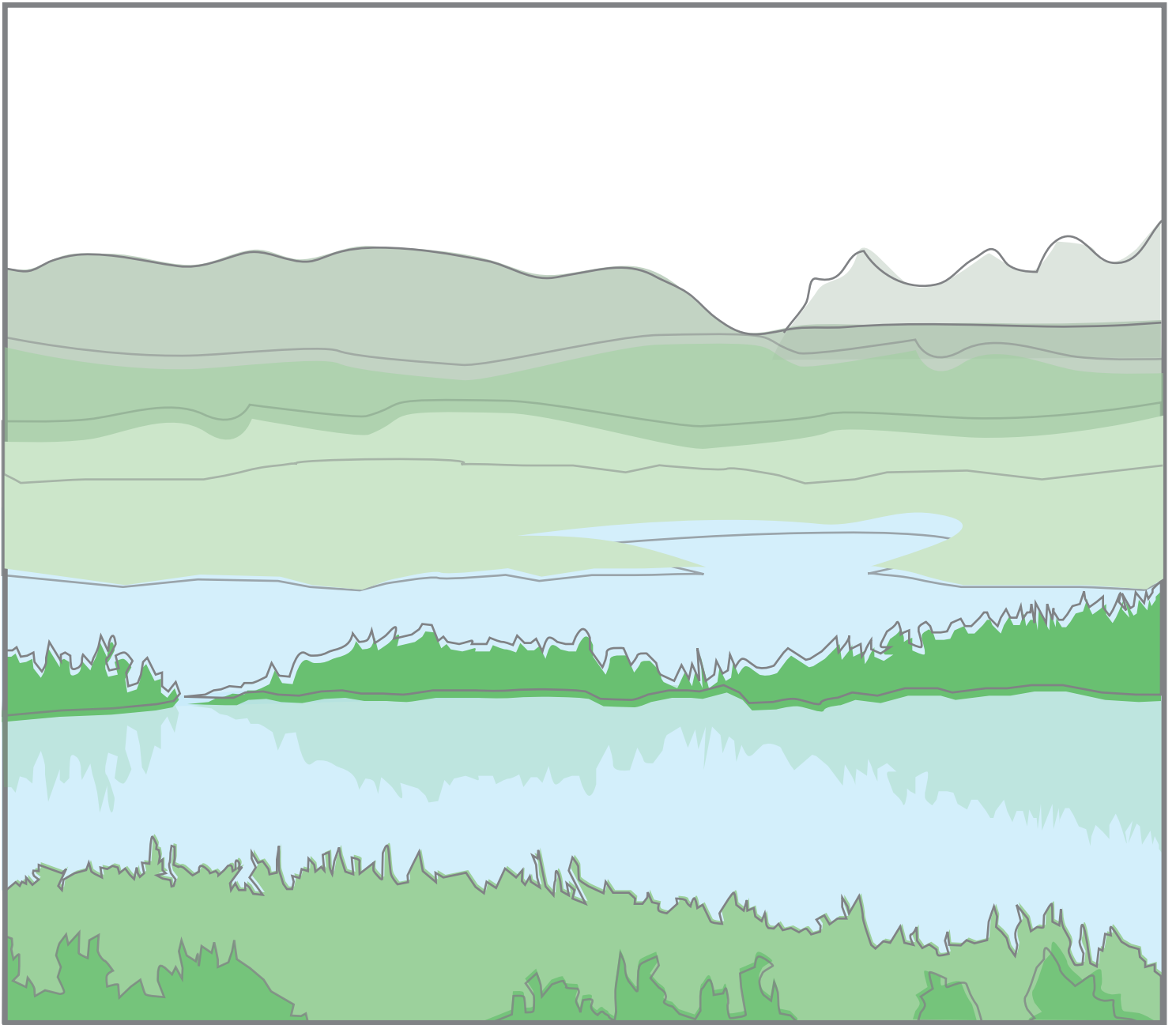


Fish Creek Management Plan

Draft Alternatives, May 2, 2007.



Prepared by Agnew::Beck Consulting, LLC, JadeNorth Consulting.

Funded by the Matanuska-Susitna Borough.



May 2, 2007

To people interested in the Fish Creek area:

The Matanuska-Susitna Borough, working with Agnew::Beck Consulting and Jade North, is updating a management plan for a block of 45,000 acres of public land west of the Little Susitna River, south of Nancy Lakes Recreation Area. Much has changed in the Mat-Su Borough since the original Fish Creek Management Plan was adopted in 1984. The purpose of this project is to update the earlier plan to reflect changes that have taken place over the past twenty years.

This document presents and evaluates a set of three general alternatives for the future of the Fish Creek area. These alternatives were developed working with state and borough staff, as well as other local interest groups, property owners and people that use the area today. Considerations in developing these alternatives included: physical characteristics of the site, market demands for different uses, costs for extending access into the area, and applicable government land use policies, including the policies of the previous plan.

We are seeking public and agency views on these three alternatives. A meeting for this purpose has been scheduled as shown below.

Wednesday, May 9, 2007 6:30-8:30 p.m.
Central Matanuska Susitna Borough Public Safety Building
101 W. Swanson Ave., Wasilla, AK

If you are unable to make the meeting please send any comments (fax, mail, e-mail) to Tomas Jensen at the locations below. Comments are due by May 18, 2007.

In addition, if you want current information on the project, see the project website at www.agnewbeck.com, under the 'Current Projects' page. If you want to be involved in planning for Fish Creek or to be informed on upcoming workshops, please send your email address and other contact information to Tomas Jensen, tomas@agnewbeck.com, and we will keep you posted.

Thanks for your interest in the future of the Fish Creek area.

Chris Beck
Agnew::Beck Consulting

Bob Loeffler
Jade North

Fish Creek Management Plan

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■ INTRODUCTION

Purpose of the Fish Creek Plan/Purpose of this Alternatives Document

The Fish Creek Management Plan will guide the use of 45,000 acres of land owned and managed by the Matanuska-Susitna Borough and by the Alaska Department of Natural Resources. The project area is located immediately west of the Little Susitna River, adjoining the rapidly growing communities of Big Lake and Wasilla. Possible land uses in the Fish Creek area include residential, forestry, agriculture, fish and wildlife, recreation and watershed protection.

The purpose of this document is to present and evaluate several alternatives for the future use of these lands. Public and agency review of these alternatives, including a public workshop on May 9th, will be used to identify preferred future uses of the area, and a draft management plan will be written and distributed for further review. Ultimately, a final plan will be formally approved by the Borough and the State Department of Natural Resources.

Project Background

Proposed uses for the Fish Creek area were originally established by the Willow Sub-basin Plan, prepared by the Department of Natural Resources (DNR) in 1982. A more detailed plan for this specific area – the Fish Creek Management Plan – was completed in 1984. The original Fish Creek Management Plan set out a blueprint for development for a major commercial agricultural project. Moraine Ridge, on the eastern boundary of the project area, was to be used for settlement area, with a mix of year-round residences and recreational cabins and a community center at the southern end of the Ridge. Timber harvest was to take place prior to development of the agricultural tracts as salvage.

Much has changed since the original management plan was adopted. The plan needs to be updated to ensure it reflects current market realities for agriculture and forestry, current Borough and State policies and methods for land sales, and the demands for use of public land linked to rapid growth of the southern Mat-Su Borough.

The Fish Creek Management Plan will ensure that the Fish Creek area is managed in a manner that reflects the site's physical constraints and opportunities and the interests of present and future users of the area.

Who is working on the plan

The management plan process is sponsored jointly by the Matanuska-Susitna Borough and the Department of Natural Resources. The plan is being prepared by Jade North and Agnew::Beck Consulting, under a contract to the Matanuska Susitna Borough. A Planning Team is helping the consulting team to guide the development of these alternatives and provide resource information and policy guidance. The Planning Team includes representatives from the Matanuska-Susitna Borough; Alaska Department of Natural Resources, Divisions of Agriculture, Forestry, Parks and Outdoor Recreation, and Mining, Land & Water; Alaska Department of Fish & Game, and the Wasilla Soil and Water Conservation District.

Plan Approval Process

The plan becomes official policy for state lands when approved by the director of the Division of Land and Water Management and then the Commissioner of the Department of Natural Resources. Approval by the borough requires initial review by several Mat-Su advisory commissions, and ultimately formal approval by the Matanuska-Susitna Borough Assembly. The plan has no direct effect on private lands.

PROJECT AREA

Introduction

The Fish Creek area is bordered on the west by Flathorn Lake and the Susitna River and on the east by the Little Susitna River. The area encompasses two management areas as identified by the Willow Sub-basin Plan, Fish Creek and Moraine Ridge.

The map on page 7 (Map 2) depicts land ownership. The Matanuska-Susitna Borough owns approximately 60 percent of the study area. Borough land is concentrated in the eastern and southern portions of the Fish Creek area. The State of Alaska owns the large majority of the remaining 40 percent, in the lower-lying northern and western sections of the area.

Approximately 1800 acres of private lands are included within project area boundaries, concentrated around several large lakes, including Red Shirt Lake in the northeast and Flathorn Lake in the southwest.

Major, legislatively-designated public areas surround the project area on three sides. Nancy Lake State Recreation Area borders the study area on the north, the Little Susitna State Recreation River area on the east and Susitna Flats Game Refuge on the south.

Physical Environment

Topography

The majority of the Fish Creek project area is level to rolling forest terrain, with breaks for muskegs and incised stream channels. The eastern edge of the management unit has a ridge running north-south, rising roughly 430 feet above the surrounding terrain. The remainder of the management unit is generally flat with little topographic variation.

Hydrology

The Fish Creek management area contains an array of streams, lakes, and wetlands. Fish Creek and Homestead Creek are the two main drainages running diagonally from northeast to southwest through the project area into Flathorn Lake. Homestead Creek, the smaller western stream, is fed by the wetlands scattered throughout the project area. Fish Creek comes down out of the lakes and wetlands at the north end of the project area.

Five good-sized lakes are located at least partially in the project area; Flathorn Lake, Redshirt Lake, Cow Lake, Delyndia Lake, and Hock Lake. The lakes vary from approximately six square miles for Flathorn and Redshirt Lake, to one-half square mile, Hock Lake. The Fish Creek management area contains approximately 10-12,000 acres of wetlands. These wetlands occur in large areas in a branching pattern along the drainages of Fish Creek.

Vegetation

Vegetation in the area includes a boreal mix forest -- bands of spruce, birch, aspen and cottonwood, with smaller stretches of willow and alder, separated by areas of wetlands. At higher elevations in the north, alders are more common. Wetland sites are primarily muskeg (peat bog) which provides a home for an abundance of plants that thrive in the wet, acid soil; sphagnum moss is the mainstay.

Fish and Wildlife

Like the remainder of the broad Susitna Valley, the Fish Creek area is home to a wide variety of wildlife and also provides migratory corridors for a number of species.

Small mammals include lynx (listed a species of concern under the Endangered Species Act), fox, beaver, wolverine, land otter, mink, short tailed weasel and least weasel, marten, snowshoe hare, red and flying squirrels, porcupine, muskrat, marmot, pica, and coyote.¹

Fish species include five species of Pacific salmon and eight other important freshwater game fish. These include king, coho, sockeye, chum, and pink salmon, lake and rainbow trout, Dolly Varden, Arctic grayling, northern pike, whitefish, and burbot. Non-game fish species include blackfish, long-nose sucker, slimy sculpin, and Arctic lampreys.²

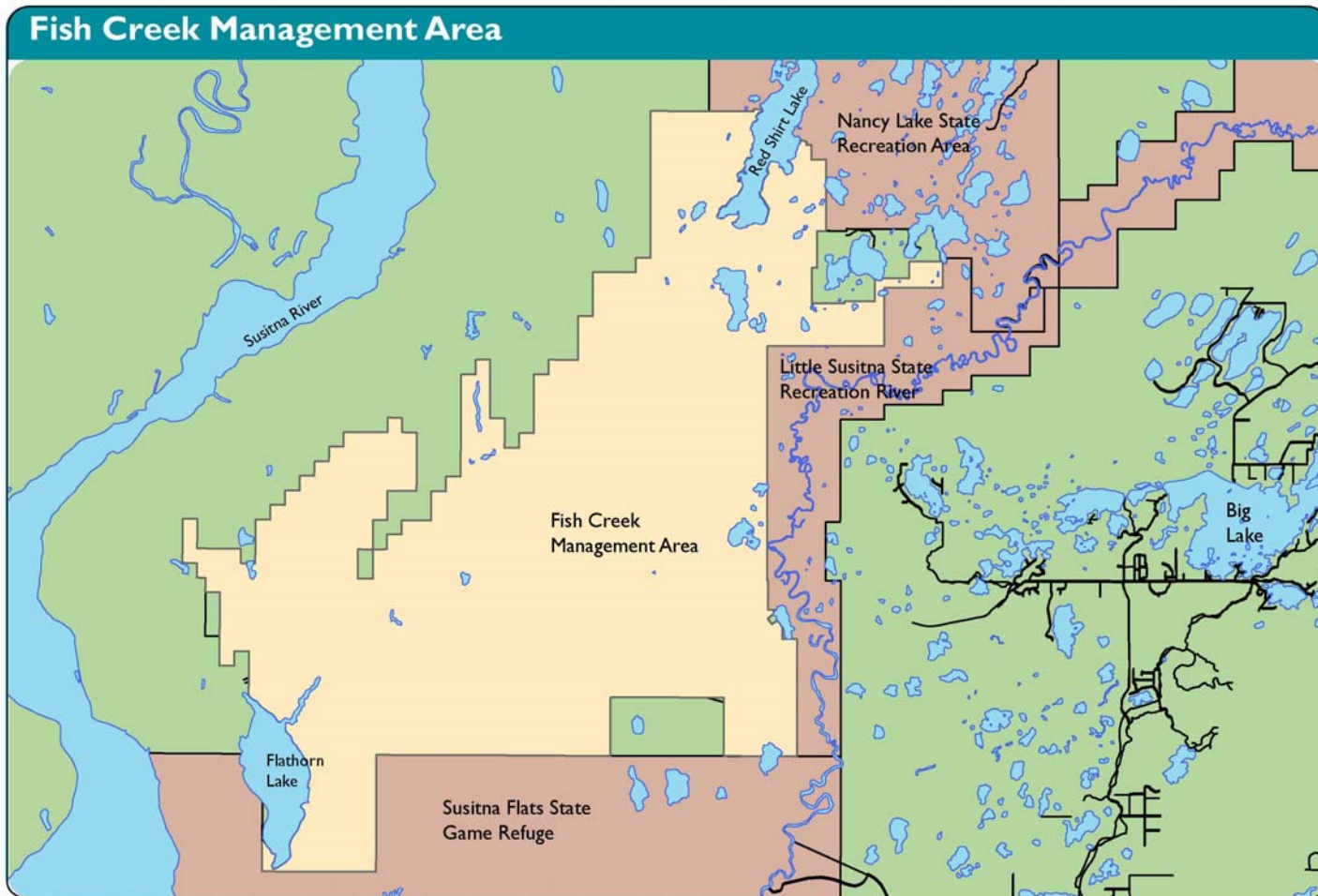
These fish attract numerous brown and black bears who den in uplands to the north and make their way down into the region in early summer. Other large mammals include caribou, moose, wolves and coyote. Black bear range in forested areas while brown bears show a preference for open areas. Caribou, moose, and wolves use a range of habitats.

The area attracts a wide range of migratory birdlife, including swans, loons, raptors, golden eagles, bald eagles (mostly in summer) and sand hill cranes. Three species of concern under the Endangered Species Act – the northern goshawk, olive-sided flycatcher, and the American peregrine falcon – are found in habitats like those in the Fish Creek area. Non-migratory birds are also present in the area, including ravens, magpies, downy woodpeckers, chickadees, spruce grouse, brown creeper, gyrfalcon, pine grosbeak, redpoll, willow and rock ptarmigans, and several species of owls. Waterfowl are numerous in the large Susitna Flats Refuge immediately to the south, and range into the project area, including the migratory trumpeter swans, harlequin ducks, Canadian geese and tule greater white-fronted geese, loons, grebes, long-tailed ducks, and scooters.

¹ DNR 1980 data, Petersville Road Corridor Management Plan page 28.

² DNR 1980 data, Petersville Road Corridor Management Plan page 28.

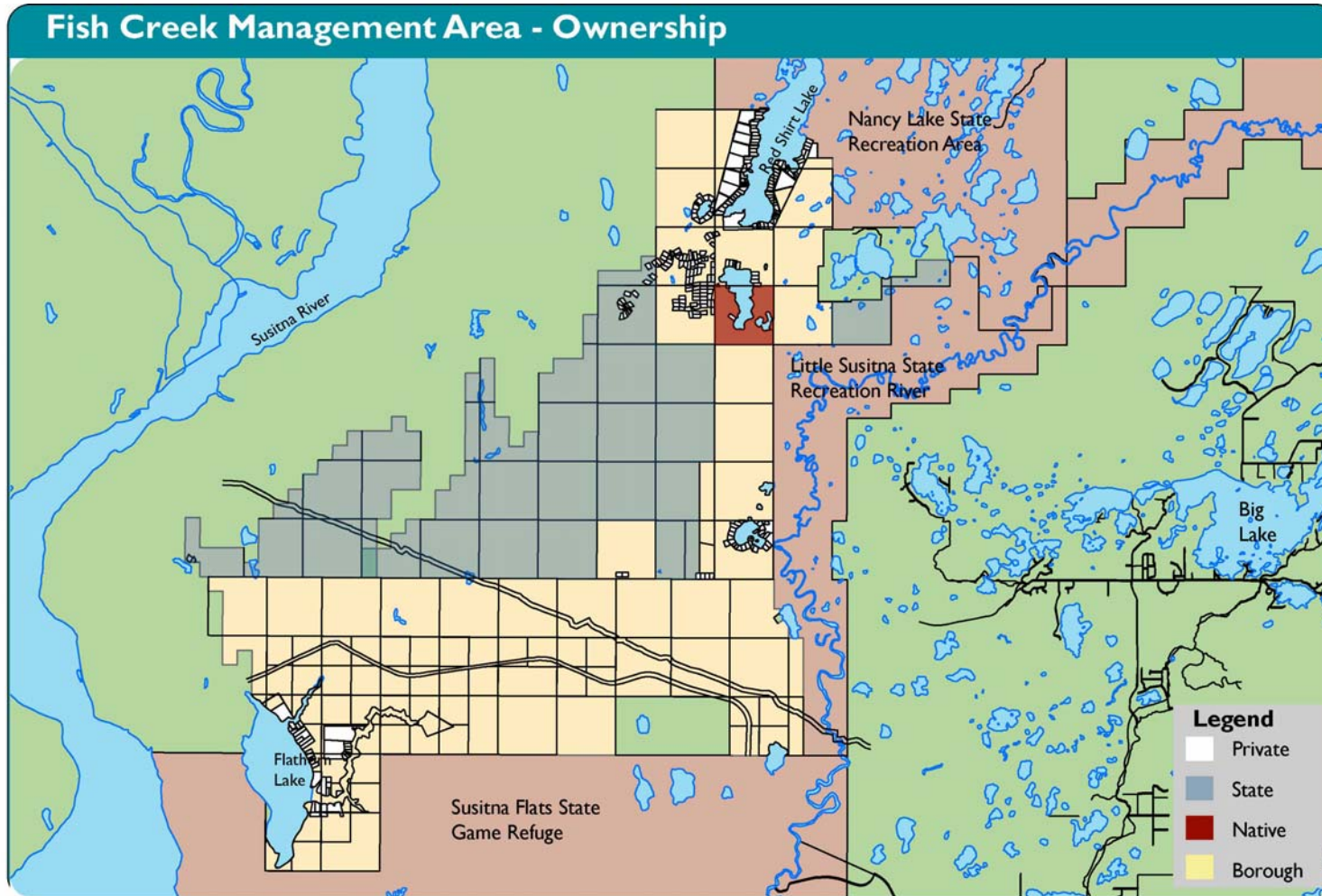
Map 1. Project Area.



Alaska State Plane, Zone 4, NAD 1983
May 1, 2007
This map was compiled for the Matanuska-Susitna Borough.
Data courtesy of the Matanuska-Susitna Borough.



Map 2. Land Ownership.

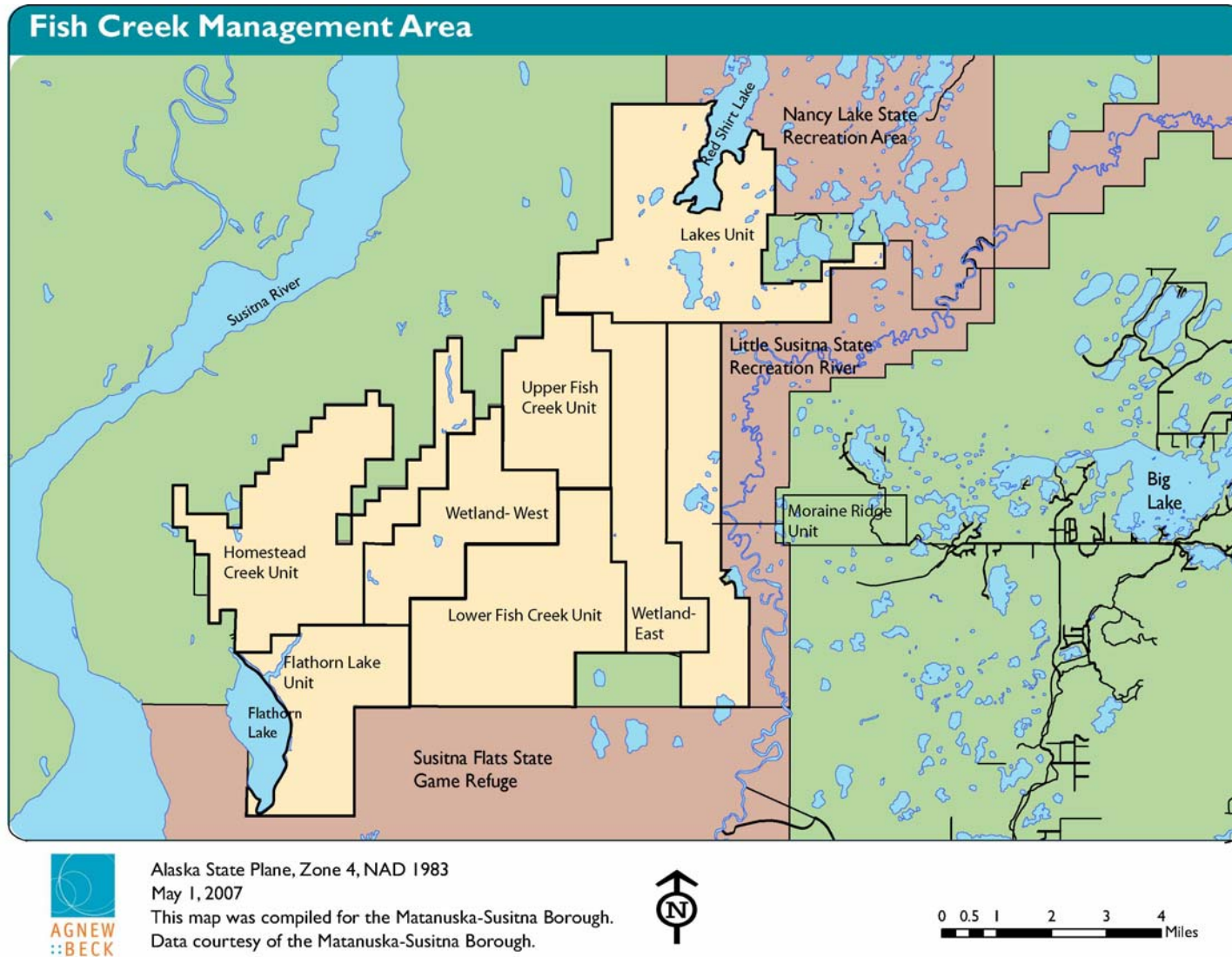


Alaska State Plane, Zone 4, NAD 1983
May 1, 2007
This map was compiled for the Matanuska-Susitna Borough.
Data courtesy of the Matanuska-Susitna Borough.



0 0.5 1 2 3 4 Miles

Map 3. Management Units.



■ TRANSPORTATION & ACCESS

Introduction

There are currently no roads to this area. The closest roads are east of the Little Susitna River. Private parcel owners generally reach their properties by float/ski plane, ATV or snowmachine during winter months.

Requirement to Build Roads Before Land Sales

Before the State or Borough may sell land agriculture or residential land, the law requires that roads actually be constructed. The Matanuska-Susitna Borough platting ordinances, like similar laws throughout the country, require that there is “legal and physical road access provided to all subdivisions and to all lots within subdivisions...” The platting board may waive this requirement only if “no practical means of providing road access to a proposed subdivision exists and upon a showing that permanent public access by air, water or railroad is both practical and feasible...” (MSB 16.20.100).

The major cost that the State or Borough must incur when preparing land for sale is the cost to actually construct roads to a parcel for sale. Roads will certainly be required before the Borough or State sells land within the Moraine Ridge, Upper Fish Creek, Lower Fish Creek, or Homestead Creek management units. Road construction may not be required before land could be sold in the Flat Horn Lake and Lakes management units. Individuals who own land in these management units have a history of getting to their land by air and water, consistent with the Borough law.

Land Sale Revenue and Cost of Roads

- **Residential Land.** Revenue from selling residential land is expected to be greater than the cost of preparing the land for sale and constructing internal subdivision roads, especially if the sale is for small lot sizes: 2.5 acres or perhaps as large as 5-acre lots. Larger lots require more road building to get to each parcel. At larger sizes, the road costs are greater than the potential land sale revenue.

In addition to the internal road system, a major connecting road will be needed to link the land sale areas with the road coming in from the planned Little Susitna River Bridge. Expected revenue from selling residential land is not great enough to fund both internal subdivision roads and also a significant length of roadway required to reach the subdivision.

- **Agricultural Land.** The rough estimate of road costs made for this plan indicates that the market value of smaller agricultural parcels 40-acres and less may, in some situations, be equal to the cost of internal roads to access the parcels. Smaller agricultural lots, such as 20-acre parcels, would be more likely to generate revenue to pay for internal road costs. A mix of smaller residential lots and 20 to 40-acre agricultural lots would be even more likely to provide revenue equal to the cost of internal access roads. But like the conclusions for residential land sales, the value of the agricultural parcels is not great enough to equal the cost of building roads from a main truck road to the agricultural units.

In summary: neither agriculture nor residential land sales (except limited sales near Flat Horn Lake) may occur before roads are built to the area. The revenue from sale of residential and agricultural

land is in some situations expected to be greater than the cost of providing internal roads but not large enough to pay for the cost to build a road to the sale areas. However, timber harvest could occur using winter roads. Also a long-term timber harvest program could provide pioneer roads that would decrease the cost of all-season roads required for agriculture or residential land sales.

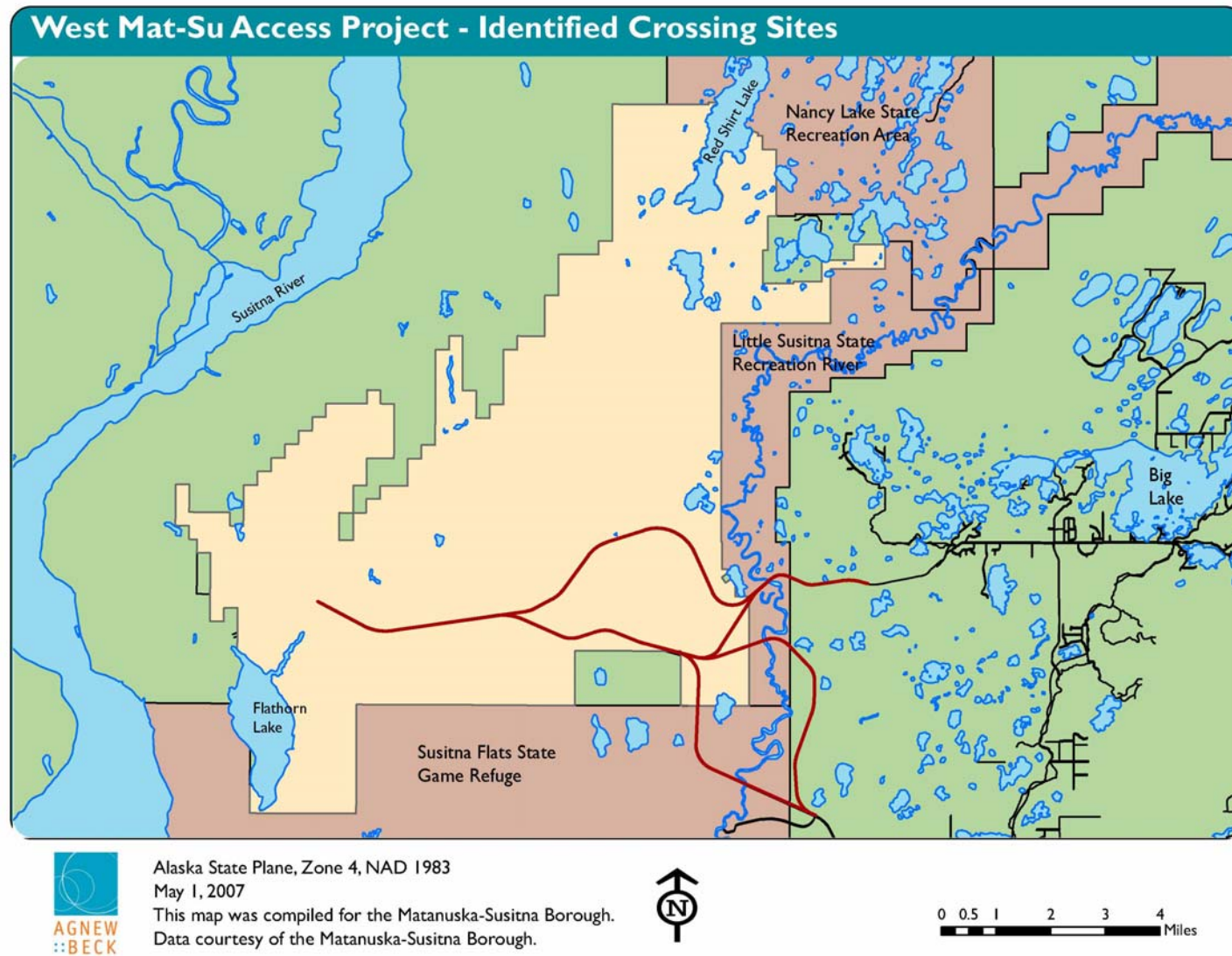
West Mat-Su Access Project: A Bridge Across the Little Susitna River

The Matanuska-Susitna Borough is beginning to evaluate the feasibility of building a bridge across the Little Susitna River into the southern part of the Fish Creek unit. The Borough has contracted with Lounsbury and Associates and HDR Alaska, to begin an assessment of the environmental consequences of constructing a bridge to the Fish Creek Management Area across the Little Susitna River. The project may also include a short spur road continuing 3-4 miles west past the river. The study – called the the West Mat-Su Access Project – looks at alternative routes and several different potential bridge locations (See Map 3.). No funds have yet been appropriated for actually building the bridge. Given time required for the environmental evaluation, bridge design, and funding, it is unlikely the project will be constructed for at least a decade.

Other Access

- **Chuitna Right-of-Way: platted but no plans for construction.** The Chuitna Road Right-of-Way (ADL 57588) runs through the Fish Creek Management Unit in an east-west direction, and crosses the southern portion of the Moraine Ridge Unit. This route was conceived over 20 years ago, as a possible link to coal and other resources located roughly 50 miles west of the Big Susitna River. Though the right-of-way is reserved and platted, there are no plans to construct the road in the near future, and the road is not on the Borough's Long-Range Transportation Plan, nor is it the Borough's Official Streets and Highway's Plan.
- **Iditarod National Historic Trail.** The U. S. Forest Service, working with the Bureau of Land Management, has reserved and surveyed an easement through the unit for the Iditarod National Historic Trail. The corridor is 400 feet wide, 200 feet either side of the centerline.
- **A Railroad Corridor Reserved.** The Mat-Su Borough's Long Range Transportation Plan includes a north-south rail corridor, connecting the with existing Alaska Railroad line in the vicinity of Willow with the Point MacKenzie area. The selected route runs through Fish Creek, just west of Moraine Ridge, and then runs just on the western edge of the Lakes Unit. A specific route has not been identified or platted.
- **Other Trail Easements.** Other trail easements in the area include the Iron Dog Trail, Crooked Lake Winter Trail, and the Red Shirt Lake Trail. The Crooked Lake Winter trail travels in an east-west direction and crosses the unit just below Hock Lake and continues parallel to the Historic Iditarod Trail. The Red Shirt Lake Trail is a north-south trail beginning south of the management area and entering at the southern end of the Moraine Ridge area, travelling north and west into other management units.
- **Recreation Using Unreserved Trails.** The Fish Creek area is a popular area for trail-based recreation – primarily winter snow machine use, but also summer use by ATV's. Trails extend into and through the area from the Willow and Nancy Lakes area to the north, and from the Big Lake area to the east. Most of the use follows old seismic lines or open wetlands. All alternatives in the plan try to accommodate recreation using reserved and unreserved trails.

Map 4. Map of Possible Crossings.



ALTERNATIVES

Introduction

This section presents three alternatives for the future use of Fish Creek. The purpose of these alternatives is to help the public and agencies better understand land use options, and the benefits and costs of different land use choices. These alternatives were developed by the Fish Creek Planning Team, based on a review of resource information and the existing plan and the transportation analysis. Input from the Matanuska-Susitna Borough Real Property Asset Management Board and other groups was also a consideration in developing these alternatives.

The list below summarizes the three alternatives:

- I. Agriculture – extensive sales of agriculture land
- II. Resource Management – limited agricultural sales, moderate timber sales
- III. Public Ownership – retain land in public ownership; manage for timber, habitat, recreation

Description of the Alternatives

Portions of the Fish Creek area are proposed to be managed the same way in each of the three alternatives. These are the three units intended for future settlement, and the large wetland management units. The remaining portions of the project area – the Fish Creek and Homestead Creek Units - would be managed differently under different scenarios. See the following tables for a description of these alternatives.

Fish Creek Management Alternatives

Units with Significant Class I and II Agricultural Soils			
Alternative	Lower Fish Creek	Upper Fish Creek	Homestead Creek
I. Agriculture and Residential Sales	<p>Designate Agriculture/Settlement. Sell small-lot agriculture parcels, mostly 10-20 acres after roads are provided. This may be a decade or significantly longer in the future. (May re-evaluate lot size if larger lots will pay for roads at the time layout is designed.)</p> <p>Other Resources. As sales are designed, retain system of trail and stream buffers in public ownership. Timber harvest is an allowed but not primary use, to occur in limited locations to complement settlement and agriculture land sales (e.g., small wood lots, clearing rights-of-way, etc.)</p>		
<p>II. Resource Management: Interim management for Recreation/Forestry/Wildlife Habitat.</p>	<p>Designate Resource Management; Interim Management for Forestry, Recreation, and Wildlife Habitat. This alternative recognizes that the decision to sell land in these units is dependent on roads being built to them. That action is expected to be at least 10 years away in the Lower Fish Creek Unit, and longer for the other two units. By that time, the demand for agricultural land or residential settlement land may change significantly from today's assessment. Therefore, this alternative delays the decision about when and whether to sell the land. Ultimately it is expected that much of the capable land will be sold for agricultural or general settlement purposes. Before roads are constructed, the land should be managed for public uses, including forestry, recreation, and wildlife habitat, in a manner that does not preclude the eventual sale for agriculture or residential settlement.</p> <p>Timber harvest allowed prior to eventual sales will be designed to help support this eventual development. Harvest planning will be done, as much as is feasible, to bring road access to the area, and to maintain the area's attractiveness for eventual residential and small-parcel agricultural use.</p>		
III. Long-term Public Ownership	<p>Designate Forestry, Recreation, and Wildlife Habitat. The land will be retained in long-term public ownership. Forestry is a designated primary use, though any timber harvest will maintain stream, wetland, and trail buffers. Timber harvest will be managed to enhance moose habitat and hunting opportunities.</p>		

Fish Creek Management Alternatives (cont'd)

Other Units (Intent does not vary by Alternative)				
Alternative	Moraine Ridge	Flathorn Lake	Lakes Unit	Wetland East and West
I. Agriculture and Residential Sales	Designate Settlement. Land will not be sold before roads are built. Retain trails and sites for public uses in public ownership.	Designate Settlement. Sell limited additional waterfront lots and some backlot areas with access easements to the water. Roads are not required prior to sales, as the area is expected to remain roadless for many years. However, easements for roads should be retained in case roads are constructed at some future date. Other lands within the management unit will be retained in public ownership for trails, and public uses.	Designate Resource Management. Manage to retain rural recreation-residential character. Land sales are prohibited. If a railroad is constructed adjacent to this area, intent may be revisited.	Designate Public Recreation, Wildlife Habitat and Watershed Protection. Manage to maintain the functional value of the wetlands for habitat and watershed protection. Maintain public use of the area, especially in winter.
II. Resource Management: Interim management for Recreation/Forestry/Wildlife Habitat.	Same as above.			
III. Long-term Public Ownership	Same as above.			

EVALUATION

Introduction

The alternatives outlined above present an array of possibilities for the future management of the Fish Creek Unit. This section provides a brief summary of the impact of each alternative on the resources of the area.

Impacts to Agriculture

The three alternatives treat agriculture differently.

- **Alternative 1: A commitment to agricultural use.** The Agriculture and Residential Land Sales Alternative commits three management units to agriculture use. These are the units with large amounts of Class I and II soils: Lower Fish Creek, Upper Fish Creek, and Homestead Creek Units. The land could not be sold for agriculture until roads are constructed.
- **Alternative 2: Delayed Decision.** The Resource Management Alternative recognizes that the decision to actually sell land will not be made for a long time: at least decade and likely longer. By that time, demand for agriculture or residential land and public preferences may change. Therefore, this alternative delays the decision on the eventual use of the three management units with agricultural soils. In the interim, the land would be managed for public recreation, wildlife habitat, and timber harvest. The presence of small trees that grow in the 25-30 years following timber harvest could make clearing land for agricultural more difficult.
- **Alternative 3: A Decision Not to Sell.** The Long-term Public Ownership Alternative makes a decision to retain the land in long-term public ownership, and not to sell it. While this decision could always be changed in the future, and consequently the option for agriculture in the future is not lost, it is at least an interim decision that the land will not be used for sold agricultural uses.

Impacts to Forestry

The three alternatives have an impact on timber harvest that is in some ways the reverse of that on agriculture.

- **Alternative 1: Limited, If Any Timber Harvest.** Alternative 1 allows timber harvest only to the extent it did not affect the agricultural values: small woodlots, rights-of-way, etc.
- **Alternative 2: Delayed Decision and Interim Forestry Use.** Forestry is an interim management for the three agricultural soils units in this alternative. This would allow the Borough and State Forestry to complete limited harvest and make some investments. However, it does not give them the expectation that the land would be a part of the permanent timber base in the Borough. In addition, timber harvest would be designed, as much as feasible, to minimize impacts on the eventual value of the area for agricultural and residential land sale.
- **Alternative 3: Long Term Addition to the Timber Base.** Forestry is a primary use in this alternative, along with Public Recreation and Wildlife Habitat. The area would become a part of the long-term timber base for State and Borough and would be managed for sustained yield.

Impacts to Recreation, Hunting, Fishing, and Wildlife Habitat

All three alternatives retain extensive trail systems, river corridors and large wetlands in public ownership open for public recreation use. This will ensure that the area continues to offer substantial public recreation opportunities. Alternative 3, however, makes the decision to retain the land in public ownership. It is the alternative that keeps the greatest option for public recreation and maintains the existing habitat. Both under alternatives 2 and 3 some timber roads are likely to be constructed. This may change recreation opportunities. For some people, the roads would enhance recreation opportunities by providing better access. Others may believe that roads and harvest may decrease the recreation values.