

Haines Coastal Management Program

Final Plan Amendment



HAINES BOROUGH

*With Assistance from
Sheinberg Associates
Juneau, Alaska*



This report is funded by the Alaska Coastal Management Program, Department of Natural Resources, Office of Project Management and Permitting, Pursuant to National Oceanic and Atmospheric Administration Award No. NA17OZ2058. The preparation of this (map/report) is funded by a grant from the National Oceanic and Atmospheric Administration, and administered by the Alaska Department of Natural Resources, Office of Project Management and Permitting (OPMP), and the Department of Commerce, Community and Economic Development (DCCED), Division of Community Advocacy. The views expressed herein are those of the author(s) and do not necessarily reflect the views of the NOAA or any of its sub-agencies.

Acknowledgements

This plan revision and update would not have been possible without the help of many people who gave their time and expertise.

Most important were the Haines Coastal District Coordinator Scott Hansen, who produced maps and provided support for meetings and guidance, Borough Manager Robert Venables, and the Haines Borough Planning Commission:

Jim Stanford, Chair
Harriet Brouillette
Bob Cameron
Rob Goldberg
Lee Heinmiller
Bill Stacy
Lynda Walker

The Haines Borough Mayor and Assembly also contributed to the development of this Plan. They were:

Mike Case, Mayor
Jerry Lapp, Deputy Mayor
Scott Rossman
Stephanie Scott
Debra Schnabel
Norman Smith
Herb VanCleve

Others who assisted in the development of this plan by providing information or by following its development include local groups such as the Takshanuk Watershed Council and Chilkat Indian Association. State and Federal staff were helpful in their review and comments on resource inventory and analysis and policy development. Gina Shirey-Potts, OPMP was especially attentive and helpful as were Patty Crow, DGGS-ADNR; Joan Dale, SHPO-ADNR; Mike Turek, ADFG; Roy Josephson, Forestry and Roselynn Smith, ADNR.

My apologies to anyone inadvertently left off the acknowledgements.

Frankie Pillifant, Sheinberg Associates.

Table of Contents

1.0 Introduction.....	1-1
1.1 Coastal Management Overview.....	1-1
1.2 Purpose of Coastal Program.....	1-2
1.3 Document Organization.....	1-2
2.0 Haines Coastal Management Program Boundaries	2-1
3.0 Resource Inventory and Analysis.....	3-1
3.1 Land Status and Management.....	3-1
3.1.1 Past Development Patterns	3-1
3.1.2 Land Ownership and Management	3-2
3.2 Natural Environment.....	3-6
3.2.1 Climate.....	3-6
3.2.2 Air, Land and Water Quality	3-7
3.2.3 Geology, Glaciers and Soils.....	3-7
3.2.4 Natural Hazards	3-11
3.2.5 Coastal Habitats	3-16
3.2.6 Fish and Wildlife.....	3-29
3.2.8 Marine Mammals.....	3-37
3.2.9 Terrestrial Mammals.....	3-38
3.2.10 Vegetation.....	3-42
3.3 Human and Cultural Resources	3-43
3.3.1 Prehistory and History	3-43
3.3.2 Cultural and Archaeological Resources.....	3-47
3.3.3 Population and Demographics	3-52
3.3.4 Economy	3-54
3.3.5 Employment and Wages	3-54
3.4 Subsistence and Personal Use Harvests.....	3-56
3.4.1 Traditional Chilkoot Tlingits Subsistence Use Areas and Resources.....	3-61
3.5 Coastal Development and Uses	3-63
3.5.1 Commercial Fishing and Seafood Processing.....	3-64
3.5.3 Sand and Gravel Processing.....	3-78
3.5.4 Transportation and Utilities	3-82
3.5.5 Timber Harvest and Processing	3-89
4.0 Issues, Goals and Objectives	4-1
4.1 Introduction.....	4-1
4.2 Issues.....	4-1
4.3 Goals and Objectives	4-3
5.0 Haines Borough Coastal Management Program Enforceable Policies	5-1
5.1 Introduction.....	5-1
5.2 Criteria for Enforceable Policies.....	5-1
5.3 Enforceable Policies and Designated Areas.....	5-3
Coastal Development.....	5-4
Natural Hazards.....	5-9
Recreation	5-10
Subsistence.....	5-12
Commercial Fishing and Seafood Processing	5-13
Sand and Gravel Extraction Processing.....	5-14

Prehistoric, Historic, & Archaeological Resources.....	5-15
6.0 Former Port Chilkoot/Portage Cove AMSA.....	6-1
6.1 Introduction.....	6-1
6.2 Land Status.....	6-1
6.3 Land Use	6-2
6.4 Issues, Goals and Objectives.....	6-3
7.0 Implementation	7-1
7.1 Introduction.....	7-1
7.1.1 Organization.....	7-1
7.1.2 Subject Uses.....	7-2
7.1.3 Proper and Improper Uses	7-2
7.1.4 Designated Areas	7-2
7.1.5 Uses of State Concern.....	7-3
7.2 Borough CMP Participants' Duties and Responsibilities.....	7-3
7.3 General Consistency Review Information.....	7-4
7.4 Borough Participation In State-Coordinated Consistency Review.....	7-6
7.5 Borough Coordination of Local Consistency Review	7-9
7.6 Elevation Process/Appeals.....	7-10
7.7 Planning For Major Projects	7-11
7.8 Amendments and Revisions.....	7-14
7.9 Monitoring and Enforcement.....	7-14
7.10 Public Education and Outreach.....	7-15
8.0 Public Participation	8-1
Appendix A- Haines Enforceable Policies	A-1
Coastal Development.....	A-1
Recreation Designation.....	A-3
Commercial Fishing and Seafood Processing Designation.....	A-4
Sand and Grave Extraction Processing.....	A-4
Prehistoric, Historic, & Archaeological Resources Designation.....	A-5
Appendix B Haines Borough Enforceable Policies Cross Reference Table....	B-1
Appendix C Haines Borough Designated Areas Cross Reference Table	C-1

List of Figures and Tables

Figure	page
Figure 1 Location Map.....	2-2
Figure 2 Boundaries.....	2-3
Figure 3 Land Ownership	3-3
Figure 4 Soils	3-9
Figure 5 Natural hazards Designation.....	3-14
Figure 6 Coastal Habitats.....	3-18
Figure 7 Wetlands	3-23
Figure 8 Groundwater Potential.....	3-25
Figure 9 Important Habitats.....	3-32
Figure 10 Anadromous fish streams	3-33
Figure 11 Terrestrial Mammals, Fish and Wildlife Harvests	3-40

Figure 12	Prehistoric, Historic, Archaeological and Cultural Designation	3-49
Figure 13	Subsistence	3-59
Figure 14	Commercial Fishing and Seafood Processing Designation.....	3-68
Figure 15	Recreation Designation	3-75
Figure 16	Tourism.....	3-77

Table.....	page
Table 1 - Sites with Historic and Prehistoric Value.....	3-51
Table 2 - Alaskan Population Data 1990, 2000, 2003	3-52
Table 3 - Haines Subsistence Harvests by Resource Category, 1987, 1996.....	3-58
Table 4 - Average Number of Species Harvested Haines Households, 1996.....	3-60
Table 5 - Subsistence Fishing Statistics, 1993-2003	3-63
Table 6 - Commercial Fish Trends for Haines Borough, 1990, 2000, 2002.....	3-65
Table 7 - Endangered and Threatened Species in the Area	3-70

Acronyms

ACMA	Alaska Coastal Management Act
ACMP	Alaska Coastal Management Program
ADEC	Alaska Department of Environmental Conservation
ADFG	Alaska Department of Fish and Game
ADNR	Alaska Department of Natural Resources
AMHS	Alaska Marine Highway System
AMSA	Area Meriting Special Attention
ANB/ANS	Alaska Native Brotherhood/Alaska Native Sisterhood
ANILCA	Alaska National Interest Land Conservation Act
ANCSA	Alaska Native Claims Settlement Act
B.C.	British Columbia
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
DGGS	Division of Geological and Geophysical Services
DOTPF	Department of Transportation and Public Facilities
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Maps
FRPA	Forest Resources Practices Act
GPD (gpd)	Gallons Per Day
GPM (gpm)	Gallons Per Minute
HB	House Bill
HCMP	Haines Coastal Management Plan
IPEC	Inside Passage Electric Cooperative
IRA	Indian Reorganization Act (Federally recognized Tribal entities)
Kw	Kilowatt
KwH	Kilowatt Hour
MBF	Million Board Feet
MLLW	Mean Lower Low Water
NMFS	National Marine fisheries Service
NOAA	National Oceanographic and Atmospheric Administration
NSRAA	Northern Southeast Regional Aquaculture Association
OCRM	Office of Coastal and Resource Management
OHMP	Office of Habitat Management and Permitting
OPMP	Office of Project Management and Permitting
POL	Petroleum Oil Lubricant
TRUCS	Tongass Resource Use Conservation System
TWC	Takshanuk Watershed Council
ULCF&G	Upper Lynn Canal Fish and Game
USDA	United States Department of Agriculture
USFS	United States Forest Service

1.0 Introduction

The current Haines Borough and former City of Haines have participated in the Alaska Coastal Management Program (ACMP) since 1980. Coastal management has been a useful tool to manage coastal uses and resources. This includes the port and waterfront areas, development along rivers and roadways, important areas for community recreation, tourism, natural hazards, and coastal habitats.

Recent changes in State law require the Borough to revise the Haines Coastal Management Plan (HCMP). This document has been prepared to comply with the Alaska Coastal Management Act (ACMA) as amended by the Alaska State Legislature in 2003 and the ACMP regulations adopted in 2004-2005. Haines has also taken this opportunity to update the resource information in the plan and to address emerging and changing issues in the community through updated coastal management policies.

1.1 Coastal Management Overview

The United States Congress passed the Coastal Zone Management Act in 1972. The federal law provided an opportunity and incentives for coastal states to develop land and water use plans to manage their coastlines and coastal resources. The Alaska State Legislature passed the Alaska Coastal Management Act in 1977 and Alaska won federal approval of the ACMP in 1979.

Coastal management planning in Haines began in 1980 with adoption of the City's *Haines District Coastal Management Plan*, which was approved by the State of Alaska and Federal Office of Coastal and Resource Management (OCRM). This plan included the Port Chikoot/Portage Cove Area Meriting Special Attention (AMSA). In 1993, Haines revised its coastal plan to update its resource inventory and analysis, update its goals and objectives, clarify the enforceable policies, and revise the implementation section of the plan.

In 2003, the Alaska Legislature amended the Alaska Coastal Management Act (AS 46.40) with the passage of House Bill (HB) 191. The State of Alaska, Office of Project Management and Permitting (OPMP) adopted new regulations to implement the statute (§11 AAC 112 and 11 AAC 114). The statute made many substantive changes to Alaska's coastal management program and required all coastal districts to revise their plans to bring them into compliance with the new requirements. This 2005 revision of the Haines Coastal Management Program and AMSA:

- Complies with the revised Alaska coastal management statute and regulations.
- Updates the resource information base and the goals and objectives of the program.
- Provides updated and improved mapping for coastal resources and areas subject to the policies of the plan.
- Updates the enforceable policies to reflect the Haines Borough current intent and interests with regard to managing coastal uses and activities within its coastal district boundaries.

- Sets the foundation for a future plan revision to enlarge the coastal plan to include the entire Haines Borough, beyond the current the boundaries, which are the same as those of the former City of Haines.

1.2 Purpose of Coastal Program

The general purposes of the Alaska Coastal Management Plan are to balance development and preservation of coastal resources and to bring local expertise and knowledge to the state and federal project review process. The specific objectives of the Alaska Coastal Management Plan (A.S. §46.40.020) are the:

- (1) Use, management, restoration, and enhancement of the overall quality of the coastal environment;
- (2) Development of industrial or commercial enterprises that are consistent with the social, cultural, historic, economic, and environmental interests of the people of the state;
- (3) Orderly, balanced utilization and protection of the resources of the coastal area consistent with sound conservation and sustained yield principles;
- (4) Management of coastal land and water uses in such a manner that, generally, those uses, which are economically or physically dependent on a coastal location, are given higher priority when compared to uses which do not economically or physically require a coastal location;
- (5) Protection and management of significant historic, cultural, natural, and aesthetic values and natural systems or processes within the coastal area;
- (6) Prevention of damage to or degradation of land and water reserved for their natural values as a result of inconsistent land or water usages adjacent to that land;
- (7) Recognition of the need for a continuing supply of energy to meet the requirements of the state and the contribution of a share of the state's resources to meet national energy needs; and the full and fair evaluation of all demands on the land and water in the coastal area.

1.3 Document Organization

Key elements of the Haines Borough Coastal Management Plan are:

Coastal Zone Boundary (chapter 2) - Identifies the Haines coastal district boundary, which is the area subject to this Plan.

Resource Inventory and Analysis (chapter 3) - Inventories coastal resources and analyzes the impacts to these uses and activities.

Issues, Goals, and Objectives (chapter 4) - Develops policies applicable to the land and water uses subject to the Haines coastal management program.

Enforceable Policies (chapter 5)- Lists the Plan's enforceable policies.

Port Chilkoot/Portage Cove Areas Meriting Special Attention (AMSA) (chapter 6)- Describes and provides policies for this special area.

Implementation (chapter 7)- Identifies the land and water uses and activities subject to the Alaska coastal management program. Describes how the plan is implemented locally and by State and federal agencies.

Public Participation (chapter 8) - Documents the process for public participation used to develop this plan.

Appendix A- lists the Enforceable Policies without the Administrative Policies for the Coastal District.

Appendix B-Lists the Enforceable Policies in a cross-reference table format.

This revision to the HCMP was prepared in accordance with the direction and process outlined in Alaska Regulation §11AAC114.345 Transition.

2.0 Haines Coastal Management Program Boundaries

The Haines Borough encompasses an area of approximately 2,620 square miles, or almost 1.7 million acres. It is bounded on the North and East by Canada and the City of Skagway, to the South by the City and Borough of Juneau and Icy Straits, and to the West by Glacier Bay National Park. Nearly 120 miles long and 80 miles at its widest, the Borough is the northern boundary of the Southeast Alaska region.

The Haines Borough is in the Southeast region of the state of Alaska at the northwestern tip of Lynn Canal and Chilkoot Inlet. It is approximately eighty air miles north of Juneau, Alaska and one thousand air miles north of Seattle, Washington

The Alaska Coastal Management Program boundaries are defined in the 2004 atlas Coastal Zone Boundaries of Alaska (OPMP). The Haines Coastal District boundary is specified by statute and is the same as the municipal boundary of the Haines Borough. The coastal zone boundary defines the area that is subject to the HCMP. Though consolidation occurred in 2002, this plan revision applies only to land and water uses and activities within the Haines coastal zone boundary, the former City of Haines (Figure 1). The Haines coastal management area boundary includes the areas of direct interaction and influence between coastal waters and adjacent land. The inland coastal management area boundary includes all lands and waters in this area down to mean lower low water (MLLW). The Haines Coastal District Study Area boundary was originally established in the 1980 Haines Coastal Management Program. This update retains the Study Area boundaries as shown on the location map (Figure 1). This larger Study Area includes the "zone of direct interaction," and the "zones of direct and indirect influence".

Subject uses within the coastal zone will be reviewed by the Haines Planning Commission and state agencies for consistency with the enforceable policies of the plan. Enforceable policies of this plan are applicable to the mapped areas of the coastal management area.

Federal lands within the Haines Coastal District are excluded from local zoning jurisdiction. Excluded from Alaska's Coastal Zone Boundaries are "those lands, owned, leased, held in trust or whose use is otherwise by law, subject solely to the discretion of the Federal Government, its officers or agents" (15 CFR 923.3). Activities on these lands are subject to the consistency provisions of Section 307 of the Coastal Zone Management Act of 1972, as amended. Uses and activities are subject to consistency review if the actions are likely to affect any land or water use or natural resource in the coastal zone.

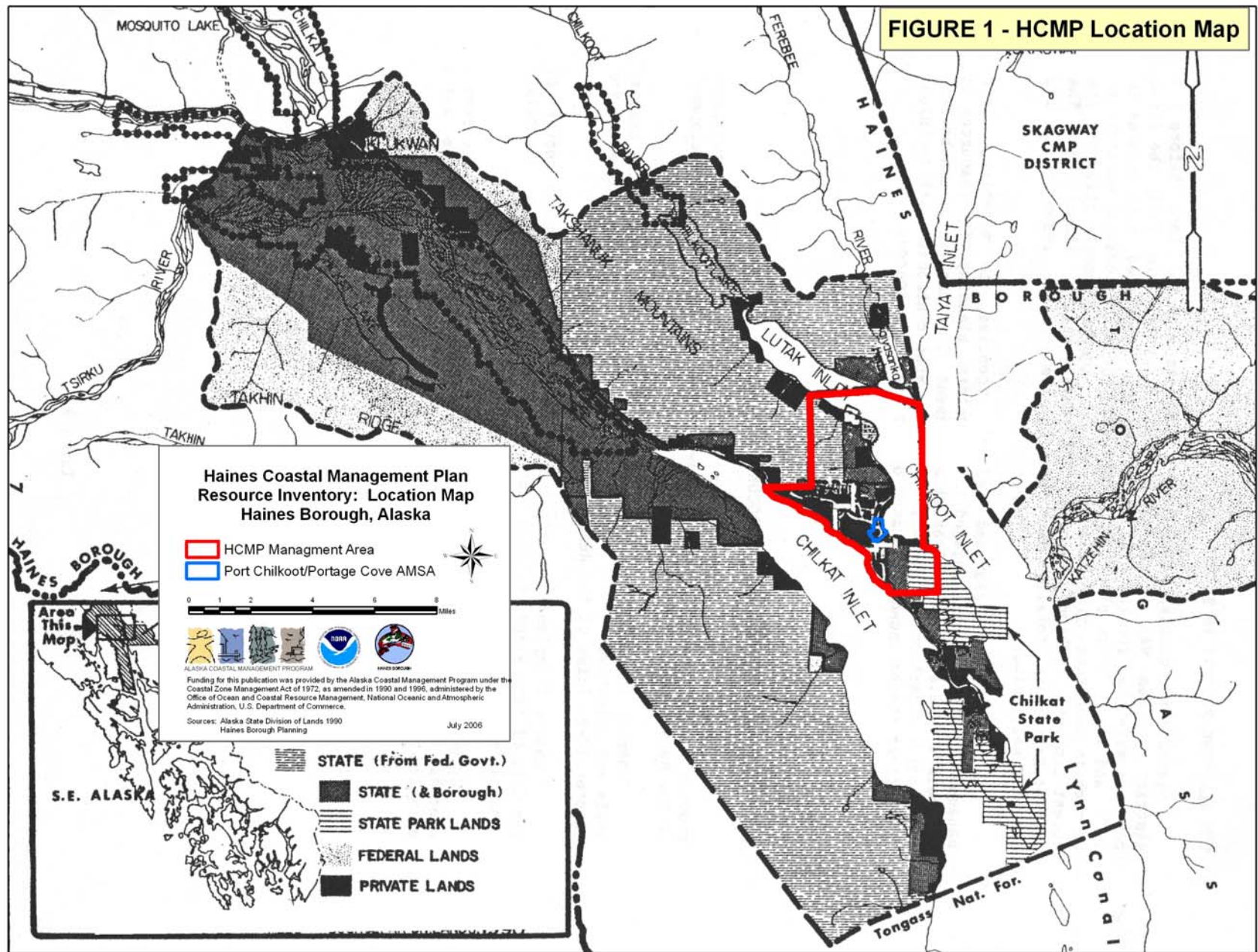
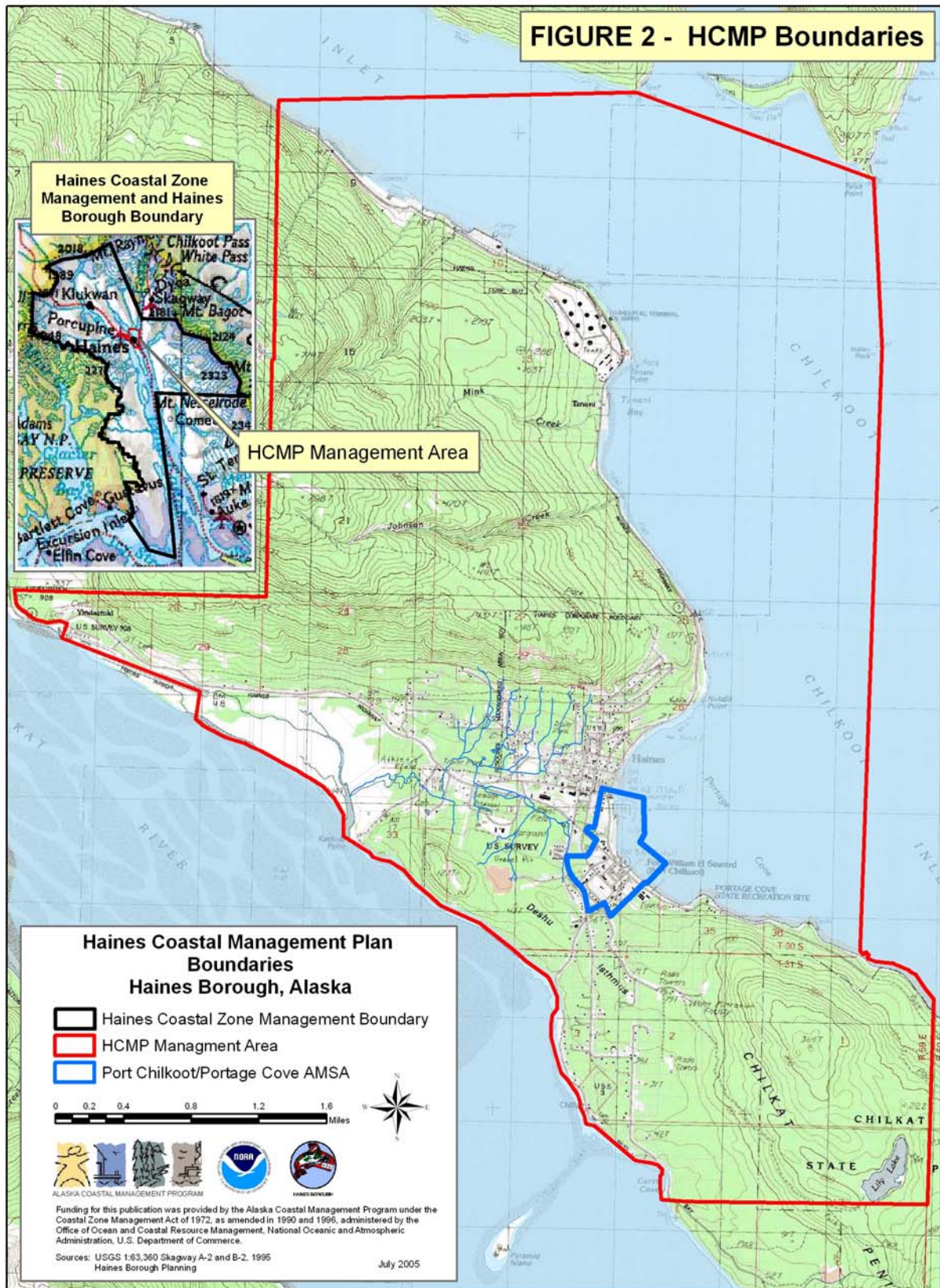


FIGURE 2 - HCMP Boundaries



3.0 Resource Inventory and Analysis

3.1 Land Status and Management

The Haines Borough through its powers of planning and zoning makes management decisions within the jurisdictional planning area. The Haines Borough has statutory authority and direct control over the patterns of use and development within the planning area.

3.1.1 Past Development Patterns

Native Alaskans of the Tlingit culture originally settled the Haines area. These first people traveled to the area along the Northwest Coast after the receding glaciers or came down the mountain valleys from the Interior. The original Native name for Haines was Deishu, meaning "end of the trail". European explorers began arriving in the late 1700's. During the following decades, explorers and traders became more frequent visitors to the Upper Lynn Canal region. When the City of Haines was incorporated in 1910, it had about 400 residents, 19 stores and four canneries. The original city was a small area adjacent to Portage Cove that grew as a service center for Fort Seward and canneries in northern Lynn Canal. The lack of a road system limited growth and development at that time to areas near the fort and canneries.

During the 1940's and 1950's, Haines became an important transportation link with the completion of the Haines Highway and the initiation of the Alaska Marine Highway System (AMHS). This improved access provided a spur to development, which was especially needed because of the closing of Fort Seward. The state ferry system constructed its dock north of town in Lutak Inlet in the early 1960's. The federal tank farm and dock were constructed north of the city. The downtown commercial district became well established along Main Street and many residences were established in the town site area. Rural residential, commercial and industrial development began to spread along the developing road system.

While population throughout the area has increased over time, the population in the former City grew primarily due to a series of annexations of land and residences into the city, including:

- South of the Haines Highway, the former Fort Seward was incorporated as the City of Port Chilkoot in 1956. In 1970, Port Chilkoot and Haines merged and the land between them, the current Haines Highway corridor, was annexed.
- In 1983, the City annexed about 15.5 acres of City port facilities and submerged lands at Lutak Inlet.
- In 1989, the City annexed about five acres, including the ballpark at Oslund Park.
- In 1993 the City annexed 4.75 square miles of uplands north of the City and seven square miles of submerged lands north and east of the City.

- In 1999, the City of Haines annexed an additional 6.5 square miles of land to the south and west of the City.

An effort to consolidate the First class City of Haines and the Third class Haines Borough was narrowly defeated by voters in 1998, but passed in 2002 when the Home Rule Haines Borough formed. This action combined two separate governmental entities into one and mandated adding area wide planning, platting and land use regulation to the responsibilities of the local government. Areas of the Borough that already had planning and zoning powers, the former City of Haines, Mud Bay and Lutak, retained their respective zoning regulations. The remainder of the Borough was zoned General Use as described in the Haines Borough Charter and accompanying Transition Plan of 2002.

3.1.2 Land Ownership and Management

Ownership and management of land in the Haines Borough is a patchwork of Federal, State, Haines Borough, and private property (Land Ownership Map, Figure 3).

Federal Land

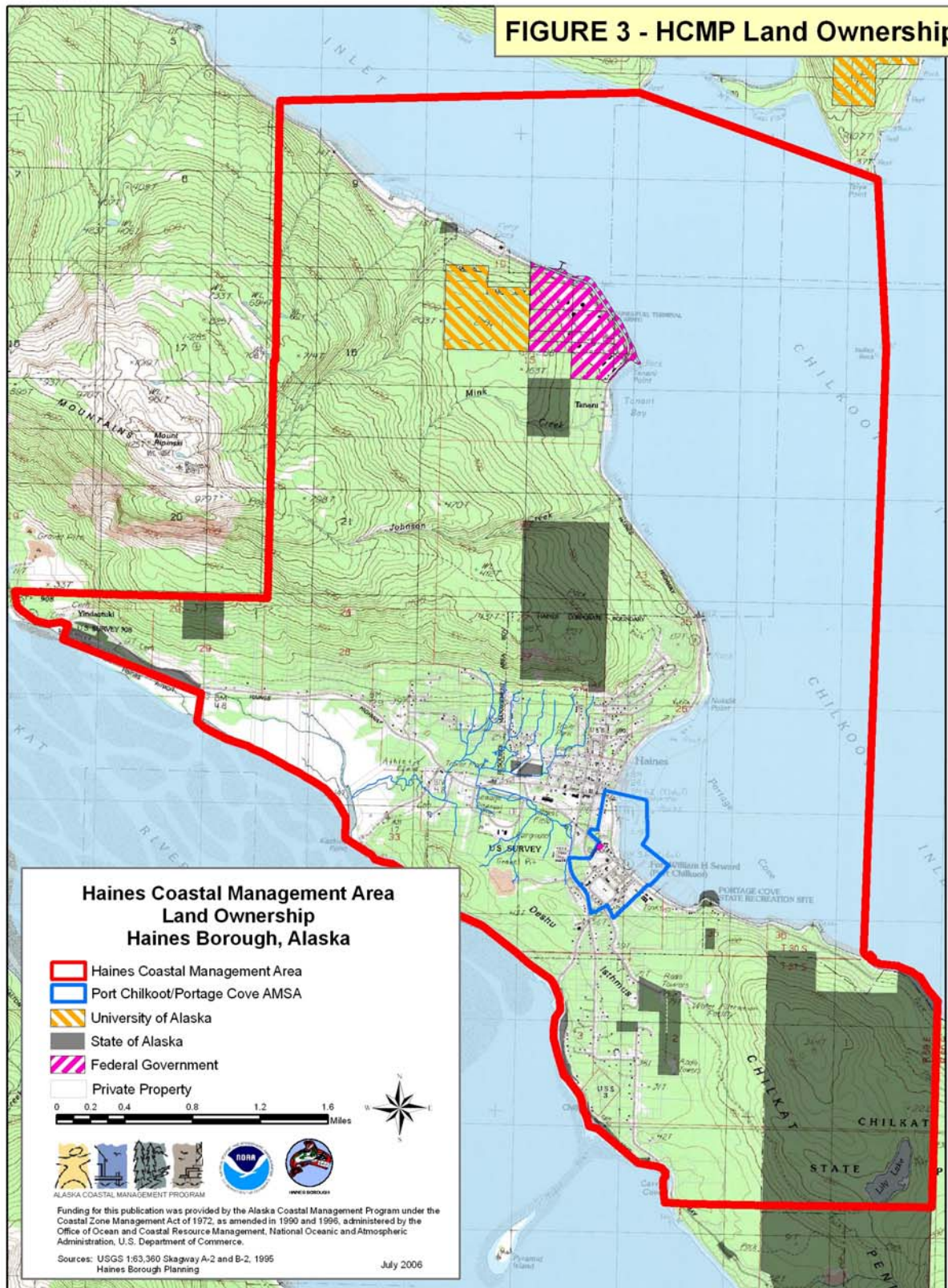
Federal lands in the borough are under the administration of both the USDA Forest Service (USFS) and the Bureau of Land Management (BLM). These federal lands make up the majority of land in the Haines Borough.

All land on the east side of Lynn Canal and on the west side of Lynn Canal south of Glacier Point, with the exception of a few private in holdings, is part of the Tongass National Forest, managed by the USFS under its *Tongass Land Management Plan, 1999 Update*. Much of the National Forest Land in the Borough is designated Remote Recreation and is managed to maintain these uses including all National Forest land on the east side of Lynn Canal, except the Katzeihin River. There are areas of National Forest land open to resource extraction on the west side of Lynn Canal.

The BLM managed land is mostly in alpine areas to the west of Chilkat Inlet from the Tongass Forest boundary to the Canadian border and continuing around to the north to meet the boundary of the City of Skagway. The BLM manages their land for multiple uses and is currently preparing the *Ring of Fire Resource Management Plan*, which will guide its land use decision-making.

Federally owned lands within the town site include of the U.S. Army Tank Farm and POL Dock facility at Lutak Inlet. This 220-acre facility, currently surplus property, is undergoing an environmental clean-up prior to disposal by the federal government. It is a major industrial area and was annexed into the City in 1992. The federal government also owns the U.S. Post Office on the Haines Highway and the Federal Aviation Administration (FAA) tower site located on FAA Road.

FIGURE 3 - HCMP Land Ownership



State Land

State land in the Haines Borough includes the Haines State Forest and Chilkat Bald Eagle Preserve, both managed by the Alaska Department of Natural Resources (ADNR). Other state land is managed by the University of Alaska and by the Alaska Mental Health Land Trust.

The University of Alaska's parcels are scattered throughout the borough. Some of these parcels have been subdivided and sold as residential lots, including the Letnikof Estates Subdivision on the Chilkat Peninsula and others in the Mosquito Lake and Porcupine areas. The University has been actively managing their land for revenue generation.

The Alaska Mental Health Land Trust's parcels are widespread in the borough. They include land on Mt. Riley, along the Haines Highway near the border and on the upland side of Lutak Road. To date, the Alaska Mental Health Trust has not pursued sale of their holdings in the Haines Borough, although their mission is to generate revenue from their land holdings to support mental health programming in Alaska.

The ADNR manages uplands within the northwest and southwest quadrants of the town site. Most of this ADNR land within the town site is marginally useful for development because of slope or wetness. The Haines State Forest, managed by ADNR, covers large areas of the Chilkat and Klehini valleys and is managed for multiple uses, with some areas emphasizing recreation and scenic values and other areas emphasizing commercial timber harvest. The Haines State Forest Management Plan was updated in 2003. The state manages lands, as described in the Northern Southeast Area Plan.¹

ADNR also manages the Chilkat Bald Eagle Preserve that stretches along the Chilkat, Klehini and Chilkoot Rivers. It is managed under The Chilkat Bald Eagle Preserve and Management Plan, adopted in 2003 for the protection of the eagles and their habitat, but does allow for other non-conflicting uses. The State owns, and ADNR manages, significant tideland areas within the borough, mainly along Chilkoot and Lutak Inlet. These tidelands are classified by the State as Commercial/Industrial and are open for leasing.

The state highway maintenance facility on Main Street is owned by DOT&PF.

Borough Land

The Haines Borough owns approximately 2000 acres of land, from the western border with Canada to the south in Excursion Inlet. Other parcels are on Mt. Ripinsky, Mt. Riley, and along Lutak Inlet. Borough subdivisions where land is sold to private parties for housing include 13 view lots in the Carr's Cove Subdivision, and the Skyline Subdivision north of the downtown area above Highland Estates with another 51 lots. Many of these lots sold immediately, and the pace of home building has been steady. Other borough lands within the town site are reserved for

<http://www.dnr.state.ak.us/mlw/planning/areaplans/nseap/>, or copies can be obtained from the Director's office at 550 W. 7th Ave., Suite 1070 Anchorage, AK 99501-3579. Active State land Special Use Designations (SUDs) are also available from this site, including Alaska Division of Land projects (ADLs) 106858, 106859, 106929, and 106939 (pending)¹

public use and include school facilities on a 16-acre site between Main Street and the Haines Highway, roads, parks, the library, Sheldon Museum, Chilkat Center for the Arts, the Visitor Center, Municipal Building and the Maintenance Shop. Most of the tidelands in Portage Cove are also Borough owned. The small boat harbor infrastructure is leased from the DOT&PF.

The 1986 Borough Comprehensive Plan identified six goals, objectives and policies based on a survey conducted at that time. The six goals were:

1. Preserve the rural lifestyle;
2. Maintain the natural environment;
3. Provide for an orderly pattern of land use and development;
4. Improve the beneficial use of local resources for employment opportunities;
5. Improve road quality; and
6. Maintain a decentralized and manageable planning and review process.

From these six goals, a set of policy recommendations was made within the 1986 and 1999 Plans. A sampling of these recommendations: land density policy; buffer zones and setbacks; existing and future services; natural environment policy; land classification policy; land disposal policy; industrial area development policy; economic development policy; area road policy; and, the creation of planning service areas, special assessment districts, neighborhood associations, and homeowners associations.

In 1998 residents asked further that the Borough:

- Provide for a orderly process for management of Borough owned lands;
- Improve use of local resources for employment opportunities;
- Provide for a planning process; and,
- Improve the quality of life.

Broad management goals and desired growth for borough lands are established in the Comprehensive Plan, which is implemented through the Borough Municipal Code (particularly zoning and subdivision codes) and through the Borough's annual Capital Improvement Program and spending. There are ten zoning districts within the former City, four within the former Mud Bay and Lutak Service Areas, and the General Use Zone applies in the remainder of the borough. It is expected that zoning will change over time, partly in response to direction established and issues discussed in this Comprehensive Plan. The Borough also uses the HCMP to implement its land use objective and the coastal management plan and an approved Port Chilkoot /Portage Cove AMSA Plan.

Private Land

Land in the town site is mostly in private ownership and in pockets along the road system. There are also remote parcels of privately owned land scattered throughout the Borough in places such as Chilkat Lake, the upper Chilkat River valley, the Takhin and Tsirku valleys, Pyramid Harbor, Glacier Point, Sullivan Island and Excursion Inlet. The private land within the original town site is a mix of commercial, industrial and residential development. The pace of residential

development on private land quickened in the mid 1990's, especially on the south and north sides of the town site. About half of the private land within the town site remains undeveloped, including residential areas and some commercial lots in the downtown area.

3.2 Natural Environment

3.2.1 Climate

Moderate summers and mild winters with heavy snowfall generally typify the climate in Haines. Prevailing Lynn Canal winds are northerly throughout much of the year except in the summer, when they are southeasterly, weaker and more variable. Low-pressure systems pass over or nearby all year. In July at least one, and sometimes two or three primary low pressures systems pass near the Lynn Canal area. During December, the month of the greatest number of cyclones, there are more cyclonic lows per unit area over the nearby Gulf of Alaska than in any other part of the northern hemisphere in any other month of the year.

Because of the mountain barrier along the northern and eastern edges of the Gulf of Alaska, cyclonic lows tend to stagnate there and dissipate their energy over the mountains, resulting in the abundant precipitation and windy weather of the region. Throughout the year the prevailing winds bring relatively warm, nearly saturated air into Southeast Alaska. Upon striking the coastal mountains these air masses rise and cool resulting in precipitation. Annual rainfall near sea level in the Lynn Canal area varies from over 92 inches at the southern end to 20 inches at the northern end. Mean annual precipitation at Haines is 60 inches compared with 20 inches at Klukwan. Mean annual snowfall for Haines is 132.6 inches. Precipitation is greater at higher elevations than at sea level.

Mean annual temperature is 40° F. in Haines and 36° Klukwan. In Haines, the temperature ranges from -12° F. to 90° F, and it is not uncommon for temperatures to differ by as much as 10° F. between Haines and Klukwan, only 20 miles apart. During the winter, the Tsirku alluvial fan area near Klukwan is colder and receives less precipitation than Haines.

In winter a high-pressure area will frequently develop over northern British Columbia and the Yukon Territory while a strong low-pressure area centers over the western Gulf of Alaska. The resulting large pressure gradient generates extremely strong winds (Taku winds) that blow through the mountain passes and down Lynn Canal. The funneling effect of the mountains that surround Lynn Canal channels winds in a northerly or southerly direction. Occasionally during the winter extremely strong 20-30 mph down slope winds occur, with gusts occasionally over 50 mph. Sustained northerly winds as high as 80 to 90 knots have been recorded at Eldred Rock light station. Likewise, the mountains around the Chilkat-Chilkoot River valleys channel surface winds up and down river. For this reason, prevailing winds in these areas are from the west and southwest.

Growing season data for the Haines study area shows a climate suitable for agriculture, with an average frost-free period of 140 days, and 2,250 growing degree-days (the total annual number of degrees above 40° F. for all days of the year with mean temperature above 40° F.).

The average annual heating degree-day total for the Haines area is 7,724 (the total annual number of degrees below 65° F. for all days of the year). Which is important for determining fuel consumption, required insulation, and other engineering considerations.

3.2.2 Air, Land and Water Quality

The quality of air, land and water in the Haines area is generally considered excellent. The existing air quality in the Haines area is classified as a class II airshed by the Alaska Department of Environmental Conservation (ADEC) under the authority of the Federal Clean Air Act administered by the State of Alaska, and the federal Environmental Protection Agency. Class II airsheds are generally pollution free and will allow industrial development. The more restrictive Class I is designed to protect pristine areas such as parks and wilderness areas. The air quality of the Haines study area is almost always considered excellent. During seasonal thermal inversions, however, industrial and domestic emissions tend to stratify between sea level and 1,200 feet causing visible air pollution.

Areas of the coastal district that have experienced occasional impacts to air, land and water quality include: Chilkoot Inlet, Lutak Inlet, Holgate Creek and Sawmill Creek. Identified nonpoint sources of pollution are urban runoff, septic tank leachate, and channelization of streams, stream bank and shoreline modification, and road runoff. The Small Boat Harbor in Portage Cove is a source of minor but persistent petroleum products pollution. Sources are oily bilge water pumped by vessels in the vicinity and minor escapement of fuels at the fuel dock. Raw sewage from tourist RV's at Tanani and Nukdik Points, and sewage leachates from the drain fields of the residences on Tanani Bay have created isolated water pollution in these areas.

Disturbances created by humans and domestic animals in the Chilkoot River have been primarily noise, and injection of human scent which is scientifically known to repel smelt (eulachon) and salmon (Hara, 1975, "Olfaction in Fish"). The disturbance occurs from bilge pumping and petroleum products escapement. The Federal Tank Farm and POL Dock waste disposal practices during the life of the facility have also contributed to pollution in the water.

The ADEC is the state agency charged with administering all state and coastal air, land and water quality policies. Management of air, land and water has been 'reserved' or 'carved' out of the Alaska Coastal Management Program.

3.2.3 Geology, Glaciers and Soils

The geologic processes that formed the Haines area are recorded in the landforms, fossils, debris, and plant life. Faulting and folding of the earth's crust formed the rugged and relatively young mountains of the area, and the Alexander Terrane that predominates in Southeast Alaska emerged.

Glaciations had a major effect on the shape of the land today. At least eight major glacial cycles have carved out valleys, grinding down rock and depositing moraines and layers of glacial till. Climate warming 6-7 thousand years ago caused a general retreat of late Pleistocene ice. At that time Alaska's glaciers were reduced to their present size or smaller.

Glacial rebound, the uplift of terrain after the weight of glaciers is removed, causes measurable elevation increase in northern Southeast Alaska, especially along shorelines, mud flats, and riverine basins. The rate of rebound has been constant in this century and has been recorded as high as 1.6 inches per year in the region and 0.9 inches in Haines.

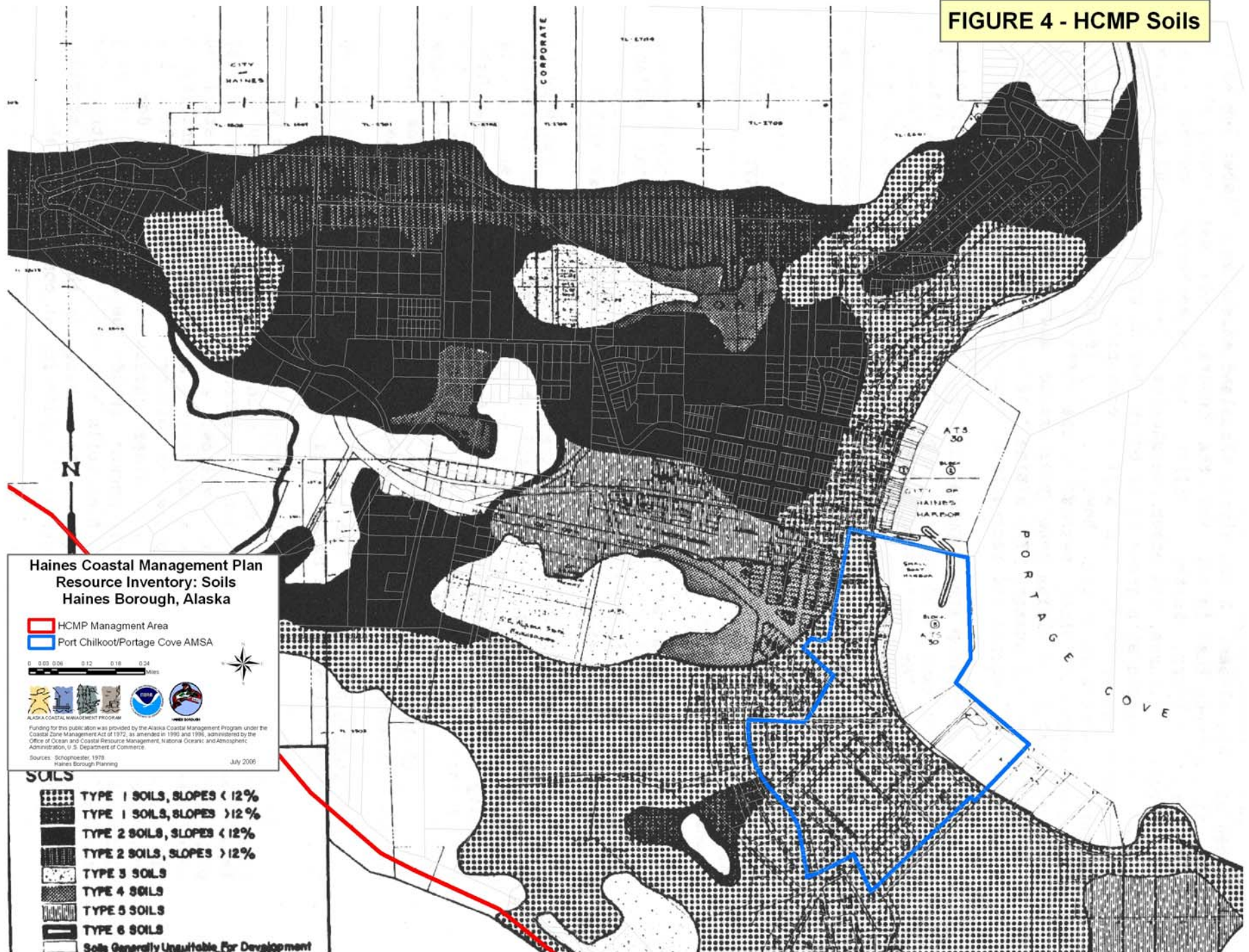
The Chilkat Peninsula forms an important geological boundary in Lynn Canal. It is composed of Mesozoic greenstones, volcanic sandstones, mudstone, chert, and limestone that closely resemble the rocks of the Gravina belt. These Gravina belt type rocks lie on top of much older lower to middle Paleozoic carbonates of the Alexander terrain. Southwest of Haines, Alexander terrain rocks crop out in the Chilkat Range, and farther southwest into Glacier Bay.

Near the delta of the Tsirku and Chilkat Rivers, 750 feet of river sands and gravel fill this deep glacially scoured valley. Along the Chilkat River valley, Mesozoic Gravina-like rocks, and Alexander terrain rocks are separated by the Chatham Strait fault, which can be traced from Berner's Bay north of Juneau, along Lynn Canal, and northwestward through the Chilkat River valley. On the Chatham Strait fault, fiord-filling sediments indicate no slippage has occurred.

Soils

The core area of the coastal district has soils that can support development although moderately steep slopes, a high water table, and slow permeability rates pose constraints in some locations. A preliminary evaluation of foundation suitability, susceptibility to earthquake damage, and drainage (including septic tank limitations) was made to determine those soils that can support development.

FIGURE 4 - HCMP Soils



About 11,500 acres have adequate soil for growing, though only 25% of this acreage may be agronomic due to topographic conditions. Areas of best potential are located on stream terraces. The growing season is about 140 days a year. Small vegetable gardens have been successful in the borough for many years, and a number of farms produce commercial sales. Kale and root vegetables such as cabbage, cauliflower, carrots, beets and potatoes seem to do best, and some people grow berry and lettuce patches. Charles Anway developed his prize-winning "Anway Strawberry" and exhibited it at the Alaska Yukon Exposition of 1908. He also started the first commercial apple and cherry orchards in Alaska.

Soils of the Haines coastal district are divided into six main types, described as follows (Schophorester, 1978) and shown on the soils map (Figure 4).

TYPE 1 (Ch). This soil has 12 to 18 inches of well-drained topsoil over glacial deposits. The glacial deposits consist of gravel, sand, silt, and clay to depths of 42 inches, and probably much deeper. These soils are firm when moist, and hard and brittle when dry, and they provide a good foundation. Their susceptibility to earthquakes is relatively low. However, they are generally not suitable for septic tank leach fields because of slow permeability rates ranging from 0.20 to 0.63 inches per hour. A percolation of 0.5 inches per hour is acceptable minimum for single-family homes on large lots. Frost action is not a major problem in these soils, and they provide a good source of road fill material. This soil type is found on undulating to steep slopes, and on glacial moraines.

TYPE 2 (De). This soil type has 18 to 26 inches of somewhat poorly drained, gravelly sandy topsoil over firm clayey deposits. These soils are found on level areas and on low hilly moraines and alluvial fans. The clayey deposits extend to as much as 80 feet below the surface. These soils provide a moderately firm foundation but have a high frost action potential. They are subject to compaction, settling, loss of bearing strength, and sliding during an earthquake. Permeability is low, and the soils are not suitable for septic tank leach fields. There is a potential for slumping of surficial soils on sloping areas.

TYPE 3 (Maybeso). These soils are found on nearly level sites and surrounding areas. They have about 20 inches of peat and much over firm glacial drift and would be available for building if the peat were removed and/or drained. The glacial materials consist of stony silt and clay with some fine sands. Potential frost action in these materials is high, and drainage is poor due to the high water table and slow permeability. The glacial drift is suitable for foundations, but septic tank leach fields cannot be built in these area.

TYPE 4 (Lu). These soils consist of very gravelly, coarse sand with a thin organic covering. They are found on gently sloping portions of moraines that receive seepage from surrounding areas. They have a high water table within two feet of the surface and are usually not suitable for septic tanks, although they could be drained in some locations through the use of deep open ditches. These soils provide a good source of sand, gravel, and road fill materials. They have sufficient foundation bearing capacity and relatively low susceptibility to earthquakes.

TYPE 5 (Kina). This soil type has approximately 50 inches of peat over firm, stony glacial till. It is found in level areas and broad depressions, and drainage is poor. The soils underlying the

peat would provide good foundations for building, and thus development may be possible in parts of these areas if the peat is excavated and some system of drainage is provided.

TYPE 6 (Ka) This soil type has approximately 22 inches of silty clay loam over plastic silty clay. Drainage is poor, with the water table normally 2 to 4 feet below the surface. In places the soil is occasionally flooded. These soils cannot be artificially drained and are not suitable for septic systems. Plastic clays do not have good foundation bearing capacity and are extremely susceptible to earthquake hazards. While this poses severe limitations for development, maps indicate that some development has occurred in areas with type 6 soils. Thus, parts of these areas may be suitable to some types of development.

Soils in the broader Borough area have not been inventoried.

3.2.4 Natural Hazards

Generally, Haines is located in an active tectonic region about 100 miles northeast of the active Fairweather fault, and near the less active Denali fault. A general assessment of earthquake potential prepared by the DNR Division of Geologic & Geophysical Surveys (DGGS) for emergency planning purposes indicated that a magnitude 7.0 earthquake would be the maximum credible event for the Denali fault (Hansen and Combellick, 1998). Yehle and Lemke (1972) indicated a maximum event of magnitude 5.5 to 6.0. Earthquake effects could include ground shaking, surface displacement, subaerial and subaqueous slides, avalanches, compaction, and liquefaction of certain soils, ground subsidence, and/or destructive waves. Natural hazard areas are identified on the Flood Plan and Hazards Map of the Haines Borough, which available immediately upon request.

The Haines coastal district has several regions at risk for flooding and seasonal flooding due to storm events. Additionally, borrow sites along the base of Mt. Ripinsky are also within these areas (Figure 5). Slopes along the base of Mt. Ripinsky that have previously been utilized as borrow sites are now closed. These areas were mined for rock material but due to excavation processes extreme slope angles were created which left the slopes unstable.

The steep slopes in the Haines area are subject to large and small-scale slides, debris flows, rockfalls, soil flows, and underwater slides. Although many times such slides are triggered by earthquakes, many also occur as the result of normal river delta formation, heavy rainfall, seasonal freezing and thawing, and man's alteration of slopes.

Earthquakes and Tsunamis

The largest potential geological hazard in the Haines area is earthquakes. The area lies within an extremely active tectonic zone, where large-scale faulting is common. Haines is part of a belt in the second most seismically active region in Alaska and constitutes a part of the highly active circum-pacific seismic belt where earthquakes of magnitude 8 or greater have occurred. Seismic records indicate that over 100 significant earthquakes have been recorded in the Haines area since 1899.

Earthquakes of moderate size, between 6.0 and 7.0 on the Richter scale, can be expected to occur on the order of once or twice per century. There are no known earthquake epicenters within the Haines coastal zone; however, in November of 1987 an earthquake registering 5.3 on the Richter scale had its epicenter near Haines. This earthquake also had several preliminary and after-shocks.

The Haines study area may have a higher earthquake probability than indicated by historic seismic records. The possibility of a magnitude 8 or greater earthquake in the general area of Haines cannot be ruled out. The Haines area is assigned by the U.S. Army Corps of Engineers to seismic zone three (3). The greatest potential earthquake effects include compaction, settlement, liquefaction, subsidence and ground fracturing of poorly consolidated, water-saturated deposits, as well as sliding on steep slopes of fine grained plastic sediments and damage from waves induced by submarine sliding.

Local subsidiary faults to the Chatham Strait Fault are the Chilkat River Fault, the Chilkoot Fault, the Takhin Fault, and faults in the saddle area of Haines. These faults are, for the most part, concealed by water or valley floor deposits, thus their exact location and character can only be inferred.

Major tsunami effects from earthquakes near, or outside, the region is less likely due to the location of Haines at the end of a long fjord. Haines' location 100 miles up the Lynn Canal, with sheltering from the Chilkat Islands and Peninsula will tend to dissipate the energy of distant oncoming tsunami shock waves. The Anchorage earthquake of 1964, with its destructive tsunami effects in the outside waters coastal zone, created only several additional tidal bounces in the upper Lynn Canal of magnitude close to the normal daily tidal extremes at the time.

Avalanche, Landslide, Slope Failure, Erosion

Landslides frequently occur on or adjacent to steep slopes where unconsolidated soils, talus deposits and overburden overlay bedrock or impermeable soils. Avalanches can also occur on these slopes. Most of these steep slopes are away from currently developed and inhabited areas, though the Mt. Ripinsky excavations are near the community. Landslides and mixed mud and snow debris avalanches occur during or after periods of extreme precipitation. Small landslide and snow avalanche debris accumulations occur along the steep mountain front north and northwest of Haines and along the fjord walls of the Chilkoot and Lutak Inlet. Numerous landslides of considerable extent occur frequently in the Haines borough, but rarely impact any developed areas. However, in the late 1890's, a landslide virtually eliminated a Native village at 19-mile Haines highway.

Seiches are tidal waves generated by nearby surface or submarine landslides. It is estimated for emergency preparedness purposes that, on a 1,000-year cycle seiches could have impacts up to 100' elevation above MLLW shoreward, with higher effects also possible.

Flooding and Storms

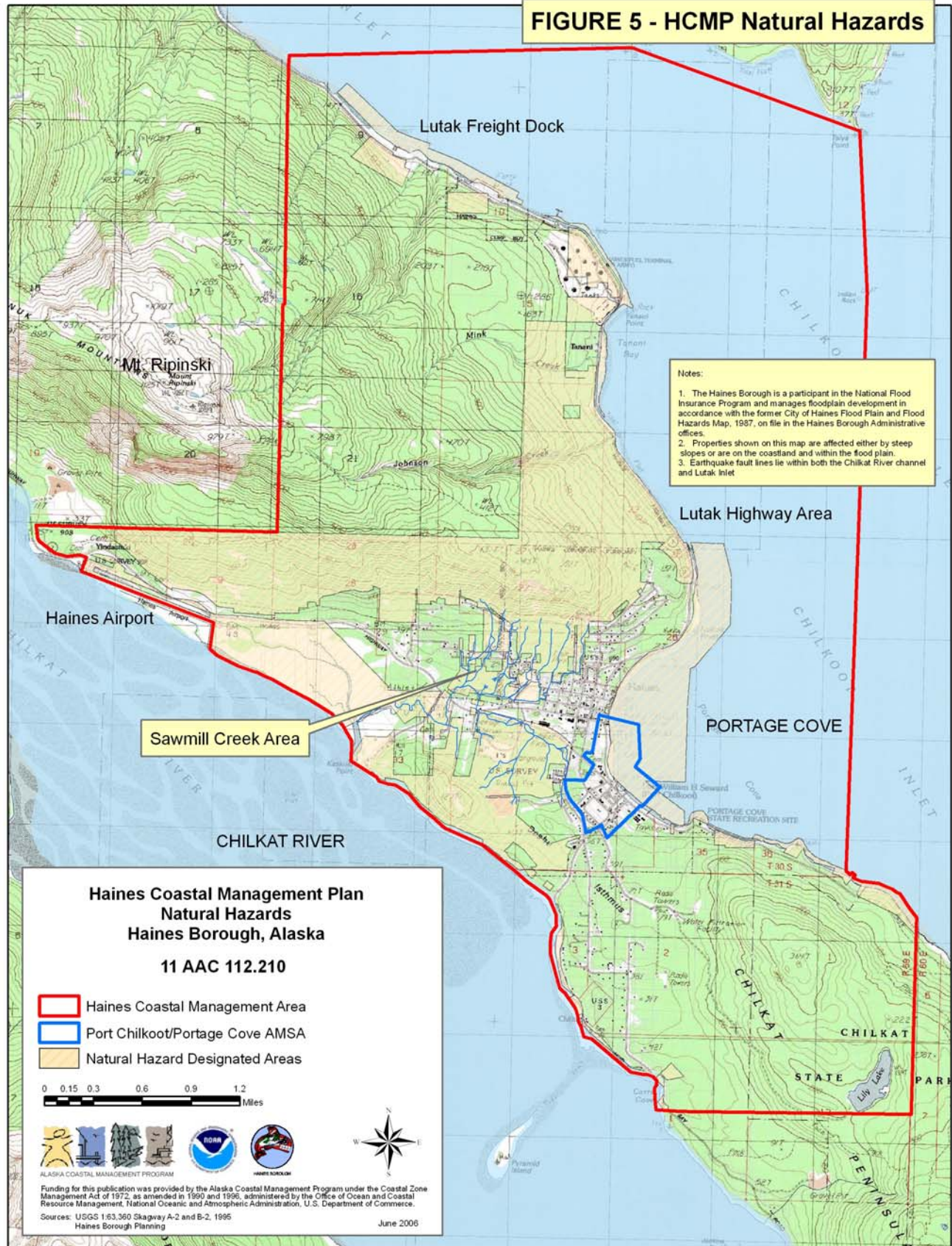
Extensive flood hazard areas exist throughout the flood plains of all riverine systems. Sudden changes in main channel alignment and course are common as has occurred at Klukwan and the Tsirku River Fans. Sloughs, riverine islands, river deltas, and tributary channels are all subject to sudden flood immersion and scouring. As a result existing low land physical features are sometimes not considered permanent. Salmon and wildlife habitat, salmon enhancement project areas, and human developments in flood prone areas are continually subject to negative impacts from flooding. In mid-September of 1967, 6.5 inches of rain fell in a 5-day period, and inundated the Haines Highway from mile 7 to mile 16, impacted another 35 miles of the highway damaging the roadbed and bridges, and closed the highway for two days. Flood hazard areas in the developed core area of the coastal district are well identified on the 1989 Flood Plane and Flood Hazards Map of the Haines Borough and through F.E.M.A.

Flood and geophysical hazard areas in the Tanani Bay and Lutak Inlet areas are primarily within the Johnson Creek, Mink Creek, and unnamed industrial water source drainages. In this area some minor landslide and avalanche activity can also occur on higher slopes, especially in association with the deeply cut drainages of the three creeks.

Seasonal storm winds can create wind damage, wind-driven water damage, and high runoff inundation. However, wind damage in the Haines coastal area is rare due to the semi-sheltered location of the community. Winds up to 40 knots in summer (southeasterly), and winter (northerly) can impact the community with occasional gusts to 60 knots. Related water damage is usually minor, but more frequent in areas where human development has encroached into natural drainages, and flood plains. During periods of high seasonal rains and storm driven high tides the Haines area is subject to the effects of 100-year floods up to 25' above MLLW.

Natural hazard areas are clearly identified on the Flood Plan and Hazards Map located in the offices of the Haines Borough.

FIGURE 5 - HCMP Natural Hazards



Major tsunami effects from earthquakes near, or outside, the region is less likely due to the location of Haines 100 miles up the Lynn Canal, with sheltering from the Chilkat Islands and Peninsula dissipating the energy of distant oncoming tsunami shock waves. The Anchorage earthquake of 1964, with its destructive tsunami effects in the outside waters coastal zone, created only several additional tidal bounces in the upper Lynn Canal of a magnitude close to the normal daily tidal extremes. Local tsunamis generated from landslides, either generated by earthquakes or other conditions, above or below the water are more likely to be hazardous than distant tsunamis, and are much harder to predict (Combellick and Long, Alaska Report of Investigations 83-17, Geologic Hazards in Southeastern Alaska: an overview, 1983).

Slope Instability

Sites along the base of Mt. Ripinsky that have been used for sand and gravel borrow sites and the uplands along Lutak Highway are also designated as natural hazard areas due to slope instability and landslides (Figure 5). Steep slopes in the Haines area are subject to large and small-scale slides, debris flows, rock falls, soil flows, and underwater slides. Many times such slides are triggered by earthquakes but they also occur as the result of normal river delta formation, heavy rainfall, seasonal freezing and thawing, and human alteration of slopes.

Avalanches, landslides and erosion frequently occur on or adjacent to steep slopes where unconsolidated soils and talus deposits overlay bedrock or impermeable soils, or in places where artificial factors such as undercutting the toe of a slide or overloading an unstable slope with man-made structures has occurred. Most steep slopes susceptible to these earth movements are away from developed and inhabited areas, though the Mt. Ripinsky excavations are near the community (Combellick and Long, Alaska Investigations Report 83-17, 1983).

Heavy precipitation, snowfall, winds and temperature gradients can contribute to avalanching. Mainland areas generally have higher snowfall and therefore higher snow-avalanche potential than the island and coastal areas. Landslides and mixed mud and snow debris avalanches occur during or after periods of extreme precipitation and saturation that lowers the soils shear strength. Small landslide and snow avalanche debris accumulations occur along the steep mountain front north and northwest of Haines and along the fjord walls of the Chilkoot and Lutak Inlet. Numerous landslides of considerable extent occur frequently in the Haines Borough, but rarely impact any developed areas. However, in the late 1890's, a landslide virtually eliminated a Native village at 19-mile Haines highway.

Moderate to steep slopes greater than approximately 30 degrees that rise to elevations over 1,000 feet should be considered to have avalanche potential (Combellick and Long, Alaska Investigations Report 83-17, 1983). These slopes can be naturally occurring or created by excavations for project development. The removal of vegetation increases the potential for avalanching.

Surface or submarine landslides create tidal waves called seiches and can be caused by coastal erosion or sedimentation processes. It is estimated for emergency preparedness purposes that, on a 1,000-year cycle, seiches could impact up to 100 feet elevation shoreward, with higher effects

also possible. Development activities increase sediment runoff and marine sediment loads and raise the risk.

Flooding and Storms

The Haines coastal district designates the Portage Cove shoreline and Sawmill Creek floodplain as natural hazards at risk for flooding due to storm events or seismically induced tsunamis. Flood hazard areas in the developed core area of the coastal district are well identified on the 1989 Floodplain and Flood Hazards Map of the Haines Borough and by the Federal Emergency Management Act (FEMA). The need to adequately design and site bridges and culverts to provide for the passage of the 100-year flood event is part of the overall strategy for surface water drainage in the area.

Extensive flood hazard areas exist throughout the floodplains of all Southeast riverine systems (Combellick and Long, Alaska Investigations Report 83-17, 1983). High precipitation and glacial outburst are the most common flood causes, although early, heavy snowfall can cause flooding as well including sudden changes in main channel alignment and course. Steep terrains with no soils on the slopes can result in storm precipitation runoff rapidly reaching stream systems. One example of this occurred in mid-September of 1967, when 6.5 inches of rain fell in a 5-day period and inundated the Haines Highway from mile 7 to mile 16, and damaged another 35 miles of the highway roadbeds and bridges. The highway was closed for two days. Sloughs, riverine islands, river deltas, and tributary channels are all subject to sudden flood immersion and scouring. As a result low land physical features are sometimes not considered permanent. Salmon and wildlife habitat, salmon enhancement project areas, and human developments in flood prone areas are continually subject to negative impacts from flooding. In the Haines coastal district, Sawmill Creek drainage and Portage Cove shoreline are areas of flooding concern.

Flood and geophysical hazard areas in the Tanani Bay and Lutak Inlet areas are primarily within the Johnson Creek, Mink Creek, and unnamed industrial water source drainages. In this area some minor landslide and avalanche activity can also occur on higher slopes, especially in association with the deeply cut drainages of the three creeks.

Seasonal storm winds can create wind damage, wind-driven water damage, and high runoff inundation. However, wind damage in the Haines coastal area is rare due to the semi-sheltered location of the community. Southeasterly summer winds up to 40 knots and northerly winter winds with gusts up to 60 knots can impact the community. Related water damage is usually minor, but more frequent in areas where human development has encroached into natural drainages and floodplains. The 100-year flood can impact areas in Haines up to 25 feet above MLLW, especially if it occurs during periods of high seasonal rains and storm driven high tides.

3.2.5 Coastal Habitats

Coastal habitats in the Haines area include offshore areas/marine habitats; estuaries; wetlands and tide flats; rivers, streams and lakes; and important upland habitat as seen in Figure 6.

Offshore Areas/Marine Habitats.

Offshore areas are defined at 11 AAC 112.990 (17) as submerged lands and waters seaward of the coastline as measured from mean low tide. Offshore areas in the Haines coastal district are northern Lynn Canal, Portage Cove, Tanani Bay, Chilkoot Inlet and Lutak Inlet.

Within the Portage Cove offshore area the beachfront slopes are usually gentle and substrates vary from sandy gravel to cobbles and some rock. From Nukdik Point north to the shoreline is steep and rocky.

Habitat values in Portage Cove are numerous:

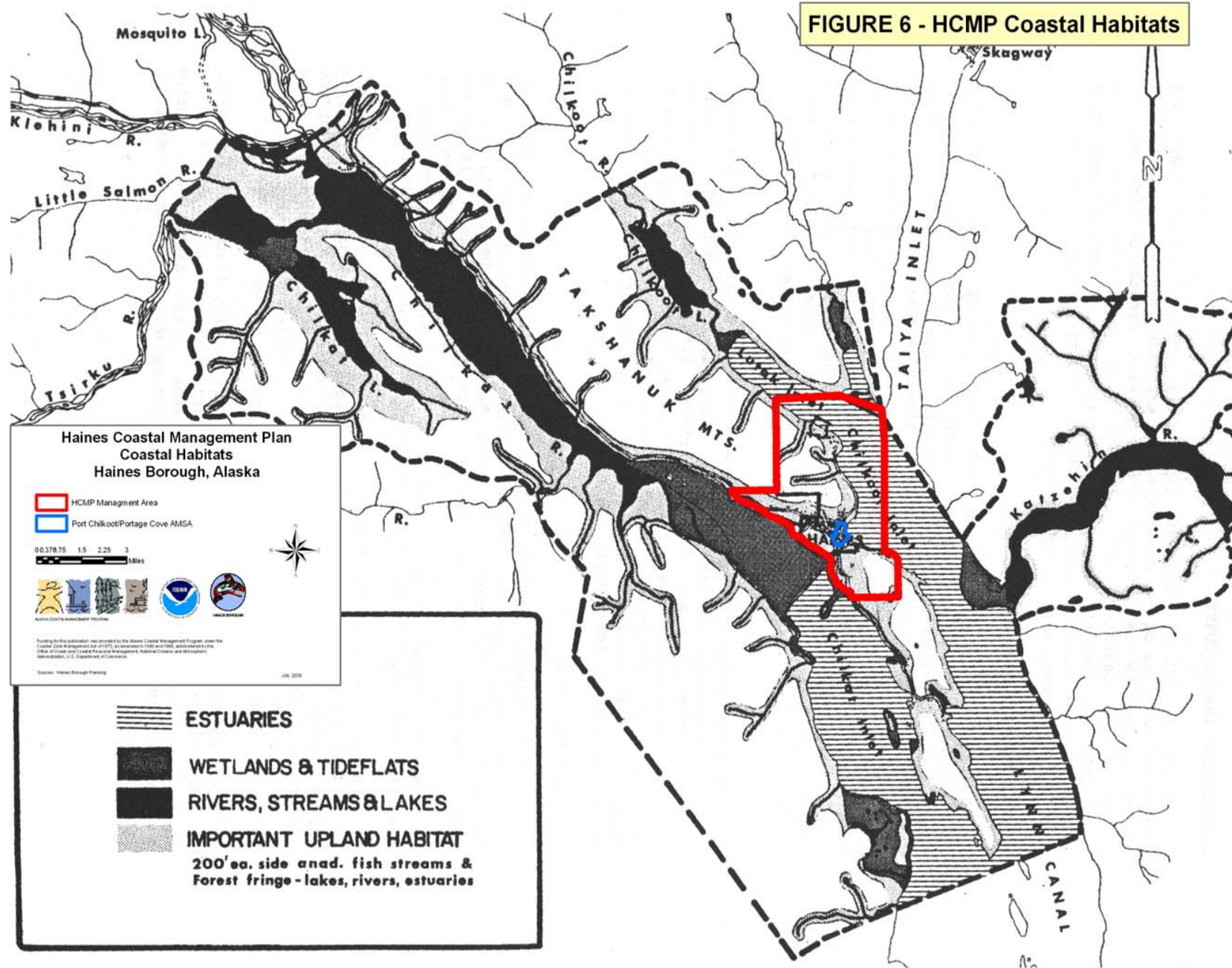
- It is used as a milling and migration area by all species of local anadromous fish;
- It is used periodically by feeding sea mammals, and it provides bottom fish and shellfish habitat;
- Lucrative rocky intertidal pools exist along the shore of much of Portage Cove;
- The entire waterfront seasonally hosts local species of migratory and resident fish, sea mammals, waterfowl and terrestrial birds;
- Large rafts of scoters and diving ducks are commonly seen and great blue herons can be observed along the shoreline;
- Rockweed is common inter-tidally and bull kelp is common in the upper sub-tidal zone;
- The in and out migration of all species of local anadromous fish, bottom fish and shellfish populations are very important to the fishing industry;
- Out-migrating juvenile salmon hug the shallow near-shore waters throughout the Cove to avoid larger predatory fish in deeper waters;
- Milling salmon and Dolly Varden attract sport and subsistence harvesting, although other areas are preferred.

Localized water pollution in Portage Cove is a concern. A sewer outfall is located in Portage Cove, extending eastward beyond the small boat harbor. When activities occur that compromise the ability of the system's biological action, untreated sewage has been disposed of via the subsurface sewer outfall into Portage Cove.

Similarly, high inflow and infiltration of water into the sewer system causes untreated sewage to impact Portage Cove during times of heavy rainfall. Though highly diluted, the impact is not in compliance with requirements of the U.S. Environmental Protection Agency that has conducted negotiations with the city since 1982 for solutions to the problems. Currently a \$4.8 million sewer system improvement project is underway to solve these concerns.

As is typical in most local harbors, the Haines Small Boat Harbor in Portage Cove is a source of minor but persistent petroleum products pollution. Sources are oily bilge water pumped by vessels in the vicinity and minor escapement of fuels at the fuel dock. Exasperating the problem is the fact that the Small Boat Harbor is a sheltered, quiet water body, which accumulates wind and tide driven petroleum sheen from Portage Cove. Improvements in fueling procedures at the nearby fuel dock, and higher standards by vessels in handling petroleum products escapement could reduce this pollution source.

FIGURE 6 - HCMP Coastal Habitats



Estuaries.

Estuaries are defined at 11 AAC 112.900 (11) as "a semi-closed, coastal body of water which has a free connection with the sea and within which seawater is measurably diluted with fresh water derived from land drainage."

These are areas where freshwater and nutrients mix with seawater to provide important habitat for fish, marine mammals, and water birds. Within the Haines Coastal District, the head of Lynn Canal, the mouths of the Chilkat and Chilkoot rivers, the head of Lutak Inlet, and Taiyasanka Harbor meet the definition of estuaries.

Chilkat Inlet is a nine-mile long estuarine system, one mile wide at its mouth and three miles wide at its head. Chilkat Inlet depths are 275 to 400 feet, with the exception of the narrow restriction near Glacier Point where depths approach 500 feet.

Chilkoot Inlet is a 15-mile long estuarine system that lies between the Chilkat Peninsula and the Coast Range. Depths in Chilkoot Inlet range from 600 to 700 feet. A shallow sill lies between the Chilkat Peninsula and the mouth of the Katzehein River. Off of the sill, depths increase to about 400 feet.

Lutak Inlet is an estuary five miles long and one mile wide from Tanani Point and Taiya Point to its confluence with the Chilkoot River. Lutak Inlet has depths generally less than 275 feet, although depths at the mouth approach 400 feet.

Taiyasanka Harbor estuary is shallow with a spit that protects its entrance from southerly wind-driven waves. It is fed by glacial waters of the Ferebee River, has a characteristic powder green color from glacial till and is located between Lutak and Taiya Inlets. It has been used during the last 30 years as a log storage area.

Estuarine circulation in Lynn Canal is driven by fresh water inflow that remains near the surface and is forced seaward so that surface salinity increases in a seaward direction. Maximum estuarine circulation and lowest salinities in Lynn Canal occur in July and August during the period of maximal fresh water flow. It is believed that colder, high salinity ocean water enters Lynn Canal at depths between 250 and 650 feet by the strong estuarine circulation. Much of the fresh water enters Lynn Canal from the Chilkat, Chilkoot and Ferebee Rivers. Although the rivers do discharge some ice into marine waters, sea ice is rarely a problem in Lynn Canal and the inlets near Haines.

Each of these systems is important for the collection and utilization of subsistence food resources. Subsistence users primarily harvest eulachon, salmon, halibut, and crab in Lutak Inlet and, infrequently, seals.

Of significance for Lutak Inlet is the potentially increased use of the port due to growing maritime activity in the region. Without careful management of the resources uses in the area

conflicts could develop. Increasing numbers of tourists and local residents utilize the upper Lutak Inlet, and Chilkoot River and Lake. Additionally, the north end of the inlet is a traditional and intensive harvest area for subsistence, sport, and commercial fisheries of high value. Industrial use of the Federal Tank Farm upland and dock could further increase impacts to estuarine water quality.

Potential exists for increased competition between users and the resource values of the estuarine waters of Lutak Inlet, Portage Cove, and Chilkoot Inlet. Renewable resources in the upper Lynn Canal are the majestic scenery and the abundant fish, sea mammal, and wildlife populations. Haines is a gateway community to one of the largest systems of scenic and wilderness parks and preserves in the world. The tourism industry recognizes the scenic and wildlife resources of the region by sending cruise ships to Haines and Skagway in the summer. Local and international tourist industry derives millions of dollars annually marketing the scenic resources, colorful history, and recreational opportunities of the region.

The Haines Borough has long been interested and involved in tracking issues related to water quality and human activity. In a December 1989 meeting of the Upper Lynn Canal Fish and Game (ULCF&G) Advisory Committee several known and potential sources of pollution were discussed that could adversely impact migratory and resident Chilkoot and Lutak Inlet aquatic life and the quality of the marine environment. The Haines Alaska Native Brotherhood and Alaska Native Sisterhood (ANB/ANS) fisheries committee has similarly identified possible pollution sources. In response the Haines Borough and ADEC tested the quality of several drinking water sources in Lutak Inlet. At that time all were found to be safe. Known and potential sources of pollution discussed at recent meetings (ULCF&G Advisory Committee, ANB/ANS) are:

1. Raw sewage from encamped tourist RV's at Tanani and Nukdik Points, and sewage leachates from the drain fields of the residences on Tanani Bay;
2. Disturbances created by humans and domestic animals in Chilkoot River primarily noise, and injection of human scent which is scientifically known to repel smelt (eulachon) and salmon by stimulating an instinctive "fright and flight" reaction through the olfactory organs (Hara, 1975, "Olfaction in Fish");
3. Bilge pumping and petroleum products escapement from the shipping and fishing industries injecting waterborne petroleum scents which similarly repel anadromous fish (Hara, 1975, "Olfaction in Fish"); and
4. Leachates from wood wastes on the city Lutak Dock, and Chilkoot Lumber Company dock and yard, and leachates from subsurface bark piles in Lutak Inlet and Taiyasanka Harbor. Wood waste leachates and subsurface bark piles are known to negatively impact aquatic life, especially crabs, primarily by repelling them from the area and biodegrading crabs that remain in contact with bark piles (Freese, Stone, O'Clair, 1988, NOAA Technical Memorandum NMFS F/NWC-136).

A focused cooperative planning effort will be required to maintain and enhance the biological life of these estuarine areas while accommodating increased development.

Tideflats.

In 11 AAC 112.900 (17) tide flats are defined as “mostly unvegetated areas that are alternately exposed and inundated by the falling and rising of the tides.” Major tideflats in the Haines area are the McClellan Flats of the Chilkat River; tide flats of upper Lutak Inlet - Chilkoot River; Sawmill Creek area around the airport and Yindastuki Creek.

A detailed study (Bishop, 1989) inventoried, analyzed, and mapped the McClellan Flats and associated for the Alaska Department of Transportation and Public Facilities (DOT&PF) as part of the Haines Airport Reconstruction Project.

Wetlands.

Wetlands are defined in 11 AAC 112.900 (13) as “those environments characterized by rooted vegetation which is partially submerged either continuously or periodically by surface fresh water with less than 0.5 parts per thousand salt content and not exceeding 9 feet in depth.” Freshwater wetlands are found in the floodplains and drainages of the Takhin, Tsirku, Klehini, Tahini, Chilkat, Chilkoot, Ferebee, Katzehin and Glacier Rivers, and within the Sawmill Creek drainage.

Wetlands in Haines, mapped from aerial photos as part of the National Wetlands Inventory (NWI) Map, are depicted on Figure 7. The entire NWI map of the region is on file in the Haines Borough office. The Haines Coastal District has identified high value wetlands that are more extensive than those identified as part of the NWI effort. The most current Federal, State and Borough wetlands information and maps should be reviewed during the design phase of proposed projects.

Freshwater wetlands and floodplain vegetation types provide important habitat for aquatic and terrestrial plants and animals in the Haines coastal district. They include: spruce, hemlock, and deciduous trees; yellow pond lily, pond weed, bur reed, stonewort, quillwort, water milfoil, mare’s tail, sedges, spike rush and horsetail, which occur in shallow standing water and form the borders of ponds and sloughs.

The wetlands areas where Sawmill Creek outflows, and where McClellan Flats, Haines Airport and Yindastuki Creek drains into the Chilkat River include emergent and accreting areas mostly south of the Haines Highway. Similar to Sawmill Creek, Yindastuki Creek and other small streams enter from the upland (north) side of the Haines Highway feeding Sawmill Creek, the ponds near the Haines Airport and the Chilkat River. Yindastuki Creek and the accreting wetland in the Haines Airport area provide important salmonid rearing and spawning habitat.

Wetlands and their values in the McClellan Flats area have been impacted by development including a wood waste fill area, a former auto wrecking yard, fill and site preparation for a grocery store and a small retail mall. The Crystal Cathedral well field and its access road are also

within this wetland complex. Extensive accreted lands on the flats adjacent to the private parcel land continue to be applied for by private landowners.

A concern in the Sawmill Creek wetlands is the impact of poorly maintained septic systems. The Borough should regulate the design and operation of septic systems in these and other sensitive areas and exercise greater control over residential septic tank leachate pollution.

Saltwater wetlands

Saltwater wetlands are defined at 11AAC 112.900(19) as “those coastal areas along sheltered shorelines characterized by halophytic hydrophytes and macroalgae extending from extreme low tide to an area above extreme high tide, which is influenced by sea spray or tidally induced water table changes”. They can be described as “mostly unvegetated areas that are alternately exposed and inundated by the rising and falling of the tide.”

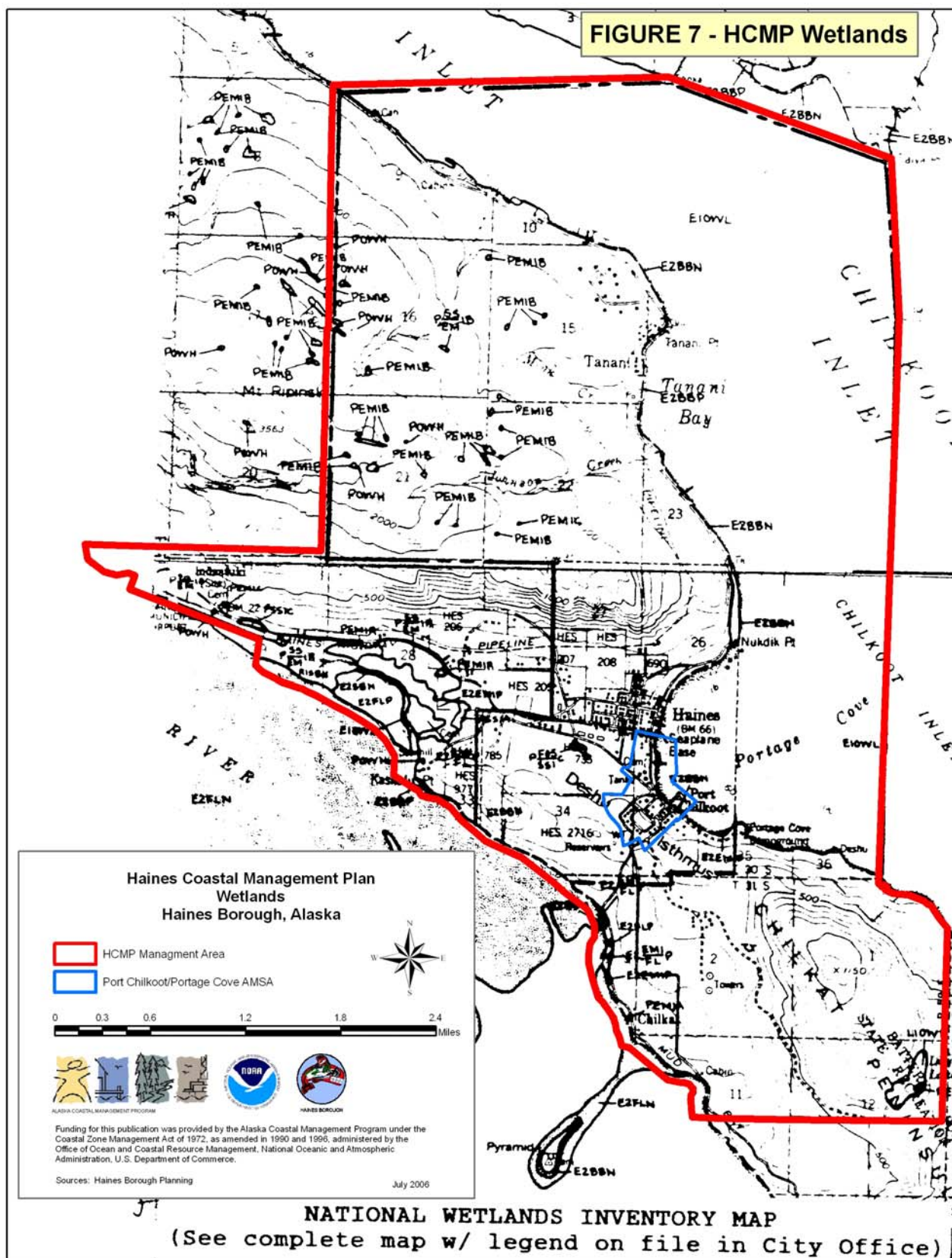
Saltwater wetlands areas include the McClellan Flats of the Chilkat River; the tide flats of Upper Lutak Inlet – Chilkoot River; and the tide flats of the Katzechin, Ferebee and Glacier Rivers. These saltwater wetlands and tide flats encompass all of the intertidal zones and form an important link between freshwater, floodplain and upland habitats and saltwater estuaries. They provide spawning habitat and feeding grounds for fish, shellfish, marine and terrestrial birds and mammals.

Rivers, Streams and Lakes

In AAC112.900 (23) rivers, streams, and lakes are defined as “those portions of water bodies that (a) are catalogued under AS 41.14.870 as important for anadromous fish; (b) are not catalogued under AS 41.14.870 as important for anadromous fish, but have been determined by the deputy commissioner of the department to contain or exhibit evidence of anadromous fish, in which event the anadromous portion of the stream or waterway extends up to the first point of physical blockage; or (c) are delineated based on written scientific findings demonstrating to the satisfaction of the coordinating agency, in consultation with the state resource agency with expertise, that the project or activity would cause significant and adverse impact to (i) water bodies identified in (a) or (b) of this paragraph; and (ii) coastal waters”. In making development decisions for these

areas the Haines Coastal District considers the area’s rivers, streams, and lakes and their respective floodplains (including channels and sloughs, islands, and sandbars) as an integral system.

Rivers in the Haines coastal zone and surrounding area includes: the Excursion River; all or parts of the Chilkat River; the Chilkoot River; the Kicking Horse River; the Takhin River; the Tsirku River; the Ferebee River; the Katzechin River; the Klehini River; Glacier River; and the Tahini River.



For residents of Haines, the Chilkat and Chilkoot rivers are part of the daily life and economy of Haines for subsistence fishing, commercial fishing, and tourism. At its mouth, the Chilkat River forms the extensive McClellan Flats area. This area remains ice free due to sources of warmer water near the Tsirku Fan at Klukwan. The combination of flats, ice free water and spawning salmon creates the perfect conditions for the annual late fall gathering of the largest concentration of eagles feeding on spawned salmon.

Streams are Sawmill Creek, Johnson Creek, Mink Creek and Holgate Creek and all streams within the riverine systems, catalogued and uncatalogued. The Alaska Department of Fish and Game (ADFG) classified the main stem of Sawmill Creek as an anadromous fish stream. Salmon, Dolly Varden and Cutthroat trout all use these waterways for rearing. In recent years Holgate Creek has been surveyed to document the Western Toad population.

Lakes include Chilkoot Lake, Chilkat Lake, Lily Lake, Rutzebeck Lake, and any unnamed lakes within the area.

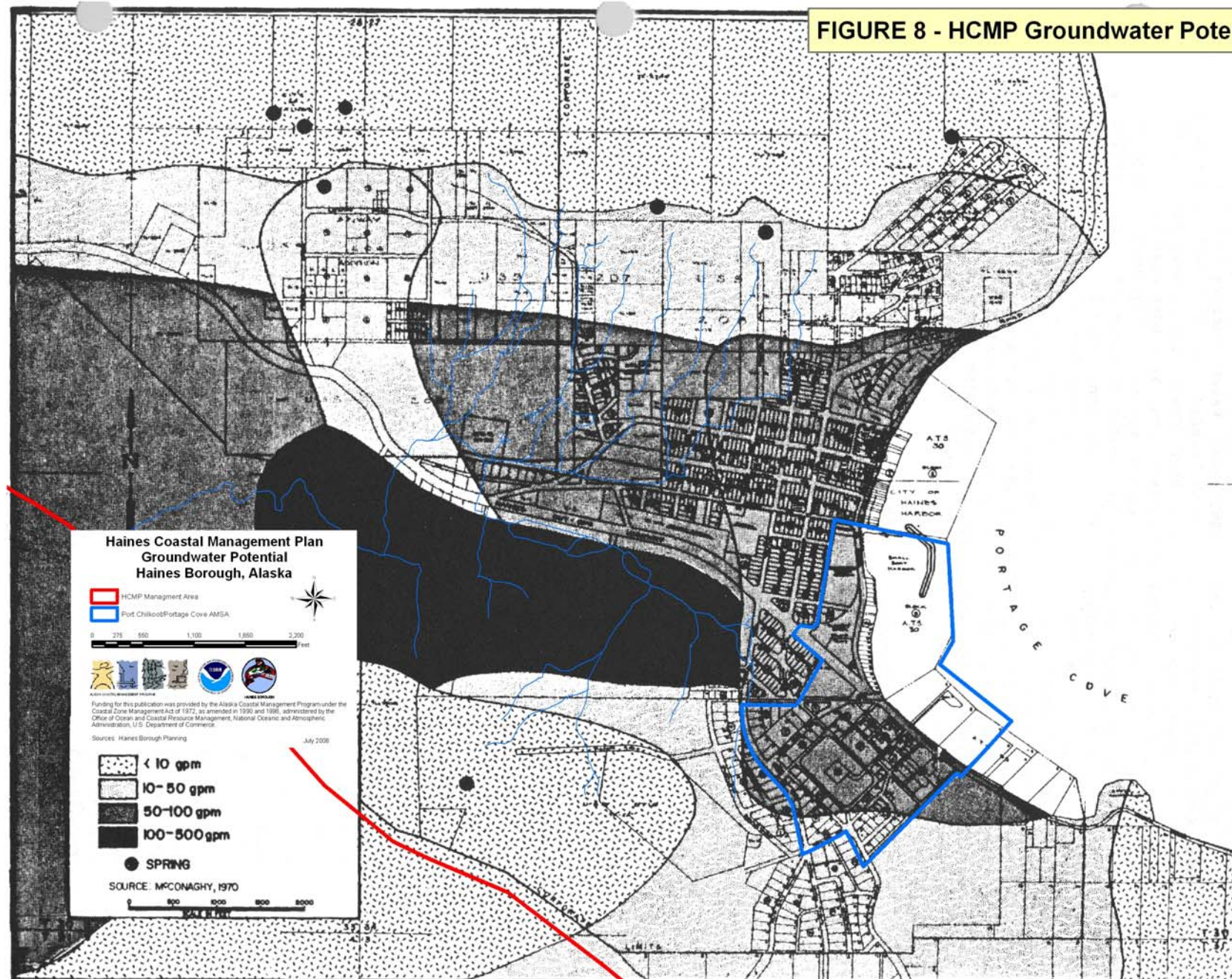
All of these freshwaters flow into the Lynn Canal with the exception of Excursion River. Stream flow is typically lowest in winter, with peak runoff in the summer months. Springs and groundwater seeps flowing from alluvial fans contribute to stream flow year-round.

Precipitation in the Haines area contributes significantly to groundwater sources that feed the rivers, streams and lakes. The slopes northwest of town are considered the principal recharge areas of the coastal district. Most of the groundwater in the area moves down the valley west of Haines.

Haines aquifers are generally small and the water is generally of the calcium bicarbonate type and suitable for most uses (Figure 8). Surficial deposits composed of sand, gravel, and cobbles inter-bedded with fine-grained sediments constitute the best aquifers in the area. However, large quantities of groundwater from these surficial deposits appear to be available in only a few areas. The highest groundwater potential exists in glacial outwash deposits south of the Haines Highway and Sawmill Road. However, the gravel zones are not continuous, and water quality deteriorates with depth. The wetland west of Sawmill Road also has groundwater potential but is periodically flooded by tidewater.

The combination of moving and quiet water bodies within the freshwater aquatic floodplains, and riparian zone, provide a very productive habitat for moose, brown and black bears, waterfowl, grouse, and other birds and mammals. These water bodies provide a natural reservoir for floodwaters, which provide spawning and rearing areas for commercial, sport, and subsistence fish species, and migration routes for waterfowl and mammals, as well as habitat for muskrat and beaver, and the Western.

FIGURE 8 - HCMP Groundwater Potential



Sawmill Creek

Sawmill Creek is a primary drainage of significance within the Haines coastal zone. Numerous unnamed uplands springs and drainage channels contribute to the flow of Sawmill Creek, as well as upwelling ground water in the wetlands area of the creek. The watershed for Sawmill Creek is very important as the primary drainage in the developed part of the Borough; for its flood control properties; as a catalogued anadromous fish system (ADF&G, 1983) and provides waterfowl and terrestrial mammal, predominately moose and muskrats, habitat. Bald Eagles are known to use the ponds for feeding and perching.

Sawmill Creek and its subsidiary ponds, tributaries, and depressions are the major drainage outflow system and flood plain for the western portion of the district as well. Development in close proximity to the Sawmill Creek wetlands has been ongoing for many years. Historically, spawning coho, cutthroat and Dolly Varden used the upper reaches of the stream, and it is still used as rearing habitat by these species. In recent years spawning has been eliminated because of barriers introduced by drainage ditch realignment and culvert installation. Two closed-out sanitary landfill sites are immediately adjacent lowlands tributaries.

Sawmill Creek was surveyed in detail in 1989 in a cooperative program with the former City of Haines, by biologists from the ADF&G, both commercial and sport fish divisions, and biologists of the Northern Southeast Regional Aquaculture Association (NSRAA). The first measures to correct drainage and habitat deficiencies were undertaken in the summer of 1989. Rehabilitation and enhancement of Sawmill Creek has been given a top priority for natural anadromous systems enhancement in the region.

In 1989, the ADEC identified Sawmill Creek as a polluted waterway (ADEC, Alaska Nonpoint Source Pollution Assessment Report, 1989). Nonpoint sources of pollution have been identified as urban runoff, septic tank leachate, channelization of the stream, stream bank and shoreline modification, and road runoff. Additionally, heavy siltation has occurred from storm drainage due to vegetative material blocking natural stream flows and upland clearing and filling.

In 1997 the ADFG, Division of Sport Fish, conducted a survey of fish habitat on Sawmill Creek. Young fish use the stream as a nursery and in order to thrive, these fish need healthy water systems. The outcome of this study was a rating system related to health. Sections were compared and ranked. The three categories included sections that were: severely disturbed, moderately disturbed and relatively undisturbed. Furthermore, a 1997 ADFG evaluation of the entire Sawmill Creek drainage refers to the newly annexed areas as “relatively undisturbed.” All of the annexed lowland areas south of the Haines Highway provide excellent habitat for a variety of game and migratory bird life and live up to a common, local name, “Moose Meadows.”

Educational and habitat enhancement projects for the Sawmill Creek area wetland were proposed by several organizations including the Northern Southeast Regional Aquaculture Association (NSRAA), ADF&G local biologists, the Haines Sportsmen's Association, and the local chapter of Ducks Unlimited. These proposals included the following:

- 1) Coho, cutthroat, and Dolly Varden habitat enhancement sufficient for an expanded sport fishery;
- 2) Increasing the available pond and slough acreage for use by migratory waterfowl, and terrestrial birds and mammals;
- 3) Establishment of a fish and wildlife study curriculum in the Haines High School that would use these wetlands as a field study area; and
- 4) Installation of appropriate viewing locations conveniently located for the resident and tourist population to view and appreciate fish and wildlife resources within, and close to, the city limits.

Holgate Creek

Geographically, Holgate Creek located at latitude is 59.17 and longitude 135.39. It is the major drainage on 5.5 miles of shoreline, the majority of which is rocky and steep. It is likely the only creek usable by anadromous fish between Sawmill Creek to the northwest and a small stream draining into Letnikof Cove to the southeast. Its mouth is situated very near the large delta that the Chilkat River forms as it enters the Chilkat Inlet. The lower stretches of the creek comprise a one-acre pond, and a sinuous creek leading to a small delta at the junction with the Chilkat River.

The protected and sinuous lower reaches of the creek as it drains through the estuarine area are important for migrating waterfowl in spring and fall and as an important breeding site of the Western toad. This area is also an important recreation site for town-people. The network of trails is heavily used three seasons of the year, principally by hikers.

Additionally, the fact that cutthroat trout spawn in the creek makes the upstream portion significant as well. The very particular needs for spawning habitat of this species render it a rarity in the area and Holgate Creek sports a reliable springtime run of these fish. The cutthroat has a relatively restricted spawning distribution in southeast Alaska and is a desirable sport fish.

Holgate Creek is a catalogued anadromous stream and registered as "One Mile Creek- Mud Bay Road" with the stream code 115-32-094, and a waterbody code of 115-32-10230. Local Fish and Game biologists base fish trapping information on notebook entries.

In 1996 personal observations were made of a huge emergence of metamorphs in the area of the Haines airport. In 1998 a report of deformed metamorphosed juvenile toads alerted all to the presence of possible problems. A resident reported that her children had found at least 15 toadlets lacking one limb or portions thereof. It is noteworthy that this was the same period of time when significant pollution of Holgate Creek by faulty septic systems was discovered. In addition to the reports of deformed toads, personal observations reported a gradual reduction in the number of live and road-killed toads in the area over the last decade. The Takshanuk Watershed Council (TWC) decided to begin a study of the species' breeding sites in and around Haines and the Chilkat Valley. Extensive interviews with long-time residents of the Haines area indicate a dramatic decline of the Western Toad in the last twenty years. Exhaustive searching of the town area has revealed only two small breeding sites still active, one near downtown Haines and the Holgate Creek site. This declining species is being studied in several locations in

southeast Alaska and TWC is in the process of forming a cooperative study plan with other researchers.

In 2001 TWC personnel began conducting of observation on a Western Toad breeding site near the mouth of the Holgate creek. The TWC began a watershed assessment of the area with initial focus on stream drainages with residences, such as Holgate Creek, where homes are on the lower one-half to three-quarters of a mile of the creek, the stretch extending upstream from Mud Bay Road to Small Tracts Road, and upstream to the north. Households use septic systems for wastewater disposal and Borough testing revealed significant creek pollution from at least four of these systems. Other concerns being tracked are barriers to fish passage due to inadequate culverts, and creek pollution from non-residential sources including treated wood in creek, possible petroleum product contamination, erosion and siltation, water withdrawals and animal waste deposition.

Initial focus was on locating breeding ponds that contained egg masses or tadpoles in local ponds. Four sites were found in 2002 and three more in 2004. These sites represent a wide range of habitat types and history. Data gathered is entered on standard field forms designed for the project. Emphasis is on detailed description of the habitat and careful estimation of the numbers of tadpoles or eggs. Effort is made to revisit sites often to monitor progress of the cohorts of young. Every month samples of tadpoles are captured and measured to monitor growth rates and for assessment of degree of metamorphosis. Repeated scientific estimation of numbers of tadpoles gives a rough picture of survival rate. Observed incidences of predation and evidence of predators are noted. Water temperature, turbidity and level are recorded.

As metamorphs begin to emerge samples are captured, measured and weighed. Careful search is conducted for deformed individuals. Behavior of toads at all life cycle stages is noted carefully particularly as regards habitat and microhabitat preference. Distribution of tadpoles within a pond, particularly their tendency to clump into schools at certain times, is noted. Dispersion rates and direction of emerging metamorphs is also monitored.

TWC is further documenting the importance of Holgate Creek through a series of resident interviews, assessing ADFG fish trapping data, collecting information on wildlife occurrences through personal observation and interviews, GPS assisted stream walks, and collection of water samples from points along the creek for total coliform testing. Research on Western Toad presence in the area is ongoing in cooperation with Chilkoot Indian Association.

Through this work TWC and the Haines coastal district are attempting to learn the annual pattern of the species, its habitat needs, growth rates, behavior, survival rates of young and the year-to-year dynamics of particular breeding sites. This is a necessary complement to wider scale study of distribution.

At this time there does not appear to be any specific protective measures for Holgate Creek. It is a registered anadromous fish stream but is not on the State's impaired water body list, though it may be listed in the future. Some effort has been made to restrict the use of off-road vehicles in the sensitive lower stretches of the creek. The TWC is working out a cooperative agreement with US Fish and Wildlife workers using the Amphibian Research and Monitoring Initiative protocol.

Upland Habitat

All upland habitat areas within the Haines coastal management district are important. This includes coastal spruce/hemlock and deciduous forest with concentrations of cottonwood near the valleys and some hardwood species (primarily birch). Above 3,000 feet altitude, alpine tundra is the only vegetation found, while the areas below that abound with alder, dwarf maple, willow, berry bushes, and devil club that form dense underbrush in the forested areas. Upland habitat protects anadromous fish streams, freshwater quality, marine waters, and down-slope developments. It supports moose, brown and black bear, mountain goat, wolf, lynx, mink, martin, muskrat, otter, weasel, and wolverine, and helps maintain the visual continuity of shorelines which support the visitor industry, as well as contributing to the quality of life, tourism and recreation in Haines.

Rocky Island and Seacliffs

This habitat is defined in 11 AAC 112.900. as “islands of volcanic or tectonic origin with rocky shores and steep faces, offshore rocks, capes and rocky seafronts.” Rocky islands within the Haines coastal zone are Pyramid Island, Talsani Island, Dalasuga Island, Indian Island and Kochu Island. Sea cliffs in the area are the coastal area north and south of the Katzechin River, the sea cliffs of the Chilkat Range, Taiya Point, Sanka Point and Seduction Point.

Exposed High Energy Coasts

Exposed high energy coasts are defined in 11 AAC 112.900(12) as "open and unprotected sections of the coastline with exposure to ocean generated wave impacts and usually characterized by coarse sand, gravel, boulder beaches, and well mixed coastal water." Exposed high-energy coasts within the Haines area are the east and west shores of northern Lynn Canal and portions of Chilkoot Inlet. However, within the Haines coastal management area there are no exposed high-energy coasts.

3.2.6 Fish and Wildlife

Anadromous Fish

ADFG catalogued anadromous fish streams in the Haines coastal management area are shown on Figure 10. Holgate Creek and Sawmill Creek are within the coastal management area boundary. The Chilkoot and Chilkat Rivers are major producers of all five species of salmon: Sockeye, Chum, Coho, Pink and King, and supports the area's sport and subsistence fisheries.

Salmon in-migrating to the Haines area all use Icy Straits and Chatham Straits. Biologist's observations note that where possible they remain close to the shoreline and congregate for varying periods in schooling areas. Rearing juvenile salmon populations peak in May and migrate through Icy Straits and Chatham Straits. The timing of salmon migration varies with a given species according to the physical characteristics of the parent stream.

Outside the coastal management area the Chilkat, Chilkoot, Ferebee, Takhin, and Katzeihin Rivers are complex glacial water systems that provide corridors for migrations to freshwater spawning grounds. Salmon stocks of S.E. Alaska are grouped into three categories, early, middle, and late runs based on the temperature regimes of the parent streams. Data indicates the colder riverine systems have the early runs of salmon.

Most streams and tideflats in the entire area host one or more species of spawning fish at some time during the year as documented by the ADFG surveys. Smelt spawn in the Chilkoot-Chilkat Rivers annually, and herring spawning occurs at Tanani Point, Nukdik Point, and Flat Bay.

Upwelling groundwater characterizes the spawning areas for all species of salmon in the Chilkat-Chilkoot systems. Spawning areas are usually characterized by relatively clean pea gravel substrates, but upwelling spring water (as at the Glory Hole near Chilkoot

Lake) allows sandy substrates to be cleaner and more aerated thus providing for high egg survival rates.

Sockeye Salmon (Oncorhynchus nerka)

Sockeye spawn in the Chilkoot and Chilkat systems. The Chilkat Lake and River systems host several races of sockeye including the 'zero check sockeye' of the main-stem system, and the lake rearing sockeye of Chilkat Lake. Sockeye also spawn and rear in smaller numbers in the Little Salmon River system, tributary to the Tsirku River. Sockeye spawn from mid-July into October, usually arriving in two distinct peaks. Occasionally a strong sockeye run will continue into Chilkat Lake into late October. The habitat provided by Chilkoot, Chilkat, and Mosquito Lakes, and Bear Flats Ponds serve as prime spawning and rearing areas for large numbers of sockeye salmon. In the Chilkoot system, sockeye spawn in the Glory Hole springs area located at the northwest end of Chilkoot Lake, and in Chilkoot River tributaries. Sockeye spawning also occurs in some of the sloughs of the upper Chilkat River, in Bear Flats Ponds, and in the Little Salmon River system. Juveniles spend one or more years in the lakes before migrating to sea where they continue to grow for two to five more years, but usually for two to three years. Zero check Sockeye, however, rear for less than one year in the freshwater system before out migration, returning from sea after two to five years.

Chum Salmon (Oncorhynchus keta)

Chum salmon represent the next most valuable commercial species with some fall sport and subsistence harvest. An early fall chum run spawns in the Klehini River basin, upper Chilkat and Takhin Rivers, and a late run spawns in the lower Chilkat River basin near Klukwan at the mouth of the Tsirku River delta. Due to the presence of warmer upwelling subsurface water at the delta, chum salmon eggs and fry are able to successfully survive winter conditions. Chum eggs hatch in early winter and fry emerge from the gravel in the spring and immediately begin their migration to sea for three to four years. Rapid and increasingly dramatic natural change in the Chilkat basin has directly and negatively impacted the available spawning area for chum salmon especially at Klukwan where it is estimated that in the side sloughs more than 50% of the available spawning habitat for chum has been recently lost. These chum salmon are the primary food source for the American Bald Eagle concentration located in the Alaska Chilkat Bald Eagle Preserve Critical Habitat Area and are equally important for the subsistence use of the Village of Klukwan. The reduction of this Klukwan chum-spawning habitat has had a serious effect on the

numbers of Bald Eagles that can be sustained within the Preserve. This is identified as an issue of federal, state, and local concern.

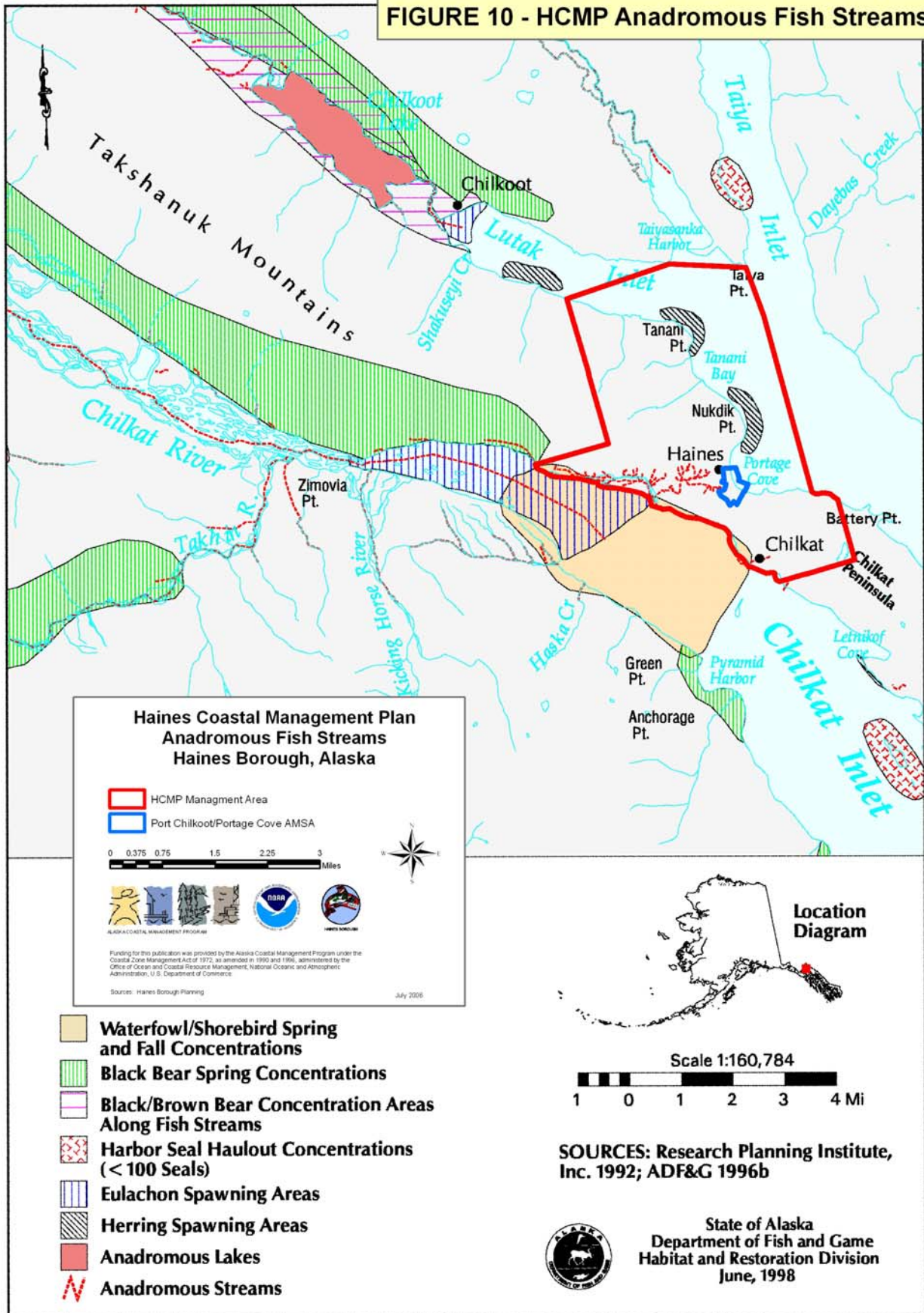
Coho Salmon (Oncorhynchus kisutch)

Coho salmon are of about equal importance to the commercial and sport fishery. Incidentally harvested cohos may be retained in the subsistence gillnet fishery. Fall coho runs use the Chilkat-Chilkoot River basins and spawn in most of the streams and tributaries in a widespread and diverse area. Prime spawning areas include mile 10, 14, 20 (Klukwan), and Mile 31 on the highway, the Big Salmon River, Chilkat Lake, Chilkoot Lake, and the south channel of the Kicking Horse River. Coho rears in the small clear tributaries, spending one or two years, and out-migrate to sea for two to three years. The commercial troll and gillnet fleets harvest coho, and in the sport fishery coho is the most sought after species in the fall. Chilkoot Lake and its river outlet is the most important freshwater sport fishing area near Haines for Coho. As well the Chilkat River along the Haines Highway also sees a substantial sportfishing effort during the late fall coho migration.

FIGURE 9 - HCMP Important Habitats



FIGURE 10 - HCMP Anadromous Fish Streams



Chinook Salmon (Oncorhynchus tshawytscha)

The Chinook salmon run of the Haines area has significant value to the sport fishery. For conservation purposes Chinooks are not targeted by the commercial gillnet fishery although a small incidental catch of feeder Chinooks by the commercial fishery is utilized for personal use purposes. Incidentally harvested Chinooks may be retained in the subsistence gillnet fishery. Chinooks enter the Chilkat River in April through June, and proceed to their spawning grounds in the upstream tributaries of the Chilkat basin. Prime King salmon spawning occurs in Little and Big Boulder Creeks and in the upper Klehini, Kelsall, and Tahini Rivers. Chinooks rear extensively in the upper Chilkat River sloughs and ponds, with juvenile Chinooks remaining in fresh water until the following spring. After out-migration to sea they return after 3 to 4 years. The annual Haines Salmon Derby has been suspended for conservation and rebuilding of the declining stocks of Chinooks; however, the Chinook fishery remains very popular. It is estimated that up to 25% of harvest in this fishery is taken by nonresident foreigners, primarily from the Yukon Territory.

Pink Salmon (Oncorhynchus gorbuscha)

Pink salmon are harvested by the commercial, sport, and subsistence fisheries. They are on many years the third most valuable commercial species (ahead of Coho salmon) arriving in the Chilkat-Chilkoot estuaries in late July to mid August. The sport and subsistence use is substantial, with pinks almost totally supporting the sport fishery in the month of August. Spawning occurs in Chilkoot Lake near the west shore, in large numbers at the outlet of the Chilkoot River on the tidal flats of Lutak Inlet and in the lower Chilkat River side channels and sloughs. Eggs hatch from late November to early January, and the fry emerge from streambed gravel from March through May and almost immediately begin their migration to sea, returning usually after two years.

Cutthroat Trout (Oncorhynchus Salmo clarki)

Cutthroat trout are common throughout the study area. They are found in salt and brackish water seasonally, as well streams and lakes (not migrating to salt water). Saltwater Cutthroat in-migrate in early spring to meet the young out-migrating salmon fry, and in the fall and winter they in-migrate to their spawning grounds, usually after three years of rearing. Mosquito Lake, lower Chilkat River, Chilkat Lake and Little Salmon River, are important Cutthroat spawning and rearing habitat areas.

Rainbow Trout (Oncorhynchus Salmo gairdneri)

Rainbow trout (steelhead) are harvested in the commercial gillnet, sport, and subsistence fisheries. They are not abundant in the study area with only one major known spawning area located at the head of the Little Salmon River, tributary to the Chilkat River system. Limited numbers of rearing Rainbow Trout are found in the Chilkat River drainage. They enter the Chilkat Inlet estuary in fall and reach their spawning streams in fall and early to mid-winter. They emerge from the gravel in spring, and out-migrate in mid-May through mid-July, and return to spawn after the third year.

Dolly Varden (Salvelinus malma)

The southern sub species of Dolly Varden, both as anadromous and freshwater species, are locally (and seasonally) abundant. They spawn extensively throughout the Chilkoot-Chilkat

drainages, rear in freshwater and saltwater habitats, and are harvested extensively in the subsistence, and sport fisheries. They are also a by-catch of the commercial fleet. Anadromous Dolly Varden migrates cyclically to freshwater to feed throughout the year. They spawn in fall and fry out-migrate the following spring. Individuals are known to spawn up to three times during their life cycle that can be up to six years.

Eulachon (Pacific smelt)

The harvest of Eulachon is identified as a critically important subsistence fishery in the Haines Study Area. Eulachon are fished intensively from shore in the subsistence dipnet fishery during their spawning in-migration. Eulachon spawn and are harvested in the lower Chilkat, and the Chilkoot Rivers. The magnitude of the eulachon runs, past and present, has never been quantified but on some years they are very abundant. In 1988, and 1989, the Chilkoot eulachon run did not materialize as expected, and in 1989 the Chilkat run favored the far (west) shore and was therefore only marginally available for harvest. Eulachon enter the rivers in late April and spawning peaks around mid-May. They take one month to hatch and out-migrate immediately around mid-June. A late February run of eulachon up the Chilkat River was documented 1882 by A. Krause, and they are reported by local natives to have migrated in the past.

Resident Fish

Brook Trout (Salvelinus fontinalis).

This species was introduced in Southeast Alaska some years ago, and are currently considered rare. They are found in small numbers in Rutzebeck Lake and are utilized lightly due to the inaccessibility of the lake and the stunted population.

Kokanee (freshwater sockeye).

Kokanee have been identified to be present in Chilkat Lake by ADF&G with no quantification available on population size and utilization. They are a freshwater sockeye usually found in lakes having outflows that are barred to in-migrating anadromous fish species.

Round Whitefish (Prosopium cylindraceum).

Round Whitefish are found in small numbers in the Chilkat River and are common in Chilkat Lake. This species apparently does not migrate, but exhibits inshore and upstream movements during spawning in November and December.

3.2.7 Marine and Shellfish

Many Haines area residents, especially from the Native community, utilize area fish, crab, and shrimp stocks as a subsistence food source. Areas generally used for harvesting include Lynn Canal into the Chilkoot and Lutak Inlets.

Invertebrates

The intertidal and subtidal zones of the upper Lynn Canal contain invertebrates and vertebrates that contribute significantly to the overall productivity of the marine waters. Some of the more important species include snow crabs (tanner), Dungeness crabs, and brown, blue, and red king crabs. Tanner crab is the most abundant species followed by Dungeness and both brown and red

king crabs. Shrimps include the coonstripe, crangon, pink, sidestripe, humpy, and spot shrimp. The most abundant species of shrimps are the pink and sidestripe followed by the coonstripe and crangon shrimp. The least abundant are the spot shrimp. Lutak, Chilkat, and Chilkoot Inlets are important growing and harvesting areas.

Filter feeders (clams, mussels, and cockles) subsist on plankton and detritus and are found in the mid-intertidal zone of most bays and estuaries along the Haines coast. Cockles and clams are found in the sub-tidal areas with suitable substrates. Extensive mats of mussels are found in the mid-intertidal zone. Limited access to the areas and the well-publicized danger of paralytic shellfish poisoning keeps harvest pressure on the species low.

All species mentioned above have commercial and subsistence value. The small, continuing, commercial Dungeness and King crab fishery and the periodic shrimp fishery establish the commercial potential of crab and shrimp in the Lynn Canal. Ninety percent of the commercial value of Lynn Canal crab and shrimp, however, is taken from Berner's Bay south. A sport and subsistence pot fishery for Dungeness, Tanner, and King crabs exists, and both user groups have the same bag limits and seasons.

The subsistence value of the macrophytes, and invertebrates of the Haines coast has been long established and recognized. Federal legislation under the Alaska National Interest Land Conservation Act (ANILCA) and Alaska Native Claims Settlement Act (ANSCA), and subsequent State laws and regulations have established the subsistence resource value and subsistence harvest rights as the first ranked priority above commercial and sport use in the Haines area.

Birds

Lynn Canal and the Chilkat and Klehini River Valleys provide major migration routes to and from the Interior of Alaska and Canada.

Seabirds and Waterfowl. Seabirds in the area include loons, grebes, cormorants, gulls, terns, murre, and marbled murrelet (common locally, but "threatened" in Washington, Oregon, and California). Gulls are present in major concentrations, sometimes in the hundreds of thousands, in the spring during the eulachon and herring runs. Sea ducks include the surf and white wing scoters, common merganser, harlequins, and oldsquaw. They are frequently seen in the estuaries, inlets, lakes and rivers. Diving ducks include the Barrow's and common goldeneye, and bufflehead. Dabbling ducks include mallards; green winged teal, American widgeon, and pintail. Geese most commonly found are the Canada geese, and occasional Snow geese. Small flocks and pairs of Trumpeter swans are also observed primarily in the spring. Sandhill cranes also utilize the Chilkat River basin during migration. Great blue herons are observed in increasing numbers along the coastal intertidal wetlands and have nesting sites within the Townsite Service Area limits (Sawmill Creek & wetlands), as well as in other secluded ponds in the area. A system of secluded ponds on the Glacier Point moraine harbors large numbers of migratory and resident waterfowl, as well as most of the quiet sloughs and ponds of the Chilkat and Chilkoot River drainages.

Sport and Subsistence hunting of waterfowl is usually incidental to big game hunting in the area. Many more ducks are produced than are harvested.

Terrestrial Birds. Land birds are found in the area including hawks, eagles, harriers, falcons including the Peregrine Falcon, plovers, sand pipers, alcids, pigeons and doves, owls, night hawks, swifts, hummingbirds, kingfishers, woodpeckers, flycatchers, larks, swallows, jays and crows, chickadees, nuthatches, creepers, dipper, wrens, thrushes, kinglets, pipits, waxwings, shrikes, starlings, vireos, wood warblers, blackbirds, sparrows, and finches. Uplands birds include the willow ptarmigan (most common in riparian shrubs at timberline) and rock ptarmigan (timberline to 3500'). The blue grouse is common in the coniferous forests, and the spruce grouse inhabits the deciduous/coniferous forests. In the Sawmill Creek wetlands several nesting sites for blue heron have been identified and several secluded ponds are used as a rookery area by blue herons. Hawks, especially marsh hawks, and a wide variety of ducks use these secluded ponds for feeding, mating, and nesting purposes.

Some recreational and subsistence hunting of ptarmigan and geese occurs and there is a relatively low harvest of grouse, primarily in the spring.

Bald Eagles. Bald eagles commonly nest on the shoreline of the inlets and rivers in the Haines area. Cataloguing has identified over 100 nest sites in the region, a density equivalent to the Seymour Canal of Admiralty Island, considered to be the most densely populated eagle nesting area in Southeast Alaska (National Audubon Society, 1983). Eagles require very large old growth trees near the water's edge in which to build their nests. Nests typically occur in large spruce trees located within 200 yards of open water. No eagle nests have been found in second growth timber (National Audubon Society, Haines/Klukwan Resource Study, 1984). Bald eagles also frequently nest inland in the large cottonwoods of the flood plains of the Chilkat-Chilkoot systems. The Bald Eagle Protection Act of 1940, as amended, protects all bald eagles, their nests, and their eggs.

Most noteworthy within the Haines Borough is the over-wintering of bald eagles that occurs in the fall and winter months in the Alaska Chilkat Bald Eagle Preserve. This concentration, estimated at from 1,500 to 3,500 eagles, gathers in the critical habitat area of the Preserve to feed on the late fall chum salmon run. This is the largest known concentration of bald eagles in the world. Although the greatest numbers occur in the late fall, many hundreds of eagles remain in the Haines area throughout the year. The large late fall chum salmon run attracts bald eagles from throughout Southeast Alaska, the Gulf of Alaska coast, and perhaps the more northerly coasts and interior regions.

3.2.8 Marine Mammals

Marine mammals of the Haines area include harbor seals, sea lions, porpoises and whales.

Seals. The Harbor Seal is the only seal species known to occur in the coastal district and is the predominant near-shore seal in ice-free waters north of 35 degrees north latitude. Population estimates of the total number of seals in the Haines area are not available; however, several

hundred normally occupy the intertidal zone near the mouths of anadromous fish streams. Some seals are also noted in the inlet and rivers. Seals have some subsistence use by Native Alaskans.

Steller Sea Lion. The Northern (Steller) Sea Lion (listed as a threatened species throughout its range) is the only sea lion species known to exist in the Haines area. They are found year round but most commonly during the spring and fall in the mouths of anadromous fish streams. During April and May when pupping takes place, female sea lions seek isolated locations. An important sea lion use area is the haul-out at the "Sea Lion Rocks" on the east shore of the Lynn Canal at the latitude of Flat Bay, where hundreds of sea lions are known to congregate especially during the spring and summer.

Porpoise. Both the Dall and Harbor Porpoise inhabit the waters of the area. The Harbor Porpoise is a circumpolar, inshore species, commonly found in the estuaries and mouths of the rivers of the study area and occasionally ascend freshwater streams. The Dall Porpoise is perhaps the most abundant small cetacean in the waters of the area. They are usually found in groups of 10 to 15 animals. The number of both species of porpoise in the study area is unknown.

Whales. Three species of whales are known to inhabit the waters of the study area, the humpback, minke, and killer whales. The most common of the three, the humpback whale (*megaptera noveangliae*) listed as endangered, moves into the upper Lynn Canal opportunistically in the spring and early summer following the dense schools of small "feed" fish. The killer whale (*Orcinus orca*) is present infrequently, depending on the food supply, preferring the more productive coastal waters closer to the open ocean. The minke (*Balaenoptera acutorostrata*) whale is infrequently sited. Studies, including those following the Exxon Valdez oil spill, indicate that more than 500 humpbacks may now be found in Southeast Alaska during summer and approximately 160 killer whale have been identified in Southeast Alaska (ADFG Notebook series, 1994) There are no estimates available on the numbers of minke whales in the area as their occurrence is sporadic and varies greatly from year to year.

The Marine Mammal Protection Act limits subsistence harvest of marine mammals. It restricts utilization of most species to only Alaska Natives. In the Haines area the harvest of seals and sea lions is traditional for their meat, skin, and parts (ornamental uses). No record exists as to harvest of whales and porpoises in the Lynn Canal.

3.2.9 Terrestrial Mammals

The Haines area supports significant populations of terrestrial mammals including moose, brown bear, black bear, mountain goats, mink, marten, otter, muskrat, coyote, wolf, fox, lynx, wolverine, marmot, porcupine, and numerous other small mammals (Chilkat Bald Eagle Preserve Management Plan, 2002; and Haines State Forest Plan, 2002). Important game harvest areas are shown in Figure 11.

Moose. The Haines and Chilkat Range moose herd originated from migrations through adjoining river drainages from Canada in the 1930's. Moose numbers in the Haines area declined in the late 1960's and early 1970's to a population estimated to be about 500 animals (ADF&G Regional Game Biologist, 1989). The reduced browsing pressure, milder winters, and increase

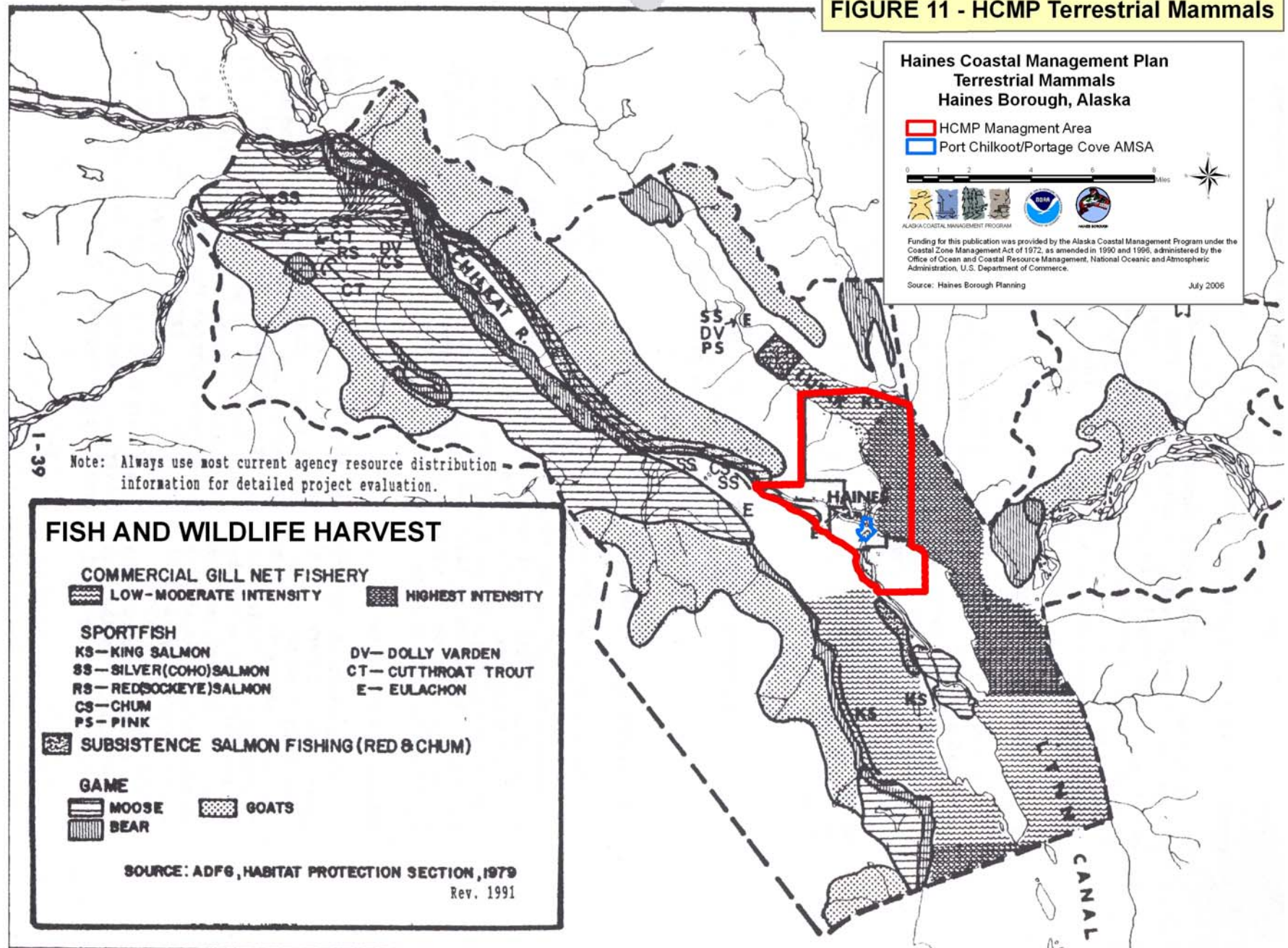
in browse species occurring in older timber harvest areas all contributed to an increase in the herd's population to about 750 in 1977. Current estimates of the Chilkat Range moose population are difficult to ascertain as limited snow cover and dense canopy cover make aerial surveying difficult. Based on harvest records and anecdotal information from hunters the population is presumed to be stable (ADFG survey report, 1994).

Moose use different habitats in different seasons. In mid-summer, moose use of forested habitats with an over story possibly reflects the intolerance of moose to high temperatures. Moose feed on succulent forbs in these areas.

In winter moose use riparian areas for feeding and adjacent coniferous stands for thermal and escape cover. Clear cuts are used in low snow winters, but not in deep snow winters. Moose also use steep, southerly facing slopes with coniferous stands and frozen river channels to escape from deep snow.

Because of dense concentrations of moose on the Takhin River and Murphy Flats areas and the restricted movement corridor between these areas, researchers (Rolley and Keith, 1980; & Haines/Klukwan Cooperative Resource Study, 1984) recommended that development in these areas, particularly roading and logging, be avoided. This area is also important for calving. Researchers also reported that moose avoid roaded areas, and that logging roads in the vicinity of moose concentration areas should have restricted public access to minimize access to moose populations.

FIGURE 11 - HCMP Terrestrial Mammals



Mountain Goats. Mountain goats occur seasonally in the remote and rugged alpine country, the coniferous forests, and at lower elevations in winter. During summer they forage on grasses, forbs, and low-growing shrubs in the high alpine meadows, and in winter they move to lower elevations at or near sea level. In the Haines/Skagway area, game management unit 1-D, goat populations are estimated to be stable and capable of additional harvesting pressure (ADFG survey report, 1998) Mountain goat habitat includes coniferous forests, brushy slopes, alpine tundra, permanent ice and snow, and cliffs.

Subsistence harvest of mountain goats is long established and includes the taking of animals for their meat, wool, and parts that are used for a variety of traditional native purposes including blanket making, utensils, and ornamentation.

Bear. Both brown bear and black bear inhabit the study area, with the black bear being more common. Prime black bear habitat in the study area consists of climax, semi-open mature forests with a good food producing under story. Seasonal concentrations of black bear occur in all the estuarine areas during the spring, and along salmon streams during the fall. Current black bear populations appear to be relatively stable. Harvests occur annually from sub units 1-C and 1-D, with most harvest occurring in the spring.

Brown bear utilize all of the habitats in the study area throughout the year and generally prefer the more open grassland or tundra habitats. Beach grass and sedge flats are used as a food source during the spring, while in summer and fall a wide variety of fruit and berry producing plants are consumed. Insect larvae, small mammals, occasional ungulates, and a variety of carrion are also used in the summer. Spawning salmon is the major food source in late summer and fall and results in major brown bear concentrations in the Chilkat, Chilkoot, and Tsirku River valleys.

Subsistence and traditional use for bear in general is long established and is focused on the black bear for its meat, hide, and parts. Brown bear are utilized for their hide and parts, and less utilized for their meat due to parasitic trichinosis, and diminished palatability.

Other mammals. Information is very limited, or not available, for mink, marten, otter, muskrat, coyote, wolf, fox, lynx, wolverine, marmot, porcupine, and numerous other small mammals in the study area. There are wolves periodically inhabiting the area. A limited amount of trapping, the primary use for these species, does occur for the more valuable furbearers. Small numbers of wolves, martin, red fox, and a few coyotes are harvested each year. Lynx populations vary radically due to rabbit cycles so trapping is sporadic and hunting of these species is rare.

Subsistence and traditional use of all of the above species is long established, and most have been harvested for their fur, hides, or parts and (rarely) their meat.

3.2.10 Vegetation

The terrestrial vegetation of the Haines area is comprised of three major plant community types; upland hemlock/Sitka spruce forest, alpine tundra, and lowland cottonwood and alder woodlands.

These upland and floodplain plant communities are indicators of topography, soils, and drainage characteristics in coastal areas. Vegetation also indicates the resource potential of an area for timber harvest and wildlife habitat, and is valuable for its scenic beauty.

Hemlock/Spruce Forest. The hemlock/Sitka spruce forest is a segment of the essentially continuous coastal temperate rain forest which extends along the Pacific rim from northern California to Cook Inlet. This type of forest is found on most well drained slopes from sea level to timberline (generally 2,000 to 3,000 feet in elevation), although a few small patches of birch dominated hardwood forest occur on these slopes near timberline. Variations within the hemlock/spruce forest, such as muskegs, shrub thickets, and rocky outcrops contribute substantially to its diversity and value as wildlife habitat. Most terrestrial mammals utilize these forests.

The hemlock/spruce forest in this area is also valuable for its commercial timber and for the scenic and recreational resources it provides. The best growing conditions for commercial timber are found on streamsides, gentle slopes, uplifted beaches, and well-drained valley bottoms.

Alpine Tundra. Alpine tundra and barren ground lies above the hemlock/spruce forest on rugged mountain slopes. A sub-alpine shrub land exists near timberline as a transition between the forest and the tundra. Low mat-forming shrubs (cranberry, blueberry, heather, willow and salmonberry), cushion-like plants, mosses, lichens and other herbaceous plants are found in alpine tundra, interspersed with gravelly or rocky barren ground and snow patches that remain year-round. The alpine community is visited and used by many terrestrial mammals in summer, however; only the marmot and mountain goat are common during the other seasons. The willow, rock and white tailed ptarmigan inhabit the alpine zone year round, and several other birds are common in spring and summer. The alpine tundra yields no commercial timber resource, but the scenic and recreational value of this community is high.

Floodplain vegetation. The black cottonwood forest/alder shrub land association is found near sea level on floodplains and glacial outwash plains. The cottonwood forest, dominated by black cottonwood (*Populus balsamifera*) is similar in shrub and ground species composition to the hemlock/spruce forest. The cottonwood forests dominate in areas where drainage is poor, inundation of water for brief periods is common, and the mineral soil is exposed.

The alder shrub lands are commonly dominated by several species of alder (*Alnus* spp.) and willow (*Salix* spp.). This riparian subtype is found mainly on gravel bars in the floodplain community where cottonwoods cannot become established due to frequent inundation of water.

Grasses, sedges, and rushes dominate important wetland communities in the floodplains. Most of the mammal and bird species that inhabit the hemlock/spruce forest also utilize this floodplain community. In addition, this woodland provides important habitat for moose and ruffed grouse. Cottonwoods are the preferred winter roosting tree of bald eagles in the Chilkat Valley.

The value of the lowland cottonwood/alder woodland as a scenic and recreational resource is high, as sport fishing, boating and other water-related recreation commonly occurs within or adjacent to this community. Most of this community is also included within the boundaries of the Alaska Chilkat Bald Eagle Preserve and is unavailable to commercial harvest. In the fall, the bright yellow cottonwood forest provides a ribbon of beauty and brilliance along the Chilkat and Klehini River valleys which envelope the Haines Highway. Cottonwood has little or no commercial value at this time.

Most of the forests in the Haines area are in the sub-climax stage of ecological succession and consist of old growth, uneven aged hemlock and spruce stands, with trees averaging 100-150 feet in height and 2 to 3 feet in diameter.

3.3 Human and Cultural Resources

3.3.1 Prehistory and History

Native Alaskans of the Tlingit culture originally settled the Haines area. History shows they traveled along the Northwest Coast upwards behind the receding glaciers or came down the mountain valleys from the Interior. The area was valued for its mild climate and abundance of food. The original Native name for Haines was Deishu, meaning "end of the trail". With an oral tradition, but no written history, details of Tlingit Native migrations are largely anecdotal, from generation to generation.

Many Tlingits of the Chilkat Valley can trace their families back generations to residents of local villages. There are Tlingit sites in Southeast Alaska where fish traps and basketry date from 5,000 to 10,000 years ago. Local archeological evidence shows fish traps in the Chilkoot River 2,100 years ago and remnants of houses at the Chilkoot village site date to over 800 years ago. Oral history also reflects a long tradition of Tlingit habitation in the Chilkat valley.

The Chilkats were well known as the largest and most powerful of all the Tlingit tribes. They had exclusive control of many trade routes into the interior through which they maintained their position as middleman in the fur trade and amassed great wealth. Historically, the Chilkat valley had many village sites but only two are still occupied today.

A village was located along the banks of the Chilkoot River and was occupied by three clans:

Lukaax̱.adi (raven/sockeye)
Kaagwaantaan (bear)
Shangukeidi (thunderbird)

European explorers began arriving in the late 1700's. During the Vancouver expedition in July 1794, Lieutenant Joseph Whidbey led a small exploration party up the Lynn Canal (named after Vancouver's birthplace) to the shores of the Chilkat Inlet. It was during that visit that the Whidbey party greeted local Natives and first charted the local physical environment.

Chief Kohklux of Klukwan was known as the most powerful warrior and greatest diplomat on the Northwest Coast. By the mid 19th century, traders were attempting to access the interior to trade for valuable furs. Hudson Bay Company built Fort Selkirk on the Pelly River but Chilkat warriors led by Kohklux were responsible for its destruction on August 21, 1852. Historically many defensive forts were constructed by the Tlingit in the area; one on a point in Portage Cove, one on a hill at the mouth of the Chilkoot River, and on the Chilkat River: one at 7 mile, one at 9 mile, and one at 13 mile above the current road. The Russians built "Willow Fort" near Pyramid Harbor about 1838 while surveying the Chilkat River.

During the following decades, explorers and traders became more frequent visitors to the Upper Lynn Canal region. Most notably, Captain Richard Jeffrey Cleveland sailed to the end of Taiya Inlet in 1799 and John D'Wolfs conducted a trading excursion in 1805. The first white man to settle here was George Dickinson, who came as an agent for the Northwest Trading Company.

The location of Klukwan or "Eternal Village" more than 20 miles up-river, offered protection from the well-armed sailing vessels of the Russians, Americans, British, and others. The village had many large clan houses and a population of a few thousand, but by 1882, only 65 houses and about 600 people remained.

There were 30 houses on the west bank of the Chilkoot River in the 1860's, and more on the east bank. The village site on the east bank was destroyed between 1881-1890 by a landslide and many lives were lost. It was called Akaxwoo.ee (earth/mud slide over it). More lives were lost to Western diseases so that by 1882 only 8 houses and 127 inhabitants were reported at the village site. By 1895, four named tribal houses and nine smaller houses remained.

The Chilkats became aware of the transfer of Alaska from Russia to the United States, when Capt. Howard presented Kohklux with a U.S. flag on October 17, 1867 on the ship Lincoln. Kohklux displayed the flag mounted on his canoe, one day before the US flag was raised at Sitka.

In 1869, William Henry Seward, his son Frederick and surveyor George Davidson visited Klukwan to view a total eclipse. While there, Seward became friends with Kohklux and was well respected as a man of peace as he negotiated a treaty between the Sitka Tlingits and the Chilkats. Seward realized the importance of the Chilkat Valley to the United States. Starting in 1903 the US Government began construction of Fort William H. Seward to help settle the boundary dispute between the United States and Canada.

In 1879 when John Muir and Presbyterian missionary, S. Hall Young visited Yandeist'akye', Kohklux wore a robe that was a gift from Seward and showed a tattoo of "Seward" on his arm. At this time, at the request of Chiefs Kohklux and Daanawaak, permission was given to the Presbyterians to build a mission school at Deishu to educate local Native children. The site

chosen was on the narrow portage between the Chilkat River and Lynn Canal. By 1881, with the financial help from Sheldon Jackson, the mission was established. The town was named for Mrs. F. E. Haines, secretary of the Presbyterian National Committee of Home Missions, which raised funds for the new mission.

Located near the Haines airport, Yandeist'akye' was an important village site to the local Tlingit. In 1880, Yandeist'akye' had 16 houses and 171 people, but by 1900 only 7 houses remained. Both Tan.aani and Yandeist'akye' were decimated by disease so that by 1895 Tan.aani was deserted and the last residents of Yandeist'akye' died in the 1930's. Many residents who did not succumb to disease moved to Deishu, where their descendants still survive today.

Many areas in the Chilkat Valley have a long history of use by the Tlingit. Duk Point "Little Cottonwood Point" at seven mile on the Chilkat at four mile point are important sites to fish for eulachon and Jones Point was important for early king salmon. South of Jones Point was a large Chilkat village and a cemetery before a cannery was built in the same area in 1882.

Leaving Sitka on May 20th, 1880, the "Edmund Bean Party" was the first group of miners allowed into the interior with permission of Chief Kohklux. As pressure was brought to bear on the Chilkat Tlingit to open trade access to the interior, their position as middleman in trade was threatened. Lunaat, 38 years old and the second chief at Yandeist'akye' was killed in Dyea in 1888 during a dispute over rights to pack on the trail. Kohklux died in 1889 at the age of 70 and Chief Daanawaak of Yandeist'akye' was very old by then. Many changes were coming fast. During the 1890's their income derived from the "fur trade" was shrinking, as others began to haul freight over the passes. As the gold rush began, mounting pressures due to economics and Native rights issues caused the government to exert more pressure on Native peoples through the courts. Often Tlingits lost their cabins, hunting, fishing and berry picking sites to encroachment by new "owners". As Native rights issues were developed, the ANB and ANS were formed to fight for the rights of Natives to vote and own land.

In the 1880's a post office was established at Chilkat. The town of Haines developed around the Mission School. The town then became an important outlet for the Porcupine Mining District, producing thousands of dollars worth of placer gold at the turn of the century. Haines also marked the beginning of the Dalton Trail, which crossed the Chilkat mountain pass to the Klondike goldfields in the Yukon during the great Klondike gold rush of 1896-99. The Dalton Trail now roughly follows the route of the Haines Highway.

The discovery of gold in the Porcupine district triggered action to finally resolve the lingering boundary dispute between Alaska and Canada. Skagway was garrisoned with federal troops in 1898. In 1903, construction was begun on a permanent military post near Haines. Garrisoned in 1904, it was named Fort William H. Seward, in honor of the Secretary of State who negotiated the purchase of Alaska from Russia in 1867. In 1903, the federal boundary treaty was signed in support of the United States' claim.

By 1910, Haines had approximately 400 residents, 19 stores, and four canneries. In its first special election, residents voted to incorporate as a city for the purposes of maintaining order and improving the school system. As the growth of Haines and Fort Seward continued through the years, Fort Seward was renamed "Chilkoot Barracks" to honor the gold seekers who

struggled over the Chilkoot Trail. The name changed again at the end of World War II when the Barracks were decommissioned and sold to a group of veterans who incorporated it as the City of Port Chilkoot in 1956. In 1970, Port Chilkoot merged with Haines to become a single municipality, the City of Haines. In 1978, Fort Seward became a designated National Historic Landmark. Presently, the old fort and stately buildings serve as homes, hotels and cultural attractions.

A road was constructed in the late 1950's directly through the village site to Chilkoot Lake and over the years the site became a park wayside. Native use continues on a seasonal basis for subsistence food gathering and the Lukaax̄adi have erected a cultural camp within the old village site. Additional village sites of the Lukaax̄adi were Tan.aani on Lutak Inlet, Deishu at Haines, and on the Chilkat River, Yandeist'akye' at four mile, and Kaatxawultu' at 19 mile. Kaatxawultu' was destroyed by a landslide after 1895, and some of the villagers moved to Yandeist'akye'.

In the 1940's and 1950's Haines became an important transportation link with the completion of the Haines Highway and the initiation of the AMHS. Steve Homer and Ray Gelotte, two of the veterans who purchased Fort Seward, and docked in Portage Cove, operated the first ferry in the Upper Lynn Canal. In the early 1950's a military fuel storage pumping facility was constructed at Tanani Point, and an 8 inch pipeline ran over 600 miles to Fort Wainwright near Fairbanks. This pipeline operated for 20 years before becoming obsolete.

After statehood in 1959, the Alaska Legislature began urging various occupied areas of the state to become more organized. They passed the Mandatory Borough Act in 1963 that required certain sections of the state to form boroughs. The intent was to provide a degree of tax equity between those residents living within the incorporated communities and those residing without where both groups shared the same school system. Though the Haines area was not specifically cited in the law, it was evident that some governmental system would have to be adopted to make the school system legal. In 1968, the Haines Borough became the only third class borough in the state, and its only mandated power. was taxation for education. The original boundaries encompassed approximately 2,200 square miles. In 1975, the Borough annexed an additional 420 square miles with the inclusion of the commercial fish processing facility at Excursion Inlet, thereby increasing the Borough's income base.

In 2002 Borough residents voted to consolidate the first-class City of Haines and the third-class Haines Borough into a home rule Borough. This action combined two separate governmental entities into one and mandated adding area wide planning, platting, and land use regulation to the responsibilities of the local government. The remainder of the Borough has been zoned General Use as described in the Haines Borough Charter. Areas of the Borough that already had planning and zoning powers, the former City of Haines, Mud Bay and Lutak, retained their respective zoning regulations.

Many of the founders of the Haines ANB/ANS went on as leaders to influence the development of Native Rights issues statewide. Elizabeth Peratrovich was from the Lukaax̄adi of Yandeist'akye'. Mildred Sparks and Victor Hotch of the Klukwan Gaanax̄teidi', Austin

Hammond of the Chilkoot Lukaax̱adi and others were active on issues and received statewide recognition for their efforts and dedication.

Today Tlingits still maintain a strong cultural presence in the community and the Elders are influential in the region protecting Native rights and subsistence issues.

3.3.2 Cultural and Archaeological Resources

The Haines Borough's long and rich native and military history as well as the former City's status as one of the first cities established in Alaska, ensure the presence of a number of important cultural, historic and prehistoric places of significance.

The State of Alaska defines *cultural resources* as historic, prehistoric, and archaeological remains, from existing buildings to fossils, which provide information about the culture of people or the natural history of the state. According to the State, cultural resources can include the traditions and memories of the longtime residents of an area, and, in fact, can be thought to include the people themselves.

In general, there are three types of cultural sites: archaeological sites, historic sites (both native and non-native) from the period of exploration and early settlement, and sites corresponding with the period of U.S. influence.

The Haines Borough intends to protect and preserve these community assets by designating them as Prehistoric, Historic, Archaeological and Cultural resource sites (Figure 12). These sites are important to the understanding, study and illustration of the local, state and national history or prehistory of the area. Many of these sites have long been known, listed and described by the State of Alaska. The sites include, but are not limited to:

- **Deishu village.** Site of the Chilkoot tribe of the Tlingit Nation
- **Fort William H. Seward.** The U.S. Government established a permanent military post here in 1904 and called it Fort William H. Seward in honor of the Secretary of State who negotiated the purchase of Alaska from Russia in 1867; recognized in 1978 as a National Historic Landmark
- **Haines Town site Local Historic District.** Defined by boundary lines established in 1913. Within the town site 35 structures have been inventoried.
- **Presbyterian Mission and Native School Site.** Now the site of the Presbyterian Church and Manse.
- **Portage cove burial site.**
- **South Portage Cove Native fortification site.**
- **Anway Homesite historic structure and property.**
- **Tanani Village site and Nukdik/Tanani Beach site.** A site of historic and prehistoric significance and is located on the Tank Farm property
- **Tlingit Park Cemetery.** Historic burial sites with headstones from the Presbyterian Mission era
- **Yan Deist' akye' Village site and traditional burial areas.**

Established in 1904 by the U.S. Army, Fort William H. Seward is the primary visually defining element for Haines and is considered a community asset. Decommissioned after World War II, the Fort was purchased by a group of veterans and now is home to Alaska Indian Arts, a hotel, Bed-and-Breakfasts, galleries, shops and private residences. The parade grounds provide a rare open, grassy space. The fort is also part of the Port Chilkoot/Portage Cove AMSA, with its own separate development goals.

It is the goal of the Haines Borough to maintain Fort William Seward as a National Historic Landmark and valuable community asset. The Fort is in the most intensely developed area of Portage Cove. Recent improvements to docks in the area to accommodate tourist vessels will bring opportunities to establish a new commercial center and tourism related businesses in the area. The borough intends to continue to work toward restoration and adaptive re-use of the Fort, with respect for its historic significance, and to enhance its value to the community's cultural life and economy.



In the past, many sites of importance to the Native people of the Haines area have been altered or destroyed by development projects. Subsistence fishing sites, village sites, and other places of cultural and historic importance have been degraded or paved over. The Haines Borough's goal is to protect these resources. A number of strategies have been developed to promote this effort. They include:

- Work with the Native community to define areas of importance to subsistence, culture and history.
- Identify and map areas of special concern and places where future development could impact cultural resources. These places could be subsistence fishing areas, historic village sites or graveyards, for example.
- Work to protect these areas through the planning and zoning process.
- Gather existing documents and maps and put them into the Borough's Comprehensive Plan.
- Recognize, interpret and restore the Tlingit Park Cemetery. Designate the Tlingit Park cemetery as a community historic site. Work with Native organizations and individuals to develop and pursue a plan for cemetery restoration, including restoration of grave markers, wooden balustrades and seating areas, and proper lighting. Post appropriate signs notifying visitors and Park users of the sanctity of the cemetery and requesting their respectful use; and interpretive signs explaining the cemetery's historical and cultural significance.

It is essential when planning for development proposals to confer with the Alaska Office of History and Archaeology, under the Department of Natural Resources. The exact location of historic and prehistoric sites of importance can be learned. Additional strategies for working with historic and cultural sites can be found in the Haines Borough Comprehensive plan and by consulting the Chilkat Tlingit tribe.

The Alaska Heritage Resource Survey of the Alaska Office of History and Archaeology lists sites in the Haines coastal district and vicinity (Table 1). Many of these sites are in the coastal district's designation list. Few of these sites have been thoroughly investigated, and most are listed only for their potential significance. Because of the risk of disturbance of historic sites, the Office of History and Archaeology does not allow the locations of these sites to be listed for the general public.

TABLE 1 - SITES WITH HISTORIC AND PREHISTORIC VALUE		
Alaska Heritage Resource Survey Number	Name of Site	Prehistoric (+)
*SKG-001	Fort William H. Seward (National Historic Landmark)	
SKG-005	Chilkat Village Site	
*SKG-007	Deishu Village Site	
SKG-010	Chilkat Cemetery	
SKG-011	Klukwan Village	
SKG-012	Kohklux	
SKG-014	Pyramid Harbor Village	
SKG-018	Chilkoot River Village	+
SKG-029	Weitzman Roadhouse	
* SKG-043	T'anani Village	+
SKG-044	4 Mile eulachon Camp	+
SKG-045	Takshanuk Village	+
SKG-046	Fort Luanaxadi	
SKG-047	Kicking Horse River Site	+
SKG-048	DOK Point Village	+
SKG-049	Zimovia Point Village	
SKG-050	T'anu Fort	
* SKG-051	Nukdik/Tanani Point Beach	
SKG-052	Dalton Trail	
SKG-053	Haines Packing Co. & Cannery	
SKG-054	Yindastuki Village	+
SKG-055	Tayeyi	+
SKG-056	Chilkat Pictograph	+
SKG-057	Chilkat River Indian Doctor Burial	+
SKG-058	Glass Point	+
SKG-059	Gaiqudi	+
SKG-060	Di Kxinya	+
SKG-061	Daquxiliya	+
SKG-063	Little Salmon River	+
SKG-066	Deishu Cemetery	
SKG-068	Kaskulu Point Burial	
SKG-069	Klukwan Burial	+
SKG-070	Lutak Inlet Autograph & Burial	+
* SKG-071	Portage Cove Burial	+
SKG-073	Zimovia Point Village Site	+
* SKG-074	Presbyterian Mission & Native School Site	
SKG-085	Alaska Road Commission Buildings & Wagon Road	
SKG-088	Katkwalu	
SKG-089	Wooden Structure	
SKG-103	Portage Cove Campground Dump	
* SKG-130	Haines Town site Local Historic District(Includes historic structures SKG-033 - 041, 075, 097, 098, and 107-129)	
* Located within Haines Coastal Area Boundary		

3.3.3 Population and Demographics

The population of the Haines Borough has varied over years and stands at approximately 3,800 (2004 State Demographer estimate).

From 1990 to 2000 the population of Alaska, Southeast Alaska, Juneau and Haines Borough all increased (Table 2). While Southeast Alaska's average annual growth rate during this decade was 0.6%, under the State's overall pace of 1.3%, Haines' population growth (and Juneau's) was on par with that of the State as a whole.

Today, the Borough is experiencing another population dip, like almost all Southeast Alaska due to declines in timber and fishing. During 2000-2003 the population of the State has grown, while the populations of Southeast Alaska and Haines Borough have both decreased. Haines Borough's population has declined at an average annual rate of -0.8% during this time period, slightly higher than Southeast Alaska's rate of -0.6%. In fact, only Juneau (at 0.6%) and Sitka (at 0.2%), in Southeast Alaska, have experienced an average annual population gain during 2000-2003. In most places in Southeast Alaska, including Haines Borough, a net migration of people out of the area is causing an overall population decline.

The population of Haines fluctuates on a seasonal basis. In May of each year, the population begins to increase due to an influx of summer seasonal visitors and both transient and permanent resident populations, only to decrease proportionately with the onset of winter. Also, in the winter some of the resident population migrates out for winter work while others travel. Peak demands on Haines community services are, therefore, in the summer months. Peak demands on the community resources are during the summer months.

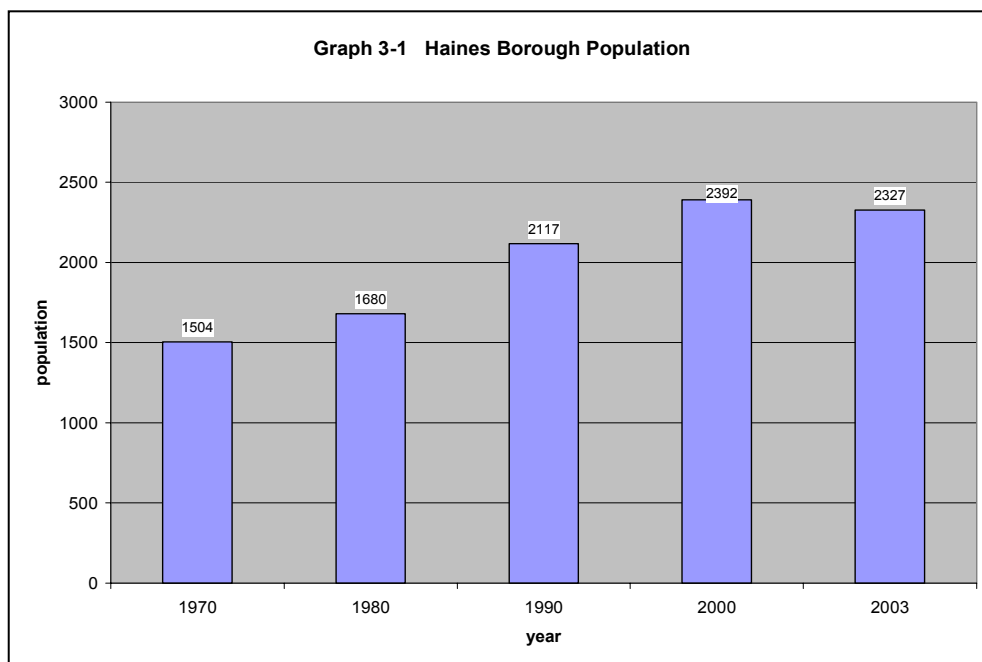
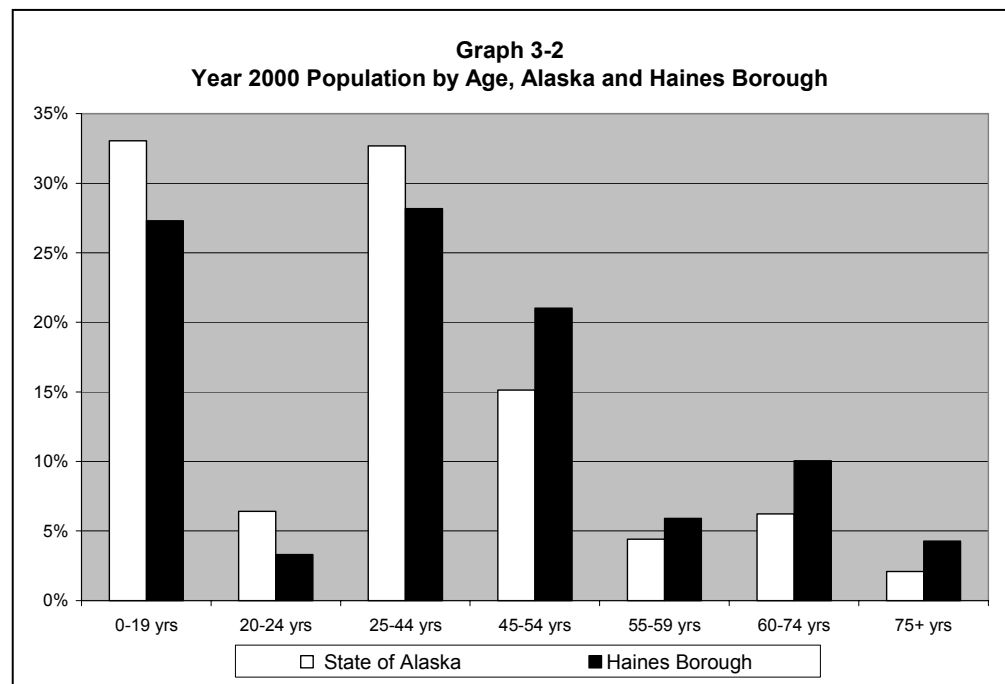


Table 2 - 1990, 2000, 2003 Alaskan Population Data									
	DOLWD Provis. Estm	April 1 Census	April 1 census	Change		Ave Annual Rate of Change		Natural Increase	Net Migration
	1990	2000	2003	1990- 2000	2000- 2003	1990-2000	2000- 2003	4/1/00 - 6/30/03	4/1/00 - 6/30/03
Alaska	550,043	626,392	648,818	76,888	21,887	1.3%	1.1%	22,356	-469
Southeast Alaska	68,989	73,082	71,841	4,093	-1,241	0.6%	-0.5%	1,643	-2,884
City and Borough Juneau	26,751	30,711	31,283	3,960	572	1.4%	0.6%	874	-302
Haines Borough	2,117	2,392	2,327	275	-65	1.2%	-0.8%	4	-69

Natural Increase=births minus deaths
Net Migration=difference between in and out migration
Source: Alaska Dept of Labor and Workforce Development, Research and Analysis Section

Statewide the percentage of seniors in Alaska has been steadily increasing, and the Haines Borough population mirrors this trend. Southeast Alaska has the highest proportion of elderly citizens in the state, and Haines has one of the highest in Southeast.

During the 2000 U.S. Census, total-housing units numbered 1,419, and vacant housing units numbered 428. Vacant housing units used only seasonally numbered 301. U.S. Census data for Year 2000 showed 992 residents as employed. The unemployment rate at that time was 13.66 percent, although 46.78 percent of all adults



were not in the work force. The median household income was \$40,772, per capita income was \$22,090, and 10.67 percent of residents were living below the poverty level.

A federally recognized tribe is located in the community - the Chilkoot Indian Association of Haines. The population of the community consists of 18.5% Alaska Native or part Native. Historically Chilkat Indian Territory, Haines is now predominantly a non-Native community.

There are two Chilkat Indian Villages in the area, the Chilkoot, in Haines, and the Chilkat, in Klukwan.

3.3.4 Economy

Haines Borough's nearly 2,620 square miles of rainforest, lakes, rivers and mountains lie at the northern end of Lynn Canal in the northern part of the Southeast Alaska Panhandle. Haines bridges the waterways of Southeast and the Interiors of Alaska and Canada. The AMHS connects Haines and the interior highway system with Juneau and the rest of Southeast Alaska. The community is a major transshipment point, due to its deep water, ice free port and year round road access to Canada and the rest of Alaska.

Haines' strategic location has nurtured transportation and trade, which have always strongly influenced the Haines economy. Throughout its history, these industries complemented natural resource industries such as fishing, timber, and mining. During the 1990's, construction and seasonal tourism employment grew while the influence of resource extraction industries diminished.

Today, wood products employment is limited to some smaller-scale logging, milling and value-added enterprises, as Haines' economic base centers on the visitor industry, commercial fishing and processing, government, small businesses and retirement. This economic foundation is what draws new money into the community. A variety of other opportunities in the support sector, including retail, services and transportation-related jobs add diversity and help circulate money that is already in the economy.

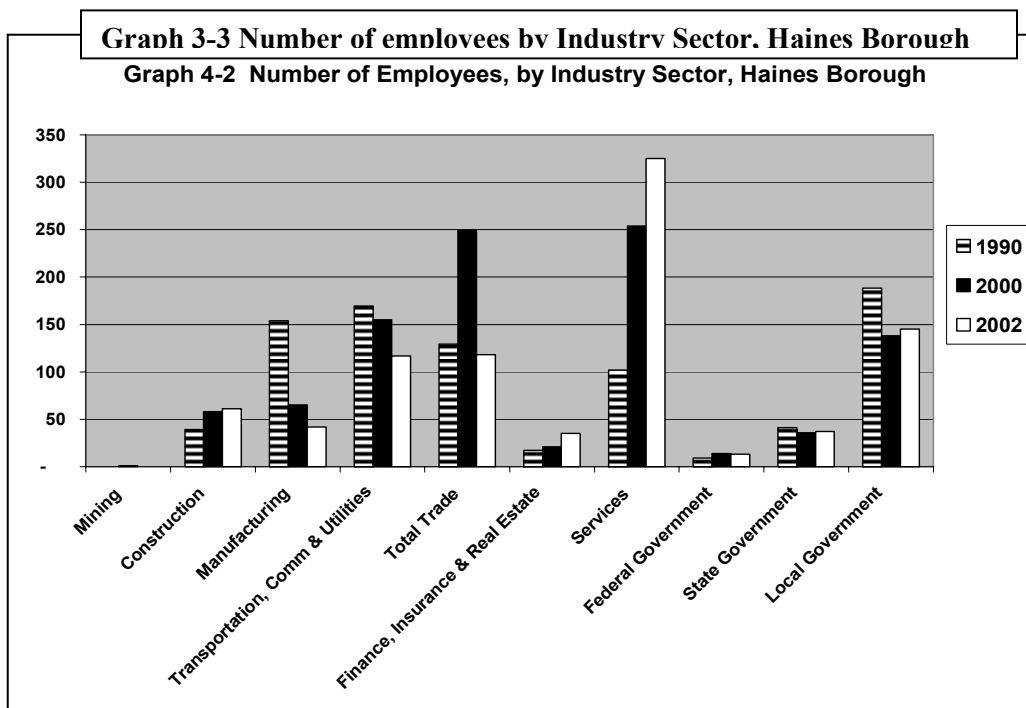
Rounding out the economic picture are subsistence activities, an often-overlooked part of Haines' historic and current economy. Traditional hunting and gathering accounts for a percent of the Haines' residents' diet. Berry picking, fishing, hunting and shellfish gathering reduce the need to earn cash for grocery trade.

Income from non-employment related sources has increased markedly in Haines since 1990, demonstrating the effect of the growing retirement community.

In 1990, the combination of transfer payments and dividends, interest and rent accounted for 29% of total personal income for Haines residents. In 2000, that share was up to 39%. Income from dividends, interest and rent accounts for 21% of total personal income in Haines compared with 17% in Alaska overall, and 16% Nationwide. Transfer payments account for about 18% of personal income in Haines, 16% in Alaska and 17% nationwide.

3.3.5 Employment and Wages

Employment and earnings data show that total salaries and wages earned by Haines residents and the number of employees grew from 1990 to 2000, but from 2000-2002 private sector wages and employee numbers dropped to 1990 levels (Graphs 3-3 and 3-4). Total private sector wages in the Haines Borough in 2002 were less than in 1990. While Haines has fewer government jobs

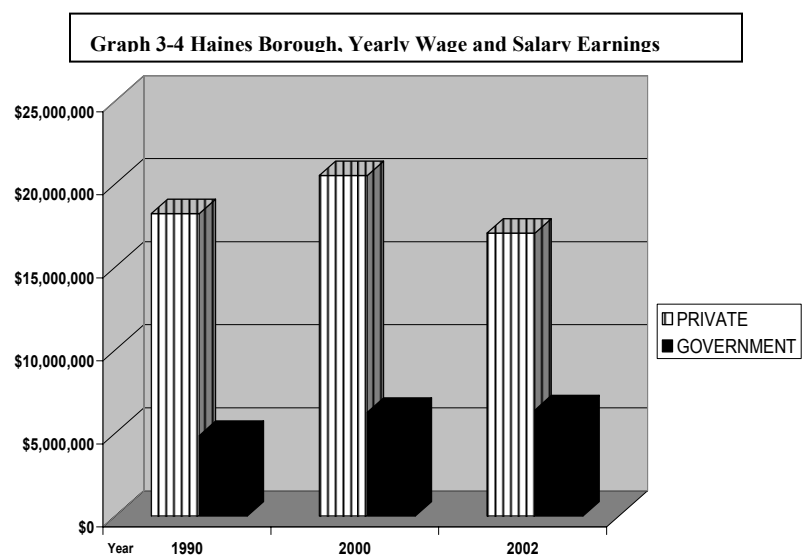


than other
Southeast
Alaska

communities, its government jobs pay some of the higher wages in town and the total earnings from this sector continue to slowly rise.

Wage and salaried employment in Haines reached a high of 966 in 1990, and then dropped to a low in 1992 of 697 following the sawmill closure. Since that time total employment in Haines has 'seesawed' in response to rises and falls in local tourism and manufacturing related jobs.

The Haines economy has become less diversified and shifted over the last 10-12 years. In 1990 and 2000 local government, services, transportation-communications-utilities, and manufacturing each accounted for over 100 jobs in the workforce. By 2002, only the first three industries supplied over 100 jobs each. From 1990 to 2002 the number of manufacturing jobs in town dropped from 154 to 42, while services jobs grew significantly from 102 in 1990 to 325 in 2002. The high proportion of retirees in Haines and has mitigated the downturn in wage and employment in the Haines Borough. Per capita income in 2001 shows Haines in the top third of Alaskan areas and just above the State average.



3.4 Subsistence and Personal Use Harvests

Subsistence use in Haines is a necessity and a way of life long established in local native and white cultural traditions and practiced by a majority of the residents. It is a vital part of the interaction between the indigenous native and non-native residents, and it is considered by both to be a birthright. Many local "sport" users subsist on the fish and game they harvest, and the substantial local commercial fish harvest gives needed jobs to the community and the opportunity to bring home "subsistence" fish which is consumed by fishing families and shared with neighbors. To the Tlingit people subsistence is a part of their custom, ritual, and religion. The tradition of sharing seafood harvest with friends and the elderly is still very alive in Haines.

Subsistence, sport, and commercial fish and game user groups have identified common ground in regards to the issue and unified their efforts in Haines. Subsistence users in Haines, to survive as a designated user group, have become very active participants in planning decisions that will affect their future.

Federal legislation (ANILCA and ANSCA), and subsequent State laws and regulations have established the subsistence resource value and subsistence harvest rights as the first ranked priority above commercial and sport utilization in the Haines area. "Subsistence uses" means the customary and traditional uses by rural Alaska residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicraft articles out of non-edible by-products of fish and wildlife resources taken for personal or family consumption; for barter, or sharing for personal or family consumption; and for customary trade (ANILCA).

Title VIII of ANILCA provides significant protections for the subsistence rights of rural Alaskans. These "rights" include considerations of subsistence resource access, use, and protection on federal lands in Alaska. State laws provide the highest priority to subsistence use of fish and game resources. The Alaska legislative intent also addresses protection of subsistence resource values within state lands and waters "so that the viability of fish and game resources is not threatened and so that resources are conserved in a manner consistent with the sustained yield principle."

Many factors may affect the harvest levels and the resources harvested in a community. Availability of a resource, weather and other climatic conditions may affect both the health of the resource and the harvest success of households. In small communities, the participation of particular individuals and households can affect the overall harvest level. Factors such as health, time and equipment of the hunters can influence the harvest. It is possible that some resource harvests may be understated if the resource is harvested by a relatively few households and a survey missed them. Or it may be overstated if the few households harvesting the resource are included in the survey.

Use patterns also include the handing down of knowledge of fishing, gathering, and hunting skills, values and lore from generation to generation. Subsistence hunting and fishing items are commonly distributed and shared among other members within the community including customary trade, barter, sharing, and gift giving. Customary trade may include limited

exchanges for cash but does not include significant commercial enterprises. Subsistence use patterns rely upon access and a wide diversity of resources in the area, and provide substantial economic, cultural, social, and nutritional elements of the subsistence users' way of life.

Local dependence upon subsistence harvest activities has been well documented by the U.S.D.A. Forest Service, ADF&G, Division of Subsistence (Tongass Resource Use Cooperative Survey (TRUCS), 1988, 1996), by a study for the Central Council of Tlingit & Haida, Bureau of Indian Affairs, 1983 that more precisely specifies subsistence use patterns for the Haines Community, and a 1983 study by ADF&G, Division of Subsistence on salmon use by local residents.

In the 1988 TRUCS study, a random survey of 62 households in Haines estimated subsistence harvest of edible resources in the Haines area was, for all areas except Klukwan, 105.4 pounds per capita in 1987-88, which is below average for subsistence communities in Southeast Alaska. The Village of Klukwan harvested 239.2 pounds per person in 1987-88 that was about average for subsistence communities in the region. Haines residents used, on the average, 4.3 types of harvested subsistence resources and 4.1 types of subsistence resources received from others.

The TRUCS studies have shown the following subsistence harvest patterns by type of resource. Researchers point out that these results are only a "snapshot" in time from a limited number of households and do not totally define subsistence harvest patterns. Listings indicate the estimated percentage of households in the community that harvested the resource in 1987.

Mammals: Deer (37%), Furbearers (11%), Black Bear (8%), Moose (4%).

Note: In some years goats are harvested. Also the low percentage on moose is due to the highly restricted moose hunts in the late 1980's of subsistence-only hunts where 15 to 25 bulls have been allowed annually.

Salmon: Sockeye (36%), King (33%), Coho (24%), Chum (6%), Pink (6%).

Finfish: Halibut (41%), Dolly Varden & Steelhead Trout (41%), Eulachon (14%), Rock Fish (10%), Cod (8%), Flounder, Sole, Flatfish (1%).

Shellfish: Dungeness Crab (12%), King Crab (6%), Tanner Crab (6%), Clams & Cockles (5%).

Birds: Ducks (14%), Seabirds (3%), Other Birds (23%).

Plants: Berries (43%), Seaweed (3%).

Firewood: 46%

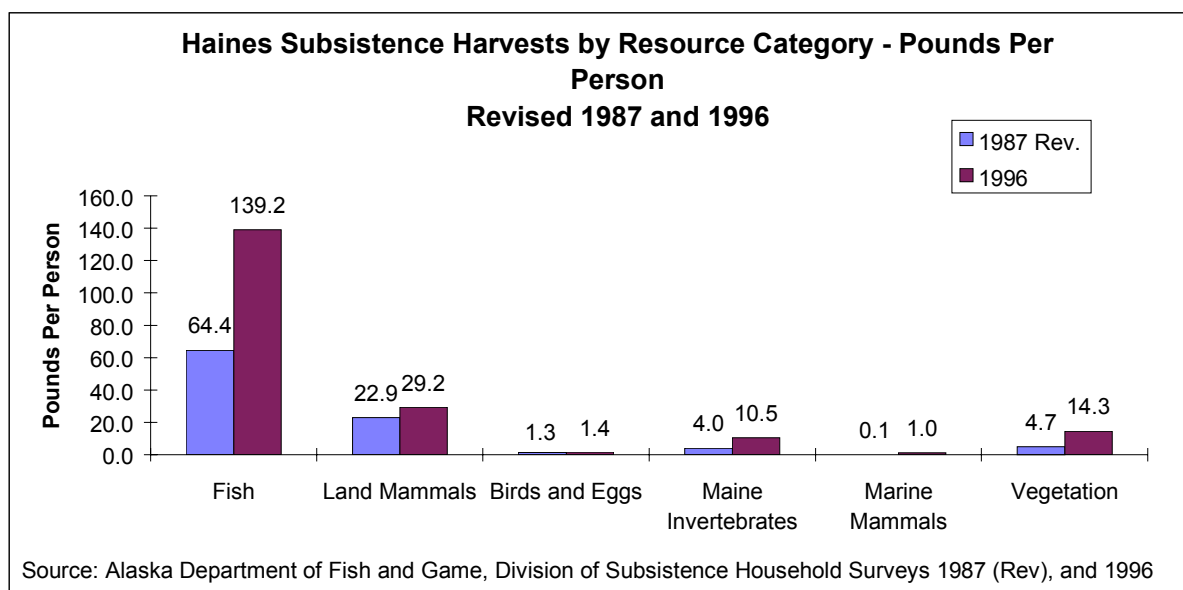
In the TRUCS study about 27% of the subsistence harvest of edible pounds of food was salmon, with the remainder being other finfish (36%), deer (15%), other mammals (12%), invertebrates (5%), and other resources harvested (5%). Haines residents harvested subsistence fish with driftnet, dip net (eulachon) and hook and line in salt water, and river set net and hook and line in fresh water. The subsistence value of the Macrophytes, and Invertebrates of the Haines coast has been long established and recognized.

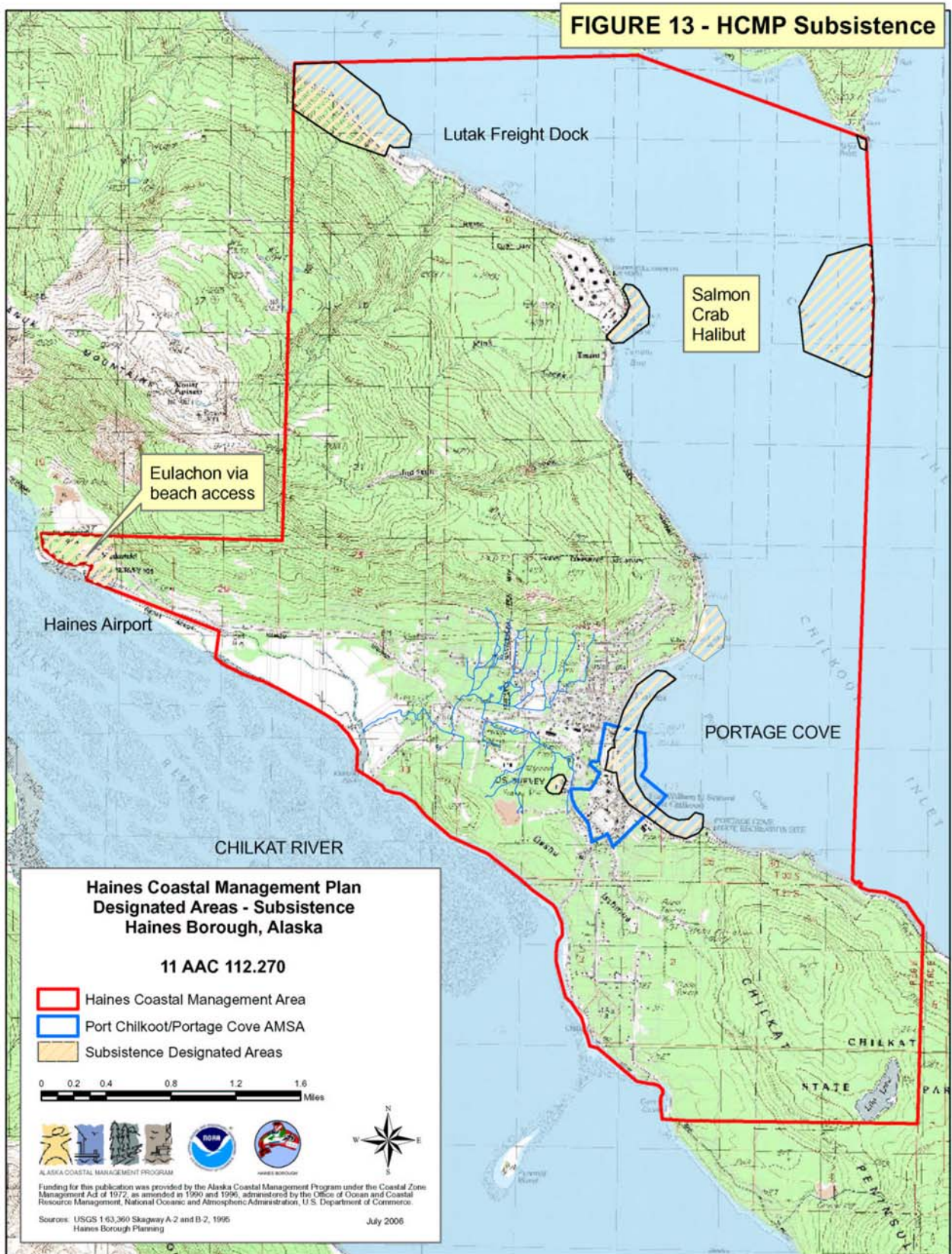
A follow-up survey of 92 households in 1996 further quantified subsistence harvest. The surveys showed a substantial increase in overall pounds of subsistence resources harvested per person - up from 97 lbs. to 196 lbs., about 50.2 percent. Overall, pounds per person of all salmon species were up by almost 53 percent. Only Chinook salmon harvests per person were down. Pounds of

non-salmon fish species, especially eulachon, flounder and rockfish were higher per person by more than 54 percent. Moose, bear and goat harvests were higher in 1996 over the earlier study period, but deer harvests were lower.

Of the fish species harvested, sockeye salmon, and eulachon were the most important in terms of pounds of edible weight per person. Moose was the principal land mammal used by 67 percent of Haines households, and contributing almost 13 pounds per person. For the 32 percent of households using birds, ptarmigan and grouse, and mallards, widgeon, teal, and scaups were the principal species of birds used. Crab and shrimp were the principal marine invertebrates used by Haines households in terms of edible weight per person. A variety of berries, including blueberries, high bush cranberries, raspberries, wild strawberries and salmonberries, and seaweed, were the important vegetation resources used (Table 3).

Table 3





Based on the 1996 survey sample, it is estimated that Haines households from February 1, 1996 through January 31, 1997 harvested more than 420,919 pounds of wild resources. Some Haines households used as many as 47 different animal or plant species, while other households used none. The average (mean) number of different wild resources used by Haines households was 15, out of a possible 196 species listed on the survey (Table 4).

According to the TRUCS study most households received subsistence items from others in addition to those they harvested. Items received were in all species listed above under "harvested" plus the following additional species presumably received through barter both locally and non-locally in Alaska: Goat (6%), Harbor Seal (5%), Shrimp (19%), Sea Urchins (3%), Octopus (1%), Gumboots (5%), Herring Eggs (10%).

Table 4 - Average Number Species Harvested Haines Households (1996)			
	Total Pounds Harvested	Mean Pounds Per Household	Pounds Per Capita
ALL RESOURCES	421,429.65	534.81	195.81
Fish	299,566.59	380.16	139.19
Salmon	125,619.40	159.42	58.37
Non-Salmon	173,947.19	220.75	80.82
Land Mammals	62,811.23	79.71	29.19
Marine Mammals	2135.23	2.71	0.99
Birds and Eggs	3,008.89	3.82	1.40
Maine Invertebrates	22,599.04	28.68	10.50
Vegetation	30,798.18	39.08	14.31

Source: Wildfoods Resource Harvest in Haines, Household Survey. ADFG 1996.

The harvest of eulachon is identified as a very important subsistence fishery in the Haines study area. Eulachon are fished intensively from shore in the subsistence dipnet fishery during their spawning in-migration. (Figure 11) They are rendered by the local Tlingits for oil, smoked, or frozen to eat whole. As a nutritional necessity, eulachon oil is an important trade item between the Chilkat/Chilkoot Tlingits and the Alaska Native communities of the rest of S.E. Alaska. It is traded for other traditional and nutritionally essential products such as seaweed and seal oil. The Eulachon oil trade has an extensive history and tradition in the region.

The HCMP designates the areas indicated on Figure 13 for subsistence and includes the Chilkat River shoreline, along the west side of the coastal district boundary, from Yandastuki southeast past Mud Bay; and the Chilkoot River Inlet northwest into Lutak Inlet including out to the eastern edge of the coastal district boundary from south of Deshu Point north to Indian Rock, Taiya Point, and Sanka Point back to the east. The shoreline area and its use is a matter of local concern. Subsistence resources are especially sensitive to development and environmental impacts. Because many of the subsistence harvest targets are transitory or because some resource harvests need to be staggered by year so overuse doesn't occur, it can be difficult to exactly draw lines on where the resource or access needs to be.

These areas are of unique concern to local users and their importance to the Haines subsistence users is supported by scientific harvest data, as well as local knowledge of subsistence harvests. The Haines Borough has a goal to maintain and enhance subsistence resources and opportunities for all citizens. Their objectives are to:

- Represent Haines as a rural community before State and federal subsistence boards and commissions to ensure continued subsistence access and use by all residents of the community.
- Support maximum subsistence access opportunities within Portage Cove and Lutak Inlet for all citizens of Haines.

The areas shown on Figure 13 for subsistence use under the HCMP are not limited to these uses for this area.

3.4.1 Traditional Chilkoot Tlingits Subsistence Use Areas and Resources

The Tlingit & Haida study in 1983 titled Traditional and Customary Natural Resources Used by the Southeast Alaska Natives gives additional information on the past and present uses of subsistence resources by the Chilkoot Tlingits who currently, live in the Haines Borough area. The Chilkoot tribe is distinguished from the Chilkat tribe of Klukwan in this Tlingit & Haida study. The Chilkat Indian Village and Chilkoot Indian Association participated with the Borough in documenting historical subsistence use areas. Subsistence use areas are documented on Figure 13 as well as an original map in the Borough administration office.

Primary village locations for the Chilkoot Tlingits are as Dyea (summer camps), Skagway (summer camps), and lower end of Chilkoot Lake, Tanani Point, and Yindastuki.

The territory used was vast and included the Taiya Inlet (Dyea, Skagway); Chilkoot Lake Area and Chilkoot River up to the falls; Yayika Peninsula (Tleya Beach, Seduction Beach, Nukdik Point, Battery Point, Chilkat Islands); East Coast of the Lynn Canal (Katzehin River, Berners Bay, Berner's River, Lace River) and West Coast of the Lynn Canal and Sullivan Island (Endicott River to Glacier Point, Sullivan Island, Pyramid Harbor, some areas of the Chilkat River).

Resources areas and resources gathered from:

- Taiya Inlet: at Dyea are berry picking; hunting; other (smoking of meat), and at Skagway, hunting seals; mountain goats; trout fishing; other uses (meat smoking).
- Taiyasanka Harbor area includes salmon fishing; hunting goats; other uses (smoke houses).
- Chilkat Lake Area is used for trapping; hunting goats and bear; fishing eulachon and needle fish; berry picking; other uses (smoke houses, fuel, timber for houses and canoes).
- Yayik Peninsula is used for fishing eulachon, sockeye, and chums; gathering hemlock bark; other uses (smoke houses).
- Battery Point includes seaweed and shellfish harvesting; hunting seals; halibut fishing and fishing.
- East Coast of Lynn Canal harvest included trapping marten, wolverine, lynx; hunting goats and bear; salmon and trout fishing; and shellfish harvesting.

- West Coast of Lynn Canal and Sullivan Harbor harvested resources included trapping mink and lynx; hunting seal, goat, and bear; harvesting shellfish, harvesting ribbon seaweed, halibut fishing.

The Tlingit and Haida study was more extensive in listing precise species utilized by the Chilkoot Indians. Percentages shown are based on the number of Haines users responding in each category out of a total of 22 respondents. (Note: Items with an asterisk are probably not obtained locally but through barter and gift giving with other native communities throughout Southeast Alaska.) The following is a list of utilized species of plants and animals not mentioned by name in the TRUCS study:

Fisheries Resources. Herring (36%), Bullhead (27%), Salmon Shark (18%), Red Snapper (27%).

Marine Resources. Clams (41%), *Abalone (27%), Mussels (27%), *Scallops (23%), *Sea Cucumber (18%).

Berries & Edible Vegetation. Wild Rhubarb (27%), Wild Celery (32%), Wild Rice (23%), Hudson Bay Tea (23%), Grey Currents (18%), Soapberries (41%), Elderberries (27%), Salmonberries (32%), Blueberries (64%), Huckleberries (23%), Raspberries (41%), Cranberries (64%), Strawberries (50%), Thimbleberries (27%), Jacob Berries (32%).

Fowl. Geese (32%), Grouse (36%), Ptarmigan (27%), Freshwater Ducks (50%), Saltwater Ducks (27%).

Land and Marine Game. *Mountain Sheep (18%), Brown Bear (36%), *Whale (9%).

A Sealaska Corporation study conducted on subsistence concluded, "The importance of subsistence to rural Alaskan communities has been recognized by all levels of government as a legitimate, and necessary use of resources. Pending state legislation concerning subsistence use determinations can help to diffuse conflicts between user groups by creating an understanding that subsistence uses are the most necessary and least threatening of all the uses of resources. In rural Alaska it is recognized that the basic survival of individuals is substantially dependent upon the individual's rights to access and harvest fish, game, and plant life resources."

Many non-natives in Haines, and some natives, utilize the wide variety of edible mushrooms in the area. This use has been facilitated by the growing number of field guides to mushrooms that aid in identification.

Additional common local species of edible plants harvested for subsistence purposes (determined through personal interviews) are ferns (young shoots), chamomile, and rosehips.

In 1983 the ADF&G, Subsistence Division did the most comprehensive survey of subsistence use in the Haines area under the title Salmon Use by the Residents of the Chilkat and Chilkoot River Drainages. There were 180 randomly selected households in the Haines, Highway, and Klukwan areas interviewed for the survey with 117 surveyed in Haines. The purpose of the

study was to describe traditional and contemporary uses of local subsistence resources and to quantify the socioeconomic characteristics of sampled households. This study quantified higher per household usage in Haines of subsistence resources in 1983 than the TRUCS study in 1987-88, 343 pounds as the mean household harvest vs. 105 pounds in the TRUCS study. The 1996 study by ADF&G also shows a higher use (see section above).

There were many other important items documented in this survey. One was the extensive use of the Chilkoot River area by the pre-white native community (Chilkoot Tlingits) for habitation and salmon harvesting and processing purposes. Also, the more recent shift of the Chilkoots to river set net fishing on the Chilkat River and their modern fishing patterns are discussed in detail. The use of salmon is shown to have a higher percentage of overall harvested resources than in the TRUCS study. Additionally, extensive information is provided on employment and life style patterns as they relate to the amount of subsistence resources harvested by various households.

Table 5 - SUBSISTENCE FISHING STATISTICS, Haines, AK

YEAR	ISSUED	RETURNED	FISHED	CHINOOK	SOCKEYE	COHO	PINK	CHUM
1993	509	509	316	46	8390	213	164	743
1994	494	494	299	57	6516	197	1358	712
1995	470	470	258	62	6347	343	373	953
1996	505	487	313	68	8461	205	392	901
1997	567	532	306	29	5852	137	888	893
1998	337	277	213	48	5251	178	582	663
1999	349	311	233	51	5386	119	663	967
2000	326	296	224	48	4878	221	411	959
2001	360	325	254	76	5931	129	515	688
2002	374	341	274	89	5739	581	771	518
2003	380	344	254	101	6342	507	1040	659
1993-2003								
Average	425	399	268	61	6,281	257	651	787

Source: 2004 Haines Comprehensive Plan

3.5 Coastal Development and Uses

The State coastal development standard applies only to development in or adjacent to coastal waters. The coastal development standard directs districts to prioritize uses and activities in the coastal area based on whether the uses are water dependent, water related or neither but without an inland alternative. These terms are broad in scope and general in their application. An enforceable policy that defines which uses or activities in the coastal district fall into each of the three categories is making the broad standard more specific in relation to addressing local issues.

The nearshore marine waters, intertidal areas and wetland areas adjoining the coastline may provide productive habitats for fish and wildlife spawning, migration and feeding. Some shoreline locations will be unique habitats that support important life cycle functions. These same biologically productive bays, inlets and estuarine waters are often the most attractive sites for development. Development in these coastal areas, including fill, jetties, seawalls or revetments can greatly alter the local geography and function of sediment transport and deposition, sometimes creating local emergencies related to precipitation and runoff processes. Floating facilities are generally broad in scope, for instance they do not adequately address

location of the facilities. In some cases there is no actual law governing the permitting. Specificity from the coastal district policy will ensure that local issues are addressed.

Development of the community's coastal areas is a matter of local concern as documented in the many planning documents for the Haines coastal management area, including a Comprehensive plan, coastal management plan, tourism management and public access plan. Typical of Southeast Alaska the availability of shoreline development sites is limited by steep geography. The coastal area receives high usage from local residents and visitors because of its resource values for subsistence harvest, commercial harvest, habitat, recreation, tourism, and transportation. The natural scenery is an important factor contributing to recreational enjoyment by residents and in attracting visitors to the coastal district area. Development activities that entail clearing, excavation, dredge and fill operations, facility construction and right of way construction should take care to site and screen such activities. Care is needed to minimize visual impact, particularly as viewed from the marine coastline and limited roadway system of the communities.

3.5.1 Commercial Fishing and Seafood Processing

The HCMP designates the areas on Figure 14 for the purposes of Commercial Fishing and Seafood Processing. These areas, the Port Chilkoot Dock area, and uplands and tidelands lots adjacent to (and north of) the Small Boat Harbor in Portage Cove and the Lutak Dock are suitable for the location and development of facilities related to fisheries. These areas are historically where such activity has occurred and infrastructure exists to continue supporting the activity. Furthermore, other areas of the coastal district shore and coast are not as physically suitable.

Commercial fishing is a significant part of the local economy, and expenditures by visiting and local sport fishermen contribute to local business income. The seafood industry is the only resource-based industry providing significant employment at this time. The seafood processing plant in Excursion Inlet is the Borough's largest employer and wage provider. Ward's Cove Packing Company owned it until 2003 when Ocean Beauty Seafoods purchased it. A small support facility located at Letnikof Cove was purchased by a group of local businessmen in 2003.

Issues related to commercial fishing and seafood processing include:

- The need to further fisheries projects for economic development,
- The need to enhance Lynn Canal fisheries management with better cooperation between State agencies and fishermen,
- The need to maintain effective and important timber management practices for the benefit of fish,
- The need to reduce loss of fishing gear through proper placement of underwater structures and equipment,

The goals and objectives to accomplish these efforts include:

- Encouraging a stable and diversified economic base for long-term employment and livelihood of Haines residents that strengthen the tourism sector of the economy through coordination and promotion of the existing and potential tourist attractions in the Haines area,
- Ensuring balanced management, conservation and wise utilization of Haines resources,
- Supporting subsistence, sport and commercial fishing and encouraging the development of fish processing facilities in the appropriate coastal locations,
- Support timber management regulations that provide for balanced management of fisheries and all other forest resource values,
- Require the use of mitigation measures by resource developers to maintain the aesthetic and visual qualities of the Haines area,
- Promote compliance with sustained yield management in the utilization of timber and fisheries resources,
- Maintain water quality in lakes, streams, aquifers and marine waters,
- Minimize soil erosion and stream siltation caused by development activities,
- Promote reforestation on public and private lands that have been logged,
- Encourage fishery enhancement programs that have proven to be successful in maintaining and improving a healthy salmon population,

Fish harvesting, particularly a local gillnet fleet, has always been an important contributor to the Haines economy. Salmon traditionally comprises over three-quarters of all fish caught by Haines residents. In 1990, 140 Haines residents had commercial fish permits, earning an estimated \$4.8 million in gross wages. By 1995, the number of permit holders was decreasing but fisheries still brought in an estimated \$4.8 million in gross earnings. But by 2002, gross earnings for fisheries dropped to \$2.0 million, and the number of permit holders, permits being fished, and pounds landed and number of commercial vessels registered to Haines residents was also down (Table 6). In 2003 (the last year for which data is available) the drop in fishing activity continued, though at a slower pace. In 2004 local efforts to value-add processing began with the State increasing marketing efforts as well.

Table 6 Commercial Fish Trends for Haines Borough								
Permit Activity			Fishing Activity				Vessel Information	
No. Permit holders	No. Permits issued		No. Who fished	No. Permits fished	Total pounds landed	Est. gross earnings	No. Comm. vessels	Ave age

1990	140	328	114	218	4,390,164	\$4,783,039	138	1975
2000	128	244	97	152	6,987,751	\$3,780,974	122	1977
2002	120	203	81	124	5,153,845	\$2,648,917	96	1979
<i>Source: State of Alaska Commercial Fishing Entry Commission</i>								

Typical of this industry, jobs are seasonal with most employment occurring between June and September. Since non-residents hold many seafood-processing jobs, the impact of these jobs and wages on the resident employment is muted. Value-added processing has the potential for effectively extending the fishing season.

Besides the value of wages and employment from the fishing industry, it is important to note that fishery operation brings funding to the local government through state and local taxation. In 1996, Haines realized approximately \$325,000 in State Fisheries Business Tax. In 2001 this amount was \$250,000.

While conditions such as price per pound caused commercial fishing to decline in importance during the 1990's, seafood processing and fishery related jobs are still important factors in the local manufacturing sector. The significant loss of revenue in the commercial salmon fishing industry from the peak years in the late 1980's and early 1990's was caused largely by lower ex-vessel prices.

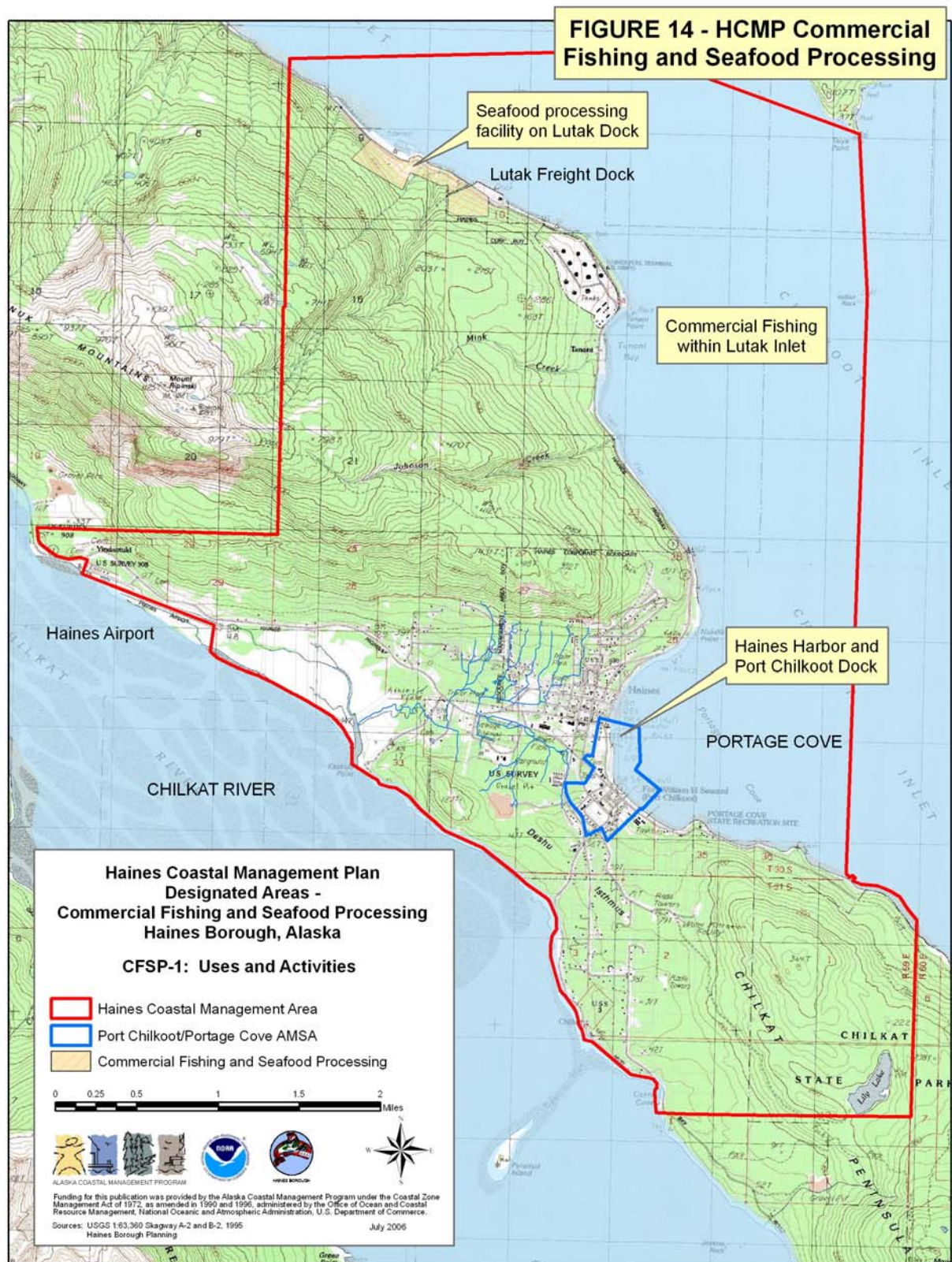
While fishing remains an important element in the economy, many fishers have changed occupations while others seek new seafood marketing strategies. This trend has strengthened in 2005, including the development of several small value-added smoked salmon producers starting operations. So far investments by commercial fishers in shore-based facilities and alternative marketing have yielded mixed results. A portion of the Lutak dock facility is now leased by a private operator who successfully expedites minimally processed fresh salmon and bottom fish to Lower 48 and Canadian markets using highway trucking; while a cooperative venture by local fishers to construct and operate a seafood processing plant at the former Chilkoot Lumber Company facility experienced difficulty, yet continues to experiment with additional value-added processing.

One of the major obstacles to continued value-added production in Haines is the absence of an adequate cold storage facility able to make ice. Many in the industry believe that such a facility would allow products to be stored into the winter, allowing marketing and processing to continue in the off-season. Competition for wild salmon from the farmed fish industry in Chile and other states and countries is a recognized factor and the Alaskan fishing industry is working on strategies to promote the Alaskan Wild Salmon as superior fish to higher-end markets. Salmon roe, in particular the Chum, has become an important portion of the salmon market.

While fisheries activity in Haines declined through much of the late 1990's, with the new marketing strategies and value added possibilities, the future looks promising as prices stabilize and markets are accessed from Haines via the road system southward.

In order to best support the Haines fishing fleet, the community developed strategies that would encourage the economic value of the fishing industry (Haines Borough Comprehensive Plan, 2004):

- Build an ice machine.
- Build a cold storage facility.
- Develop infrastructure and marketing for fisheries other than salmon such as herring, halibut and bottom fish.
- Focus on efficiency of harvest and processing through upgrade of equipment and technology and other operational improvements.
- Review value of fleet consolidation to reduce number of vessels on harvest grounds through several schemes such as buy-back options and permit stacking that are currently being considered in the fishing industry.
- Expand the use of the resources such as value-added products and the creation of new products from fish waste such as fishmeal, oils and fuel etc.
- Develop incentives and or a process to assure a consistent good quality product.



3.5.2 Recreation and Tourism

The Borough's spectacular setting has made it a popular destination as visitors come to see and experience the mountains, fjords, glaciers, fishing, bear and eagle viewing and other abundant sea and land wildlife in the area. Both residents and visitors to Haines enjoy a wide range of activities such as fishing, beach combing, hiking, bird watching, boating and kayaking, boat anchorages, picnicking, camping and campfires, outdoor sports, bicycling, skiing, learning about local culture, and hunting.

Many of the areas attractions that are used for local recreation are also attractive to visitors and important for tourism. It can be difficult to separate tourism and recreation and in fact it is a benefit to both in considering their development. The visitor industry contributes to the economy of many Southeast communities and the health of the natural environment attracts visitors.

For recreation planning purposes there is no easy way to distinguish recreational use from subsistence and traditional use activities. Past surveys of Haines residents have shown that subsistence harvest activities are considered by over 50% of the respondents as both "subsistence" and "recreation" reflecting the outdoor life style of local residents. As a pristine natural environment, the region will become increasingly more rare on a global basis and more marketable for tourism and recreation purposes. As a gateway community to this vast system of parks, Haines expects to increase its role as a support center for the many activities associated with them.

Attractions

The most perfectly renewable resources in the upper Lynn Canal are the majestic scenery and the abundant fish, sea mammal, and wildlife populations. Haines is a gateway community to the largest international system of scenic & wilderness parks and preserves in the world.

The Haines area, like much of Southeast Alaska, is known for its beautiful scenery and wildlife viewing. This is one factor in the growing recreation and tourism industry. Disturbed and altered views are not as valuable to the economics of the recreation and tourism industry and to many residents. Much of the local opportunities for recreation, commercial recreation and tourism activities benefit from and, to a certain extent, depend upon, attractive scenery and viewsheds.

In fact, the tourism industry recognizes the scenic and wildlife resources of the region by sending world class cruise ships to Haines and Skagway in the summer. The local and international tourist industry derives millions of dollars annually marketing the scenic resources, wildlife, colorful history, and recreational opportunities of the region.

Haines scenic resources have proven economically important in the recent past, particularly as a film location. In 1990 the filming of the Jack London story White Fang in Haines strengthened the film location industry, already in existence because of the Alaska Chilkat Bald Eagle Preserve and other local attractions. The film industry has considerable expansion potential with recognition of Haines as a location and support community for regional film production

activities. This industry rivaled tourism as a whole in 1990 as a direct income producer to the community of Haines.

Lutak Inlet has become increasingly popular to shore side and boating sport fishermen and recreationists. Salmon, Dolly Varden, halibut, and crab are regularly harvested in the inlet, and the associated Chilkoot River and Lake sport fishery has become one of the most intensive in the state. The sport and recreational fisheries value to the local area of the inlet, lake, and river systems may approach \$2,000,000 per year based on a total estimated Haines/Skagway angler spending of \$5,600,000 for 1988 (ADF&G, 1991).

The Chilkat Bald Eagle Preserve, Haines State Forest, Chilkat State Park and the Chilkat Lake State Recreation Site are all within the Haines Borough boundaries. History enthusiasts enjoy the Fort William Seward, Alaska's first permanent army post constructed in Alaska in 1903. The post was decommissioned following World War II and was designated a National Historic Landmark in 1973. Of additional historic interest are the mining districts of Porcupine, Pleasant Camp (Dalton Trail Post) at the Canadian border, Government Indian School, Eldred Rock Lighthouse, the Charlie Anway Cabin, and original historic buildings located in the center of Haines business district. The Sheldon Museum is dedicated to the history of Haines and its rich Tlingit native cultures. Although the Haines Borough is considered remote in some aspects, it is fully accessible by land via the Haines Highway, by air service from Juneau, and by water via the Alaska Marine Highway and through its deep water, year-round port.

Animal species that aren't as easy to see in other parts of the world are more readily seen in the Haines area. The following endangered or threatened species, protected by the Endangered Species Act of 1973, as amended, occur within the Haines Coastal District and are recognized as an important resource to the tourism and recreation industry as well as local residents.

Table 7 Endangered And Threatened Species In The Area.		
Name of Species	"listed status"	Status of Population & Distribution
American Bald Eagle	Endangered in continental U.S	Stable to increasing, thousands in winter, widely Distributed.
Humpback Whale	Endangered throughout its range	Occasional in early in early summer, healthy, tens, all marine waters of Upper Lynn Canal.
Steller Sea Lion	Threatened throughout its range I	Stable, many hundreds in summer, all marine waters of Lynn Canal.
Marbled Murrelet	Status under review	Stable, many hundreds, all marine waters of Lynn Canal.

Source: ADF&G Habitat Division, 1992.

In 1999 US Fish and Wildlife Service proposed removing the bald eagle from the federal list of endangered and threatened species, and currently the status is "threatened." (US Fish & Wildlife Service, 2005).

In addition to the activities and tours offered by private concerns, the community holds a number of events hosted by non-profit organizations. One such event is the Kluane to Chilkat Bike Relay in June. This race has grown in participation to over 1,000 in the past few years and draws professional as well as novice bikers from around the world. Other events include the Alaska Southeast State Fair and Bald Eagle Music Festival, Craft beer and Homebrew Festival, the Koot to Kat Skat Skoot (biathlon), King Salmon Derby, and the Sam Donajkowski Memorial Triathlon.

The Haines Arts Council sponsors a variety of musical events throughout the year. The Borough's economic development department and the Chamber of Commerce market Haines as a small convention and conference destination. Private golf courses are located at Chilkat Lake and in the town site area.

Issues, Goals and Objectives

With the development of any project come challenges to managing the benefits. Through the development of the Haines Comprehensive Plan (2004), the Plan for Public Use and Access in the City of Haines (2001), the Port Chilkoot/Portage Cove AMSA and the Haines Tourism Management Plan (2002) stated issues, goals and objectives of the Haines community in regards to recreation and tourism include:

Concern over tourism impacts and the need for tourism planning spurred a Haines Borough advisory vote recommending a limit on visitor industry growth in 1999. This advisory question, supported maintaining the number of port calls for ships carrying more than 1,000 passengers to the level of the year 2000, increasing promotion of small ship visitation, rubber tired traffic, special events and conventions. In 2002, a ballot initiative repealed the tour tax in an effort to encourage cruise ship return. A 4% tour tax on tours operating in the Haines Borough had been in effect since 2000. Some felt that the tax discouraged the competitive market of tours sold on board the ships and in general was cause for ill will with the cruise companies.

Viewshed impacts and protection can be divided into the near shore or foreground viewshed and the mid and background viewshed. In a boat traveling near the shoreline, the foreground or near shore viewshed is generally all that can be seen. The farther back from the shoreline, the more of the mid and background viewshed that can be seen. This distinction is important because, if for example, the goal is to protect views that be seen from the water by tour boats and recreationists that generally travel near shore to view wildlife, the foreground viewshed is the most critical to protect. The Haines coastal district desires to direct tourism and recreation traffic where it can best be managed given existing facilities and to minimize adverse impacts on the viewshed from downtown Haines where most residents live, from the water towards shore and from important recreation sites. Some techniques to protect the on land viewshed from impacts include: limiting the acreage to be logged; selective logging such as helicopter and shovel logging; and leaving large natural buffers, including beach fringe buffers.

The economic benefits of tourism and recreation continue to engage the community of Haines. Future expectations are a continuing expansion of the tourism and recreation potentials of Haines and the upper Lynn Canal. Additional expansion bring further management issues to deal with

accumulations of refuse and improper disposal of human wastes, parked RV's obstructing traffic, and possible disruption of migration patterns of anadromous fish. Additionally, competition between local users and visiting resource harvesters can cause conflicts. Other environmental impacts associated with the cruise ship, tourism, and recreation industry are petroleum products escapement into the environment, air pollution from stack emissions, and high stress on community facilities and services.

The visitor population in Haines on any given day in summer can equal the resident population in numbers. Ferry, airlines, highway, and cruise ship visitors, as well as visiting friends and relatives create maximum capacity loading on the Townsite Service Area water and sewer systems. Capital investment in facilities and services by both the government and private sectors in Haines are increasingly programmed around the peak cumulative demands associated with the visitor population rather than the resident population. In this regard the municipal government must pay careful attention to the cost-benefits associated with visitor services. Revenues, direct and indirect, must measurably balance expenditures for visitor (and transient) services so that the small resident population does not shoulder an excessive tax burden.

The Haines Tourism Management Plan, McDowell Group, June 2002, reviewed the economics of Haines visitor industry. This research found that the visitor industry directly or indirectly accounted for the annual equivalent of approximately 300 jobs in Haines in 2001, including 230 direct jobs and 70 indirect jobs. Visitor related employment has three components: direct wage and salary employment, proprietorships (those who own businesses catering to tourists such as Bed and Breakfast establishments, charter fishing businesses), and indirect employment. This employment includes approximately 90 cruise related jobs (including those generated by cruise visitors from Skagway), 55 jobs due to highway traffic visitation, and 45 jobs from other niche markets.

Other issues include expanding visitation into the 'shoulder' months of winter and fall. While most other communities in Southeast Alaska have little snow and much rain during the winter, Haines boasts a relatively mild climate and abundance of snow. This has lent itself to become a winter sport destination of visitors from other Alaskan communities as well as from the lower 48 and foreign countries. Several private companies offer cross-country ski and snow machine tours. The Chilkat Snowburners hosts the Alcan 200 snowmachine race between Haines Junction in the Yukon and Haines. In recent years the Borough has become a destination for heliskiing. For some, this has become a source of off-season tourist revenues. It has also become a controversial issue due to helicopter activity causing disturbance in residential neighborhoods and concern about such activity's impact on wildlife.

Stated goals and objectives of the community in regards to recreation and tourism include the need to:

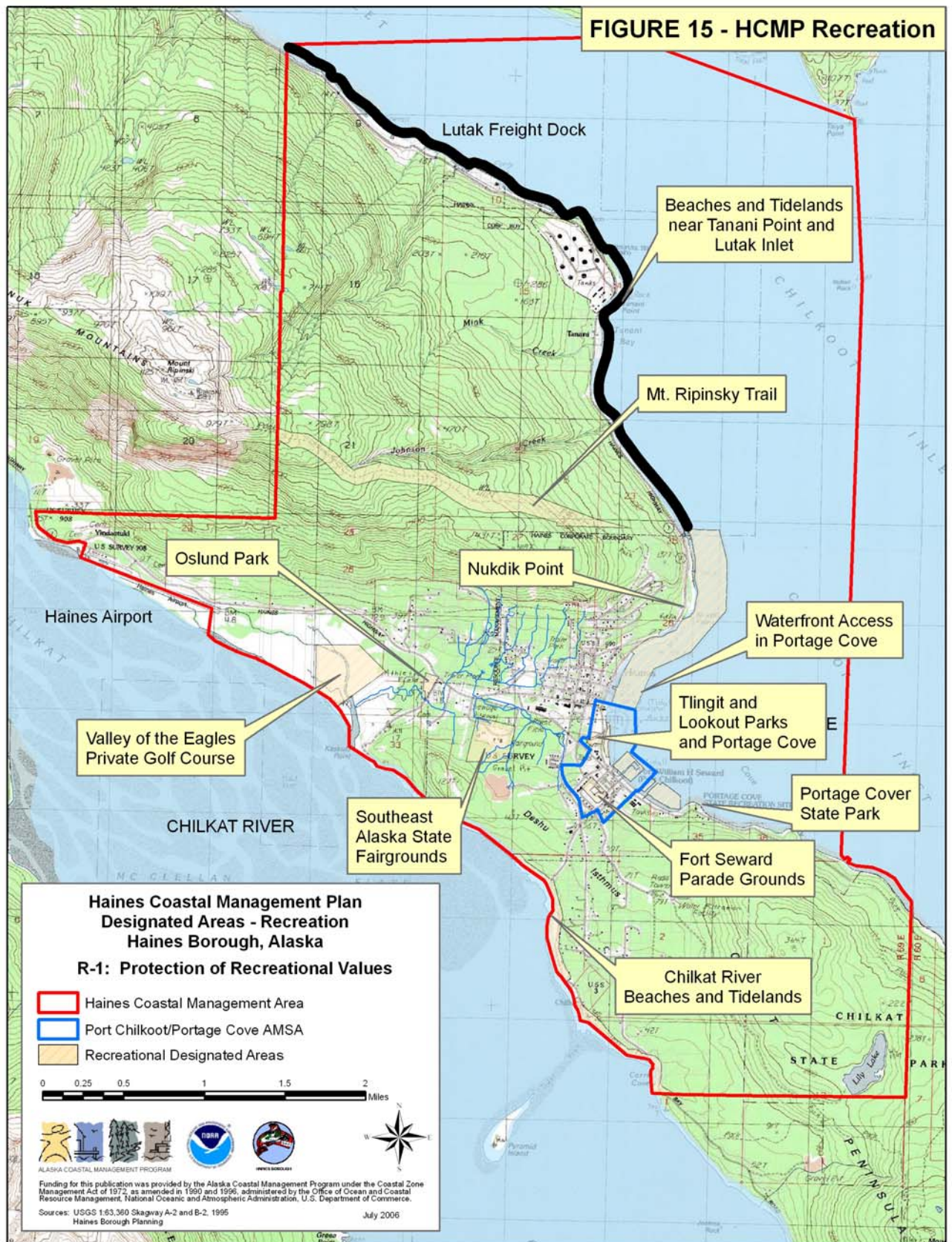
- Strengthen the tourism sector of the economy through coordination and promotion of the existing and potential tourist attractions in the Haines area,
- Seek improvements in AMHS ferry services and encourage the development of fueling and maintenance facilities in Haines,

- Require the use of mitigation measures by resource developers to maintain the aesthetic and visual qualities of the Haines area,
- Assist and encourage preservation of the historical assets of the community,
- Develop broader year-round recreational opportunities for all age groups,
- Create an attractive, accessible, and enjoyable waterfront,
- Maintain and protect significant historic sites,
- Maintain and continue to develop the parks and trails system,
- Expand the public ownership and management of tidelands within the Haines Town site Area, and to the extent feasible and prudent, adjacent uplands,
- Use the available waterfront in Haines for its most appropriate and beneficial use,
- Maintain and enhance the harmonious relationship of the variety of existing and future coastal land and water uses, activities and values,
- Maintain or enhance the quality of coastal habitats, scenic values and historic resources,
- Support the continued development of the American Bald Eagle Foundation building and overall program for an eagle, wildlife, and natural history interpretive center,
- Restore and develop appropriate sections of Fort William H. Seward as a military museum,
- Continue to improve tourism promotional programs that will highlight Haines for its pristine scenic beauty, cultural diversity, historic significance, and recreation values,
- Support expansion of Borough, State and private tourist facilities and services to better accommodate and serve the growing visitor population through the development of a market demand study, economic feasibility analysis, and business operations plan,
- Pursue expansion of secure moorage facilities for cruise ships, sport and recreational vessels to attract additional vessels to Haines and better accommodate the increasing need for secure moorage facilities,
- Support the development of private sector tourist recreation facilities such as charter boat services and other scenic and recreational excursions as viable activities based in Portage Cove,

- Continue to develop the Historic and Scenic District and the waterfront as specified in the Port Chilkoot/Portage Cove AMSA Plan to enhance the tourist appeal of Haines and provide better access along the waterfront for local residents and visitors.
- Improving access and facilities at Chilkoot Lake to accommodate visitor and resident use and address safety concerns
- Addressing neighborhood and habitat impacts caused by sightseeing along the Chilkat River beaches between Jones Point and Carr's Cove.
- Identifying helicopter flight paths that provide the least noise impacts on local residents.
- Monitoring tour and resident activity in the Chilkat Bald Eagle Preserve to ensure least impact on wildlife habitat, and
- Addressing Chilkat River bank erosion.

Recreation Designation

Recreation is of primary importance to Haines residents and state law does not exist to adequately address it. In accordance with 11 AAC 114.250, the HCMP designates the areas shown on Figure 15 as recreation areas under the ACMP. As there is no existing state standard for recreation this designation is necessary to maintain and enhance safe public use of the scenic corridors and public beaches and to manage the designated areas as natural public use areas that retain the natural character of the open space. Designation as an area for recreation use under the HCMP does not mean that recreation is the only appropriate use of the area. However, uses and activities proposed to take place within these designated areas must comply with the enforceable recreation policies of the HCMP. The designated areas include:



Tlingit Park. Located overlooking the Haines Small Boat Harbor and Portage Cove, this park includes a historical cemetery, picnic and play area with shelter structure, restrooms, and fresh water.

Oslund Park. Two improved ball diamonds, restrooms, and fresh water.

Portage Cove. Portage Cove is the Haines' gateway to Chilkoot Inlet. The Portage Cove waterfront is the downtown access to the Inlet for small boat users, its sandy beach playground, its picture-postcard view shed, and its "greeting point" for many visitors arriving by sea.

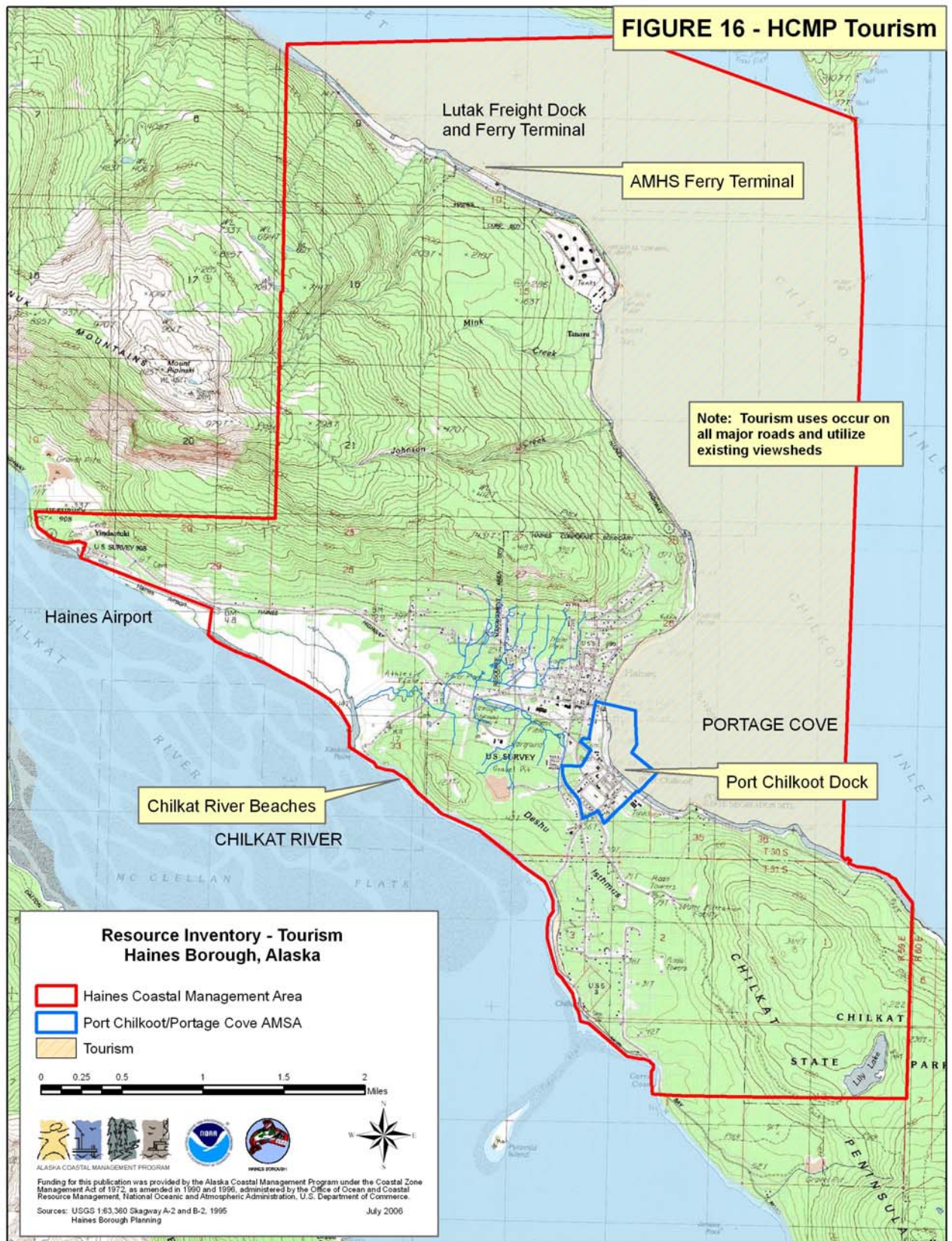
Southeast Alaska State Fairgrounds. The historic and current location of the Southeast fair, this location hosts a local brewery, horse ring, logging competition arena, performance stage and exhibit facilities.

Fort Seward Parade Field. The parade field is a large grassy area, restrooms, and centerpiece of historic Fort William H. Seward, native tribal house, salmon bake facility, and parking.

Chilkat River Beaches. The community has determined through planning efforts to manage the Chilkat River beaches and tidelands as "natural public use areas" that retain the natural character of the open space, provides public access to the beach and water, provides opportunities for low-intensity, dispersed recreation activities focused on enjoyment of the natural environment, and maintains a healthy natural resource environment. Many people use the beachfront, especially along River road and Mud Bay road, recreationally. The borough-operated small boat harbor and boat ramp at Letnikof Cove is used extensively for sport fishing. Chilkat State Park also has a boat ramp used by recreational boaters, and beaches in the park are popular camping spots. Letnikof Cove, located at 5 Mile Mud Bay Road, has a Borough owned small boat harbor and boat ramp. Sport fishermen and other recreational boaters use the ramp extensively; resident and transient fishing boats, pleasure boats and a small private ferry uses the adjacent floats.

Sawmill Creek watershed encompasses most of the community of Haines – flowing from the slopes of Mount Ripinsky, across the McClellan Flats, and into the Chilkat River. Much of the creek has been developed. However, the natural areas along the creek and in the Flats provide important fish and wildlife habitat and attract public use for hiking, skiing, hunting and outdoor education. Sawmill Creek provides spawning and rearing habitat for coho salmon, cutthroat trout and Dolly Varden char. The community has spoken in favor of this area for recreation, outdoor education, and other low-intensity public uses, in a manner that is acceptable to private landowners by obtaining and improving public access points on Borough land on Sawmill Road.

Nukdik Point. Ensure Public Access by working with the landowner of the scenic view pullouts and beach along North Portage Cove, near Nukdik Point to reach a mutually acceptable agreement to allow future public use of these areas. Pursue a long-term easement or Borough acquisition of the property.



Lutak Road and Tanani Point Beaches, Industrial Area, and Chilkoot Inlet. Beaches along the Lutak Road – especially the “tank farm beach” tidelands at Tanani Bay – are used for walking, fishing, picnicking, gathering seaweed and local foods, and fish and wildlife viewing. These beaches are valued for their south-facing aspect, which makes them accessible and enjoyable in inclement weather, and for the scenic views they offer. Past the former Chilkoot Lumber mill site and the Alaska Marine Highway terminal, land uses around Lutak Inlet are recreational, residential, and for commercial tourism. The Chilkoot River and Chilkoot Lake are very popular destinations for sport fishing and wildlife viewing, especially when brown bears are feeding on salmon.

Tourism

Tourism use is documented by Figure 16. Although tourism uses occur in these areas tourism is the not only appropriate use of the area.

- Port Chilkoot Dock in Portage Cove – large and small cruise ships
- Chilkat River beaches between Jones Point and Carr’s Cove – walking and bicycle riding tours, bus tours, independent tourists
- Portage Cove north to Lutak Inlet - independent travelers and fishermen, bus tours - maintain and enhance safe public use of the scenic Lutak Road corridor and public beaches along the road, north of the downtown area;
- AMHS ferry terminal in Lutak Inlet – walking, bicycle, and vehicular tourist traffic
- Viewsheds from shore toward the water, and from water toward shoreward along the coastal district shoreline – independent travelers and fishermen

3.5.3 Sand and Gravel Processing

Sand and gravel materials are an important resource in the development of the Haines coastal management area and district. Gravel deposits from the area have been documented as the best in the region for hardness, thereby increasing their value for road building. Haines is located on or near major river flood plains that tend to provide an easily developable source of materials. Other sources are also available including talus slopes, glacial moraines, and beach deposits. Previously utilized sand and gravel pits have been limited, or closed, to operations due to geophysical hazards (steep slopes), depletion of available materials, and conversion of the land to other more profitable uses. The primary private material source is at 4.5 mile on the Haines Highway, outside the planning area, and is owned and operated by Southeast Roadbuilders, Inc.. This source provides a variety of materials including sand, gravel, crushed rock, and rock of almost any dimension. It is used extensively by private and municipal contractors and has a substantial capacity for the future construction needs within the planning and study areas.

A pit owned by Turner Construction operates regularly from the top of Allen and Menaker Roads. There is still minor use of the Port Chilkoot Company borrow pit off Major Road.

Southeast Roadbuilders, Inc. continues to operate a borrow site north of Fourth Avenue at the base of the steep slopes of Mt. Ripinsky. A similar site to the east on private property was closed by the state in the 1970's due to the hazardous (unstable and steep) slopes being created by the borrow activities. Several downhill residences were judged to be at risk from landslides, and University of Alaska lands uphill were being undermined. A small pit owned by the State of Alaska just north of the ferry terminal is used intermittently. A pit operates at Jones Point.

Borrow sites along the base of Mt. Ripinsky are hazardous areas. Small slides occur on the almost vertical 50' to 100' slopes created by borrow activities, and the danger exists of a major slide in an earthquake of sufficient magnitude. Risk to existing residences is slight, but new developments closer to the slopes will have to be carefully considered and conditioned if permitted. Additional information for these slopes can be found in the Natural Hazards section.

Public meeting minutes referenced in this document show that the public is concerned for safety, environmental, and viewshed issues when evaluating economic development projects involving resource extraction. State laws do not adequately address the preferred location of sand and gravel extraction sites and do not provide specific enough direction regarding sand and gravel sites involving lower levels of extraction and subsequent reclamation. The Haines coastal area created enforceable policies related to sand and gravel extraction that include direction to (Haines Borough Comprehensive Plan, 2004):

- Provide for the orderly development and operation of materials borrow sites within the borough while protecting the diverse environmental values and other resource users within the coastal zone.
- Improve mineral transshipment safety standards and efficiency by improving the truck route through the Borough and finalizing a hazardous materials ordinance.
- Ensure that materials borrow sites are operated safely near hazardous slopes, do not disrupt or inject silt into drainages, and are developed to remain compatible with adjacent land uses.
- Encourage structural development on those lands determined to be suitable as indicated by soils, slope and drainage characteristics as well as free from flood and other natural hazards and with good access and availability of utilities.
- Minimize soil erosion and stream siltation caused by development activities.
- Support mineral extraction projects that provide balanced management for all resources and maintain important environmental values.
- Better define known hazardous zones within the Coastal Management Area and establish guidelines for development activities to improve public safety and minimize property damage.

Mineral developments

The HCMP cannot develop mineral processing enforceable policies based on state law. However, the district feels it is important to document this aspect of resource opportunity. The Haines CMP district is located within the Juneau Mining District. The vast majority of mining claims are located outside of the Haines CMP study and planning areas. All mineral developments inventoried (except the Windy Craggy Mine) are within, or adjacent to, the boundaries of the Haines Borough whose population lives almost entirely within the Haines District Coastal Management Program boundaries.

The U.S. Bureau of Mines surveys established that extensive marine volcanic rock units are currently of unknown size and grade exist near Haines. Exploration of these deposits has been in close association with the exploration and development of similar proven deposits such as the massive sulfide Windy Craggy (British Columbia (B.C.)) and Greens Creek (Hawk Inlet on Admiralty Island) deposits. It can be concluded that a large belt of mafic marine volcanics that contain massive sulfide-base metal ores, gold, and cobalt (strategic metal) exist in the Haines Borough region and British Columbia.

Within the Haines coastal district management boundaries lay the Haines Ultramafic Occurrence, as listed by the U.S. Bureau of Mines, which contains iron and titanium deposits. The source of iron is ultramafic rock that forms the steeper slopes of Mt. Ripinsky. The prospects for utilization of this iron and titanium occurrence have not been sufficiently quantified.

Gold was discovered in 1898 in the Porcupine District south of the Klehini River and 30 miles northwest of Haines. By 1930 about 1.25 million dollars worth of placer gold was taken from this area. Lode and placer claims are still active. Gold-bearing gravel has also been found on the lower Kelsall River, on Rosaunt Creek, and in the middle reaches of the Tsirku River.

The Big Nugget Mine operated by John Schnabel of Haines on Porcupine Creek constructed and improved a road to provide access for recreational miners. Panners and suction dredges took small amounts of gold from McKinley and Nugget Creeks also in the Porcupine Mining District. Adjacent to the placer claims are some copper, lead, zinc, gold, and barite showings which have intermittently been staked but never adequately explored.

A barite deposit at Glacier Creek at Mile 37 of the Haines Highway across the Klehini River has been sampled and studied but has yet to be developed. Due to its remote location this deposit has been unable to compete with other deposits that are more conveniently located for development purposes. At full production the barite ore body is estimated at 200 tons of ore per day with approximately 90% of the ore being usable.

Geologic Potential

The Chilkat Peninsula and Chilkat Islands area has been studied as a cooperative effort between the State of Alaska, Division of Geological and Geophysical Surveys (DGGs), and the U.S. Department of Interior, Bureau of Mines as part of the larger Juneau Mining District study. Six prospects or occurrences on the Chilkat Peninsula and Chilkat Islands area have been identified:

- 1) Road Cut Prospect (gold-copper);

- 2) Road Cut II Prospect (gold, silver, copper, and zinc);
- 3) Battery Point Occurrence (copper, and gold)
- 4) Islands Copper Occurrence (copper-zinc);
- 5) Talsani Island Jadeite Occurrence (copper); and
- 6) Anomalous areas. gold, silver, copper, zinc, barite and cobalt.

It is clear that there is pervasive gold/copper mineralization in the Chilkat Peninsula mineralized zones of unknown potential. Areas with significant clustering of anomalous or highly anomalous samples were the Road Cut Prospect and Mt. Riley gulch area. The Road Cut Prospect did not reveal an economic deposit; however, it did reveal sufficient tonnages and grades to encourage additional examination.

The majority of the Chilkat Peninsula and islands area are within Chilkat State Park and are not open to mineral entry. If these lands remain closed to mineral entry there can be no exploration for mineral deposits or development of such if they are discovered. If substantial mineral deposits were discovered in the Road Cut Prospect area outside of the State park, land status problems would have to be resolved before any development could occur.

Porcupine is the original mining district of the Haines Borough area. Gold was discovered in 1898 in the Porcupine District south of the Klehini River and 30 miles northwest of Haines. By 1930, about 1.25 million dollars worth of placer gold was taken from this area. At least 75 lode and six placer claims are currently active. Gold bearing gravel has also been found on the lower Kelsall River, Rosaunt Creek, and in the middle reaches of the Tsirku River. The Big Nugget Mine on Porcupine Creek has improved access for recreational miners. Fanners and suction dredges took small amounts of gold from McKinley and Nugget Creeks also in the Porcupine Mining District. Adjacent to the placer claims are some copper, lead, zinc, gold, and barite showings which have intermittently been staked but never extensively explored.

Rubicon Minerals' exploration work around the Glacier Creek area in 1999 showed promise for development of the lead, zinc and copper deposits. In January 2004, Rubicon Minerals formed a subsidiary, Toquima Minerals Corporation, to continue the development of the Palmer project. Toquima now controls 100% of the precious and base metal-rich Palmer project in Alaska. The Palmer project is considered to possess the attributes of a large mineralizing system and has several drill-ready targets. The market for base metals is improving and planned drilling of Palmer is scheduled for the summer of 2004.

Since the 1970s consideration had been given to the development of a world-class iron ore deposit near Klukwan. Most recently, the project was considered unfeasible and the land has been placed into an environmental trust and is no longer open for development.

The Kensington Gold Mine is located within the City and Borough of Juneau at Sherman Point on the east shore of Lynn Canal, 20 miles south of Haines. Mining could offer some returns to Haines when the proposed Kensington gold mine moves forward. Coeur Alaska proposes to train and hire local southeast Alaska residents. The required permits to begin operations have been signed off as of June 2005.

Canadian mining prospects are important for the Haines coastal district. There is a high potential to ship ore via the Haines deepwater port facilities. Socioeconomic impacts could include the need to develop better infrastructure. The State of Alaska faces prospective Haines Highway corridor development and maintenance costs that could require substantial cost sharing by mineral developers and fisheries enhancement agencies (to mitigate impacts to wetlands habitats).

The ore-trucking alternative by mineral developers promises major impacts to the Haines area. These are related to the potential of hundreds of ore truck trips per day on the Haines Highway, and rapid population increases in the Haines area from trucking, ore terminal facilities, and related support industry jobs and families. Impacts should be expected in the areas of housing shortages, and extra governmental costs associated with providing services such as schools, health and social services, public safety, and utilities systems extensions and improvements. It is not always the case that increases in sales and property tax and other fees and collections offset costs to local government to create the additional infrastructure to serve a new population. Many local government expenditures can be required prior to actual increased revenues from taxation causing cash flow problems for the municipality.

The world-class Windy Craggy ore deposit is located in the Alsek/Tatshenshini River area of the St. Elias Mountains in British Columbia, approximately 150 road miles and 80 air miles north of Haines. The ore body consists of very high-grade copper ore and smaller amounts of gold, cobalt, zinc and silver. However, the area has been declared park land and cannot be developed.

The Tsirku deposit is located in northwest British Columbia near Haines, near the Tsirku/Jarvis Glacier area, approximately 50 miles by highway from Haines. An exploration program resulted in the discovery of copper, lead, zinc and barite. A world-class gypsum deposit is located approximately 65 miles northwest of Haines in British Columbia. The Wellgreen nickel mine near Burwash Landing, Yukon Territory, Canada, is 200 road miles northwest of Haines.

3.5.4 Transportation and Utilities

Haines has developed as a marine, land, and air transportation hub due to its deep-water harbor, the AMHS facility, its highway link to the interior, and the Haines airport. Haines, Alaska's support facilities for transportation activities are also well developed. The Haines Borough has set the goals of providing a well-planned and developed road transportation network that will meet future development requirements and to improve the utility systems of the Borough, with proper regard for natural habitats and competing coastal uses. In particular, techniques that will consolidate or install underground utilities are a focus (Haines Borough Comprehensive Plan, 2004).

Federal Highways

Access to the continental road system from Southeast Alaska is provided at two points in the region: from Haines via the Haines Highway, and Skagway via the Klondike Highway. The Haines Highway extends from Haines, 159 miles to Haines Junction in the Yukon. It was

constructed in 1949 for strategic purposes to link the tidewater port of Haines by road with the Alcan Highway.

Within the United States, the Haines Cutoff Highway has a paved, two-lane Federal-aid primary route that carry traffic from the Lutak Dock to the town site and beyond to the Alaskan and Canadian interior. The Shakwak Project, a joint venture by the United States and the Canadian Federal governments, continues to substantially improve the roadway of the Haines Highway within Canada. Paving, straightening and widening, as well as the by-pass of several steep switchbacks in the British Columbia section of the roadway, remain the goals. Within the United States, re-paving, roadbed, and drainage improvements are an on-going program.

State Roads

DOT&PF maintains approximately 70 miles of unpaved roadways and approximately 60 miles of paved roads (including the Haines Airport). These state roadways are maintained by a state crew from a 6.5-acre site located at Main and Union Streets within the Haines Borough.

Local Roads

In the 1980's, the former City of Haines substantially improved the road network in town with paving, gutters and sidewalks. Improvements were funded from the State capital improvements program. Some platted rights-of-way in the town site, however, still require grading, paving, and connection to other streets.

Marine Transportation

Tug and Barge Operations

Tug and barge operations are primarily from Seattle. They carry substantial volumes of freight and commerce and handle the majority of the general cargo-type freight that supplies the needs of Southeast Alaskans. In addition tug and barge companies carry a large portion of the region's fish and seafood products (frozen and canned) to the Seattle area for further distribution. Currently, Haines is served by two freight tug and barge companies, Alaska Marine Lines and Glacier Marine Transport. Additional tug and barge operators provide petroleum products delivery and wood and forest products transshipment for Haines.

Alaska Marine Highway System

The AMHS is the main component of the marine transportation system in Southeast Alaska. This system provides surface links for passengers and vehicles to, from and within the panhandle area. Four main vessels operate between the southern road systems between Prince Rupert, B.C., and Bellingham, Washington and the northern road connections out of Haines and Skagway. These vessels provide a link for the through movement of traffic as well as carrying passengers and vehicles to and from the region and within the region.

The AMHS also acts as an important link for the movement of freight through the region and between various communities. This service supplements the other freight operators who barge large volumes of freight.

Air Transportation

Haines Airport

The Haines Airport is located in the extreme northwestern part of the town site area at about three-mile on the Haines Highway. The terminal building was constructed in 1982 by the former City of Haines and was operated by the former City until August 1996, when a local resident purchased it. The private owner has since sold the facility to Wings of Alaska, a local commuter airline, who will continue to make the building available to the public through an agreement with the Borough.

The original runway was constructed in the territorial days and was expanded in the 1950's. The airport occupies a 126-acre site that is confined by a historical site, the Haines Highway, the Chilkat River and an anadromous fish stream that divides a portion of the property. It has no tower and a limited airport-operating certificate.

In 1992, DOT&PF completed construction of a five million dollar expansion to the airport. Improvements included a new runway, improved taxiway and aircraft parking. LAB Flying Service, Skagway Air, and Wings of Alaska provide scheduled air service. Skagway Air Service and Mountain Flying Service often provide charter services. All of these aircraft carriers provide flight-seeing tours from Haines and Skagway airports.

The Haines Airport Master Plan Draft Report of January 2004 describes in detail the current airport layout with all the accompanying information.

Seaplane facility

The existing seaplane float was constructed in 1978 and is located in the Small Boat Harbor in Portage Cove. The float is constructed to accommodate docking of transient aircraft and for loading and unloading aircraft. No tie downs are provided, and the float is in need of repair.

Water Ports

Lutak Dock

The Lutak dock is located five miles north of downtown Haines along the Lutak Highway. The 1,051-foot face of the Lutak Dock and its associated six-acre staging area is three-quarters owned by the Haines Borough (Lutak Dry Cargo Dock) and one-quarter owned by the State of Alaska (AMHS ferry terminal). The U.S. Army constructed it in the 1950's and it has a 36-foot above MLLW depth at the face. Modifications to the fender system, construction of a barge loading facility, and development of the upland lots to service the dock, make the Borough-owned portion of the Lutak dock one of the best deep water port facilities in S.E. Alaska. The facilities of the Lutak Dock are currently capable of handling containerized cargo (break and bulk) manual loading and unloading operations, petroleum products transshipment and passenger operations. This dock is used commercially year-round and is operated by the Haines Borough on a fee basis.

Haines Boat Harbors

The Haines Boat Harbor, located on the downtown waterfront, and the Letnikof Cove Small Boat Harbor are central components of the fishing industry, the growing charter and water-taxi sector and provides recreational vessel moorage. The Borough operates this dock as an enterprise fund for the communities benefit. In 2004, the U.S. Army Corps of Engineers completed its feasibility study for an improvement and expansion of the downtown Haines Boat Harbor. Completion of this project is a high priority in the community.

AMHS Ferry Terminal

The southern one-quarter of the Lutak Dock is owned by the State of Alaska and operated by the AMHS. It is the largest volume passenger port in Southeast Alaska after Juneau, as well as the third largest volume vehicle port on the entire AMHS. The State also owns and maintains a concrete boat-launching ramp north of the Lutak Dock.

Federal U.S. Army Petroleum-Oil-Lubricants (POL) Dock

This POL facility is located at the entrance to Lutak Inlet 1/5 mile south of the Lutak Dock on the Lutak Highway, and is attached to the Federal tank farm facility. The dock consists of a concrete and steel pier head with two dolphins. The large 200-acre Tank Farm uplands site includes maintenance shops and residential and administrative buildings. A variety of corporate, local and state entities are interested in the purchase of the facility. For the sake of future development it is currently in the process of being cleaned up of hazardous materials from prior operations.

Chilkoot Lumber Company Dock

The Chilkoot Lumber Company dock is located one-half mile north of the Lutak dock and used to be the site of the transshipment of forest products to Pacific Rim markets. The dock is 1,000 feet long and has an adjacent barge landing site and approximately ten acres of uplands

properties. The mill has been closed and dismantled. Recently, local fish processors have used this dock.

Port Chilkoot Dock

The Port Chilkoot Dock is located on the shore of Portage Cove at the end of Portage Street. The dock is owned and operated by the Haines Borough. The original dock is woodpile construction. Renovation work in 1988 included re-decking, pile replacement, reinforcement of the face with steel dolphins and a system of floats with a ramp utilized as a cruise ship lightering facility. In 1994 and 1995, the former City made additional improvements to the dock structure and installed mooring dolphins that allow the docking of large cruise vessels. As now configured, the dock can accompany two cruise vessels simultaneously: one vessel on the main dock face and another small vessel on the floating dock.

Chilkat Cruises Dock

The Chilkat Cruise dock is privately owned by Klukwan, Incorporated. Chilkat Cruises operates the dock, the adjoining seasonal restaurant and gift shop and catamaran shuttle service between Haines and Skagway. In addition to company owned vessels, small cruise vessels touring Lynn Canal use the facility.

Regional Transportation Trends

The long-range transportation plan for Southeast Alaska identifies what air, water and land transportation links southeast communities will need, as well as access to and from the region over the next twenty years. The current plan calls for fast vehicle ferry service between Haines, Skagway, and Juneau, or a road from Juneau to Skagway.

Under Governor Knowles' administration the proposed East Lynn Canal Road was shelved in favor of improved ferry service. The Murkowski administration has renewed the road project and is pushing for its construction. There are concerns among many in Haines that an East Lynn Canal road would isolate Haines and hurt the economy. Other concerns about the road include the cost of construction and maintenance, danger from avalanches, winter unreliability, visual impacts and environmental concerns. The few proponents claim a positive benefit from being able to drive when they choose, instead of waiting for ferry service.

Ferry scheduling is also very important to Haines. Consistent daily ferry service in the summer months between Haines, Skagway and Juneau boost ridership and helps the communities economically. The new fast ferry MV Fairweather will serve Haines five days a week but will not sail between Haines and Skagway, instead making separate trips between the Lynn Canal communities and Juneau. This will break the link in the "Golden Circle Route" between Haines, Skagway and Whitehorse that has been marketed for years and has become a popular route with tourists. Tour operators and RV parks have already seen a drop in bookings because of this change in Marine Highway scheduling.

Utilities

Residential Water Use

The existing water supply system for Haines is the Lily Lake water system with a small spring-fed satellite system in the Piedad area, and a dam and distribution main for the Lutak Dock and AMHS terminal. The water system is chiefly gravity distributed and delivers water to meter and non-metered commercial and residential users through pipes constructed from a variety of materials between 1951 and the present.

The Lily Lake system serves the greater downtown of the community. Lily Lake yields an estimated 500 gpm, meeting the current requirements of the Borough with its demand of approximately 160 gpm during the winter and up to 400 gpm during the summer.

Lily Lake water is treated for color and chlorinated at the water treatment plant. The plant limits the flow through control valves to 400 gpm, but can deliver up to 950 gpm if the treatment plant is bypassed in times of emergency. The Borough supplements the Lily Lake supply during peak summer demand periods by using the West Spring water source.

Private enterprise meets a portion of the demand for potable water and sewer service. Crystal Cathedral Water and Sewer Systems, Inc., supplies water to customers west of the town site from its privately owned well field.

Borough water mains extend beyond the town site in several areas: south along Beach Road for one-half mile; south along Small Tract Road for 1,000 yards; and southwest along Mud Bay Road for several hundred yards. The Borough recently agreed to provide water to the Piedad Road area by way of a water main constructed privately by Crystal Cathedrals Water and Sewer Systems, Inc. Future extension of town site area water mains further into the Borough is most feasible southward into the Small Tract Road-Mud Bay Road area where growing population density may warrant such a project. The remainder of Borough residents has their own contained water wells, flume collectors from streams, rain entrapment (cistern) systems, or hauls water.

Important watersheds within the coastal district and planning area include:

1) Water Supply out of Lily Lake. The principal water source for the majority of the residents of the Haines Borough is Lily Lake located three miles Southeast of Haines on the Chilkat Peninsula. As a storage reservoir it is estimated to contain approximately ten million gallons per foot of depth. Lily Lake yields an average of 810,000 gpd. or over 550 gpm. Low yields in the order of 254,000 gpd (175 gpm) occur usually during June, February, and March. Normal flows approach 600 gpm. Although generally of good quality, the lake is in a muskeg area that causes the water to be discolored. It has a relatively high iron content and is classified as moderately hard. The watershed for the current municipal water system at Lily Lake is completely within Chilkat State Park and with very limited access, is generally considered well protected.

2) The Lutak Dock Water Supply. A snowmelt and groundwater fed stream above the dock at Lutak Inlet crosses the north corner of the Lutak Dock properties. It is the developed water source (small uplands dam, and 4" pipeline) for the Lutak Dock, State Ferry Terminal, the Federal Tank Farm facility and a 50KW hydropower plant. During drought conditions in August of 1989 the flow was 750 gpm. Flows in November of 1989 were measured at 115,000 gpm.

The watershed for the Lutak Dock and Tank Farm water source is in wilderness terrain with difficult access and is currently well protected.

3) The Piedad Road Water Supply. The watershed for the Piedad Road water system is subject to potential negative impacts from proposed logging of private land partially within the watershed. The former City of Haines has for many years owned some of the lands within this watershed to create a protected uplands buffer. The entire Piedad Road system is outside the coastal district boundary limits and Planning Area and is kept valved off from (while still connected to) the municipal water system.

4) Wells and Springs. Some residents choose to get their drinking water from one well location at 1 mile Haines Highway or from springs at 4 Mile Mud Bay Road and Six Mile Haines Highway. Ensuring the quality of these water sources as development occurs is a high priority for the community.

The above listed watersheds, as public drinking water sources, are owned and managed by various state agencies including ADNR and the Alaska Mental Health Land Trust. The Haines Borough will work with land managers to ensure access to water sources in the future and to prevent development in these watersheds that could lead to pollution of the water.

5) Additional water sources. In the area West Spring services the Piedad Subdivision northwest of the coastal district boundaries; Johnson Creek and Mink Creek immediately north of the core area of Haines at Tanani Bay (identified as a potential future water sources for Haines); Haska Creek across Chilkat Inlet (water source use would require the construction and maintenance of a pipeline across Chilkat Inlet) with a low flow estimated at 1,390 gpm; the POL Tank Farm water source upland of the Borough Lutak Dock with very low flow (2.0 gps) during recent drought conditions but much higher flows normally; Allen's Creek which crosses Sawmill Road at the Townsite Service Area limits boundary line and has an estimated flow of 4,570 gpm which is adequate for municipal needs for most of the year but is discolored with organic material. Since all of these surface waters have the potential for supplying domestic and industrial water, adjacent land use activities must be managed to protect their water quality.

Groundwater in the study area is derived locally and directly related to local precipitation. The slopes northwest of Haines are the principal recharge areas. Both the areal extent and storage capacity of all aquifers near Haines are small. Large quantities of ground waters are available from surficial deposits in only a few areas. The highest groundwater potential exists in the glacial outwash deposits south of the Haines Highway and Sawmill Road. However, gravel zones are not continuous and the water quality deteriorates with depth. The Sawmill Creek wetlands west of Jones Point Road have groundwater potential, but they are periodically flooded by tidewater and saltwater intrusion may affect water quality. The raised beach deposits surrounding Portage Cove to Third Avenue have some potential for ground water; however, these deposits are of local extent, the recharge area is small, the underlying till deposits further restrict recharge, and contamination of water in the surficial deposits is possible.

Electricity and Fuel

Haines Light and Power, a subsidiary of Alaska Power and Telephone Company, provides Haines electricity via the Goat Lake hydroelectric facility. The previously used diesel powered

generating plant within the town site has been quieted and will now serve the community as a back-up electricity source. The total hydroelectric peak-load capacity of the system is 4,900KW. The total load capacity, with diesel electric backup generators included, is 7,400KW. HL&P serves approximately 1,150 residential, commercial and industrial customers at an approximate cost of 17 cents/KWH. The existing system and the diesel back up could accommodate safely a 50% increase in the number of customers. The firm's hydroelectric generators are located below Goat Lake at four- mile of the Klondike Highway. A submarine cable between Haines and Skagway transmits this electricity and also provides a fiber optic telecommunication line.

Haines Light and Power electrical service extends northward along the Lutak Highway to the Haines Ferry Terminal and involves a hydro-electric plant adjacent to the Lutak Dock; northward along the Haines Highway to five-mile at the Southeast Roadbuilders facility; southward to the end of Mud Bay Road and southeast to near the end of Beach Road.

Inside Passage Electrical Cooperative (IPEC) recently completed the Haines Highway project to provide electricity to the residents from eighteen mile to the Canadian border.

A private hydroelectric project at ten mile provides electricity for the remainder of the highway residents.

The remainder of Borough residents furnishes their own electrical power sources by use of generators and inverters, solar energy, wind power, and small hydropower plants.

The only residential areas of the Haines Borough currently without public electrical utility service are Lutak Road (beyond the ferry terminal), between five-mile and ten-mile on the Haines Highway, remote homes on the Chilkat Peninsula, and Excursion Inlet.

Please refer to previous versions of the HCMP that go into great detail on community utilities and services. Additionally, the 2004 Haines Borough Comprehensive Plan details further community services such as solid and liquid waste streams, education, fire, police, library services, medical services, child care, senior services, visitor services, cultural facilities.

3.5.5 Timber Harvest and Processing

The Alaska Forest Resources and Practices Act (FRPA) and regulations provide the standards, policies and review procedures under the ACMP for timber harvest activities. Associated activities that require a State or federal authorization under a provision of law other than the FRPA would be reviewed against all ACMP standards, the FRPA, and the Haines Coastal Management Program enforceable policies.

The dominant and most valuable tree species in the study area are Sitka spruce and western hemlock. They account for 85% of the available acreage of commercial forestlands. Black cottonwood accounts for 14% with the balance being hardwoods, mostly birch. Historic harvest activity has been concentrated outside of the Haines Coastal Management Area.

Within the area there are Tongass National Forest lands with accessible stands of commercial quality timber. The current USFS management plan excludes these areas from timber harvest and leaves them road less. Historically, the USFS has made available timber sales to Haines mills in the Tongass National Forest. Such sales are critical sources of timber for maintenance of far larger scale mill operations than would be possible from exclusively local timber supplies.

USFS lands inside the Haines Borough intermittently generate commercial timber harvests, mostly in the southern region of the borough. The State of Alaska, through the Haines State Forest, is the primary commercial timberland owners with ownership of 270,410 acres around the watersheds of the major tributaries to the Chilkat River at the northeastern tip of the Alaska panhandle. Approximately 18% (49,231 acres) is dedicated to timber harvest with an allowable harvest of 6.96 million board feet per year.

In the early 1980's the Haines Borough received from the State of Alaska an entitlement for 2,800 acres of state-owned lands to be transferred to the Borough. To date, 2,722 acres have been transferred to the Borough and 422 acres sold by the Borough to the public. Commercial timber harvest from these lands is expected to be very minimal as most are being sold for residential purposes, are in small parcels, and split among many owners.

Commercial timber harvest from private lands has also contributed to the harvest volume available to the local forest products industry. The private sector in the area owns 27,000 acres with commercial quality timber, which translates into 648 MMBF of timber. The land parcels are small and split among many owners and difficult to analyze as part of the commercial timber base. Several small independent mills in the area rely upon private timber sources for most, or all, of their operations. In this regard private timber sources remain critical.

Approximately 3,000 acres of Native allotments have been claimed in the area. Problems with access, timber quality, environmental concerns, and ownership questions have combined to slow the process of timber harvest on native lands in Haines.

The Tongass Timber Reform Act of 1991, and recent administrative reductions in the national forest timber base, caused substantial reductions in available timber to the local mill, making future operations highly uncertain. Timber industry employment is now limited to smaller scale logging. The future of the Haines forest products industry will be largely determined by the following principal factors including: available timber supply; available markets; available production facilities; timber accessibility; economic feasibility; success of value-added enterprises. One example is the Beetle Kill Project in 2003. The Haines Borough Economic Development Department and the Haines Chamber of Commerce offered this cooperative marketing opportunity for small business entrepreneurs to take advantage of the free use of beetle kill trees.

4.0 Issues, Goals and Objectives

4.1 Introduction

The community of Haines is confronted with many issues that are described in the preceding inventory and analysis chapters of this document. Coastal management issues were well defined within the original 1980 Coastal Management Plan, the 1982 and 2004 Haines Borough Comprehensive Plan, and the AMSA Plan. Additionally, this chapter was reviewed, edited and approved by the Haines Borough Assembly and Planning Commission. After consolidation in 2002 no changes were made to the existing HCMP boundary.

Issues, goals and objectives are not "enforceable" and they are not used to evaluate proposed activities for "consistency" with the district, State, or federal coastal management laws and regulations. They do, however, provide an important foundation for the enforceable and administrative policies of the district coastal management program as shown in Chapter 5- Enforceable Policies of this document.

ISSUES are needs, concerns and problems expressed by local residents of a coastal district that are appropriate for the coastal management program to address. Many of the following issues apply to areas outside the Town site Area Planning Area and directly affect the economy and well being of area residents.

GOALS are broad statements of long-term results or conditions that the residents of the Haines Borough wish to achieve. They provide direction for the balanced use and protection of local resources by local, state, and federal agencies and private industry.

OBJECTIVES are specific actions that can be taken to achieve a goal or move closer to achieving it.

4.2 Issues

NEED FOR DEVELOPMENT OF LOCAL INDUSTRIES TO PROVIDE YEAR-ROUND EMPLOYMENT FOR MORE INDIVIDUALS.

Steady employment and a sound economic base require a broad based economy that does not rely on one or two industries. A variety of economic opportunities within the coastal zone should be pursued especially within the fishing and fisheries enhancement, transportation, tourism, timber, mining and other industries that will maintain or add value to local resources.

NEED TO MAKE HAINES COASTAL MANAGEMENT AREA MORE ATTRACTIVE.

While the surrounding environs are most attractive, portions of Portage Cove require cleanup and improvements. Additional improvements for parking and pedestrian access are required especially from the Port Chilkoot Dock area to the State Campgrounds and scenic lookout. Recreational vehicle usage of the pullout area off the Lutak Highway on the northern shore of

Portage Cove needs to be monitored, use policies established, and onsite and waterfront access improvements made where desirable. The natural greenbelts existing along major roads and highways should be maintained to the maximum extent feasible.

NEED TO IMPROVE MANAGEMENT OF SPECIAL AREAS SUCH AS WETLANDS, HAZARD AREAS, AND SCENIC VIEWSHEDS.

Currently there are no defined management areas and prescriptions for existing wetlands, hazard areas, and scenic greenbelts within the Coastal Management Area. Considerable advantage could be realized by linking the management requirements of these special areas into an integrated system of scenic and habitat resource conservation.

NEEDS CONCERNING HARVEST AND MANAGEMENT OF FISHERIES RESOURCES.

Management of Lynn Canal fisheries could be enhanced by better cooperation between State agencies and fishermen. The primary goal of the fisheries management policies in the upper Lynn Canal, and Chilkat and Chilkoot Valleys should be in the area of aquaculture (fisheries enhancement and rehabilitation), and the sustained yield of the fisheries resources in harmony with the development of other local and regional natural resources. Proper management of the Icy Straits migration corridor south of the Lynn Canal is also critical to passing northbound salmon through to the Chilkat and Chilkoot systems. Passing through more of the 3% fisheries enhancement tax paid by commercial fishermen in the Lynn Canal back to projects in the local area is also very critical to maintenance and improvement of the salmon stocks for the many users.

NEEDS FOR DEVELOPMENT OF THE TOURISM AND RECREATION INDUSTRIES.

The full potential of existing Haines tourist attractions has not been realized. The area has the potential to support a variety of recreational developments along its coast. Recent year increases in summer tourism must be improved upon by further developing facilities within Portage Cove and expanding the private sector tourism support businesses and industries within the community. Tourism development in fall, winter and spring must be targeted, using the Alaska Chilkat Bald Eagle Preserve and special winter events as attractions, to improve year-around tourism employment.

MAINTENANCE OF A LONG-TERM TIMBER SUPPLY.

Continued support for an adequate timber base for the local forest products industry, the leading year-around local employer, is important to the Haines economy. The current moratorium on timber harvest on Mental Health Lands within the Haines State Forest must be resolved. These trust lands make up the majority of the lands within the Haines State Forest designated for commercial timber harvest and heavily support the small dimensional mills in the area. Similarly, new harvest management prescriptions as a result of the 1990 Tongass Timber Reform Act may reduce the volume of small business set aside sales upon which the major local lumber mill almost totally depends.

TIMBER MANAGEMENT AND FISH AND WILDLIFE HABITAT.

The Alaska Forest Resources and Practices Act, as amended in 1990, and regulations adopted under the act protect fisheries resources and wildlife habitat. Within the Haines State Forest

detailed multiple use land management prescriptions have been established. Protection of fish and wildlife habitat is important to the commercial fishing industry, and sport and subsistence users as well as to maintain many of the recreational opportunities the Haines area offers.

NEED TO IMPROVE WASTEWATER MANAGEMENT BY HAINES.

The activated sludge sewage treatment plant requires improvements to meet EPA standards. Inflow and infiltration problems impact the plant during periods of heavy rains and snowmelt overloading the plant's treatment capacity. If final EPA regulations on primary and secondary treatment are in place, the Borough will have two years to come into compliance. A \$4.8 million project is underway to improve the plant and replace the sewer outfall lines and numerous collection mains and laterals under a scheduled "construction compliance order" from the EPA. It is hoped that the enhanced primary treatment standards set by the EPA will be met by the improvements underway. In past years the former City received funding from the State to improve the system to meet final EPA requirements.

NEED TO IMPROVE OVERALL ENVIRONMENTAL MANAGEMENT.

Current planning to make improvements to the leachate monitoring and collection system at the sanitary landfill should be expedited, as well as improvements to recycling efforts in Haines. Continued collection of baseline data on water quality, and continuing monitoring of effluents and bilge discharges from vessels are also important environmental management requirements. In 1992 an agreement was signed between the City of Haines and ADEC for cooperative overall environmental management within the Town site Area.

NEED FOR HISTORIC PRESERVATION.

While Fort Seward is on the National Register, the barracks building, warehouses and support buildings are in need of renovation and repair. With the rich Native and cultural history of the Haines area, many other historical sites exist. Restoration or excavation of these sites may enhance the tourist attraction of the area, as well as enrich the historical culture.

NEED TO MORE SAFELY & EFFICIENTLY UTILIZE THE WATERFRONT.

The small boat harbor is filled to over capacity in the busy summer months and design and construction of expansion to this facility is required. The Borough Port Chilkoot Dock requires additional improvements to securely moor large cruise ships and better serve sport and commercial fishing vessels. The very popular public beach immediately north of the Port Chilkoot Dock must remain accessible and protected from impacts. Several abandoned barge landing sites on the beach near the Port Chilkoot Dock require demolition and cleanup to improve the public access, safety and appearance of the Fort Seward beach front. Several old fishing boats scattered along the waterfront are considered picturesque but should be inspected for safety and liability reasons. At the Lutak Dock numerous improvements are required to improve the efficiency and services at that facility.

4.3 Goals and Objectives

The first set of goals and objectives statements are general in nature and are listed under the category "(1) General Community Development" to reflect previous planning documents for the Haines Coastal Management Area. Goals and objectives statements (2) through (13) listed

below, are specific to the requirements of coastal management planning. The remaining category, "(14) Mariculture" is included to recognize the increasing demands of aquatic farming in the Alaska coastal zone.

The Goals and Objectives statements are listed, therefore, under the following categories:

1. General Community Development
2. Coastal Development
3. Natural Hazard Areas
4. Recreation and Tourism
5. Energy & Industrial Facilities
6. Transportation and Utilities
7. Commercial Fishing and Seafood Processing
8. Timber Harvest and Processing
9. Sand and Gravel Processing
10. Subsistence
11. Habitats
12. Air, Land, and Water Quality
13. Historic, Prehistoric & Archaeological Resources

(1) GENERAL COMMUNITY DEVELOPMENT

GOAL A: ENCOURAGE A STABLE AND DIVERSIFIED ECONOMIC BASE FOR LONG-TERM EMPLOYMENT AND LIVELIHOOD OF HAINES RESIDENTS.

- Objective A1. Strengthen the tourism sector of the economy through coordination and promotion of the existing and potential tourist attractions in the Haines area.
- Objective A2. Support subsistence, sport and commercial fishing and encourage the development of fish processing facilities.
- Objective A3. Seek improvements in ferry services and encourage the development of fueling and maintenance facilities in Haines.
- Objective A4. Improve the management of transshipment through Haines of supplies, equipment, and natural resources associated with resource development activities in the region.
- Objective A5. Continue local efforts to encourage state and federal timber sales for the benefit of large and small timber operators.
- Objective A6. Tailor support for the above activities to the social and economic needs of the residents so as to not cause significant adverse impacts on any of the diverse resource values of the community.

GOAL B: ENSURE BALANCED MANAGEMENT, CONSERVATION AND WISE UTILIZATION OF HAINES RESOURCES.

- Objective B1. Support timber management regulations that provide for balanced management of fisheries and all other forest resource values.
- Objective B2. Require the use of mitigation measures by resource developers to maintain the aesthetic and visual qualities of the Haines area.
- Objective B3. Promote compliance with sustained yield management in the utilization of timber and fisheries resources.
- Objective B4. Encourage structural development on those lands determined to be suitable as indicated by soils, slope and drainage characteristics as well as free from flood and other natural hazards and with good access and availability of utilities.
- Objective B5. Maintain water quality in lakes, streams, aquifers and marine waters.
- Objective B6. Minimize soil erosion and stream siltation caused by development activities.
- Objective B7. Promote reforestation on public and private lands that have been logged.
- Objective B8. Support mineral extraction projects that provide for balanced management all resources and maintain important environmental values.
- Objective B9. Encourage fishery enhancement programs that have proven to be Successful in maintaining and improving a healthy salmon population.

GOAL C: MAKE HAINES A GOOD COMMUNITY IN WHICH TO LIVE, WORK, PLAY AND RAISE FAMILIES.

- Objective C1. Ensure continued high-quality education programs.
- Objective C2. Continue to support comprehensive community cleanup efforts
- Objective C3. Assist and encourage preservation of the historical assets of the community.
- Objective C4. Assist and encourage arts, drama and music activities in Haines.
- Objective C5. Develop broader year-round recreational opportunities for all age groups.
- Objective C6. Create an attractive, accessible, and enjoyable waterfront.

GOAL D: PROVIDE HAINES WITH A FULL RANGE OF NECESSARY AND DESIRABLE COMMUNITY SERVICES.

- Objective D1. Encourage the establishment of broader powers within the Haines Borough to provide a means of local control of developments that may impact the quality of

community services and to provide a more equitable means of sharing the cost of providing such services.

Objective D2. Identify those streets most in need of upgrading or which need to be developed to accommodate desirable local, tourist and industrial traffic patterns.

Objective D3. Maintain and protect significant historic sites.

Objective D4. Maintain adequate water and sewer utilities.

Objective D5. Maintain and continue to develop the parks and trails system.

Objective D6. Make provisions for thorough and consistent enforcement of Borough ordinances.

(2) COASTAL DEVELOPMENT

GOAL E: MAXIMIZE THE BENEFITS OF PLANNED COASTAL DEVELOPMENT AND PUBLIC ACCESS TO COASTAL RESOURCES FOR THE CITIZENS OF THE COMMUNITY.

Objective E1. Expand the public ownership and management of tidelands within the Haines Town site Area, and to the extent feasible and prudent, adjacent uplands.

Objective E2. Utilize the available waterfront in Haines for its most appropriate and beneficial use.

Objective E3. Maintain and enhance the harmonious relationship of the variety of existing and future coastal land and water uses, activities and values.

Objective E4. Maintain or enhance the quality of coastal habitats, scenic values and historic resources.

Objective E5. Assure compatibility of waterfront uses and activities with those of adjacent uplands.

Objective E6. Retain the flexibility to accommodate desirable types of economic development and ensure coastal development is planned and monitored so as to maintain and enhance the quality of life within the community.

(3) NATURAL HAZARD AREAS

GOAL F: MINIMIZE SIGNIFICANT ADVERSE IMPACTS FROM GEOPHYSICAL HAZARDS SUCH AS EARTHQUAKES, HIGH WINDS, LANDSLIDES, AVALANCHES AND TSUNAMIS.

- Objective F1. Improve emergency preparedness planning by forming a Local Emergency Planning District or joining with Skagway and/or Juneau in a regional LEPD.
- Objective F2. Encourage proper siting, design and construction of permanent developments to minimize damage from earthquakes, high winds, landslides, avalanches, floods, and tsunamis.
- Objective F3. Better define known hazardous zones within the Coastal Management Area and establish guidelines for development activities to improve public safety and minimize property damage.

(4) RECREATION AND TOURISM

GOAL G: ENSURE THAT PRESENT AND FUTURE CITIZENS AND VISITORS TO THE COMMUNITY HAVE ACCESS TO DIVERSE RECREATIONAL OPPORTUNITIES WITHIN THE HAINES BOROUGH.

- Objective G1. Support the continued development of the American Bald Eagle Foundation building and overall program for an eagle, wildlife, and natural history interpretive center.
- Objective G2. Restore and develop appropriate sections of Fort William H. Seward as a military museum.
- Objective G3. Continue to improve tourism promotional programs that will highlight Haines for its pristine scenic beauty, cultural diversity, historic significance, and recreation values.
- Objective G4. Support expansion of Borough, State and private tourist facilities and services to better accommodate and serve the growing visitor population through the development of a market demand study, economic feasibility analysis, and business operations plan.
- Objective G5. Pursue expansion of secure moorage facilities for cruise ships, sport and recreational vessels to attract additional vessels to Haines and better accommodate the increasing need for secure moorage facilities.
- Objective G6. Support the development of private sector tourist recreation facilities such as charter boat services and other scenic and recreational excursions as viable activities based in Portage Cove.
- Objective G7. Continue to develop the Historic and Scenic District and the waterfront as specified in the AMSA Plan to enhance the tourist appeal of Haines and provide better access along the waterfront for local residents and visitors.

(5) ENERGY & INDUSTRIAL FACILITIES

GOAL H: PROVIDE APPROPRIATE COASTAL LOCATIONS FOR ENERGY AND INDUSTRIAL FACILITIES WHILE ENSURING PROTECTION OF THE VALUES AND NEEDS OF THE DIVERSE COASTAL RESOURCES AND USERS.

Objective H1. Promote segregation of major industrial and energy facilities away from Portage Cove and place them in Lutak Inlet.

Objective H2. Ensure that energy and industrial facilities are operated to prevent adverse effects on the land and water environment and the resource values important to other resource users.

Objective H3. Continue to work with the Corps of Engineers to pursue site investigation and cleanup required at the decommissioned Federal Tank Farm facility.

(6)TRANSPORTATION AND UTILITIES

GOAL I: PROVIDE A WELL-PLANNED AND DEVELOPED ROAD TRANSPORTATION NETWORK THAT WILL MEET FUTURE DEVELOPMENT REQUIREMENTS.

Objective I1. Continue to improve the quality of streets within the commercial and residential areas of the Borough.

Objective I2. Work with DOT&PF to plan improvements to the truck route through the Borough to facilitate efficient and safe movement of truck traffic.

Objective I3. Plan better access to developing areas within the Town site Area by establishing a transportation plan for major arterials that will be required in the future.

GOAL J: IMPROVE THE UTILITY SYSTEMS OF THE BOROUGH.

Objective J1. Continue to improve the water and sewer utilities and extend them to developing areas adjacent the Town site Area street network.

Objective J2. Continue to work with the EPA to finalize the sewer effluent treatment standards and improve the sewer mains, treatment plant and outfall system to meet these standards.

Objective J3. Support recycling programs to extend the life of the sanitary landfill and turn waste into a resource with value.

Objective J4. Improve water and waste disposal systems at the boat harbor.

(7) COMMERCIAL FISHING AND SEAFOOD PROCESSING

GOAL K: SUPPORT AND ENHANCE THE FISHERIES RESOURCES AND PROCESSING INDUSTRY WITHIN THE BOROUGH.

- Objective K1. Encourage the development of the commercial fishing industry by contracting a feasibility study for a seafood processing and cold storage facility and by providing incentives such as a favorable lease agreement or tax structure.
- Objective K2. Plan for expansion of the Town site Area Boat Harbor to better accommodate the fishing fleet, tenders and ice barges.
- Objective K3. Continue to enhance the Sawmill Creek and adjacent McClellan Flats anadromous fish systems to improve the production of fish within these systems.
- Objective K4. Ensure conflicts are minimized between the commercial fleet and other coastal resource users.
- Objective K5. Work for fair allocation of salmon harvest, and enhancement funding to local users and projects.

GOAL L: SUPPORT THE DEVELOPMENT OF SHELLFISH AND OTHER NON-FINFISH MARICULTURE (AQUATIC FARMING) ACTIVITIES.

- Objective L1. Support the increasing local interest in non-finish mariculture and industry to encourage economic development.
- Objective L2. Ensure that conflicts are minimized with existing and expected coastal uses and resource values.
- Objective L3. Ensure that no negative impacts will occur to existing marine life species and that water quality, natural circulation and important habitat areas are not impacted

(8) TIMBER HARVEST AND PROCESSING

GOAL M: SUPPORT A VIABLE TIMBER INDUSTRY IN THE HAINES AREA WHILE MINIMIZING ANY ADVERSE IMPACTS ON THE ENVIRONMENT.

- Objective M1. Work toward resolving timber base issues in the Haines State Forest (Mental Health Lands) and the Tongass National Forest (Tongass Timber Reform Act) to stabilize the timber supply for local mills.
- Objective M2. Improve the system of storage and transshipment of timber products on the Borough Lutak Dock for increased efficiency and to avoid conflicts with other users of the dock.

Objective M3. Monitor the operation of the dimensional mill on uplands above Sawmill Creek to avoid impacts on the creek.

(9) SAND AND GRAVEL PROCESSING

GOAL N: PROVIDE FOR THE ORDERLY DEVELOPMENT AND OPERATION OF MATERIALS BORROW SITES AND MINERAL TRANSSHIPMENT FACILITIES WITHIN THE BOROUGH WHILE PROTECTING THE DIVERSE ENVIRONMENTAL VALUES AND OTHER RESOURCE USERS WITHIN THE COASTAL ZONE.

Objective N1. Improve mineral transshipment safety standards and efficiency by improving the truck route through the Borough and finalizing a hazardous materials ordinance.

Objective N2. Ensure mineral transshipment operations on the Borough Lutak Dock are planned to maximize efficiency, minimize congestion and allow for the operations of other users of the dock.

Objective N3. Plan mineral transshipment activities for prevention of adverse effects on marine life and commercial, sport, and subsistence fisheries within Lutak Inlet and Portage Cove.

Objective N4. Ensure that materials borrow sites are operated safely near hazardous slopes, do not disrupt or inject silt into drainages, and are developed to remain compatible with adjacent land uses.

(10) SUBSISTENCE

GOAL O: MAINTAIN AND ENHANCE SUBSISTENCE RESOURCES AND OPPORTUNITIES FOR ALL CITIZENS OF THE HAINES BOROUGH.

Objective O1. Represent Haines as a rural community before State and federal subsistence boards and commissions to ensure continued subsistence access and use by all residents of the community.

Objective O2. Support maximum subsistence access opportunities within Portage Cove and Lutak Inlet for all citizens of Haines

(11) HABITATS

GOAL P: MAINTAIN AND ENHANCE FISH AND WILDLIFE HABITAT VALUES AND BIOLOGICAL PRODUCTIVITY BY REQUIRING COASTAL DEVELOPMENTS TO MITIGATE MEASURABLE NEGATIVE IMPACTS TO VALUABLE HABITATS WHEREVER FEASIBLE.

Objective P1. Identify high value habitats in the Sawmill Creek and Portage Cove areas and develop specific management guidelines for each area.

- Objective P2. Continue to work with ADF&G for site-specific habitat management recommendations that will protect or enhance valuable fish and wildlife resources.
- Objective P3. Maintain salmon, cutthroat trout and Dolly Varden spawning and rearing habitat, bald eagle nesting and roosting habitat, and maintain or enhance moose, mountain goat and other fish and game populations.
- Objective P4. Work with the U.S. Army Corps of Engineers and the federal Environmental Protection Agency to fully identify and delineate wetlands within the Haines Coastal Management Area, and accomplish a wetlands management plan.

(12) AIR, LAND, AND WATER QUALITY

GOAL Q: MAINTAIN OR IMPROVE THE QUALITY OF THE AIR, LAND AND WATER WITHIN THE HAINES BOROUGH.

- Objective Q1. Encourage continued development of alternative electrical power generation to minimize emissions from the diesel-powered generators.
- Objective Q2. Encourage the use of highly efficient wood heating stoves to minimize emissions.
- Objective Q3. Work with ADEC to maintain monitoring, prevention, and remediation programs that will ensure maintenance of air, land and water quality.

(13) HISTORIC, PREHISTORIC & ARCHAEOLOGICAL RESOURCES

GOAL R: PRESERVE AND PROTECT THE HISTORIC, PREHISTORIC & ARCHAEOLOGICAL RESOURCES OF THE HAINES BOROUGH.

- Objective R1. Encourage continued development of Fort William H. Seward that highlights its historic significance.
- Objective R2. Support the many outstanding programs of the Sheldon Museum.
- Objective R3. Continue to identify, protect and enhance the historic and prehistoric sites of the early white and Native cultures.
- Objective R4. Accomplish a Local Historic Preservation Plan that specifies desired improvements to historic sites to maintain their character and special values.

5.0 Haines Borough Coastal Management Program Enforceable Policies

5.1 Introduction

This chapter establishes the enforceable policies for the Haines Coastal Management Program to be used by local, state and federal decision-makers and project proposers to guide development within the Haines coastal district. A proposed project or activity within the Haines coastal district must be consistent with policies of the HCMP and the policies of the Alaska Coastal Management Program. Justification for the Enforceable Policies is provided in Chapter 3: Resource Inventory and Analysis and Chapter 4: Issues, Goals and Objective.

By choosing to prepare a district coastal management plan, the Haines Coastal District is taking advantage of a forum to work with state and federal agencies and private landowners to affect the direction of future growth within the district. The uses and activities that are subject to this plan and its policies are explained in Chapter 7: Implementation. The ACMP state standards are listed in Section 5.3 and Appendix A.

It is important to note that the Forest Resources Practices Act (FRPA) and its implementing regulations (11 AAC 95) establish the forest management standards, policies, and review processes under the ACMP for timber harvest activities on private and federal land. The FRPA regulations preempt the ACMP timber harvest and habitat standards for state land. As well, there are no policies for air, land and water quality or mining because the state standards and laws with respect to these resource areas are components of the program exclusively administered by the State. Districts are precluded from developing enforceable policies for these three resource areas.

The policy topics addressed in this chapter include:

- Coastal Development and Land Use
- Natural Hazard Area
- Prehistoric, Historic, and Archaeological Resource
- Recreation and Tourism
- Subsistence
- Commercial Fishing and Seafood Processing
- Sand and Gravel Processing
- Energy and Industrial Facilities
- Transportation and Utilities

5.2 Criteria for Enforceable Policies

The Alaska State Legislature passed legislation in 2003 that established new criteria for district enforceable policies. Specifically, AS 46.40.070(a) states that ADNR shall approve the revised

Coastal Management plan if it meets statutory and regulatory requirements including enforceable policies that:

- Are clear and concise regarding the requirements, the activities and the persons affected by it;
- Use precise, prescriptive and enforceable language; and
- Do not address matters authorized by State or federal law unless it is a “matter of local concern.”

A “matter of local concern” is defined as a specific *coastal use* or *resource* that is sensitive to development, not adequately addressed by state or federal law, and of unique concern to the coastal district as demonstrated by local usage or scientific evidence.

Regulations developed by the ADNR in 2004-05 establish that a district may create enforceable policies for six statewide ACMP standards without designating specific geographic area within the coastal district in which those policies would apply. These topics are:

- ***Coastal Development*** for uses and activities in or along coastal waters anywhere in the coastal area (11 AAC 112.200),
- ***Coastal Access*** to increase public access to, from and along coastal waters (11 AAC 112.220),
- ***Utility Routes and Facilities*** for routes and facilities occurring anywhere in the coastal area (11 AAC 112.240),
- ***Sand and Gravel Extraction*** for sand and gravel operations in coastal waters, intertidal areas, barrier islands, and spits (11 AAC 112.260),
- ***Transportation Routes and Facilities*** for routes and facilities occurring anywhere in the coastal area (11 AAC 112.280), and
- ***Energy Facilities*** for the siting of major energy facilities anywhere in the coastal area (11 AAC 112.230).

Per 11 AAC 114.250(b) – (i) if a district designates areas², it can also create enforceable policies for the following eight uses or activities, within the specific designated areas of the coastal district:

- ***Important Habitat Areas*** (statewide Habitats standard – 11 AAC 112.300),
- ***Natural Hazard Areas*** (statewide Natural Hazards standard – 11 AAC 112.210),
- ***Subsistence Use Areas*** (statewide Subsistence standard – 11 AAC 112.270),
- ***Energy Facilities*** (statewide Energy Facilities standard (11 AAC 112.230),
- ***Recreational Use Areas*** for any area within the coastal zone receiving significant use or the potential for recreational use because of physical, biological or cultural features (per 11 AAC 114.250(c), no statewide standard),
- ***Tourism Use Areas*** for any area within the coastal zone receives or has the potential to receive visitors from cruise ships, floatplanes, helicopters, busses or other means of conveying groups (per 11 AAC 114.250(d), no statewide standard),

Area designations cannot be made for federal lands or waters.²

- ***Areas Suitable for Commercial Fishing and Seafood Processing Facilities*** for any area within the coastal zone (per 11 AAC 114.250(f), no statewide standard), and
- ***Areas Suitable for the Study or Understanding of History and Prehistory*** for any area within the coastal zone (per 11 AAC 112.320, no statewide standard).

Policies established for recreation and tourism areas do not need to meet the “matter of local concern” test.

5.3 Enforceable Policies and Designated Areas

The HCMP policies flow from the Resource Inventory and Analysis set out in Chapter 3 and the Issues, Goals and Objectives outlined in Chapter 4. The enforceable policies of this HCMP apply only to land and water uses and activities within the Haines Coastal Management Area Boundary (Figure 2), which is the same as the former City of Haines corporate boundary. Uses and activities occurring on lands and waters outside the Haines Coastal District Boundary are subject to HCMP and ACMP policies only if a proposed action will have a direct and significant affect on coastal resources within the Haines coastal district boundaries.

Administrative policies cannot be enforced by the State of Alaska through the coastal management program, either because they are actions beyond the scope of those subject to consistency, or because they pertain to issues and areas outside the coastal district boundary. Administrative policies are clearly labeled and presented in a single line text box style. The goal of administrative policies is to express concerns and preferences of the Haines Coastal District and to support increased cooperation between parties that are involved in land and resource use decisions in the area.

Coastal Development

ACMP Coastal Development Standard (11AAC 112.200)

- (a) In planning for and approving development in or adjacent to coastal waters, districts and state agencies shall manage coastal land and water uses in such a manner that those uses that are economically or physically dependent on a coastal location are given higher priority when compared to uses that do not economically or physically require a coastal location.
- (b) Districts and state agencies shall give, in the following order, priority to
 - (1) water-dependent uses and activities;
 - (2) water-related uses and activities; and
 - (3) Uses and activities that are neither water-dependent nor water-related for which there is no practicable inland alternative to meet the public need for the use or activity.
- (c) The placement of structures and the discharge of dredged or fill material into coastal water must, at a minimum, comply with the standards contained in 33 C.F.R. Parts 320 - 323, revised as of July 1, 2003.

CDLU-1. Waterfront property uniquely suited for water-dependent or water related uses are reserved for the following, listed in order of priority and consistent with permitted and conditionally zoned uses:

a) Water dependent uses and activities. The following list of land and water uses and activities are considered “water dependent” including : fish hatcheries; mariculture activities; fish processing; log storage and transfer; float plane bases, boat harbors, freight, fuel, or other docks; marine-based tourism facilities; boat repair, haul outs, marine ways and accessory attached housing; remote recreational cabins dependent on water access; and facilities that serve as inter-modal transportation links for the transfer of good and services and people between the marine transportation system and the road system.

b) Water-related uses and activities. The following list of uses and activities are considered “water-related”, and thus given a lower priority of use than those previously listed as “water dependent” including: marine retail stores and commercial activities such as hotels, restaurants, and other similar uses that provide views and access to the waterfront.

This enforceable policy applies to waterfront areas within the Haines Coastal Management area. See the Coastal Boundary section and the Resource Inventory for more information and maps delineating the location of the waterfront zones within the Haines Coastal Management area.

The waterfront area is sensitive to development because there is limited waterfront area within the coastal district. Due to the shortage of waterfront area it is important to establish a priority of water/dependent and water-related uses and activities, as these uses and activities can be adversely impacted by other development that may interfere with or preclude them. See Sections 3-2, 3-3, and 3-5 in the Resource Inventory and Resource Analysis chapter for more information.

The coastal development state standard at 11 AAC 112.200 directs coastal districts to list uses that are water-dependent and water-related. We reviewed Alaska Statutes Titles 38 and 46, USCG regulations, and USACOE regulations and found no statutes or regulations that prioritized waterfront uses for the Haines Borough. Since the coastal development state standards do not specifically list priority uses or activities this district enforceable policy adds specificity to the existing state standard at 11 AAC 112.200.

The State coastal development standards apply only to development or in adjacent to coastal waters. The coastal development standard directs districts to prioritize uses and activities in the coastal area based on whether the uses are water dependent, water related or neither but without an inland alternative. These terms are broad in scope and general in their application. An enforceable policy that defines which uses or activities in the coastal district fall into each of the three categories is making the broad standard more specific in relation to addressing local issues.

The limited waterfront area of the coastal district is a unique concern to the coastal district. The economic well-being of the coastal district depends on this area. For example, the Haines area, like much of Southeast Alaska, is known for its beautiful scenery and wildlife viewing. This is one factor in the growing recreation and tourism industry. Disturbed and altered views are not as valuable to the economics of the recreation and tourism industry and to many residents. This information, established by local usage, provides the requisite basis for the prioritization set forth in the district enforceable policy which implements 11 AAC 112.200. See Section 3.5 in the Resource Inventory and Resource Analysis chapter for documentation of local usage and for more information.

CDLU-3. Fill Below Mean High Water. Piling-supported or floating structures shall be used for construction below mean high water unless clear and convincing evidence shows that all of the following conditions exist:

- a) There is a documented public need for the proposed activity;
- b) There are no practicable inland alternatives that would meet the public need and allow development away from the waterfront;
- c) Denial of the fill would prevent the applicant from making a reasonable use of the property;
- d) The fill is placed in a manner that minimizes impacts on adjacent uses, public access easements along the shoreline and water views;
- e) The fill is the minimum amount necessary to establish a reasonable use of the property; and
- f) Development of the property would support a water dependent use.

The following publicly-owned facilities are exempt from this policy: Log and mining transfer facilities, bridges, causeways, boat ramps, utility transmission facilities, pipelines, treatment plant lines and outfalls, and transportation facilities.

This enforceable policy applies to waterfront areas within the Haines Coastal Management area. See the Coastal Boundary section and the Resource Inventory for more information and maps delineating the location of the waterfront zones within the Haines Coastal Management area.

The nearshore marine water, intertidal areas and wetland areas adjoining the coastline may provide productive habitats for fish and wildlife spawning, migration and feeding. Some shoreline locations will be unique habitats that support important life cycle functions. These same biologically productive bays, inlets and estuarine waters are often the most attractive sites for development. Development in these coastal areas, including fill, jetties, seawalls or revetments can greatly alter the local geography and function of sediment transport and deposition, sometimes creating local emergencies related to precipitation and runoff processes.

Placement of Structures and Discharge of dredged or Fill Material. The coastal development standard requires compliance “at a minimum” with COE regulations, 33 CFR parts 320-323. These regulations provide the COE with general permitting authority over the placement of structures and discharge of dredged or fill material into navigable waters; the laws are broad in scope and general in their application. The enforceable policies that relate to this standard provide more specificity to ensure that local issues are addressed.

There were no comments submitted by federal and state agencies on the Public Review Draft that indicate that the policy duplicates existing agency regulations.

Development of the Haines community’s coastal areas is a matter of local concern as documented in the many planning documents for the Haines coastal management area, including a Comprehensive Plan, Coastal Management Plan, Tourism Management Plan, and Waterfront Public Access Plan. Typical of Southeast Alaska the availability of shoreline development sites is limited by steep geography. The coastal area receives high usage from local residents because of its resource value for the subsistence harvest, commercial harvest, habitat, recreation, tourism, and transportation. The natural scenery is an important factor contributing to recreational enjoyment by residents and in attracting visitors to the coastal district area. Development activities that entail clearing, excavation, dredge and fill operations, facility construction and right-of-way construction should take care to site and screen such activities. Care is needed to minimize visual impact, particularly as viewed from the marine coastline and limited roadway system of the communities.

CDLU-5. Tidelands Viewsheds. Placement of structures or dredged or fill material in tidelands below mean high water shall minimize to the maximum extent practicable obstruction of the values for which the water views are currently enjoyed.

This enforceable policy applies to waterfront areas within the Haines Coastal Management area. See the Coastal Boundary section and the Resource Inventory for more information and maps delineating the location of the waterfront zones within the Haines Coastal Management area.

All single family residences have a component of viewshed review. Code limits structures to a height of thirty feet for viewshed reasons. Viewshed issues are considered in Conditional Use Permit reviews and are specifically mentioned in the Comprehensive Plan.

The coastal development standard requires that the discharge of dredged or fill material must at a minimum comply with 33 CFR 320-323. 33 CFR 320-323 requires permits for the placement of structures or dredged or fill material in navigable waters and the project is subject to the requirements of the permit. Permits under 33 CFR 320-323 do not specify that scenic views shall be maintained. Several state statutes were reviewed: Title 44 and 46 Alaska Coastal Management Program, Title 29 Municipal Government, Title 38 Public Land, and Title 41 Public Resources. None of these statutes addressed minimizing obstructions to water views. The US Forest Service was contacted, and there are no current USFS lands in Haines Borough. There were no comments received about tidelands viewsheds.

Development of the community's coastal areas is a matter of local concern as documented in the many planning documents for the Haines coastal management area, including a Comprehensive plan, coastal management plan, tourism management and public access plan. Typical of Southeast Alaska the availability of shoreline development sites is limited by steep geography. The coastal area receives high usage from local residents and visitors because of its resource values for subsistence harvest, commercial harvest, habitat, recreation, tourism, and transportation. The natural scenery is an important factor contributing to recreational enjoyment by residents and in attracting visitors to the coastal district area. Development activities that entail clearing, excavation, dredge and fill operations, facility construction and right of way construction should take care to site and screen such activities. Care is needed to minimize visual impact, particularly as viewed from the marine coastline and limited roadway system of the communities.

CDLU-6. Floating Facilities. Floating facilities located in coastal waters in the Haines Coastal District shall be sited and operated to reduce exposure to storm and tidal action, utilize secure anchoring to prevent pulling of the anchor or grounding, and minimize proximity to other floating and fixed facilities.

This enforceable policy applies to waterfront areas within the Haines Coastal Management area. See the Coastal Boundary section and the Resource Inventory for more information and maps delineating the location of the waterfront zones within the Haines Coastal Management area.

Several state statutes were reviewed: Title 44 and 46 Alaska Coastal Management Program, Title 29 Municipal Government, Title 38 Public Land, and Title 41 Public Resources. None of these statutes addressed the anchoring of floating facilities. General permit 89-4 of the Corps of Engineers specifies that A “floating house shall be adequately secured by anchors and shore ties.” Policy CDLU-6 addresses specific anchoring methods for floating facilities for anchoring floating facilities with respect to the extreme weather conditions of the Haines Borough outside of the scope of general permit 89-4. There were no comments received about floating facilities.

Violent winter winds, commonly referred to as the “Skagway Winds” routinely afflict northern-facing shores of Taiya Inlet and upper Lynn Canal. Tidal action can also exceed twenty-five feet between high and low tides. These factors call for caution when siting such facilities. Anchor pulling and grounding damages equipment and can ultimately compromise natural habitat areas.

The nearshore marine waters, intertidal areas and wetland areas adjoining the coastline may provide productive habitats for fish and wildlife spawning, migration and feeding. Some shoreline locations will be unique habitats that support important life cycle functions. These same biologically productive bays, inlets and estuarine waters are often the most attractive sites for development. Development in these coastal areas, including fill, jetties, seawalls or revetments can greatly alter the local geography and function of sediment transport and deposition, sometimes creating local emergencies related to precipitation and runoff processes. Floating facilities are generally broad in scope, for instance they do not adequately address location of the facilities. In some cases there is no actual law governing the permitting. Specificity from the coastal district policy will ensure that local issues are addressed.

CDLU-7 Maintenance of Public Access to Coastal Water. Proposed uses or activities shall not impede or degrade access to, from and along coastal water and within designated recreation areas as identified on Figure 15.

This enforceable policy applies to waterfront areas within the Haines Coastal Management area. See the Coastal Boundary section and the Resource Inventory for more information and maps delineating the location of the waterfront zones within the Haines Coastal Management area.

Public access is important in several ways. Residents use coastal areas nearly year-round for recreation, subsistence uses, and commercial harvesting. Access is critical for maintaining the current level of use, and as population and development increases these access points will increase in value.

Several state statutes were reviewed: Title 44 and 46 Alaska Coastal Management Program, Title 29 Municipal Government, Title 38 Public Land, and Title 41 Public Resources none of these statutes addressed the maintenance of public access to and within designated recreation areas in the Haines Borough. 11 AAC 112.220 directs districts to ensure that coastal access to, and from and along coastal waters is maintained.

In 2001 the former City of Haines completed a Waterfront Use and Access Plan, assisted by Sheinberg Associates, which documented the importance of several issues within the Townsite Service Area, of which one topic was access. The public identified dozens of valuable areas and their corresponding uses.

Natural Hazards

The areas mapped on Figure 5 in the Haines coastal district are designated as Natural Hazard areas (in accordance with 11 AAC 112.210(a) and 11 AAC 114.250(b)).

Mt. Ripinski Hazardous Slopes Area. This is the area of Mt. Ripinski with cliffs, very steep slopes greater than 30%, and the related hazardous zone along the base of these slopes. Protecting vegetation that has been able to grow is important to stabilizing the slopes and reducing impacts from avalanching.

Lutak Highway Hazardous Slopes Area. This is the area of cliffs and very steep slopes greater than 30% along the east side of Mt. Ripinski, and immediately upland of the Lutak Highway from the coastal management program boundary to extend north of the AMHS terminal. This area shall be managed to prevent erosion and subsequent avalanching by protecting the natural trees and vegetation on the steep slopes.

Portage Cove Shoreline. The U.S. Army Corps of Engineers Flood Hazard Boundary Map, and the Haines Borough Flood Plain and Hazards Map indicate that run-up from a tsunami, seiche or high storm surge could adversely affect the Portage Cove shoreline up to 25 feet above (MLLW).

Sawmill Creek Flood Plain. This area includes all geographic depressions, ponds, streams, and improved drainage routes at or near the elevation of Sawmill Creek. These areas are indicated on the Haines Borough Flood Plain and Hazards Map. Management in this area shall be to protect property from flood hazards and flood bearing capacity of the flood plain.

These areas are and described in Sections 3.2.4 and 3.5.3 of the Resource Inventory and Analysis.

Recreation

Recreation Designations. The following areas in the Haines Coastal district are designated as recreation areas in accordance with 11 AAC 114.250(c). These areas are mapped on Figure 15. Information that justifies their designation is provided in the Resource Inventory and Analysis in section 3.5.2. For specific recreational uses please see the chart below:

RECREATIONAL USES BY LOCATION

	Walking	Beach-combing	Community events	Recreational fishing	Bicycling	Swimming	Hand-launched boats	Play-ground use	Camping	Hiking	Golfing	sight-seeing	wildlife obs	recreational hunting
Tanani beaches	X	X		X		X	X					X		
Mt. Ripinsky Trail	X		X						X	X		X	X	
Nukdik Point	X	X	X		X							X	X	
Portage Cove Waterfront	X	X		X	X	X	X					X		
Tlingit and Lookout Parks	X		X		X			X						
Portage Cove State Park	X			X	X		X		X					
Fort Seward Parade Grounds	X		X		X							X		
Chilkat River Beaches	X	X			X		X			X		X	X	
Southeast Alaska State Fair	X		X											
McClellan Flats	X	X					X			X			X	X
Valley of the Eagles golf course	X				X		X				X		X	X
Oslund Park			X		X			X						

Designation as an area for recreation use under the HCMP does not mean that recreation is the only appropriate use of the area. However, uses and activities proposed to take place within these designated areas must comply with the enforceable Recreation policies of the HCMP designation.

- a) Tlingit Park and Lookout Park
- b) Oslund Park
- c) Beaches and tidal pools within the intertidal zone of Portage Cove as follows:
 - 1) Between the Port Chilkoot Dock and the Downtown Boat Harbor;
 - 2) Between the Klukwan Inc. petroleum dock and the State Park and Campgrounds; and
 - 3) Beyond the developed areas north of the Downtown boat harbor along the beaches of Portage Cove to Nukdik Point.
- d) The Southeast Alaska State Fairgrounds
- e) The Fort Seward Parade Grounds (as long as the current public land use agreement between the private owner and the Haines Borough remains in effect).
- f) Lutak Inlet
- g) Chilkat State Park
- h) Nukdik Point
- i) Chilkat River Beaches and Tidelands (Carr's Cove to Jones Point, Borough lands south of Jones Point and south of Carr's)
- j) Lutak Road beaches

R-1. Protection of Recreation and Tourism Values. Projects and activities on lands and waters designated for recreational activities as shown in Figure 15, shall be located, designed, constructed, and operated to avoid, minimize, or mitigate significant adverse impacts to recreation values include activities such as fishing, beach combing, hiking, bird watching, boating and kayaking, boat anchorages, picnicking, camping and campfires, access, playing outdoor sports, bicycling, skiing, learning about local culture, and hunting.

This enforceable policy applies within Recreation Designated areas as mapped on Figure 15 within the district's coastal zone boundary. See the Coastal Boundary section and the Resource Inventory for more information and maps delineating the location of the designated area within the Haines Coastal Management area.

See Section 3.5.2 for a description of sensitivity to development.

There are no state standards for recreation established in 11 AAC 112. Several state laws address recreation, particularly in Title 38 and Title 41 of the Alaska Statutes, but these only apply to state lands, not private or municipal lands, and thus, do not address the management of recreational resources in the designated Recreational Use area. Likewise, federal laws, such as the Fish and Wildlife Act of 1956 and ANILCA apply only to

federal lands, and thus do not adequately address the need to manage recreation use in the designated Recreational Use area. In addition, there were no comments submitted by federal and state agencies on the Public Review Draft that indicate that the policy duplicates existing agency regulations.

- R-3. Utilities.** To the extent practicable, utilities shall be installed underground in the designated recreation use areas shown on Figure 15 for which enjoying scenic views is listed as a recreational use in Section 3.5.2 of the Resource Inventory and Analysis

This enforceable policy applies within Recreation Designated areas as mapped on Figure 15 within the district's coastal zone boundary. See the Coastal Boundary section and the Resource Inventory for more information and maps delineating the location of the designated area within the Haines Coastal Management area.

See Section 3.5.2 for a description of the area's sensitivity to development.

There are no state standards for recreation established in 11 AAC 112. Several state laws address recreation, particularly in Title 38 and Title 41 of the Alaska Statutes, but these only apply to state lands, not private or municipal lands, and thus, do not address the management of recreational resources in the designated Recreational Use area. Likewise, federal laws, such as the Fish and Wildlife Act of 1956 and ANILCA apply only to federal lands, and thus do not adequately address the need to manage recreation use in the designated Recreational Use area. In addition, there were no comments submitted by federal and state agencies on the Public Review Draft that indicate that the policy duplicates existing agency regulations. Enjoyment of scenic views is an important use in many of the designated recreation areas discussed in Section 3.5.2. The ACMP statewide standard for utilities (11 AAC 112.240) would not adequately protect scenic views in these recreational use areas. This policy will address this important issue.

See Section 3.5.2 for a description of the area's sensitivity to development and for evidence of being of unique concern to the district.

Subsistence

The areas mapped on Figure 13 in the Haines coastal district are designated for subsistence in accordance with 11 AAC 114.250(g). Each Subsistence use is listed on Figure 13. Information that justifies their designation is provided in the Resource Inventory and Analysis section 3.3.

Commercial Fishing and Seafood Processing

Commercial Fishing and Seafood Processing Designations. The following areas in the Haines coastal area are designated as commercial fishing and seafood processing areas in accordance with 11 AAC 114.250(f). These areas are mapped on Figure 14. Information that justifies their designation is provided in the Resource Inventory and Analysis in Section 3.5.1.

- a) The Port Chilkoot Dock area, and uplands and tidelands lots adjacent to (and north of) the downtown Boat Harbor in Portage Cove and,
- b) The Lutak Dock.

CFSP-1. Permitting Priority. Uses and activities in the designated area on Figure 14 shall avoid or minimize interference with the development and operation of facilities related to Commercial Fishing and Seafood Processing.

This enforceable policy applies within Areas Suitable for the Development of Facilities Related to Commercial Fishing and Seafood Processing Designated areas as mapped on Figure 14 within the district's coastal zone boundary. See the Coastal Boundary section and the Resource Inventory for more information and maps delineating the location of the designated area within the Haines Coastal Management area.

See Section 3.5.1 for a description of the area's sensitivity to development.

There are no state standards for the Development of Facilities for Commercial Fishing and Seafood Processing established in 11 AAC 112. Alaska Department of Fish and Game Title 5 regulate uses and activities of commercial fisheries but not specifically the location of development of commercial fisheries and seafood processing facilities. Title 44 and 46 Alaska Coastal Management Program, Title 29 Municipal Government, Title 38 Public Land, and Title 41 Public Resources. None of these statutes addressed maintenance and enhancement of commercial fisheries and seafood processing facilities or established commercial fisheries and seafood processing as a priority.

Fish harvesting, particularly a local gillnet fleet, has always been an important contributor to the Haines economy. Salmon traditionally comprises over three-quarters of all fish caught by Haines residents. In 1990, 140 Haines residents had commercial fish permits, earning an estimated \$4.8 million in gross wages. By 1995, the number of permit holders was decreasing but fisheries still brought in an estimated \$4.8 million in gross earnings. But by 2002, gross earnings for fisheries dropped to \$2.0 million, and the number of permit holders, permits being fished, and pounds landed and number of commercial vessels registered to Haines residents was also down (Table 6). In 2003 (the last year for which data is available) the drop in fishing activity continued, though at a slower pace. In 2004 local efforts to value-add processing began with the State increasing marketing efforts as well.

Sand and Gravel Extraction Processing

ACMP Sand and Gravel Extraction Standard (11 AAC 112.260)

Sand and gravel may be extracted from coastal waters, intertidal areas, barrier islands, and spits if there is no practicable alternative to coastal extraction that will meet the public need for the sand or gravel.

SG-1. Location of Sand and Gravel Sites. To the extent practicable, extraction of sand and gravel shall be permitted in the following order of priority:

- a) Existing, approved upland sand and gravel pits;
- b) Reuse of sand and gravel from abandoned development areas, unless reuse would cause more environmental damage than non-use from the area;
- c) New upland sites approved for the purpose; and
- d) Streams that do not provide fish habitat.

This enforceable policy applies to waterfront areas within the district's coastal zone boundary. See the Coastal Boundary section and the Resource Inventory for more information and maps delineating the location of the waterfront zones within the Haines Coastal Management area.

Sand and gravel use is continuous in the Haines area with road projects and residential and commercial construction. The majority of this construction requires sand and gravel from the four above areas to remain solvent and participate in the local economy.

See Section 3.5.3 for a description of the area's sensitivity to development.

The following states laws apply to sand and gravel extraction: 11 AAC 112.260, AS 38.05, 11 AAC 71, and 33 CFR 320-323.

Prehistoric, Historic, & Archaeological Resources

ACMP Historic, Prehistoric, and Archeological Resources Standard (11 AAC 112.320)

- (a) The department will designate areas of the coastal zone that are important to the study, understanding, or illustration of national, state, or local history or prehistory, including natural processes.
- (b) A project within an area designated under (a) of this section shall comply with the applicable requirements of AS 41.35.010 – 41.35.240 and 11 AAC 16.010 – 11 AAC 16.900.

Prehistoric, Historic and Archaeological Resource Designations. As all public and private development is required to conform to Section 106 of the National Historic Preservation Act some locations of valuable archaeological resources are held back from public viewing from all but those determined by the federal agency to have a necessary interest. As the areas below are historically documented it is to the benefit of the public that those areas be generally indicated on the map provided. The following areas in the Haines coastal district are designated as important to the study, understanding or illustration of national, state or local history or prehistory in accordance with 11 AAC 114.250(i). These areas are mapped on Figure 12. Information that justifies their designation is provided in the Resource Inventory and Analysis in section 3.3.2 Cultural and Archaeological Resources.

- a) Fort William H. Seward, listed on the National Historic Register as a National Historic Landmark.
- b) The Haines Town site Local Historic District is defined by the boundary lines established in the original 1913 Haines Town site Survey. Within the historic town site, the Division of Parks and Outdoor Recreation, Office of History and Archaeology have inventoried 35 structures. The Deishu Village site is also within the historic district.
- c) Tlingit Park and historic cemetery.
- d) The T'anani Village Site and Nukdik/Tanani Beach Site are within the area annexed to the former City in June 1993.
- e) Presbyterian Mission and Native School site.
- f) Portage Cove burial site - headstones and partially-disturbed burial site adjacent to Tlingit Park.
- g) South Portage Cove native fortification site – ancient fortification site now converted into Portage Cove State Park, offering camping and views in the Portage Cove area.
- h) Anway Homesite historic structure and property– Charlie Anway, homesteader and prominent local mining and agricultural figure, built a home still standing, and the Haines Historical Society purchased his former residence and surrounding property in 2005.
- i) Yandeist'akye' historic native settlement – formerly an Indian Reservation, the site no longer has standing buildings, and a number of headstones stand across from the airport just west of town.

PHAR-1. Coordination. For projects within the historic and prehistoric designated area as shown in Figure 12, if previously undiscovered artifacts or areas of historic,

prehistoric, or archaeological importance are encountered during development, an artifact curation agreement will be developed between the landowner, appropriate state or federal preservation authorities, and curation facility if artifacts are disturbed by the project.

This enforceable policy applies within Areas Important for the Study, Understanding and Illustration of History, Pre-History and Archeology Designated areas as mapped on Figure 12 within the district's coastal zone boundary. See the Coastal Boundary section and the Resource Inventory for more information and maps delineating the location of the designated area within the Haines Coastal Management area.

See Section 3.3.1 and 3.3.2 for a description of the area's sensitivity to development.

The following state and federal laws deal with historic resources: AS 41.35 and 11 AAC 16.

See Sections 3.3.1 and 3.3.2 for a description of the area's unique concern to the district.

PHAR-2 Protection of Cultural Resources. For projects within the historic and prehistoric designated area as shown in Figure 12 the applicant shall submit with the consistency review packet an assessment of potential impacts to historic and prehistoric resources and a plan for the protection of those resources. As part of the assessment, the applicant shall consult with the Haines Coastal District and tribal entities.

This enforceable policy applies within Areas Important for the Study, Understanding and Illustration of History, Pre-History and Archeology Designated areas as mapped on Figure 12 within the district's coastal zone boundary. See the Coastal Boundary section and the Resource Inventory for more information and maps delineating the location of the designated area within the Haines Coastal Management area.

See Sections 3.3.1 and 3.3.2 for a description of the area's sensitivity to development.

The following state and federal laws deal with historic resources: AS 41.35 and 11 AAC 16.

See Sections 3.3.1 and 3.3.2 for a description of the area's unique concern to the district.

6.0 Former Port Chilkoot/Portage Cove AMSA

6.1 Introduction

The Port Chilkoot/Portage Cove AMSA has been partially accommodated into Title 18 land use code, but significant portions still reside within the AMSA. Although there is potential to convert AMSA policies into enforceable policies or ordinances this handling of the AMSA contains no enforceable policies.

The ACMP allows a coastal district to develop a more specific coastal management plan for an Area Which Merits Special Attention (AMSA) when there are resources sensitive to change or alteration, when there are conflicting or incompatible resource uses, or when there are values particularly important to the general public (AS 46.21.210(1)).

The Haines Coastal Management Program has designated one AMSA, the Port Chilkoot/Portage Cove AMSA, under the authority of 11 AAC 114.420. The area was designated because of its historical importance (much of it listed on the Alaska Heritage Resources Survey), scenic, recreation and tourism values and opportunity. The Port Chilkoot/Portage Cove AMSA was originally adopted in 1980 and since that time many of the original policies and goals were implemented. The AMSA boundaries can be seen on Figure 2. No changes are suggested for the boundaries but the enforceable policies have been edited and updated to comply with ACMP law and regulations and to reflect Haines Borough intent. Information on resource values and analysis can be found in Chapter 3.0 of this Plan and not repeated here. This AMSA will be implemented as part of the Haines CMP as described in Chapter 7.0. Finally, public participation for the entire Haines CMP is described in Chapter 8.0.

The objectives of Port Chilkoot/Portage Cove AMSA are to stimulate local and tourist oriented use of public lands and to provide direction and coordination for private sector development that will benefit both Haines Borough and individual property owners. Portage Cove plays an important social role as the Haines' gateway to Chilkoot Inlet. The Portage Cove waterfront is the downtown access to the Inlet for small boat users, its sandy beach playground, its picture-postcard view shed, and its "greeting point" for many visitors arriving by sea.

There are four areas within this AMSA: the downtown, the urban waterfront, Tlingit Park and Cemetery, and Fort William H. Seward. The unique assets of these areas combined with Lynn Canal's natural features allow managed visitor industry growth that will result in longer stays in Haines and an enhanced living and working environment for local residents and businesses.

6.2 Land Status

The Port Chilkoot/Portage Cove AMSA includes about six percent of the land area and 21 percent of the tidelands within the corporate boundaries of the Haines coastal area. The Haines Borough owns more than three-quarters of the tidelands area including the small boat harbor. Two tidelands lots are privately owned. Of the 65.6 acres of upland property, 68 percent is in

private ownership, one-quarter is public use (tax exempt) land, and the Borough owns the remaining seven percent.

One striking land ownership pattern is the relatively high concentration of the community's public use lands. Whereas the percentages of privately owned and Borough owned properties here are comparable to the amounts of each throughout the Haines coastal district, one-half of all designated public use lands in the coastal district are located within the AMSA. Public use areas include the parade grounds at Fort William H. Seward, the Chilkoot Center for the Arts, the Presbyterian Mission Reserve, harbor facilities, Tlingit Park, and the beach area north of Port Chilkoot Dock.

6.3 Land Use

Approximately one-half of all designated public use lands in the Haines coastal area are located within the Port Chilkoot/Portage Cove AMSA. This concentrated public use was highlighted in meetings and workshops where development goals for the area were discussed. Most participants appear to perceive tourist and resident use as compatible in most areas in the AMSA. However, the land use preference is to focus on use and residents. Tlingit Park, the beach adjacent to Port Chilkoot Dock, Fort Seward parade grounds, and other open space areas are of prime consideration. Public facilities still in need of upgrading within the AMSA include:

- Waterfront parks and walkways for local and visitor use; and
- Waterfront repair and service facility for small marine craft.

Transportation to, from and within the AMSA consists of automobiles, trucks, service vehicles, buses, and vans, commercial and pleasure boats, float planes, and cruise ships. An expansion of all transportation modes is anticipated in the AMSA and detailed design recommendations for each special design district reflect this expansion. Circulation throughout the Haines urban area as it relates to the AMSA consists of the overall loop of Main Street, Front Street, Mud Bay Road, and Third Avenue. The Haines Cut-off Highway intersects this loop in a northwest-southeast alignment.

Significant transportation improvements in the AMSA shall include:

- Improved pedestrian and bicycle flow.
- Additional private auto access for local residents and visitors based on new and improved public recreational facilities and private sector visitor industry developments.

In order to preserve the integrity of existing and future neighborhoods within and adjacent to the AMSA, the Plan recommends the retention of the basic circulation pattern with the addition of Second Avenue being continued from Main Street to the Haines Cut-off Highway. First Avenue should remain terminated at the senior citizen center with a connection to Second Avenue.

Utilizing improved street and sidewalk construction and improved traffic controls at the Mud Bay Road/Haines Cut-off intersection, overall vehicular circulation should be adequately accommodated.

Proposed development within the AMSA shall enhance pedestrian and bicycle and motor vehicle circulation with substantial additions to a trail-walkway-boardwalk system throughout the AMSA and adjacent the public safety building, downtown, and residential areas.

The waterfront linear pedestrian system will be a high visibility, major image route. An upland trail connection to this system, in addition to existing improved street rights-of-way, shall be established between upper Main Street, the Second Avenue future development area, the public safety building, and Fort William H. Seward.

Seasonally appropriate bicycle routes are recommended for the major pedestrian loop system. The basic loop is recommended as follows:

- Southward along First Avenue from Main Street to and crossing the Haines Cut-off Highway;
- Continuing southward to Mud Bay Road in the vicinity of the Totem restaurant;
- Through lower Fort Seward to Portage Street;
- Northeast on Portage Street to Beach Road;
- North along Beach Road/Front Street in conjunction with waterfront improvements across from the Presbyterian Mission Reserve; and
- West on Main Street connecting to Second Avenue.

6.4 Issues, Goals and Objectives

Issues

The AMSA area serves multiple purposes and is highly valued by the community of Haines as it offers natural scenic areas, beach access, transportation and historic facilities. The primary issue is to manage the various uses and developments to maximize their compatibility and not preclude any of the important uses from occurring.

Goals

- Provide a well-planned and developed pedestrian/bicycle/motor vehicle transportation network that will meet future development requirements while preserving the integrity of existing and future neighborhoods within and adjacent to the AMSA.
- Ensure balanced management, conservation and wise use of AMSA resources.
- Ensure that present and future citizens and visitors have access to diverse recreational opportunities.
- Preserve and protect the historic, prehistoric and archaeological resources.

Objectives

- Strengthen the tourism sector of the economy through coordination and promotion of the existing and potential tourist attractions in the AMSA area.
- Require mitigation measures to maintain the aesthetic and visual qualities of the AMSA area as it develops.
- Maintain and protect significant historic sites, encouraging continued development of Fort William H. Seward that will highlight its significance.
- Maintain and continue to develop the parks and trails system.
- Use the waterfront for its most appropriate and beneficial use.
- Continue to improve tourism promotional programs that highlight this area of Haines for its scenic beauty, cultural diversity, historic significance and recreation values.
- Expand moorage for pleasure craft as well as commercial fishing boats is recommended for the Haines small boat harbor and the Port Chilkoot Dock area.

Potential Policy Language

The following language could be used for future enforceable policies relative to the Port Chilkoot/Portage Cove AMSA.

AMSA-1. Water Dependent Harbor Development Preference.

Moorage facilities for recreational and commercial small boats shall be developed at the Port Chilkoot Dock.

AMSA-2. Transportation Circulation

Pedestrian walkway, sidewalk, and trail improvements shall be developed throughout the AMSA with the waterfront area being the 'spine' for this system.

AMSA-3. Improvements for Recreation and Tourism Transportation

Accommodations for visitor and regional bus and van transport shall be incorporated in all appropriate AMSA projects. Cruise ship activity should occur within the AMSA, at the Port Chilkoot Dock, with additional lightering facilities at the Haines small boat harbor.

AMSA-4. Public Facilities for Recreational Use

Public facilities within this AMSA shall support recreational use for local residents and visitors, as well as service facilities required for marine recreational and small-scale commercial craft.

AMSA-5. Preservation of existing and future neighborhoods and vehicular circulation.

Vehicular circulation throughout the AMSA shall be slow-moving, neighborhood, touring-oriented.

7.0 Implementation

This Implementation chapter contains the following sections:

- 1) Introduction
- 2) Borough CMP Participants' Duties and Responsibilities
- 3) General Consistency Review Information
- 4) Borough Participation in State-coordinated Consistency Review
- 5) Borough Coordination of Local Consistency Review
- 6) Elevation Process/ Local Appeals
- 7) Planning for Major Projects
- 8) Amendments and Revisions
- 9) Monitoring and Enforcement
- 10) Public Education and Outreach

7.1 Introduction

This chapter of the Haines Borough district plan accomplishes the following:

- Describes the Haines Borough organization.
- Provides instructions on how to use this coastal management program and participate effectively in state consistency reviews.
- Explains to other ACMP participants how best to work with the Haines Borough in implementing its coastal management plan.
- Provides Borough residents, landowners, and development project applicants with an understanding of how the Haines Borough CMP will be used.

7.1.1 Organization

The Haines Borough, which is a home rule borough, is eligible to be a coastal district in accordance with state law at AS 46.40.210(2)(B).

Local ACMP decisions and actions are the responsibility of the Borough Assembly. The Assembly has delegated ACMP implementation duties to the Borough Planning Commission and the Borough Planner, who also serves as the Coastal Coordinator. The Coastal Coordinator is authorized to make routine decisions and to participate in consistency review and other daily implementation tasks.

The Borough Planner works with the Borough Planning Commission, which is an advisory body to the Borough Assembly, to implement the HCMP. The Borough planner regularly consults with the Planning Commission on matters related to implementation of the Coastal Plan. Decisions about large or controversial projects are also brought to the Planning Commission for consideration during the consistency review process. Final Planning Commission recommendations are brought before the Borough Assembly for their final decision.

The point of contact for local consistency reviews involving Haines Borough coastal zone lands is the Haines Borough Coastal Coordinator. The address is:

Haines Borough
ATTN: Coastal Coordinator
P.O. Box 1209
Haines, Alaska 99827
(907) 766-2231

7.1.2 Subject Uses

In accordance with 11 AAC 100.010, land and water uses and activities in the coastal zone that are subject to a consistency review and district enforceable policies include the following:

- Federal activities affecting coastal uses or resources
- Land and water uses and activities requiring federal permits or authorizations (see 11 AAC 110.400)
- Land and water uses and activities requiring state permits or authorizations
- Designated areas.

In addition, outside of the state consistency review process, there may be a local consistency review for land and water uses in the Haines Borough's coastal zone for land and water uses and activities requiring local permits or authorizations.

7.1.3 Proper and Improper Uses

The Alaska Administrative Code under 11 AAC 114.260 requires that district plans identify uses and activities, including uses of state concern, that are considered proper and improper within the coastal area. The Haines Borough has not identified any uses that are categorically prohibited within the coastal boundary. Proper and improper uses are determined by their compliance with performance standard policy requirements.

All land or water uses or activities within the Haines Borough are considered to be proper as long as they comply with the policies of this coastal management plan, the ACMP standards under 11 AAC 112, and applicable federal and state regulations. All other land or water uses or activities are considered to be improper if they are inconsistent with ACMP standards or the policies of this plan or if they do not comply with or cannot be made to comply with applicable federal and state regulations. Designated areas included in this plan identify specific land or water uses and activities that will be allowed or not allowed.

7.1.4 Designated Areas

District policies related to natural hazards; subsistence; historic, prehistoric and archeological resources; recreation and tourism; commercial fishing and seafood processing; and habitat only apply to projects within designated use areas identified in this plan.

7.1.5 Uses of State Concern

Uses of state concern are uses and activities that are considered to be of state or national interest. A district cannot restrict or excluded uses of state concern unless they provide ample justification for the exclusion or restriction within the district plan.

Alaska Statutes at AS 46.40.210(12) defines uses of state concern. In addition, the former Coastal Policy Council issued Resolution Number 13 that specifies more categories and criteria for uses of state concern. This resolution remains in effect until statutes or regulations supercede it or until it is formally rescinded by DNR.

7.2 Borough CMP Participants' Duties and Responsibilities

Haines Borough Planning Commission

The Borough Assembly has delegated local implementation of the HCMP to the Planning Commission and the Planner. The Planning Commission implements the Borough CMP when issuing consistency comments. The Planning Commission normally delegates authority to make consistency comments to the Borough Coastal Coordinator. In addition, the Planning Commission has the following responsibilities:

- Monitor and assess consistency comments issued on its behalf by the Coastal Coordinator.
- Review every five years and amend, if required, the HCMP.
- Submit the HCMP to OPMP for reapproval every ten years. The submittal shall include an evaluation of the plan effectiveness and implementation, a presentation of any new issues, and a recommendation for resolving any problems that have arisen.

Haines Borough Coastal Coordinator

The Haines Borough Coastal Coordinator is staff to the Haines Borough Planning Commission, among other duties.

The Coastal Coordinator has day-to-day responsibilities within the Haines Borough for the administration of the HCMP. He or she must:

- Help applicants fill out the coastal project questionnaire including an evaluation of the district's enforceable policies along with the boundary determination and educate them about the ACMP and the HCMP throughout the process.
- Ensure that the parties involved in the consistency review process have received information in a timely manner.
- Determine if information received is complete and sufficient for a consistency review.
- Decide which projects are routine and which projects have great significance to the coastal zone and should be reviewed and discussed with the Planning Commission (routine approvals will be processed by the Coastal Coordinator).

- Evaluate uses and activities that require local, state, or federal permits or authorizations for consistency.
- Evaluate proposed projects against the enforceable policies of the Coastal Program.
- Accurately assess the effect of applicable policies of the HCMP on the application.
- Manage project information to ensure that it reaches all affected persons and organizations.
- Draft effective, concise and comprehensive consistency determinations and recommendations and produce evidence in support of the conclusions reached.
- Develop draft consistency comments and alternative measures for consideration by the Planning Commission, when necessary.
- Integrate feedback from the local contacts and other interested parties into the Haines Borough's consistency recommendation.
- Coordinate consistency review activities with adjoining coastal districts where issues or activities of mutual concern are under consideration.
- Prepare and submit the consistency recommendation in a timely manner.
- Prepare quarterly and annual reports to the state, as required by the Haines Borough's ACMP grant agreement.
- Facilitates and receives public input, and acts as an information resource concerning the HCMP.

The Coastal Coordinator represents the Haines Borough at meetings, conferences, and in ongoing interactions with applicants, the general public and state and federal agency staff regarding the HCMP.

7.3 General Consistency Review Information

Because the State of Alaska has adopted the HCMP as an amendment to the ACMP, the Haines Borough is one of several reviewers that concurs or objects to an applicant's consistency certification or a federal agency's consistency determination to the coordinating agency during consistency review. Based on these comments and on the policies and procedures of the ACMP, the coordinating agency issues a consistency finding.

Two Types of Consistency Reviews

The enforceable components in this plan form the basis for a determination of consistency with the HCMP. There are two types of reviews: state-coordinated consistency reviews and locally coordinated consistency reviews. When a project is proposed, State ACMP project reviewers determine which authorizations are needed. If the project is a federal activity, or needs state or federal authorization, the State of Alaska reviews the project for consistency with the ACMP. The Haines Borough participates in the state-coordinated review (see Section 7.4). If only local authorization is required (but not state or federal authorization), then the Haines Borough itself reviews the project for consistency with the ACMP (see Section 7.5).

Determination of Consistency in Connection with Other Permits and Approvals

In addition to consistency, an applicant is required to obtain all other necessary permits and approvals required in connection with a proposed project. A determination of consistency does not guarantee or presume approval of any other federal, state, or local permit.

DEC “Carve out”

DEC’s air, land, and water quality standards are the exclusive standards of the ACMP for those purposes. Issuance of DEC permits, certification, approvals, and authorizations establishes consistency with the ACMP program for those activities of a proposed project subject to those permits, certifications, approvals, or authorizations. A project that includes an activity subject to a DEC authorization on the C list (see ABC List next) may be subject to a coordinated review if the project includes a different activity that is not subject to a DEC authorization but is the subject of an enforceable district policy or another C-listed authorization. However, the specific activities subject to the DEC authorization are not within the scope of those project activities to be reviewed.

In the case of a DEC single agency review, the scope of review is limited to an activity that is the subject of a district enforceable policy. DEC Policy Guidance No. 2003-001, January 7, 2004, contains the actual procedure by which DEC will participate and coordinate in ACMP consistency reviews. This document is titled “DEC Single Agency Coastal Management Consistency Review Procedures and sets forth the “Uniform Procedures for Conducting a Coastal Management Consistency Review for Projects that Only Require a [DEC] Permit or Contingency Plan Approval to Operate.”

ABC List

The ABC List is a classification system of state and federal approvals that can streamline the consistency review portion of the state permitting process for a proposed project. The intent of the ABC List (specifically the "A" and "B" portions of the List) is to reduce the amount of time reviewers must spend on reviewing routine individual projects, allowing them to concentrate on more complex projects that require more involved ACMP consistency review.

The ABC List actually breaks down into three lists:

- The "A" List represents categorically consistent determinations – approvals of activities requiring a resource agency authorization, when such activities have been determined to have minimal impact on coastal uses or resources.
- The "B" List has been broken into two sections. Section I of the "B" List represents generally consistent determinations – approvals for routine activities that require resource agency authorization(s), when such activities can be made consistent with the ACMP through the application of standard measures. Section II of the "B" List includes nationwide permits and general permits that have been found to be consistent with the ACMP.
- The "C" List represents a comprehensive listing of those state permits that may trigger consistency review.

Projects do not always fit neatly into just one of the three lists (the "A," "B," or "C" List). Some projects need authorizations that fall under more than one list or include activities that are not

found in the “B” List. For these projects, OPMP will determine how much review the project requires.

Federal Authority and Consistency Determination

In accordance with federal law, the Haines Borough coastal zone excludes all federal lands and waters within its boundaries. Federal lands and waters are those lands and waters managed, owned, or held in trust by the federal government.

However, the federal government is not exempt from the ACMP or the HCMP. Federal law requires "federal agencies, whenever legally permissible, to consider State management programs as supplemental requirements to be adhered to in addition to existing agency mandates." (15 CFR 930.32(a)). The federal government meets this requirement in several ways, depending upon the type of project or activity being considered.

First, federally licensed or permitted activities proposed within the coastal area and affecting coastal uses or resources must be consistent with the ACMP, including the HCMP. (15 CFR 930.50).

Second, federal license and permit activities described in detail in Outer Continental Shelf plans and affecting coastal uses or resources must be consistent with the ACMP including the HCMP (15 CFR 930.70).

And finally, all federally conducted or supported activities, including development projects directly affecting the coastal zone, must be consistent to the maximum extent practicable with the ACMP, including the HCMP. Federal activities are "any functions performed by or on behalf of a federal agency in the exercise of its statutory responsibilities." This term does not include the issuance of a federal license or permit. Federal development projects are those federal activities "involving the construction, modification, or removal of public works, facilities, or other structures, and the acquisition, utilization, or disposal of land or water resources." (15 CFR 931.31) The phrase "consistent to the maximum extent practicable" means that such activities and projects must be "fully consistent with such programs unless compliance is prohibited based upon the requirements of existing law applicable to the federal agency's operations." (15 CFR 930.32(a)).

7.4 Borough Participation In State-Coordinated Consistency Review

Procedure

The point of contact for state and federal consistency reviews involving the Haines Borough CMP is the OPMP. OPMP addresses are:

Southcentral Regional Office
550 W 7th Ave, Ste. 1660
Anchorage, AK 99501
(907) 269-7470
Fax#: (907)-269-3981

Central Office
302 Gold Street, Ste. 202
Juneau, AK 99801-0030
(907)-465-3562
Fax#: (907)-465-3075

The state-coordinated consistency review process is contained in state regulations at 11 AAC 110. The Haines Borough may participate in that process as an affected coastal district. A brief discussion of the Haines Borough's role in the state consistency review process is described in this section. However, applicants should obtain current information on the state consistency review process from OPMP.

The Haines Borough strongly recommends that applicants who seek state or federal permits for a major or complex project in the coastal zone request pre-review assistance prior to submitting such an application. The Haines Borough seeks to work with applicants to initiate early communication and facilitate an expedient and informed consistency review.

The coordinating agency will notify the borough of a pending consistency review. If requested, the borough will participate in determining scope of review of a proposed project, based on the borough's enforceable policies.

Upon the notification from the coordinating agency of the start of a consistency review, the HCMP Coordinator will determine whether the project information is adequate to allow the Borough to concur or object to an applicant's consistency certification. If more information is required, the Borough will notify the coordinating agency by the "request for additional information" deadline and specifically identify the additional information required.

Permit Application Meeting

During a consistency review, the HCMP Coordinator may contact the coordinating agency to request a meeting to resolve issues. The purpose of the meeting is to discuss coastal management and permitting issues of the proposed activity and to work toward resolution of issues of concern and potential conflicts. This meeting should be scheduled no later than 10 days after the HCMP Coordinator receives notification of the action. At a minimum, representatives of the coordinating agency, the Haines Borough, affected villages, affected major landowners, the applicant, affected interest groups and organizations, and affected resource agencies will be invited to participate. Depending on the nature of the activity and travel constraints, the meeting may involve a meeting or teleconference. Subsequent work sessions may be beneficial to reaching early consensus on the consistency determination. Scheduling a permit application meeting does not change the final consistency review deadline of ninety days as directed in 11 AAC 100.265.

Consistency Comments

During the period allowed to review and consider the proposed use, the Haines Borough will prepare written comments on the applicant's consistency certification. In preparing a consistency review comment the borough will comment on consistency with state standards. In order to be considered by the coordinating agency, borough comments must be in writing and must:

- State that the borough concurs with the applicant's consistency certification and explain why or
- Identify that the borough objects to the applicant's consistency certification.

If the Borough objects, the borough must:

- Identify and explain why the proposed project is inconsistent with specific state standards or district enforceable policies and
- Identify any alternative measure that, if adopted by the applicant, would achieve consistency with the specific state standard or district enforceable policy.

Alternative measures are project conditions proposed by a state resource agency or coastal district that, if adopted by the applicant, would make the project consistent with either state standards or district enforceable policies. If the borough proposes alternative measures, they must explain how the alternative measure would achieve consistency with the specific enforceable policies in question.

When the consistency review is routine in nature and the Haines Borough Planning Commission does not need to take action, the HCMP Coordinator will issue the Borough's consistency comments on behalf of the Planning Commission.

Upon receiving notice of local, state, or federal permit application, the HCMP Coordinator will notify the mayor/ city manager of any cities or villages, the president of any IRA Councils or Traditional Councils, and the appropriate regional non-profit corporation that could potentially be affected by the proposed action. The HCMP Coordinator will also determine if major landowners will be affected by the proposed action and will contact their representatives to identify concerns and special conditions for development.

The HCMP Coordinator will ensure that local concerns are solicited and appropriately incorporated in the Haines Borough's consistency comment. One or more representatives of any villages affected by the proposed use may assist the HCMP Coordinator in preparing the comments. Input from appropriate Native corporation land managers may also be solicited. The city or village representative is responsible for providing information on local community concerns and input about the proposed development. Local input to the Haines Borough consistency comment must be received promptly in order to meet the state review deadlines. The borough will consider such input in developing comments and alternative measures regarding the consistency of a proposed project. Where local concerns cannot be incorporated in the Haines Borough consistency comment, the HCMP Coordinator must provide justification for this decision to the local contacts involved.

Public Hearing During a State-coordinated Consistency Review

Any person or affected party may request that the coordinating agency hold a public hearing on a project or activity undergoing a consistency determination by providing adequate justification for the request as specified in 11 AAC 110. During the initial consistency review, the HCMP Coordinator, in consultation with the Planning Commission and affected parties, may decide that the scope of a project will require a public hearing. If a public hearing is needed, the HCMP Coordinator will submit a written request to the coordinating agency that they hold a public hearing and outline the need for such a hearing. The coordinating agency will review the request to determine if it is based on concerns not already adequately addressed in the review. If a public hearing is held, the ninety-day deadline in 11 AAC 110.265 for the completing the

consistency review is unchanged. The coordinating agency should be consulted for the exact schedule.

Changes in the Nature of a Permitted or Approved Activity

Per 11 AAC 110.280, an applicant that proposes a modification to an activity for which a final consistency has been issued must submit a new coastal project questionnaire to the agency that coordinated the consistency review. The modification is subject to another consistency review if the modification will have significantly different effects than the existing use on the resources of the Haines Borough coastal zone and if a new authorization or change in authorization is required.

Due Deference

Due deference is a concept and practice within the consistency review process that affords the commenting review participants the opportunity to include, review, or refine the alternative measures or consistency concurrence if they have expertise in the resource or the responsibility for managing the resource. The borough and resource agencies are provided deference in interpretation of policies and standards in their area of expertise or area of responsibility. First, in order to be afforded due deference, the district must have an approved district plan and have commented during the consistency review. Then the district may be afforded due deference if no resource agency has specific authority or expertise and if the district can demonstrate expertise in the field. A district doesn't have to have a specific policy that applies to the proposed project under review. The district may comment on the consistency of the proposed project within the state standards.

If the coordinating agency rejects the comments of the Haines Borough or any alternative measures that the Borough might seek to have imposed on the application in connection with a consistency determination, the coordinating agency must provide a brief written explanation stating the reasons for rejecting or modifying the alternative measure. *Note: this requirement only applies when the coordinating agency disagrees with the Borough on issues involving the interpretation and application of the HCMP.*

7.5 Borough Coordination of Local Consistency Review

Under the provisions of AS 46.40.100, actions and approvals by local governments are also subject to consistency with approved district coastal management programs. In some cases, a proposed action requiring a municipal permit or approval will also need a state or federal permit, and the federal/state consistency review will take place at the state level. Sometimes, a proposed action will only require a municipal permit and no state or federal permit. In such cases, the municipal government is responsible for reaching the consistency determination.

Uses Subject to Local Consistency Review

All uses that are proposed in the Haines Borough coastal zone that do not require federal or state authorization or that is not a federal activity will require a determination of consistency from the Haines Borough if they are among the following local subject uses:

- All land and water uses requiring a permit or approval in accordance with Haines Borough Code Title 18.

Haines Borough procedures for local consistency determinations are simple and are designed to quickly determine whether a proposed use is consistent with the Haines Borough CMP.

Application Procedure and Time Line

There is no separate application for a local consistency determination under the Haines Borough CMP. Rather, the applicant desiring to undertake a subject use applies to the Haines Borough for the required land use permit or approval. When an application involves land within the Haines Borough coastal zone, the land use permit application usually provides the Haines Borough with the information required in order to make a CMP consistency determination.

Local Consistency Determinations

The point of contact for local consistency reviews involving Haines Borough coastal zone lands is the Haines Borough Coastal Coordinator, a staff position within the Haines Borough. The address is:

Haines Borough
ATTN: Coastal Coordinator
P.O. Box 1209
Haines, Alaska 99827
(907) 766-2231

The Haines Borough will issue its consistency determination in conjunction with the underlying zoning permit or approval. The underlying permit or approval process will establish the time line for a local Haines Borough CMP consistency determination. If the information provided by the applicant is incomplete or insufficient to allow a local consistency determination, the Borough will ask the applicant for the missing or required information in accordance with local authorization procedures.

The Haines Borough zoning ordinance details the review process and schedule for each specific permit or approval required. The Haines Borough will conduct its consistency review concurrently with its zoning permit or approval review process. Upon issuing its zoning permit or approval, the Haines Borough will also issue a consistency determination.

The Haines Borough strongly recommends that applicants who seek authorization from the Borough for a major project requiring local consistency review request a pre-application meeting before submitting the application.

7.6 Elevation Process/Appeals

Elevation of State Consistency Determination

Elevations of a consistency determination issued by a coordinating agency follow the procedures established under regulations at 11 AAC 110.600.

Appeal of Local Consistency Determination

The applicant, or any aggrieved person, may appeal the Haines Borough 's consistency determination to the Haines Borough Planning Commission or Assembly, in accordance with the procedures established for the appeal of the underlying zoning permit or approval in the Haines Borough zoning ordinance. Subsequent appeals may be made to the Superior Court in accordance with the procedures established in the Haines Borough zoning ordinance.

7.7 Planning For Major Projects

Introduction

Certain types of activities can significantly impact coastal resources and create major changes within the Haines Borough coastal zone. The Haines Borough is interested in participating in agency planning for large-scale development projects and land management decisions. A consistency determination for a major project often takes place after the planning process is completed, which may mean that substantive decisions concerning the use have already been made. Conflicts that could have been avoided by mutual agreement early on become costly in terms of time and effort spent on resolving differences later on. To avoid this, major project planning establishes the following objectives:

- Haines Borough CMP policies should be considered as early as possible in planning for proposed major uses.
- Problems and potential consistency conflicts should be addressed and resolved prior to the application stage.
- Prior resolution of differences should speed the issuance of subsequent permits or approvals.

There are three procedures that are strongly encouraged for major activities of area-wide concern: (1) pre-application meetings, (2) permit application meetings, and (3) local partnership in planning activities. Participation in these procedures has the following objectives:

- Apply coastal management policies early in project or plan development.
- Address problems and potential consistency evaluation conflicts prior to the permit or approval stage.
- Speed up subsequent permits or approvals through early resolution of issues.
- Ensure the compatibility of future planning projects with the approved Haines Borough CMP.

Major Projects

The following types of activities and actions are considered to be major activities of regional concern:

- Oil and gas exploration, development, and support activities.
- Land disposal and subdivision of land over 100 acres in size.
- Transportation/utility facility and corridor designation or construction.

- Mineral exploration or development (projects requiring development of new airstrip or roads, major energy generation or transmission facilities, slurry pipelines, port facilities, extensive overburden or tailings disposal areas, offshore mining, or significant stream diversion).
- Large scale sand, rock, and gravel extraction (greater than 25,000 cubic yards).
- Transportation, storage, cleanup, and disposal of hazardous substances (including the Defense Environmental Restoration Act Program and other federal sites).
- Development of management guidelines for subject uses and activities on National Wildlife Refuges, National Parks and Preserves, and State of Alaska Critical Habitat Areas.
- Development of management guidelines for subject uses and activities on Native Corporation lands.
- Industrial projects, including fish processing and petroleum product storage and transfer.
- Construction or major additions to military facilities within the Haines Borough.

Local Participation in Planning Activities

Local participation in state and federal planning activities that affect the allocation of resources in the Haines Borough coastal zone benefits everyone involved. State and federal agencies should invite representatives of the Haines Borough Planning Commission, coastal zone communities, and major coastal zone landowners and land managers to take part when conducting regional planning and resource allocation studies. The Haines Borough Planning Commission will assist in the identification of local representatives who are capable of ensuring that the plans that are developed accurately reflect local concerns and have credibility both in the Borough and in state government.

Pre-application Meeting Between Haines Borough and Applicant

At least 60 days prior to filing a permit application for a federal, state, or local permit or approval or proposing action on a disposal or management plan, parties involved in activities on the "major project" list are strongly encouraged to present a plan for activities to the Haines Borough Planning Commission and other participants in the consistency review process. This meeting is not part of a state-coordinated consistency review and is optional.

Developers of large industrial projects allow for sufficient lead time between their plan presentation to the Planning Commission and filing the permit application so that key issues can be addressed in project planning and permit applications submitted. It is recommended that presentations include the following information, which the prospective applicant may submit to the Haines Borough in any format desired that conveys the following information clearly and in sufficient detail.

- **Project Description.** The description should consist of a narrative describing the proposed use or activity.
- **Site Description.** The description should include information about the property, as it currently exists, including such items as size, existing structures, vegetation, topography, and any other features that may be a factor in the design of or operation of the proposed project.

- **Owner, Sponsor or Developer.** The name of the agency, activity, business enterprise or person who will own the use should be provided, along with the name of other operators, if any.
- **Location and Size.** The location and size of the proposed project should be identified. A map, prepared at the most appropriate scale, and which may initially be hand drawn, should be provided showing the location of the proposed use and any structures, roads or alterations planned for the area. As the significance or complexity of the proposed project increases, the Haines Borough may, in its discretion, determine that professionally prepared maps and other documentation are needed at the time of application.
- **Construction Schedule.** The dates of any construction or other preparatory site activity should be given.
- **Operation Schedule.** The dates, times, and, if applicable, seasons of operation should be given.
- **Special circumstances.** Any special circumstances that exist that effect decisions made should be described.
- **Impact Assessment.** The prospective applicant's assessment of the impact on Haines Borough coastal zone resources that will be created by the proposed use should be given.
- **Statement of Consistency.** The applicant should provide a sufficiently detailed statement demonstrating that he or she has assessed the project against applicable Haines Borough CMP policies and believes that the proposed use is consistent with the Haines Borough CMP. Supporting material, such as studies and assessments supporting the prospective applicant's assertions, should be submitted to support any area where compliance is not apparent. Written justification for deviating from any applicable Haines Borough CMP policy should be provided in the event that the proposed use does not comply with one or more of the pertinent policies.
- **Mitigation Measures.** Any actions or measures that will be undertaken to bring a nonconforming proposed use into conformity with the policies of the HCMP should be explained.

The Haines Borough recommends that the applicant provide the following additional information in connection with proposed uses that are of large size, occupy a large land area, involve intensive activities, or are generally complex in nature:

- **Statement of Local, State or Federal Need.** Information supporting the public need and necessity for, and the benefit to be gained from, the project;
- **Alternative Sites.** Consideration of alternative locations outside the Haines Borough coastal zone.
- **Alternative Size and Scope.** Consideration of a reduced size and/or scope of the project.
- **Alternative Development Schedule.** Consideration of alternative construction and site preparation times.

Within 30 days of notification that an applicant would like to make a presentation, the CMP Coastal Coordinator will notify affected villages, major landowners, the general public, and other consistency review participants and will work with these groups to hold the presentation meeting. As appropriate, discussions may follow the presentation to identify issues and conflicts that need to be addressed prior to permit review and preparation of the Haines Borough

consistency comment. The Coastal Coordinator and Planning Commission will be available to work with developers in project planning. The Coastal Coordinator may provide a written summary to the developer outlining major consistency concerns and policy issues. Copies will be sent to OPMP and the coordinating agency. All pre-application meetings sponsored by the Haines Borough are open to the public, and public notice of the meeting will be provided. The Haines Borough will notify appropriate state agencies in advance and invite them to attend.

After the applicant's presentation, discussions will be held to identify issues and conflicts that need to be addressed prior to the submission of a formal application. Following the meeting, the Haines Borough will undertake additional pre-application work with the prospective applicant in project planning on request.

7.8 Amendments and Revisions

Every five years, the HCMP Coordinator should initiate a local review of the approved coastal program. This formal review gives residents, developers, affected communities, and local landowners an opportunity to become familiar with the plan and its policies and to propose amendments. Changes can keep the Coastal Plan up to date and relevant. Some adjustments may be made to coastal zone boundaries or land use districts based on new information. Policies may be further refined and standards adopted to facilitate the consistency review process. More detailed plans developed for special areas, such as AMSA plans, may be incorporated into the HCMP after state and federal approval.

In addition, after completing any regional planning efforts, the Planning Commission may evaluate amending the HCMP to include pertinent policies, classifications, and resource data developed through the specific planning process. The Haines Borough Assembly must approve all amendments to the HCMP. The Commissioner of ADNR and the federal Office of Ocean and Coastal Resource Management must also approve any amendment to the HCMP. The process for amending the Haines Borough CMP is contained in regulations at 11 AAC 114.

Two processes are available to the Haines Borough for amending its plan. The minor amendment process quickly incorporates minor changes. The significant amendment process provides a more thorough review for important changes. Examples of changes that are a significant amendment to the HCMP are:

- New policies or changes to existing policies.
- Alteration to the coastal zone boundaries.
- AMSAs or ACMP special management areas.
- Restrictions or exclusions of a use of state concern not previously restricted or excluded.

7.9 Monitoring and Enforcement

AS 46.40.100 gives state resource agencies and municipalities enforcement responsibility for provisions of the Alaska Coastal Management Program. If an applicant fails to implement an adopted alternative measure or if the applicant undertakes a project modification not incorporated into the final determination and not reviewed under 11 AAC 110.800- 820, it is a

violation of the Alaska Coastal Management Program. The responsibility for enforcing alternative measures carried on state and federal permits rests with the permitting agency. The Haines Borough strongly encourages the state to enforce alternative measures and bring violators into compliance.

District policies and ACMP standards are implemented at the state level through alternative measures incorporated into the project description. The ACMP does not issue a separate coastal permit but relies on existing state authorities. Thus, state monitoring and enforcement of the ACMP occurs primarily through agency monitoring and enforcement of alternative measures on their permits. A district can assist in this process by monitoring projects and providing information to appropriate state agencies.

The Haines Coastal Coordinator and the Planning Commission have first-hand knowledge of local concerns and issues related to development activities. The HCMP Coordinator and Planning Commission may, within legal and logistical constraints, assist agencies and municipalities in their monitoring and compliance efforts. The intent is to ensure that alternative measures associated with the HCMP are carried out in the development process.

The HCMP Coordinator is the key individual in monitoring projects to ensure that alternative measures are carried out in the development process. The HCMP Coordinator and Planning Commission will rely on community input in monitoring implementation of alternative measures. Individuals, local governments, and landowners in the Haines Borough coastal zone may report suspected violations to the HCMP Coordinator, Planning Commission, or state and federal resource agencies. The HCMP Coordinator will investigate reports of violations and follow up with appropriate action to ensure state or federal enforcement. The HCMP Coordinator and Planning Commission will work with state and federal agencies in monitoring and enforcement and provide responsible agencies with copies of local reports on noncompliance. This will include adherence to permit conditions, cooperative plans and the policies of the HCMP.

If a subject use requires a zoning permit or approval from the Haines Borough, the Borough will carry on its zoning permit all conditions placed on the subject use in the consistency determination. In such instances, the permitting state and/or federal agency will share concurrent jurisdiction with the Haines Borough and either or both may seek to enforce the conditions placed on the subject use.

7.10 Public Education and Outreach

The HCMP Coordinator is committed to understanding how coastal management can benefit communities and residents within borough boundaries and knows the most important way to gain this understanding is to listen to people. This local coastal professional also knows if coastal management is presented within the framework of local issues, concerns, and visions for the future, residents will be more likely to participate and support the program.

The HCMP Coordinator already has a general feel for local issues and sentiment and should encourage decision-making bodies and residents of the borough to use coastal management as a

way to identify areas appropriate for development, keep coastal resources healthy, and as a way to effect state and federal decision-making. The Coordinator also wants to ensure that local knowledge and public needs are heard and considered when local coastal resources and way of life might be affected by a development proposal. Other education and outreach opportunities that the Coordinator intends to consider as he or she identifies how best to communicate about coastal management within the Haines Borough are:

- Request general ACMP publications from OPMP and make sure these are available to local residents. The Coordinator plans to apply labels with local contact information to each of these publications before putting them out in the borough office reception areas and his or her office.
- Use public service announcements (radio and newspaper), flyers, newspaper ads, and phone calls to encourage the input from residents during the review of projects.
- Encourage local residents to communicate with the coastal district coordinator about coastal issues.
- Talk to legislators about how the ACMP benefits the people, local coastal resources, and the local economy.
- Provide local news and volunteer to write articles for the ACMP website.
- Develop a borough coastal management web site and provide a link to the ACMP website. Once this website is regularly providing information considered important by locals, the Coordinator plans to develop a promotional strategy for getting the word out about this valuable information source.
- Train local teachers or other environmental educators about ACMP-related materials including the “Discover the Zone” game for kids.
- Be available for work in the schools, especially during Sea Week in the spring.
- Volunteer to serve as a mentor to high school students, especially if a local high school is participating in the annual National Ocean Sciences Bowl quiz game and research paper hosted at the Alaska SeaLife Center in Seward.
- Develop a presentation on the local coastal management program and the ACMP and pursue speaking engagements with different community organizations. The Coordinator plans to request assistance from OPMP to develop and, if appropriate, deliver this presentation.
- Participate in state, federal, and tribal natural resource planning efforts.
- Participate in watershed volunteer efforts and help them seek sources of funding.
- Encourage borough assembly and planning commission members to participate in education and outreach efforts, and provide them with the resources they will need to do this.
- Organize and participate in an annual beach clean up. If appropriate, coordinate this local effort with the international beach clean up held every year in September.
- Use OPMP as a resource.

8.0 Public Participation

This section summarizes the work of the Planning Commission and public and agency involvement in developing this Final Draft Plan Amendment. The Haines Planning Commission began the process in June 2004 by directing the Coastal Coordinator to review and develop the Plan Evaluation. In July the Assembly approved the effort to move forward with the revision and update of the Haines Coastal Management Plan. It was decided that there would be no change to the coastal district boundary as part of this plan revision (thus retaining the former City of Haines boundary as the coastal district boundary).

The Haines Borough Coastal Coordinator attended the ACMP District Workshop in Anchorage on October 22-24, 2004, and met with state and federal resource agencies during the Resource Fair. During the plan revision process, the Borough and its consultant Sheinberg Associates contacted resource agency staff to obtain information relevant to the resource inventory, analysis and enforceable policies of the coastal management plan

The revision process began in November 2004 with a publicly noticed Planning Commission meeting with coastal coordinator Scott Hansen and consultant Sheinberg Associates in Haines Borough Assembly chambers. Another Planning Commission meeting was held via teleconference on February 17 to discuss the developing draft plan. Other discussions occurred via telephone with the Coastal Coordinator and residents or member organizations knowledgeable on local issues. Local agency and public comment on draft sections was sought during the revision process.

The public was invited to comment in writing or verbally on the Public Review Draft during the 21-day public review period from March 14 through April 4, 2005. The Planning Commission hosted a public meeting on March 17 to review the Draft Plan and hear public comment. No public comments were received though various state and federal agencies supplied comments as recorded. The Planning Commission and Assembly, as part of their process of considering resolutions of support for the plan before it is submitted to OPMP, held additional public hearings on May 12 and May 24, 2005. On May 24, 2005, the Assembly adopted the revised HCMP through Resolution 05-05-063.

Appendix A - Haines Enforceable Policies

The enforceable policies of the Haines Coastal Management Program are listed in this appendix.

The HCMP policies flow from the Issues, Goals and Objectives outlined in chapter 4 and the Resource Inventory and Analysis set out in Chapter 3. The enforceable policies of this HCMP apply only to land and water uses and activities within the Haines Coastal Management Area Boundary (Figure 2), which is the same as the former City of Haines corporate boundary. Uses and activities occurring on lands and waters outside the Haines Coastal District Boundary are subject to Haines and ACMP policies only if a proposed action will have a direct and significant affect on coastal resources within the Haines Coastal Management Area coastal district boundaries.

Coastal Development

ACMP Coastal Development Standard (11AAC 112.200)

- (a) In planning for and approving development in or adjacent to coastal waters, districts and state agencies shall manage coastal land and water uses in such a manner that those uses that are economically or physically dependent on a coastal location are given higher priority when compared to uses that do not economically or physically require a coastal location.
- (b) Districts and state agencies shall give, in the following order, priority to
 - (1) Water-dependent uses and activities;
 - (2) Water-related uses and activities; and
 - (3) Uses and activities that are neither water-dependent nor water-related for which there is no practicable inland alternative to meet the public need for the use or activity.
- (c) The placement of structures and the discharge of dredged or fill material into coastal water must, at a minimum, comply with the standards contained in 33 C.F.R. Parts 320 - 323, revised as of July 1, 2003.

CDLU-1. Waterfront property uniquely suited for water-dependent or water related uses are reserved for the following, listed in order of priority and consistent with permitted and conditionally zoned uses:

- a) Water dependent uses and activities. Such uses are economically or physically dependent upon a coastal location, and as such are given a higher priority than those land and water uses and activities that are not water-dependent. The following non-exhaustive list of land and water uses and activities are considered “water dependent”: fish hatcheries; mariculture activities; fish processing; log storage and transfer; float plane bases, boat harbors, freight, fuel, or other docks; marine-based tourism facilities; boat repair, haul

outs, marine ways and accessory attached housing; remote recreational cabins dependent on water access; and facilities that serve as inter-modal transportation links for the transfer of good and services and people between the marine transportation system and the road system.

- b) Water-related uses and activities. The following non-exhaustive list of uses and activities are considered “water-related”, and thus given a lower priority of use than those previously listed as “water dependent”: marine retail stores and commercial activities such as hotels, restaurants, and other similar uses that provide views and access to the waterfront.
- c) Uses and activities necessary to meet the public need for which there is not practicable inland alternative.

CDLU-3. Fill Below Mean High Water. Piling-supported or floating structures shall be used for construction below mean high water unless clear and convincing evidence shows that all of the following conditions exist:

- a) There is a documented public need for the proposed activity;
- b) There are no practicable inland alternatives that would meet the public need and allow development away from the waterfront;
- c) Denial of the fill would prevent the applicant from making a reasonable use of the property;
- d) The fill is placed in a manner that minimizes impacts on adjacent uses, public access easements along the shoreline and water views;
- e) The fill is the minimum amount necessary to establish a reasonable use of the property; and
- f) Development of the property would support a water dependent use.

The following publicly-owned facilities are exempt from this policy: Log and mining transfer facilities, bridges, causeways, boat ramps, utility transmission facilities, pipelines, treatment plant lines and outfalls, and transportation facilities.

CDLU-5. Tidelands Viewsheds. Placement of structures or dredged or fill material in tidelands below mean high water shall minimize to the maximum extent practicable obstruction of the values for which the water views are currently enjoyed.

CDLU-6. Floating Facilities. Floating facilities located in coastal waters in the Haines Coastal District shall be sited and operated to reduce exposure to storm and tidal action, utilize secure anchoring to prevent pulling of the anchor or grounding, and minimize proximity to other floating and fixed facilities.

CDLU-7. Maintenance of Public Access to Coastal Water. Proposed uses or activities shall not impede or degrade access to and within designated recreation areas as identified on Figure 15.

Natural Hazard Designation

The areas mapped on Figure 5 and described in Sections 3.2.4 and 3.5.3 of the Resource Inventory and Analysis are designated as Natural Hazard areas (in accordance with 11 AAC 112.210(a) and 11 AAC 114.250(b)) in the Haines coastal district.

Recreation

Recreation Designation. The following areas in the Haines Coastal district are designated as recreation areas in accordance with 11 AAC 114.250(c and d). These areas are mapped on Figure 15. Information that justifies their designation is provided in the Resource Inventory and Analysis in Section 3.5.2.

Designation as an area for recreation use under the HCMP does not mean that recreation is the only appropriate use of the area. However, uses and activities proposed to take place within these designated areas must comply with the enforceable Recreation policies of the HCMP.

- a) Tlingit Park and Lookout Park
- b) Oslund Park
- c) Beaches and tidal pools within the intertidal zone of Portage Cove as follows:
 - 1. Between the Port Chilkoot Dock and the Downtown Boat Harbor;
 - 2. Between the Klukwan Inc. petroleum dock and the State Park and Campgrounds; and
 - 3. Beyond the developed areas north of the Downtown boat harbor along the beaches of Portage Cove to Nukdik Point.
- d) The Southeast Alaska State Fairgrounds
- e) The Fort Seward Parade Grounds (as long as the current public land use agreement between the private owner and the Haines Borough remains in effect).
- f) Lutak Inlet
- g) McClellan Flats access
- h) Chilkat River Beaches and Tidelands (Carr's Cove to Jones Point, Borough lands south of Jones Point and south of Carr's)
- i) Chilkat Peninsula
- j) Tanani Point beaches

R-1. Protection of Recreation and Tourism Values. Projects and activities on lands and waters designated for recreational activities as shown in Figure 15, shall be located, designed, constructed, and operated to avoid, minimize, or mitigate significant adverse impacts to recreation values include activities such as fishing, beach combing, hiking, bird watching, boating and kayaking, boat anchorages, picnicking, camping and campfires, access, playing outdoor sports, bicycling, skiing, learning about local culture, and hunting.

R-3. Utilities. To the extent practicable, utilities shall be installed underground in the designated recreation use areas for which enjoying scenic views is listed as a recreational use in Section 3.5.2 of the Resource Inventory and Analysis

Subsistence Designation

The following areas in the Haines coastal district are designated for subsistence in accordance with 11 AAC 114.250(g). These areas are mapped on Figure 13. Information that justifies their designation is provided in the Resource Inventory and Analysis section 3.3.

Commercial Fishing and Seafood Processing

Commercial Fishing and Seafood Designation. The following areas in the Haines coastal area are designated as commercial fishing and seafood processing areas in accordance with 11 AAC 114.250(f). These areas are mapped on Figure 14. As described in 3.5.1, the fishing industry is of specific, critical concern to the vitality of Haines' economy, and measures to promote the industry are warranted. Information that justifies their designation is adequately provided in the Resource Inventory and Analysis in Section 3.5.1.

- a) The Port Chilkoot Dock area, and uplands and tidelands lots adjacent to (and north of) the downtown Boat Harbor in Portage Cove, and
- b) The Lutak Dock.

CFSP-1. Permitting Priority. Uses and activities in the designated area on Figure 14 shall avoid or minimize interference with the development and operation of facilities related to Commercial Fishing and Seafood Processing.

Sand and Gravel Extraction Processing

ACMP Sand and Gravel Extraction Standard (11 AAC 112.260)

Sand and gravel may be extracted from coastal waters, intertidal areas, barrier islands, and spits if there is no practicable alternative to coastal extraction that will meet the public need for the sand or gravel.

SG-1. Location of Sand and Gravel Sites. To the extent practicable, extraction of sand, gravel and rock shall be permitted in the following order of priority:

- a) Existing, approved upland sand and gravel pits;
- b) Reuse of sand and gravel from abandoned development areas, unless reuse would cause more environmental damage than non-use from the area;
- c) New upland sites approved for the purpose; and
- d) Streams that do not provide fish habitat.

Prehistoric, Historic, & Archaeological Resources

ACMP Historic, Prehistoric, and Archeological Resources Standard (11 AAC 112.320)

- (a) The department will designate areas of the coastal zone that are important to the study, understanding, or illustration of national, state, or local history or prehistory, including natural processes.
- (b) A project within an area designated under (a) of this section shall comply with the applicable requirements of AS 41.35.010 – 41.35.240 and 11 AAC 16.010 – 11 AAC 16.900.

Prehistoric, Historic and Archaeological Designation. The following areas in the Haines coastal district are designated as important to the study, understanding or illustration of national, state or local history or prehistory in accordance with 11 AAC 114.250(i). These areas are mapped on Figure 12. Information that justifies their designation is provided in the Resource Inventory and Analysis in section 3.3.2 Cultural and Archaeological Resources.

- a) Fort William H. Seward, listed on the National Historic Register as a National Historic Landmark.
- b) The Haines Town site Local Historic District is defined by the boundary lines established in the original 1913 Haines Town site Survey. Within the historic town site, the Division of Parks and Outdoor Recreation, Office of History and Archaeology have inventoried 35 structures. The Deishu Village site is also within the historic district.
- c) Tlingit Park and historic cemetery.
- d) The T'anani Village Site and Nukdik/Tanani Beach Site are within the area annexed to the former City in June 1993.
- e) Presbyterian Mission and Native School site
- f) Portage Cove burial site.
- g) South Portage Cove native fortification site.
- h) Anway Homesite historic structure and property.
- i) Yandeist'akye' historic native settlement.

PHAR-1. Coordination. For projects within the historic and prehistoric designated area as shown in Figure 12, if previously undiscovered artifacts or areas of historic, prehistoric, or archaeological importance are encountered during development, an artifact curation agreement will be developed between the landowner, appropriate state or federal preservation authorities, and curation facility if artifacts are disturbed by the project.

PHAR-2 Protection of Cultural Resources. For projects within the historic and prehistoric designated area as shown in Figure 12 the applicant shall submit with the consistency review packet an assessment of potential impacts to historic and prehistoric resources and a plan for the protection of those resources. As part of the assessment, the applicant shall consult with the Haines Coastal District and tribal entities.

Appendix B - Haines Borough Enforceable Policies Cross Reference Table

Enforceable Policy Chapter, Name and Page			Supporting Information for Enforceable Policies			
			Issues, Goals, and Objectives	Resource Inventory & Analysis	Maps	Appendices
CDLU-1.	Waterfront property uniquely suited for water-dependent or water related uses	p. A-1	p. 4-6, Obj. E3, E5	p. 3		
CDLU-3.	Fill Below Mean High Water	p. A-2	p. 4-6, Obj. E3	p. 3		
CDLU-5.	Tidelands Viewsheds	p. A-2	p. 4-6, Obj. E4	p. 3		
CDLU-6.	Floating Facilities	p. A-2	p. 4-6, Obj. E6	p. 3, Table 4.1		
CDLU-7.	Maintenance of Public Access to Coastal Water	p. A-2	p. 4-6, Obj. E3,E4	p. 4		
R-1.	Protection of Recreation Values	p. A-3	p. 4-7, Obj. G3	p. 4	p. 3-75 Fig 15	
R-3.	Utilities	p. A-3	p. 4-7, Obj. G7	p. 5, Table 5.2		
CFSP-1.	Borough Permitting Priority	p. A-4	p. 4-9, Obj. K1	p. 5	p. 3-68 Fig 14	
SG-1.	Location of Sand and Gravel Sites	p. A-4	p. 4-10, Obj. N4	p. 3, Table 2.1		
PHAR-1.	Coordination	p. A-5	p. 4-11, Obj. R3	p. 3	p. 3-49 Fig 12	
PHAR-2	Protection of Cultural Resources	p. A-5	p. 4-11, Obj. R3	p. 3	p. 3-49 Fig 12	

Appendix C - Haines Borough Designated Areas Cross Reference Table

Designated Areas Chapter, Name and Page		Resource Inventory & Analysis	Maps	Appendices
Natural Hazards	3.2.4	3-11	3-14	
Recreation	3.5.2	3-74	3-75	
Areas important for the study, illustration and understanding of History, Pre-history and Archeology	3.3.2	3-47	3-49	
Areas suitable for the development of facilities related to Commercial Fishing and Seafood Processing	3.5.1	3-64	3-68	