.S. Department of Interior, Bureau of Land Management. 1986. The Iditarod National Historic Trail- A Comprehensive Management Plan. Anchorage, AK.

U.S. Department of Interior, Bureau of Land Management. 1982. The Iditarod National Historic Trail- Volume Two Resource Inventories. Anchorage, AK.

Wilson, F.H., Hults, C.P., Schmoll, H.R., Haeussler, P.J., Schmidt, J.M., Yehle, L.A., and Labay, K.A., 2009, Preliminary Geologic Map of the Cook Inlet region, Alaska: U.S. Geological Survey Open-File Report 2009-1108, 2 sheets, scale 1:250,000,
URL:pubs.usgs.gov/of/2009/1108/.

Zimmerman, J. 1993. A Naturalist's Guide to Chugach State Park. A.T. Publishing and Printing, Inc., Anchorage, AK.