SKAGWAY

COASTAL MANAGEMENT
&
ENERGY IMPACT PROGRAM

PREPARED BY
ENVIRONMENTAL SERVICES Ltd.

SKAGWAY COASTAL MANAGEMENT
AND
ENERGY IMPACT PROGRAM

CONCEPT APPROVAL DRAFT

prepared by

ENVIRONMENTAL SERVICES LIMITED
835 West Ninth Avenue
Anchorage, Alaska 99501
907/276-4216

August 1980

TABLE OF CONTENTS

Chapter		Page
	INTRODUCTION	1
I.	INVENTORY AND ANALYSIS	1-1
	Natural Resources	1-3
	Coastal Habitats	1-5
	Physical Oceanography	1-11
	Marine Life	1-12
	Hydrology and Water Resources	1-14
	Freshwater Fish	1-16
	Climate and Air Quality	1-20
	Geology, Soils and Slope	1-23
	Hazards	1-29
	Vegetation	1-35
	Wildlife	1-36
	Cultural Resources	1-41
	Regional Land Use and Status	1-43
	Local Land Use and Status	1-48
	Population	1-61
	Employment	1-65
	Transportation	1-67
	Utilities	1-73
	Community Facilities and Services	1-80
	Community Finance	1-83
	History, History Sites and Archaeological Resources	1-87
	Recreation Areas & Facilities	1-88
	Economic Resources and Activities	1-95
	Transportation	1-97
	Pipeline Transshipment	1-101
	Klondike Gold Rush National Historical Park	1-103
	Tourism	1-104
	Trade and Services	1-108
	Fishing, Timber and Agriculture	1-109
	Other Economic Activities	1-110
II.	COASTAL ZONE MANAGEMENT	2-1
	Coastal Management Boundaries	2-5
	Issues, Goals and Objectives	2-13
	Use and Activity Analysis	2-19
	Uses of State Concern	2-21
	Subject Uses	2-21
	Coastal Management Policies and Standards	2-22
	Policies and Standards for Uses and Activities	2-23
	Policies and Standards for Habitats, Resources and Hazards	2-42
	Proper and Improper Use Determination	2-47

Chapter		Page
	Land Use Policies and Standards	2-49
	Skagway Townsite	2-51
	Upper Skagway River and Klondike Highway	2-64
	Dyea Road and Surrounding Area	2-69
	Dyea Valley	2-78
	Areas Meriting Special Attention	2-81
	Municipal Land Management	2-93
	Energy Impact Element	2-99
	Timing	2-102
	Port Facilities	2-102
	Transportation	2-102
	Housing	2-104
	Employment	2-106
	Entertainment	2-106
	Power and Communication	2-107
	Coordination	2-107
	Policies	2-107
III.	ORGANIZATION AND IMPLEMENTATION	3-1
	Community Finance Plan	3-3
	Priority Rating and Capital Improvements	3-5
	Public Improvements	3-6
	Municipal Services	3-31
	General Revenue Sources	3-33
	Code Amendments	3-39
	Title 18 - Building Regulations, Chapter 50	3-41
	Title 95 - Zoning	3-42
	Municipal Organization, Administration and Coordination	3-59
	Existing City Organization	3-61
	Program Implementation	3-65
	APPENDIX A	A-1
	APPENDIX B	B-1

LIST OF FIGURES

Figure		Page
0.1	Vicinity Map	5
1.1	Coastal Habitats	1-7
1.2	ADFG Stream Number	1-17
1.3	Glacial Advances and Runoff	1-25
1.4	Geophysical Hazards	1-31
1.5	Habitats for Wildlife	1-37
1.6	Land Use Policies and Standards	1-45
1.7	Historic District/Industrial Shoreline	1-49
1.8	Vacant Lots	1-53
1.9	Zoning District	1-59
1.10	Function of Community	1-63
1.11	Overall Economic Development Report	1-77
1.12	Recreation Areas and Historic Sites	1-89
1.13	Transportation, Mineral Sites and Hydroelectrical Potential	1-99
2.1	Coastal Zone Biophysical Boundary	2-9
2.2	Coastal Management	2-11
2.3	Public Recreation	2-33
2.4	Proposed Zoning Designations	2-53
2.5	Proposed Zoning Designations	2-55
2.6	Proposed Zoning Designations	2-57
2.7	Upper Skagway Valley	2-67
2.8	Planning Areas	2-71
2.9	Proposed Waterfront Park	2-85
2.10	Land Ownership	2-97
3.1	City of Skagway Organizational Chart	3-63

LIST OF TABLES

Table		Page
1.1	Tidal Information at Skagway, Alaska	1-12
1.2	Mean Monthly and Annual Discharge	1-15
1.3	Climatic Data for Skagway	1-22
1.4	Land Ownership in Lots	1-55
1.5	Structural Condition	1-56
1.6	Population Characteristics	1-62
1.7	Unemployment	1-66
1.8	Tourist Transportation	1-69
1.9	U.S. Custom Figures by Mode of Transport	1-70
1.10	Marine Highway Traffic	1-72
1.11	Historic Sites in the Skagway Area	1-91
3.1	Various Projects by Priority	3-7

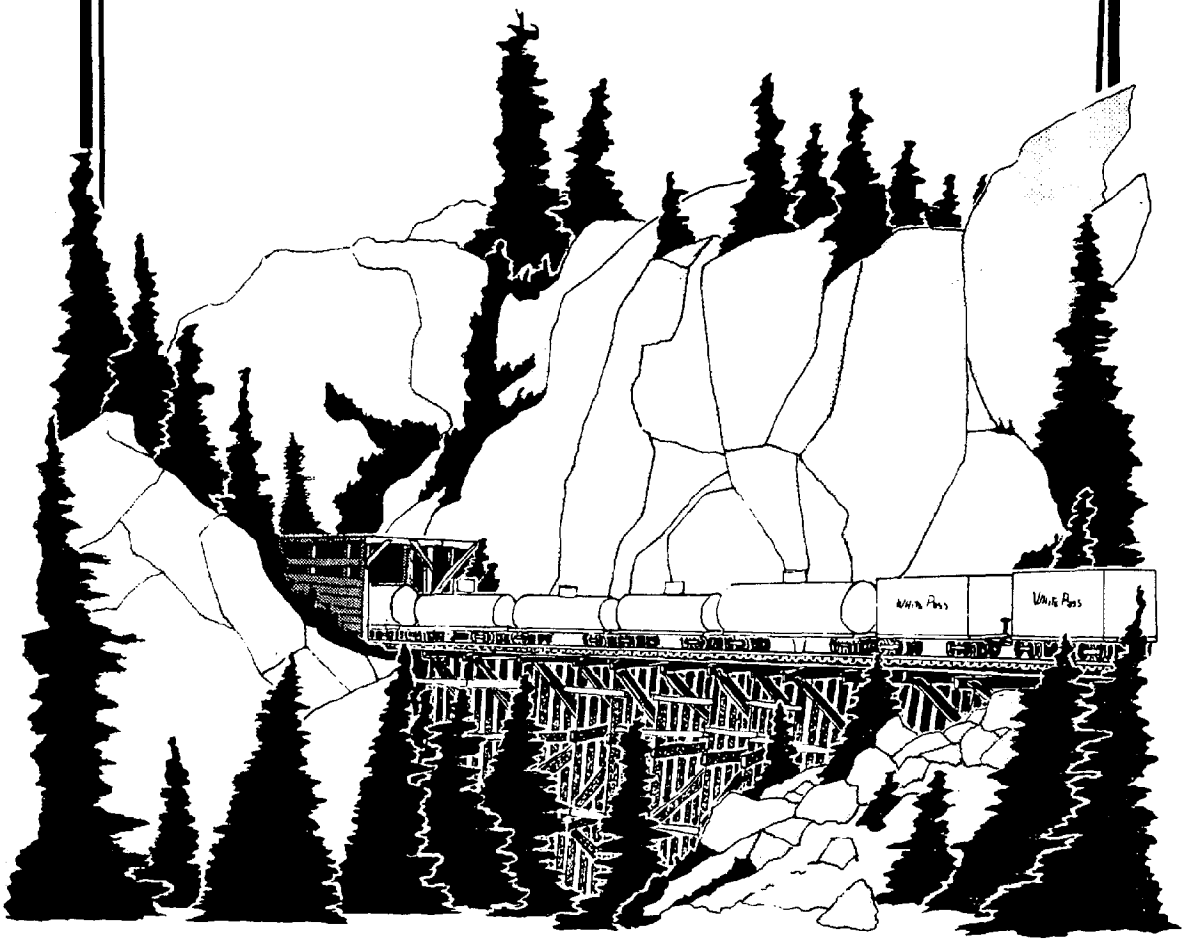
This coastal management and coastal energy impact program was prepared by the planning staff of Environmental Services Limited (ESL) for the City of Skagway. This project was supported in part by funds from the Alaska Coastal Management Program and the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, administered by the Division of Community Planning, Department of Community and Regional Affairs.

Special acknowledgment should be given to ESL planning staff members: John Sonnen, planner; Dick Mylius, planner; Lynne Minton, geologist; Steve Counsell, graphic artist; Cyndi Schultz, word processor and editor; and Dave Simpson, planning director, for the extra time and effort they contributed in the research, development and production of this program.

Direction for this coastal development program was provided by the mayor, city council and community of Skagway. The assistance of Gil Acker, city manager, was invaluable in providing local information and program direction.

Coordination with local, state and federal agencies was essential to preparation of this report. In particular, we wish to thank Richard Spitler, of the Alaska Department of Community and Regional Affairs, Community Planning Division, as well as the Alaska Department of Fish and Game, Habitat Protection Section, the Division of Lands of the Alaska Department of Natural Resources and the U.S. Park Service, Skagway Office, for their participation in this planning effort.

INTRODUCTION



The city of Skagway has been and will continue to be dependent on its coastal location and resources. The coastal environment surrounding Skagway provides economic and recreational opportunities, an aesthetic setting and an atmosphere valued by local residents.

Realizing the statewide dependence on coastal resources, the Alaska State Legislature passed the Alaska Coastal Management Act in June 1977. The act mandates local planning for the balanced management of coastal resources and for the wise development of the coastal area. The state program was developed so as to be consistent with the Federal Coastal Zone Management Act of 1972, as amended.

As a first class city with planning and zoning powers, the City of Skagway has been defined as a coastal district. Local (district) coastal management programs are the building blocks in the statewide effort toward coastal planning. The rationale for originating plans at the local level is to increase local voice and control in planning and developing the city and in utilizing its coastal resources. The Skagway Coastal Management Program will provide a forum to efficiently apply existing federal, state and local controls and programs to the management and utilization of coastal lands and waters in the Skagway area, with primary direction coming from the local level. Also, because the city of Skagway is likely to become a transshipment point for materials to build the proposed Alcan natural gas pipeline, this document addresses the energy impact aspects of this development in the energy impact element.

SKAGWAY PROGRAM APPROACH

A four-phase approach has been used to develop the Skagway Coastal Management and Energy Impact Program.

Phase I	Background Studies
Phase II	Management Plan
Phase III	Implementation Program
Phase IV	Program Approval

Throughout preparation of the program, the consultants, Environmental Services, Limited, have worked closely with local officials, community leaders and interested citizens to ensure that local needs are met. This four-phase process is described as follows.

Phase I Background Studies

In this phase, background information necessary for development of the Skagway Coastal Management and Energy Impact Program was collected and analyzed. During this phase, ESL worked with city officials and concerned citizens, and reviewed studies, documents and local newspaper articles to identify local issues and needs. A community planning questionnaire was prepared and distributed to further involve the citizens of Skagway in the process of accurately accessing issues, goals and objectives of this planning effort.

Under the direction given by the standards and guidelines of the Alaska Coastal Management Program, a resource inventory and analysis of the Skagway area was conducted. Physical and biological resources and their limitations and capability for development were identified. Land use and status, demographics (population, housing, employment), community transportation, utilities, facilities and services and their financing were assessed. Historic, recreational and aesthetic values were also identified. Finally, existing and potential economic activities in or affecting Skagway were discussed. These industries provide the economic backbone vital to Skagway's very existence and their future will ultimately shape Skagway's destiny. These studies provide the base and direction for the entire planning effort.

Phase II Coastal Zone Management and Community Plan

Based on the information obtained in the first phase, a comprehensive coastal management plan was prepared to address the city's needs and to meet federal and state requirements. The plan is consistent with community goals and desires and the region's physical opportunities and constraints. The plan is composed of three sections: issues, goals and objectives; use and activity analysis; and land use policies and standards. The issues, goals and objectives section provides direction for the land use plan and implementation program. The issues, goals and objectives were developed primarily by the residents and leaders of Skagway. They indicated a desire for community development and improvement that would improve the economy, yet protect the physical environment and lifestyle of Skagway.

The use and activity analysis section identifies uses and activities subject to the coastal management program. Policies and standards were developed to guide uses and activities consistent with the identified goals and objectives, the physical opportunities and constraints, and federal, state and local regulations. Nearly all major land use developments, both public and private, within the coastal management area are subject to the policies and standards of this program. These policies and standards provide for development and operation of industrial, commercial, residential, recreational and other uses in a manner that protects fish and wildlife habitats and the quality of life in the Skagway area, including the lifestyle, historic resources, scenic quality and recreational opportunity.

The land use policies and standards section identifies the general suitability of an area for various uses and activities and, as the section title implies, land use policies and recommendations are provided. These policies and recommendations are based on the natural capabilities of the land to support a particular type of development and on community needs and desires.

A land management program identifies city property and proposes the purchase, sale, lease and exchange of lands with other governmental entities and private land owners needed to satisfy coastal management and community development policy.

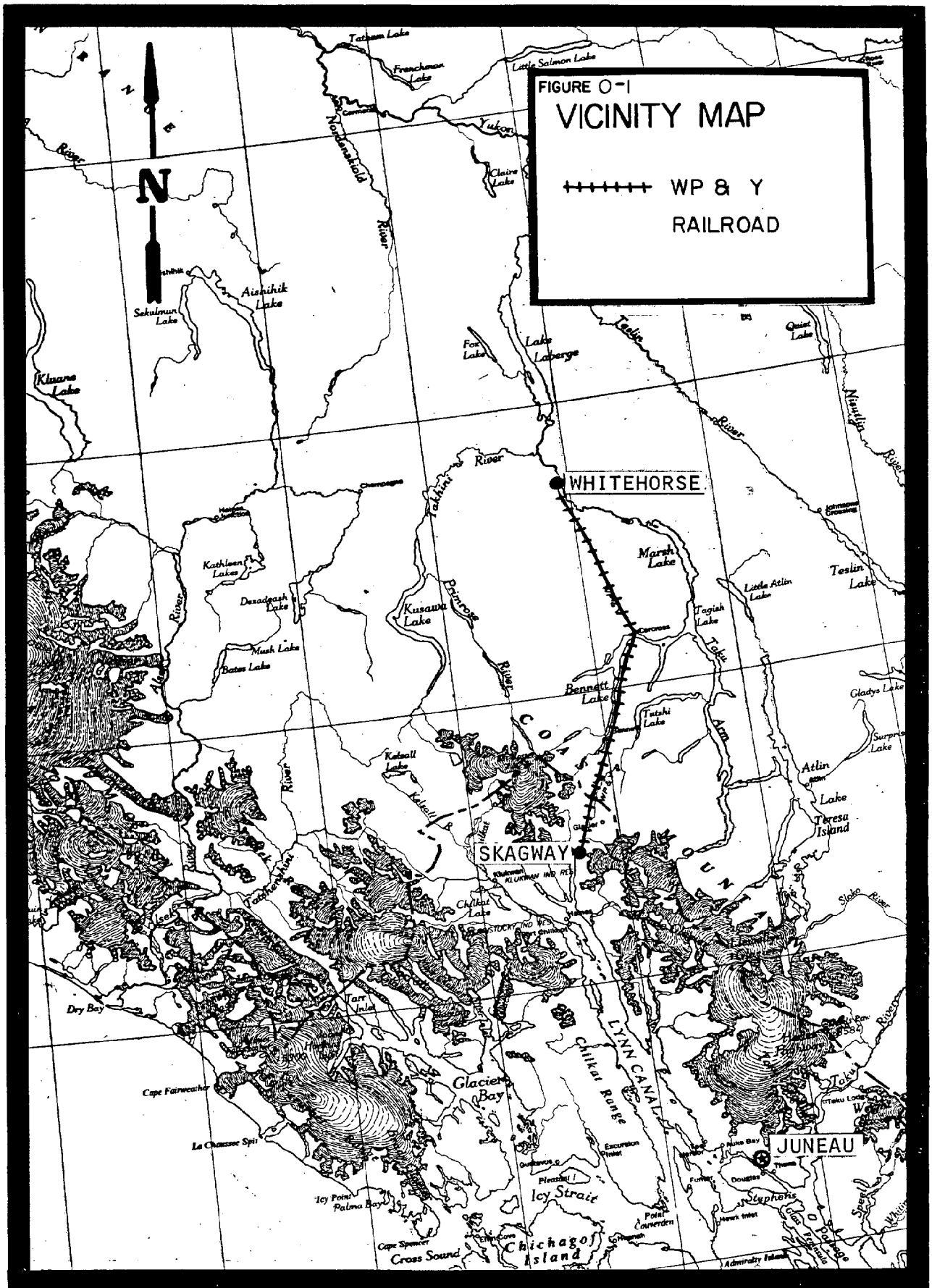


FIGURE O-1
VICINITY MAP
WP & Y
RAILROAD
N
WHITEHORSE
SKAGWAY
JUNEAU
Tatsam Lake
Frenchman Lake
Little Salmon Lake
Yukon
Claire Lake
Nordenskiold River
Aishihik Lake
Sekulmun Lake
Kluane Lake
Fox Lake
Lake Laberge
Teslin River
Quiet Lake
Nisutlin River
Takhini River
Kathleen Lakes
Dezadeash Lake
Mush Lake
Bates Lake
Kusawa Lake
Primrose River
Marsh Lake
Tagish Lake
Little Atlin Lake
Teslin Lake
Bennett Lake
Tutshi Lake
Taku Arm
Gladys Lake
Surprise Lake
Atlin Lake
Teresa Island
Kelsall Lake
Kelsall R
Chilkat Lake
Tatshenshini River
Dry Bay
Tarr Inlet
Glacier Bay
Chilkat Range
LYNN CANAL
Cape Fairweather
La Chaussee Spit
Icy Point
Palma Bay
Icy Strait
Cape Spencer
Cross Sound
Chichagof Island
Point Couverden
Stephens Passage
Admiralty Island
Taku River
Sloko River
Speel
SCALE 1:2,000,000
10 0 20 40 60 80 100 MILES
10 0 50 100 150 KILOMETERS

The last element of this phase consists of an energy impact element. Because the development of major energy facilities such as the proposed Alcan natural gas pipeline could have a significant impact on the community, Skagway has been granted Coastal Energy Impact Program (CEIP) monies. The monies are available under Section 308 of the Federal Coastal Zone Management Act to fund planning and development of projects and programs necessary to provide public facilities and services required as a result of coastal energy development. Implementation of the coastal energy impact element for Skagway will help eliminate short-term problems and conflicts and prevent any long-term impacts on the community caused by pipeline-related activity.

Phase III Implementation Program

The implementation program represents the means by which Skagway will enact its coastal management and energy impact program. The implementation section consists of three elements. A capital improvements, services and finances plan was prepared to meet community needs over the next several years. Capital improvements represent fixed cost projects such as construction of a new school, new water lines or a park. Capital improvements represent a positive and important method for implementing this program. Capital improvements often influence the location of and quality of other future development and can be used to guide community growth as the residents and leaders of Skagway desire it. By considering coastal management in the development of capital improvement plans, many program goals and objectives will be fulfilled. Recommended capital improvements and upgrading or expansion of municipal services and facilities are identified, prioritized and scheduled. Existing and alternative funding sources for these public improvements are identified.

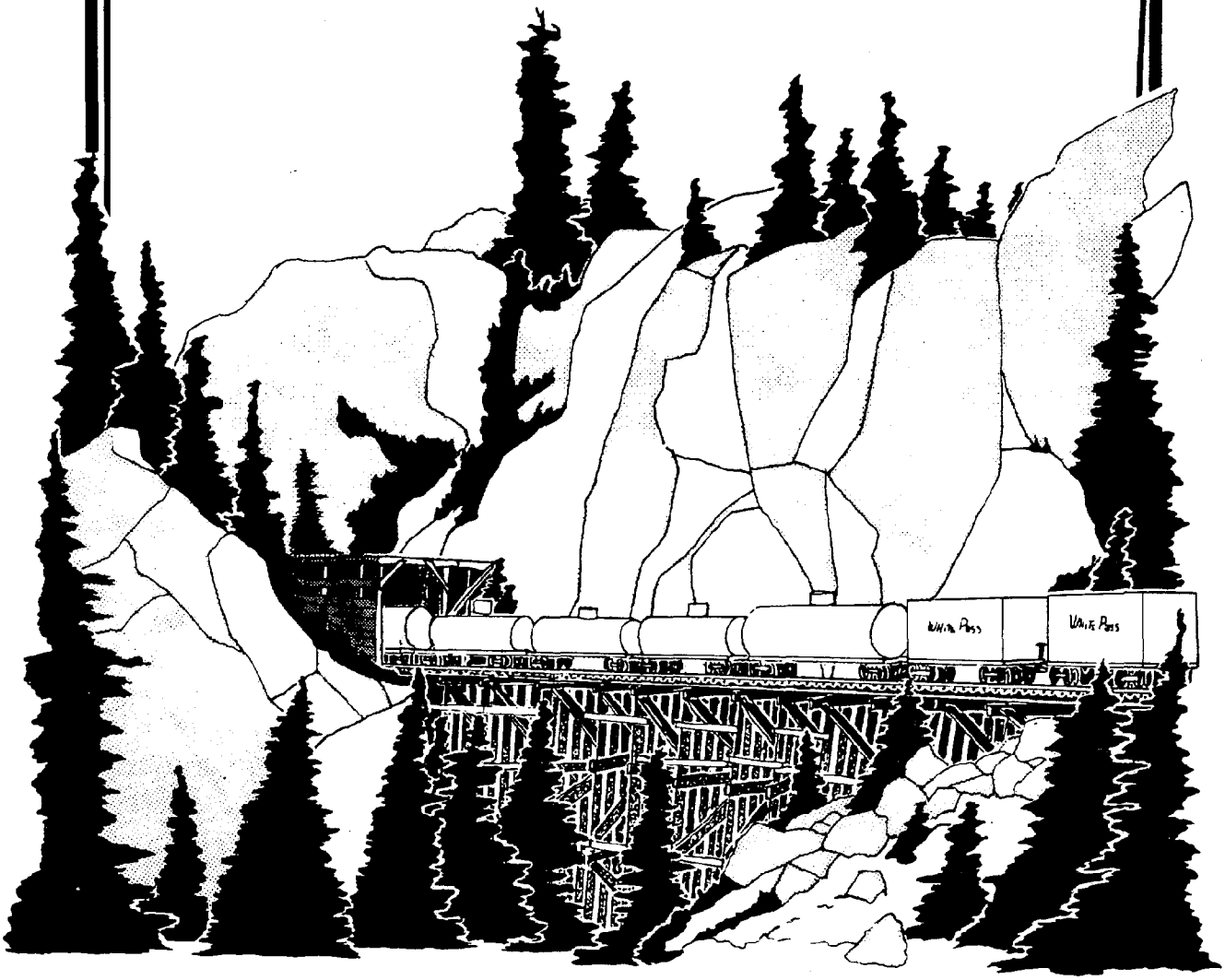
Existing municipal ordinances and codes have been reviewed and revised as necessary to implement the coastal management plan. The revisions integrate local regulations into a system that is tied to the local administrative structure, community goals and development policies and municipal service needs, yet provide flexibility of design and predictability of approach to the developer. Finally, a local organizational approach has been designed to identify administrative means to meet community needs in implementing the program while minimizing local government expense.

Phase IV Program Approval

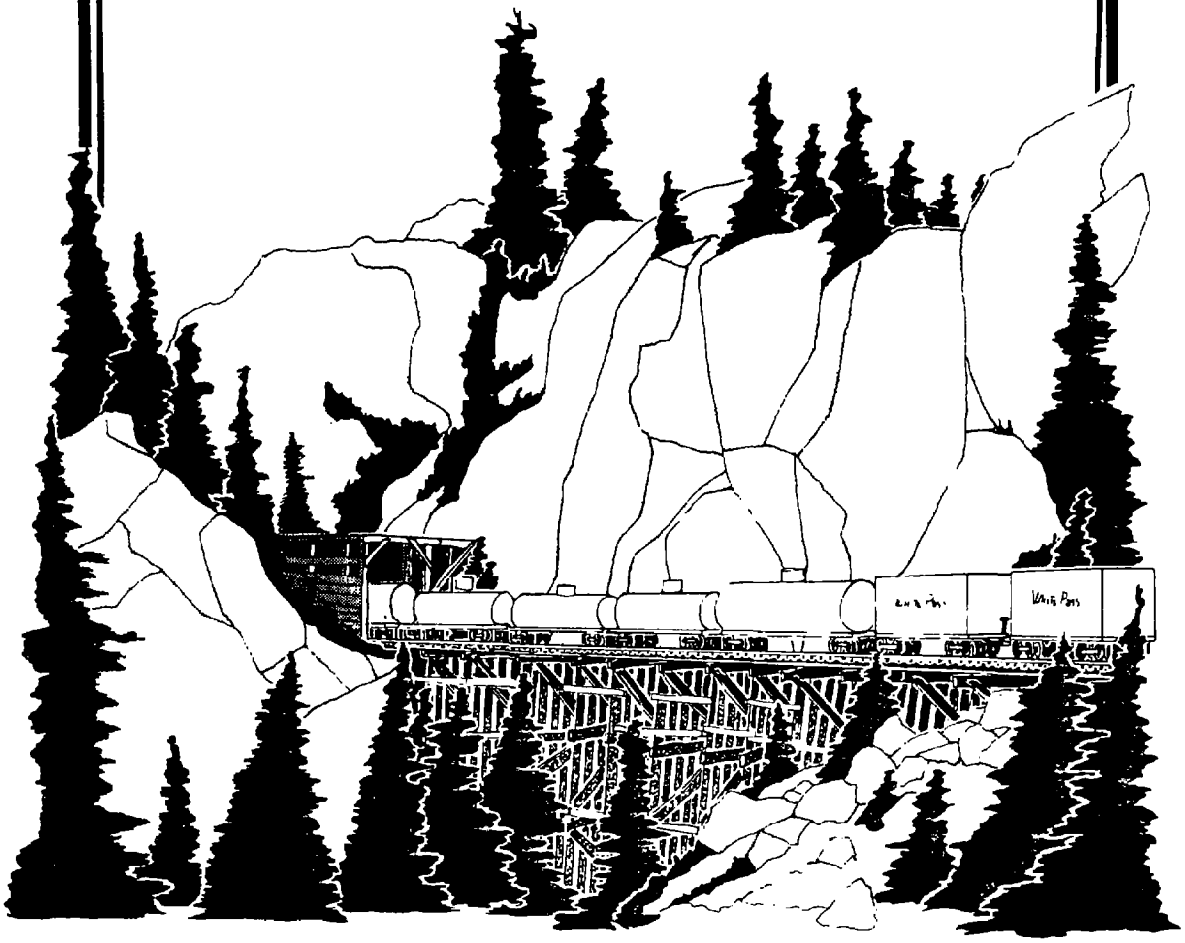
This document was reviewed by the mayor, city council and city manager as well as by state and federal agencies. With the program approved at the local level, it has been submitted to the Alaska Coastal Policy Council for approval.

CHAPTER I

INVENTORY AND ANALYSIS



NATURAL RESOURCES



COASTAL HABITATS

The standards and guidelines of the Alaska Coastal Management Program (ACMP) include standards for the management of coastal habitats (6 AAC 80.130). Habitats in the Skagway coastal area subject to the ACMP include estuaries and offshore areas, wetlands and tideflats, rivers, streams, lakes and important upland habitats. These habitats are briefly described below and identified in Figure 1-1A and 1-1B. The Marine Life, Fisheries, Vegetation and Wildlife sections of the Natural Resource Inventory contain more detailed descriptions of the flora and fauna of the Skagway area.

Coastal habitats are interdependently linked by flows of energy, water and nutrients. These habitats should therefore be managed using a holistic approach which maintains or enhances the physical, biological and chemical characteristics of these habitats, contributing to their capacity to support living resources.

Estuaries and Offshore Areas

To a large degree, estuaries and offshore areas in the Skagway area overlap. The ACMP standards give definitions of each of these habitat types, along with specific habitat maintenance standards.

An estuary is defined as 'a semiclosed coastal body of water within which seawater is measurably diluted with freshwater from land drainage.' Offshore areas are 'submerged lands and waters seaward of the coastline.' By these definitions, all of Taiya Inlet is estuary and offshore area. The mixing of freshwater and its suspended sediments and nutrients with saltwater by wind, water currents and tides usually creates a productive estuary environment; however, relative to the rest of Lynn Canal, Taiya Inlet is not very productive. This is due to the high volume of freshwater and silt and the deep, steep-sided nature of Taiya Inlet. Furthermore, the majority of the freshwater sediment and nutrient input into upper Lynn Canal comes from the Chilkoot, Chilkat and Katzehin Rivers to the south. Taiya Inlet does provide habitat for marine fish and shellfish, acts as a migratory pathway for anadromous fish, staging area for waterfowl and seabirds and occasionally attracts marine mammals.

Wetlands and Tideflats

The majority of this habitat type in the Skagway area is occupied by tideflats, which are predominately unvegetated areas alternately exposed and inundated by the falling and rising of the tide. The largest tideflats occur at the mouths of the Taiya and Skagway Rivers, with smaller tideflats at the mouths of smaller creeks and the heads of small coves. Tideflats provide habitat for shellfish and other invertebrates and are used by waterfowl and shorebirds at low tides. Wetlands are vegetated areas inundated by salt or fresh water with a frequency sufficient to support hydrophytic plants (species which grow in water or require saturated soil conditions for growth and reproduction).

Wetlands include saltwater marshes, swamps, bogs and similar areas such as sloughs and shallow ponds. The only extensive wetlands in the Skagway area occur along the lower reaches of Taiya River below West Creek. Small, isolated saltwater wetlands are found in association with tideflats in the few sheltered bays of Taiya Inlet. Small freshwater wetlands occur along the Skagway River or as isolated bogs and shallow ponds on topographic benches, such as the area between Lower Dewey Lake and Icy Lake.

Wetlands and tideflats help establish drainage characteristics, sedimentation and current patterns, salinity gradients and flushing characteristics, serve as valuable storage areas for storm and flood waters and help shield upland areas from wave action, erosion or storm surge damage. Within wetlands and tideflats, organic material is decomposed, providing bacterially-enriched detritus (nutrients) to marine and aquatic food chains. The wetlands along the Taiya River are part of an aquatic/riparian/floodplain forest habitat complex important to waterfowl, bear and small furbearers.

Rivers, Streams and Lakes

All freshwater bodies contained within the Skagway coastal management boundary (see Figure 2-1) are included in this habitat type. The glacially-fed Taiya and Skagway Rivers are the primary drainages. Lower Dewey Lake and other smaller lakes within the coastal spruce/hemlock forest are also components. Rivers, streams and lakes of the Skagway area provide habitat for fish and wildlife and a limited local water supply for domestic use, fire protection and backup power generation.

Important Upland Habitat

This habitat type has not been defined by the Alaska Coastal Policy Council. This habitat type has been defined in areas subject to Skagway's coastal management plan to include:

1. All important upland habitats identified by the Alaska Department of Fish and Game (see Figure 1-5 on page 1-37).

2. An area two hundred feet on either side of the banks of any freshwater system.

3. Coastal forest and brush communities up to the two hundred foot elevation contour.

Upland habitats provide areas for reproduction, rearing, forage and shelter for many terrestrial mammals and upland birds. Besides providing important habitat in themselves, upland habitats protect streams, marine waters and downslope developments from excessive runoff, erosion, winds and avalanches and help to maintain the visual continuity of shorelines. Improper use of these uplands would adversely impact important upland wildlife and might affect lowland aquatic and

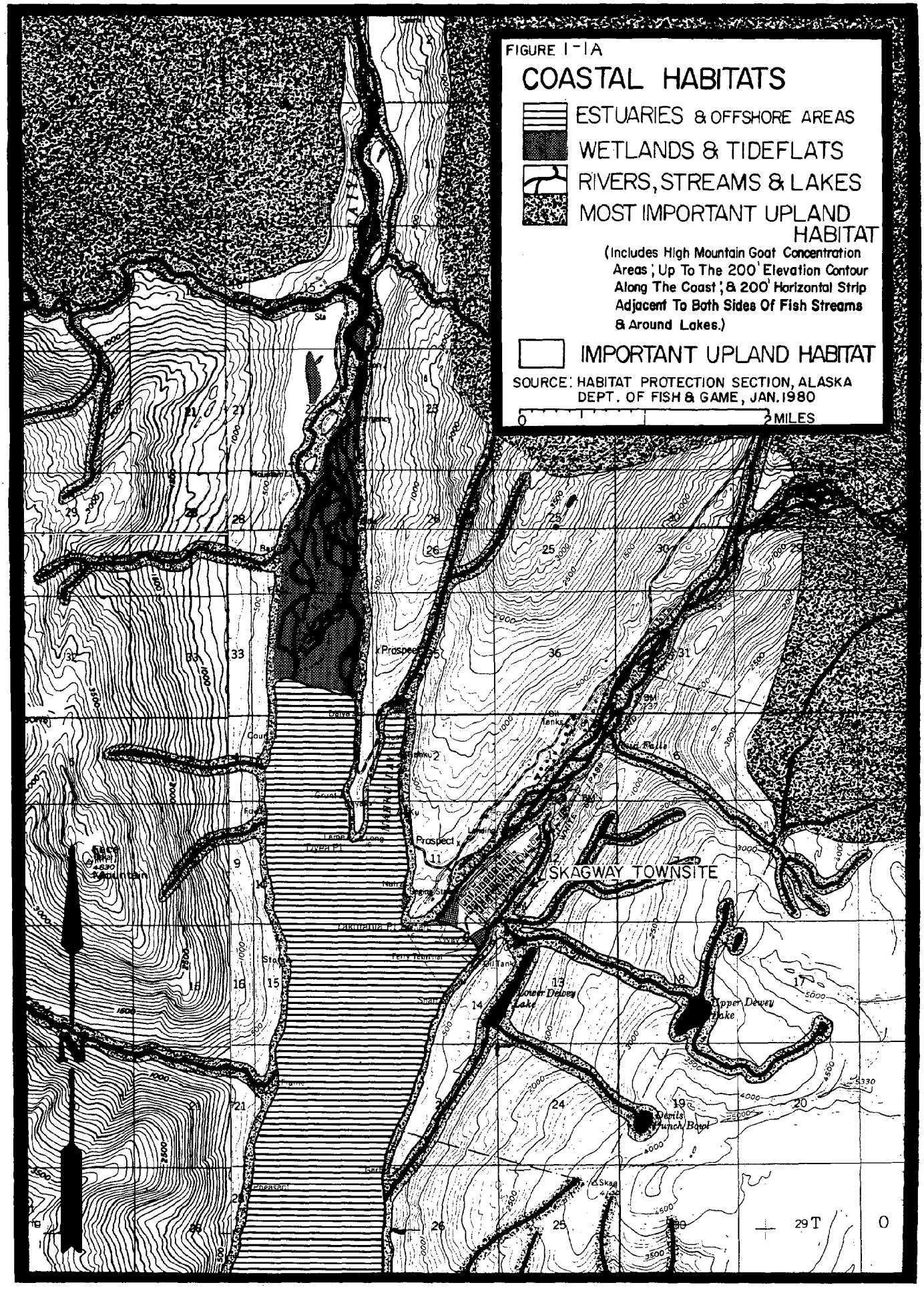


FIGURE 1-1A
COASTAL HABITATS
ESTUARIES & OFFSHORE AREAS
WETLANDS & TIDEFLATS
RIVERS, STREAMS & LAKES
MOST IMPORTANT UPLAND HABITAT
(Includes High Mountain Goat Concentration Areas; Up To The 200' Elevation Contour Along The Coast; & 200' Horizontal Strip Adjacent To Both Sides Of Fish Streams & Around Lakes.)
IMPORTANT UPLAND HABITAT
SOURCE: HABITAT PROTECTION SECTION, ALASKA DEPT. OF FISH & GAME, JAN. 1980
0
2 MILES
SKAGWAY TOWNSITE
Prospect
Lower Dewey Lake
Upper Dewey Lake
Devils Punch Bowl
N

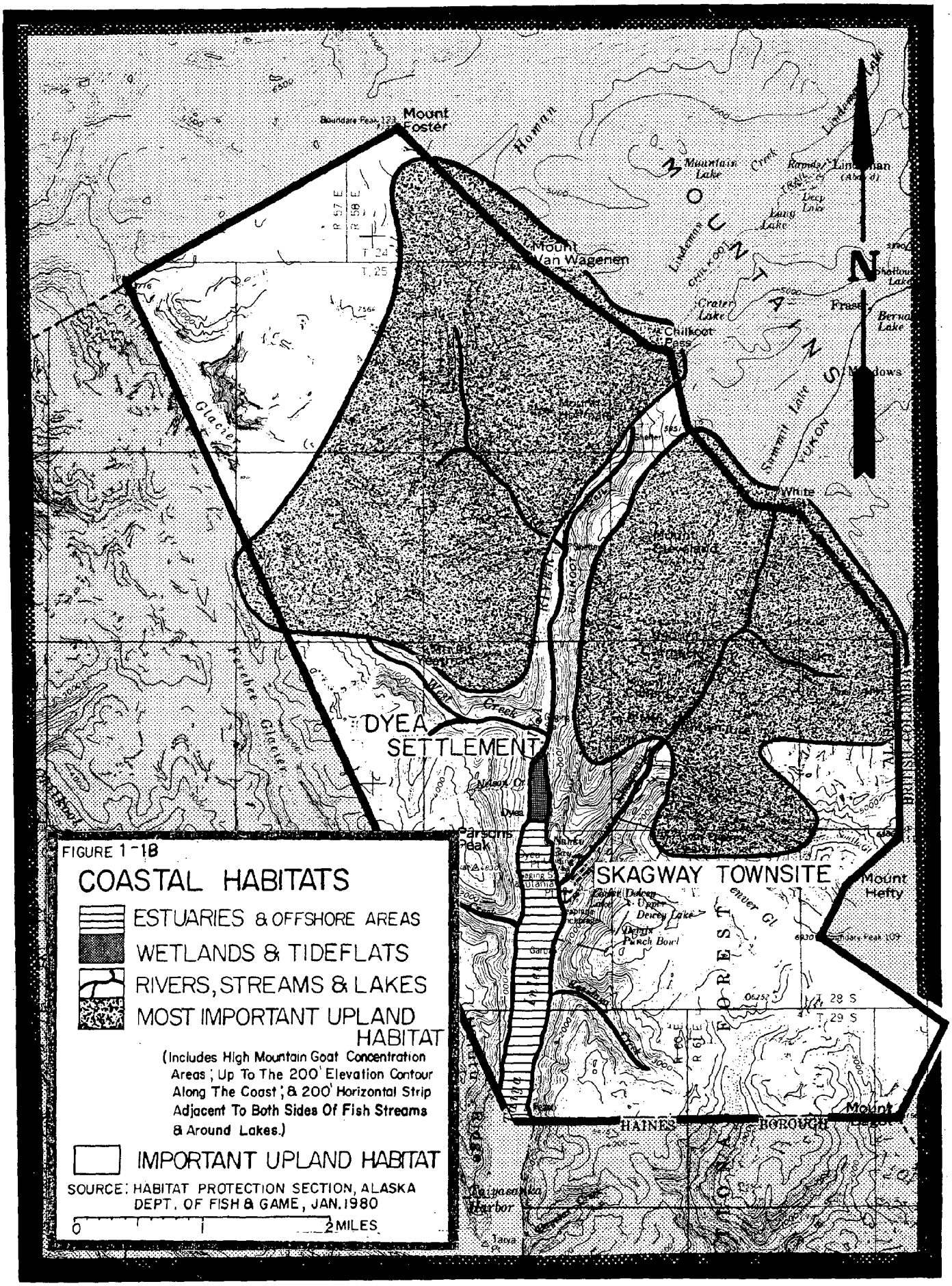


FIGURE 1-18

COASTAL HABITATS

- ESTUARIES & OFFSHORE AREAS
- WETLANDS & TIDEFLATS
- RIVERS, STREAMS & LAKES
- MOST IMPORTANT UPLAND HABITAT

(Includes High Mountain Goat Concentration Areas; Up To The 200' Elevation Contour Along The Coast; & 200' Horizontal Strip Adjacent To Both Sides Of Fish Streams & Around Lakes.)

- IMPORTANT UPLAND HABITAT

SOURCE: HABITAT PROTECTION SECTION, ALASKA DEPT. OF FISH & GAME, JAN. 1980

marine life, including sportfish stocks, water supplies, downslope residences and developments, and recreation and tourist values. Important upland habitat should be viewed as a flexible management zone that will allow developments compatible with resource management concerns.

Designation of the study area into these coastal habitat types does not preclude resource utilization or development such as road or residential construction. Rather, developments must recognize the biological, physical and economic value of these habitats and plan accordingly. Human developments and activities occurring within the coastal zone and its delineated habitats must plan for the maintenance or enhancement of the habitats.

PHYSICAL OCEANOGRAPHY

The following summary of physical oceanography is based on information taken from the National Marine Fisheries Service Lynn Canal Resource Assessment (1974).

Skagway is located near the head of Taiya Inlet, an estuarine branch of Lynn Canal. A sill, eighty meters beneath the surface, forms the southern end of the basin in Taiya Inlet. Depths average around 125 fathoms (750 feet) in Lynn Canal and gradually deepen to 350 fathoms (2,100 feet) at its mouth.

Circulation within the Lynn Canal is generally down channel on the surface and up channel at some deeper level. This is because freshwater flows into the inlet and remains at the surface for some distance, creating low salinity near the source and upwelling of saline waters as freshwater moves seaward. Minimum salinity of 15 ppm occurs during late July or early August; maximum salinity of 31 ppm occurs during March.

The waters of the canal generally receive heat from the atmosphere from April to September and lose heat to the atmosphere from October to March. The top one hundred meters are a homogeneous 3° to 4°C during March, increasing to a maximum of 14°C during August, then falling back to 3° to 5°C by November or December. The vertical heat gradient varies accordingly.

The tidal range in Lynn Canal increases northward with uniform low tides and varying high tides. The tides are essentially standing waves, not progressive. Tidal range at Skagway/Taiya Inlet is 4.20 meters (13.9 feet) (U.S. Dept. of Commerce Tide Tables, 1973a). The average surface velocity of flood tides at Skagway is 0.3 knots and the average ebb tide is 0.7 knots, resulting in a net flow of 0.4 knots southward (U.S. Dept. of Commerce Tidal Current Tables, 1973b). Due to the Coriolis effect, flood tides tend to hug the eastern shore and ebb tides hug the western shore (see Table 1-1).

Taiya Inlet is a twenty-three kilometers (seventeen mile) fjord which extends north from Taiya Point to the mouth of the Taiya and Skagway Rivers. The bathymetry of the inlet is unique compared to any other estuaries in Lynn Canal. At Indian Rock and Taiya Point, depths range from sixty-one to ninety-one meters (two to three hundred feet) and then markedly increase northward to over 427 meters (1,400 feet). This is over three times the depth of surrounding estuaries in Lynn Canal. The effects on currents, chemistry and potential icing probability is not well known, although certain variations are documented. Taiya Inlet has the lowest deep water temperatures of any other Lynn Canal inlet and it also has low salinity values. Deep water oxygen values are higher than corresponding depths in other inlets. This is probably due to the separation by the sill which isolates deep, low oxygenated Pacific waters from Taiya Inlet waters.

Table 1-1

TIDAL INFORMATION AT SKAGWAY, ALASKA

Location - 59°27'N/135°19'W

	Feet
Mean Higher High Water	16.7
Mean High Water	15.7
Mean Tide Level	8.7
Mean Lower Low Water	0.0
Extreme Low Water	-6.0

The average depth directly offshore of the Skagway River mudflats is fourteen fathoms (eighty-four feet), increasing to between twenty and forty fathoms one-quarter mile offshore. From Yakutania Point inland to Skagway, the bottom sediments are a soft mud. Outward from the point, a rockier bottom predominates.

MARINE LIFE

Primary Producers and Consumers

Phytoplankton and zooplankton have not been studied in Taiya Inlet, but data from Auke Bay studies probably reflect general trends that occur in Lynn Canal estuaries. Phytoplankton growth exhibits a cyclic pattern, with a large initial spring bloom, smaller blooms throughout the summer, followed by a moderate fall bloom. Diatoms are the most abundant type of phytoplankton present, with those of the genus Thalassiosira and Chaetoceros most common in the spring and early summer and Skeletonema costatum dominating in late summer and early fall (NMFS, 1975; Selkregg, 1976). Phytoplankton productivity is stimulated by wind-induced mixing of these partly enclosed inlets and fjords and

by upwelling. Upwelling makes important nitrogen-containing nutrients from land sources or deeper waters available to phytoplankton near the surface.

In general, zooplankton abundance follows, with small delay, the timing of phytoplankton blooms. The primary species constituting the Auke Bay zooplankton community, and probably reflecting northern Lynn Canal estuaries, include cladocerans, copepods, barnacle nauplii, tunicates and the euphausids (NMFS, 1975).

Rockweed (Fucus distichus) is a brown algae that blankets the tideline all along the coast in the Skagway area. Herring may spawn in these rockweed beds. Offshore, the kelps, primarily the species of Nereocystis, form masses of floating leaflike branches. Other kelps common in the lower portions of the intertidal zone and subtidally include Laminaria and Alaria. The green algae, Ulva (sea lettuce), the red algae Callophyllis (red sea fan) and Corallina (tidepool coral) are commonly found between the rockweed and kelp beds. Other species of algae are also distributed in the subtidal area (Selkregg, 1976; Guberlet, 1956).

Marine and Estuarine Invertebrates

The intertidal and subtidal zones of Taiya Inlet contain invertebrates and vertebrates which contribute to its overall productivity. The only comprehensive survey of intertidal and subtidal animals was done in Berners Bay, some fifty miles south of Taiya Inlet, but many of the species found there would inhabit Taiya Inlet in smaller numbers.

Clams and cockles are found in flat, subtidal areas with suitable substrate and mussels are found in the mid intertidal zone of most bays and estuaries along Lynn Canal. These filter feeders subsist on plankton and ditritus. Paralytic shellfish poisoning is probably present in these clams and shellfish.

Several commercially important species of crab and shrimp are found in upper Lynn Canal inlets. These include snow (tanner) crab, dungeness crab, brown, blue and red king crab, and pink, sidestripe, coonstripe and crangon shrimp. Tanner crab and pink shrimp are the most abundant crab and shrimp species in Taiya Inlet respectively, though they are generally not present in commercial quantities (NMFS, 1975). A limited commercial fishery for tanner crab extends into lower Taiya Inlet (McClean and Delaney, ADFG, 1978) and Nahku Bay is utilized by a few sport and commercial crab fishermen (Montgomery, USFWS, 1979).

Marine Fish

Silver, pink, chum and possibly chinook salmon, halibut and herring are the most valuable fish species present in Taiya Inlet. Other species, including dolly varden, steelhead, true cod, rockfish, flounder, sole and sablefish, may also be found in Taiya Inlet.

Adult salmon migrate up the Taiya Inlet into the Taiya and Skagway Rivers. Some pink salmon spawn intertidally at the mouth of the creeks that plunge into Taiya Inlet. The salmon juveniles that hatch in these areas migrate out of fresh water and remain in estuaries of upper Lynn Canal near natal streams. The time period that the salmon juveniles stay in the estuaries depends on freshwater input, temperature and available food. Juvenile salmon probably make use of the net surface water transport down Lynn Canal and into the straights leading to the Gulf of Alaska. Where possible, they remain close to the shorelines and congregate for short periods in minor schooling areas.

Herring spawning has only been surveyed in portions of Lynn Canal. No spawning sites have been identified in the Skagway area.

Marine Mammals

Marine mammals of upper Lynn Canal include seals, sea lions, whales and porpoises. Harbor seals are commonly seen in the intertidal zone near the mouths of the Taiya and Skagway Rivers. Like seals, the less commonly seen northern (Steller) sea lions are occasionally found during the spring and fall near the mouths of streams containing anadromous fish. No major seal or sea lion concentrations or rookeries occur within the study area.

Both Dall and harbor porpoise have been sighted in upper Lynn Canal and Taiya Inlet. Observations of porpoise, primarily Dall, in concentrations ranging from ten to fifteen are common in the upper Lynn Canal.

Humpback, minke and killer whales are known to inhabit upper Lynn Canal. Of these, killer whales are the most numerous. It is not known if humpbacks range into Taiya Inlet. The Marine Mammal Protection Act of 1972 has prohibited hunting of marine mammals (except for subsistence hunting) and placed management responsibility under federal jurisdiction.

HYDROLOGY AND WATER RESOURCES

Surface Water Hydrology

All of the land in the Skagway study area drains into Lynn Canal via Taiya Inlet. The major drainage basins in the Skagway area are the Skagway River basin, the Taiya River basin and West Creek. Elevations range from sea level to over five thousand feet within a distance of several miles, creating rapid runoff and short precipitous drainage areas. All three of these drainages have gaging stations from which flow information has been recorded for several years. Table 1-2 summarizes monthly and annual discharge of these rivers.

Table 1-2

MEAN MONTHLY AND ANNUAL DISCHARGE (cfs)

	Drainage Basin		
	Skagway River	Taiya River	West Creek
Area (sq. mi.):	145	179	43.2
January	29.5	82.0	21.4
February	32.5	93.7	23.3
March	33.9	85.1	30.8
April	65.7	107.0	50.4
May	422.0	686.0	218.0
June	1,363.0	2,082.0	656.0
July	1,497.0	3,485.0	974.0
August	1,151.0	3,446.0	945.0
September	794.0	1,528.0	608.0
October	360.0	737.0	249.0
November	151.0	399.0	111.0
December	56.0	154.0	41.5
Annual	498.0	1,074.0	329.0

Source: National Marine Fisheries Service, 1974.

The Skagway River basin extends nineteen miles from the gaging station to the basin divide. Mean elevation in this basin is thirty-nine hundred feet and the channel slope is 192 feet per mile. Glaciers within the basin include Laughton Glacier, which drains into the Warm Pass valley, and Denver and South Glaciers, which drain into the East Fork of Skagway River. Diurnal fluctuations in discharge are caused by variation in glacial melt at the source and tributaries of the river. Major tributaries include the White Pass Fork and the East Fork of Skagway River. Major lakes within the basin include Summit Lake at the head of the White Pass Fork and Goat Lake at the head of Pitchfork Falls Creek. Water quality is excellent, with dissolved solids measuring below acceptable drinking water limits set by the U.S. Public Health Service; an increase in suspended sediments does occur during the summer months due to glacial rock flour in suspension. Water temperatures range from 33°F to 49°F (0.6°C to 9.4°C).

The mean elevation of the Taiya River basin is 4,500 feet with a slope of 190 feet per mile. The distance from gage station to basin divide is 16 miles. Glaciers exist at the river's source and downstream along the river, creating diurnal fluctuations in discharge and variations in suspended sediment due to glacial flour. Saussure Glacier is located near the headwaters on the southeast side of Mount Hoffman. Irene Glacier is downstream on the north side of Mount Yeatman. Major tributaries of the Taiya River are Nourse River and West Creek. Several

smaller tributaries flow into it as well. Only one unnamed lake exists in this basin. Water quality is also excellent in the drainage.

West Creek flows from a glacial source southeast and then turns east, discharging into the Taiya River. Some diurnal variation occurs due to its glacial source, which also creates sediment loads during the summer months. No lakes exist in this basin and glaciers in the area are unnamed. Two unnamed tributaries feed West Creek. The distance from gaging station to the basin divide is 12.1 miles, mean elevation is 3,400 feet and average slope is 439 feet per mile. Water quality is excellent with temperatures ranging from 33° to 47°F (0.6° to 8.3°C).

Groundwater Hydrology

Aquifers in the Skagway area are not well defined. They may be confined by impermeable sediments or they may be unconfined, causing fluctuation in water level as season and precipitation rates vary. Potential for groundwater is excellent in the gravel beds along the Skagway River. Two wells drilled by USGS in 1966 at the north end of town near the airport had good water flows. The aquifer is confined beneath a shallow layer of hard clay. Many springs along the valley margins should provide ample flow of good water for single-family residences.

Water Use and Supply

The current Skagway water supply is from three wells, forty to sixty feet deep, in alluvial deposits formed by the Skagway River. Lower Dewey Lake was the main water supply prior to 1968; at present it is used as an alternative or emergency supply. Areas outside of the Skagway townsite use wells as a means of obtaining water.

FRESHWATER FISH

There are seven known species of commercial and sport fish in the Skagway area that spend all or part of their lives in freshwater. Important freshwater habitat in the Skagway area for these fish is shown in Figure 1-2. These species provide for a limited sport harvest for local residents, Canadians from Whitehorse and tourists and recreationists visiting Skagway and travelling the Klondike Highway.

In the Skagway area, the Taiya River and its two lower western tributaries (Nelson and West Creeks), an unnamed eastern tributary, the Skagway River and the unnamed creek emptying into Nakhu Bay are classified as anadromous waters (ADFG, 1968; revised 1975). Alaska Statute 16.05.870 requires that any proposed use or activity which would use, divert, obstruct, pollute or change the flow of these waters or use vehicles in streambeds must first notify the Commissioner of the Alaska Department of Fish and Game (ADFG) for approval. These streams are identified by ADFG stream number in Figure 1-2.

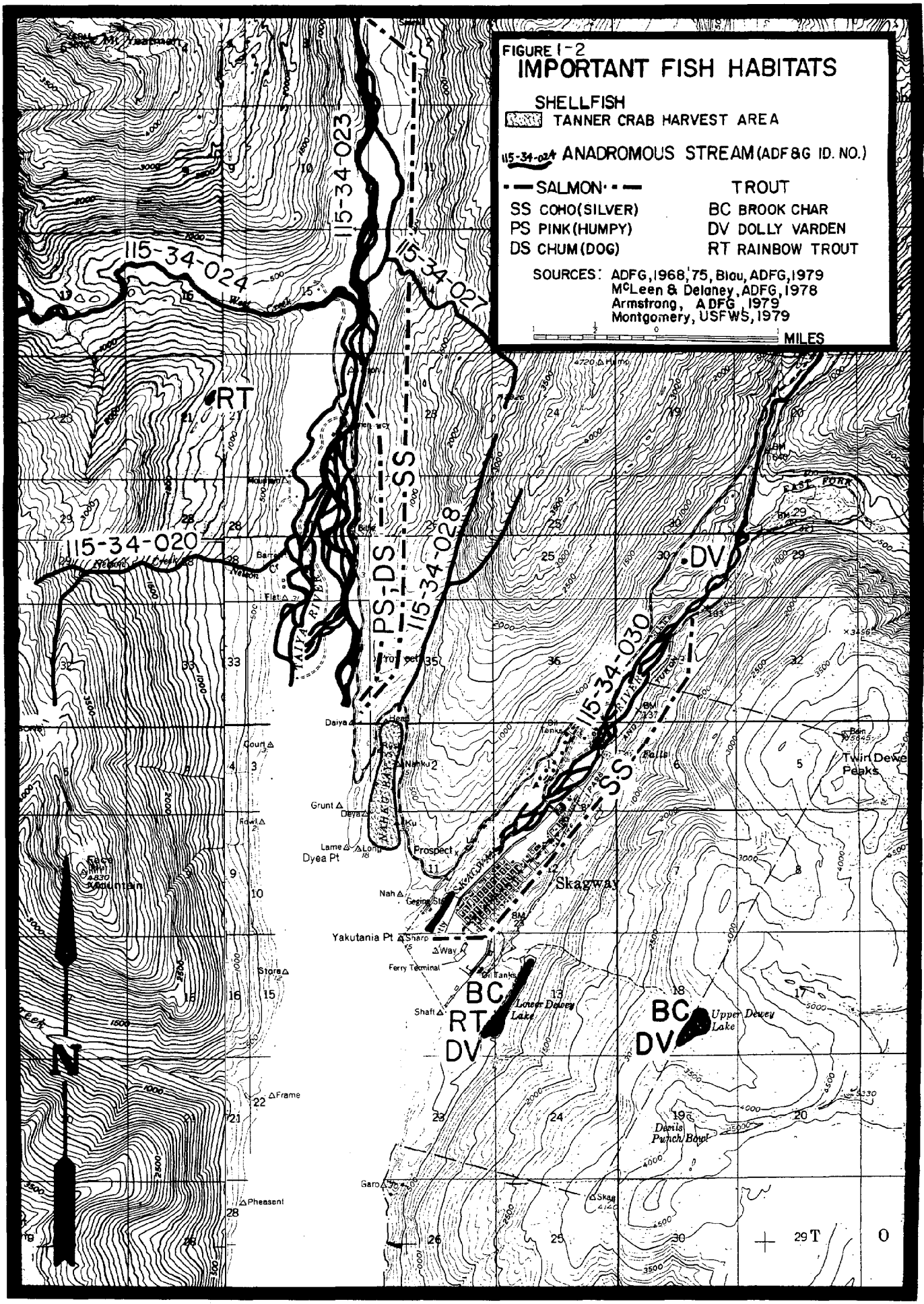


FIGURE 1-2
IMPORTANT FISH HABITATS
SHELLFISH
TANNER CRAB HARVEST AREA
115-34-024 ANADROMOUS STREAM (ADF&G ID. NO.)
SALMON
TROUT
SS COHO (SILVER)
PS PINK (HUMPY)
DS CHUM (DOG)
BC BROOK CHAR
DV DOLLY VARDEN
RT RAINBOW TROUT
SOURCES: ADFG, 1968, '75, Blau, ADFG, 1979
McLeen & Delaney, ADFG, 1978
Armstrong, ADFG, 1979
Montgomery, USFWS, 1979
MILES
115-34-023
115-34-024
115-34-027
115-34-028
115-34-020
115-34-030
RT
SS
PS-DS
DV
BC
RT
DV
BC
DV
Skagway
Twin Dewey Peaks
Lower Dewey Lake
Upper Dewey Lake
Devils Punch Bowl
Yakutania Pt
Dyea Pt
Prospect
Daiya
Grunt
Lame
Nah
Sharp
Ferry Terminal
Shaft
Frame
Pheasent
Garo
Skag
Store
Court
Flat
Nelson Cr
Mountain
N

Salmon smolt migration and adult salmon returns in the Taiya Inlet occur during the period of June 1 through August 31. The Taiya River is a large glacial river that flows into the head of Taiya Inlet. Coho (silver) salmon are known to be present in the lower ten miles of the Taiya River and pink and chum salmon are also found below West Creek (McLeen and Delaney, ADFG, 1978). Chums are known to spawn in the lower stretch and it is likely the other species do as well. A small slough located on the east side of the mouth of the Taiya River is a known spawning habitat but is subject to flooding and silting by the main river. Sampling in the lower Taiya River indicates that it supports a considerable number of dolly varden char and currently offers the greatest potential for sportfishing in the Skagway area. The lower three and one-half miles presently support a moderate sport fishery. Access is via a road from Skagway which crosses the river and parallels the west side for several miles and via the Chilkoot Trail on the east side. Local residents indicate that eulachon also run up to West Creek (Armstrong, ADFG, 1978).

The Skagway River has a minor fall run of chums and cohos below the East Fork. The river has minimal fishing potential, as fish are few in number and the stream habitat and production capability have been substantially degraded by human activity over the years. Most other creeks entering into Taiya Inlet drop too steeply to provide salmon habitat. A private salmon hatchery has been proposed at the mouth of Burro Creek, which supports resident dolly varden char. A salmon enhancement program is also being considered for Pullen Creek, which runs along the east side of the Skagway townsite.

Several lakes in the Skagway area support limited numbers of trout and char. Robert Armstrong of ADFG did a preliminary assessment of the sportfishing potential of these lakes. His report is summarized below.

Lower Black Lake (two small lakes about three miles from Skagway on the Klondike Highway) contains dolly varden char and could support a limited put and take coho or dolly fishery, preferably for children only.

Lower Dewey Lake is a thirty-eight and a half acre lake reached by a three-quarter mile trail from Fourth Street. A few campsites and picnic tables are available. The lake has a history of containing stocked brook char (eastern brook trout), rainbow trout and native dolly varden. Armstrong feels that Lower Dewey Lake is best managed as a sportfishery for brook char due to their superior growth, condition factor and reproductive success. Upper Dewey Lake is reached by a steep trail continuing two and a quarter miles from the lower lake and supports a limited number of brook char (stocked) and native mountain dolly varden. The upper lake may serve as a source of dolly varden and brook char for the lower lake.

Goat Lake, a fairly large lake at three thousand foot elevation five to six miles out of Skagway, is accessible by foot from the White Pass and Yukon Railroad. It may support brook char from a 1932 stocking effort. Icy Lake, a three acre lake two and a half miles by trail north-

east of Lower Dewey Lake, was stocked with brook char, but has little spawning habitat and is subject to winter kill.

Lost Lake is a twelve acre lake accessible by vehicle to the Taiya River and by foot up a one and a half mile steep, unimproved trail. It was planted with rainbow trout which have apparently survived. Improved access and enhancement could improve its sport fishery potential.

Saltwater fishing is the Skagway area is limited. Dolly varden have been caught off the ore dock and some of the beaches in the spring and summer. There is some fishing for chinook, coho, halibut and rockfish in Taiya Inlet, but success is spotty. If fishery enhancement and hatchery projects occur at Pullen and Burro Creeks, saltwater fishing for salmon in the Skagway area will greatly improve.

Analysis

The Skagway area does not support any significant commercial fishing. It presently supports a modest sport fishery; however, the Klondike National Historic Park and the recent Klondike Highway attract many Whitehorse residents, tourists and recreationists to the area. The sportfishing potential of the area could be improved to the benefit of local residents and visitors. The ADFG report (Armstrong, 1978) indicates that the best sportfishing potential in the Skagway area (based on access, habitat and size, condition and survival of individual species) would include:

1. Lower Taiya River for dolly varden and salmon.

2. Lower Dewey Lake for brook char. Potential for rainbow trout should be further assessed.

3. Lower Black Lake for a children's put and take dolly varden or coho fishery.

4. Goat Lake and Lost Lake could support more wilderness-oriented sport fisheries if access is improved and larger stocks established.

5. The City of Skagway and ADFG are also jointly considering the creation of a small put and take pink salmon fishery on Pullen Creek involving the construction of small ponds near the waterfront and stocking from a local native source (see AMSA).

CLIMATE AND AIR QUALITY

Skagway lies within the maritime climatic zone that extends throughout southeastern Alaska. The coastal waters of the Lynn Canal are the main influence upon Skagway's weather, resulting in average summer temperatures of 60° to 70°F and average winter temperatures of

20° to 30°F. Climatic data for Skagway is shown in Table 1-3. The first frost is generally expected in early September and the last frost occurs near the first of May.

Storms and heavy precipitation are typical in the mountainous regions of southeastern Alaska. Skagway is located within a rainshadow, however, and therefore receives relatively less precipitation than surrounding areas. Two-thirds of the city's precipitation falls between September and January, with October being the wettest month. May through July are drier months and occasional droughts lasting several weeks may occur during this time. The mountainous terrain causes great variation in precipitation patterns. Total precipitation may vary by a factor of two to three times within a five-mile radius. Snowfall averages thirty-nine inches annually with frequent accumulations that usually melt after a few days.

Persistent surface winds are characteristic of a maritime climate. Mild southerly winds blowing up the Lynn Canal predominate at Skagway, although an occasional cold, dry northern air mass will spill over from the arctic or Canada. Strong downslope winds also occur during winter months. Called "taku winds" in the Juneau area, the winds may result in violent gusts in excess of fifty knots in areas where the mountains rise abruptly from the water. These winds occur when high pressure conditions exist over northwest Canada accompanied by low pressure conditions off southeastern Alaska. These conditions create a pressure gradient that causes cold air to flow over the Coast Range into Lynn Canal.

Structural design information for Skagway is not available, but existing climatic data does not suggest that wind and snow loads would be a deterent to development. Port facilities should be designed so they are protected from north/south winds. Low ceilings, fog and/or high winds may delay flights in and out of Skagway on occasion, particularly in fall and winter months.

Air quality at Skagway is excellent. The city is located within a Class II airshed - a generally pollution free airshed that may have industrial use in the area - as defined by the Alaska Department of Environmental Conservation. Currently, there are no major industrial pollutants and traffic in the area is light. Minor problems, which may be an annoyance to residents and tourists, result from dust blowing around in the dock area on gusty days. If kept properly oiled and watered, no problems occur. On calm winter days, a temperature inversion can result. Heavier cold air settles into the Skagway valley and can trap pollutants and cause them to concentrate. The winds in the area usually maintain air circulation and minimize this potential.

Table 1-3

CLIMATIC DATA FOR SKAGWAY

Temperature (°F)

Month	Minimum	Maximum	Mean
January	17.9	23.4	28.9
July	48.5	57.2	65.9
Annual	34.1	41.2	48.2
Record	-24.0	92.0	----

Heating degree days (Base 65°F) - 8,820
Growing degree days (Base 40°F) ≈ 2,000
Frost free period - 180 days average

Precipitation (includes water equivalent of snow)

	Inches
Average annual	26.34
Minimum monthly	Trace
Maximum monthly	9.99
Maximum daily	5.25

Snowfall Comparisons

	Inches
Mean annual	39
Maximum monthly	40
Maximum daily	15
Maximum on ground	23

Winds

Prevailing direction	South
Mean hourly speed	15-22 mph

Source: Southeast Alaska Regional Profile, AEIDC.
Skagway Community Profile, Department of Commerce and Economic Enterprise, May 1979.

GEOLOGY, SOILS AND SLOPE

Geology and Surficial Deposits

Skagway is located within the Coast Mountains of the Pacific Mountain System. The Coast Mountains lie between Southeast Alaska and western Canada and border on the Inland Passage. They are high, rugged mountains with peak elevations greater than five thousand feet. The Coast Range batholith, comprised of quartz diorite, a coarse-grained, massive, igneous rock was carved by the Pleistocene glaciation to form the steep-walled valley in which Skagway is nestled. The plutonic igneous bedrock is exposed along the valley walls while the valleys themselves have accumulated sediments from the Pleistocene glacial advances and subsequent retreat and runoff (see Figures 1-3A and 1-3B).

The Skagway River flows through the narrow Skagway Canyon into Taiya Inlet at sea level, with mountains rising to seven thousand feet on either side. The mouth of the river is only three-quarters of a mile wide and four miles north of the city of Skagway the canyon narrows to fifteen hundred feet.

The surficial deposits at Skagway are chiefly a result of Pleistocene glaciation. Several inundations of glacial ice probably occurred during this time period to depths of up to three thousand feet. Erosion and deposition from alpine glaciers was and is a major factor in soil formation throughout southeastern Alaska. Preglacial deposits have been eroded away and the remaining steep walled valleys are unable to support surficial material.

Few surficial deposits exist at Skagway and few, if any, remain unaltered. Two types of glacial drift deposits are exposed. They are till, comprised of unsorted gravelly silt, sand, clay, cobbles and boulders, and stratified drift made up of sorted gravelly sand and cobbles. These deposits are concentrated in bedrock depressions on the southwest side of bedrock outcroppings, the leeward side of the glacial advance. They are occasionally found on slopes along the northwest side of the Skagway valley and upon the topographic bench southeast of the valley. Geophysical data indicate that considerable depths of glacial drift may lie beneath alluvial deposits on the floor of the Skagway River. These deposits are subject to moderate groundshaking during earthquakes. Sorted drift is used extensively for road surfacing. It is also well suited for foundation material for man-made structures. Terminal moraines exist at the lower end of the Skagway valley and across the lower end of Taiya Inlet.

Colluvial deposits are scattered along the southeast side of the Skagway valley along steep slopes. These are mixed accumulations of bedrock rubble, organic material and drift that have moved downslope under the influence of gravity. Colluvium is generally unsuitable foundation material.

Alluvial deposits comprised of sediments from the present and ancestral Skagway River are found up the valley from 14th Avenue.

Comprised of gravel, sand, some cobbles, boulders and silt, these deposits are moderately suited for foundation material. Their average thickness is twenty-five feet. Alluvial fan deposits up to fifty feet thick are located along the lower reaches of Skagway River. They generally have a high flood potential and are subject to earthquake-induced compaction, sliding and strong groundshaking. Liquefaction may occur in locally saturated, fine, uniform sands.

The Skagway townsite is on a sand and gravel deposit to a depth of as much as six hundred feet in the center of the valley. This pervious deposit presents a good groundwater reservoir for wells that is presently being utilized. The inherent problems of a location on a river outwash plain, such as high groundwater and flooding potential, are present in much of the present townsite (Engineering Science of Alaska, 1972). Depth to water table is generally four to four and a half feet near Pullen Creek and six to seven feet elsewhere in Skagway.

Deltaic deposits ranging from ten to fifty feet thick are found in the intertidal zone at Skagway. Sandy gravel, gravelly sand, cobbles and minor amounts of small boulders, shell fragments, sand and silt lenses make up these deposits. The delta is an active geologic feature with continual sediment being added to its outer margin by the Skagway River. Isostatic rebound may also be contributing to the delta's growth. These deposits are used extensively for fill in the lower Skagway valley and also along the delta surface. The delta itself is suited as a foundation for only limited occupancy uses, as it is highly subject to sliding, compaction and liquefaction.

A few accretion deposits lie adjacent to sea cliffs along Yakutania Point. Loose mixtures of cobbles, gravel, sand and boulders can average five feet thick. They have limited use as construction material due to their scarcity.

Man-made fill is widely distributed over the lower Skagway valley and on top of the Skagway River delta. Most of the city is built on top of this fill, which averages five feet thick and reaches a maximum of thirty feet in thickness at the seaward edge of the tidal flats. The fill is made up of loose mixtures of gravel, sand, cobbles, some boulders, organic material and riprap. Major earthquakes in the area could cause compaction, groundshaking and ejection of water from fractures and ground cracks within the fill.

Soils

As no Soil Conservation Service report has been published for the area, little information is available on the soils in Skagway. Soil development over the past two hundred to two hundred fifty years has resulted in soil formations of the spodozol order. These are soils that develop in cool, humid climates that contribute to its development and the modification of parent material. Mature mineral soils found in the timber uplands have well developed spodic horizons.

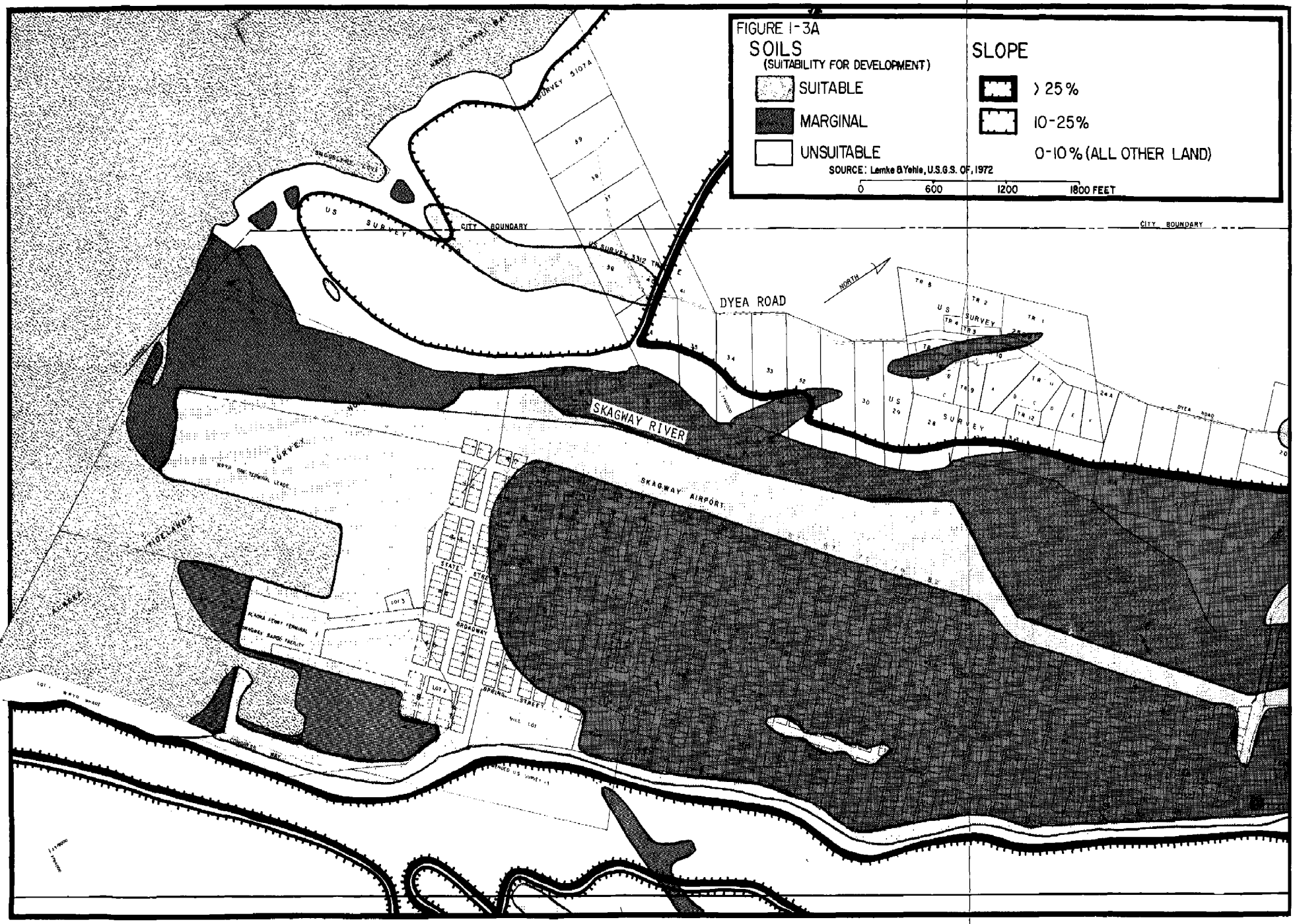


FIGURE I-3A
SOILS
(SUITABILITY FOR DEVELOPMENT)
SUITABLE
MARGINAL
UNSUITABLE
SLOPE
> 25%
10-25%
0-10% (ALL OTHER LAND)
SOURCE: Lemke & Yehle, U.S.G.S. OF, 1972
0
600
1200
1800 FEET
CITY BOUNDARY
CITY BOUNDARY
DYEA ROAD
NORTH
SKAGWAY RIVER
SKAGWAY AIRPORT
US SURVEY
TIDELANDS
ALASKA
BROADWAY
SPRING STREET
STATE STREET
DYEA ROAD

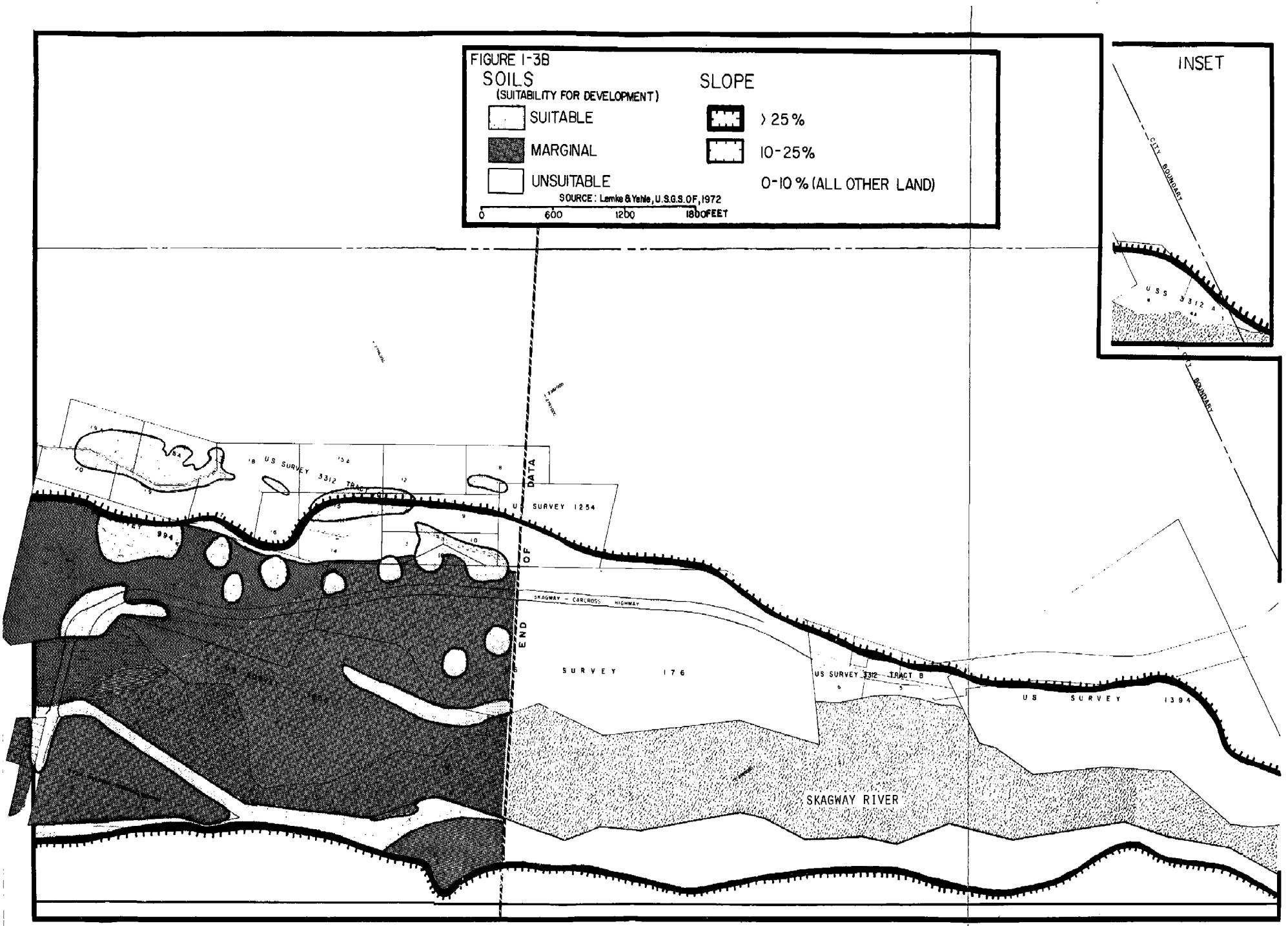


FIGURE 1-3B
SOILS
(SUITABILITY FOR DEVELOPMENT)
SUITABLE
MARGINAL
UNSUITABLE
SLOPE
> 25 %
10-25%
0-10 % (ALL OTHER LAND)
SOURCE: Lemke & Yehle, U.S.G.S. OF, 1972
0 600 1200 1800 FEET
INSET
CITY BOUNDARY
CITY BOUNDARY
END OF DATA
U SURVEY 1254
SURVEY 176
US SURVEY 3312 TRACT B
US SURVEY 1394
SKAGWAY RIVER
SKAGWAY - CARCROSS HIGHWAY

Due to heavy precipitation, muskeg has developed on flat lowlying areas, depressions in uplands and slopes of up to twenty degrees that are affected by seepage. Muskeg is generally saturated most of the year and may have organic mats from two to forty feet thick. It may be composed of sphagnum moss, sedge peat or muck. Muck over peat may support forest vegetation.

Slope

The Skagway valley floor ranges in elevation from ten to seventy feet above mean sea level with an approximate three percent slope. Along the south side of the valley, canyon walls rise five hundred feet to a topographic bench that contains Lower Dewey Lake. From this bench, mountains rise to over three thousand feet. The north side of the valley slopes over ten percent but still allows for development up to five hundred feet above sea level.

Soil and slope limitations to development are shown in Figures 1-3A and 1-3B. Soils suitable for development occur in areas where adequate fill has been built up. Most of Skagway is located on floodplain soils where a seasonal high water table poses constraints on development. Soils that are generally unsuitable for development occur in areas where thin soils cover bedrock, on steep slopes and on tidelands. There is no soil data for the remainder of the study area.

HAZARDS

Seismic Risk

Skagway lies adjacent to the North Pacific Rim tectonic belt. No major faults have been positively identified at Skagway due to concealment by surface deposits and/or water. Nevertheless, the strikingly linear fjords, valleys and aligned topographic features are highly indicative of faulting in the area. Three groups of inferred faults have been identified (USGS open file report, 1972) - the lower Skagway valley group, the Taiya Inlet-Taiya valley group and the Katzehin River Delta-Upper Dewey Lake group. Major movement may have occurred along the faults of the first group during the middle to late tertiary period. Locally identified faults which may have some affect on Skagway are the Chilkat River fault, with segments ninety miles northwest of Skagway, and the Lynn Canal fault, which splits into several segments, one of which is in the Skagway River valley.

The city of Skagway lies within seismic risk zone three. Earthquakes of magnitude six or greater on the Richter scale can be expected. Earthquakes of this magnitude can cause major damage to structures. The Skagway area is adjacent to risk zone four, in which potential damage is greater due to geologic or tectonic factors. One hundred twenty-two quakes had been felt at Skagway between 1898 and 1969. A magnitude six quake with its epicenter thirty miles southwest of the city

resulted in no damage. The closest quake, of magnitude eight on July 10, 1958, resulted in some damage at Skagway. Its epicenter was one hundred miles southwest of the city. The vast majority of earthquakes recorded in the area are mainly offshore, with epicenters located southwest, west and northwest of the city. Although only moderate quakes are expected at Skagway, the potential does exist for larger catastrophic events. This should be considered in the design of major structures.

The principal effects of nearby earthquakes include surface displacement, groundshaking, compaction and settlement of soils and possibly liquefaction of local deltaic and alluvial deposits. Landslides and subaqueous slides of unstable delta deposits may be triggered by nearby earthquakes and may, in turn, generate destructive waves (tsunamis) which could cause slight to severe damage to harbor facilities.

Flood Hazard

Much of the Skagway River valley is exposed to some degree of flooding. The river is aggrading (depositing material) at a rate of 0.06 feet per year, thus increasing the flood potential. The channel bottom is close to, or at some points possibly higher, than ground level of parts of the city, so that any breach of the dike could result in major flooding.

Quake-induced tsunamis or seiche waves reaching heights of twenty feet could occur in the Skagway area. Damage from such waves would depend largely on the stage of the tide at the time the wave reaches Skagway (R.W. Pavitt, 1976). At low tide, it is unlikely that a twenty foot wave would do any damage. At high tide, however, a twenty foot wave could cause severe damage to harbors, oil tanks, boats and buildings below twenty feet in altitude. Generally, Skagway would have enough approach time to assess the situation and warn residents of approaching danger from tidal waves. Known potential geophysical hazards are mapped in Figures 1-4A and 1-4B. This represents only a small portion of the study area. Information on geophysical hazards is not available for most of the area.

Floods in the past have resulted primarily from rapid runoff during heavy rains in September and October. Between 1901 and 1970, eight major floods occurred during these two months, causing water levels to rise 3.4 to 7.9 feet above mean sea level. Dikes built by the U.S. Army Corps of Engineers in 1940 have relieved, to some extent, the threat of flooding at Skagway. Increased maintenance of the existing dike and stockpiling of dike reinforcements are necessary precautions to avoid future flood damage.

The Federal Insurance Administration, U.S. Department of Housing and Urban Development, investigated the existence and severity of flood hazards in Skagway to aid in the administration of the Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. One hundred year flood zone maps were developed within the city and a description of the possible flooding made.

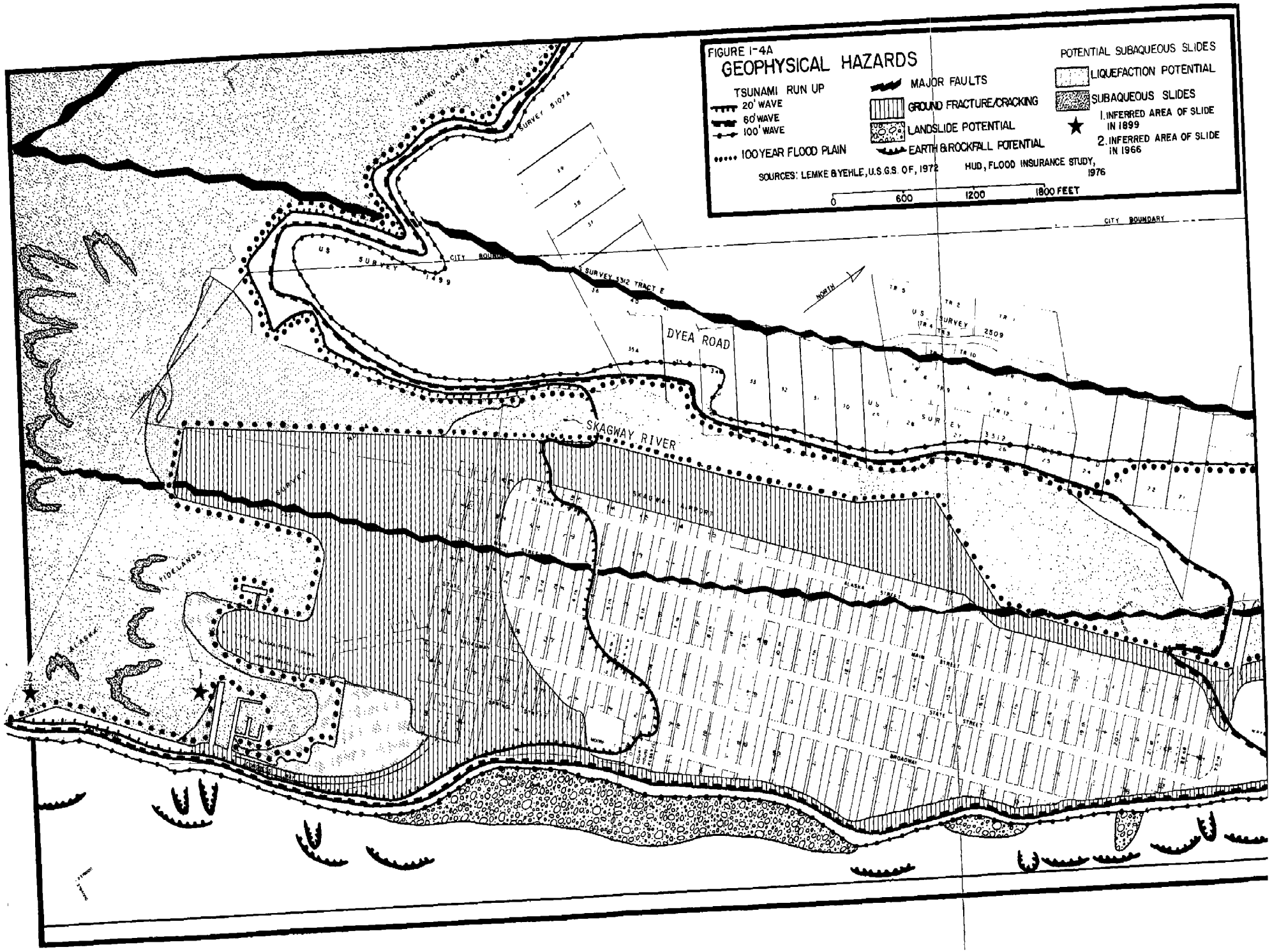


FIGURE I-4A
GEOPHYSICAL HAZARDS
TSUNAMI RUN UP
20' WAVE
60' WAVE
100' WAVE
100 YEAR FLOOD PLAIN
MAJOR FAULTS
GROUND FRACTURE/CRACKING
LANDSLIDE POTENTIAL
EARTH & ROCKFALL POTENTIAL
POTENTIAL SUBAQUEOUS SLIDES
LIQUEFACTION POTENTIAL
SUBAQUEOUS SLIDES
1. INFERRED AREA OF SLIDE IN 1899
2. INFERRED AREA OF SLIDE IN 1966
SOURCES: LEMKE & YEHLE, U.S.G.S. OF, 1972
HUD, FLOOD INSURANCE STUDY, 1976
0
600
1200
1800 FEET
CITY BOUNDARY
DYEA ROAD
SKAGWAY RIVER
SKAGWAY AIRPORT
TIDELANDS
MAIN STREET
STATE STREET
BROADWAY
NORTH

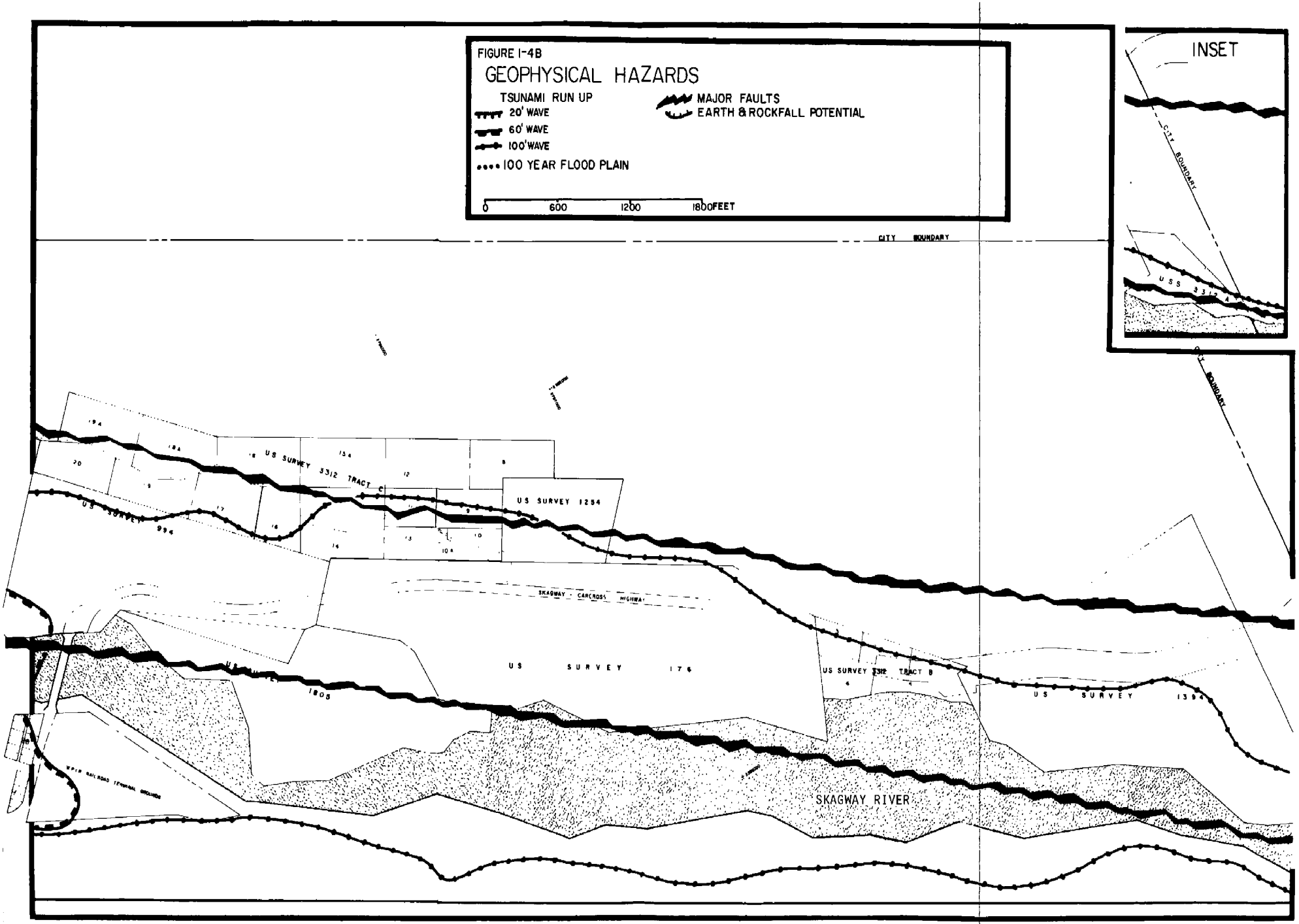


FIGURE I-4B
GEOPHYSICAL HAZARDS
TSUNAMI RUN UP
20' WAVE
60' WAVE
100'WAVE
100 YEAR FLOOD PLAIN
MAJOR FAULTS
EARTH & ROCKFALL POTENTIAL
0
600
1200
1800FEET
INSET
CITY BOUNDARY
US SURVEY 3312 TRACT C
US SURVEY 1254
US SURVEY 994
SKAGWAY - CARCROSS HIGHWAY
US SURVEY 176
US SURVEY 1803
US SURVEY 3312 TRACT B
US SURVEY 1394
SKAGWAY RIVER

Minor flooding can also result. On occasion, culverts on Pullen Creek will plug with ice and debris or heavy rains can result in local ponding. The city is in the process of replacing and cleaning culverts along Pullen Creek and may extend drainage systems along Broadway to alleviate these problems (Buttle, pers. com., 1979).

Other Geologic Hazards

Other geologic hazards affecting Skagway include landslides, avalanches, glacial outburst floods (reportedly, two have occurred) and isostatic rebound of the land. The latter can, theoretically, cause shifting of the shoreline, harbor shoaling and increased erosion.

VEGETATION

Skagway is located within the coastal spruce/hemlock forest that extends throughout Southeast Alaska north to Cook Inlet. Variation in vegetative composition occurs along stream channels, tidally influenced areas and with increased elevation or distance from the coast. Soils, drainage and available light are also determining factors.

Sitka spruce and western hemlock are found on most well-drained slopes from sea level to timberline at two to three thousand feet in elevation. As timberline is approached, tree composition shifts to mountain hemlock and fir, which are scattered and stunted. Within the city of Skagway, stands of trees act as structural windbreaks. The spruce/hemlock forest provides cover and forage important to wildlife. Openings in the canopy allow shrubs and other small plants that provide food for animals to flourish. This understory of growth is comprised of dense shrubs, regenerating conifers and carpets of moss.

Above timberline, alpine tundra and barren ground dominate the landscape. Lowlying heaths, grasses and wildflowers adapted to harsh climates survive in this zone. Alpine meadows and talus slopes provide important habitat for mountain goats.

Most of the spruce/hemlock forest in the Skagway area is noncommercial. Skagway lost part of its virgin forest to fires shortly after the gold rush. Commercial forestland is defined as land which supports usable crops of industrial wood (usually defined as at least eight MBF (thousand board feet) per acre) which is not withdrawn from timber utilization and is economically accessible. The best growing conditions for commercial timber are streamsides, gentle slopes, uplifted beaches and well drained valley bottoms. Spruce/hemlock forests provide eighty-five percent and cottonwood provides fifteen percent of the commercial harvest in the Skagway area.

The West Creek valley timber management area has the only significant timber potential on state land in the Skagway area. This is the site of a previous state timber sale and is accessible by logging road. Sitka spruce and western hemlock are most abundant, although mountain

hemlock exists at higher elevations. The upper reaches of the harvest area are not visible from the Chilkoot Trail. The West Creek valley forested land, as well as the rest of the forested land in the Skagway region, has great recreational value with potential for hiking trails and remote campsites.

Muskeg is found in clearings throughout forested areas. It is composed of sphagnum mosses, sedges, rushes and bog plants that grow on peat layers. Muskeg plays an important role in groundwater distribution and streamflow regulation. It also provides food and habitat for many animals and creates diversity for the recreationist.

Predominately unvegetated tideflats and vegetated wetlands are located at the head of bays and inlets, especially where freshwater streams, such as the Taiya and Skagway Rivers, enter saltwater. These areas are inundated by varying amounts of salt and freshwater from tidal action and flooding. Species composition of grasses, sedges and rushes vary in response to these salinity, water depth and flood frequency gradients. These tideflats and wetlands harbor an abundance of marine life and provide habitat and food for waterfowl, bears and numerous other animals.

Floodplain vegetation occurs in the Dyea and Skagway valleys. It consists of a complex of black cottonwood-dominated forests with some conifers and alder/willow shrubland. This riparian shrub vegetation is found on gravel bars subject to frequent flooding. This vegetation type provides habitat for bear, a few moose in the upper Skagway River valley, grouse and small animals.

WILDLIFE

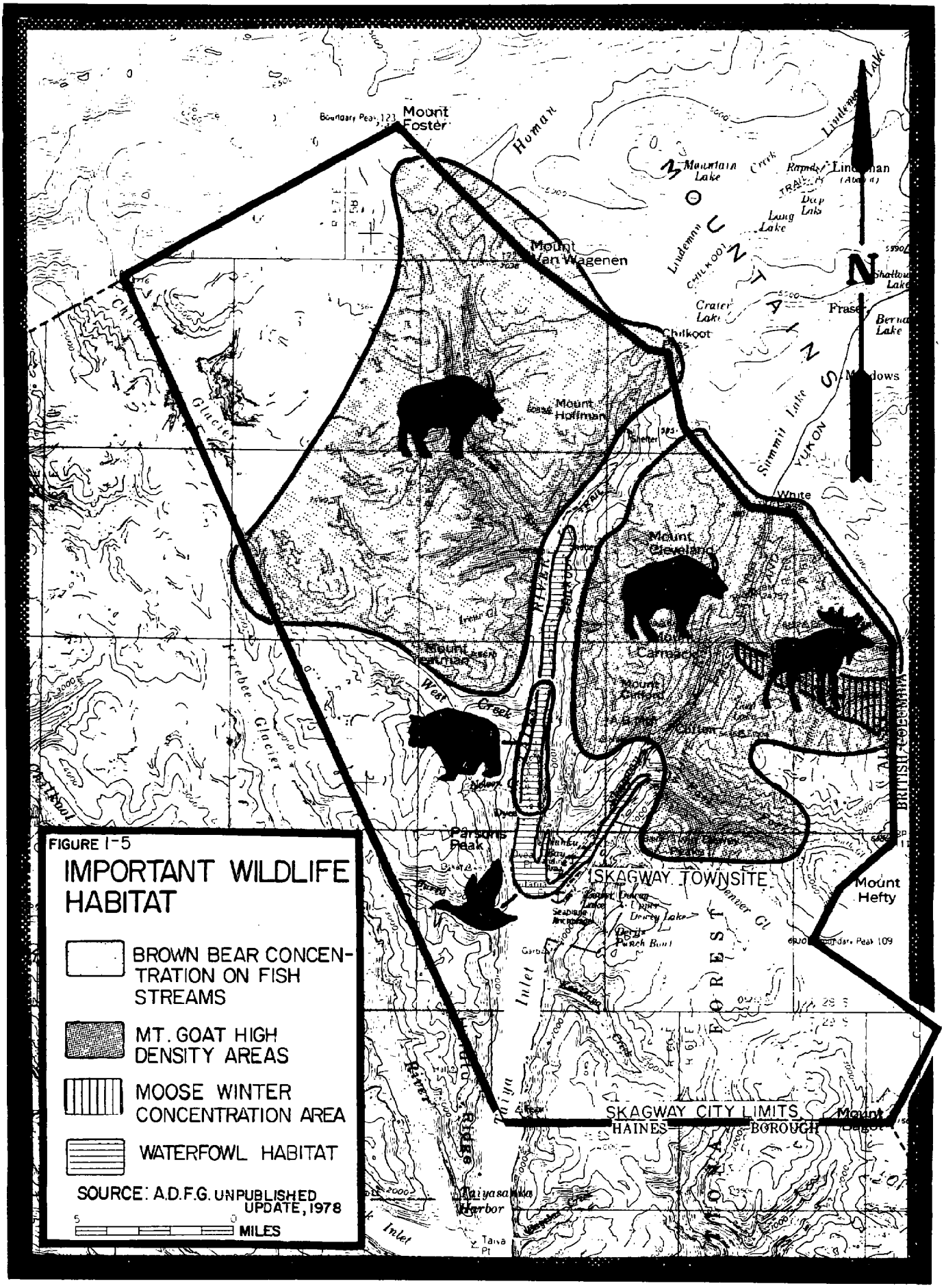
The Skagway area supports a high concentration of mountain goats, moderate numbers of black and brown bear, waterfowl, and a few moose. Important habitats for these game and waterfowl species and shown in Figure 1-5.

Moose

A small population of moose inhabits the upper Skagway River valley, but adequate habitat is limited in the Skagway area. The Warm Pass valley provides important winter habitat for these moose (Curtis, 1978; Blae, ADFG, 1978).

Mountain Goat

The Skagway area supports one of the highest mountain goat populations in the state. High meadows and talus slopes in rugged, remote alpine areas provide important summer habitat for mountain goat. In winter, goats move into coniferous forests adjacent to steep slopes and rock outcrops for shelter, food and escape routes from predators.


Mount Foster
Mount Hoffman
Mount Cleveland
Mount Carmack
Parsons Peak
SKAGWAY TOWNSITE
Mount Hefty
SKAGWAY CITY LIMITS
HAINES BOROUGH
Taiya Inlet
Skagway River
Dyea
Lindeman Lake
Summit Lake
Chilkoot Pass
White Pass
Mount Dyea
Mount Harriman
Mount Carmack
Mount Clifford
Mount Bagot
Denver Gl
Glacier
Creek
Lake
Pt
Harbor
FIGURE 1-5
IMPORTANT WILDLIFE HABITAT
BROWN BEAR CONCENTRATION ON FISH STREAMS
MT. GOAT HIGH DENSITY AREAS
MOOSE WINTER CONCENTRATION AREA
WATERFOWL HABITAT
SOURCE: A.D.F.G. UNPUBLISHED UPDATE, 1978
5 0
MILES

Deep snows occasionally force goats to valley bottoms and can cause significant population declines.

Goat numbers within this area appear to have declined since 1970, but are currently static. Game management unit 1-D (Haines/Skagway area) supports an estimated 2,700 goats (Johnson, 1973). With the construction of the Klondike Highway and heavy recreational use of the Chilkoot Trail, the area between the Taiya River and the White Pass and Yukon Railroad has been closed to hunting. The primary management goal of this area is to provide an opportunity to view, photograph and enjoy mountain goats (ADFG, 1977). Access for goat hunters is usually by the railroad and foot or by small float plane to alpine lakes in the area.

Bear

Both black and brown bear inhabit the Skagway area, with black bears considerably more common. Prime black bear habitat consists of semi-open forests in the Taiya/West Creek and Skagway River valleys. In these areas, bears feed on fruit-bearing shrubs, grasses and succulent forbs. Salmon, carrion and insects supplement their diet. The black bear population in the Haines/Skagway area is estimated at 4,600 and harvest is low (Klinkhart and Schoen, ADFG, 1977).

Brown bear are infrequently seen. They use a variety of habitats throughout the year, but generally prefer open grassland or tundra habitats. While a wide variety of fruits, berries, insects, small mammals and carrion are consumed throughout the year, brown bears tend to feed on beach grasses and sedge flats in the spring and concentrate on salmon streams in the late summer and fall. The wetlands, tideflats and streambanks of the lower Taiya River provide important brown bear habitat.

Other Mammals

There is not much information on the quantity and distribution of other mammals in the Skagway area, but a variety of animals may be in the area, including mink, otter, muskrat, wolf, fox, lynx, wolverine, marmot, porcupine and numerous small mammals. There are approximately fifty wolves inhabiting the Haines/Skagway area (Johnson, 1973; Klinkhart and Schoen, ADFG, 1977).

Waterfowl and Seabirds

Lynn Canal and the Chilkat valley south of Skagway provide the major migratory route for waterfowl and seabirds in the region. However, Taiya Inlet, the Taiya River valley and, to a lesser extent, the Skagway River valley does provide resting and feeding habitat for migratory birds. Peak spring migration generally occurs April 10 through May 1 and fall migration begins around October 7, generally ending by October 22 (Klinkhart and Shoen, ADFG, 1977).

Mallards are the most common dabbler, though green winged teal, widgeon, pintail and shoveler may be found. Canadian geese and dabbling ducks use drier portions of sedge-grass meadows associated with the heads of bays, beaver ponds, pond and stream edges in larger rivers and some alpine ponds. Diving ducks (goldeneyes, bufflehead and scaup) primarily use beaver ponds, alpine ponds and larger ponds in wetlands at the heads of bays, but may be found in protected bays. Exposed tideflats at low tides are also important feeding and resting areas for waterfowl (Klinkhart and Shoen, ADFG, 1977). Mergansers, a fish-eating diving duck, nest in the sloughs and side channels of the Taiya and Skagway Rivers and other small, low elevation creeks in the area.

Sea ducks observed in Taiya Inlet include scoters, harlequins and oldsquaw. Nonbreeding and adult male scoters return to the protected inland waters of Southeastern Alaska to molt and spend the summer. They can commonly be seen in upper Lynn Canal and Taiya Inlet.

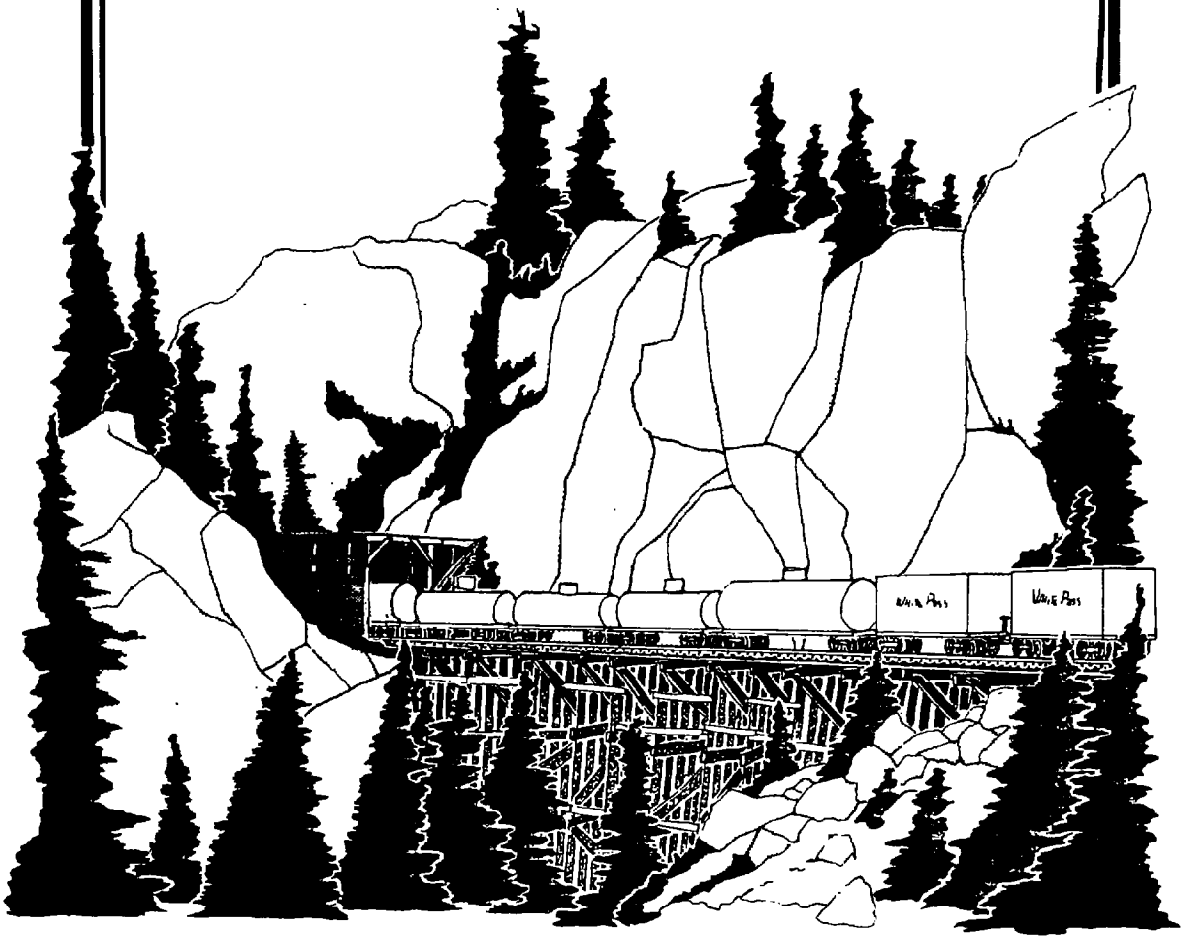
Various species of gulls, cormorants, murres and shorebirds (mostly sandpipers and plovers) are also observed in the area. The gulls and shorebirds are commonly found on tideflats or along the beach, while the cormorants and murres are seen in open waters or on beach cliffs or rocky outcrops.

Other Birds

Blue and ruffed grouse and the three species of ptarmigan are found in the forested and alpine areas around Skagway. The area is also the northernmost breeding habitat of the rufous hummingbird. Common perching or songbirds include ravens, magpies, jays, crossbills, chickadees and juncos.

No bald eagle nest surveys have been carried out in the Skagway area (Montgomery, USFWS, 1979), but the forested coastline of Taiya Inlet and the major river valleys (Taiya and Skagway) probably support some scattered eagle nesting. A few eagles roost in the lower Taiya River valley and feed on tideflats during the late summer/fall salmon run.

CULTURAL RESOURCES



REGIONAL LAND USE AND STATUS

Skagway is wedged between the surrounding mountains and Taiya Inlet on the delta of the Skagway River. Since available, vacant land is limited in the existing townsite, surrounding land use and status is important to the people of the area. The following section provides an overview of important land use determinants for the region.

State Land Management Plan

The land surrounding Skagway is predominately in state and federal ownership. The state recently completed a land management plan for its land in the Haines/Skagway area. This plan was developed through the course of several public meetings and it reflects the concerns and desires of the residents of Skagway. The highlights of the plan's land use recommendations are shown in Figure 1-6 and described as follows:

Public Recreation. The lower Taiya River and Long (Nahku) Bay, the Nourse River valley and West Creek. The management of these areas will be determined by cooperative agreement between the state, the National Park Service and the City of Skagway.

Transportation Corridors. The Klondike Highway/White Pass Railroad corridor will be managed for transportation and scenic quality. Access across or along the corridor is allowed, including power lines and pipelines. Widening of existing roads is also allowed. Design and construction must be sensitive to scenic values of the surrounding landscape. There is interest in developing homesites along the highway, however, the plan states that "until additional information is gathered, the land along the road and the railroad is included in the Resource Assessment classification."

Watersheds. The Dewey Lake drainage area east of Skagway will be managed for recreational use as well as for "maintenance of the quantity and quality of the water supply." The state is considering building public use cabins in the area. The area will be studied first "to determine what recreation facilities (cabins, tables, benches, pit toilets, etc.) are necessary, and are compatible with the Watershed Classification. A study should also be done to evaluate "extending the maintained trail to Icy Lake, and on to Reid Falls and the cemetery. Consideration should be given to erecting historic and information markers, where suitable."

Resource Assessment. Much of the land designated as Resource Assessment is mountainous and contains significant wildlife habitats. It also contains commercial quality timber and concentrated mineral claim activity. The land in the Resource Assessment classification will be studied for a two-year period to determine its value and best use. Mineral exploration is permitted. Timber harvesting is limited, however, to selective cutting of house logs and firewood. The National Park Service, the State Division of Parks and the City of Skagway will participate in planning for the use of the land designated as Resource Assessment.

Land Disposal Categories. The plan identified areas potentially suitable for residential use. These areas will be made available through a variety of land disposal programs (e.g., homesites). Possible areas for disposal include AB Mountain and land in the West Creek valley near Dyea and Dyea Point. The eleven hundred acre site on the long, sloping ridge at the base of AB Mountain appears to be the most suitable area for homes between Skagway and Dyea, but development would be expensive because of the physical limitations of the site. For example, the noncompact surface bedrock may cause loose foundations and high maintenance costs. Obtaining water and sewage disposal would also be expensive.

Although the site poses problems for development, the proposed AB Mountain homesite area was selected as the top priority disposal area by a large majority of people at public hearings in Skagway. Following AB Mountain in popularity were homesite proposals on Dyea Point and along Long Bay, in the West Creek valley near Dyea and along the Klondike Highway. The management of the lower Taiya River valley and the West Creek valley generated the most debate. About one-third of the people attending the public hearing on the plan indicated that they would like to have the West Creek and Dyea area developed for homesites. Few people expressed interest in harvesting the two thousand acres of timber in the West Creek valley. (The West Creek valley also has potential for a hiking trail and remote campsites.)

There probably will not be any substantial disposals in the Skagway area until Skagway has selected its entitlement. As of spring, 1980, most good state land is either in a reserve category (as requested by Skagway), adjacent to state and national park boundaries or has been nominated by Skagway.

Klondike Gold Rush National Historic Park

The national park includes the historic district in Skagway, the Chilkoot Trail, located near Skagway in the Taiya River valley, and the White Pass Trail. The Pioneer Square Historic District in Seattle, Washington, is also included in the park. In all, the park contains less than fourteen thousand acres.

The Skagway historic district includes fifty-five wooden, one-, two- and three-story stores, hotels and residences, some partially vacated, that are the remaining evidence of the gold rush town of Skagway. The historic district is located along Broadway and its side streets between First and Seventh Avenues, largely coinciding with the Skagway historic district (city ordinance adopted in October 1972). The area is the focal point of the Skagway business district and is a major tourist attraction. The district, along with all known historic resources in the Skagway and Taiya River valleys, is listed in the National Register of Historic Places.

The Chilkoot Trail area consists of a corridor of park-designated land approximately one mile wide and sixteen miles long paralleling the entire length of the Chilkoot Trail within the United States. It lies in

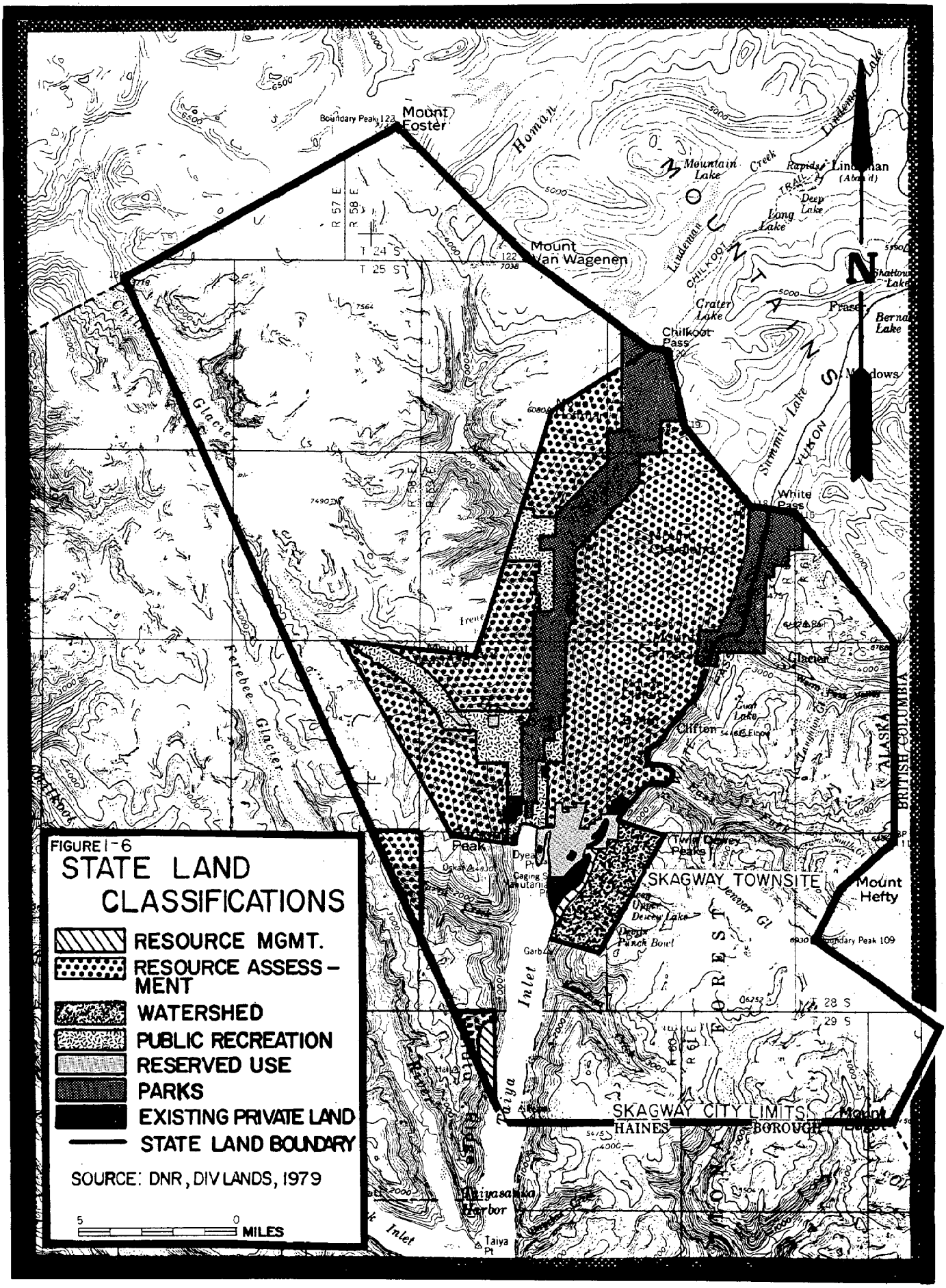


FIGURE I-6
STATE LAND CLASSIFICATIONS
RESOURCE MGMT.
RESOURCE ASSESS-MENT
WATERSHED
PUBLIC RECREATION
RESERVED USE
PARKS
EXISTING PRIVATE LAND
STATE LAND BOUNDARY
SOURCE: DNR, DIV LANDS, 1979
5
0
MILES
Mount Foster
Boundary Peak 123
Mount Van Wagenen
Chilkoot Pass
White Pass
Mount Cleveland
Mount Hefty
SKAGWAY TOWNSITE
SKAGWAY CITY LIMITS
HAINES
BOROUGH
Taiya Inlet
Taiya Pt
Ferebee Glacier
Glacier
Clifton
Twin Dewey Peaks
Dyea Pt
Mountain Lake
Long Lake
Deep Lake
Crater Lake
Summit Lake
Lindeman Lake
Lindeman (Aban'd)
Frase
Bernal Lake
Shallow Lake
Meadows
Boundary Peak 109
T 24 S
T 25 S
T 28 S
T 29 S
R 57 E
R 58 E
N
ALASKA
BRITISH COLUMBIA

a generally north/south direction, with the south boundary including the historic townsite of Dyea, about three miles (eight by road) northwest of Skagway. The park boundary includes the Slide Cemetery, the Chilkoot Trail and all related historic sites and artifacts found along the trail. The northern boundary of the corridor is Chilkoot Pass on the international boundary.

The White Pass Trail corridor consists of park land approximately one mile wide and five miles long, including the ruins of White Pass City and important remnants of the White Pass Trail. The trail lies in a north/south direction, the south boundary beginning eight miles northeast of Skagway. The north boundary of the unit is White Pass on the international boundary.

In British Columbia and the Yukon, the National Historic Parks and Sites Branch of Parks Canada is planning park areas based on the Klondike Gold Rush similar to the American park. Because the respective Chilkoot Trail units join together and hikers will travel through both countries, preliminary arrangements have been made for integrated management of the Chilkoot Trail. Substantial funds have been invested in restoration of historic buildings in Dawson and additional work is underway and programmed at Dawson, on the Klondike and on the Chilkoot Trail. In order to achieve an optimum mix of preservation and use, state, federal and local officials have agreed to interagency and intergovernmental comprehensive planning for the entire area.

Areas of Special Importance to the District

Land use around Smuggler's Cove has been a controversial issue. The cove is the only "unspoiled" beach in the vicinity of Skagway. The park is an easy fifteen to twenty minute walk from downtown Skagway via a recently constructed bridge across the Skagway River (more work needs to be done on the bridge). A clear creek enters the cove and provides drinking water for the numerous picnickers and beachcombers that frequent the area. The cove has been designated as a park for fifty years, but it has never been developed.

Westours proposed to develop a park at Smuggler's Cove that would be available to the public in exchange for permission to construct a dock for their day boat. The proposition was taken to the voters and it was overwhelmingly rejected (seventy percent opposed - thirty percent in favor). People argued that the proposed development would destroy some of the cove's best qualities. People also opposed it for safety and economic reasons - for instance, the cove is subject to high winds and is a focal point for floating debris. The city council voted unanimously to construct a barricade at the top of the road to the cove in response to the overwhelming public support to keep the cove in its relatively natural state.

Skagway Land Nominations

Skagway has nominated 750 acres of land for municipal selection in the vicinity of town. Five hundred acres of land will be selected by the city as its entitlement. When the selections have been approved by the Director of the Division of Forest, Land and Water Management, Skagway will receive title. Once title is received, the city will be the primary supplier of land for relatively intense development in the district.

Annexation

The City of Skagway recently annexed all land between the Haines Borough boundary and the Canadian border. This annexation expands the city's boundaries from eleven square miles to 431 square miles. Most people support annexation, as evidenced by a 169 to 96 vote on the issue. Some people, most notably in Dyea, would prefer to remain outside the city boundary.

LOCAL LAND USE AND STATUS

Land Use in Skagway

The shoreline along the Skagway townsite is used for industrial purposes, with the exception of a small city park on the tidelands on the west side of the Skagway River. The White Pass and Yukon Railroad leases the bulk of the Skagway shoreline from the city. The shoreline outside the Skagway townsite is in a predominately natural state, with only a few scattered dwellings on Dyea Point.

The historic district, which is the commercial center for Skagway, abuts the industrial shoreline (see Figures 1-7A and 1-7B). The historic district includes most of the historic structures in Skagway, and has been included in the Klondike Gold Rush National Historic Park. The Park Service purchased fourteen structures in the district and is in the process of renovating them. Some private owners are doing the same. When the park-owned structures are refurbished, some will be used for accommodations for park employees; others may be leased to private individuals for a variety of purposes. When the railroad depot is finished, in four or more years, it will be used as the National Park Service headquarters.

The area surrounding the historic district contains a mixture of residential and commercial uses. As one moves north, away from the shoreline and the historic district, residential use becomes predominant and the number of vacant lots also increases (Figure 1-8 and Table 1-4). There appears to be ample room for constructing more housing (infilling) in the north half of Skagway to accommodate the gradual growth that is anticipated for Skagway in the next five years (site analysis will have to be done to determine the physical suitability of various sites as well as their proximity to utilities, etc.). Infilling obviously depends on the willingness of present owners to sell or develop their holdings as well as

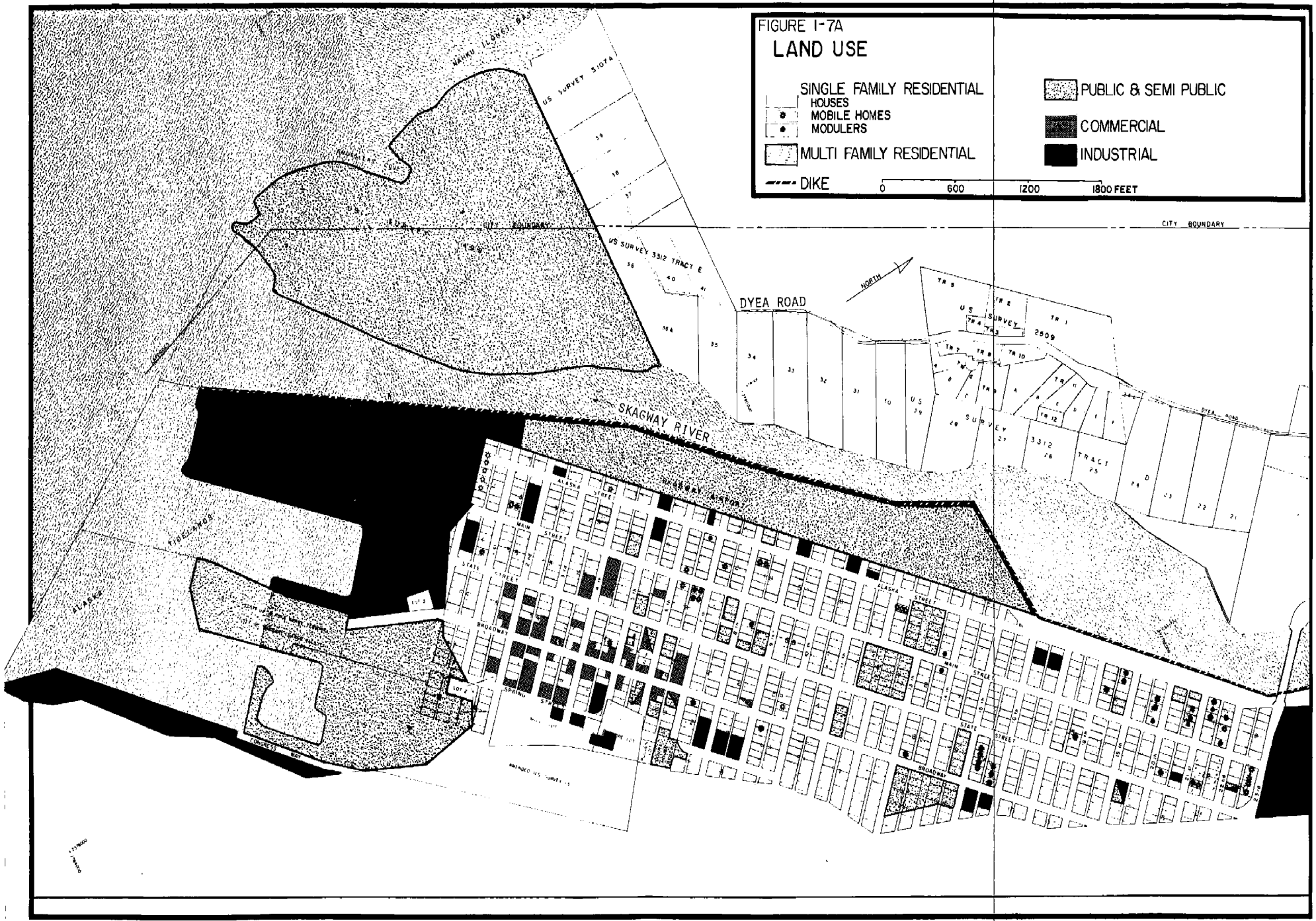


FIGURE I-7A
LAND USE
SINGLE FAMILY RESIDENTIAL
HOUSES
MOBILE HOMES
MODULERS
MULTI FAMILY RESIDENTIAL
DIKE
PUBLIC & SEMI PUBLIC
COMMERCIAL
INDUSTRIAL
0
600
1200
1800 FEET
CITY BOUNDARY
NORTH
DYEA ROAD
SKAGWAY RIVER
US SURVEY 3312 TRACT E
US SURVEY 2509
US SURVEY 3312 TRACT D
ALASKA STREET
MAIN STREET
STATE STREET
BROADWAY
SPRING STREET
CONGRESS WAY
TIDELANDS

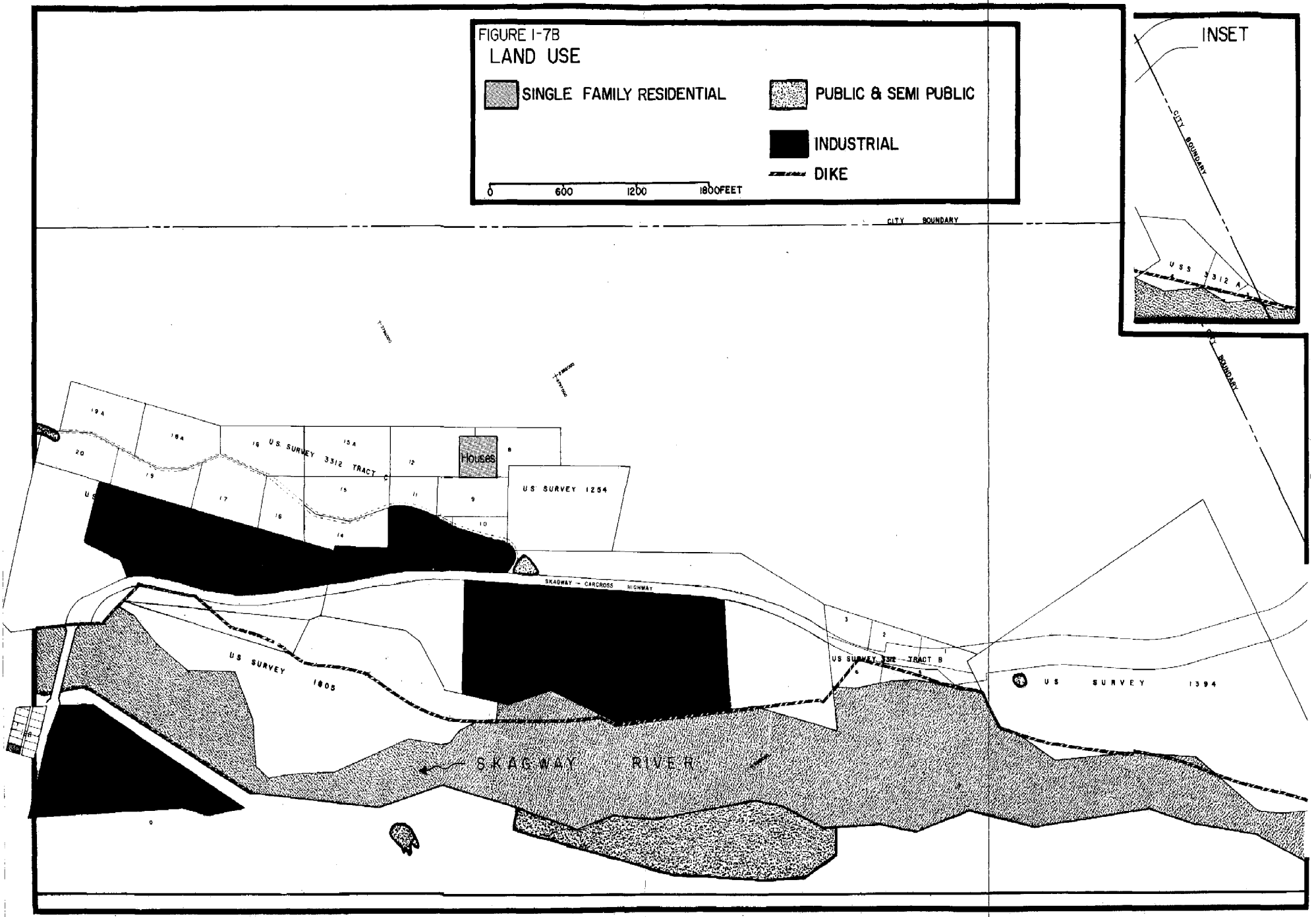


FIGURE I-7B
LAND USE
SINGLE FAMILY RESIDENTIAL
PUBLIC & SEMI PUBLIC
INDUSTRIAL
DIKE
0
600
1200
1800 FEET
INSET
CITY BOUNDARY
USS 3312 A
CITY BOUNDARY
CITY BOUNDARY
Houses
U.S. SURVEY 3312 TRACT C
U.S. SURVEY 1254
SKAGWAY - CARCROSS HIGHWAY
U.S. SURVEY 1805
U.S. SURVEY 3312 TRACT B
U.S. SURVEY 1394
SKAGWAY RIVER

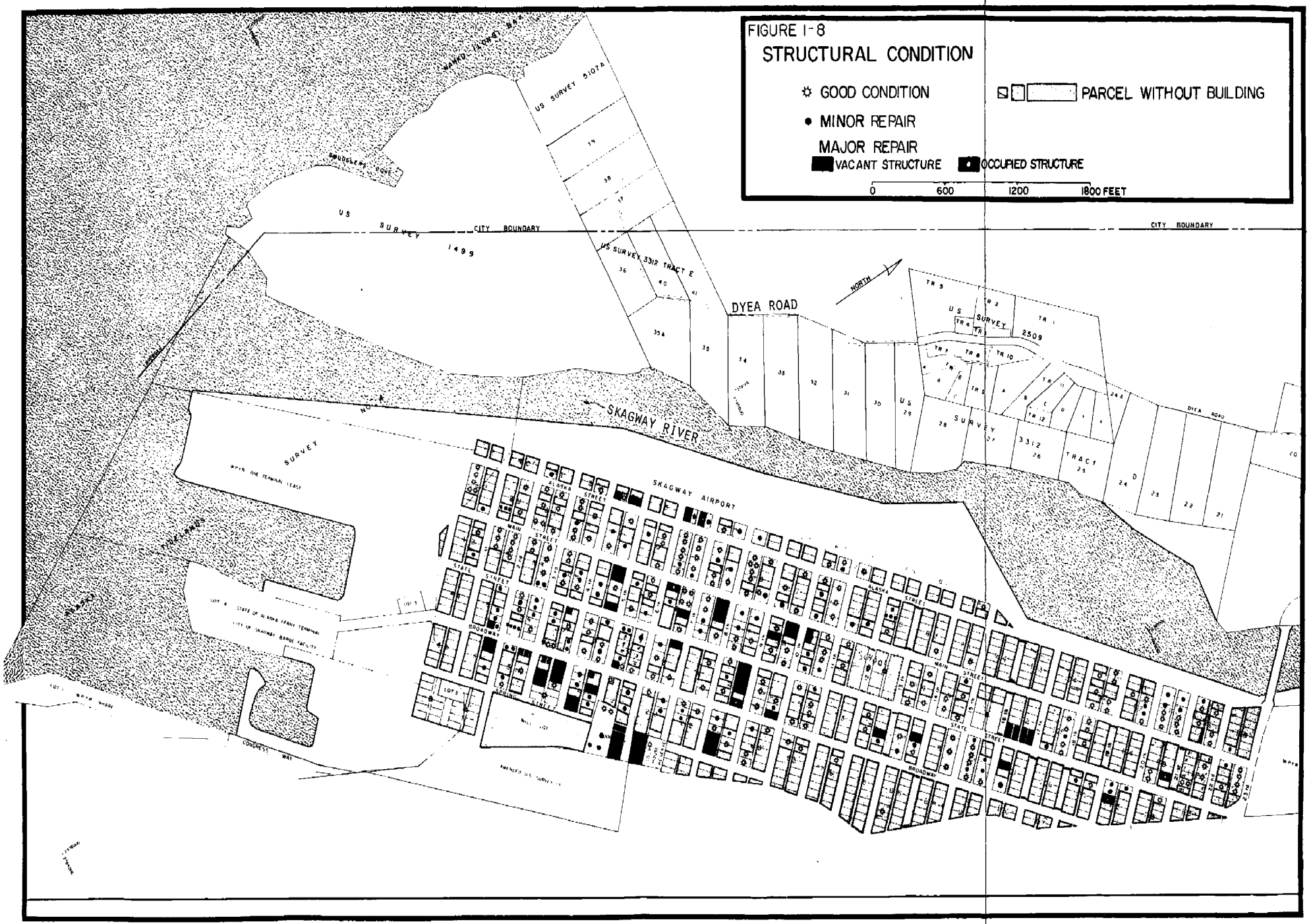


FIGURE I-8
STRUCTURAL CONDITION
GOOD CONDITION
MINOR REPAIR
MAJOR REPAIR
VACANT STRUCTURE
OCCUPIED STRUCTURE
PARCEL WITHOUT BUILDING
0
600
1200
1800 FEET
CITY BOUNDARY
US SURVEY 1499
US SURVEY 5107A
US SURVEY 3312 TRACT E
DYEA ROAD
NORTH
US SURVEY 2509
US SURVEY 3312 TRACT D
SKAGWAY RIVER
SKAGWAY AIRPORT
ALASKA STREET
MAIN STREET
STATE STREET
BROADWAY
SPRING STREET
CONGRESS WAY
DYEA ROAD

the price of the parcels. Further development of the existing townsite could be supplemented by the gradual development of the relatively gentle slopes of lower AB Mountain.

Table 1-4
LAND OWNERSHIP IN LOTS

	Zone								
	RS	RM	BG	BH	I	CR	BN	Total	
City	89	6	2	15		22		134	8%
Railroad	14	1			*			15	2%
National Park Service				17				17	2.2%
Corporation of Catholic Bishops							24	24	3%
Other (small private holdings)	377.5	141	41	17				576.5	75%

*The vast majority of the land owned by the Yukon and White Pass Railroad is contained in the industrial zone (e.g., waterfront, terminal area, railroad corridor). These areas were not included in the calculations.
Source: ESL field survey.

One of Skagway's most pressing needs is to provide adequate camping and parking areas. There is little room in Skagway for campground areas. Hanousek Park was recently expanded; while this will help, the answer lies with state and federal campground development outside of town (see the Recreation section for details). The parking problem, however, must be dealt with in Skagway. Skagway will soon be forced by increasing demand to find space for cars. This should be done now, before options are foreclosed.

Most of the land outside of the Skagway townsite is in a natural state, with only sparse development at the base of AB Mountain, Dyea Road and Dyea Point. The residential area on Dyea Point is concentrated on the private land south of Nelson Creek. The National Park Service has begun to develop park-related structures and facilities in the lower Dyea valley.

Housing. A land use inventory and structural analysis was conducted, as a part of this study, in September of 1979. It revealed that there were sixteen vacant houses in Skagway. All but three of these houses, however, required major repair and were generally unsuitable for habitation. Adequate housing is in such short supply that twenty (seven percent of total housing) occupied houses were substandard and in need of major repairs (see Figure 1-8 and Table 1-5). When the Skagway population swells with summer visitors, the housing shortage becomes even more acute; for instance, construction workers on the Klondike Highway had extreme difficulty in locating any kind of housing. Many families moving to Skagway are forced to bring their own mobile homes.

Table 1-5
STRUCTURAL CONDITION

	Well Maintained	Minor Repair	Major Repair		Total
			Vacant	Occupied	
Single family houses	164/60%	77/28%	13/5%	20/7%	274/78%
Multi-family homes	6/50%	5/45%		1/5%	12/3.5%
Commercial	15/30%	27/54%	8/16%		50/14%
Industrial	3/20%	5/33%		7/47%	154.5%
Total	193/54%	114/32%	21/6%	28/8%	351

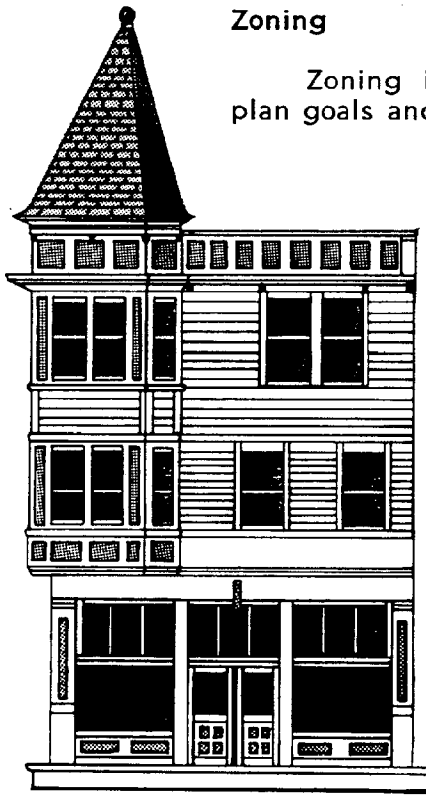
Source: ESL field survey.

There is an obvious need to expand and upgrade Skagway's housing opportunities. Aside from the normal increase in housing demand, Skagway may have to accommodate as many as forty-five employees from outside during transshipment activities for the gas pipeline. Providing housing for this group (and perhaps some family members) may not be as difficult as one would think. There is a strong possibility that much (if not all) of the anticipated pipeline activity will occur in the winter months. Many workers could be accommodated in hotels and motels at that time. If transshipment occurs during the tourist season, when accommodations are filled, Foothills Pipeline Limited is expecting to bring in trailers. Skagway will have to make provisions for the location of the trailers.

Port and Harbor Development. The completion of the port development project is one of the city's top priorities. The ferry pier realignment and the construction of the ferry/barge offloading facility are completed. The transfer bridge-upland storage facility is expected to be completed in October of 1980. The city is investigating the possibility of an expansion of the barge facility in order to accommodate more than one cruise ship at a time. The Cyrus Anvil ore dock will be used during the 1980 tourist season when more than one cruise ship is in port at one time. The city should strive to achieve a long-term solution to this problem of providing adequate space for cruise ships.

The small boat harbor expansion is well underway. The dredging is completed and the expansion of the float system is scheduled to be completed in the summer of 1980. There has also been discussion of developing a new ship basin west of the Anvil ore dock. The White Pass and Yukon Railroad (WPYR) completed dredging adjacent to their existing dock. A dock may be built in the WPYR ship basin to accommodate barges involved in pipeline transshipment activities. This dock may be available to cruise ships when it is not in use for other purposes. WPYR is also considering a major expansion of the ore terminal wharf.

The White Pass ore dock, POL dock, dry cargo dock, ferry dock and small boat harbor are competing for space on Skagway's limited waterfront. In order to fully utilize the harbor, additional docking and storage facilities are needed. These facilities must be well planned however, as there is very little space to work with. Skagway cannot afford to have to turn ships away because of a lack of docking space or storage facilities.



Zoning

Zoning is a primary implementation tool in achieving desired plan goals and objectives. The Skagway zoning code consists of a schedule of district regulations and general administrative provisions applicable in some or all districts such as parking regulations and building permits. The administrative provisions consist of:

95.10.010.	Application of Regulations
95.10.020.	Use Districts and Map
95.10.100.	Definitions
95.10.110.	General Provisions and Exceptions
95.10.120.	Public Uses
95.10.130.	Private Use of Public Property
95.10.140.	Existing Uses
95.10.150.	Off-Street Parking Area Regulations

95.10.160.	Sign Regulations
95.10.170.	Approval by Planning Commission
95.10.180.	Building Permits
95.10.190.	Enforcement and Penalties
95.10.200.	Exceptions, Variances and Appeals
95.10.210.	Board of Adjustment
95.10.220.	Force of Conditions
95.10.230.	Amendments and Changes

These provisions are analyzed in greater depth and revisions provided in the implementation program. In general, the code appears to have all the components necessary to make it function properly. Following is an outline of the schedule of district regulations which follow a classic "pyramid" structure that permits uses permitted in the previous zone. Revisions to the zoning are included in the implementation program.

Zoning Districts. Descriptions of the zoning districts found in Skagway are shown in Figure 1-9 and described as follows (see the management plan in the land use section for proposed zoning):

CR - Conservation Residential. This designation is applied to lands used for parks, recreation, open space, watershed, agriculture, utilities, homes and churches on a minimum of forty thousand square feet of land. The intent is a low density use of land in areas not requiring normal city services or utilities.

RS - Single-Family Residential. Uses permitted in this zone include uses permitted in the CR, plus schools, child nurseries, parks and playgrounds. Uses permitted by exception include basement apartments, churches, temporary structures, duplexes and trailer courts. The intent of the zone is to provide a low density residential atmosphere served by city services including sewer and water systems.

RM - Multiple-Family Residential. Uses permitted include all those listed previously plus apartments, multiple family dwellings and boarding houses. The intent of the district is to permit a more intense use of residential properties in selected locations of the city.

BN - Neighborhood Business Zone. Permitted uses include all residential listed above except house trailers plus neighborhood-serving commercial use including retail stores, services, restaurants and laundry services. The intent of the district is to provide convenient commercial goods and services adjacent to or within the residential areas.

BG - General Business. All uses previously listed except trailers are permitted, along with other uses of a general commercial nature. The intent of the district is to provide for the city's commercial activity.

BH - Historic. Uses permitted include all residential and commercial uses permitted in the general business district except automotive service and repair. The intent of the historic district is to protect and enhance the historic heritage and character of Skagway.

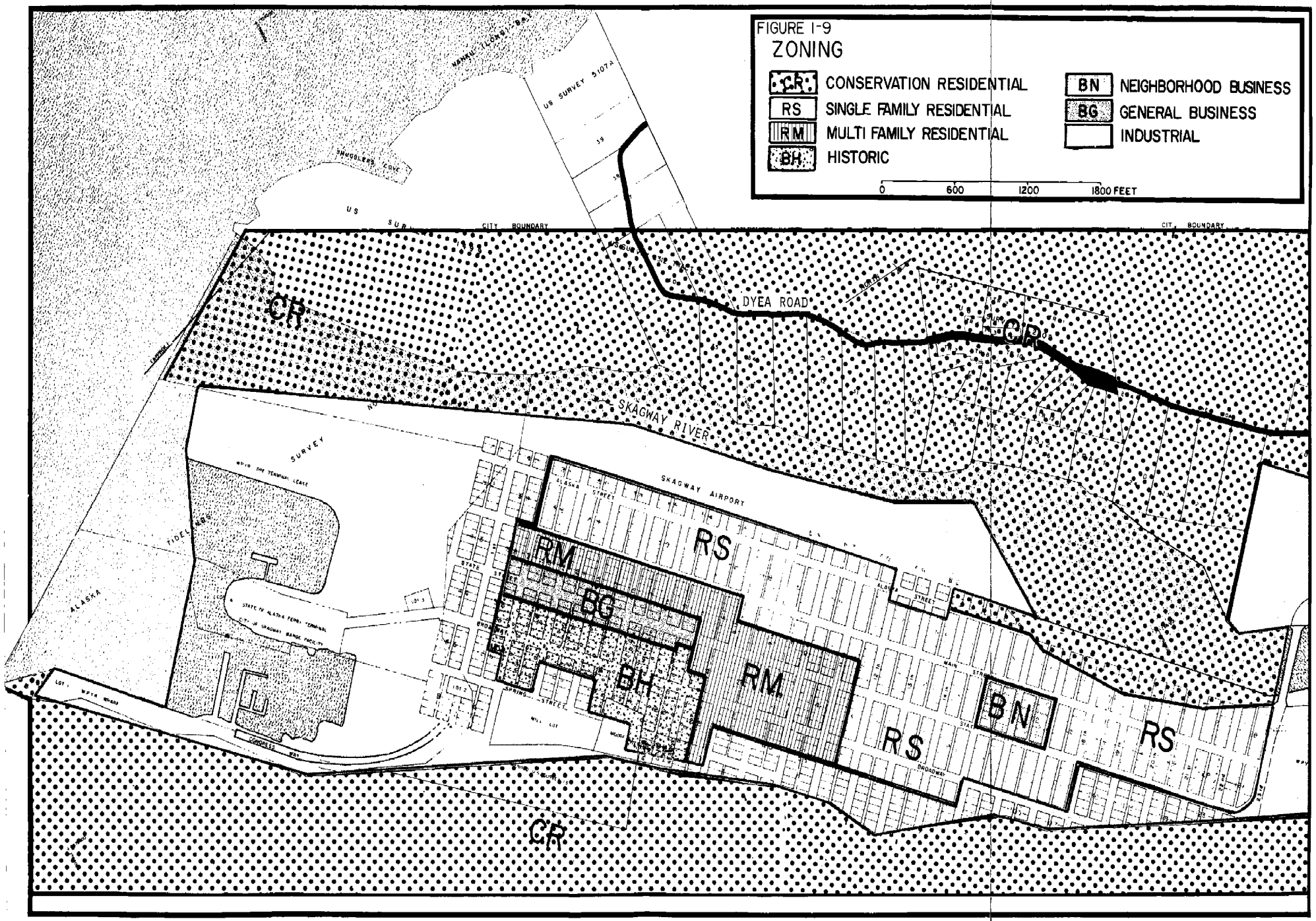


FIGURE I-9
ZONING
CR CONSERVATION RESIDENTIAL
RS SINGLE FAMILY RESIDENTIAL
RM MULTI FAMILY RESIDENTIAL
BH HISTORIC
BN NEIGHBORHOOD BUSINESS
BG GENERAL BUSINESS
INDUSTRIAL
0 600 1200 1800 FEET
CITY BOUNDARY
DYEA ROAD
SKAGWAY RIVER
SKAGWAY AIRPORT
ALASKA STREET
STATE STREET
SPRING STREET
MAIN STREET
BROADWAY
CONGRESS WAY
ALASKA
TIDELANDS
SURVEY
US SURVEY 5107A
CR
RS
RM
BG
BH
BN

I - Industrial. Permits all uses except residential, garbage dumps, cemeteries or any noxious or injurious use. The intent of this zone is to provide an area where industrial activities can be carried out.

Community Appearance and Function. The following provides an evaluation of various sections of the community, as well as their function in the community (Figure 1-10).

The city was geographically segmented into six general areas. This segmentation was based on the function of the identified areas. The areas described are as follows:

1. Historic District: includes business, commercial and civic functions which are centered on Broadway. This area serves the heart of the city and center of community life in Skagway.

2. State Street: a major transportation link between the Klondike Highway and the Skagway waterfront. The truck route represents the most important traffic corridor through town and a developing auto-oriented commercial district.

3. Waterfront: functionally the reason for Skagway's existence; a transshipment point for ore and freight. Consists of staging ground, small boat harbor and docks for barges, ferries and cruise ships.

4. Residential Area:
   Tenth Street South: the older, more established residential section.
   Tenth Street North: characteristic of a mixture of residential uses, multi-family, mobile home, single family structures.

5. Dyea Road: Lower AB Mountain - potential residential and recreational area.

POPULATION

At its peak in 1899, Skagway was the largest community in Alaska, with a population of more than ten thousand. The population declined rapidly as the gold in the Klondike area became increasingly elusive. By 1910, Skagway's population had dwindled to less than nine hundred people. Since that time, Skagway's population has remained relatively stable, with the exception of the World War II era, in which Skagway's population peaked at about twenty-five hundred people. At the end of the war, the population returned to its pre-war level. The following U.S. census figures show the relative stability of Skagway's population.

1910 - 872	1950 - 758
1920 - 494	1960 - 659
1930 - 492	1970 - 675
1940 - 634	1979 - 877 (greater area 914)

Table 1-6 identifies some of the characteristics of Skagway's population.

Table 1-6
POPULATION CHARACTERISTICS

	Skagway	Alaska
Percent of persons 60 years of age or older	10.0%	4.0%
Median age	25.2	22.9
Percent of nonwhites	5.9%	21.1%

Source: Pavitt, 1976.

In recent years, the population of Skagway has experienced moderate growth. This population increase is associated with the creation of the Klondike Gold Rush National Historic Park in 1976 and the construction of the Klondike Highway. During the construction of the highway, the population of Skagway swelled to the point that a housing shortage occurred.

The White Pass and Yukon Railroad has been the mainstay of Skagway's economy for many years. Recently, however, the railroad has been plagued by financial and physical difficulties. As a result, several people have been terminated in Skagway. This loss of employment and the resulting depression of the economy has forced some people to leave Skagway. There is speculation that the railroad may cease operations in Skagway. In such an event, the population would drop dramatically and stabilize at a much lower level. It appears, however, that the railroad will remain in operation, at least for several years (for details see sections on transportation, employment, and economic resources and activities).

According to Foothills Pipeline Limited representatives, if Skagway becomes a transshipment point for a gas pipeline, approximately seventy-five jobs will be available in the Skagway area. It is expected that thirty to forty of these jobs will be filled by Skagway residents, with the remainder of the employees coming from outside. Pipeline transshipment activities will occur in Skagway on an intermittent basis (e.g., two to three months at a time, perhaps fairly steadily in the winter) over a two-year period. Considering the intermittent nature of the work, it is doubtful that outside employees will be accompanied by many family members on a permanent basis; if transshipment activities

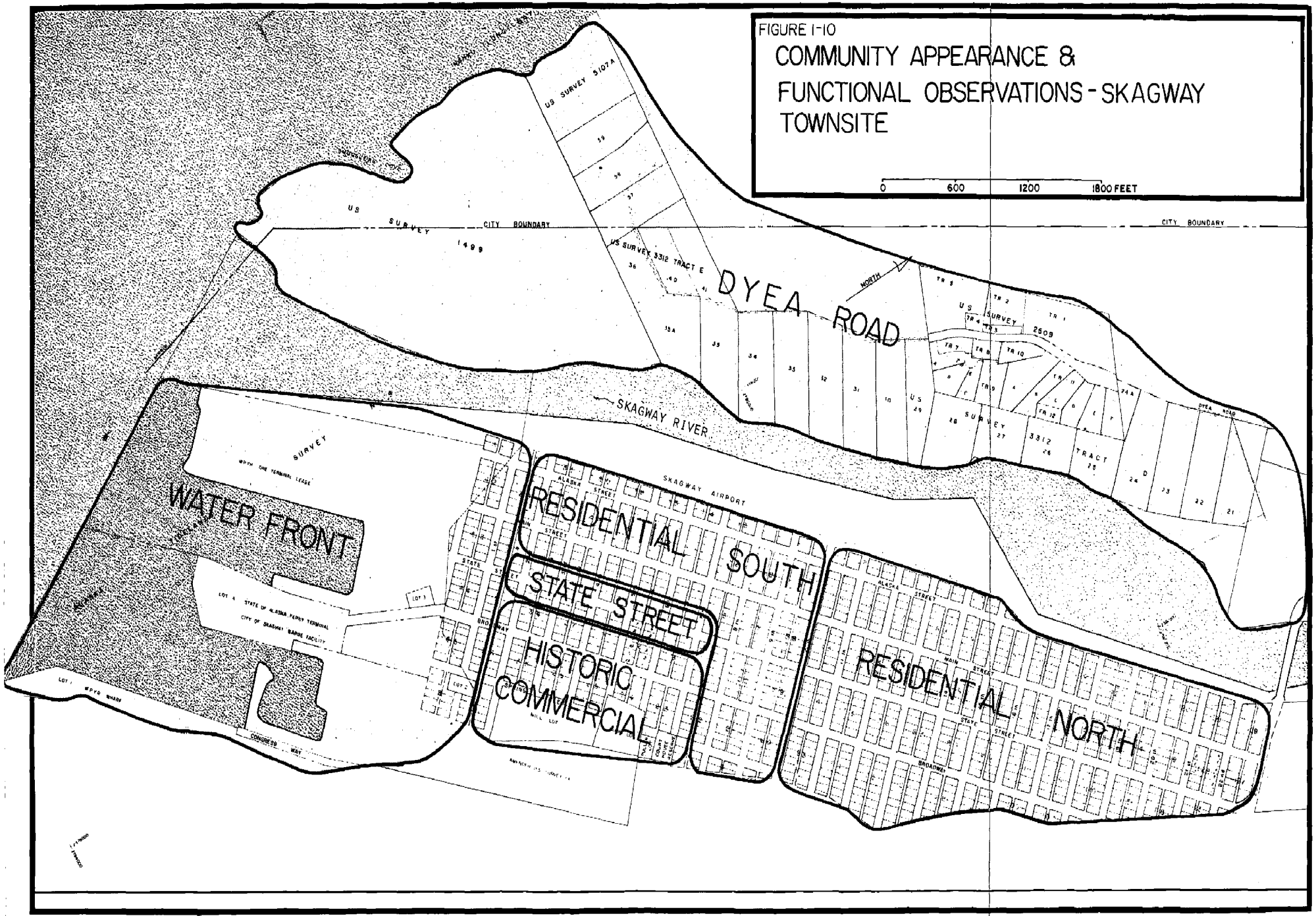


FIGURE 1-10
COMMUNITY APPEARANCE &
FUNCTIONAL OBSERVATIONS - SKAGWAY
TOWNSITE
0
600
1200
1800 FEET
CITY BOUNDARY
CITY BOUNDARY
US SURVEY 1499
US SURVEY 5107A
US SURVEY 3312 TRACT E
DYEA ROAD
SKAGWAY RIVER
US SURVEY 2509
US SURVEY 3312 TRACT 25
WATER FRONT
RESIDENTIAL SOUTH
STATE STREET
HISTORIC COMMERCIAL
RESIDENTIAL NORTH
SKAGWAY AIRPORT
ALASKA STATE FERRY TERMINAL
CITY OF SKAGWAY BARGE FACILITY
MAIN STREET
STATE STREET
BROADWAY
CONGRESS WAY

occur in the summer, however, a substantial number of family members may be expected to join project employees for the summer. A rough estimate is that if fifty employees are brought in from outside, the total population will increase by less than seventy people. There is a possibility that unemployed jobseekers will swell the Skagway population to an undeterminable degree.

When the transshipment activities are over, the population is expected to drop to near its pre-pipeline level. Gradual increases can be expected as the tourist industry grows and more mining operations open in the Yukon. This will probably result in a ten percent increase over present population by 1985. The major determinant of population growth is mining in the Yukon, which will provide employment in either railroad or trucking operations. Growth is expected in the Yukon mining industry; however, the timetable for growth and the extent that it impacts Skagway is indefinite (see economic resources and activities section for details). Any population estimates must therefore be viewed in this light.

EMPLOYMENT

Employment in Skagway is generated by the transportation industry - primarily the White Pass and Yukon Railroad - and tourism. Employment peaks in summer and falls substantially as the tourist season ends. The railroad has traditionally been the main source of direct and indirect year-round employment. The maintenance shops, ore storage and loading docks, petroleum products storage and cargo dock facilities are all at Skagway, and the line employs approximately 140 Skagway residents full-time and another twenty-five to thirty on a seasonal basis. Other important employers include the National Park Service, which hires about fifty people in the summer. The bulk of these are laborers and carpenters to do restoration work in the historic district. Construction of the Klondike Highway provided fifty to sixty temporary jobs; however, such projects are infrequent.

Employment data for Skagway is limited, but available figures indicate that in July 1976 there were 418 people employed and sixty unemployed. Apparently, this 12.5 percent unemployment rate has diminished since 1976. A recent publication by the Division of Economic Enterprise (Skagway - An Alaskan Community Profile, May 1979) noted that "the labor supply is tight in Skagway. There are very few unemployed people available for work" (see Table 1-7).

In recent years, the railroad has experienced financial and physical difficulties, resulting in the termination of several employees in Skagway. These terminations have somewhat altered the situation as described by the Division of Economic Enterprise. Federal Industries, owners of the railroad, have considered curtailing rail service to Skagway, with the possible exception of passenger service during the summer. It is unlikely that this will happen, as the Canadian regulating agency appears to be determined to keep the railroad running.

Table 1-7
EMPLOYMENT ESTIMATES

Sector	1976 Self-Employed	1976 Full-Time and Part-Time Employment	1976 Seasonal Employment	1979
Construction*	2	6	---	10
Manufacturing	1	---	---	5
Transportation	4	179	35	190
Communications and Public Utilities	--	6	---	
Trade	12	30	8	45
Finance, Insurance, and Real Estate	1	6	---	10
Service	14	35	56	30
Federal Government	--	3	1	
Local Government	--	29	---	40
State Government**	--	2	---	
TOTALS***	34	296	100	310

*Does not include 50-60 full and part-time workers engaged in the construction of the Skagway-Carcross Highway.

**Ten state employees are listed within the transportation sector.

***A number of workers fall into more than one sector of the economy due to holding two part-time jobs, self-employed persons working part-time for others, etc. Thus, while the figures do not agree precisely with the employment totals previously given, they do give an accurate picture of the relative importance and seasonality of the various sectors of Skagway's economy.

Sources:

Alaska Department of Labor; Research and Analysis Section and field investigation conducted by R.W. Pavitt and Associates, Inc. (Pavitt, 1976).

Alaska Department of Natural Resources. Haines-Skagway Area Land Use Plan, City of Skagway, Alaska Division of Economic Enterprise.

There are several major factors that effect employment in Skagway, including tourism, transshipment activities for the proposed gas pipeline, mining in the Yukon, the railroad, and competition from other ports and the state on the regional and national economy. Although tourism will be affected by the availability of fuel and the general state of the North American economy, a gradual increase in tourism can be expected as long as Skagway remains attractive and accommodating. This will result in increased seasonal employment.

The transshipment of pipe and materials through Skagway will temporarily boost employment in the community. Transshipment activities are expected to generate seventy full-time and intermittent jobs over the course of two years. Skagway residents will probably fill between thirty and forty of these positions. (Transshipment probably will not occur for at least a year and a half.)

Mining in the Yukon provides for a basis for employment for the White Pass and Yukon Railroad, which hauls ore from the interior to the port of Skagway. Increases in mining are expected in the next few years, which will tend to stabilize employment on the railroad. In the event that part or all of the railroad's shipping activities are transferred to a trucking operation (which has been proposed by WPYR), there will probably be as much as a twenty percent reduction in employment related to trucking and railroad activities. This is due to a possible transfer of maintenance facilities to Whitehorse and union demands that will probably require five Canadian truckers for each U.S. citizen; this is because the ratio of Canadian to U.S. highway between White Horse and Skagway is roughly five to one - it is not possible switch truck drivers at the top of the pass, as the railroad does. This loss in jobs would be balanced, to some extent, by the hiring of people to maintain the highway on a year-round basis to accommodate truck traffic.

The port of Stewart, Canada is becoming increasingly competitive with Skagway for the shipment of goods to the Canadian interior. Unless Skagway provides adequate facilities and competitive rates, there will be an erosion of the traffic through Skagway with an attendant loss of jobs.

Accurate employment projections are difficult, if not impossible, in the absence of comprehensive employment data. Some trends, however, can be identified and crude projections made. The overall employment trends in Skagway will probably be as follows: a ten percent increase in employment in 1981-1982 due to pipeline activities, returning to previous levels in 1983, and a ten percent increase in 1984-85 due to increased mining activity in the Yukon as well as gradual increases in tourism. These figures are obviously crude, and may vary substantially in response to the variables previously indicated.

TRANSPORTATION

Transportation is Skagway's lifeblood. Skagway's existence is due to its strategic location in the transportation corridor to the Yukon.

The gold rush era provided Skagway with its beginning and the railroad has been its economic mainstay ever since. The railroad, which is one of the last commercial narrow gauges railroads in North America, traverses a hundred mile route from Skagway to Whitehorse on a daily basis. The railroad transports passengers, vehicles, freight and vast amounts of lead, zinc and silver ore. The ore is hauled from the Yukon to Skagway for transshipment by foreign ore ships to destinations throughout the world. "During the summer, White Pass operates the immensely popular 'Bennett Turnaround' . . . a scenic morning trip to Lake Bennett, British Columbia, featuring a family-style luncheon at the railroad's Lake Bennett facility; returning to Skagway late the same afternoon. Thousands of tourists and hundreds of Alaskans annually travel to Skagway to enjoy this spectacular journey" (R.W. Pavitt, 1976). This trip may be curtailed in favor of a shorter trip to the White Pass summit.

Passenger volumes obtained from the railroad are, to a large extent, duplicative of the other modes of transportation. The passenger figures are of interest, however, in that they show how attractive the railroad trip is. The railroad carried approximately 73,000 passengers in 1977. This compares to 62,000 in 1976 and reflects the railroad's close dependence on the cruiseship arrivals. Approximately fifty percent of the passengers take the trip to Lake Bennett, with the remaining half going through to Whitehorse. The railroad expects to lose most of this "through" traffic to the highway (Pavitt, 1976) (Table 1-8)

Marine passenger transportation consists of ferries and cruiseships. The ferries stop in Skagway eight times a week in the summer and four times a week in winter. The number of cruiseship arrivals varies. In 1977, there were 116 arrivals, in 1979 there were fifty-eight and in 1980 between fifty and sixty-eight are expected. The largest number of tourists come to Skagway on cruiseships, thus accounting for approximately sixty-five percent of the total number of visitors in 1977. The cruiseships operate on a trip cycle of either eight or fourteen days and carry from two hundred to nine hundred passengers per trip. They run at or near capacity with bookings being sold out a season in advance. The industry has grown from 27,000 passengers in 1970 to an estimated 68,000 in 1977. These ships lay over in Skagway up to eighteen hours, giving the passengers sufficient time to see Skagway and take the train ride to Lake Bennett. Some of the tour groups travel through Skagway, departing via railroad to Whitehorse, then on to Fairbanks (Table 1-9). Two new large-capacity ships are coming to Alaska in the 1980 season. This should substantially increase the tourist traffic in Skagway, although the ship "Fairsea" has recently terminated service to Skagway.

Freight traffic in Skagway is primarily handled by containerized ship and barge, in conjunction with the railroad. Federal Industries (owners of the White Pass and Yukon Railroad) operates two containerized ships that bring bonded freight to Skagway for transshipment via rail to Whitehorse, Yukon Territory and other points in Canada. Tankers bring bonded petroleum products that are shipped via pipeline from the tank farm north of the city to Whitehorse.

Table 1-8

TOURIST TRANSPORTATION

	1979	1978
FERRY (included in Table (#4)) - (May-Aug.)		
Embarking Ferry		
Vehicles	3,076	1,403
Passengers	16,887	12,739
Debarking Ferry		
Vehicles	3,076	1,729
Passengers	20,085	14,706
HIGHWAY - (May-Sept.)		
Northbound		
Vehicles	8,804	
Passengers	39,032	
Southbound		
Vehicles	11,182	
Passengers	45,592	
WHITE PASS & YUKON ROUTE - (May-Sept, Customs Figures)		
Northbound	33,033	41,330
Southbound	33,308	44,058

Table 1-9

U.S. CUSTOM FIGURES BY MODE OF TRANSPORT

Transportation Mode	1977	1978	1979
Air Taxi			
Flights	231	202	167
Persons	896	570	472
Private Air			
Flights	76	122	89
Persons	189	319	257
Cargo Ships	72	150	114
Persons	39	63	30
Container	60	81	52
Ore & Tanker	20*	20*	29*
Cruiseships	101	57**	67
People	13,553	6,255	5,589
Trains	746	813	691
People	61,573	51,912	44,769
Highway		123	10,733
People		411***	49,622***
Total People	76,250	59,530	100,739

*Ships agent except for White Pass

**Introduction of motor vessel Westours "Fairweather", 150 passenger day boat which brings in Juneau passengers (decrease road trip time from Vancouver from eight to seven days).

***Opening of highway September and October 1978, May through October 15, 1979.

Source: U.S. Customs Office, Skagway. Port Directors Statistical Report to the Regional Commissioners, VIII-RC-286-MAN.

Marine traffic is limited in Skagway by the insufficient amount of docking and storage space. The Skagway port facilities are being improved; more work needs to be done, however, to enable the harbor to accommodate more traffic (see port development in the land use section for details).

Air transportation is limited to small planes (e.g., six passenger) that can land on the short, 3,300 foot runway. Scheduled and charter service is provided by L.A.B. Flying Service and Southeast Skyways. Chartered flights are also available with Skagway Air Service.

Bus service is provided by Westours and American Sightseeing; taxi service is also available.

The total number of people coming into Skagway by land reached 96,000 in fiscal year 1979. Forty-one thousand people entered on the railroad and 49,000 entered Skagway on the highway. This latter figure includes 10,800 people who rode 568 buses. Tables 1-8 through 1-10 provide additional data.

The road network in and around Skagway and Dyea consists of the new Klondike Highway, the Dyea Road, the streets in town and a few access roads. The streets in Skagway are dirt and gravel, with the exception of State Street, which is paved for twenty-three blocks. These gravel streets have been treated with chemicals (calcium chloride and oil) to keep dust down. Skagway intends to eventually install drainage facilities along Broadway so buildings along the street will be protected from infiltration and decay. The traffic generated by the Klondike Highway will cause increased wear on Skagway's road network. This may require increased maintenance and upgrading of roads. Skagway has recognized that state-maintained Dyea Road, which has a history of serious accidents, must be upgraded to help prevent accidents. In addition to alleviating a driving hazard, upgrading the road would facilitate the construction of a campground in Dyea.

In the event that pipeline materials are moved from Skagway on trucks, as appears will be the case, a truck/bus route may need to be developed to bypass the historic district and relieve congestion. A new road along the west side of the Skagway River or along the aiport has been suggested. Another suggestion is to construct a by-pass route on the dike along the east side of the river.

The Klondike Highway, which was completed in the fall of 1978, provides an alternative to the railroad for transportation into the Yukon interior. People driving the Alcan, as well as residents of the Yukon, will be arriving in Skagway in substantial numbers via the Klondike Highway. The new route will also attract people who will take the ferry to Skagway and then drive the Alcan Highway or the Skagway/Whitehorse/Haines Junction/Haines loop.

The Klondike Highway is not maintained in the winter due to the high cost and to the Canadian government's reluctance to participate (most of the highway is in Canada). If a gas pipeline is built, Foothills

Table 1-10

MARINE HIGHWAY TRAFFIC

Year	Passengers	Vehicles
1970	27,518	3,996
1971	29,503	4,157
1972	34,748	4,312
1973	39,332	4,649
1974	39,946	5,052
1975	42,756	6,151
1976	43,880	6,222
1977	36,150*	5,375*
1978	36,907	6,950
1979	43,382**	6,950**

*1977 figures are estimated to the end of the year. Ferry strike during the peak months of July and August accounts for the decrease from 1976.

**As of October 1979.

Pipeline Limited has indicated that it will use the Klondike Highway to move materials to the interior. This would require substantial upgrading of the highway (thirty-two miles will be upgraded on the Canadian side of the highway during the 1980 construction season). Some curves will have to be straightened and grades reduced to accommodate trucks carrying one hundred foot joints of pipe. The snow avalanche and snow blowing potential should be looked into; however, this area does receive less snow than the Haines road, which is maintained year-round. The highway grades are also less severe than the Haines highway.

In order to minimize the detrimental effects of transshipment activities on other forms of transportation using the highway, it has been suggested that trucks be allowed to use the road only during the winter. If the transshipment of pipe occurs in the summer - and Foothills is not ruling out that possibility - it would cause havoc. Tour buses, cars and a stream of trucks don't mix well. If it is essential that trucks be run in the summer, they should be scheduled to travel when traffic is light. In planning for use of the Klondike Highway during pipeline transshipment, the City of Skagway should coordinate with the State of Alaska, the U.S. Federal Inspector and the Northern Pipeline Agency of Canada.

The increased traffic generated by the Klondike Highway will result in a greater demand for parking spaces. Parking plans have been proposed, but they have not met with favor by the community. A public opinion poll taken in the fall of 1978 revealed that the voters were opposed to closing Broadway to traffic in the summer (93/134), limited parking on the street (61/154) and a system of one-way streets (21/180). A slight majority of people were in favor of a system of diagonal or straight-in parking on side streets (107/106). The city council has designated twelve loading zones; eleven are in the historic district and one is next to the small boat harbor.

More must be done to eleviate the parking and congestion problem. Tourism is one of Skagway's major industries. It is important that visitors are provided wth ample parking areas, campgrounds, camper parks and recreation areas. If Skagway appeals to visitors, it will prosper. If Skagway poses problems for visitors, it will experience something less.

UTILITIES

Solid Waste

Skagway currently relies on an illegal, unsightly dump in the Skagway valley near the airport. Members of the community, state officials and numerous solid waste experts have attempted to find an adequate alternative solid waste site for Skagway. The problem is that it is difficult to find suitable sites for solid wastes in the Skagway valley. Most of the valley is underlain by permeable alluvial deposits which will allow contaminants from a dump to enter the surface and ground water and thus pollute Skagway's water supply. To make matters worse, most

of the valley is in a floodplain. The flooding of a landfill would pose a dangerous health hazard for the community.

The National Guard developed a solid waste site for nonburnable material on AB Mountain. The site was to be used in conjunction with an incinerator in town; the incinerator, however, proved to be too inefficient and expensive to operate. The feasibility of further use of the AB Mountain site should be investigated and the dump's compatability with the future residential development of AB Mountain should also be evaluated.

Although winter access with heavy equipment on the dangerous Dyea Road would be extremely difficult, Alaska Department of Environmental Conservation (ADEC) representatives have indicated that a suitable solid waste site could be developed in the Dyea valley. The road will have to be upgraded to the extent that it is safely passable by heavy trucks during the winter. ADEC is also evaluating a potential dump site in the Skagway valley.

Another alternative to developing a solid waste site near Skagway is to ship compacted waste to suitable sites in Juneau or Haines. A pilot project in this regard was undertaken in the summer of 1979 by Channel Sanitation of Juneau and was apparently successful. Both the Juneau firm and a Haines firm have offered to transport Skagway's solid waste for a fee of $93,000 to Juneau and $50,000 to Haines. These figures should be weighed against the expense incurred in developing and operating the alternative facilities.

Another possibility for solid waste disposal is to acquire an incinerator large enough to generate heat for other buildings. Skagway may not generate enough burnable waste, however, to make this practical.

The city recognizes that it is imperative to develop a method for disposing of solid waste in the near future. The 1979 Overall Economic Development Plan makes the following suggestions to that end:

> Make a decision on how solid waste is to be disposed of and initiate action towards the timely development of an adequate waste disposal program.
>
> Seek funding assistance as required from EPA, EDA, ADEC and, as appropriate, industrial users - e.g., pipeline contractors.
>
> Develop and implement a schedule of user fees for resident and industrial users sufficient to support the waste disposal program.
>
> Participate in the EPA funded study of the waste disposal program on a regional basis, with emphasis on transfer of the city's waste for energy use.

Sewage Disposal

The sewer system consists primarily of eight, ten and twelve inch wood stave constructed in the 1940's and 1950's. This is gradually being replaced by new pipe. A wastewater treatment plant which provides secondary treatment was recently installed; unfortunately, the cost to operate the plant is excessive. There was also a question of the actual physical need for the plant. It is widely considered that Taiya Inlet provides adequate flushing action to dispose and disperse sewage generated by Skagway and, as a result, the city suspended operation of the plant. Federal and state authorities are working with the city to attempt to resolve the problem. The following excerpt from the 1979 Overall Economic Development report provides additional information (see Figure 1-11.)

> Sewerage System Improvement Project
>
> It has been determined that the volume of flow in the collection system exceeds the capacity of the waste treatment plant to attain secondary level of treatment. A continuation of the project to include an I&I study and replacement or repair of obsolescent sewer mains will be required. Additionally, it is likely that much of the infiltration comes from service lines; therefore, property owners also will be faced with the cost of replacement of lines underlying their property. The city has exhausted its bond monies for water and sewer systems improvements; hence, one hundred percent financing assistance will be required to undertake additional improvements - e.g., the elimination of the excessive I&I and expansion of the system to accommodate oil and gas pipeline construction work forces. The city submitted a request for a waiver from the requirement for secondary level treatment which, if approved, would reduce O&M costs somewhat without degradation of the environment.
>
> Meanwhile, at a cost of $6,000 to $7,000 per month, the city is operating the functionally ineffective treatment plant. Either the I&I problem in the collection system must be corrected or the project accepted as completed with the likelihood that the plant will be by-passed and secured. As a practical matter and fundamental to the outcome of this issue is the answer to the question of whether or not waste water treatment is in fact required - e.g., does the non-industrial waste water in Skagway in fact pollute the waters of the Lynn Canal? This question was not resolved before construction of the secondary plant was mandated.

The funding agencies, FMHA, ADEC and EPA, have informally advised that additional assistance likely could be made available upon receipt of a formal grant application from the city. In other words, if the city opts for more construction, it must provide an engineering estimate of the scope and costs of the work.

The recent decision by the city council to suspend operation of the treatment plant effective 1 July 1979 should work to bring this problem to resolution one way or the other - i.e., to complete or to close out the project.

With an alternate energy source the city could possibly operate this treatment plant economically.

Due to difficulties in resolving the sewage disposal issue, the city relinquished its responsibilities for operation and maintenance of the city sewage system. A recent court-issued injunction has ordered the city to operate the plant for a ninety-day trial period. ADEC will monitor the plant and receiving waters and present its findings to the court.

Water

Skagway gets most of its water from deep wells north of town. The quality of the water is good. It could be polluted, however, by contaminants from a dump or other incompatible land use in the proximity of the wells. Water can also obtained from Lower Dewey Lake, but this source is not currently in use. All but a few people who live on the outskirts of town, on the way toward Dyea, are on the public water system. The remainder of the people in the area use private wells. The public water system, which uses water mains of six to twelve inches in diameter, provides the residents with an average of 650,000 gallons of water a day. This system is adequate for present needs. The main problem is that there are still some wooden water mains that need to be replaced as they leak excessive amounts of water and thus severely limit the carrying capacity of the system. There is also some problem with pipes freezing in the winter.

If gas pipeline transshipment activities occur, greater water capacity will be required. This could be provided by mainline extensions and additional wells. An existing water storage tank should be repaired to help provide water for emergency purposes. Additional fire wells may also be needed.

Water is generally available throughout the Skagway valley; however, obtaining water would be a problem in the uplands such as AB Mountain and along Dyea Road due to shallow bedrock. There has been speculation that water could be obtained from the Skagway River or perhaps from wells in town to provide water for the AB Mountain area. The feasibility of piping or hauling water to these areas should

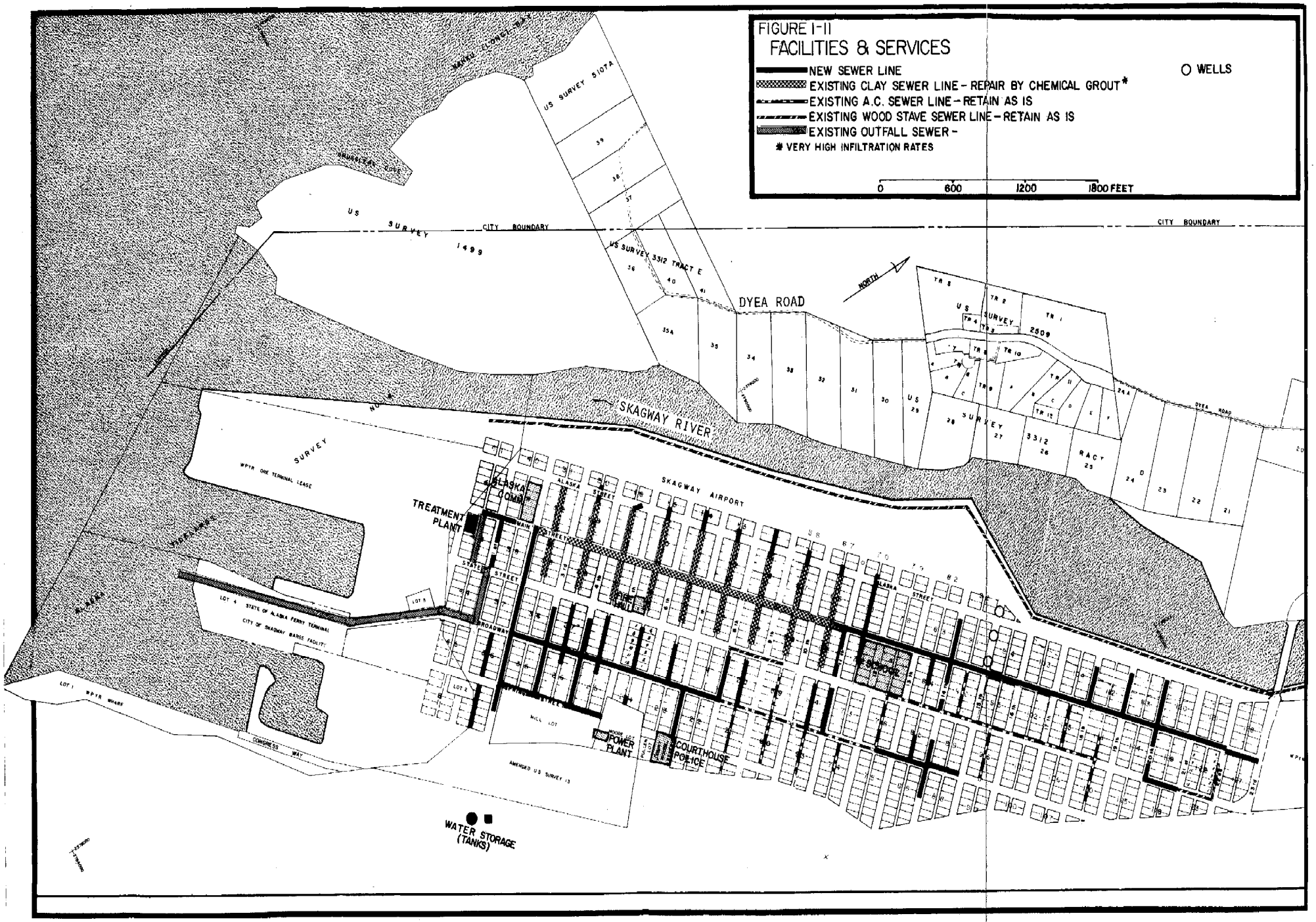


FIGURE I-II
FACILITIES & SERVICES
NEW SEWER LINE
EXISTING CLAY SEWER LINE - REPAIR BY CHEMICAL GROUT*
EXISTING A.C. SEWER LINE - RETAIN AS IS
EXISTING WOOD STAVE SEWER LINE - RETAIN AS IS
EXISTING OUTFALL SEWER -
* VERY HIGH INFILTRATION RATES
WELLS
0 600 1200 1800 FEET
CITY BOUNDARY
US SURVEY 1499
US SURVEY 3312 TRACT E
US SURVEY 2509
DYEA ROAD
SKAGWAY RIVER
SKAGWAY AIRPORT
TREATMENT PLANT
ALASKA COMM.
POWER PLANT
COURTHOUSE POLICE
SCHOOL
WATER STORAGE (TANKS)
WPYR ORE TERMINAL LEASE
STATE OF ALASKA FERRY TERMINAL
CITY OF SKAGWAY BARGE FACILITY
WPYR WHARF
CONGRESS WAY
MILL LOT
AMENDED US SURVEY 13
NORTH

be investigated (for details see Land Use Policies and Standards - AB Mountain).

Energy

Electric power in Skagway is provided by the Alaska Power and Telephone Company (AP&T). Diesel generators, supplemented during the summer months by hydroelectric power generated by two Kelton wheels located in the outfall from Lower Dewey Lake, provide a maximum of 1,495 kilowatts of power, with an estimated 855 kilowatts of "firm" power (Pavitt, 1976). The AP&T submitted an application to the Federal Power Commission to install a third penstock to provide greater seasonal use of hydropower. There has been concern in Skagway regarding AP&T's poor management of the Dewey Lake watershed. Attempts are being made to assure that the watershed fares better in the future.

The city contacted the Northern Canada Power Commission to investigate options for obtaining power. The commission indicated that the only available option at present was diesel power. Hydropower was committed to Yukon communities. No new hydro projects have been approved (there is a ten to twelve year lead time after a project is approved before an area can be committed). The commission has offered to include Skagway in its study of long-term requirements.

The 1979 Overall Economic Development Plan (OEDP) notes that the present levels of electric power and telephone service is inadequate. The city stresses the need to upgrade the capacity of these services. The OEDP states:

> "The potential for greater use of the Dewey Lake drainage system and the development of hydro power facilities in the Skagway River valley should be examined. Over longer term, the potential for hydro installations at West Creek should be looked into. Additionally, the possible use of wind power should be explored."

The local power company is in the process of increasing their power generating capacity. It therefore appears that there will be adequate energy to supply short-term needs (e.g., several years), although the price for diesel generated power may be excessively expensive. A recent report by CH2M Hill recommends investigation of Reid Falls Creek for future hydropower development.

Wind Energy. Skagway is considering tapping its ample supply of wind to create electrical energy. Skagway is inspired because modern windmills in North Carolina and New Mexico are generating enough power to supply electricity for towns larger than Skagway. The main problem is that they only produce power intermittently. Unfortunately, the city's application to the Alaska Division of Energy for a wind-powered generator for the clinic was rejected. Another program may be available in the spring and Skagway should submit another proposal at that time. A private windmill is operating in Skagway which should provide a good test for the feasibility of widespread use of windmills in the area.

Telephone Service/Communications

Telephone service is provided to over 385 subscribers by Alaska Power and Telephone Company, with RCA Alascom providing for long distance calls. According to the 1979 OEDP:

> "The quality and adequacy of telephone services has continued to deteriorate through the year. The city requested an investigation by the State Public Utilities Commission which resulted in a public hearing and the granting of a forty-one percent increase to the Alaska Power and Telephone Company subject to a provision that the company would initiate improvements to upgrade the material condition of its plant and the quality of its services. The satisfaction of the PUC provisions remains to be realized."

The city wants to investigate the possibility of taking over the Alaska Power and Telephone facilities.

There is no commercial broadcast facility in Skagway. Residents keep abreast of current events via radio (rebroadcast of a commercial station in Juneau) and by cable television. The cable operator offers network television programming on a "tape delay" basis (program are two to five weeks old), with national news programming available two to three days following its original live broadcast. The cable also offers one channel that provides local advertising and public service announcements. The transmission of television and radio programs is often of poor quality.

Skagway has a first class U.S. Post Office. Delivery of mail is by post office box or general delivery, as there is no home delivery service in Skagway (Pavitt, 1976).

COMMUNITY FACILITIES AND SERVICES

Public Safety

Fire Department. The fire department consists of twenty-six volunteers with six pieces of mechanized equipment. In 1978, the department responded to twenty-nine fire alarms in the community and one outside the community. Fire loss for the year was approximately $15,180.

In July 1979, Skagway experienced a startling fire in the historic district. Three buildings were severely damaged in a blaze that took sixty firefighters approximately four hours to control. A united community effort averted what may have resulted in the obliteration of the historic district and much of the remainder of Skagway. According to officials, the structures in the historic district are primarily wooden firetraps and a major fire was long overdue. Local officials were aware of the problem and had, several years ago, required that all new con-

struction in the historic district be cement, masonry or steel. This conflicted, however, with the recent trend to maintain the character of the historic district and, as a result, the fire zones were changed to accommodate wooden structures in the historic district. Currently, all new structures in the historic district are required to have sprinkler systems. Although existing structures are not required to install these devices, they are encouraged to do so.

The excellent volunteer fire department can only do so much, given present conditions. Measures should be undertaken to enable the fire department to provide better fire protection in Skagway. For instance, the low capacity, outdated wooden water mains that serve the cross streets should be replaced; fire department representatives suggested that this be done at a rate of three streets a year over the course of the next five years. In addition, one of Skagway's two water tanks is damaged and should be replaced immediately to provide necessary water storage. Fire wells should also be provided as needed. Existing firefighting equipment should be upgraded or replaced as necessary. Additional tanker trucks, water storage tanks or extended water lines will be necessary to provide adequate fire protection if there is increased activity or community expansion in areas without water systems. These areas include the tank farm and potential residential areas on the outskirts of town.

If Skagway becomes a transshipment point for gas pipeline materials, fire hazard will increase. The greater the number of people, the greater the incidence of fire. It is also probable that there will be an increased volume of fuel and other flammable material going through town. This increased danger should be compensated for by a corresponding upgrading of the fire department's firefighting capability.

Medical. The fire department has a well-trained emergency medical squad which recently acquired and modified an ambulance. The community is also served by a doctor from Haines who visits two days a week.

Police. Skagway employs three officers at this time. Results of the 1978 election indicated 274 out of 316 voters considered the present capability of the police force and the level of law enforcement to be adequate.

Overall police activity in Skagway in 1977 increased eighteen percent over 1976. Activity increased twenty-four percent in 1978 over 1977. Although no estimates are readily available, police activity can be expected to increase with the opening of the Klondike Highway and the initiation of pipeline construction activity. An additional officer may be needed if transshipment activity occurs. There will be more people in the area during that period, including unemployed jobseekers and such circumstances typically result in a higher incidence of crime.

Education

As shown below, the Skagway school system has experienced declining enrollment over the last three years.

School Year	Enrollment
75-76	217
76-77	207
77-78	232
78-79	199
79-80	172

Since the state finances schools on the basis of enrollment, this decline in enrollment has serious adverse impacts on Skagway's educational programs. Two instructional units have already been lost, which is equivalent to approximately $60,000 in funding, and the school is close to losing another unit. The reduction in funding has resulted in the termination of an instructor as well as of some programs. There are currently seventeen full-time teachers and six teacher's aides employed at the school. The school will be able to maintain its existing staff and programs until enrollment falls to about 150 students. In that event, priorities will have to be assessed.

The school has a capacity of 260 to 300 students. At the present time, there is one empty classroom and none of the classes have more than twenty students. The student/teacher ratio is 10.4 to 1, which could be doubled if necessary. Therefore, there should be no problem accommodating additional students generated, for instance, by pipeline-related activities.

Skagway also has a community education program that provides the townspeople with a variety of educational and recreational activities. Several classes are held at the school after the close of the regular school day.

The public buildings in Skagway include a maintenance shop, a clinic, a new library and City Hall. These facilities are in good to excellent condition, with the exception of the maintenance facilities, which consist of increasingly obsolete World War II structures. The top story of City Hall is occupied by a courtroom and a museum, which contains numerous artifacts of the gold rush era. Skagway also has three churches, several fraternal and civic clubs, a community education program, veterans groups and a Chamber of Commerce.

The city maintains city streets. All the streets (with the exception of State Street, which is paved) were recently surfaced with gravel and treated with chemical dust retardants. Drainage is provided by ditches and culverts. More work needs to be done in this regard to prevent the deterioration of the foundation of structures on Broadway. The city also provides snow removal. The city's maintenance equipment includes a backhoe, a dump truck, a D-4 catepillar, a grader and a garbage truck.

The following list of projects and problems is identified in the 1979 Overall Economic Development Plan. They are listed in order of priority for resolution over the next two years. Each of these topics has been discussed in appropriate sections of this report.

1. port development
2. local energy sources and needs
3. solid waste disposal
4. sewage disposal - wastewater treatment plant
5. upgrade water system
6. annexation
7. develop campgrounds
8. Klondike Highway - traffic control and parking
9. energy-related developments
10. inflation

These and other topics that can be dealt with in the context of this coastal management program are addressed in the implementation section of the program.

COMMUNITY FINANCE

The financial resources of a community are indicative of its ability to direct favorable change. While development is not directly dependent on financial resources, Skagway can discourage and/or encourage development through tax incentives, land ownership, issuance of bonds and provision of facilities and services.

Report of Examination, 1978

Following is the 1978 Report of Examination, which outlines present allocation of community expenditures and sources of financial resources.

Statement of Revenue
for year ending June 30, 1978

	Estimated Revenue	Actual Revenue
General Property Taxes	$ 318,895	$ 315,953
Licenses and Permits	1,350	4,517
Fines, Interest and Penalties	8,000	22,077
Revenue from State of Alaska	54,500	76,722
Utilities	75,000	93,377
Museum	7,000	12,189
Revenue from the Federal Government	34,146	89,531
Rentals	27,500	38,891
Miscellaneous	2,660	10,261
Donations		15,553
	$ 529,051	$ 679,071

Property taxes are the largest single source of revenue to support city operations. Since annexation has occurred, Skagway is eligible for U.S. Forest Service forest revenue sharing program, which provides communities with a portion of the Forest Service timber sales receipts, based upon the percentage of Tongass Forest land within the local government boundaries.

The breakdown in expenditures are as follows:

Statement of Expenditures

	Budget	Actual	Percent of Expend.
GENERAL GOVERNMENT	$ 352,272	$ 328,356	52%
City Hall	8,300	7,478	
City Manager's Office	29,721	29,738	
City Clerk	35,596	40,248	
Fire Department	23,620	21,707	
Police Department	92,900	86,448	
School Budget	49,000	49,000	
Parks & Recreation	15,200	12,466	
Health Center	7,000	7,557	
Elections	800	345	
Tourism Promotion	1,500	1,171	
Council	9,135	5,634	
Administration - all departments	79,500	66,564	
PUBLIC WORKS	$ 188,500	$ 170,533	27%
Administration	32,900	29,459	
Maintenance	14,850	33,664	
Streets & Sidewalks	32,000	25,450	
Water System	38,100	50,609	
Sewer System	21,400	8,863	
Garbage	20,200	16,293	
Waste Treatment Plant	26,050	3,631	
Civil Defense	3,000	2,564	
PORT AND HARBOR	$ 23,770	$ 46,325	7%
OTHER	$ 62,130	$ 86,197	14%
Museum	12,330	10,150	
Library	7,300	6,915	
Cemetery	1,000	756	
CETA	---	4,078	
Trail Project	---	5,240	
Employer Payroll Expense	41,500	44,608	
Anti-Recession Salaries	---	14,450	
TOTAL EXPENDITURES	$ 626,672	$ 631,411	100%

In order to facilitate evaluation, expenditures were broken down into General Government, Public Works, Port and Harbor, and Others. In 1977-78, the percentage of expenditures by category were as follows:

General Government	52%
Public Works	27%
Port and Harbor	7%
Other	14%

The single highest departmental expenditure was in the maintenance of the police department. Water system maintenance was the second largest expenditure.

Revenue and Expenditures
1976-1980

	Revenue		Expenditures	
	Estimated	Actual	Budget	Actual
*1976	$ 545,420	$ 673,047	$ 545,420	$ 529,662
*1977	632,299	795,805	632,299	693,855
*1978	529,051	679,071	626,672	631,411
1979 Budget	711,113		644,677	
1980 Budget	864,958		863,746	

*Report of examination

The five year history of revenue and expenditures shows the city in excellent financial condition. In the three years accounted for in the report of examination, the actual revenues have exceeded expenditures, in amounts ranging from $47,780 in 1978 to $143,385 in 1976. The city has been able to maintain this positive balance during times of inflating costs while reducing the mill rate each year since 1975.

Property Value and Revenue
1975-1979

	Mill Rate	Revenue	Assessed Value
1975:	22m		
Real Property Tax		$ 313,100	$ 14,231,820
Personal		91,882	4,176,450
Sales Tax		126,309	
1976:	18m		
Real Property Tax		329,195	18,288,610
Personal		89,610	4,978,330
Sales Tax		151,604	
1977:	11.5m		
Real Property Tax		260,665	25,193,915
Personal		55,288	5,106,875
Sales Tax		158,744	

	Mill Rate	Revenue	Assessed Value
1978:	10.5m		
Real Property Tax		318,336	27,996,300
Personal		46,890	5,105,250
Sales Tax		188,379	
1979:	8.3m		
Real Property Tax		270,804	33,600,730
Personal		51,321	6,123,290
Sales Tax		209,133	

The city has been well managed and has maintained good services where needed (i.e., police, fire, library). The preceeding tables are evidence of the sound financial basis of the city government and a tribute to sound financial management.

Community Improvements

The OEDP committee, along with the city, has been involved in the development and the securing of funds for desired community improvements. The committee report listed seventeen projects, fourteen of which had some degree of funding or development activity associated over the past year.

1. Port and harbor
2. Small boat harbor
3. Water system
4. School utilities
5. Library
6. Carcross Highway
7. State Street
8. National historic park
9. Tourist support
10. Power and telephone
11. Waste disposal
12. Street improvement
13. Energy related projects
14. Land acquisition

The committee report lists projects which they feel need attention over the upcoming years. Some of these are continuing projects and some are new.

1. Port development
2. Water system
3. Sewage system
*4. Traffic improvements
5. Solid waste
6. Energy-related projects
*7. City facilities
8. Land acquisition
*9. Planning and zoning
10. Tourist support
11. Power and telephone
*12. Dyea Road
13. Fuel storage

* New projects

As part of Phase III implementation, the community improvements programs listed will be placed into a five-year capital improvements program, where potential sources of funding will be identified.

In summary, the city is in "sound financial health" and could assume additional indebtedness for projects that have demonstrated economic viability. The City of Skagway is in a financial position to assume some economic risks for development such as tax incentives and attractive lease arrangements. The record of success in obtaining federal and state grants will be diminished somewhat by the current nationwide reduction in federal assistance to cities, but the majority of well-programmed and planned projects will most likely be funded, thereby improving the long-term economic and financial well-being of the city.

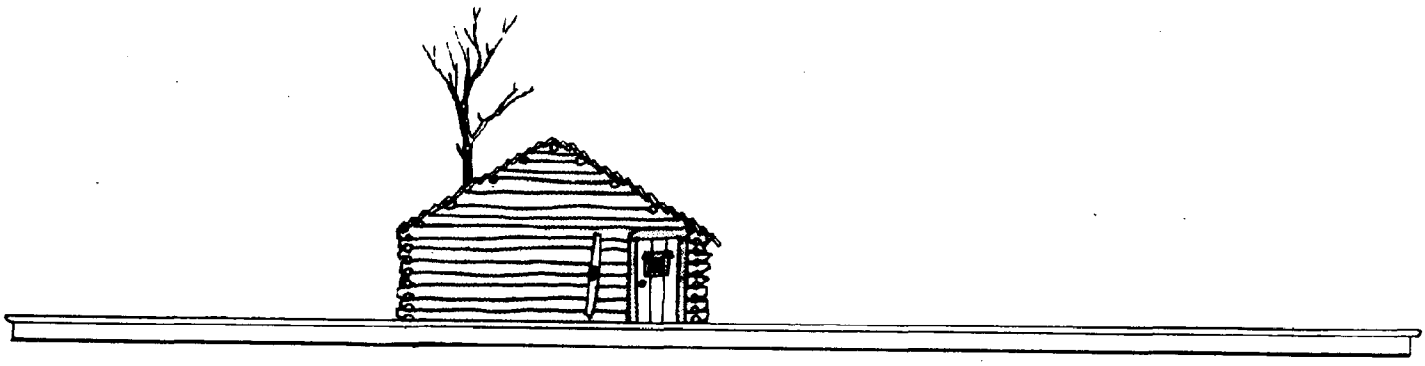
HISTORY, HISTORIC SITES AND ARCHAEOLOGICAL RESOURCES

Skagway sprang up as a result of the Klondike gold strike. Early in the summer of 1897 there was only one family in Skagway and a small trading post at Dyea. By the next winter, there were five thousand people packed into Skagway and 3,500 in Dyea.

The tales of fortune seekers, gambling, lawlessness and the infamous Soapy Smith are legendary, contributing to the fascination of present day Skagway. The Chilkoot Trail out of Dyea was the most popular route during the peak of the gold rush, with 22,000 men crossing Chilkoot Pass during the winter of 1897-1898. The White Pass Trail was replaced in 1899 with a narrow gauge railroad to Lake Bennett and, by the following year, all the way to Whitehorse. This event spelled the demise of Dyea and it soon became a ghost town. Skagway, on the other hand, became the largest city in Alaska (estimated population of ten thousand in 1899) and the territory's first incorporated city. As the gold rush subsided, Skagway's population declined rapidly to near its present level.

World War II brought another boom to Skagway. The railroad link to Whitehorse made Skagway an important port for shipment of supplies for the Alcan highway construction. Military installations were also constructed in Skagway.

Transportation industries grew during the 1960's with the advent of the state ferry system. Skagway became an important port for exporting minerals from the Yukon beginning in the late 1960's. Tourism



became increasingly popular in the late 1960's and early 1970's due to increased use of the state ferry system and the introduction of cruise ship traffic to Southeast Alaska (DNR, 1979.)

Much of the legacy of the gold rush era is preserved in the Klondike Gold Rush National Historic Park. This park contains the Skagway historic district, the White Pass and Chilkoot Trails and Dyea. Pioneer Square in Seattle is also part of the recently formed park.

The National Park Service has purchased land throughout the area, as well as fourteen structures in the Skagway historic district. The park service is currently in the process of restoring these structures. The work thus far has primarily been to repair leaky roofs and install permanent foundations. Exterior restoration of the railroad depot will begin in the summer of 1980. A few other structures may be painted before the 1980 tourist season. The depot will eventually (within four to five years) serve as the National Park Service park headquarters. Some of the other buildings are being used for employee housing, shops and storage space. As other buildings are rehabilitated they will be leased to private individuals for various uses. In addition to the park service rehabilitation activities, five private owners have applied for grants to rehabilitate their structures. The city also has three structures in the historic district which will be maintained for public use.

The state has recently nominated the barque "Canada" in Long Bay as a historic site. The city council voted unanimously to support the state's nomination. The barque, whose history dates back to the gold rush, can be seen on the flats of Long Bay at low tide in the spring and fall.

It is believed that Chilkoot Pass was a much used prehistoric trade route and that there was a Chilkat Tlingit village at Dyea, but no archaeological resources have been found in these areas (Figure 1-12). Further research needs to be conducted in these areas.

The preservation of living symbols of Skagway's past are important not only to Skagway, but to the nation. The National Park Service intends to spend another $1.5 million to rehabilitate their historic structures. Historic concerns go beyond the park, however. The community should take an active role in maintaining and enhancing their past and, in so doing, provide for their future.

RECREATION AREAS AND FACILITIES

Recreational Resources

The following list describes some of the most notable recreation areas near Skagway. The numbers refer to locations shown in Figure 1-12, and Table 1-11 lists locations of historic sites in the Skagway area.

The Dyea valley (Taiya River valley) is the primary recreation area for residents of Skagway and Dyea. Recreational activities that occur

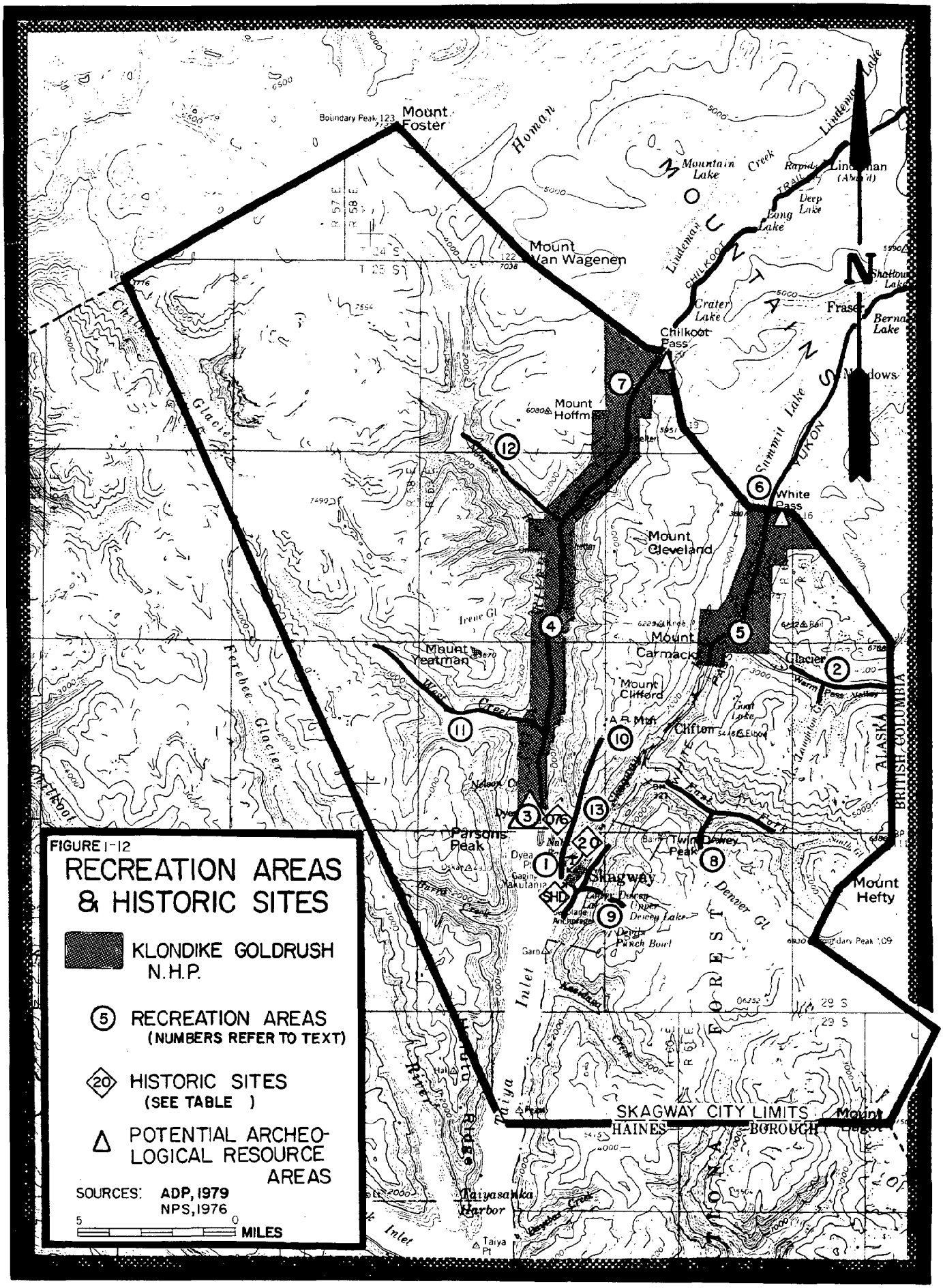


FIGURE 1-12
RECREATION AREAS & HISTORIC SITES

KLONDIKE GOLDRUSH N.H.P.

(5) RECREATION AREAS (NUMBERS REFER TO TEXT)

(20) HISTORIC SITES (SEE TABLE)

△ POTENTIAL ARCHEOLOGICAL RESOURCE AREAS

SOURCES: ADP, 1979
NPS, 1976

5 0 MILES

Table 1-11

HISTORIC SITES IN THE SKAGWAY AREA

ID Number	Name of Site	
020	D.C. Brownwell Hardware/Pantheon Salon	
076	barque Canada (boat)	
	Skagway Historic District (SHD)	
021	Frontier Bar	Blk 25
022	Red Onion	Blk 34 Bldg A
023	Library	Blk 2 Bldg C
024	Deadman's Photo Shop	Blk 27 Lot 12
026	D. Goldberg Cigar Store	Blk 2 Lot 12
027	Hotel Seattle	Blk 1 Lot 2
028	Meeting Hall	Blk 35 Bldg I
030	H. Boas Tailor and Furrier Shop	Blk 35 Lot 6
077	Verbauwhede Confectionary	Blk 35 Lot 6
078	White Pass & Yukon RR Depot	Blk 36 Lot 6
079	White Pass & Yukon RR Bldg	Blk 36 Lot 5
080	Moore Cabin	Blk 24 Bldg C
081	Bogg Bakers	Blk 25 Lot 6
082	Lynch & Kennedy Dry Goods	Blk 26 Lot 5 & 6
083	Pacific Clipper Line Office	Blk 35 Lot 6
084	Mascot Saloon	Blk 35 Lot 6

Source: Reger, DNR, Div. Parks, 1979. Alaska Heritage Resource Survey.

there include picnicking, cross-country skiing, hunting, fishing, horseback riding and driving snowmachines. The National Park Service, which regulates the area, is providing for the continued use of the valley for activities that are compatible with the park. A twenty-site campground at Dyea, near the Chilkat trailhead, is being developed by the park service.

Klondike Gold Rush National Historic Park: The park consists of the Skagway historic district and the Chilkoot and White Pass Trails. Pioneer Square in Seattle is also included in the park. Some of the specific recreational areas within the park are addressed in the remainder of this list, which is adapted from the Haines-Skagway Land Management Planning Study.

Skagway and White Pass Historic District: Designated on the National Register of Historic Places. "Gold rush town of Skagway and White Pass Trail and White Pass and Yukon Railway over which stampeders made their way to the Klondike. Many period buildings survive in

Skagway, traces of the trail can still be seen, and the narrow gauge White Pass and Yukon Railway still operates" (Alaska Division of Parks, n.d.; p. 208).

Smuggler's Cove (1): The cove is a popular picnic spot with residents and visitors. It can be reached by an easy twenty minute walk from downtown Skagway.

Trail of '98 Museum: Designated on the National Register of Historic Places. "The first granite building in Alaska, the facility now operated as a museum by the City of Skagway was also the location of McCabe College for Women - the first such institution in Alaska - from 1899-1900" (Alaska Division of Parks, n.d.; p. 207).

Glacier Site (2): Located at Mile 9, White Pass and Yukon Railroad. "Site of a telegraph station and railroad stop on the White Pass and Yukon Railway" (Alaska Division of Parks, n.d.; p. 208). A trail leads from here three miles to a Forest Service cabin and the terminus of Laughton Glacier.

Dyea Site (3): Designated on the National Register of Historic Places. Site of the town at the head of the Chilkoot Trail. There are no standing buildings, although much debris remains (Alaska Division of Parks, n.d.; p. 207).

Finnegan's Point Site (4): "Located at the end of the wagon road from Dyea on the trail to Chilkoot Pass" (Alaska Division of Parks, n.d.; p. 208).

White Pass City Site (5): Once a way station on the White Pass Trail, the site is now abandoned, although relics remain.

White Pass Trail (6): Like the Chilkoot Trail, the White Pass Trail played a significant role in the gold rush of '98. Trail relics and a scenic setting provide both historic and other recreational values.

Chilkoot Trail (7): Possessing both historic and scenic values, this trail is receiving rapidly increasing attention from the recreating public. Provided with two shelters, footbridges and other improvements, the thirty-seven miles of trail had 250 visitors in the summer of 1970, nearly 1,100 during the 1976 season and about 1,800 during 1977. The Alaska Division of Parks has continued to put maintenance crews on the trail each summer. The National Park Service has carried out maintenance on the trail since 1977. The National Park Service assigned two rangers at Sheep Camp and two rangers at Dyea.

There are several other trails in the Skagway area in addition to the major historic trails; the Denver Glacier trail (8) is one of the most popular. This state trail winds three miles to a Forest Service cabin and then to the base of the Denver Glacier. Other trails include the Dewey Lakes trail system (9), which takes off from downtown Skagway and goes to Reid Falls and Dewey Lakes, both of which have been stocked with fish. The Dewey Lakes are a popular recreation area. The AB trail (10) ascends AB Mountain from Dyea Road. Besides the

popular Chilkoot Trail, the Dyea valley includes a trail (old logging road) leading up West Creek (11) and a steep trail to Lost Lake (12), also stocked with trout. Other popular trails include the trails to Smuggler's Cove, Stargill's Woodcamp and the Gold Rush Cemetery.

The Klondike Highway is a popular drive for tourists and Skagway residents. There are several good picnic places along the road. A state wayside at Liarsville (13) was constructed several years ago, two miles from Skagway along the highway. The spaces at this wayside provide the only existing state camping facilities in the Skagway area. The site received more than eight hundred visitors in 1970 and more than 1,100 in 1973. Since the Skagway area facilities are totally inadequate for the new levels of vehicular campground use generated by the new highway and park, the National Park Service is proposing to develop additional camping areas near the summit of White Pass, the White Pass City site, and Dyea.

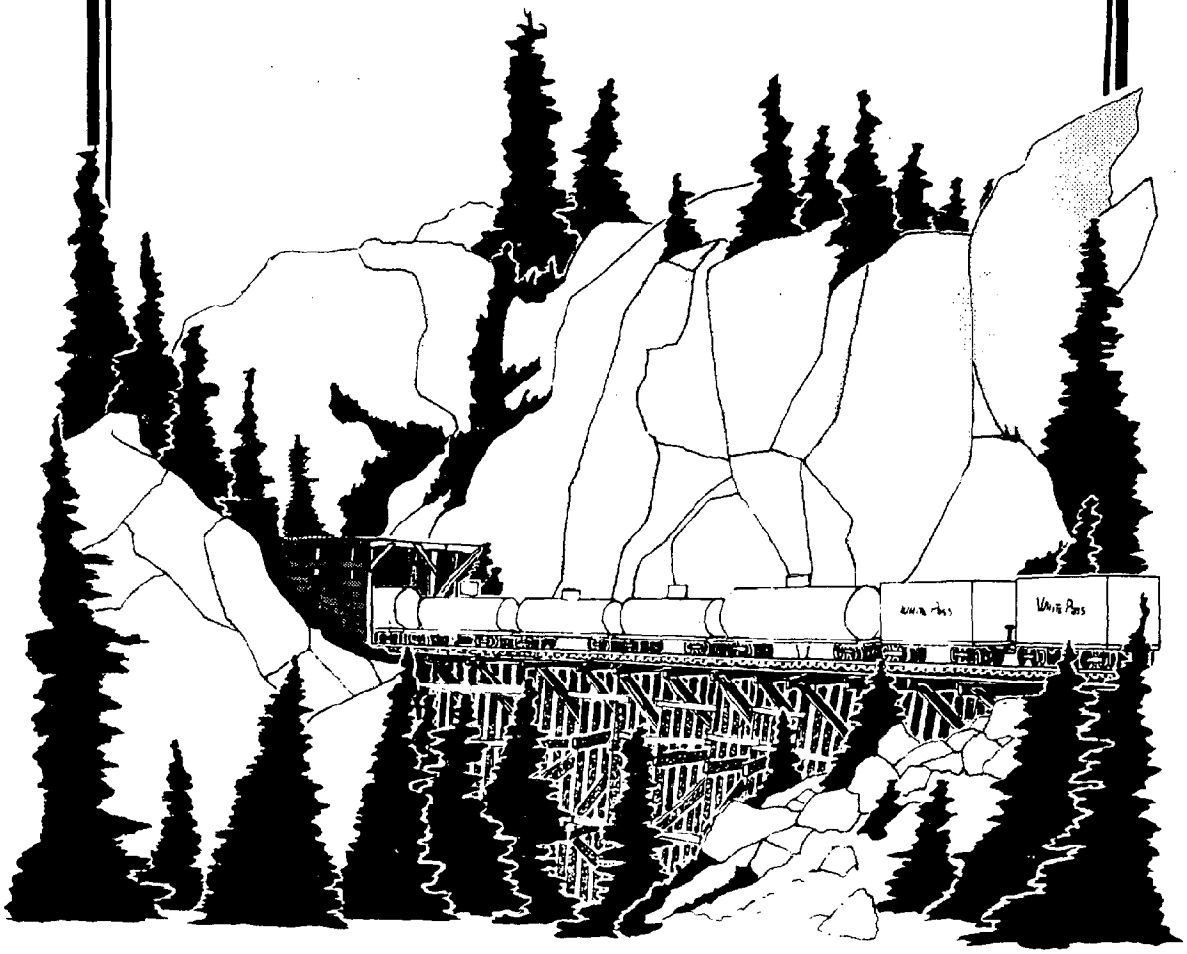
The Alaska Division of Parks has begun to develop a campground on the east side of the Skagway River north of Reid Falls Creek. Due to budget constraints,only minimal facilities and access roads will be initially produced. It is expected that the campground will be able to accommodate visitors during the summer of 1980.

In order to accommodate the visitors who come to Skagway expecting to catch fish, the Alaska Department of Fish and Game has initiated a program to rehabilitate sportfishing in the Skagway area. The department will conduct a comprehensive survey of lakes and streams in the area. In the meantime, they will stock Pullen Creek with pink salmon (see the AMSA section for details on the Pullen Creek fishery enhancement project) and the Dewey Lakes with trout, as well as, perhaps, rehabilitating Dewey Lake. A private salmon hatchery being built on Burro Creek near Skagway may add considerably to the sportfishing opportunities in the area.

In addition to the dispersed recreation activities, Skagway residents enjoy a variety of activities close to home. The community education program provides several classes and sport activities. In addition, the school gym, playground, baseball field and other school facilities are open to the public at designated hours. The community is also investigating the possibility of obtaining a public swimming pool (pre-fab) and locating a spot in town suitable for ice skating (e.g., a flooded tennis court.)

Tourism is quickly becoming Skagway's most important money maker and the community would be wise to make the most of it. Skagway should promote and contribute to the expansion of recreational opportunities and facilities in the area to keep pace with the increasing number of visitors.

ECONOMIC RESOURCES & ACTIVITIES



TRANSPORTATION

Transportation is the most important component of Skagway's economy, accounting for approximately fifty-two percent of all employment in the area. The transportation industry is dominated by the White Pass and Yukon Railroad and its subsidiary cargo ship and petroleum storage operations (refer to the transportation and employment sections for details).

The transportation industry relies to a large extent on hauling freight to, and ore from, the Canadian interior. An important part of Skagway's economy is therefore linked with mineral extraction in Canada. At present, the mining industry and the economy of the Yukon are suffering from a recession that is reflected in Skagway. The slump in the Yukon is reflected in transshipment activities through Skagway. In 1979, five hundred thousand tons of ore on sixty-two vessels passed through Skagway en route to international markets. In addition, fifty-two container ships brought cargo to Skagway. This total of 114 cargo vessels is down from the 150 vessels docked in 1978 (due to a reduction in ore shipments from Cassiar Mines), but an increase over 1977, when seventy-two cargo vessels docked in Skagway. Officials of the Yukon and White Pass Railroad (WPYR) indicated that the present rate of ore shipment from the Cyprus Anvil Mine will remain constant until new mineral deposits are opened in the Yukon, which would serve to expand activity.

There is a possibility that the railroad will be extended 150 miles north to Faro. This expansion would increase the range of service that the railroad can offer with very little operation and maintenance cost. It would bring the railroad within sixty miles of the largest iron ore deposit in North America and would provide access to deposits of tin at MacMillan Pass and a lead/zinc deposit at Howard's Pass at Summit Lake, both are expected to be tapped between 1985 and 1990. These operations would benefit greatly from the expanded railroad and its connection to the ice-free port of Skagway.

There is a good possibility that hydroelectric power plants will be developed in the Yukon. A hydroelectric project at Whitehorse would give the territory the energy mix it needs to develop industrial opportunities. Power may be made available to new mining and smelting operations which may result in increased shipments of ore through Skagway (see Figure 1-13).

Although the future of the railroad appears to be reasonably good, the it has been plagued by financial and physical difficulties (e.g., the railroad is in disrepair and has experienced several derailments). The new Klondike Highway is drawing some passenger traffic away from the railroad and the trucking industry threatens to erode much of their freight business. In addition, the railroad suffered from the closure of the Cassiar Asbestos-Clinton Creek Mine, which represented over one million dollars in revenue. The exchange rate on Canadian and U.S. currency cost the railroad another million dollars. As a consequence, White Pass experienced an approximate million dollar loss in 1979, which

LEGEND

EXPLORATION PROPERTIES

A. Canex-Summit Lake-Howard's Pass
B. MacTung, Tom, Ogilvie Joint Ventures
C. Yukon Barite
D. McIntyre, Lead, Zinc, Silver
E. Goz, Duo & Harrison Creeks, Bonnet Plume
F. Crest, Iron Ore
G. Archer Cathro Uranium
H. H.B. Umex Uranium
I. Anvil, Canol Mines
J. Tintina Silver
K. Grandby
L. Minto
M. Noranda
N. Casino
O. Plate
P. Claymore
Q. Godlin Lakes
R. Anvil, Grum, Deposit-(A.E.X.) Swim Lakes-Van Gorda

EXISTING MINES

1. Cassiar Asbestos
2. U.K.H.M.
3. Anvil
4. Mt. Nansen
5. Whitehorse Copper
6. CanTung

HYDRO DEVELOPMENT SITES

1. Hoole Canyon Site
2. Yukon River, 5 Fingers Site
3. Pelly River, Granite Canyon Site
4. Stewart River, Fraser Falls Site
5. Marsh, Tagish, Atlin, Bennett Lakes-Taiya Site

PROPOSED RAIL EXTENSION

EXISTING RAIL

MILEAGE TO RAIL HEAD AT DEASE LAKE

FROM:	
Faro Junction	- 418 Miles
Ross Junction	- 385 Miles
CanTung Turnoff	- 227 Miles
CanTung Mine	- 347 Miles
McMillan Pass	- 540 Miles
Placer (Canex) via CanTung	- 392 Miles
(To Stewart, B.C. add another to Above)	242 Miles

RAIL EXTENSIONS TO FARO OR ROSS JCT TO SKAGWAY VIA

FROM:	
Ross River Junction	- 332 Miles
Faro Junction	- 289 Miles
McMillan Pass	- 487 Miles
Placer Canex via road to North Canol and Ross	- 487 Miles
CanTung via Placer Road	- 532 Miles

FIGURE I-13

TRANSPORTATION MINERAL SITES & HYDRO ELECTRIC POTENTIAL OF THE YUKON TERRITORY

NOTE: SEE ACCOMPANYING TEXT FOR LEGEND

0 50 100 150 MILES

forced the railroad to terminate some employees in Skagway. There were rumors that the railroad would shut down if it did not receive support. Railroad representatives approached the Cyprus Anvil Company and the Canadian government for funds and were turned down. The Yukon territorial government, however, is currently (December 1979) considering purchasing the railroad. Federal estimates indicate that the railroad will have a three million dollar before tax profit by 1983. The railroad could therefore be a good investment, with purchase price between four and sixteen million dollars. Purchase is pending a formal inquiry on the railroad and the availability of federal loans. It would be highly speculative to assume, at this point, that the purchase will take place.

In any event, the Canadian government appears to be determined to keep the railroad running. This is both good and bad for Skagway, in that if Canadian government funds are used to subsidize the faltering railroad, the Canadian government may insist that most of the economic benefits be shifted to Canada; that is, the maintenance facilities in Skagway may be forced to move to Whitehorse.

If the railroad continues to operate without a subsidy, it will probably have to raise its rates. This will make alternative methods of shipment more attractive. Skagway's freight traffic could be eroded by increasingly competetive ports such as Stewart. Trucking is becoming increasingly competetive with the railroad since the gross weight requirement for trucks was doubled in the Yukon. A railroad representative said that trucking up the Alcan is destroying the transportation industry in the Yukon, Skagway and Haines. Jobs are going to Vancouver, Fort Nelson and Stewart. Representatives of the Alaska Department of Economic Enterprise, however, are of the opinion that this won't be the case in the long run, given the price of fuel and the alignment of transportation routes.

The WPYR representatives approached the Canadian regulating agencies to get permission to switch their rail operation to a trucking operation because they thought a trucking operation would be more economical, but the Canadian government would not accommodate the request. This does not mean that, if circumstances change, the WPYR won't haul part or all of its freight by trucks. If this happens, Skagway will lose some jobs (perhaps as much as twenty percent), even though trucking is more labor intensive than the railroad. Canadian unions would probably require that the number of truck drivers be proportional to the length of the highway in each country. Approximately five-sixths of the highway is in Canada. This loss of jobs would be offset somewhat by the need for crews to maintain the Klondike Highway on a year-round basis to accommodate truck traffic.

PIPELINE TRANSSHIPMENT

Skagway will probably become a transshipment point for pipe and materials for the construction of the proposed gas pipeline in the event that the project occurs, but the project has been plagued by delays and uncertainty. Details on the project as it applies to Skagway, along with

potential impacts and recommendations for minimizing adverse impacts and maximizing potential benefits, are provided in the energy impact elements.

Transshipment of materials for a gas pipeline (approximately two-thirds of the rough tonnage) will provide Skagway with a substantial temporary economic boost. The transshipment activities, which may begin in 1982, will generate approximately seventy-five jobs in the Skagway area (Foothills Pipeline Limited estimates). It is expected that thirty to forty of these jobs will be filled by Skagway residents, with the remainder of the employees coming from outside the community. The work in Skagway will be intermittent over a two year period (e.g., three months in Skagway, then activities will be moved to Haines, then back to Skagway for a few months. . .). The addition of thirty-five to forty-five new employees and perhaps some family members will provide a boost for local retailers, hotels, restaurants and generally all other sectors of the economy through the multiplier effect. There will be community costs as well as benefits. For example, there will be costs to the community in terms of wear and tear on roads and increased demand for housing, services and utilities. The substantial public cost incurred as a result of pipeline activity should be offset in taxes or other forms of compensation borne by Foothills Pipeline Limited. If transshipment activities are allowed in the summer, there may be major conflicts with tourism in terms of congestion noise and aesthetics. This could be substantially mitigated if trucks were not allowed to operate during periods of peak tourist activity.

Foothills Pipeline Limited has indicated that it will use the Klondike Highway as a transshipment route if transshipment activities occur in Skagway. The cost of shipping the pipe via railroad would cost about $25 million as opposed to about ten million dollars by truck. This poses a problem for the financially troubled White Pass and Yukon Railroad. If traffic currently using the railroad is substantially diverted to trucks on a permanent basis, the railroad would falter and, without outside support, possibly fail. This could mean economic disaster to Skagway. In an attempt to prevent this event, some people in Skagway have requested that hauling of pipeline materials be allowed only by special permit and that all other commercial activities be prohibited.

Some of the trade-offs between the railroad and trucking industries are as follows.

In order for the Klondike Highway to be a viable route for hauling pipe, it will have to be substantially upgraded (a thirty-two mile section of highway on the Canadian side south of Carcross is scheduled to be upgraded this summer). For example, some of the existing curves and grades are too severe for trucks carrying the hundred foot joints of pipe. It is assumed that funding for necessary improvement of the road would be provided by Foothills Pipeline Limited in consort with the U.S. and Canadian governments. After millions have been spent on improving the road, it is questionable if trucks will be denied access.

A truck will use three to three and a half times as much fuel per ton as the railroad on a round trip to Whitehorse. With increasing fuel

costs, this factor has far-reaching future impacts. Piggyback service could be readily accommodated at the dock by the trucking industry, but overall per-mile operation and maintenance costs to Whitehorse will be the ultimate determination. Trucking has the advantages of not needing to load and unload in Whitehorse.

Poor railroad maintenance could place the railroad at a competitive disadvantage due to derailing incidents and breakdowns. The railroad administration, however, has stated that an active upgrading and maintenance program is being pursued. Twenty-five miles of new track were laid this year.

KLONDIKE GOLD RUSH NATIONAL HISTORIC PARK

The park is an important component of Skagway's economy. Tourism and projects (e.g., renovation of historic structures) generated by the park will provide employment for numerous Skagway residents. A park representative noted that the city is probably deriving about $100,000 in additional revenue just because the park is on the map. Tourism, he said, "is a buffer against declining economics." In 1979, the park budget was $1,054,000. Operation costs were $361,000. The remaining $693,000 was, for the most part, spent in Skagway for the restoration of park-owned buildings in the historic district. Summer employment in 1979 totaled fifty-one people, with the bulk of these people doing restoration work in Skagway.

When the park service purchased structures in the historic district, the structures were taken off the tax rolls. This loss amounted to $5,466 in 1978 and $3,400 in 1977. This loss is offset, however, by an estimated (conservative) gain of $9,000 in sales taxes generated by the National Park Service. A park representative noted

> "This is an extremely conservative estimate . . . The benefit to the city will actually be much greater because of the economic rule of thumb that says, in a closed economic system such as we have in Skagway, one dollar will change hands - and be taxed - about three and a half times before going into savings or leaving the local circulation.
>
> This compensation will extend up to five years . . . and will soften the impact until the benefits of the park are felt through increased tourism and federal spending."

In addition to generating income for the community, in 1979 the park service gave Skagway approximately $45,000 to help the city initiate several projects, such as street and sidewalk repair, as well as to assist the museum. A similar agreement was negotiated for 1980 and provides for payment of $31,000 to the city for similar services.

TOURISM

Skagway has been accommodating the traveler and tourist since the beginning of the Klondike Gold Rush era. In recent years, a tourist industry has developed around Skagway's past. Tourism-related business typically provide over thirty percent of the total revenues to the community. Tourism is, however, highly seasonal; it peaks in June through August, then drops off in September and increases again in May of the following year. Approximately one hundred thousand visitors arrive in Skagway each summer. This figure can be expected to increase as the recently formed Klondike Gold Rush National Historic Park and Klondike Highway become more well-known and popular. This will result in a gradual expansion of several sectors of the economy and creation of new job opportunities (this is not to say that there will necessarily be a net increase in jobs in the community). It is reasonable to expect an average annual increase of tourism of five percent for the next five years. With proper preparation (development of attractions, accommodations and facilities) and promotion, an eight to twelve percent annual increase could be achieved.

The following is a summary of tourist activity in Skagway during the 1979 season:

> Skagway enjoyed a good tourist season in 1979 after a stagnant 1978. The Klondike Highway gave most Skagway businesses an expected boost in its first full summer of operation.
>
> Although railroad passenger traffic declined twenty-three percent, overall ferry traffic was up and passenger traffic on the ferries increased thirty-five percent.
>
> In May and June, passenger traffic on the railroad was up, but it declined in the remaining three months of the tourist season. The worst decline was in August, when forty-four percent less passengers rode the train than in August, 1978. Part of the decline was due to derailments and rockslides that held up service for a few days.
>
> Bus traffic on the new highway cut into railroad passenger traffic. While more people were coming to Skagway by highway instead of leaving Skagway, buses going northbound carried thirty-six percent more people than southbound buses. There were 543 northbound buses carrying 14,628 people, and 586 southbound buses carrying 10,733 people. Mar-Air Bus Co. in Haines had a bus run from Skagway to Whitehorse that carried over one hundred percent more passengers than its buses from Haines to Whitehorse and Fairbanks.

Cruiseship traffic also was up, accounting for over thirty-nine thousand passengers and almost nineteen thousand crew members on sixty-seven ships. The addition of the "Fairsea" to the number of ships docking in Skagway helped Skagway businesses, but the ship will not return to Skagway next year. Two other ships, the "Odessa" and the "Calypso," are slated to visit Skagway next year, however.

The Westours day boat, the MV Fairweather, carried twenty-one thousand visitors in 1979, up three thousand from 1978. The addition next year of the Cunard Princess to the Westours fleet of cruiseships stopping in Juneau will boost the Fairweather figure to twenty-four thousand in 1980.

The Klondike Gold Rush National Historic Park received increased use. The visitor center at AB Hall attracted 24,557 visitors compared to 17,744 at the visitors center in the old depot building in 1978. Over four thousand persons watched both the slide shows and the films provided by the park service at the center. At the city-owned "Trail of '98 Museum," visitor use increased forty-seven percent with over nineteen thousand visitors this past summer.

Chilkoot Trail use increased 11.6 percent over 1978 with 2,283 persons hiking the historic trail from Dyea to Bennett this past summer. Seventy-nine percent of the hikers hiked the trail in July and August, and on July 31 rangers reported eighty-eight hikers camped at Sheep Camp, an all-time high.

In an informal survey of twenty-five Skagway businesses, all owners asked said that business had been better in 1979 than in 1978. Increases ranged from five to thirty percent. When asked what they attributed the increase to, owners mentioned: 1) the opening of the Klondike Highway; 2) the fact that the Westours bus passengers stayed in Skagway until 2 p.m. before going to Whitehorse instead of leaving on the train at 9:45 a.m.; and 3) the addition of the "Fairsea" to the cruiseship schedule.

Hotel managers were pleased with the season even though the gas shortage in the lower 48, the grounding of the DC-10 and the possibility of a ferry strike forced some people to cancel reservations.

Curio stores, restaurants, grocery stores, air services and bars had gains in business last summer. The highway helped establish a steady flow

> of customers and weekends meant more Canadians. Curio store owners said that the stores were busier in the mornings and evenings because of Westours people coming in on the day boat in late afternoon and not leaving until 2 p.m. the next day.
>
> The highway did not help out local gas station or theatre as much as expected. Gold Rush Productions, which produces the show "Skagway in the Days of '98," indicated that crowds increased ten to fifteen percent, but not because of the highway. Audience surveys each night revealed that more people attending the show got to town on the Fairweather rather than the ferry, highway or railroad. (Adapted from the Lynn Canal News, October 25, 1979.)

The new national park and highway and the resulting increase in tourism brought problems as well as benefits. The opening of the Klondike Highway and Klondike Gold Rush National Historic Park has attracted visitors in numbers that exceed Skagway's ability to accommodate them. Hotels are not able to provide sufficient accommodations during peak periods in the summer and Skagway is experiencing an acute shortage of campground space. Approximately fifty camping spaces are available in the area; however, well over one hundred spaces are needed. Last summer Hanousek Park was filled every night and people had to be turned away. Although a few spaces were added to Hanousek Park, the shortage could be worse next summer. The state is in the process of developing a campground in the area which should be able to substantially relieve the shortage of camping spaces by next summer. As one could imagine, a parking problem also has developed. Some methods of dealing with the lack of parking space have been put before the voters; however, the proposals were generally rejected. More work needs to be done to resolve the problem. Some suggestions are provided in the general land use recommendations for Skagway.

Skagway also has a problem providing berth space for cruiseships. The lack of port facilities is the main constraint to tourism. Some ships have bypassed Skagway because docking space was unavailable. Arrangements were made for the use of the Cyprus Anvil dock in the 1980 season to accommodate cruiseships. A long-term solution should be developed, as the city will forego profits from tourism until the problem is rectified. The 1979 Overall Economic Development Plan identifies the following potential solutions:

1. provision of dolphins to permit use of the barge facility by cruiseships;
2. construction of a new cargo pier by White Pass (A new pier will have to be constructed to accommodate barges if transshipment activities occur in Skagway. There is a good possibility that the pier could be used by cruise ships when transshipment activities are completed.); and
3. improvements to the Ore Terminal Wharf.

The railroad is considered to be Skagway's most important tourist attraction. Skagway recognizes this and is attempting to ensure that the troubled railroad will remain in operation.

In addition to dealing with the problems previously identified, recreational improvements should be accomplished that will provide additional activities for residents as well as visitors. A community social hall or performing arts center, trail construction and improvements, restaurants and accommodations for tourists will help prepare Skagway for the anticipated increased volume of tourists. Historic and recreational resources should be improved, expanded and promoted to attract more visitors and to get them to stay longer (now that people are coming to Skagway with their own transportation, they will have the ability to stay in town longer). A proposal to operate a casino in Skagway was presented to the legislature. The casino would be similar to Diamond Tooth Gertie's in Dawson. This could become an important tourist attraction. The proposed salmon fishery enhancement project at Pullen Creek would provide a major boost to tourism, in part by making Skagway a destination instead of just a stop-over (see AMSA for details). The Economic Base Study of Skagway, Alaska (R.W. Pavitt, 1976) makes the following points in regard to the anticipated expansion of tourism:

> "Unless a planned expansion of the entire infrastructure occurs, it is likely that such increases in tourism will find Skagway critically short of housing, retail merchandise, hotel accommodations, food and drink outlets and other essential service activities.
>
> Other impacts anticipated from the advent of the Klondike Highway and Klondike Gold Rush National Historic Park include:
>
> a. accelerated increases in retail sales, services, visitor facility use and a general enlargement and expansion of the economy
> b. increased demands on local government services . . . police, fire, water/sewer services, street maintenance, small boat harbor, parking facilities, recreation and educational facilities
> c. increased housing needs for a resident population anticipated to increase to about 925 persons by the time of the 1980 decennial census
>
> The greatest opportunity lies in the ability to anticipate the needs of this expanded market and to prepare to satisfy these needs. Housing, commercial marina facilities, expanded hotel and tourist accommodations, additional and expanded retail merchandising, truck, camper, automobile and recreational vehicle service facilities and eating and drinking establishments are just a few of the types of development opportunities that will present themselves in the coming years."

If Skagway is going to continue to enjoy the benefits of a healthy, growing tourist industry, it must rectify current problems and provide

facilities and services to keep pace with the growing demand. Some steps have been taken to this end. A conference committee on tourism has formed to coordinate the policies of the principal parties involved with tourist transportation and make recommendations to the city council for possible action. In addition, the Skagway chapter of the Alaska Visitors Association (AVA) developed the following list of goals: 1) acquire emergency funds to construct dolphins on the barge side of the new city ferry-barge facility, so cruise ships may dock there; 2) make Skagway a destination point rather than a transfer point; 3) close Broadway to through traffic in the summer months; 4) educate Skagway citizens on the needs of tourists; 5) and 6) conduct membership and fundraising drives; and 7) legalize gambling in Skagway in the summer months similar to Diamond Tooth Gertie's in Dawson City. Representatives of the AVA have stated that they would promote Skagway as a destination for tourists.

TRADE AND SERVICES

The trade sector is currently highly seasonal and is not anticipated to improve significantly in this regard, as the off-season population of Skagway simply cannot support a large retail sector. Other than the everyday necessities, major retail purchases have been and probably will continue to be transacted by mail order or in connection with trips to Whitehorse, Juneau or Seattle.

Even the curio, souvenir and gift shop trade - which, considering the number of cruise ship and ferry tourists, should be quite lively during the summer season - is diminished by the presence of similar items to which these visitors have already been exposed during previous ship landings at Ketchikan, Sitka and Juneau. Local merchants, recognizing this constraint, are wisely offering merchandise unique to the area and reminiscent of Skagway's rich and romantic gold rush history.

Total employment in Skagway's retail business is only ten percent of the total labor force. Over thirty percent of the fifty working in this field are part-time or seasonal employees.

Like trade, the service industry is quite seasonal. Hotels that are booked solid during the summer either shut down completely or substantially reduce their staffs and services in the lean winter months. Although the seasonality of this sector will not be totally corrected in the near term, it is anticipated that it will be somewhat improved by the increased traffic generated by the highway, and the overall service sector should maintain a slow but steady growth and expansion (Pavitt, 1976).

Approximately twenty-three percent of Skagway's work force is employed in the service industry. Only thirty-eight percent of these 110 persons, however, have full-time, year-round jobs.

FISHING, TIMBER AND AGRICULTURE

Fishing

Nearly all commercial fishing takes place south of Taiya Inlet. A limited amount of commercial tanner crab are caught in lower Taiya Inlet and Nakhu (Long) Bay. A few fishermen utilize the Skagway small boat harbor. Fish processing is not feasible in Skagway because of distance from fishing grounds; therefore, no sites for fish processing have been identified.

The only significant commercial fisheries related development in the Skagway area is the proposed private nonprofit fish hatchery on Burro Creek. The hatchery proposed by Gene Richards would hatch one million pink salmon eggs in 1980 and build up to a maximum of ten million eggs by 1984. Chums would also be hatched when the operation proves feasible. On the site would be two hatchery buildings, two holding ponds, two pipelines from Burro Creek waterfalls for water, a hydroelectric plant and a residence. The hatchery should benefit sport fishermen in Skagway and commercial fishermen in Haines. ADFG is presently reviewing the proposal.

Timber

The only commercial timber in the Skagway area is along West Creek in the Taiya River valley. A portion of the area has been logged and portions of the old logging road survive. Two thousand acres of commercial timber were identified in a state inventory. However, in DNR's Haines/Skagway area state land management planning efforts, no local interest was expressed in commercially harvesting this stand. The state plan allows for private harvest only for houselogs and firewood. These personal use sales will require updating of the forest inventory. This information would be used to develop an area forest management plan to determine annual allowable cut in compliance with the land use plan.

Agriculture

Despite a favorable climate with moderate temperatures, ample but not excessive rainfall and an adequate frost-free period, Skagway has little potential for agricultural development. The only large tracts of flat land occur in alluvial floodplains with poorly developed soils. The lower Taiya River valley has limited agricultural potential. Local residents do, however, successfully raise gardens and gather wild fruits and mushrooms.

OTHER ECONOMIC ACTIVITIES

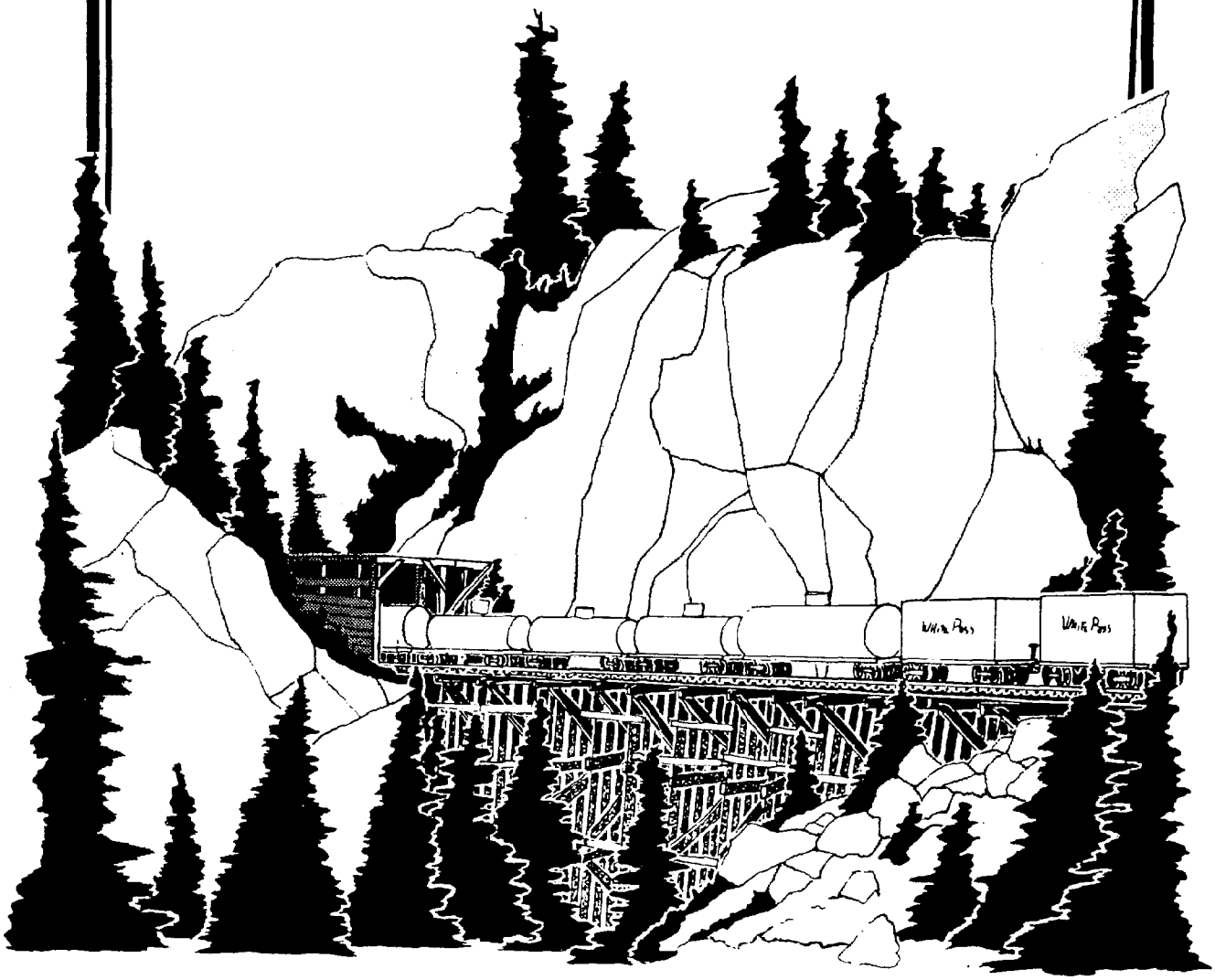
Government

Unlike most Alaskan communities, government is not a major factor in the Skagway economy. In Haines, for example, 27.5 percent of all employment is attributable to local, state and federal government operations. Juneau, as the state capital, is even more dependent on this sector, with 56.3 percent of employment being government jobs. In Skagway, government accounts for only 10.5 percent of the employment and ten of these forty-four jobs are connected with the transportation sector, as they are with the State Highway Department, the Division of Marine Transport and U.S. Customs.

As a result of the increased tourism generated by the Klondike Highway and the operation of the Skagway unit of the national historic park, this sector is anticipated to increase significantly over the next several years, and the spinoffs to other sectors of the economy will serve to somewhat improve the overall economy (Pavitt, 1976).

CHAPTER II

COASTAL ZONE MANAGEMENT



The City of Skagway is confronted with several issues that may have far reaching, long-term impacts on the community. These include the possibility of Skagway being used as a port for transshipment of pipe and materials for the construction of the proposed gas pipeline and the transfer of state land to city ownership, which will make the city a major holder of land suitable for relatively dense development. In addition, the city's recent annexation of the area between the Haines Borough and the Canadian border greatly increased Skagway's jurisdiction and management responsibility.

This chapter addresses these and other important issues in the context of a comprehensive district coastal management program. The intent of this district program is to provide for the use of coastal areas and resources consistent with the desires of the community, sound planning principles, the state coastal management guidelines and standards, and the physical opportunities and constraints of the area.

This part of the district program (Chapters II and III) represents the culmination of the information contained in the background report (Chapter I), responses to the Skagway community planning questionnaire, numerous interviews and discussion with Skagway area residents, industry representatives and local, state and federal officials. Chapter II contains several interrelated components, including:

- a description of the coastal management boundary which identifies the area subject to this district program;
- a use and activity analysis which identifies uses of state concern and uses subject to the district program;
- policies and standards to guide the development and operation of the subject uses and activities;
- land use policies, standards and recommendations for specific areas within the coastal management district;
- an energy impact element which identifies major pipeline-related impacts and policies and recommendations for dealing with them; and
- a municipal land management program which provides policies and recommendations that are intended to guide municipal land management.

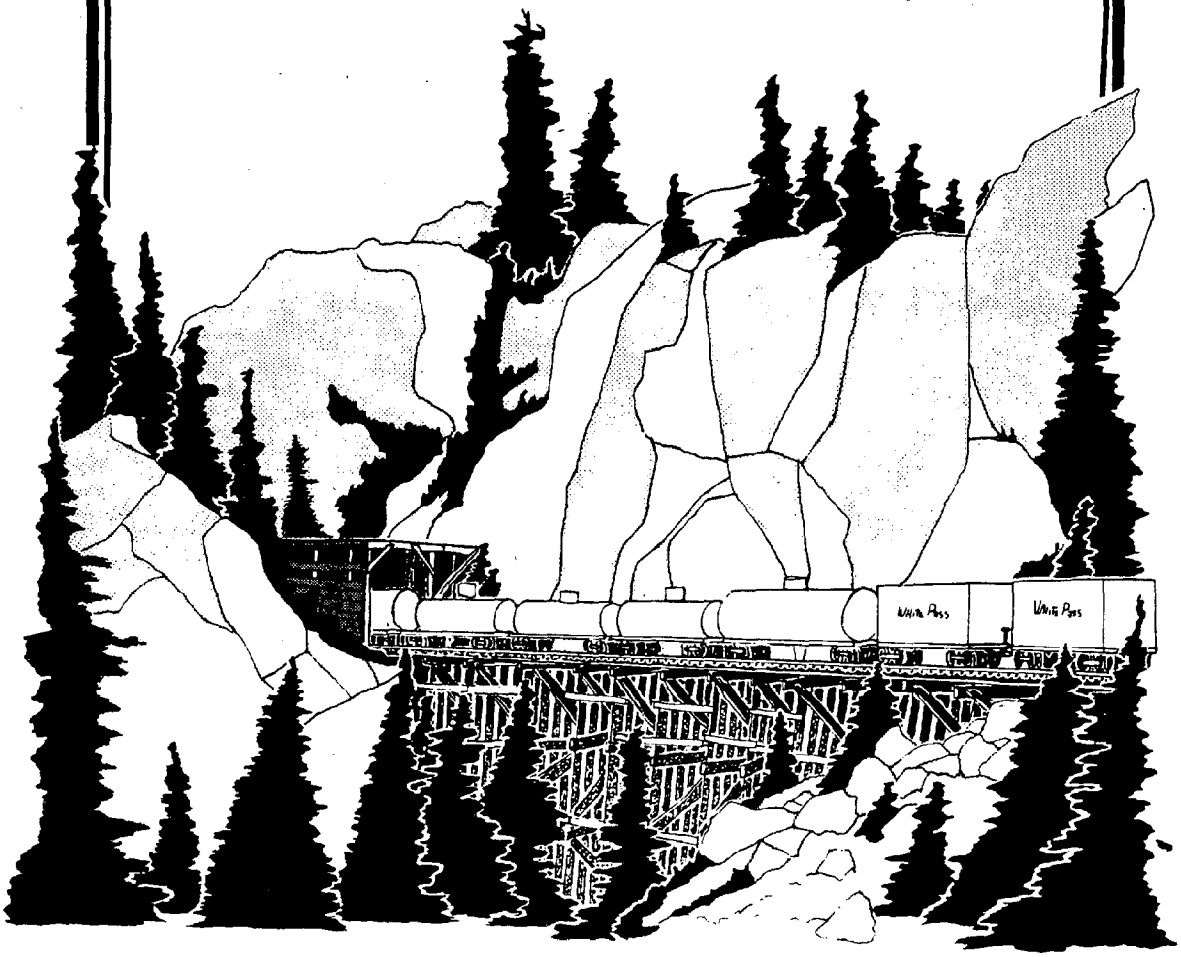
Chapter III contains an implementation program. The implementation program includes:

- a community finance plan;
- code amendments, including zoning ordinances; and
- a section on municipal government organization and administration and intergovernmental coordination.

The Skagway Coastal Management Program will strengthen local opportunities to constructively influence land and water management decisions made by federal, state and private groups. When Skagway's program is approved by the Alaska Coastal Policy Council and the legislature, federal and state agency actions must be consistent with it.

The Skagway Coastal Management Program will also serve as a tool for encouraging and acquiring federal and state funding and technical assistance for local development and management projects identified in the program.

COASTAL MANAGEMENT BOUNDARIES



The Skagway coastal management boundary contains the area recently included by annexation within the Skagway city limits to the three thousand foot level (coastal zone biophysical boundaries (Figure 2-1), as defined by the Alaska Department of Fish and Game), excluding federal land. Federal lands (Figure 2-2), notably the federal land under jurisdiction of the National Park Service, are excluded from state or local jurisdiction under the coastal management program, except the zoning as authorized under Title 29. All other land within this boundary is subject to the jurisdiction of this coastal management program.

State-owned tidelands will also come under the purview of this program. This will give the city substantial control over upland activities, on federal lands for example, which are dependent on the tidelands.

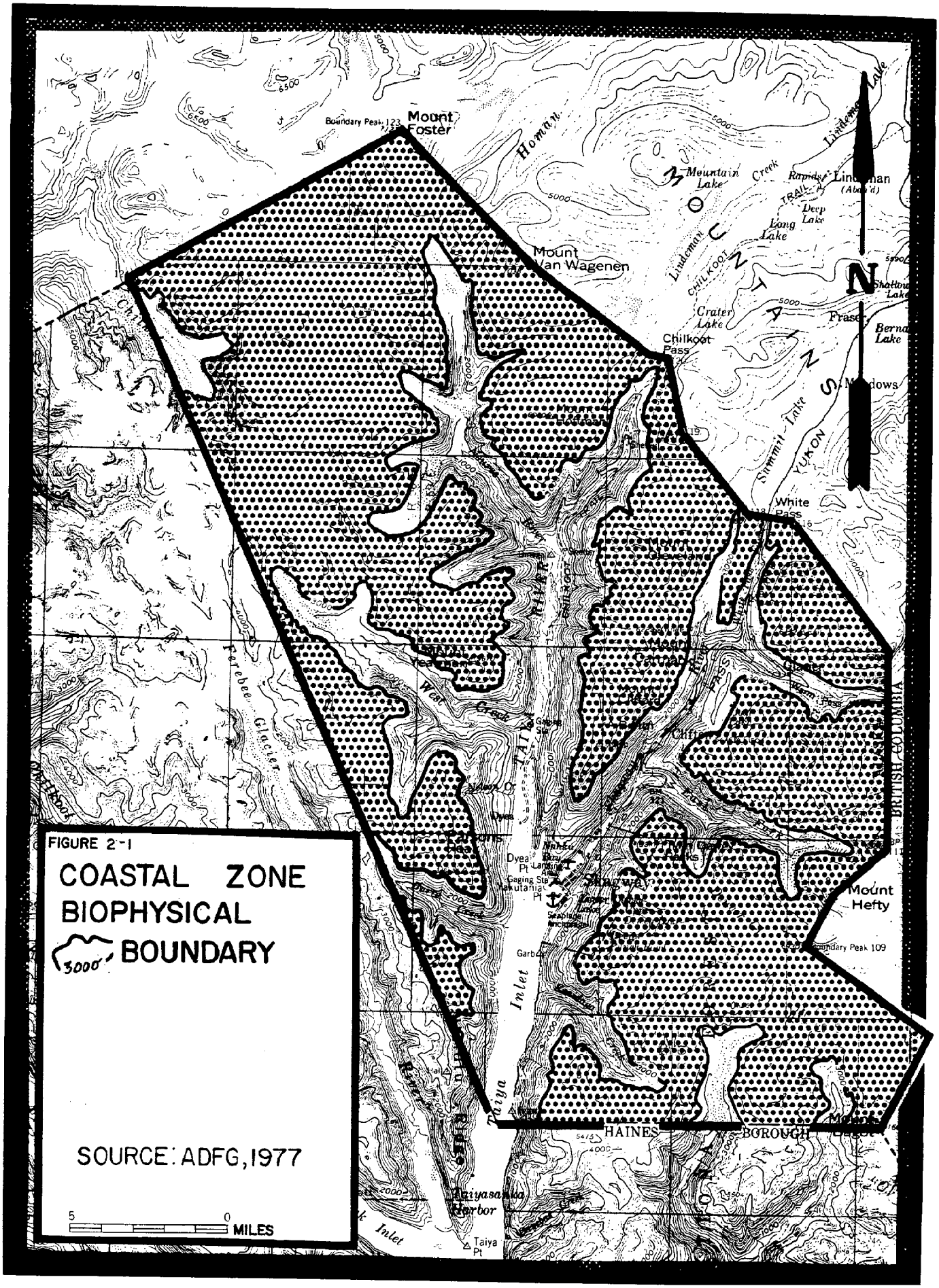


FIGURE 2-1

COASTAL ZONE BIOPHYSICAL BOUNDARY

3000'

SOURCE: ADFG, 1977

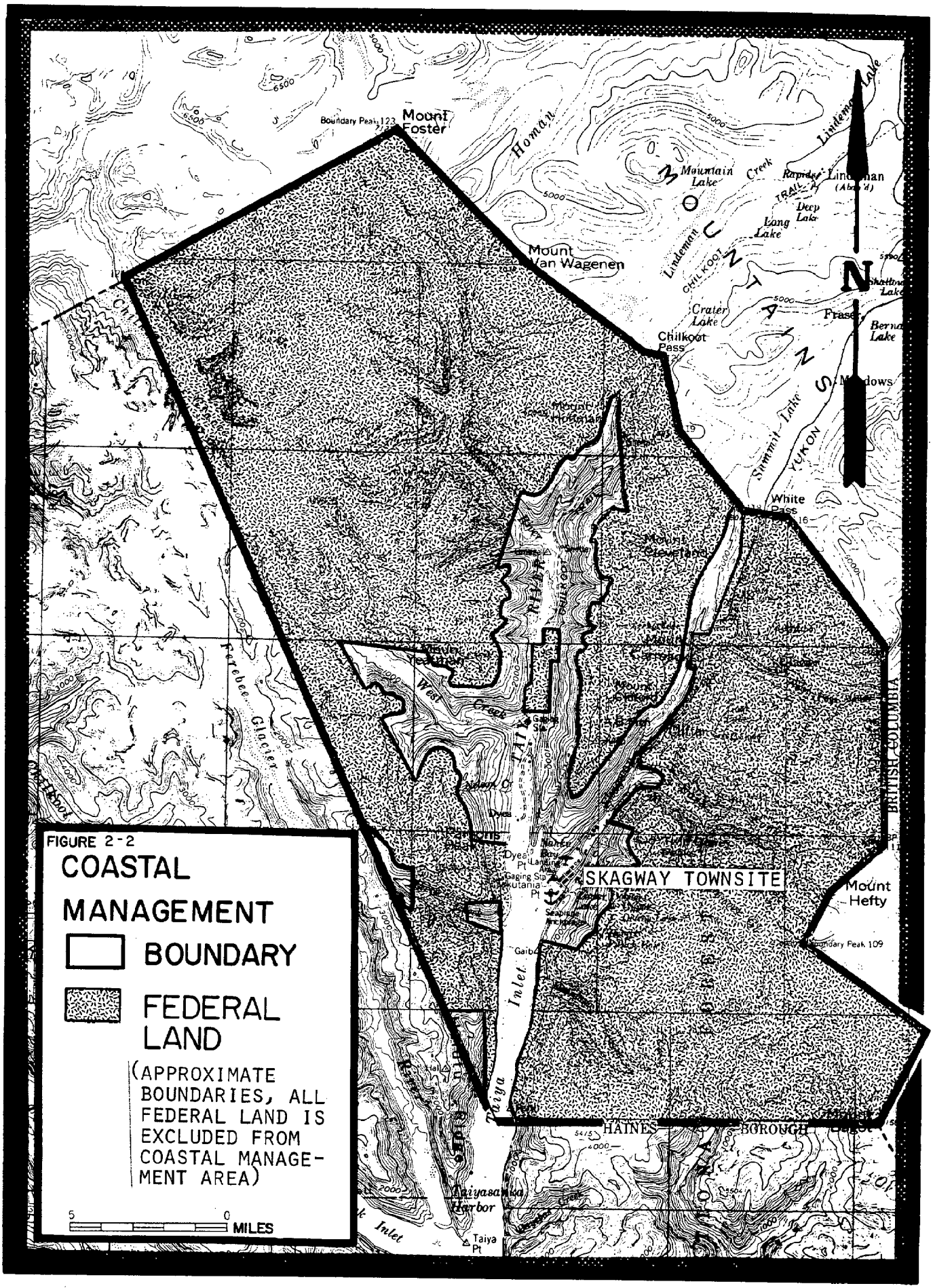
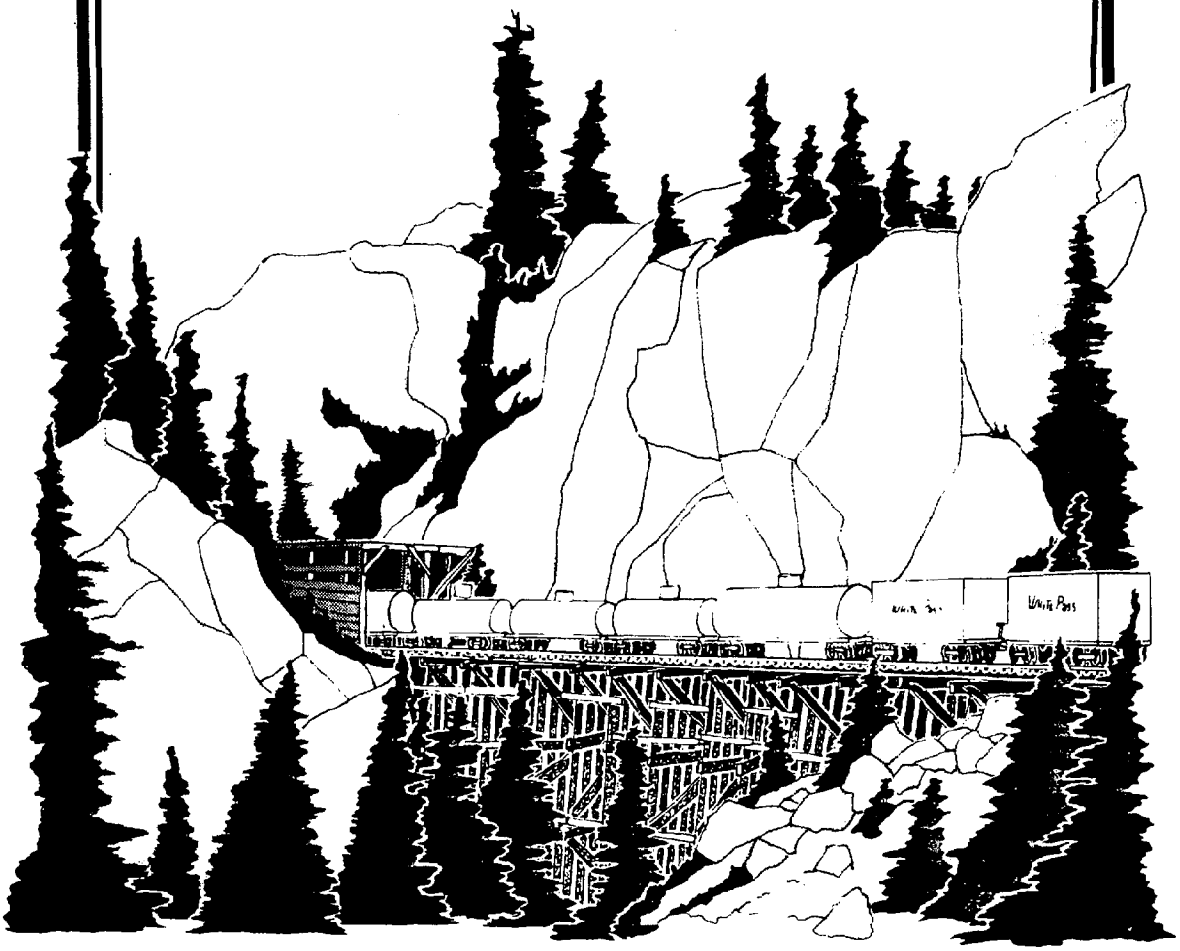


FIGURE 2-2
COASTAL MANAGEMENT
BOUNDARY
FEDERAL LAND
(APPROXIMATE BOUNDARIES, ALL FEDERAL LAND IS EXCLUDED FROM COASTAL MANAGEMENT AREA)

ISSUES
GOALS & OBJECTIVES



In order to identify the concerns and desires of the residents of Skagway, the Enviromental Services Limited (ESL) staff conducted interviews with members of the Skagway city council and other interested residents of Skagway, as well as local, state and federal agency representatives. In addition, ESL staff members reviewed local newspapers covering the last two years. Many issues identified in this manner were discussed in the background report. A questionnaire was also developed and distributed to elicit residents' opinions on a wide variety of issues identified by the city council, city manager and interested citizens in conjunction with the ESL staff. The responses to the questionnaire were compiled, analyzed and presented for discussion at a public workshop and hearing in Skagway (Appendix A).

The following issues, goals and objectives are the product of that public participation effort. The issues, goals and objectives are arranged in the order of importance, as identified by public response to the questionnaire, with the exception of oil and gas pipeline development. It is interesting to note that a majority of the respondents felt that government had a basic responsibility or government involvement is desired for resolution of these issues with expenditures of public energies and monies.

Issue: Port Development

Goal: Provide for the continued improvement of port facilities.

Objectives: Provide mooring dolphins and/or additional floats at the state ferry/city barge landing floating dock facility to accommodate cruise ships.

Support arrangements that would allow multiple use of existing private industrial dock facilities to help accommodate tourist and recreational users.

Promote utilization and expansion of existing dock facilities and dockside staging areas for pipeline transshipment and related activities.

Study the potential for development of a new multiple use municipal dock facility.

Acquisition of all, or the southern portion, of the White Pass Dock for rehabilitation and expansion, to enable large tourships to dock.

Issue: Tourism and Recreation

Goal: Provide for the enhancement of tourism and recreation as a valuable part of the community's economy.

Objectives: Promote the continued operation of the White Pass and Yukon Railroad in recognition of its unique economic role and historic value.

Develop state and federal campgrounds, recreational vehicle and camping spaces as a matter of priority.

Develop offstreet parking areas and regulations to accommodate both pedestrian and vehicular tourist traffic.

Accommodate additional cruise ships by expansion of dock facilities.

Expand the museum in the city hall building.

Develop a multi-use community, civic and convention center complex.

Expand the tourism industry into new areas and seasons, such as sportfisheries, winter recreation developments and conventions.

Expand communication and coordination efforts between the city, National Park Service, White Pass and Yukon Railroad and tour companies.

Support state legislation to permit a local option for legalized gambling to enhance the city economic base.

Issue: Community Facilities

Goal: Improve and expand existing facilities while developing a feasible means for providing new facilities.

Objectives: Continue the upgrading and expansion of the sewage and water collection and distribution systems to reduce long-term operation and maintenance cost.

Upgrade garbage collection equipment and provide an economic resolution of the solid waste disposal problem.

Pursue a timely and common sense resolution of the sewage treatment facility conflict with EPA to provide realistic protection of the public health and environment at a reasonable operation cost acceptable to the community.

Encourage joint use by state district/magistrate court of the museum facility in the city hall building.

Provide storm sewers on Broadway and Main Street from 11th Street south.

Build new recreational facilities such as an athletic field, swimming pool and ski trails.

Encourage airport improvements, including navigation aids, runway extension and construction of a terminal building.

Promote the development of a small-scale hydroelectric or wind-generated power plant to provide a more economic source of electricity for the community.

Support feasibility studies for energy power development, particularly for Reid Falls Creek.

Develop city and police offices as part of a community civic and convention center complex.

Issue: Community Programs and Services

Goal: Improve and expand programs and services.

Objectives: Expand the community education program, offering recreation and adult education programs and facilities for everyone.

Place additional funds into public safety, including fire and police protection, as well as emergency medical services.

Issue: Municipal Land Disposal

Goal: Manage and dispose of municipal selected land for the greatest community benefit.

Objectives: Develop a zoning and differential taxation ordinance for the newly annexed areas of the city.

Develop a plan for selection, use, access, public benefit and disposal of municipal selection lands.

Use the proceeds in a productive manner for local match for federal and state funded community improvement programs.

Issue: Transportation

Goal: Improve the transportation system.

Objectives: Promote the improvement of ferry scheduling.

Promote the upgrading of Dyea Road.

Promote the year-round maintenance of the Klondike Highway.

Encourage the upgrading of the airport.

Retain mainland marine service with Juneau and Seattle.

Promote the upgrading of the railroad.

Issue: Natural and Historic Resources

Goals: Balance natural resource management to provide for some industrial and recreational development and for timber, fish and wildlife harvest, while protecting the natural beauty and important wildlife habitats.

Objectives: Develop alternative energy sources, such as wind and hydroelectric power, to support future industrial development.

Develop access for sport hunting, fishing and camping.

Preserve Skagway's historic buildings and natural beauty through careful planning, regulations and restoration.

Encourage the expenditure of adequate sums of money by the National Park Service to restore key structures in the Klondike Gold Rush National Historic Park.

Initiate sportfisheries rehabilitation and big game enhancement projects.

Issue: Oil and Gas Pipelines

Goal: Maximize the benefits and minimize the adverse impacts of transshipment activities in Skagway.

Objectives: Expand port and harbor facilities.

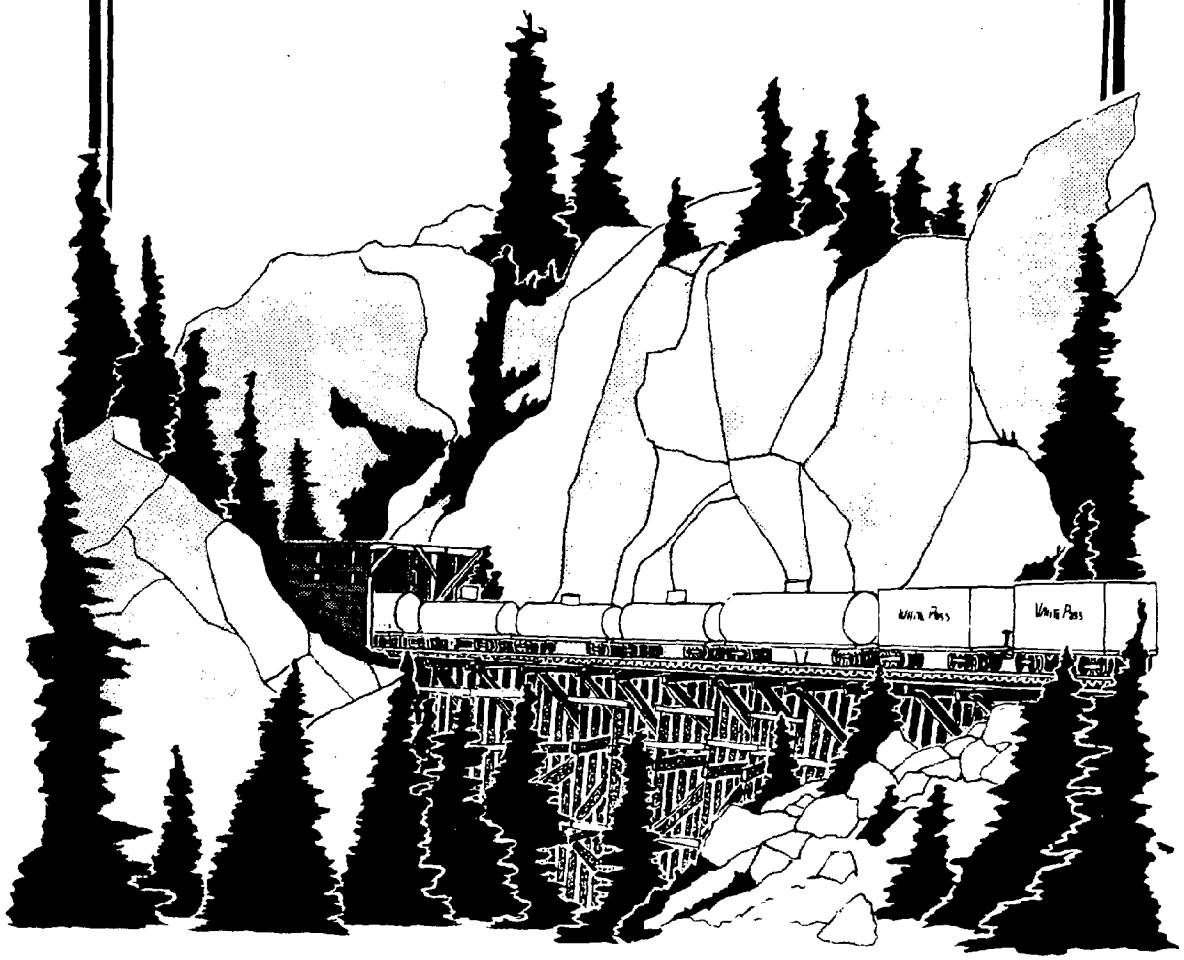
Encourage regulation of pipeline-related use of port facilities and the Klondike Highway so it does not interfere with tourism or other appropriate uses.

Levy taxes on pipeline activities to be used for community improvements and to offset public costs generated by transshipment activities.

Support regulation of development activities that minimize adverse impacts of pipeline activities.

Regulate State Street truck traffic so as to have minimal impact on the community.

USE & ACTIVITY ANALYSIS



USES OF STATE CONCERN

The Skagway Coastal Management Program recognizes that certain uses and activities are of state concern and will not arbitrarily or unreasonably restrict or exclude these uses. "Uses of state concern" are those land and water uses that significantly affect the long-term public interest. These uses are defined by the Alaska Coastal Management Program (AS 46.40.210).

There are many uses of state concern in the Skagway area. Some of the most important are:

1. management and maintenance of state roads, highways and parklands;
2. disposition of state lands, waters and forest resources;
3. management of historic resources;
4. conservation and maintenance of air, land and water quality (solid and liquid waste disposal);
5. commercial, sport and subsistence fish and wildlife harvest, fish and wildlife research, rehabilitation and enhancement programs;
6. port and harbor development;
7. pipeline related activities; and
8. disposition of energy resources, minerals and materials.

SUBJECT USES

All uses and activities that are dependent upon coastal access or that would affect coastal habitats and processes, coastal air, land and water quality, and historic and recreational scenic values are subject to the Skagway district coastal management plan. At a minimum, these uses and activities include:

Coastal Development
- Industrial, port and harbor development
- Marine-related service industries
- Commercial development
- Residential development

Recreation
- Intensive
- Nonintensive

Energy Facilities
- Oil and gas facilities
- Power plants

Transportation
- Airports, landing strips and float plane bases
- Ports, docks and harbors
- Highways and roads
- Oil and gas pipelines
- Navigation improvements and aids

Utilities
- Utility lines
- Sewer treatment plants
- Water and sewer lines
- Solid waste disposal
- Communication facilities

Fisheries
- Commercial fishing
- Fishery enhancement
- Seafood processing

Timber Harvesting and Processing

Mining and Mineral Processing

Subsistence

COASTAL MANAGEMENT POLICIES AND STANDARDS

The Skagway Coastal Management and Energy Impact Program will coordinate and supplement federal and state land and water management controls affecting the coastal zone. The plan will also provide guidance for all land use decisions within the coastal zone. The following policies and standards have been developed to encourage and direct existing and future uses and activities in the coastal zone consistent with state coastal management requirements and with community needs and desires as reflected in the goals and objectives of this program. These policies and standards provide for development and operation of industrial, commercial, residential, recreational and other uses in a manner that protects fish and wildlife habitats and the quality of life in the Skagway area, including the lifestyle, historic resources, scenic quality and recreational opportunities.

The policies and standards are divided into two categories. Policies and standards for uses and activities provide guidelines for the development and operation of specific types of uses and activities. Policies and standards for habitats, resources and hazards provide guidelines for use or protection of valuable resources and avoidance of hazards. These latter policies and standards apply to all subject uses and activities.

The appropriate state Standards for Uses and Activities (Article 2 of Chapter 80 Standards of the ACMP) and Resources and Habitats (Article 3) are included in summary form for each category. The additional policies and standards that follow the state standards were devel-

oped to supplement state standards and to address local concerns not covered by state standards. These local standards will be adopted where appropriate as supplementary district regulations in Title 95 of the Skagway zoning code. Any deviation from the specific requirements of this section shall require a variance application and justification as required in Title 95 zoning code.

POLICIES AND STANDARDS FOR USES AND ACTIVITIES

The following policies and standards for uses and activities are based on the ACMP standards and guidelines, the resource analysis in this document and the results of the public opinion survey.

I. Coastal Development

STATE STANDARD: Coastal Development (6 AAC 80.040)

This standard is adopted as part of the Skagway Coastal Management Plan.

(a) In planning for and approving development in coastal areas, 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 which are neither water-dependent nor water-related for which there is no feasible and prudent inland alternative to meet the public need for the use or activity.

(b) The placement of structures and the discharge of dredged or fill material or fill material into coastal water must, at a minimum, comply with Parts 320-323, Title 33, Code of Federal Regulations.

Skagway's development proposal review process will include consideration of potentially adverse affects of dredging or filling on the coastal ecosystem. Of principal concern is the ultimate effect such activity will have upon the fisheries resources habitats. Dredging and filling shall be minimized in productive tideflats and wetlands, subtidal areas important to shellfish and anadromous waters important for migration, spawning and rearing of salmon and other sportfish species.

Local policies and standards for coastal development are summarized below for three major coastal land uses. These are: a) industrial, port and harbor; b) commercial; and c) residential development.

I.A Industrial, Port and Harbor

A well-designed, constructed and operated port and harbor can have a minimal impact on the environment and actually provide protected marine waters to act as a nursery ground for juvenile fish, as well as providing habitat for shellfish. If not wisely managed, however, port facilities can have serious adverse impacts. An improperly designed or managed harbor could result in serious water pollution (including oil spills), accelerated erosion of the shoreline and protective breakwaters and disrupt natural littoral (long-shore) drift.

Since the construction and operation of ports and harbors can have extensive adverse impacts on coastal resources, appropriate development standards are required. Such development must be sensitive to the ecosystem they are located in and incorporate mitigating measures into their design features to minimize adverse impacts. Ports, harbors and docks should locate away from extensive tideflats and wetlands and should never, in any case, obstruct fish passage along the coast or in anadromous waters. Where ice and other conditions permit, piers, wharfs and floating docks should be used in waters that have adequate flushing capabilities, rather than areas requiring solid fill. In cases where solid fill has to be used, it should be located to maximize circulation in the harbor.

Harbor, small boat harbor and marina designs must incorporate facilities for proper handling of sewage, refuse and used crankcase oil. Discharge of untreated sewage and surface waters from boats must be prohibited. Water channels should be interconnected to aid in maintaining water flushing action. Limiting pier and dock encroachment into navigable waterways to one-third the width of the water course would aid flushing action while providing for navigation safety.

I.A.1 General Policies - Industrial, Port and Harbor Development

Optimum Use. Only water-dependent industrial and commercial uses shall be allowed in designated industrial waterfront and harbor areas. Sites for water-dependent and water-related industrial and commercial development have been identified in the land use plan.

Natural Features. Minimize excavation, shoreline alteration and disturbance of anadromous streams, tideflats and wetlands when constructing and operating port, harbor, dock and industrial facilities.

Ports, small boat harbors, marinas and docks shall be located, constructed and operated to minimize water pollution.

Such development shall be located, designed and managed, to the extent feasible, so that other appropriate uses are neither subject to substantial or unnecessary adverse environmental impacts, nor deprived of reasonable, lawful use of navigable waters. Industrial and port development which is consistent with this plan shall also be protected from encroachment or interference by incompatible uses with less critical site requirements, such as residential or commercial use.

Port and industrial development shall provide maximum practical levels of protection for affected biologic populations, habitats and the aquatic food chain in general.

Views and Aesthetics. Ports and industry shall be encouraged to minimize negative impact on shoreline areas and scenery, to enhance and maintain positive visual aspects of their development and to provide opportunities for public viewing of such positive aspects whenever practical and safe.

Multiple Use. This plan's multiple use objectives shall be implemented in the following manner:

1. Recreational use of undeveloped shorelines not needed for port or industry operations shall be encouraged for employees and/or the public, whenever possible, as long as such uses are safely compatible with operations.

2. Cooperative use of piers, cargo handling, storage, parking and other accessory facilities among private or public entities shall be strongly encouraged or required whenever feasible.

3. Navigable waters shall be kept free of unnecessarily hazardous or obstructing development; the historic open character of these waters is important to all harbor uses which are dependent on marine transportation. No one use shall be allowed to effectively exclude other appropriate uses from significant portions of navigable waters.

I.A.2 Location Policies - Industrial and Port Development

Preferred Location. Port and industrial facilities shall be located, to the extent feasible, where adequate land access and utility services are available or can be provided and where required site development can be carried out and maintained without significant adverse impact on water quality, valuable shore features or real property. The port of Skagway shall, where feasible and prudent, be developed more intensely before committing new areas (to make full use of the available space and infrastructure, to maintain options for alternative uses of other sites, to forego potential public costs associated with developing a new site and to prevent unnecessary degradation of coastal resources).

Accessory Development. Accessory development which does not require a shoreline location in order to carry out its support functions shall, to the extent practicable, be sited away from the land/water interface. This category includes parking, warehousing, open air storage, waste storage and treatment or storm runoff control facilities, utility and land transport development.

Public Access. New development will be encouraged to provide physical or visual access to shorelines when such access does not cause interference with operations or hazards to life and property.

I.A.3 Local Standards - Industrial and Port Development

Shoreline Dependency. Only shore-dependent industrial and port development is permitted in designated industrial waterfront zones, unless no feasible or prudent upland alternative is available.

Buffer. Except where impracticable, all new or expanded port or industrial development shall have buffers established between industrial areas, major public transportation routes and adjoining nonindustrial areas. Buffers shall be of adequate width, plant and soil composition, as reasonably determined by the city, to effectively protect adjacent properties from visual and noise intrusion which would otherwise occur. Buffers shall preferably be composed of natural terrain and vegetation.

Such buffers shall not be used for storage of industrial equipment or materials or for waste disposal, but may be used for outdoor recreation. Portions of such buffers may be used for light motor vehicle parking if design of such facilities is found by the city to be consistent with this plan.

Shoreline Setback and Height Standards. All new or expanded port and industrial development which does not require a water edge or water surface location shall be subject to the following requirements, where feasible and prudent:

shore setback	25 feet
height limit	35 feet

The setbacks shall be measured from the ordinary high water mark (OHWM) or mean high water (MHW), as appropriate, unless there are unstable banks or bluffs or wetlands. In this case, setbacks shall be measured from the nearest bluff or wetland edge rather than the OHWM or MHW.

I.B General Policies - Commercial Development

Optimum Use. Only those businesses which either require a shore location or which allow substantial numbers of people and/or the general public to enjoy shorelines will generally be permitted to locate there.

Use Conflicts. Commercial development shall be located, designed and managed so that adverse effects from neighboring uses are prevented or held to publicly acceptable minimums.

Public Access. New shoreline business shall be encouraged to provide shoreline access for their customers and the public whenever feasible and appropriate.

Views and Aesthetics. To the extent feasible and prudent, development shall not detract from the scenic qualities of the shoreline. Commercial development shall be visually compatible in design with its surroundings and shall not significantly block scenic vistas. Protection of the view of the shoreline from the water surface shall be considered.

I.B.1 Location Policies - Commercial Development

Preferred Use. Commercial uses which meet one of the following two conditions will be given preference over other commercial uses in securing shoreline locations:

- uses for which shoreline location is a necessity, including but not limited to boat rentals and marine service stations
- uses that promote physical or visual use of shorelines by the public

Compact Development. Commercial shoreline uses shall, to the extent practicable, locate near existing uses of a similar character or in new locations which are consistent with this plan.

I.B.3 Design Policies - Commercial Development

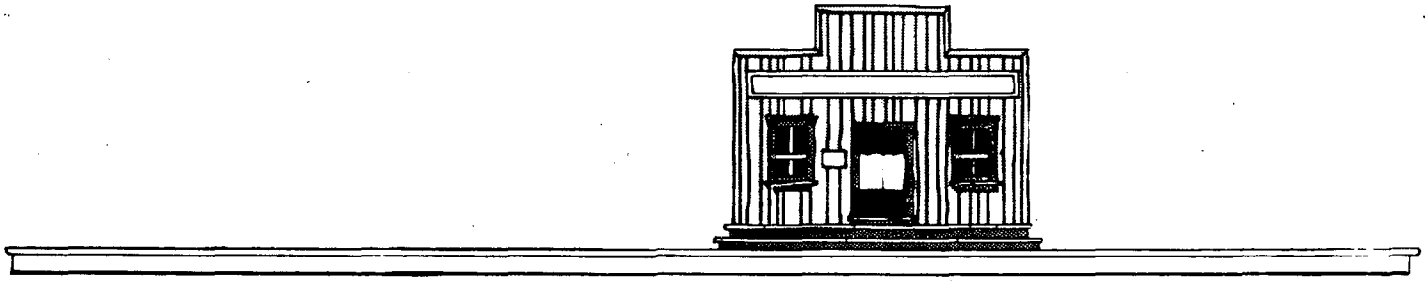
Accessory Uses. Nonshoreline-related development, such as parking, access roads or service buildings or areas, shall be sited inland from shorelines, where feasible and prudent, and shall be designed to be in visual harmony with the local area.

I.B.4 Local Standards - Commercial Development

Landscaping and Buffer. All new developments shall, where feasible and prudent, be landscaped and buffered so that they do not significantly detract from shoreline scenic qualities or adjoining properties. Such landscaping shall take into account the view of the shoreline from land and the view of the shore from the water surface. The width and physical nature of the buffer shall be established by the city commensurate with local conditions.

Landfill. Filling or drainage of water bodies, floodways, backshores or natural wetlands for expansion of upland areas for commercial development shall require variance approval by the city council and must be considered in light of other policies in this plan.

Waterfront/Over-Water Structures. Those commercial uses which require a waterfront or an over-water location, such as boat fuel stations, shall be permitted to locate waterward of OHWM, the MHW or the



natural wetland edge, provided that they can demonstrate a water-dependent need or provide public access or visual enjoyment of the waterfront.

Floor Elevation. Elevation of the finished ground floor of buildings shall be at least five feet above OHWM or MHW.

Setback, Open Space and Height Standards. The following setbacks are measured from OHWM or MHW, as appropriate, provided that, on erosional or otherwise geologically unstable bluffs or banks exceeding ten feet in height or on banks sloping at more than thirty percent, any setback shall be measured from bank rim or top of such slope respectively. On marsh shores, such setbacks shall be measured from the edge of the natural wetland. These setbacks do not apply to shoreline-dependent development that requires an over-water or water-edge location. The following setbacks and building restrictions are general in nature; site specific limitations may require a reduction in setback requirements at the discretion of the planning commission and city council.

	URBAN	RURAL (CR Zone only)
Shoreline Setbacks		
water-related uses	25'	50'
accessory uses	50'	75'
Open Space (% of lot area)	30%	50%
Building Height Limit	30'	25'

I.C General Policies - Residential Development

Optimum Use. New residential shoreline developments (creating five parcels or more) are required to provide shoreline area for recreational use by development residents and the public.

Planned Unit Development. Developments which include common open spaces and recreation facilities or a variety of dwelling sizes and types are to be encouraged at suitable locations as a preferable alternative to extensive single lot subdivisions on shorelines. Such development may also include a limited number of neighborhood business uses if consistent with city zoning.

Use Conflicts. Development shall not result in significant adverse effects upon other nearby shoreline uses.

Accessory Uses. Structures or development for uses accessory to residential use shall retain, where practicable, shoreline open space, be visually and physically compatible with adjacent cultural and natural features, and be reasonable in size and purpose. Accessory development common to residences includes, but is not limited to, recreational

piers and floats, garages and shops, parking areas, watercraft storage, shore defense works, fences, saunas and guest cottages.

Such development shall be discouraged from locating in required shore setback spaces, unless no feasible or prudent alternative exists, and shall not be permitted over the water unless clearly shoreline-dependent, such as piers and floats for recreational or personal use.

Joint or community use of private piers or floats is to be strongly preferred over proliferation of piers and floats for individual lots. Mooring buoys are preferable where feasible.

Aesthetics. Development shall, to the extent possible, protect and enhance scenic shoreline features whether natural or cultural, including scarce or valuable shoreforms (e.g., beaches), historic features and views; development shall be visually compatible with the local area.

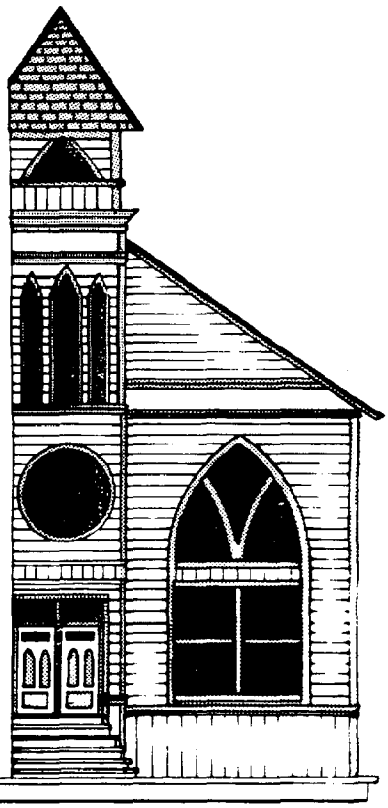
I.C.1 Location Policies - Residential Development

Recognizing that premature and scattered development needlessly consumes shoreline open space, conflicts with other appropriate uses and causes extra public costs for public services, new development shall be encouraged to locate in developed areas or in areas planned for residential uses.

Site Suitability. Development shall be permitted where the site is reasonably suitable for utility development, structural modification and covering with impervious surface in terms of soils, geological characteristics, slopes, water table height and natural drainage both on and below ground surfaces. A geotechnical investigation shall be required prior to development to determine an area's physical capability to accommodate various uses if a significant geophysical hazard has been identified or is likely to be present in the area.

Recreation-Oriented Residential. Second home or other recreation-oriented residential development shall be located where nearby property owners and other appropriate uses will not be adversely affected and where such use is considered optimal and appropriate for the local area.

Planned Unit and Multi-Unit. Such development is usually urban in density and shall be located where transportation systems are adequate and where such use will be compatible with nearby uses.



I.C.2 Design Policies - Residential Development

Density. The gross density in terms of dwelling units per acre of the entire development, including open spaces, and actual density in terms of units per acre of the developed areas, lot coverage and height shall be appropriate to local natural and cultural features as determined by the City of Skagway.

Amenities. Natural and cultural features on the development site having significant value for outdoor recreation, open space, fish and wildlife habitat or aesthetic enjoyment shall be maintained in a manner which conserves their intrinsic value and enables maximum human benefit from such features.

Open Space. Development shall, where feasible and prudent, provide ample open space between structures and water bodies or natural wetlands and along site boundaries so as to provide space for outdoor recreation, protect natural features, preserve views or to minimize use conflicts.

Public Access. New development creating five parcels or more shall be required, where practicable, to provide public access to publicly owned shorelines and public water bodies. This access shall be of a mode and size appropriate to the site, general nature and size of the development.

Recreation-Oriented Residential. Developers of residential projects for second home or other recreation-oriented markets shall be required to provide adequate and diverse on-site recreation opportunities and open space if feasible and prudent to do so.

Cluster Development. New residential development shall be encouraged to cluster dwelling units together in order to reduce physical impact upon shorelines and to reduce utility and road costs. Such development shall be required to provide substantial open space areas and diverse outdoor recreation facilities to the extent feasible and prudent. Such development shall be encouraged to provide a form of public access to water bodies compatible with the development.

Energy Conservation. Residential development shall be strongly encouraged to utilize energy conservation designs. This includes southern orientation of structures, predominance of windows on southern exposures, absence of windows and thicker than normal insulation on northern walls. Structures should be sited and screened so as to be buffered from predominate winds. (Such measures can reduce energy consumption by as much as forty percent.)

Parking and Circulation. Parking areas of sufficient size shall, if practicable, be placed away from the shoreline, buffered and constructed so as to minimize erosion and water pollution by controlling storm runoff. Structural measures such as catch basins, filtration trenches and unpaved, permeable all-weather surfaces shall be considered for this purpose.

Road or trail widths, layout and design shall comply with state standards as well as be designed to enhance valuable shore features and other amenities which make the site desirable for residential use. Alternatives to roads, such as trails for pedestrian and equestrian use, shall be provided where appropriate.

I.C.3 Local Standards - Residential Development

Access. New subdivision or other residential developments creating five parcels or more on the shoreline shall provide a public access easement or right-of-way along the shoreline, extending the length of the development. Such areas shall be of a minimum width of twenty-five feet measured landward from ordinary high water mark (OHWM) or the mean high water (MHW), whichever is appropriate. Topographic constraints or alternative access routes may allow the city council to lessen or forego this requirement.

Docks and Floats. Developers of projects involving five or more dwelling units shall be required to provide a community dock and/or float for private use, if deemed necessary and appropriate in the particular area. Private recreational docks and floats meeting dock standards of this plan for individual lots are permitted where no community facilities are provided.

Private Boat Ramps. Boat ramps are permitted for individual residences where upland slope within twenty-five feet of the ordinary high water mark or mean high water does not exceed twenty-five percent and/or where substantial cutting, grading, filling or defense works are not necessary.

Float Planes. Private moorage for float planes shall be permitted as a conditional use, consistent with program standards regarding docks.

Landfill. Filling of water bodies, floodways or natural wetlands for expansion of upland area is prohibited for residential development unless no other feasible or prudent alternative is available. Floodplain may be filled in areas where such action is consistent with this program and is deemed appropriate by the city.

Floor Elevation. Elevation of the finished ground floor of dwellings, excluding basements, shall be at least one foot above the regulatory flood plain or five feet above MHW or OHWM where a regulatory flood plain has not been established.

Shoreline Setbacks, Open Space and Height Standards. These setbacks are measured from the OHWM or MHW unless there are erosional or otherwise geologically unstable banks exceeding ten feet in height or sloping at more than thirty percent. Such setbacks shall be measured from the bank rim or top of such slope respectively or, on wetland shores, such setback shall be measured from the edge of the natural wetland. These setbacks apply to dwellings, accessory buildings and parking areas; they do not apply to outdoor decks or patios that do not extend more than twenty-five feet waterward from the dwelling unit.

Setbacks may be altered by the city council if site-specific conditions (e.g., topography) make the setback impracticable.

	URBAN (all zones permitting residential use except the CR zone)	RURAL (CR zone)
Shoreline Setback		
single family to triplex	25'	25'
multifamily less than 35 feet high	35'	50'
Building Height Limit		
single family to triplex	15'	25'
multi-unit	25'	25'
accessory	10'	15'

II. Recreation

STATE STANDARD: Recreation (6 AAC 80.060)

The state standard requires districts to designate areas for recreational use. It also requires that high priority be given to maintaining and, where appropriate, increasing public access to coastal water. Therefore, the Skagway Coastal Management Program designates areas for recreational use which:

- are currently used by residents and tourists for recreational pursuits
- have potential for high quality recreational use because of physical, biological and cultural features

Areas which meet these standards and are designated as recreational areas are delineated on the accompanying map (Figure 2-3). These designations, however, are not meant in any way to prohibit consideration and development of hydroelectric power facilities at either Reid Falls or West Creek or the construction of campgrounds.

II.A General Policies

It shall be the policy of the City of Skagway to encourage recreational and tourist use and development, as well as provide public access to the shoreline and recreation areas. The City of Skagway retains the right to nominate and select state-owned land classified as public recreation in order to meet its municipal selection land entitlement. Private in-holdings within the areas designated for recreational use are not subject to the recreation standards of this plan except where specifically stated.

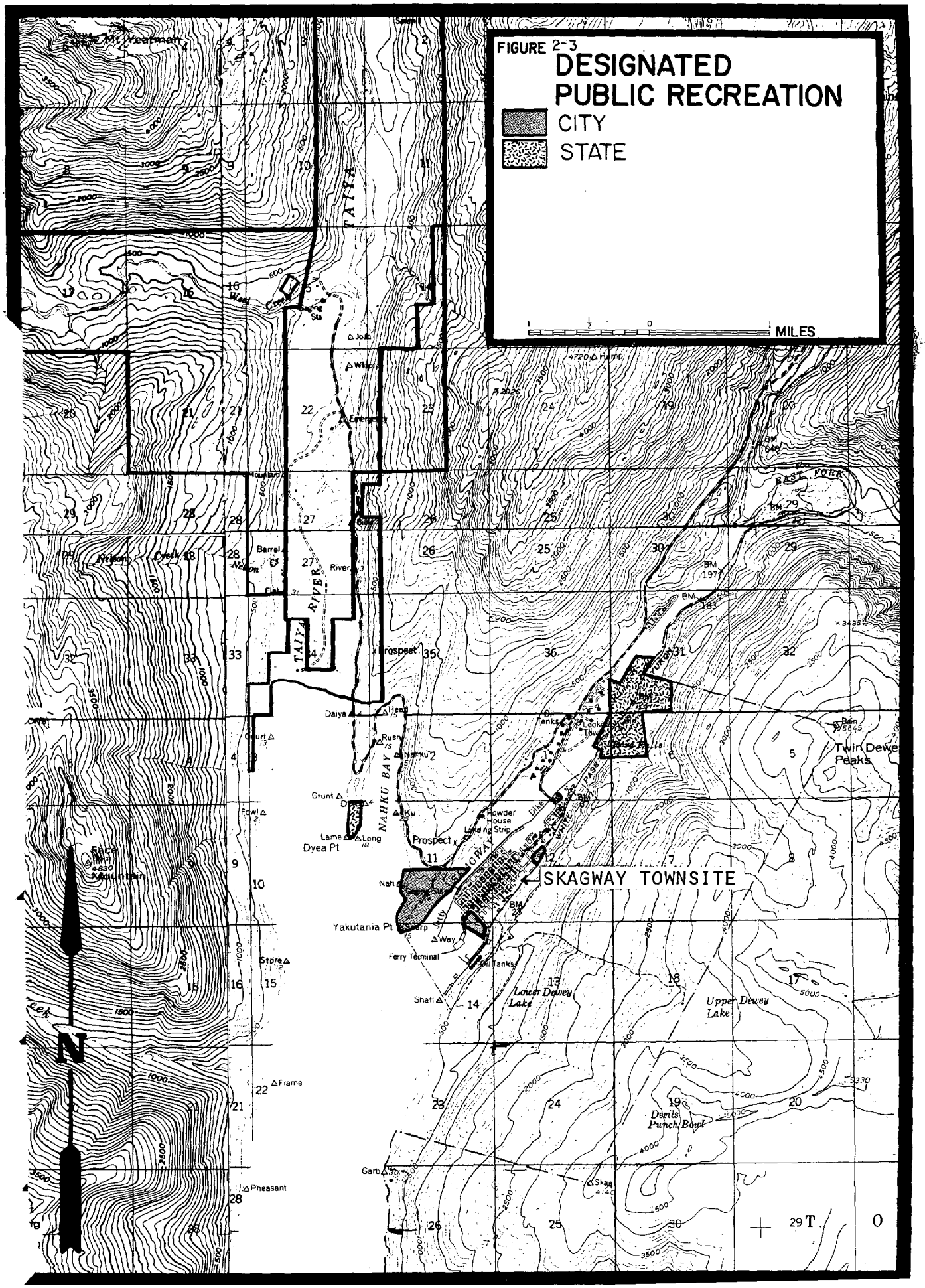


FIGURE 2-3
DESIGNATED PUBLIC RECREATION
CITY
STATE
MILES
SKAGWAY TOWNSITE
TAIYA RIVER
NAHKU BAY
Prospect
Yakutania Pt
Dyea Pt
Twin Dewey Peaks
Lower Dewey Lake
Upper Dewey Lake
Devils Punch Bowl
Ferry Terminal
Oil Tanks
Powder House
Landing Strip
Daiya
Grunt
Lame
Long
Nah
Shaft
Store
Frame
Pheasant
Garb
Skag
Barrel
Nelson Creek
Mountain
Emergency
Wilson
Hamp
Bain
Mt Yeatman
N

Preferred Use. Public and private recreational developments that provide shoreline-related recreation opportunities and increase public access to the shorelines shall be encouraged.

Use Conflicts. Recreational developments shall be located, designed, constructed and managed to minimize adverse effects on other appropriate shoreline uses, whether existing or officially planned, and to provide safe, healthy conditions for recreationists.

Variety and Coordination. Recreational developments shall, to the extent practicable, provide the regional population a balanced choice of recreation experiences in appropriate locations. Public agencies and private developers shall coordinate their plans and activities to provide a wide variety of recreational opportunities without needless duplication of facilities.

Views and Aesthetics. Recreational and access developments shall, wherever appropriate, preserve or enhance scenic views and vistas as well as improve the aesthetic value of the area.

Access. The city shall establish a public access corridor, where practicable, along publicly owned shoreline of the Conservation Residential (CR) zone and shall encourage establishment of such a corridor on private lands. Trail links between shoreline parks and public access points shall be encouraged for walking, horseback or bicycle riding and other nonmotorized vehicle access.

Dispersed Use. Access to natural-character recreational areas, such as fishing streams and hunting areas, shall be a combination or series of linear shoreline trails or easements and small parking areas to minimize user concentration on small portions of the shoreline or upland areas.

Multiple Use. There is a scarcity of suitable sites for public shoreline-oriented recreation. Therefore, provision for reasonable recreation use shall be encouraged in suitable port, industrial, commercial and residential areas.

II.A.1. Location Policies - Recreation

Optimum Use. Shoreline areas such as beaches that are suitable for several forms of recreation are scarce. These areas shall not be developed for uses which can be located elsewhere.

II.A.2 Design Policies - Recreation

Site Capability. The type and concentration of recreational development in an area should be dictated by the physical limitations and opportunities of that area. Physical conditions such as soil characteristics, slopes, geological features, surface and subsurface drainage, water tables, floodplains, shoreforms and native plant and animal life shall be taken into consideration when planning recreational development of an area.

Public Access. Provisions shall be encouraged for reasonable public access through extensive private developments creating five parcels or more, especially when they are adjacent to publicly owned shorelines or water bodies; or where they are proposed for a type of shoreline that is scarce in the region and has high potential for meeting local recreation needs.

Open Space. Where recreational developments are composed primarily of a single-purpose use (e.g. camping), adequate open space shall be provided to preserve the natural features of the area and to provide a sufficient amount and variety of recreation opportunities for the users of the development.

Use Priorities. Since shorelines with a high value for recreation are limited and the long-term demand is unlimited:

1. Facilities for water-dependent recreation such as fishing, swimming and boating and water-oriented recreation such as picnicking, hiking and walking shall be located near the shoreline, while nonwater-related recreation facilities shall be located inland when practicable.

2. Accessory use facilities which are not shoreline-dependent, such as parking lots, access roads, overnight lodging, restrooms and service buildings, shall, to the extent feasible, be located inland away from the shore.

II.A.3 Local Standards - Recreation

Urban (all zones except Conservation Residential - CR). Recreational development is permitted subject to the policies and standards of this program.

Rural (CR zone). Recreational development not requiring extensive structures nor substantial alterations to topography is permitted, subject to the policies and standards of this program.

Access. A permanent twenty-five foot public access corridor, measured inland from OHWM or MHW, as appropriate, shall be established on all publicly owned shorelines in the CR zone. Development in this corridor shall only be allowed if it is essential for an acceptable water-dependent use. Existing public access on private land shall be maintained and encouraged whenever possible to enhance access to public waters. Public access may be restricted where it would jeopardize public safety or present an unreasonable hardship on the landowner.

Buffer. In order to minimize adverse effects upon neighboring properties and local shore features, the city shall require a buffer on the shore and other perimeters of the recreational development. The width and physical nature of such buffers shall be established by the city, commensurate with the proposed intensity of use and character of the local area.

Shoreline Setbacks, Open Space and Height Standards. These setbacks are measured from OHWM or MHW, as appropriate, provided that on erosional or otherwise geologically unstable bluffs or banks exceeding ten feet in height or on banks sloping at more than thirty percent, any setback shall be measured from bank rim or top of such slope respectively. On marsh shores, such setbacks shall be measured from the edge of the natural wetlands. Setback requirements do not apply to shore-dependent development that requires over-water or water-edge location.

	URBAN	RURAL
Setbacks		
shore-related or facilities	25'	25'
other buildings, parking, overnight areas	50'	75'
Open Space		
with overnight facilities (% of lot)	30%	60%
without overnight facilities (% of lot)	25%	75%
Building Height Limits		
0-100 feet from OHWM	25'	15'
101-250 feet from OHWM	35'	25'

III. Energy Facilities

STATE STANDARD: Energy Facilities (6 AAC 80.070)

This standard requires the state and coastal management district to cooperatively identify sites that are suitable for the development of major onshore, nearshore, offshore and outer continental shelf energy facilities. No major energy facility currently exists in the Skagway area. Oil and gas potential in the area has not been assessed. Foothills Pipelines Limited plans to use Skagway as a transshipment point for materials and supplies to be used in constructing the Alcan natural gas pipeline. Standards and policies for the particular energy impact are dealt with in the coastal energy impact element of this document.

There has been considerable interest in developing hydroelectric facilities in the Skagway area. Of all means of electric power generation, hydroelectric, if properly designed and located, is probably the cleanest and safest. Adequate precautions must be taken in the design and development of such facilities to minimize adverse impacts on aquatic and terrestrial species using the affected watershed habitat.

III.A General Policies - Energy Facilites

Development of hydroelectric power facilities must be sensitive to habitat and passage of anadromous fish and the effect that streamflow alteration may have on downstream environments.

Hydroelectric facilities must be developed in a manner that is compatible with surrounding land uses and minimizes adverse environmental and aesthetic impact.

The development of devices to produce wind-generated energy shall be encouraged by the City of Skagway.

IV. Transportation and Utilities

STATE STANDARD: Transportation and Utilities (6 AAC 80.080)

(a) Transportation and utility routes and facilities in the coastal area must be sited, designed and constructed so as to be compatible with local community goals and desires as expressed in this program and local comprehensive plans.

(b) Transportation and utility routes and facilities must be sited inland from beaches and shorelines unless the route or facility is water-dependent or no feasible and prudent inland alternative exists to meet the public need for the route or facility.

IV.A.1 General Policies - Transportation

Facilities. Developers shall be required, where feasible and prudent, to install or establish access roads or utilities of a quality and type as needed to best protect shore features and other users that may be affected by pollution, nuisances, flooding, erosion and other adverse effects.

Design, Construction and Maintenance. Highway and airport design, construction and maintenance shall minimize alteration of water courses, wetlands and intertidal marshes, and aesthetic degradation.

Minimal Crossing. Roads and trails shall only cross anadromous streams when necessary to provide access as deemed necessary by the City of Skagway. Bridge or culvert construction and design must minimize habitat disturbance and allow fish passage. Phasing of construction shall be done to avoid critical migration periods for salmon and other anadromous species.

Buffers. Where practicable, establish buffers and setbacks to maintain the scenic quality of transportation corridors. Prior to development activities within one hundred feet of the right-of-way, development plans must be reviewed to determine that the project was designed to blend with the area's visual character.

Vehicles. Use of vehicles is prohibited on tidelands, shorelands, community or public backshore beaches, streamways or natural wetlands, except as necessary or for public health and safety, maintenance or water access.

Parking Areas. Such areas shall be surfaced, whenever possible, with permeable materials and provided with suitable drainage controls to minimize ponding and excessive concentrated runoff with its resulting erosion, pollution and sedimentation. Such areas shall be buffered, as feasible and prudent, from shorelines and less intense adjacent uses by vegetation or undeveloped space.

Improve the Transportation System. The transportation system shall be improved to provide safe access, increased mobility and to facilitate a healthy economy. The city shall work to:

- improve ferry scheduling to improve regional accessibility
- promote the upgrading of Dyea Road to provide safer access to and from Dyea valley
- promote the year-round maintenance of the Klondike Highway
- upgrade the airport to improve airport safety

IV.B General Policies - Utilities

Underground Location. To the extent practicable, underground installation of utilities is required in areas of high recreational or scenic value or intensive public use.

Outfall Pipes. New outfall pipes shall be located to minimize adverse impact on habitats, particularly wetlands. New outfalls shall be placed at an adequate distance and depth from shore and designed to provide optimal dispersal of the effluent or shall utilize authorized land application of treated sewage effluent.

Sanitary Landfills. To avoid leachate pollution, landfills (dumps) shall be located at sites approved by the Alaska Department of Environmental Conservation.

Utility Service. Development shall only locate in areas where utilities are either available, can be economically extended, can be developed as a part of the project, or suitable on-site systems are possible.

Improve and expand community facilities:

- Develop an acceptable means to recycle and/or dispose of solid waste
- Upgrade and expand the water system to systematically alleviate infiltration problems and leaks in the system, reduce related energy costs and increase the hookup capability of the system
- Promote the development of hydroelectric and wind-powered energy
- Construct separate storm sewers with all new development and, eventually, throughout the city

V. Fisheries

STATE STANDARD: Fish and Seafood Processing (6 AAC 80.090)

Districts shall identify and may designate areas of the coast suitable for the location or development of facilities related to commercial fishing and seafood processing.

V.A General Policies - Fisheries Enhancement and Aquaculture

Optimum Resource Use. Maintenance and enhancement of fisheries shall be given priority consideration in reviewing shoreline use proposals which might adversely impact fisheries habitat, migratory routes and harvest of significant fish or shellfish species. Alternate locations or designs shall be seriously considered for such proposals if such potential adverse impacts are significant. Shorelines having banks, beaches and beds critical to the preservation or enhancement of the fisheries resource base shall be maintained or restored to a productive natural condition whenever feasible and prudent.

Shoreline sites suited to aquaculture/hatcheries have been identified in this program (Pullen and Burro Creek sites). These areas shall be reserved from irreversible development for other uses having less critical site requirements.

Fisheries enhancement and aquaculture shall aim toward maintaining or restoring the quality and normal circulation patterns of affected waters at optimum levels consistent with applicable state standards. Aquaculture and fisheries shall be protected from significant water quality degradation by other users.

Development shall be located, designed and operated so that such plant or animal populations, their respective habitats and the local ecological balance are maintained, where feasible and prudent.

Development shall be located, designed and operated, to the extent feasible and prudent, so as to have minimal adverse impact upon valuable physical shore features and processes, including accretion shoreforms (beaches) and littoral drift.

Remaining natural estuarine and wetland shorelines shall be maintained, where feasible and prudent, in their natural, productive condition.

Aquaculture development and fisheries enhancement shall be located, designed and operated so that aesthetic values of local shorelines are maintained to the extent feasible and prudent.

V.B Location Policies - Fisheries Enhancement and Aquaculture

Accessory Uses. Development accessory to fisheries enhancement and aquaculture shall be located inland unless clearly dependent upon a shore or water surface location. Accessory development of a mainly commercial or industrial nature will be subject to appropriate policies and standards of this program.

Preferred Locations. Aquaculture or fisheries enhancement development shall be located where interference with navigation, commercial fishing, shoreline-dependent recreation or lawful access to shorelines will not become significant. A reasonable portion of regional navigable waters shall be allocated to such development on a long-term basis, however, because of high potential for regional economic and recreational benefits.

The Skagway area does not support any significant commercial fishing and, consequently, does not hold promise for future fish processing facilities. Therefore, no standards are necessary for this aspect of fisheries.

V.C Local Standards - Fisheries Enhancement and Aquaculture

Water Quality and Littoral Control. Fisheries enhancement and aquaculture practices, including disposal of wastes, viscera or fish scrap, shall be conducted so that applicable state water quality and litter control standards are not violated.

Other land and water uses shall not degrade waters used for fishery enhancement or aquaculture.

Setback and Height Standards. Minimum setbacks for development that is not shoreline-dependent is subject to the setback and height regulations of the zoning district in which it is located.

VI. Timber Harvest and Processing

STATE STANDARD: Timber Harvest and Processing (6 AAC 80.100)

State regulations for timber harvesting and processing, as promulgated under the Alaska Forest Management Practices Act of 1978, will supercede the ACMP regulations for which the same issues are addressed. Nevertheless, they can provide for the wise use of timber resources valuable to the city, provided that the standards are properly implemented and enforced. Due to the very limited timber harvesting and processing in Skagway, any local concerns are sufficiently addressed through coastal development standards or standards for sensitive resource or hazardous areas.

VII. Mining and Mineral Processing

STATE STANDARD: Mining and Mineral Processing (6 AAC 80.110)

The state policy requires mining and mineral processing to be consistent with all elements of this program and any state or federal regulations. State policy further requires that sand and gravel may be extracted from coastal waters, intertidal areas, barrier islands and spits only where there is no feasible and prudent alternative to coastal extraction which will meet the public need for the sand or gravel.

Existing state and federal standards and requirements, combined with other elements of this program, are adequate. No new policies are necessary at the local level at this time.

VIII. Subsistence

STATE STANDARD: Subsistence (6 AAC 80.120)

The state standard requires that districts recognize and identify any areas that are used for subsistence activities. No subsistence activity occurs at present in the Skagway area.

POLICIES AND STANDARDS FOR HABITATS, RESOURCES AND HAZARDS

Development shall not occur in sensitive areas such as beaches, wetlands or estuaries unless no feasible or prudent upland alternative exists. When development sites encompass areas that are hazardous, a geotechnical investigation shall be required to determine if it is safe to build, or to establish engineering practices and structures necessary to protect human life and property. If the development site is sensitive to alteration, the Alaska Department of Fish and Game shall be contacted.

I. Habitats

STATE STANDARD: Habitats (6 AAC 80.130)

The standards of the coastal management program require that important habitats be managed so as to maintain or enhance the biological, physical and chemical characteristics which contribute to their capacity to support living resources. In Skagway, four types of habitat are subject to coastal management standards:

- the Taiya Inlet estuary and offshore area
- wetlands and tideflats along the Taiya River, Skagway River and along the inlet
- rivers, streams and lakes, including the Taiya and Skagway Rivers
- important upland habitats for goat and some moose, and a two hundred foot buffer along coastlines, streams and water supplies, as defined by the Alaska Department of Fish and Game

Refer to Chapter I for a description of specific habitats.

Development shall be located, designed, constructed and managed to wisely use natural features which are valuable or scarce in the region and to facilitate appropriate human use of such features while conserving them, including, but not limited to, beaches, natural wetlands, soils, aquifers, surface water, native plant and animal life and shore processes.

State standards require that the Taiya Inlet estuary and adjacent uplands be managed so as to assure adequate water flow, natural circulation patterns, nutrient and oxygen levels and avoid the discharge of toxic wastes, silt and destruction of productive habitat. Likewise, the portion of Skagway River tideflats and wetlands along the city's northwestern boundary shall be managed so as to assure adequate water flow, nutrient and oxygen levels and to avoid adverse effects on natural drainage patterns, the destruction of important habitat and the discharge of toxic substances.

Wastewaters from industries sited in coastal areas have potential adverse impacts on coastal ecosystems, ranging from relatively minor disturbances such as temporary localized turbidity and major water pollution problems. These potential impacts shall be evaluated prior to industrial activity that would produce toxic wastes to ensure compliance with applicable state and federal water quality standards.

Upland habitats shall be managed, to the extent feasible, to retain natural drainage patterns and vegetation cover on steep slopes, and along shorelines and stream banks to prevent excessive runoff and erosion, protect surface water quality and natural groundwater recharge areas and provide for open space and scenic value. Protection of groundwater recharge areas along the Skagway River is crucial to prevent contamination of the city's public water supply.

Besides providing important habitat in themselves, upland habitats protect anadromous streams, marine waters and downslope developments from excessive runoff, erosion, winds and avalances, and help maintain the visual continuity of shorelines. Improper use of these uplands may effect lowland aquatic and marine life, including water supplies, downslope residences and developments, and recreation and tourist values.

II. Historic, Prehistoric and Archaeological Resources

STATE STANDARD: Historic, Prehistoric and Archaeological Resources (6 AAC 80.150)

> Districts and appropriate state agencies shall identify areas of the coast which are important to the study, understanding or illustration of national, state or local history or prehistory.

Areas important to the study, understanding and illustration of national, state or local history and prehistory are identified in Chapter I. The City of Skagway and the National Park Service have established projects for identifying and protecting these resources. No new local policies or regulations are required in the coastal management program.

III. Air, Land and Water Quality

STATE STANDARD: Air, Land and Water Quality (6 AAC 80.140)

Notwithstanding any other provision of this chapter, the statutes pertaining to and the regulations and procedures of the Alaska Department of Environmental Conservation with respect to the protection of air, land and water quality are incorporated into the Alaska coastal management program and, as administered by that agency, constitute the components of the coastal management program with respect to those purposes.

III.A Local Standards

The city shall require reasonable control of surface runoff on-site so that water quality and nearby shore features and properties are not adversely affected. Where appropriate, such measures shall include, but are not limited to, dikes, catch basins or settling ponds, interceptor drains, planted buffers or other suitable devices.

Oil and hazardous materials shall not be disposed of without state authorization. Facilities and procedures utilizing the best available technological pollution control systems for handling, disposal and prompt spill clean-up of such materials shall be required, where feasible and prudent, of new or expanded shoreline developments using such materials.

Land clearing, grading, filling and alteration of natural drainage features and landforms shall be limited to the minimum necessary. Surfaces cleared of vegetation and not to be developed shall be replanted as soon as possible with native or compatible plants. Surface drainage systems or substantial earth modifications shall be designed to prevent maintenance problems and adverse impact on shore features and processes.

Water quality shall not be lowered below state standards on a long-term basis by development or any activity, whether industrial, commercial or residential in nature.

IV. Hazards Areas

STATE STANDARD: Geophysical Hazard Areas (6 AAC 80.050)

(a) Districts and state agencies shall identify known geophysical hazard areas and areas of high development potential in which there is a substantial possibility that geophysical hazards may occur.

(b) Development in areas identified under (a) of this section may not be approved by the appropriate state or local authority until siting, design and construction measures for minimizing property damage and protecting against loss of life have been provided.

This standard is adopted as part of this program. Known hazard areas are identified in the Chapter I.

IV.A General Policies

Skagway shall encourage appropriate state and federal agencies to improve information on types and locations of hazard areas in the district.

Development shall be managed according to the severity of natural constraints in order to reduce risks and minimize damage to life and property. Development shall be precluded in rapidly eroding, slide-prone or geologically unstable shorelines. Development shall be severely limited where resulting damage to life and property is highly probable. Any development in these areas must be based on a geotechnical investigation attesting to the safety of the area and/or specific engineering practices or structures that would alleviate or mitigate the hazard.

The city shall regulate the location of structures near watercourses in order to reduce the impact of flooding and to allow for natural drainage.

The city shall require special development procedures for developments in natural constraint areas and require site-specific geotechnical information to identify possible problems and methods for mitigating undesirable impacts.

Surface modification that would induce excessive erosion, undermine the support of nearby land or unnecessarily scar the landscape shall be limited. Surface modifications in natural constraint areas shall be limited to the smallest extent needed for development.

Developers shall maintain existing vegetative cover to the greatest extent feasible. In cases where development necessitates removal of vegetation, a reasonable amount of landscaping shall be required to replace vegetation removed during construction.

IV.B Local Standards - Hazard Areas

There are no locally adopted building codes regulating construction in the areas identified as seismic risk areas; however, generalized local policies have been identified which serve to regulate development in such hazardous areas. These policies are listed below.

Steep Slopes. In areas of steep slopes (i.e., those above eight percent), the following standards shall apply:

- 8-15% - no more than forty percent of such areas shall be developed and/or regraded or stripped of vegetation. Data may be required by the city as to risk factors and ways to mitigate surficial constraints.
- 15-25% - no more than thirty percent of such areas shall be developed and/or regraded or stripped of vegetation. Data must be provided as to risk factors and ways to mitigate surficial constraints.
- 25% or more - no more than fifteen percent of such areas shall be developed and/or regraded or stripped of vegetation. Data must be provided as to risk factors and ways to mitigate surficial constraints.

Percent of slope is measured as the average slope over the hillside in question, not especially for particular sites within the hillside area.

Landslides. Historic landslide areas or areas prone to landslides, slumping or other forms of mass wasting shall be subject to a geotechnical investigation to determine if development is allowable and, if so, what design measures shall be required to protect human life and property.

Floodplains. City of Skagway Floodplain Management Regulations apply (Chapter 30 Municipal Code).

Wetlands. Wetlands shall not be filled or developed except where no feasible or prudent upland alternative exists. Exceptions may be granted by the city council after a public hearing and compliance with state and federal regulatory agencies. Requirements for setbacks from wetlands are identified in the regulations for various development categories (e.g., residential, commercial). This regulation applies to fresh and saltwater marshes, bogs, swamps and tidelands.

Shore Defense Works. Reasonable protective works are permitted if consistent with this program and if erosion is seriously threatening an established and appropriately located development.

PROPER AND IMPROPER USE DETERMINATION

The Skagway District Coastal Management Plan adopts the following criteria to determine if proposed uses and activities or land and water use designations (including uses of state concern) within the coastal management area are considered proper or improper. It should be the general policy of the Skagway district program to require specific proposals for land and water uses or activities to be submitted to the city planning commission and city council for review. Proposals subject to the coastal management program must meet the following criteria before approval.

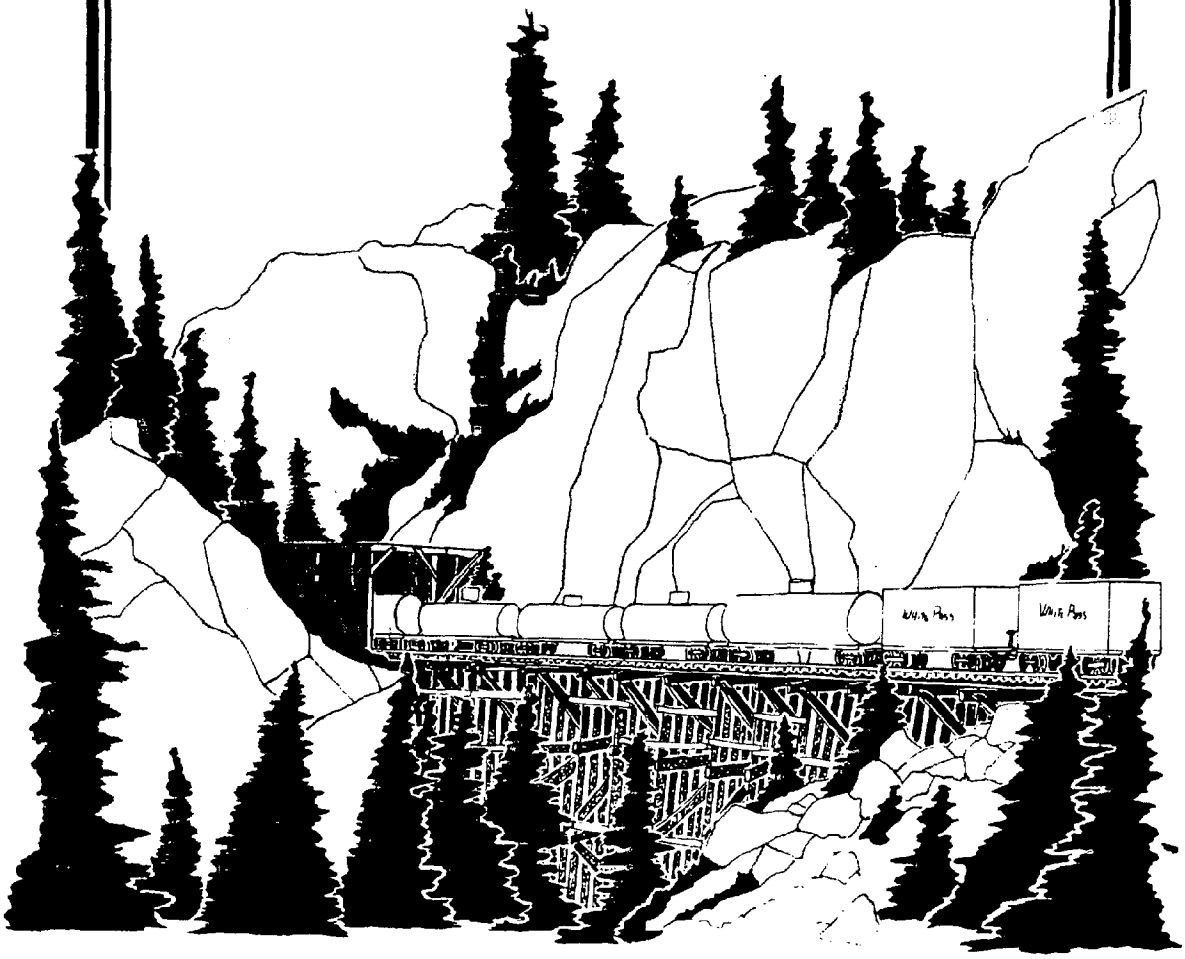
1. Goals and Objectives: Uses and activities must be compatible with the goals and objectives of the Skagway Coastal Management Program.

2. Skagway City Ordinances: Uses and activities must be in accordance with the city's ordinances.

3. Skagway CMP Policies and Standards: Uses and activities must be consistent with the policies and standards of the Skagway Coastal Management Program. These policies adopt and expand upon state standards for Uses and Activities and have been incorporated into this document under the sections titled "Policies and Regulations for Uses and Activities" and for "Resources, Habitats and Hazards."

4. Water Dependency: Water-dependent or water-related uses and activities have priority use of the shoreline. Uses and activities which do not require shoreline access or are not enhanced by shoreline proximity and for which inland alternatives exist must be located in a manner consistent with the policies and standards of this program.

LAND USE POLICIES & RECOMMENDATIONS



SKAGWAY TOWNSITE

Skagway Harbor Area

The Skagway port area extends from the Skagway River east to the base of Twin Dewey Peaks (Figure 2-4). The shoreline in this area is used for ship basins, docks, the ferry terminal and the small boat harbor. Much of the upland area is vacant and is occasionally used for storage. Railroad tracks form a half-circle around the harbor, providing rail access to the Cyprus Anvil ore dock and the White Pass and Yukon Railroad (WPYR) cargo dock. Both the railroad and the Klondike Highway link the Skagway harbor area to the Canadian interior.

Amended zoning designations for the harbor area and the entire Skagway coastal management district are shown in Figures 1-10 and in Figures 2-4 through 2-6.

Industrial Waterfront. The Skagway waterfront, designated as Waterfront Industrial (WI) (see Figure 2-4), is predominately composed of fill, with rip-rap along the waterline. With the exception of the small boat harbor, this area is and shall continue to be zoned and used for industrial purposes. Incompatible uses (e.g., residential) shall be prohibited except as a variance. Public access shall, however, be provided along the shoreline and the Skagway River to accommodate sightseeing and sportfishing where appropriate.

The WPYR owns the narrow parcel along the base of Twin Dewey Peaks. This parcel is occupied by the WPYR cargo dock, fuel tanks, railroad tracks and storage space. The fuel tanks are located upland from the small boat harbor, below a slope that is prone to rock slides. A recent slide resulted in rocks hitting a tank that might have exploded had it not been filled to capacity (no fumes). This is an obvious hazard to the community; the tanks lying in a definable hazard area are in the process of being relocated to an area north of the ore dock terminal buildings. The shoreline adjacent to the southern boundary of this WPYR parcel shall be reserved for future dock/industrial expansion.

The city owns the parcel south of the public use zone (PU designation - see Figure 2-4), which contains the small boat harbor. The industrial use of this area shall be managed to avoid or minimize conflict with the development or operation of the small boat harbor or activities and developments proposed for the public use area. The area immediately surrounding the small boat harbor shall, to the extent practicable, be reserved for marine-related, shoreline-dependent uses.

The seventy acre waterfront parcel adjacent to the Skagway River is leased by WPYR from the city. Over forty years remain on the fifty-five year lease. The WPYR ship basin and the Cyprus Anvil ore dock are located in this area. The parcel's upland area provides infrequently used storage space. If transshipment activities for the proposed gas pipeline occur in Skagway, a barge/ship dock will be constructed in the ship basin to accommodate the barges bringing pipe and materials into

port. The upland area adjacent to the ship basin will be used for storage and necessary staging purposes. This arrangement appears to be adequate to meet Foothills' needs (Foothills Oil Pipeline Limited may be constructing the Canadian portion of the proposed gas pipeline). This arrangement will have to be reevaluated, however, when Foothills' plans and needs become definite (possibly by the summer of 1980). All development within the industrial waterfront area must be water-dependent unless there is no feasible or prudent upland alternative.

Light Industrial/Commercial. The area upland from the industrial waterfront shall, to the extent practicable, be reserved for water-related light industrial and commercial use (IC designation - see Figure 2-4). Development in this area shall, to the extent feasible, be compatible with the adjoining residential area. Rezoning this area from industrial to light industrial/commercial will provide a transitional buffer between the relatively heavy industrial area and the residential area. The city owns a considerable portion of the seaward side of this new zone. The city will encourage a program to improve the scenic quality of the area.

Public Use Area. The shoreline between the road to the ferry terminal and the narrow WPYR parcel at the base of Twin Dewey Peaks, north of the small boat harbor, is composed of fill and tideflats. Pullen Creek traverses the parcel, entering saltwater at the WPYR ship basin west of the ferry terminal. This parcel is designated as an Area Meriting Special Attention (AMSA) and is planned to be developed as a community park and fishery enhancement project (refer to the AMSA section for details).

This section of waterfront is zoned for industrial use, although it is not used for that purpose. This area shall be redesignated as a public use area (PU) to provide for the use of the proposed community park, while avoiding incompatible uses.

Historic District

It is recommended that the historic district be extended seaward to facilitate the development of an appealing corridor into Skagway by merging the historic district with the proposed community park along Pullen Creek (see Figure 2-4). Water-related development shall be given preference in this addition to the historic district. The boundary of the historic district is currently located between First and Second Streets, where it abuts the industrial zone. Since the proposed National Park Service headquarters at the old railroad depot will be a point of interest as well as an orientation center, many people will be drawn to that part of town, particularly those arriving by water. It is prudent that this area is included in the historic district to facilitate its development in keeping with the historic character of the area. This addition to the historic district will abut the proposed community park to form an aesthetically pleasing corridor into town. This will add a great deal to Skagway's atmosphere and enhance people's enjoyment of the community.

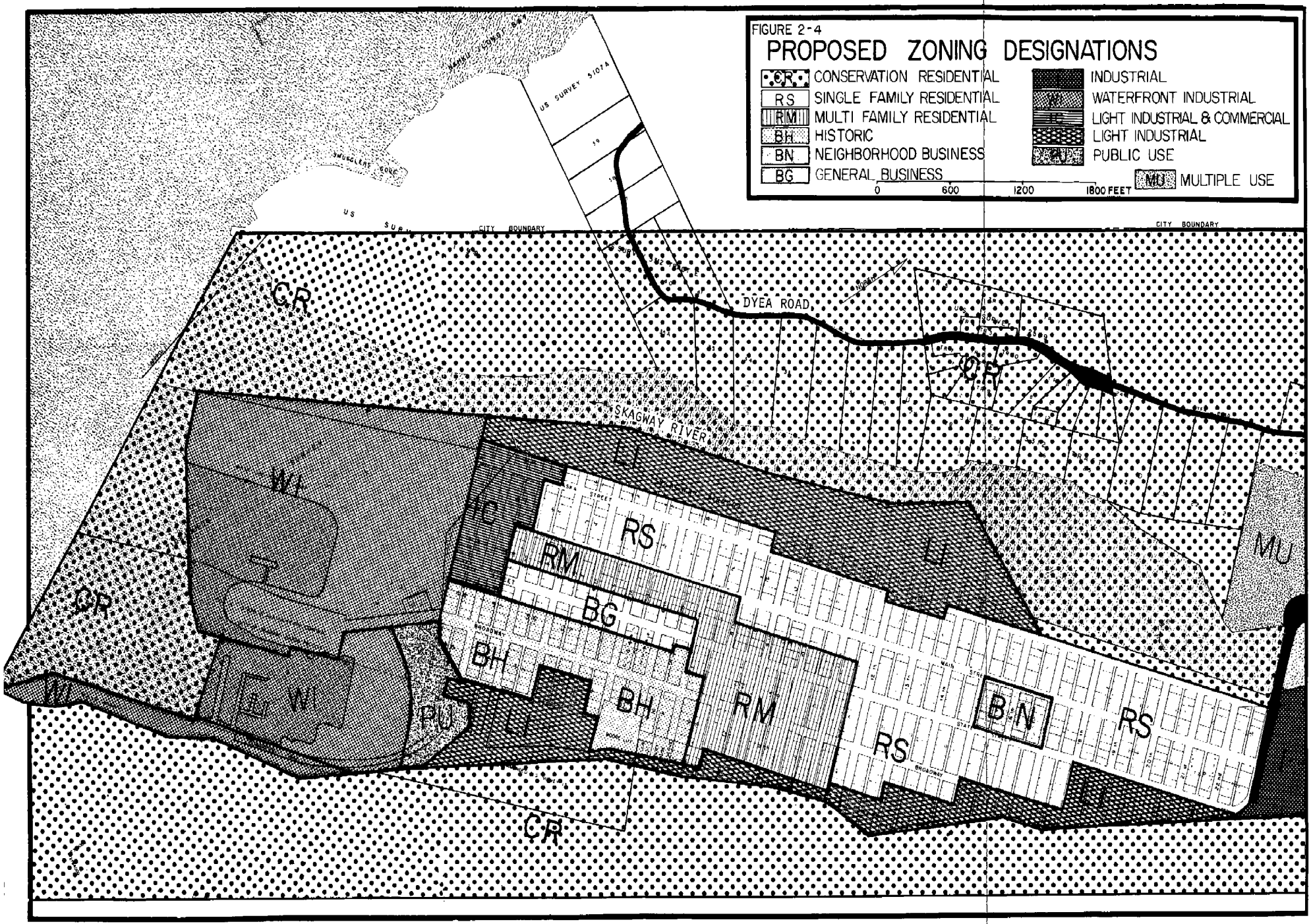


FIGURE 2-4
PROPOSED ZONING DESIGNATIONS
CR CONSERVATION RESIDENTIAL
RS SINGLE FAMILY RESIDENTIAL
RM MULTI FAMILY RESIDENTIAL
BH HISTORIC
BN NEIGHBORHOOD BUSINESS
BG GENERAL BUSINESS
I INDUSTRIAL
WI WATERFRONT INDUSTRIAL
LI LIGHT INDUSTRIAL & COMMERCIAL
LI LIGHT INDUSTRIAL
PU PUBLIC USE
MU MULTIPLE USE
0 600 1200 1800 FEET
CITY BOUNDARY
DYEA ROAD
SKAGWAY RIVER
SMUGGLERS COVE
US SURVEY 5107A
BROADWAY
MAIN STREET

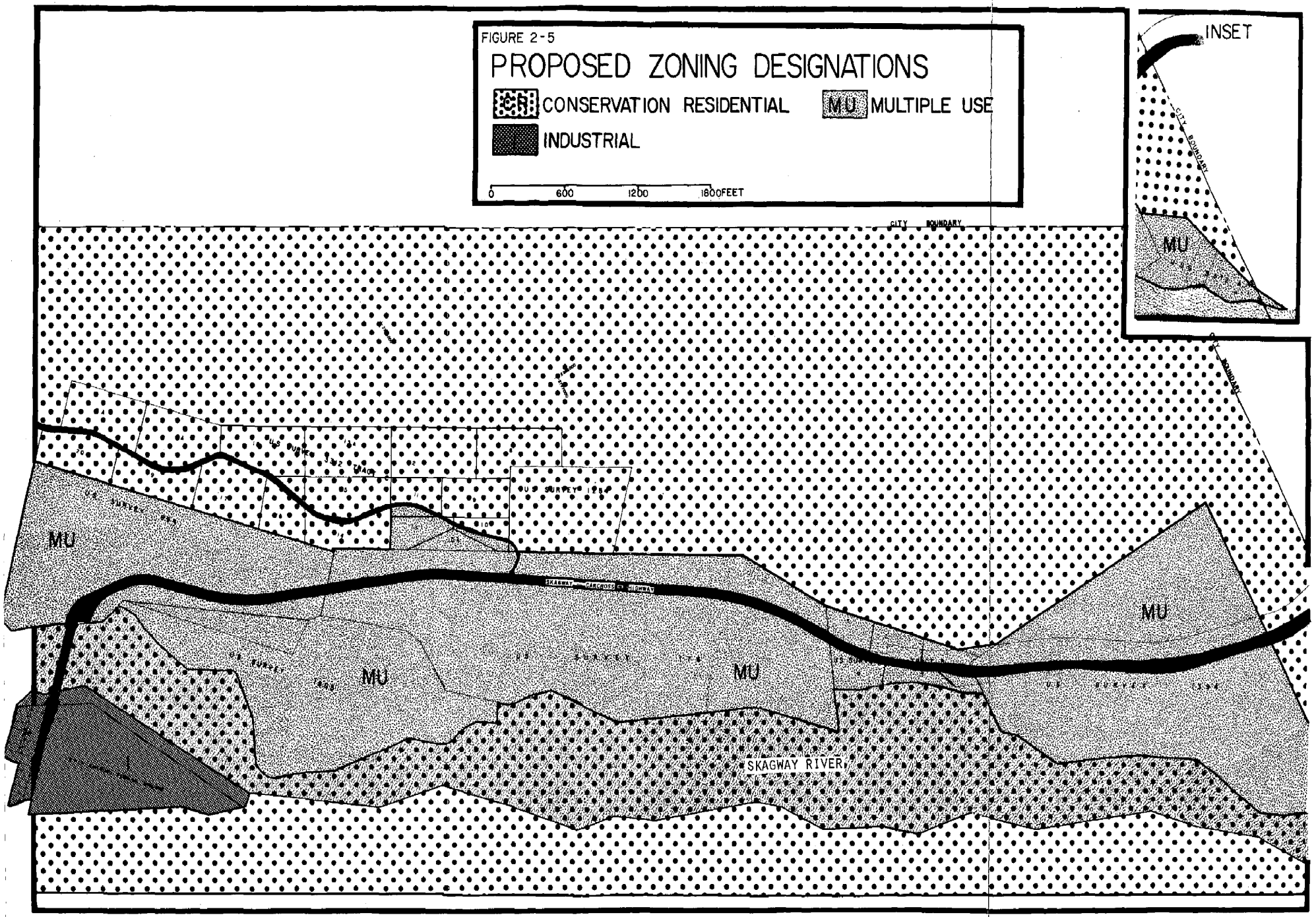


FIGURE 2-5
PROPOSED ZONING DESIGNATIONS
CONSERVATION RESIDENTIAL
MU MULTIPLE USE
INDUSTRIAL
0 600 1200 1800 FEET
INSET
CITY BOUNDARY
MU
MU
MU
MU
SKAGWAY RIVER

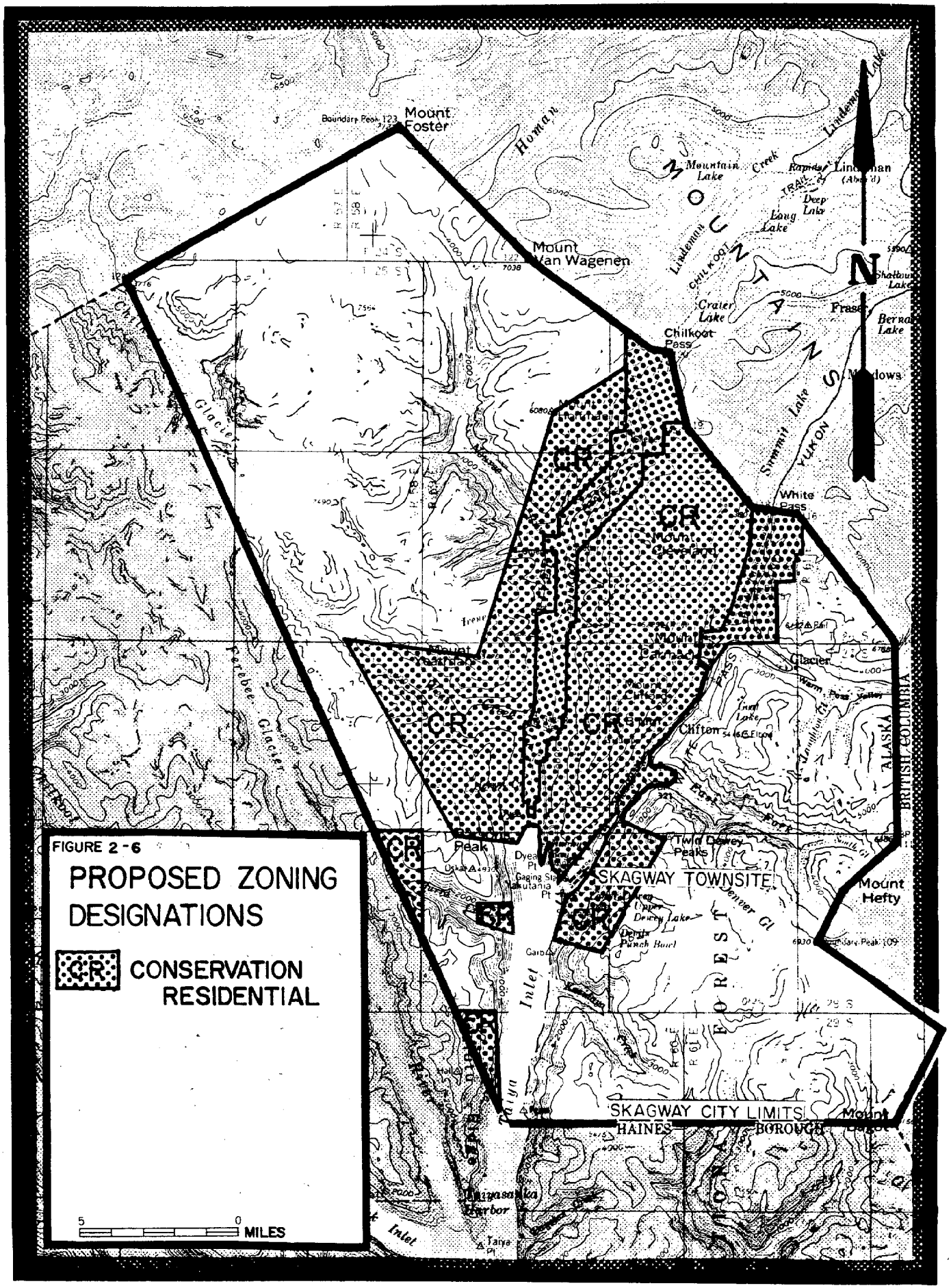


FIGURE 2-6

PROPOSED ZONING DESIGNATIONS

CR CONSERVATION RESIDENTIAL

When the proposed community park along Pullen Creek is finished and the fishery enhancement project provides fishing opportunities in and around the park, there will be considerable traffic between the historic district and the park (see AMSA). Provisions should be made to ensure that this corridor is not interrupted by inappropriate development. A boardwalk/trail system could be developed that connects the historic district, the proposed community park, museum, perhaps the ferry terminal, small boat harbor, a central parking lot and other points of interest (see AMSA, Figure 2-9). This pedestrian access system could be delineated on attractive, informational signs located at key points (e.g., a central parking lot, the National Park Service headquarters and at the proposed community park).

Light Industrial

It is proposed that the strip of land adjacent to the east side of the airport, as delineated in Figure 2-4, be designated as light industrial. This area is currently zoned for residential use; however, there is little residential use occurring there. Light industrial use that is compatible with adjacent residential and airport use will serve to buffer the residential area from the noise and potential hazards associated with the airport. It will also provide space for light industrial uses that are not water dependent. Existing uses will be allowed to continue in this zone.

Expanded Residential Zones

Sections of the area zoned for industrial use south of the Hanousek Park are proposed to be included in the adjoining residential zones. This area is vacant and would be best used for residential purposes or the expansion of the Hanousek Park campground. Industrial use in the subject area could cause serious conflicts with adjoining residential and park areas. Buffers consisting of existing vegetation or other appropriate materials shall be retained between the expanded residential area and the railroad, as well as Hanousek Park.

The area along the Skagway River between 16th and 23rd Avenues that is zoned CR should be changed to the adjoining RS zone designation. The relatively high level of residential use that is occurring on the subject land is more appropriately provided for under the RS designation than the CR zone. No development should occur in this area between Alaska Street and the Skagway River, due in part to potential flooding and proximity to the airport runway.

General Policies

Development. Growth in the Skagway area can be accommodated with the least long-term public cost and environmental impact within the existing townsite. There is vacant land in all zoning districts (see Chapter I) that is suitable for development and has easy access to water and sewer lines. There are serious constraints to development, however.

The water and sewer systems are in poor repair and will need to be substantially upgraded in order to accommodate major development. Other major constraints include the limited availability of land for sale and the high price of the land that is made available. Perhaps when land is made available for purchase in outlying areas (e.g., AB Mountain and Dyea Point) prices for land in town will be more reasonable.

Buffers. The residential and industrial uses occurring on opposite sides of 23rd Avenue shall be buffered from each other to the extent practical. This could be accomplished by planting trees along the right-of-way, serving also to enhance the scenic quality of this section of road, which is the entry way to Skagway from the Klondike Highway. It will also buffer the residential area from the increasingly heavily used street. Buffers shall also be established, to the extent feasible, between other industrial areas and adjoining nonindustrial uses consistent with the policies and standards contained in this program.

Parking Areas. There is some debate among community residents as to whether or not there is a need for additional parking space in downtown Skagway. It is probable that relatively large numbers of people with vehicles will be coming to Skagway with the advent of the Klondike Highway and the Klondike Gold Rush National Historic Park. If the proposed fishery enhancement project is carried out (see AMSA), Skagway will certainly be subjected to an influx of fishing enthusiasts - for example, from Whitehorse. This fishing frenzy will occur for about one and a half to two months during the peak of tourist season (late June and July), when parking facilities and accommodations are already strained. People have noted, however, that the price and limited supply of gas may restrict the number of people coming to Skagway with vehicles to a level that is manageable under present conditions. In any case, Skagway will at least maintain its options to provide additional parking areas in the event that they are deemed necessary. To this end, areas to meet potential parking needs will be investigated.

The proposed parking areas identified in Figure 2-9 are to be considered for development as parking lots. The larger proposed lot, off Spring Street, is comprised of six lots under two ownerships and is situated near the historic district and the proposed waterfront park/ salmon fishing area. This proposed parking lot could accommodate one hundred vehicles and provide easy access to most of the attractions in Skagway. Traffic could be directed to this lot via Spring Street and thus reduce some of the traffic on Broadway. Informational signs could be erected at the lot to delineate a boardwalk/trail system that connects the historic district and various points of interest with the waterfront park.

A small trailhead parking area on the east side of Alaska Street (e.g., eight parking spaces) could be developed near the footbridge across the Skagway River for people going to Yakutania Point and Smugglers Cove. A low impact, lost cost, walk-in camping area could be designated on Yakutania Point. Should this occur, a parking area would definitely be needed.

A parking area is also proposed along Congress Way, north of the small boat harbor. This would provide parking for people fishing in

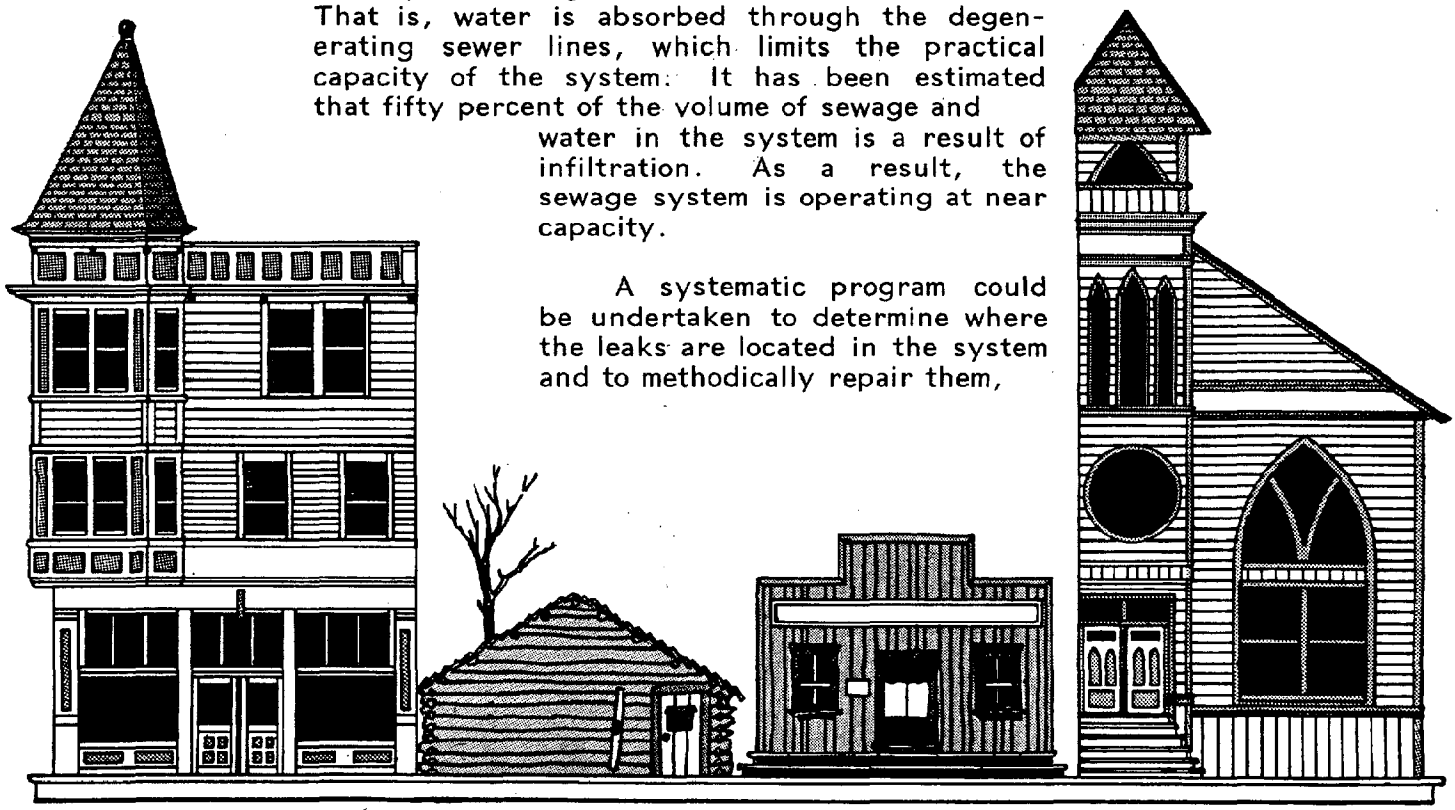
and around the proposed waterfront park as well as those using the small boat harbor. A parking area could also be developed by the National Park Service for the proposed headquarters at the railroad depot.

Parking areas shall be surfaced, whenever possible, with permeable materials and provided with suitable drainage controls to minimize ponding and excessive concentrated runoff and resulting erosion, pollution and sedimentation. They also shall be buffered from shorelines and less intense adjacent uses by vegetation, undeveloped space or structures developed for the primary use, to the extent practicable. They also will be sited, screened and surfaced to minimize dust problems.

Sewer and Water Systems. Skagway's capacity for growth is burdened by its faulty sewer and water system. These inefficient systems result in higher costs to the consumer and could also pose potential health problems. Many people in the community are aware of the shortcomings of the sewer and water systems. Ninety-three percent of the people responding to the Skagway community planning questionnaire, which was distributed to the public at the beginning of this study, indicated that they favored upgrading and expanding the sewer and water collection and distribution system to reduce long-term operation and maintenance costs and to increase the capacity of the system. Given this strong mandate, the city or other appropriate body shall investigate a program to upgrade these systems.

The primary problem with the sewer system is that the lines are in poor repair and, consequently, are plagued with infiltration problems. That is, water is absorbed through the degenerating sewer lines, which limits the practical capacity of the system. It has been estimated that fifty percent of the volume of sewage and water in the system is a result of infiltration. As a result, the sewage system is operating at near capacity.

A systematic program could be undertaken to determine where the leaks are located in the system and to methodically repair them,



beginning with the worst areas. For example, wood stave lines or other lines in poor condition may need to be replaced. Others may be sealed by slip lining or internal grouting. The cost of slip lining, that is, inserting a flexible pipe within the existing line, is about sixty percent of the cost of replacing the line. During the testing of the system, connections could be checked for leaks.

The current water system is a patchwork of lines that were laid out without any overall design concept. In many instances, the location and condition of water lines is unknown. Due to excessive leaks in the system, much more water is pumped than necessary, resulting in high costs. This excessive pumping has drawn down the water table close to its minimum level. Leaks in the system also result in dangerously low fire flow. An improved water system would provide a safeguard against fire hazards, probably reduce fire insurance rates, increase the number of units that can use the system, reduce long-term energy consumption and reduce costs to the public.

In order to upgrade the water system, water lines and valves need to be located and each segment of water line must be hydrostatically tested. By checking the water pressure between two hydrants, the condition of each segment of line can be determined. When all of the lines have been tested, priorities can be set for replacement and repair of lines.

In order to further improve the water system, fire flow wells could be drilled at key locations. The condition of the water pumps could be evaluated and provisions for replacement could be made as necessary. Steps could be taken to insulate the water system from the sewer system to ensure that water meets class A standards. This is important for technical reasons as well as to maintain public health standards - water must be of class A quality in order to sell it to cruise ships and ferries. The city will pursue all appropriate sources of funding (these have been identified in the implementation program) to initiate the upgrading of its sewer and water systems.

Further development in the area and temporary use during the period that transshipment activities are occurring will stress the sewer and water systems. This may result in inconvenience, higher user costs, water shortages and potential hazardous situations (e.g., inadequate fire flow or contamination of the water system). In this light, all necessary steps will be taken as soon as practicable to improve the efficiency and capacity of the sewer and water systems.

Transportation

Transportation is the backbone of Skagway's economy. Several policies and recommendations are given below to improve various modes of transportation.

Road System. The weakest link in the Skagway area land transportation system is Dyea Road. The character and hazards of this twisting, narrow road have been discussed in the land use policy sec-

tion for Dyea Road as well as in the background report. The bottom line is that the road is substandard and will become increasingly precarious as it is subjected to greater volumes of drivers going to the park who are unfamiliar with the road. The Klondike Gold Rush National Historic Park is the main generator of traffic on the road. The National Park Service should request that the Department of Transportation and Public Facilities upgrade the road, with the financial participation of the National Park Service, if necessary.

Seventy-two percent of the people responding to the Skagway community planning questionnaire supported the opening of the Klondike Highway in winter, twenty-three percent were opposed and five percent did not respond to the question. Year-round road access to the Canadian interior would probably improve business in Skagway to a small degree. It would also make trucking operations on the road all but inevitable. The competition that would result between trucking transportation and rail transportation could become a serious economic impediment for the faltering White Pass and Yukon Railroad. If transshipment activities occur in Skagway, the Klondike Highway will have to be opened for two winters.

A thirty-two mile section of the Klondike Highway is scheduled for substantial upgrading on the Canadian side of the highway in the summer of 1980. Upgrading of the highway on the U.S. side may be necessary to straighten some curves and reduce grades in order for transshipment activities to occur. Winter maintenance of the highway will be expensive. Procurement of equipment and maintenance for the U.S. segment of the highway is expected to cost about six hundred thousand dollars during the first year of operation. About five-sixths of the highway is in Canada and, naturally, maintenance costs will be proportionately higher there.

Marine Transportation. The main concerns with the marine transportation system are ferry scheduling, the lack of dock facilities for cruise ships, the need to develop dock facilities for barges hauling material into Skagway for the natural gas pipeline, and reconstruction of the White Pass dock.

Due to the congestion of Skagway's harbor and the scarcity of available dock space or slips, an additional slip may have to be constructed to accommodate the barges hauling pipeline-related materials into Skagway. Although Foothills Pipeline Limited's plans are still evolving, it appears that a slip will be built in the WPYR ship basin. It is possible that when the transshipment activities are completed, this slip can be used to accommodate cruise ships when other facilities are in use. This possibility should be kept in mind when designing and constructing the new dock facility. If deemed desirable, the city will make arrangements with Foothills and WPYR to use the dock facility when Foothills is finished with it. In the event that transshipment activities for the natural gas pipeline do not occur in Skagway or cruise ships cannot use dock facilities constructed for transshipment purposes, the city will seek available funding sources (see implementation section), including bonds, to finance the construction of dolphins. These dolphins, or possibly a new dock, would allow cruise ships to dock at Skagway that would otherwise have to be turned away.

Response to the Skagway community planning questionnaire revealed that eighty-five percent of the people responding wanted improved ferry scheduling. More people were in favor of improved ferry scheduling than any other transportation issue identified in the questionnaire. At this time (spring 1980) there are no plans to increase the number of ferry stops in Skagway. Every ferry that makes the circuit in the southeast region of Alaska stops at Skagway and there are no plans for more vessels in the near future. Regardless, it is vitally important to the city that mainland ferry service remain at least at present levels.

Air Transportation. A small majority of the people responding to the questionnaire indicated that they were satisfied with current air transportation scheduling (forty-seven percent thought it was alright, forty-five percent thought it needed to be improved). A large majority of respondents, however, indicated that they wanted improvements to the airport, including navigational aids, runway expansion and upgrading and construction of a passenger terminal (sixty-six percent in favor, twenty-eight opposed, six percent no response). Available funding sources for such improvements have been identified in the implementation program. These funding sources will be evaluated and appropriate steps taken, within the city's ability, to initiate the upgrading of the airport. The state, which owns the airport, will be contacted for technical advice.

UPPER SKAGWAY RIVER AND KLONDIKE HIGHWAY

The narrow Skagway valley north of the Skagway townsite has many of the same physical characteristics as the lower, developed valley. It is underlain by deep alluvial deposits, has a high water table and, if not diked, is prone to flooding. The Skagway River bed has been aggrading at the rate of approximately .06 feet per year. In effect, the river is raised by the same amount and the probability is increased that flooding will occur.

Development adjacent to a river is typically precarious. There is always a chance that floodwater will surmount the dikes and inundate adjoining land. Unfortunately, there is little land in the Skagway area that is suitable for development. Therefore, as the demand increases for land, these areas north of Skagway in the Skagway valley may be developed, despite severe limitations.

Adequate sewage disposal is critical in the upper Skagway valley due to the high water table and the associated high potential for sewage effluent to contaminate the public water supply (public wells are just north of town). Contamination of drinking water by sewage effluents can cause severe gastrointestinal illnesses and hepatitis. Effluents from dumps pose even more ominous threats of severe illness and/or death.

There are scattered areas that appear to be developable if adequate means of sewage disposal can be provided. Generally, the water table must be six feet below the water surface in order to comply with the Alaska Department of Environmental Conservation (ADEC) requirements for on-site sewage disposal (e.g., septic tanks). Although the depth

to water table is not documented for the upper valley, it appears that the water table is less than five feet below the surface in most areas. There is one area, the old sanitarium site, that may be large enough to warrant a local package sewage treatment plant if there is sufficient demand to develop it relatively intensely. Since larger areas such as the sanitarium site have the greatest potential for development, they are addressed individually as follows (refer to Figure 2-7).

a.) This 15.9 acre, privately owned parcel, known as "Seven Pastures," lies adjacent to the Skagway River immediately downstream from the west end of the Skagway River bridge. Approximately one-third of the parcel is in pasture; the remainder is covered with evergreen and deciduous trees. The site is almost entirely within the 100-year floodplain. It is protected, to some extent, by the road; however, if it is not diked, it is not suitable for residential use. From an aesthetic point of view, it would best serve the community if used for agricultural purposes (e.g., grazing). If there were sufficient demand, however, the site could be used for industrial development that complies with the city's floodplain development requirements. The road adjacent to this parcel is threatened by the river and should be diked before it is undercut and begins to slump and break away.

b.) This parcel is known as the church property and is about one and a half miles from downtown Skagway. The parcel contains about eighteen acres. Approximately one-third of the site is used for pasture; the remainder is covered by small trees and brush. The site seems to be relatively suitable for residential, recreation, pasture and other uses, as it is level and well-drained. It may, however, be susceptible to flooding. This possibility should be investigated in detail, perhaps by the U.S. Army Corps of Engineers during their "annual" dike inspections. It is probable that the dikes will need to be upgraded before the area would be suitable for residential use. As is the case with other areas in the valley, a high water table may preclude on-site sewage disposal. It is possible, however, that potential development on the parcel could be connected to a sewage system and used for residential or, conceivably, industrial use. Adequate sewage treatment is absolutely necessary in this area due to the close proximity to Skagway's public water supply.

c.) This tract of private land is composed of two parcels, one of two acres and the other 8.6 acres. The parcels are adjacent to the river; the two acre parcel is prone to flooding and should remain in open space (unless it is diked). The larger parcel is diked and appears to be reasonably safe from flooding. The city is considering using the larger parcel as a dump site. Further analysis is required before the suitability of this site for a landfill can be adequately addressed. Residential use of the site would probably have to be tied into a package sewage treatment plant. Prior to any develop-

ment, the site will have to be evaluated in detail as to potential flood hazards and provisions made for improving the dikes, if necessary.

d.) This privately-owned parcel, known as the old sanitarium, contains some of the most developable land in the upper Skagway valley. Approximately twenty-nine acres of the sixty acre, privately owned parcel is level and protected by a dike. The parcel is covered with alder, willow, maple and some cottonwoods to eighteen inches in diameter. The soil is primarily composed of well drained sand and gravel. There is a high water table, however, which precludes the use of individual septic tanks. A local package sewage system may be economical for this site if there is sufficient demand to develop the site for relatively intense residential use.

e.) The Alaska Division of Parks has initiated a program to develop this state owned parcel as a campground. Funds for development of the campground are limited. Consequently, site development will be limited to extension of the existing access road to the area, a log bridge across Reid Falls Creek and construction of a well and a latrine. As soon as funds become available, the access road will have to be realigned to reduce curves and eliminate some potentially hazardous and inconvenient railroad crossings. The design and construction of the latrine will have to be carefully assessed to prevent contamination of the ground water (the site is primarily composed of highly permeable sand and gravel and has a high water table). The parcel is within the 100-year floodplain. All use of the site should conform to the city's adopted floodplain development regulations. The development of this site as a campground will greatly help accommodate the influx of visitors to Skagway each summer.

Klondike Highway

All of the previously mentioned sites in this section, with the exception of Site E, border on the Klondike Highway. In addition, there are scattered, relatively small sites along the highway that may be suitable for residential use. The State of Alaska is considering disposing of land along the highway in the near future. Any development along the highway shall, to the extent feasible, conform to the Haines-Skagway Land Use Plan as well as to this coastal management program and existing Skagway regulations. A main concern with development along the highway is that the scenic quality be maintained in this spectacular highway corridor. The state has indicated that a corridor study would be undertaken prior to disposal of land in the area to determine setback and screening requirements along the highway. The City of Skagway shall have active participation, review and approval of any scenic corridor study undertaken by the state.

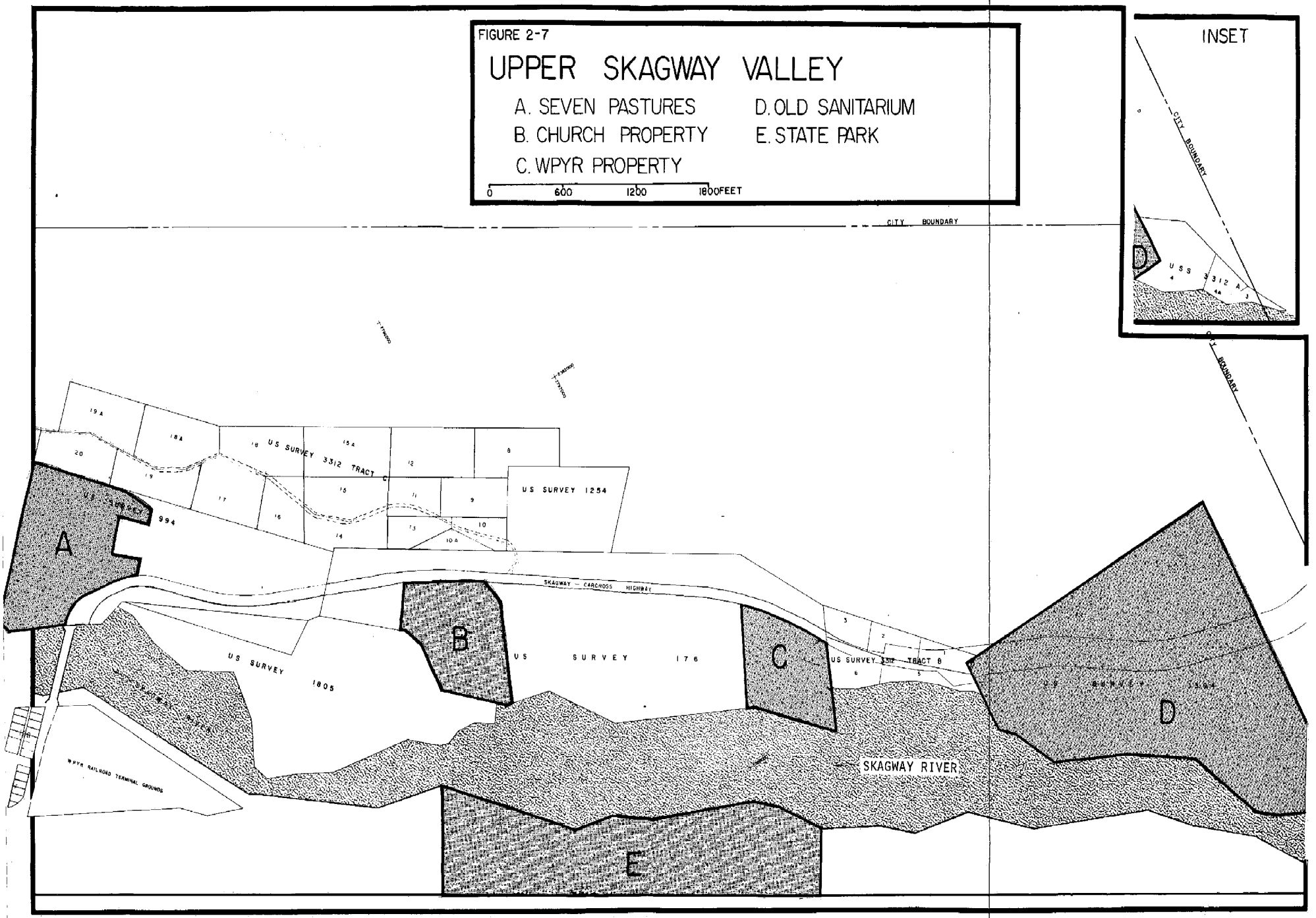
The Haines-Skagway Land Use Plan notes that "development along transportation corridors often causes traffic hazards and unattractive

FIGURE 2-7

UPPER SKAGWAY VALLEY

A. SEVEN PASTURES
B. CHURCH PROPERTY
C. WPYR PROPERTY
D. OLD SANITARIUM
E. STATE PARK

0 600 1200 1800 FEET



strip development as well as expensive services and utilities to poorly located commercial and residential areas." Development of the Klondike Highway corridor must be sensitive to these inherent problems.

If commercial development is allowed in the transportation corridor, it shall be concentrated in suitable locations. Businesses shall blend with the natural surroundings, to the extent possible, and provide safe ingress and egress. Acceptable commercial uses might include a community grocery and perhaps restaurants.

General Policies and Recommendations for the Upper Skagway Valley

The best approach to reducing potential disaster losses is to minimize the amount and kinds of development placed at risk in hazard areas. Therefore, detailed investigations of the potential for flooding shall be required, as deemed appropriate by the city council, prior to allowing any development in the upper Skagway valley.

All development shall comply with the city's floodplain development requirements.

Residential development shall, to the extent practicable, be prohibited in areas susceptible to flooding. Those areas that are protected by dikes could be developed for residential or other use if density, siting, setback and structural requirements reflect the physical opportunities and constraints of the site (e.g., flooding and high water table).

Areas with a seasonal highwater table from zero to five feet shall only be developed if sewer facilities are provided. Exceptions may be made, consistent with ADEC regulations, in instances where this is not feasible or prudent. Sewers shall be required to have leakproof joints.

DYEA ROAD AND SURROUNDING AREA

Dyea Road

Dyea Road follows a treacherous, winding course along the base of AB Mountain and the steep slopes around Long (Nahku) Bay to Dyea. The soils in the area are shallow with a few deeper pockets. Bedrock is on or near the surface throughout the area.

There has been some interest in developing homesites along Dyea Road. Some sites may be identified that are capable of supporting homesites through a site-specific geotechnical evaluation. Based upon available information, however, the development potential is low along Dyea Road.

There is considerable community interest in upgrading Dyea Road, especially since it will be getting increasingly heavy traffic as a result of the establishment of the national park in the Dyea valley. The Alaska

Department of Transportation and Public Facilities (DOTPF) has indicated that it is unlikely that Dyea Road will be upgraded in the next five years, but this may change if funds become available or priorities change. Upgrading of Dyea Road will entail considerable realignment to eliminate bad curves. Until the location of the new alignment can be determined, land should not be conveyed to the private sector in areas where road realignments are probable, as this might foreclose realignment options, require structures to be moved or greatly increase the cost of the project. Any land conveyances shall reserve a sufficient right-of-way for major roadway improvements and widening.

As soon as possible, DOTPF should conduct a location study for the realignment of Dyea Road so the state and city will know where to and where not to dispose of land. This will also serve to initiate a badly needed program to upgrade Dyea Road.

AB Mountain

The lower slopes of AB Mountain have been nominated by Skagway as part of its municipal selection pool (Figure 2-8). This area was nominated as a potential residential area because of its proximity to the Skagway townsite and its relatively gentle topography. The site has several constraints for development, however. The terrain is rugged and the sites suitable for development are small and scattered. The area is underlain by shallow bedrock with pockets of soil and organic matter that has developed over the years. Most of the suitable building sites are located on a series of sporadic benches on the mountain slope.

Development in the area will be expensive due to the identified physical constraints and the attendant difficulty in providing adequate access, utilities, sewage disposal, water and services (e.g., fire protection).

Disposal of sewage is one of the most substantial obstacles to development on AB Mountain. Few, if any, sites are physically suitable for individual septic tanks due to the poor soil conditions and shallow bedrock. It is possible that on-site sand filter systems can be used to some extent. Sand filter systems have been approved by the ADEC for use under similar conditions at Dyea Point. In relatively remote areas, composting toilets might be approved for use by ADEC, particularly for recreational cabins. Both of these alternatives require low density development. Another alternative is to develop a local package sewer system for the area. This would probably be prohibitively expensive, however, due to the cost of laying pipe in bedrock to scattered homesites (scattered due to topographic and other locational constraints). If a good package sewer system is developed, groundwater could be used extensively (assuming that there are adequate supplies) and density could be expanded to the limit of buildable sites. It is doubtful that AB Mountain could be developed to a density sufficient to warrant the expense involved in developing a package sewer system. This possibility will be evaluated, however, during the development of any subdivision plan for the area.

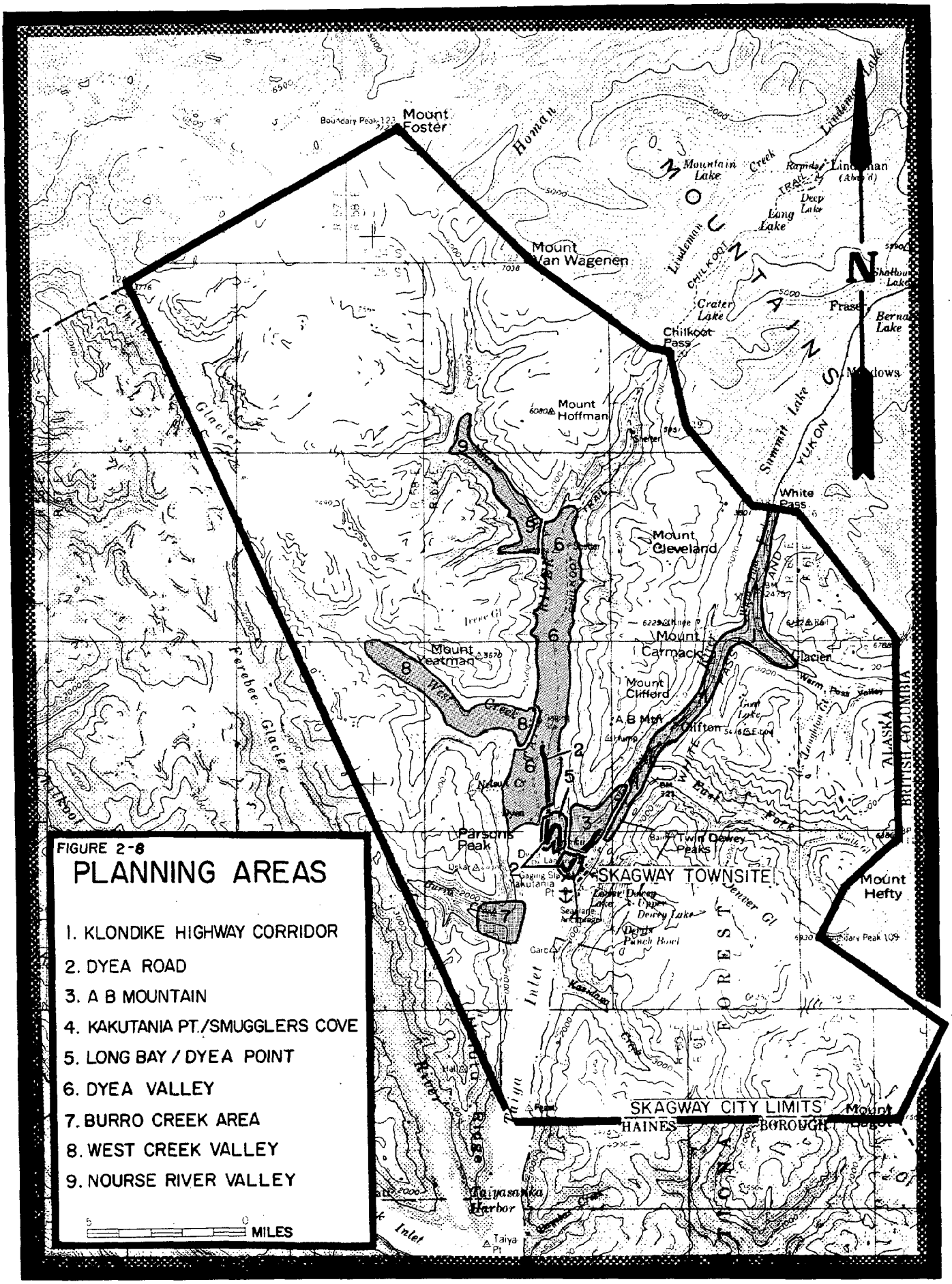


FIGURE 2-8

PLANNING AREAS

1. KLONDIKE HIGHWAY CORRIDOR
2. DYEA ROAD
3. A B MOUNTAIN
4. KAKUTANIA PT./SMUGGLERS COVE
5. LONG BAY / DYEA POINT
6. DYEA VALLEY
7. BURRO CREEK AREA
8. WEST CREEK VALLEY
9. NOURSE RIVER VALLEY

5 0 MILES

If on-site wells are used as a source of water, sewage systems must be carefully regulated and monitored to prevent pollution of the groundwater. In addition, lots must be relatively large. If water can be obtained by another means, controls on sewage systems would not need to meet as high standards. This would also allow the area to be divided into smaller lots.

There are several alternative means of obtaining water in the area (wells, piping water, rainwater collection, hauling water). Some are expensive; others are relatively inexpensive, but inconvenient. A primary concern is the ability of a system to provide adequate fire flow. Small seasonal creeks cross the lower mountain, but they are not a dependable source of water. Productive wells have been drilled through bedrock along the lower slopes on the east side of AB Mountain. All wells have produced water at depths ranging from near surface (probably seepage) to over two hundred feet. As one gets further from the river and higher in elevation, obtaining groundwater will be increasingly difficult. There is no available information on the quantity or extent of groundwater underlying the subject parcel. It is possible, however, that if there are an extensive number of wells on the parcel a groundwater drawdown problem could occur. The most serious problem with wells on the parcel is the conflict with on-site sewage disposal. There is a high probability that on-site sewage systems would contaminate the groundwater, particularly if the sewage system is uphill from a well or fissure in the bedrock. Effluents from the sewage systems flow along the bedrock until they surface or seep into a well or fissure in the bedrock. In either of the latter events, the groundwater is contaminated.

Piping water from wells in Skagway or the Skagway River has been suggested. Water from the Skagway River would probably require treatment prior to human consumption, and silt and glacial flour would pose problems for the system. This possibility should be thoroughly investigated, however. Obtaining water from wells in town is possible. The existing water lines in town, which lose a great deal of water through leakage, should be upgraded prior to expanding the system so that excessive water table drawdown does not occur. Piping water from town would be expensive due to the distance from town, the uphill gradient and the cost of laying pipe in bedrock.

Rainwater collection is used extensively as a water source throughout southeast Alaska. This type of system, which requires large storage tanks, could be used as a primary source of water for recreational cabins and as a supplementary source for year-round residences.

Water hauling is practiced extensively in areas of the state where good quality water is not available, such as the Glennallen area. In most cases, water is drawn from a common well and deposited in storage tanks. Reasonably good access to storage tanks is necessary in order for this method to be feasible. Such a system could be used to supplement a rainwater collection system.

Access into the area will be difficult, particularly as one gets further from Dyea Road, due to the topography, rugged terrain and

shallow bedrock. In areas of relatively concentrated development, access must be developed sufficient to allow passage of emergency vehicles. Isolated developable sites may be reached by foot trails from common parking areas. Construction materials can be taken to building sites on snow machines when there is enough snow.

Development of AB Mountain will have to be sensitive to the physical character of the land. Developable sites are, typically, small and scattered and much of the area is unsuitable for development. Care must be taken to identify specific sites suitable for development and access routes to the sites. This could be accomplished through an on-site suitability evaluation. The evaluation should be conducted by someone with a geotechnical background and familiarity with ADEC requirements. The information gained from this evaluation would provide the basis for a subdivision plan that is sensitive to the opportunities and constraints of the area and should include an identification of specific sites to be developed, access routes, greenbelt areas (undevelopable areas) linked by a trail system, development constraints/requirements, and provision for water, sewer and other utilities and services. The project could identify alternative development schemes and means of providing utilities and services, along with approximate development and long-term maintenance costs for each alternative (economic and environmental). This will enable the community to evaluate the alternatives and choose the one that best meets the community's needs and budget.

The Haines-Skagway Land Use Plan indicates that the state may identify, in cooperation with Skagway, land for disposal on AB Mountain in areas that are not selected by the city. It is highly desirable that the state involve the City of Skagway in any planning for the area.

Yakutania Point/Smugglers Cove

This eighty-seven acre shoreline parcel is located adjacent to the Skagway townsite on the west side of the Skagway River. The parcel is reached by a short walk from downtown via a footbridge accross the Skagway River as well as by Dyea Road. The shoreline on the east side of the point was used as a quarry. Exposed bedrock bluffs, boulders and rubble are predominant over most of this section of shoreline. There are scattered deposits of sand on the adjoining tidelands. An access road extends the length of the quarry. The remainder of the parcels shoreline is in a natural state.

Smugglers Cove lies on the west side of the point. This cove contains the only undeveloped beach in the vicinity of Skagway. This gently sloping beach is composed of cobble size stones along the low tide line, with gravel extending upland about seventy-five feet beyond the ordinary high tide line. Much of this gravel is covered by driftwood. Grass grows in a meadow above the high tide line.

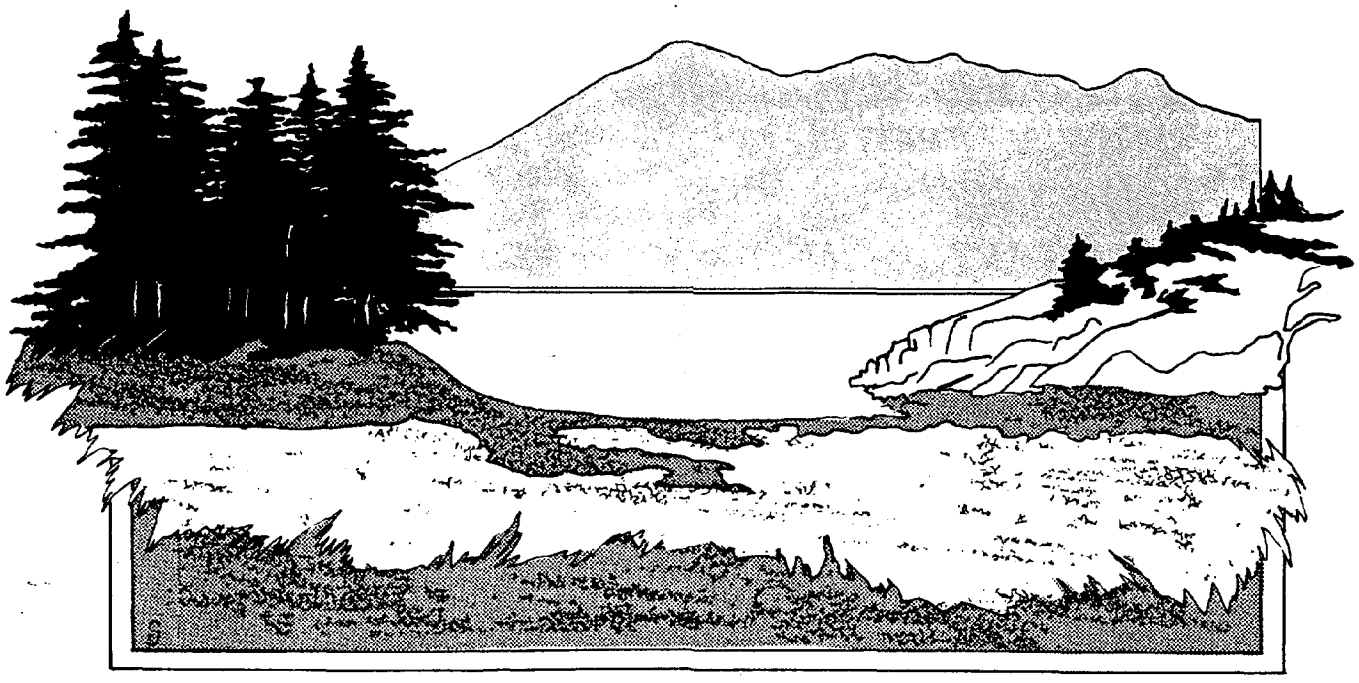
The upland area of the parcel is generally gently sloping, irregular terrain with a few flat and steep areas. The relatively flat land is concentrated near Dyea Road. Shallow bedrock underlies most, if not all, of the parcel. A clear creek crossing the parcel and entering saltwater

at Smugglers Cove provides drinking water for numerous picnickers and hikers.

The Yakutania Point/Smugglers Cove parcel was given to the City of Skagway about fifty years ago by the federal government with the understanding that it would be used as a park. Although the parcel has never been developed as a park, it has been used for generations as a recreation area.

The parcel is currently used for several recreational activities. There is a target range near Dyea Road, saltwater fishing, cross-country skiing, picnicking and hiking. The site also provides access to saltwater and Skyline Trail ascending AB Mountain. Smugglers Cove is a popular location for picnicking and relaxing. This secluded cove is reached by an easy fifteen minute walk from downtown via the footbridge across the Skagway River and can also be reached by a short, rough road off of Dyea Road.

In 1978, Westours proposed developing a dock for their dayboat and a public park at Smugglers Cove. This proposal became a controversial issue. The fate of the cove was settled by a public vote overwhelmingly mandating that the cove remain in a natural state (see Chapter I). As a result, the city council rejected Westours' proposal and proposed a resolution to barricade the access road to the cove to prevent vehicles from damaging the grass along the cove as they had in the past.

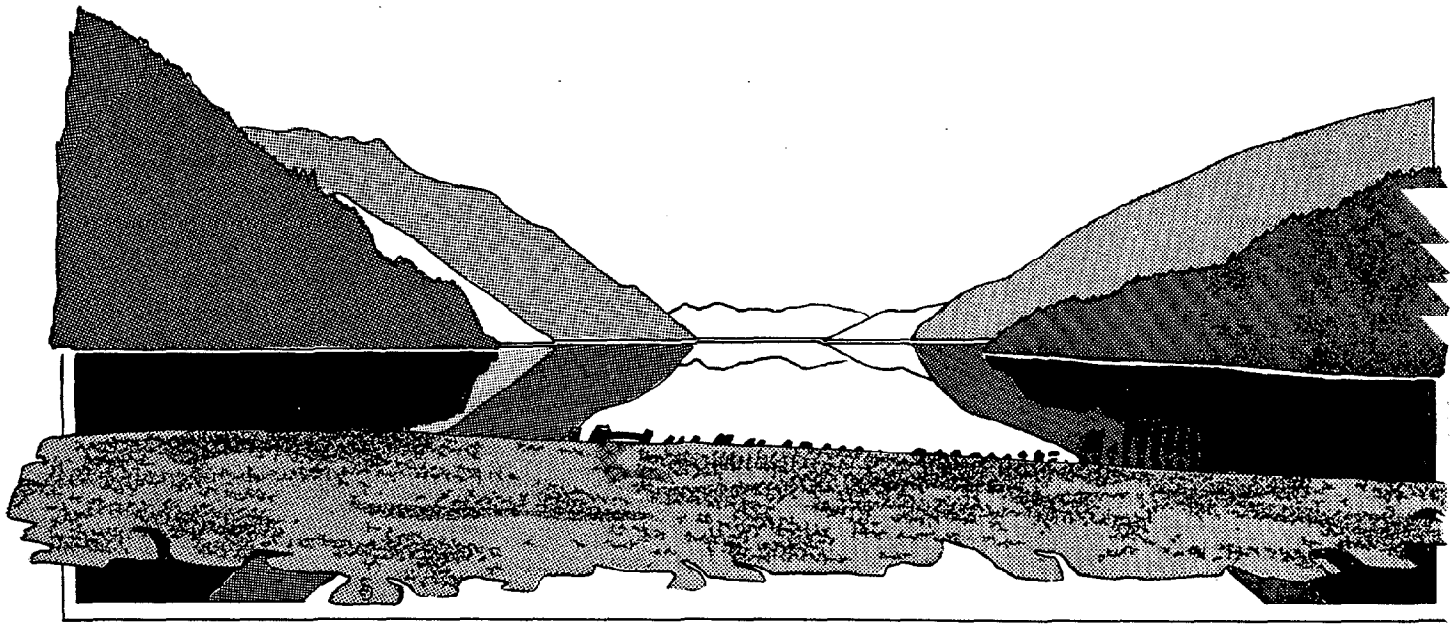


The Yakutania Point/Smugglers Cove parcel has potential to be sensitively developed for more intense recreational use. For instance, the recently completed campground study (Engineering Man Power Services, 1978) noted that it appears possible to construct a loop access road, starting at the present access road and winding through the rifle range area, rejoining Dyea Road at the northwestern portion of the parcel. Some RV campsites could be developed off this loop or a central parking area probably could be developed with trails leading to camping and/or picnic areas. The campground study notes that development cost of the site would be relatively high per campsite unit. Another possibility is to designate a walk-in camping area at an appropriate site. A small parking lot could be established near the footbridge across the Skagway River to accommodate camper's vehicles.

Smugglers Cove shall be used for low impact recreational activities with minimal facilities. Access to the cove shall be limited to foot trails, with the possible exception of maintenance vehicles.

Long Bay (Nahka)/Dyea Point

The shoreline north of Smugglers Cove along Long (Nahku) Bay consists of gently sloping terrain near the Yakutania Point parcel. From there to the head of Long Bay, the shoreline is composed of bedrock outcrops at the base of the steep mountain sides. Development would be virtually impossible in this area. There is developable land near the



head of the bay and on Dyea Point. This area is similar to AB Mountain in terms of development constraints (bedrock on or near the surface and shallow soils). Obtaining adequate supplies of water may be a problem. Excessive use of groundwater in some areas, such as Dyea Point, may result in saltwater intrusion. The area has high scenic quality and the bay itself provides habitat for tanner crab and other marine life. Prevailing winds and currents make Long Bay a focal point for floating debris and trees. Many people obtain their winter's supply of wood from this source. The area is popular for fishing and picnicking in the summer.

In 1978, Westours proposed that a dock be built for their dayboat in the vicinity of the historic barque "Canada," which lies in ruins on the tidelands at the head of the bay. Local residents were generally opposed to the project and to commercial development in the area. Consequently, the city council rejected the proposal. The residents opposed the proposal because of possible disturbance of crabbing and other fisheries in the bay and due to possible adverse effect on the barque "Canada," recreation, safety on the road and aesthetics. Others noted that the bay was not a safe place for mooring and anchoring moderate size vessels.

Since popular opinion is opposed to commercial development in the Long Bay area due to conflict with many physical and cultural values, such development shall not be allowed unless no feasible alternative exists. In the event that a commercial project is considered for the area, the proposal shall be aired at a public meeting.

The Long Bay/Dyea Point area does have potential for residential development. The Alaska Department of Natural Resources (ADNR) made forty acres (eleven lots) available in 1980 for residential use near Dyea Road in central Dyea Point. Wells will serve as a source of water. Sand filter sewage systems and outfall pipes have been approved by ADEC for sewage treatment and disposal.

Any residential development in the area must be sensitive to the scenic and recreational values in the area as well as physical constraints. Public access to the shoreline must be provided via public land easements. In addition, public access corridors shall be established, where practicable, prior to disposal, along all public-owned shorelines, particularly the Dyea Point residential area. The shoreline access corridor shall be at least twenty-five feet wide, if topographic conditions permit, measured inland from the ordinary high water mark (OHWM) or mean high water (MHW).

The state land on the tip of Dyea Point, south of the residential area, has been identified as a recreation area. This site shall be designated as such by the state and city and it shall be used for that purpose in conformance with city and state policies and standards. Adequate provision shall be made for access to the recreation area.

DYEA VALLEY

The glacially silted Taiya River runs through the Dyea valley, forming a relatively large delta and extensive tideflats. Early visitors heading for the gold fields brought gear ashore on the tideflats and at a dock, a few miles south by wagon trail, on the west side of the inlet. The historic Dyea townsite is upland from the tideflats on the west side of the river. This wooded area is being eroded by the river. The area between the tideflats and West Creek is heavily wooded with substantial open areas south of West Creek and along the Taiya River. The Dyea valley north of West Creek is densely wooded, with some open area and gravel bars along the Taiya River. The Taiya River and Nelson Creek contain dolly varden char and support salmon runs. West Creek and Taiya River have a run of eulachon.

The Dyea valley is a prime recreational area. Residential use also occurs there. People use the area for horseback riding, hiking, camping and a variety of other recreational pursuits. The Klondike Gold Rush National Historic Park provides recreational and historic interpretive opportunities of national significance. The park focuses on the famous Chilkoot Trail, which provided access to the Canadian interior during the Klondike gold rush.

The vast majority of land in the Dyea valley is contained in the Klondike Gold Rush National Historic Park. There are substantial state holdings at the mouth of the Taiya River and surrounding the valley floor. There is private residential area south of Nelson Creek along the base of the mountainside (see Figure 2-8).

In keeping with the management agreement between the state and the federal government, an interdisciplinary team (IDT) composed of representatives of the Alaska Department of Natural Resources, National Park Service, Division of Fish and Game and a local area representative is scheduled to develop land use guidelines for state land adjacent to the national park. A primary consideration is to ensure that use of state land in the area is harmonious with the park and with recreation and scenic values. Current residential use in the Dyea valley co-exists with the park with few, if any, substantial problems. Care must be taken, however, that tourism in the area does not unduly disrupt the lifestyles of area residents or restrict normal access. Some problems are inevitable - for instance, increasing use of Dyea Road by park visitors will exaggerate the road hazards and make travel on the road even more precarious than it is now. Such problems should be addressed by the team and, to the extent possible, rectified.

The following coastal management policies must be considered during the IDT guideline development process.

The Dyea valley wetlands and tideflats must be managed so as to assure adequate water flow, nutrients and oxygen levels and avoid adverse affects on natural drainage patterns, the destruction of important habitat and the discharge of toxic substances (6 AAC 80.130).

Commercial activities, with the possible exception of a community grocery, private campgrounds, a marina at the mouth of the river or a Chilkoot Trail outfitting shop, shall be prohibited. Signs shall be made of wood.

All development shall, to the extent feasible, be set back from access routes and buffered with natural vegetation to maintain the character and scenic quality of the valley.

As a state responsibility, Dyea Road must be upgraded and realigned as necessary to provide safe access to the Dyea valley. Scenic values, environmental impact and safety shall be of primary concern in this upgrading effort.

New residential development shall be prohibited in the Taiya River floodway. New development in the floodplain shall conform to the city's adopted floodplain development requirements.

The City of Skagway retains the right to select state land for community expansion purposes.

Burrow Creek Area

Burro Creek enters Taiya Inlet south of the Dyea valley. A private parcel is located at the mouth of the creek and the state has land in the upper drainage. Burro Creek provides habitat for dolly varden char.

A nonprofit salmon hatchery is located near the mouth of the creek. This activity is consistent with the coastal management program and shall be encouraged and supported by the community. Development and operation of this hatchery shall comply with the fishery enhancement policies and regulations in this plan. Upland areas must be managed to maintain water quality standards necessary to the operation of the hatchery.

West Creek Valley

West Creek flows southeast through the West Creek valley to its confluence with the Taiya River. The valley contains relatively flat areas. Steep mountains abut the valley floor in the northwest end of the valley and pose an avalanche hazard. The West Creek drainage contains commercial quality timber and provides habitat for anadromous fish, waterfowl and other wildlife.

The area is used for hiking, hunting, collecting firewood, cutting houselogs and

berry picking. Two sites for possible homesite disposals have been identified by the state. About two-thirds of the people attending public hearings on the Haines-Skagway Land Use Plan were opposed to residential development in some areas within the valley. This is due to possible conflicts with a hydroelectric power plant that could conceivably be located in the valley, poor access and disruption of recreational activities.

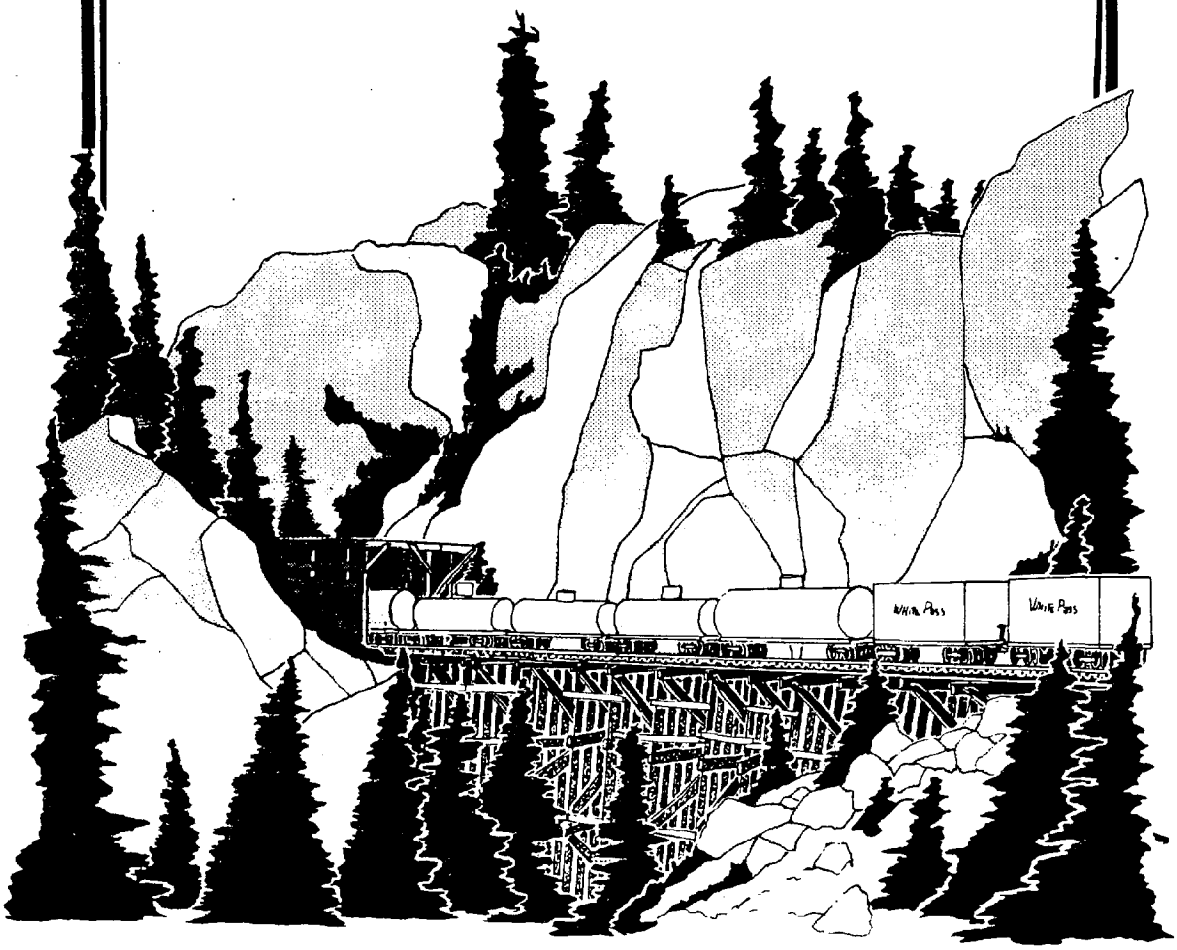
West Creek shall remain in its present state pending an evaluation by the state of the feasibility and the environmental and social impact of developing a hydroelectric power plant and/or residential areas in the valley. The City of Skagway, however, retains the option to nominate and select lands in West Creek for its allotment under the Municipal Entitlement Act.

Nourse River Valley

The Nourse River enters the Taiya River several miles north of West Creek. The river valley contains rugged terrain and steep mountains prone to slides. There is also potential for flooding in lowlying areas. The area is infrequently used for hiking and hunting by area residents and visitors.

The Nourse River valley shall be managed for recreational purposes.

AREAS MERITING SPECIAL ATTENTION



The Alaska Coastal Management Act (ACMA) and its standards require coastal management districts to designate Areas Which Merit Special Attention (AMSA) in their programs. An AMSA is defined as "an area within the coastal area which is sensitive to change or alteration and which, because of plans or commitments or because a claim on the resources within the area delineated would preclude subsequent use of the resources to a conflicting or incompatible use, warrants special management attention or which, because of its value to the general public, should be identified for current or future planning, protection or acquisition" (ACMA). By adding a special area identification and management element to the coastal management program, the financial and management resources of the program may be focused on such areas. The City of Skagway designates Pullen Creek Shoreline Park as part of its district coastal management program.

1) Name of Area: Pullen Creek Shoreline Park (Figure 2-9).

2) Basis for Designation:

The Pullen Creek Shoreline Park represents an area of substantial recreational value and interpretive values to both the people of Skagway and its visitors. This site offers the only opportunity for a waterfront park in Skagway. It also provides the only feasible location to establish a salmon fishery for Skagway. The site's proximity to major focal points (historic district, proposed National Park Service headquarters and fishing areas) and heavy traffic corridors (roads to the cruise ship dock and ferry terminal, small boat harbor and the railroad) will serve to unify and enhance these areas, define corridors and provide a scenic and inviting entryway to Skagway. An AMSA designation will serve to focus management attention on this site and provide a vehicle for supplementary funding to help realize the site's potential.

Development - This vacant area is proposed to be developed as a shoreline park in conjunction with a project to establish a salmon put and take sport fishery in Pullen Creek and, incidentally, upper Taiya Inlet. Salmon fishing opportunities will attract fishing enthusiasts from Whitehorse and other areas as well as entice visitors to spend more time and money in Skagway. Salmon fishing will occur during the peak of the tourist season, placing stress on the limited supply of accommodations. Additional accommodations may therefore be necessary.

Recreation/Scenic/Heritage - The development of the proposed park and salmon fishery will provide visitors and residents with a variety of recreational opportunities. These include fishing, convenient opportunities for observation of salmon runs and perhaps spawning activities, picnicking, sightseeing, relaxing, swimming and, in the winter, ice skating. In addition, the development of the proposed park will greatly improve the scenic quality and overall character of the Skagway waterfront. The proposed park will be integrated with the

Skagway historic district and the National Park Service headquarters (at the railroad depot) to form an attractive, congruous corridor into Skagway.

Coastal Resources - The establishment of a salmon put and take fishery and a minor salmon run will obviously increase the salmon stocks (pinks at first; silvers may be planted later) in the region. According to plans being developed, salmon fry will be stocked in Pullen Creek in large numbers. Some of the returning adults will spawn in the creek and may establish a minor self-sustaining run. Spawning could be increased if suitable areas are provided. This could be accomplished by placing gravel of proper size near the outlet of Pullen Creek, in the main pool and in suitable areas in the upper reaches of the creek. This run will be supplemented heavily by annual stocking of the creek. Additional dolly varden char probably will be attracted to the Skagway area by the availability of salmon spawn and fry. Spawned out salmon carcasses can add to the nutrient base of the local area and thus increase the productivity of the immediate area. The volume of salmon remains could, however, easily overwhelm the Pullen Creek system. Consequently, excess salmon carcasses will have to be removed (by the city) from the creek and, perhaps, the White Pass and Yukon Railroad ship basin.

3) Location:

The site is located in the northeast corner of the Skagway waterfront north of the small boat harbor (see Figure 2-9).

4) Area Description/Significance:

The subject parcel is located near the historic district in the northeast corner of the Skagway waterfront. The upland area of the waterfront (including the proposed AMSA) has been filled with dredge spoils, sand and gravel and is predominantly unvegetated. The area included in the AMSA, north of Congress Way, consists of flat grass-covered area with conifers along the creek at the north end of the proposed AMSA. The conifers extend along the creek most of the way up the valley. There are also some salmon berries and small flowering plants along the creek. The area south of the proposed park consists of filled waterfront and tidelands. The small boat harbor basin adjoins these tidelands. The area to the west is the vacant part of the industrial waterfront. The portion of the proposed park site south of Congress Way is traversed by Pullen Creek. The creek widens to form a relatively large, slow pool where it is crossed by Congress Way. It narrows considerably a fourth of the way through the subject parcel and curves gently until it reaches the western edge of the parcel. At that point, it enters a culvert extending for several hundred feet underground before emerging at the White Pass and Yukon Railroad ship basin northwest of the ferry terminal. The creek is said to contain a few trout or

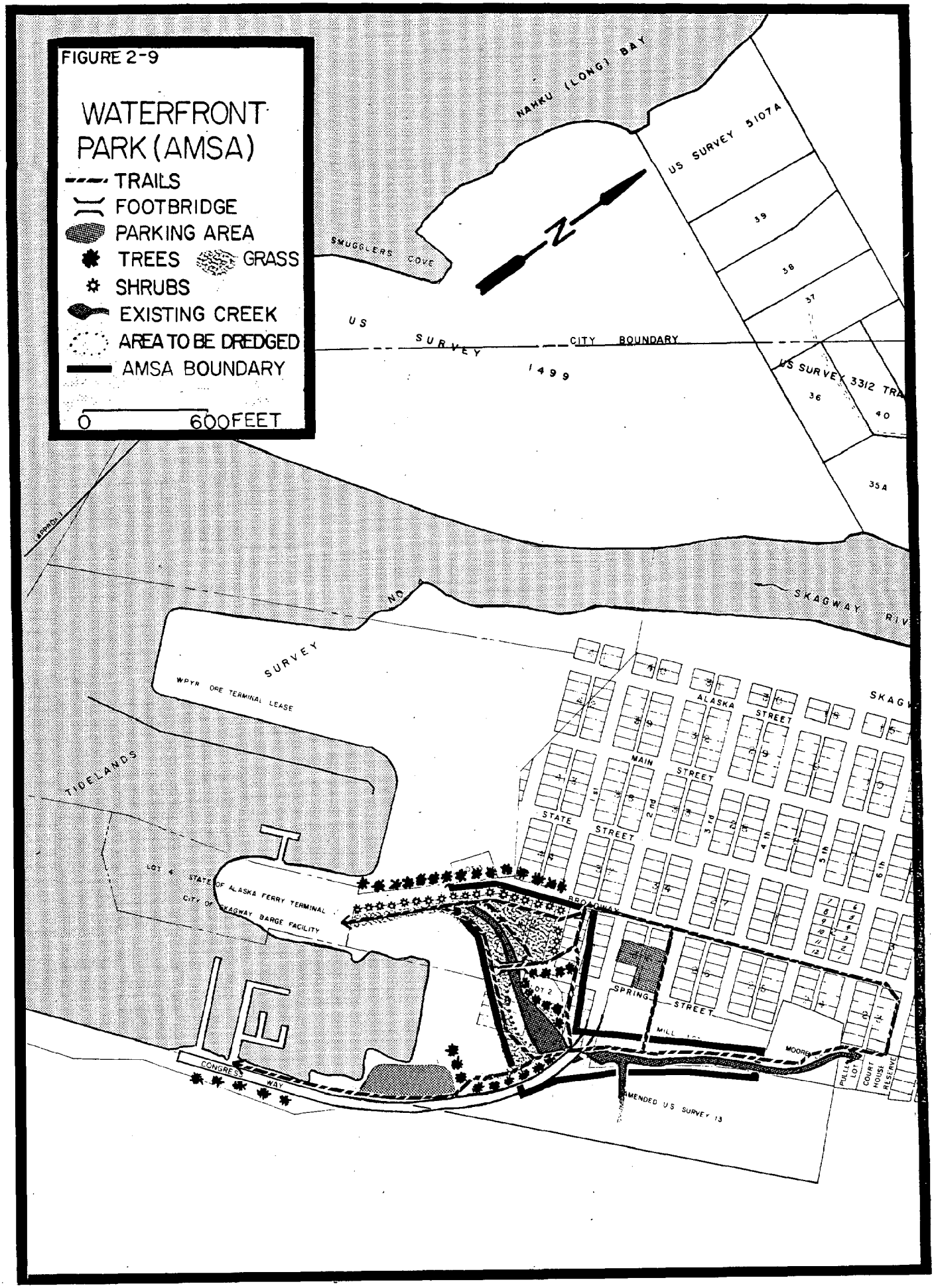


FIGURE 2-9
WATERFRONT PARK (AMSA)
TRAILS
FOOTBRIDGE
PARKING AREA
TREES
GRASS
SHRUBS
EXISTING CREEK
AREA TO BE DREDGED
AMSA BOUNDARY
0
600 FEET
NAHKU (LONG) BAY
SMUGGLERS COVE
US SURVEY 5107A
39
38
37
US SURVEY 1499
CITY BOUNDARY
US SURVEY 3312 TRA
36
40
35A
SKAGWAY RIV
SURVEY
WPYR ORE TERMINAL LEASE
TIDELANDS
LOT 4
STATE OF ALASKA FERRY TERMINAL
CITY OF SKAGWAY BARGE FACILITY
ALASKA STREET
MAIN STREET
STATE STREET
BROADWAY
SPRING STREET
LOT 2
CONGRESS WAY
AMENDED US SURVEY 13
PULLEY LOT
COURT HOUSE RESERVE

char, and a small number of silver salmon spawn in the upper reaches. If the AMSA proposal is implemented, the existing pool on the creek would be enlarged and the surrounding area would be landscaped.

The significance of the area lies in its potential to be developed as a recreational area and a key segment of an attractive corridor into Skagway, greatly improving the scenic quality and character of the community. The utilization of the park site for a fishery enhancement project has major local significance in terms of enhancement of coastal resources, a food source and recreational and economic opportunities.

5) Existing Ownership/Management/Use:

Ownership - The area south of Congress Way is owned by the city. The area north of Congress Way is owned by White Pass and Yukon Railroad (WPYR). A small parcel, identified as Lot 2, is privately owned.

Management/Use - The area is presently vacant. Part of it, however, is occasionally used for storage. It is within the city limits and is currently zoned for industrial use.

6) Adjoining Ownership/Managment/Use: The tidelands south of the site and the land immediately adjacent to the small boat harbor are owned by the city. The parcel is bordered on the east by Congress Way and the railroad tracks, which abut the steep base of Twin Dewey Peaks. This adjoining land is owned by the WPYR. The railroad right-of-way also borders the north side of the site. The area surrounding the portion of the AMSA north of Congress Way is vacant and owned by WPYR. The road to the ferry terminal and the adjoining industrial waterfront adjoins the parcel to the west. WPYR has a long-term lease (over forty years remain) for this section of industrial waterfront. There is also a small vacant private parcel adjoining the ferry access road west of the parcel.

Management/Use - The land to the south of the parcel is predominantly vacant. It is zoned for industrial use and is occasionally used for storage. The western portion may be used as a parking area for the small boat harbor (see Figure 2-9). The land to the east is consumed by the road and railroad right-of-way. There is no land in the area to the east that is suitable for development. The land north of the railroad right-of-way is predominantly vacant. There are some private structures to the north of the west end of the parcel. The proposed National Park Service headquarters is also located in this area. The industrial area to the west is typically vacant; however, it is proposed to be used as a storage/staging area for transshipment activities for the proposed gas pipeline (with the exception of the private parcel). Transshipment activities will occur on an intermittent basis over a two year period. This use will probably be completed

before the first salmon return to Pullen Creek (summer of 1983 at the earliest) and, consequently, before the park is heavily used.

7) Existing or Potential Conflicts:

The most obvious potential conflicts are those between recreational and industrial use. Both uses could prove to be a nuisance to the other. There are also potential hazards involved; for example, when people wander into the industrial area looking for a place to fish. The potential for hazards and vandalism will be minimized as hazardous substances and valuable items will be contained in a four-acre fenced security area (to be completed in the summer of 1980). A buffer of trees along the road to the ferry terminal would separate the industrial and recreation areas.

When the salmon generated by the salmon stocking project return to Skagway as adults, relatively large numbers of people can be expected to try their luck along the waterfront and on docks, where such activity is permissible. Salmon will be congregating in the WPYR ship basin at the outlet of the culvert. (Salmon will only be able to go through the culvert at high tide unless it is extended and lowered.) This will provide good fishing, as pink salmon are more inclined to strike a fishing lure in saltwater than fresh water. Also, fish caught in saltwater will usually be in good condition. Pink salmon physically degenerate very rapidly when they reach fresh water. Some arrangements should be made to accommodate the fishing that will occur around the ship basin - unless it is prohibited. Salmon fishing will span about a six week period in mid-summer. Fishing along the waterfront would be light during the remainder of the year.

In spite of the conceivable problems associated with locating a recreational area adjacent to the industrial waterfront, WYPR (lessee of the industrial area) representatives have indicated that they do not foresee any significant problems and they are supportive of the project.

There are no houses in the near vicinity of the proposed park; therefore, no conflicts with residential use are anticipated. A parking lot for the small boat harbor and proposed park may be located off Congress Way near the proposed park. If so, the parking lot will be separated from the park by a thick buffer of trees and bushes (see Figure 2-9). Foot traffic across the railroad tracks should not be a problem, as the infrequently scheduled trains move slowly through this area on their way to nearby destinations.

It is possible that the development of the AMSA and the private parcel, identified as Lot 2, could conflict with each other. If possible, the city will trade land for Lot 2 or purchase it and include it in the park. In the event that Lot 2

cannot be obtained, it shall be screened from the park to deter trespassing.

Utmost precaution must be taken to obtain salmon eggs and sperm from a suitable stream and to obtain a representative sample of the salmon gene pool in that donor stream.

The salmon planted in Pullen Creek may be caught by commercial fishermen; and thus substantially lower the rate of return to the creek. If the proposed Burro Creek nonprofit hatchery is established, hatchery representatives will be harvesting their salmon in Taiya Inlet. If the fish from Pullen Creek mix with these fish or are mistaken for hatchery fish, there may be few returning to Pullen Creek. These potential problems can be mitigated through sensitive management.

Otters, birds and dogs can cause havoc with a fishery enhancement program. Unless adequate precautions are taken, otters and birds may enter salmon holding pens and rapidly deplete the salmon fry. Dogs will attack salmon in shallow water and carry salmon carcasses around town. To help prevent this, as well as a potential biological overload which would occur if great numbers of salmon were allowed to decompose in Pullen Creek, salmon carcasses should be removed from the stream as soon as possible. (This could be done through a volunteer effort organized by the city.)

Pullen Creek provides a convenient location for tourists to observe salmon from up close. Such activity, however, conflicts with heavy fishing activity. For this reason, the area above Congress Way shall be closed to fishing. This will provide people with an opportunity to observe salmon in shallow water in a natural, scenic setting. A weir should be placed across the stream below Congress Way between July 1 and August 31 to keep most of the salmon in the fishing pool and to keep the number of salmon carcasses that will have to be removed from the upper creek to an acceptable level.

8. Management and Development Plan:

The plan consists of two interrelated projects: establishing a salmon fishery in Pullen Creek and surrounding waters; and developing a waterfront park along Pullen Creek. The park will provide a release site for salmon smolt and a catch site for adult salmon, enhance the salmon observation and fishing experience and improve the scenic quality of the waterfront. This project will be undertaken as a joint venture by the City of Skagway, the Alaska Department of Fish and Game and, perhaps, the National Park Service. The city shall, to the extent feasible, take responsibility for developing the park and the Department of Fish and Game shall establish and manage the salmon fishery. Informal agreements have been made thus far to this end. Over the course of several years, the city may take the responsibility for stocking Pullen Creek

under the supervision of the Department of Fish and Game. Arrangements will have to be made for enforcement of fishing regulations; perhaps a local resident in Skagway can be designated for this purpose. Maintenance people will also be needed.

Site Development - The first task in the project is to widen and deepen the existing pool abutting Congress Way to provide for salmon imprinting (imprinting enables the salmon to return to their parent stream). The pool should be dredged to the depth of about ten feet, widened to one hundred feet and lengthened to two hundred fifty feet. This will provide a suitable pool for returning salmon and expand the shoreline space where people can fish for them. It may be prudent to make the pool even wider so fishermen on opposite sides of the stream will not be as prone to tangle fishing lines. This pool and adjoining shoreline shall be lined with gravel or other suitable material to help maintain clear water, to possibly provide salmon spawning area, and to provide a beach for fishing and swimming (swimming will be allowed only when fishing season is over).

Next, the trail system in the park shall be established. The trail around the pool must be located far enough from the creek bank so that foot traffic does not interfere with fishing or erode the bank. An attractive footbridge could be built and placed across the creek where it narrows at the downstream end of the pool. A footbridge will improve the aesthetics of the park as well as provide access to the southern side of the creek and the small boat harbor.

The trail network in the park could join trails along the shoreline and to the historic/commercial district. Signs delineating the trail system and various points of interest could also be placed at appropriate locations (for instance, a centralized parking area and at the National Park Service headquarters).

When the dredging is completed and the trails are laid out, topsoil could be spread over the fill material and grass, flowers, shrubs and trees could be planted in designated areas. The trees and shrubs will serve as buffers and screens, define the corridors into town, and enhance the scenic quality of the waterfront. Native vegetation (except grasses) are preferable for this purpose. Hardy grass with extensive root networks will be chosen. Grasses that grow to about a foot in height and then fold over will minimize maintenance. The banks around the pool will be gently sloping to minimize slumping, erosion and sedimentation resulting from intense foot traffic. Gravel about a foot thick and ten feet wide could ring the pool. Stones along the banks would improve stability. Larger boulders could serve as places to sit. When the grass is established, benches and picnic tables can be placed in appropriate locations. Parking could be accom-

modated in the screened parking lot between the proposed park and the small boat harbor. A separate, screened area, away from the creek and shoreline, must be provided.

Fishery Enhancement - This project entails collecting salmon eggs from a suitable donor stream (tests are currently underway to determine the suitability of various salmon stocks), and stocking Pullen Creek. One possibility includes rearing fish in a state hatchery and planting them in the creek each spring. The salmon will return as adults after sixteen months at sea. Perhaps, after a few years, salmon fry can be obtained from the proposed private hatchery at nearby Burro Creek. This could substantially reduce the cost of transporting salmon eggs and fry to and from a state hatchery and Skagway. As standard practice, fish transplanted to Pullen Creek will be closely examined to ensure that they are healthy.

The Department of Fish and Game has initiated the preparation of a detailed plan for developing the fishery. This plan will be reviewed for feasibility and technical problems. If the project is feasible and funds are available, the project will proceed. Under ideal circumstances and with adequate funding, the first salmon fry would be introduced to and immigrate from Pullen Creek in the spring of 1981. The salmon would return as adults in the summer of 1983. The Department of Fish and Game anticipates stocking Pullen Creek with about five hundred thousand salmon fry, which could result in a return of one to five thousand adults to the creek. These plentiful numbers of salmon will provide excellent sport fishing opportunities for resident and visiting fishing enthusiasts.

Allowable Uses - Fishery enhancement, landscaping, fishing, interpretive displays, picnicking, sightseeing and related activities. Low intensity recreational facilities should be provided. These include trails, picnic tables and benches. Swimming is permissible before and after the salmon are in the creek if the water quality is adequate.

Improper Uses - Subsistence fishing, motorized vehicles and overnight camping.

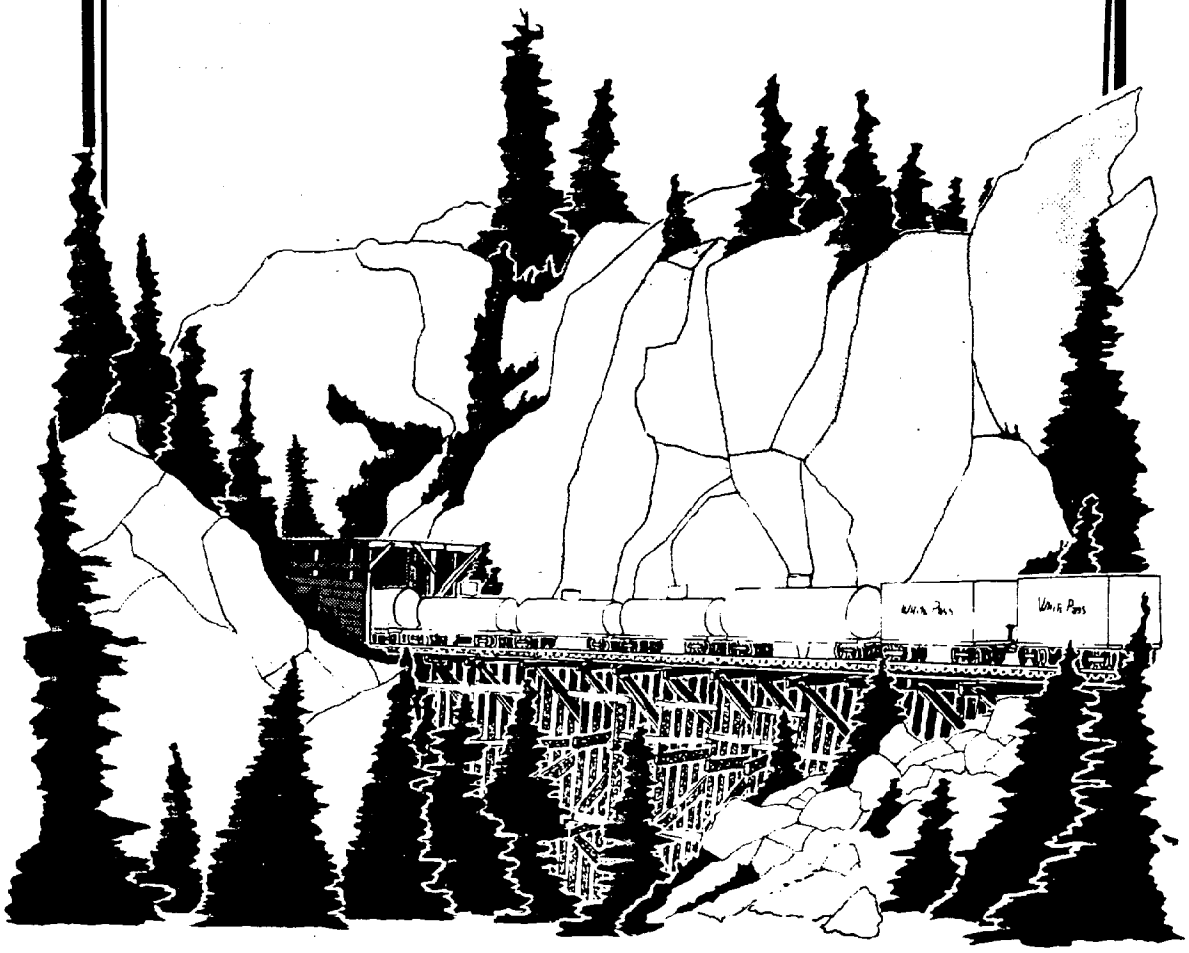
Policies That Will Be Applied to the Area - Policies and regulations contained in this plan pertain, as is appropriate, to the uses occurring in this area (e.g., recreation and fishery enhancement). The use of the area is also subject to the provisions of the Public Use Zone (PU). Alaska sportfishing regulations by the Alaska Board of Fisheries will apply to fishing. These include fishing licenses, sportfishing methods and means and bag limits. Unleashed dogs will not be allowed in the park since damage to salmon may occur. Maintenance of the park's grounds (trash removal, removal of dead salmon, salmon entrails, etc.) will be the responsibility of the City of Skagway. No species of fish or its eggs may

be transported from its naturally occurring drainage and located elsewhere within the state without written permission from the Commissioner of the Department of Fish and Game or his representative. Such permission must be granted on the basis of an approved transport form, provided by the Alaska Department of Fish and Game and signed by the appropriate department official.

Authority Which Will Be Used to Implement the Proposed Management Scheme -

1) State sportfishing regulations for the Pullen Creek fishing area:
   a) A sport fishing license is required (AS 16.05.330(a); AS 16.05.400(a)).
   b) Sport fishing is permitted only by methods specified in the Sport Fishing Regulations, Title 5, Part 2, or as authoritized by the Commissioner of Fish and Game (5 AAC 42.010).
   c) Freshwater open season - January through December 31 (5 AAC 48.010).
2) Alaska Coastal Management Act
3) City of Skagway Coastal Management Program and Administrative Code.

MUNICIPAL LAND MANAGEMENT



The following policies apply to specific parcels owned by the city. These policies are intended to serve as a short-term guide for future land management decisions consistent with this plan. As local conditions change, these land use policies may be altered as deemed appropriate by the city council. Each of the city's parcels are shown in Figure 2-10.

1. This area has been proposed as an Area Meriting Special Attention (AMSA). It will be developed as a community park and for a fisheries enhancement project (see the AMSA section for details). The city land adjoining the small boat harbor shall, to the extent feasible, be used for water-dependent marine uses.

2. This area is under long-term lease to White Pass and Yukon Railroad (over forty years remain on the lease).

3. The southern part of this area is to be included in the historic district zone; the remainder is included in a light industrial/commercial zone (see land use policies). This parcel may be needed temporarily for storage when transshipment activities are underway. Eventually, this area shall be made available to the private sector for development consistent with this program.

4. The lot closest to the footbridge across the Skagway River (a) shall be developed as a parking lot for people walking to Yakutania Point and Smugglers Cove - especially if walk-in overnight camping is allowed on Yakutania Point (see land use policies for Yakutania Point/Smugglers Cove). The other lot (b) could be made available for land exchange or disposal to the private sector.

5. The city-owned land in this area shall be retained in public ownership to be used, for example, for public maintenance facilities, storage or other appropriate municipal purposes.

6. These lots shall, if deemed appropriate by the city council, be made available for land exchange or for sale.

7. This area shall continue to be used for municipal purposes.

8. This parcel is occupied by the Skagway firehall.

9. This area shall be retained for possible expansion of community facilities.

10. This parcel is occupied by the library.

11. This parcel is occupied by the clinic.

12. This site is occupied by the school.

13. The community ballfield almost completely occupies this parcel. The three lots facing on 14th Street shall be sold at fair market value as deemed appropriate by the city council.

14. This site is the location of Hanousek Park. The city will consider obtaining part of the adjoining vacant parcel south of the park for inclusion in the park.

15. This parcel contains the future school site identified in Resolution 66-6.

16. This area shall be made into a city park for recreation purposes. It is presently used as a skating rink.

17. This parcel shall be made available for land exchange or for sale.

18. This parcel shall be made available for land exchange or for sale.

19. This parcel shall be made available for land exchange or for sale.

20. This is the Yakutania Point park site and is to be retained in public ownership.

Acquisition Plan

The following areas shall, where practicable, be acquired through land exchange, lease or purchase.

21. This parcel shall be developed as a parking lot.

22. This area shall be considered for incorporation in Hanousek Park.

23. This lot shall be acquired for inclusion in the community ballfield.

24. This lot shall be retained for the city public works garage.

Areas for Disposal or Trade

Parcels 3, 4b, 6, 15, 17, 18 and 19. When the city receives title to the state land it selects, this land shall gradually be made available to the private sector. Prior to disposal, subdivision plans shall be developed for these areas consistent with this program, including appropriate land use policies (see land use policies for AB Mountain).

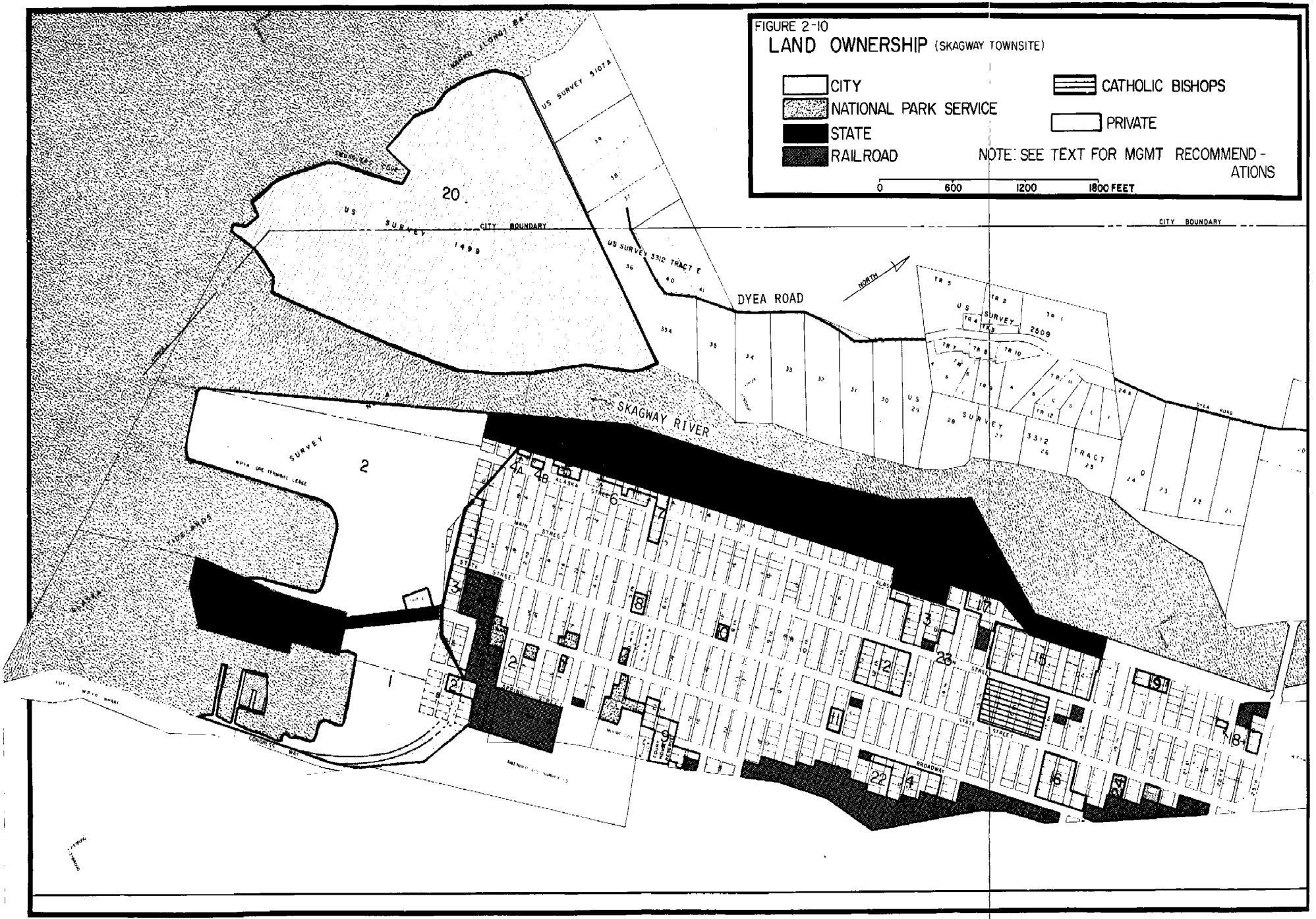
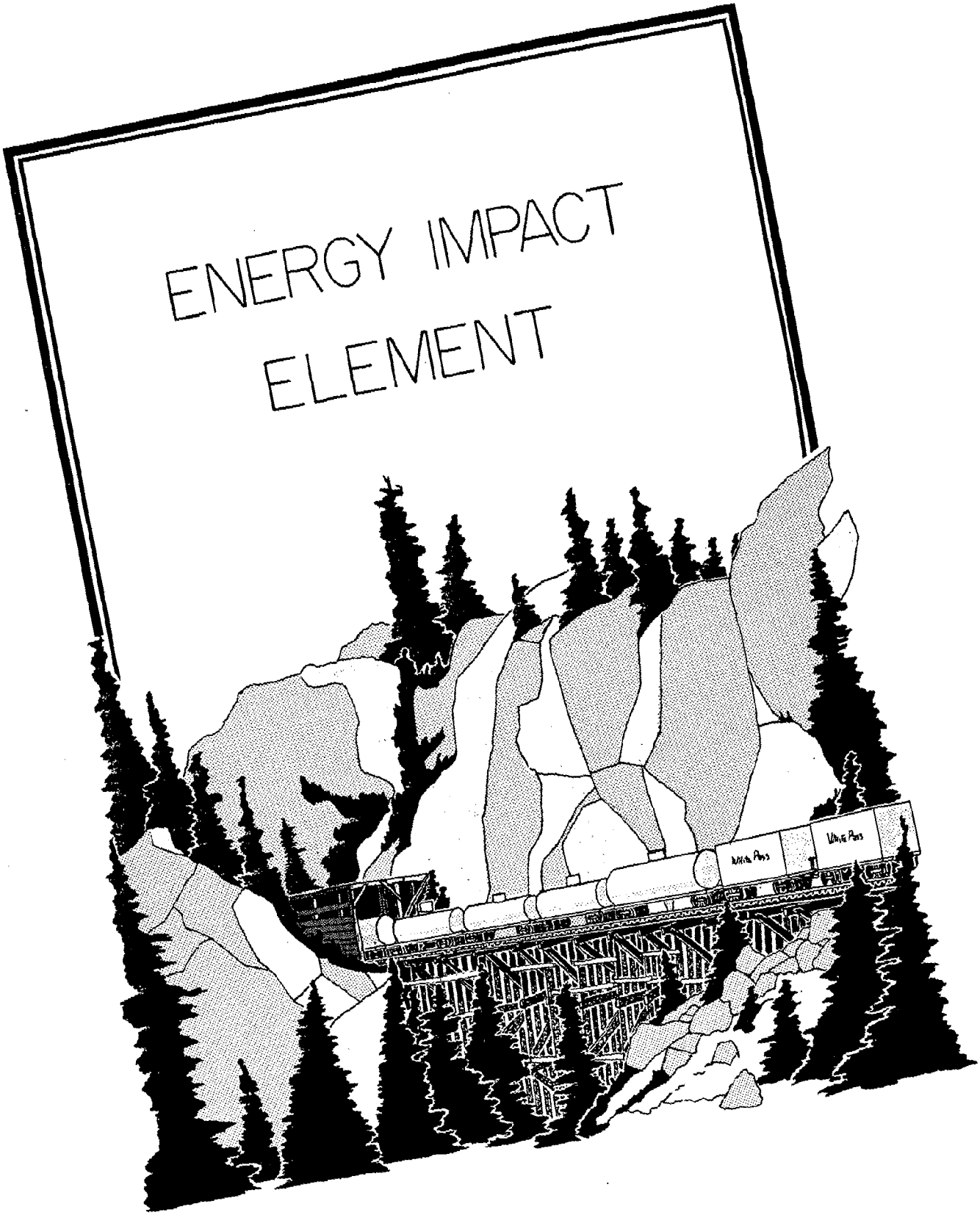


FIGURE 2-10
LAND OWNERSHIP (SKAGWAY TOWNSITE)
CITY
NATIONAL PARK SERVICE
STATE
RAILROAD
CATHOLIC BISHOPS
PRIVATE
NOTE: SEE TEXT FOR MGMT RECOMMEND-ATIONS
0 600 1200 1800 FEET
CITY BOUNDARY
US SURVEY 1499
US SURVEY 5107A
US SURVEY 5312 TRACT E
DYEA ROAD
SKAGWAY RIVER
US SURVEY 2509
US SURVEY 3312
TRACT 29
SURVEY 2
MAIN STREET
STATE STREET
BROADWAY
ALASKA STREET
TIDELANDS
NORTH

ENERGY IMPACT ELEMENT



Skagway has been considered in the plans of various oil and gas transshipment proposals over the past five years. Its location at the northern end of the inland waterway along the northwest Pacific coast and its unique advantage of having both road and rail connections to the interior have made it attractive as a transshipment point for oil and gas from the North Slope and for pipeline construction supplies. With the joint U.S./Canadian decision to build a gas pipeline following the Alcan Highway, Skagway has been proposed as a major transshipment point for pipeline materials and supplies from coastal barges to the interior of Canada via truck. Political and economic complications for building the line have led to uncertainties in actually scheduling construction and in determining Skagway's role in the pipeline construction. As a result, Foothills Pipeline Limited, which is to construct the Canadian portion of the pipeline, is in the process of reevaluating its overall logistics plan. Specific information is therefore not available on what type or to what extent transshipment activities will occur in Skagway.

As a result of these uncertainties, the specific types and magnitudes of energy development-related impacts on Skagway cannot be assessed at present. The general impacts of transshipment and other impacts related to pipeline development can be anticipated and this program's policies are based on these generalized impacts. By following these policies, the City of Skagway will have the necessary base to sufficiently address the actual impacts once more specific information is available.

If Skagway is used as a port for transshipment of pipe and material for the gas pipeline, such activity will occur on an intermittent basis (e.g., two or three months at a time) over a two-year period. Based on information that is available, the impact of transshipment activities in the Skagway area will be minimal if transshipment activities are handled properly. For example, there are potential problems with congestion in the harbor and on inland transportation routes, conflicts with tourism, and stresses on community services and utilities. All of these potential problems can be alleviated or mitigated through coordination, prudent controls and policies, and adequate compensation for expenses incurred by the community (e.g., for expanded services and utilities and for wear and tear on roads).

Skagway will treat the pipeline-related boom and the associated demands for utilities, services and accommodations as purely transitory. Services and utilities will be upgraded and permanent housing provided only to the extent that it will be needed in the post-transshipment period. If upgrading of facilities and permanent housing is necessary during the transshipment period, but not thereafter, the generators of the temporary need should pay the bulk, if not all, of the cost for such facilities and housing.

Some of the most important transshipment-related topics are discussed in the remainder of this section. Guidelines and policies are also provided. Additional information is found in Chapter I of this program.

TIMING

Timing of transshipment activities is critical. Adverse impacts on tourism, public transportation and housing shortages will be greatly reduced if transshipment activities are held to an absolute minimum during the summer (June through August). If transshipment activities must occur during peak tourist season, they must be scheduled at times when they will create the least adverse impacts (perhaps at night between 12:00 p.m. and 7:00 a.m.). If transshipment activities are concentrated in the winter, a larger percentage of the local work force will be available for employment. Foothills Pipeline Limited must be made aware of the city's desire to have them concentrate their activities in the Skagway area during the winter so they can adjust their logistics accordingly. It would be difficult to get Foothills to change their logistics plan when it is completed.

PORT FACILITIES

If transshipment activities occur in Skagway, an additional slip or other dock facility will have to be constructed to accommodate barges hauling pipe and other material to Skagway. Plans have been made by Foothills and White Pass and Yukon Railroad (WPYR) to locate a new dock facility in the WPYR ship basin. As was mentioned in the transportation section, it is possible that when the transshipment activities are completed, this slip can be used to accommodate cruise ships when other facilities are in use. This possibility must be kept in mind when designing and constructing the new dock facility. The city will make arrangements with Foothills and WPYR to use the dock facility when Foothills is finished with it. The upland area north of the ship basin, which is leased by WPYR from the city, will serve as a staging and storage area for transshipment activities. This arrangement appears to be adequate. It will have to be reevaluated, however, when Foothills plans become definite.

TRANSPORTATION

Accommodating heavy truck traffic generated by transshipment of gas pipeline related materials is a major concern. Available information indicates that Foothills Pipeline Limited is anticipating moving forty loaded (northbound) and forty empty (southbound) trucks through Skagway during each twenty-four hour period. As previously mentioned, this activity will take place on an intermittent basis.

Transshipment-related truck traffic in the summer may conflict with tourism, detract from the atmosphere of Skagway, cause congestion and be a nuisance. Adverse impacts may be reflected in economic losses for tourist-related trade. Conversely, transshipment activities could conceivably be a curiosity and an attraction for visitors.

There are three basic alternate routes for hauling materials from the waterfront to the Klondike Highway. One is to use State Street, the existing truck route, which has been recently upgraded to enable it to accommodate heavy trucks. Another is to construct a road from the waterfront along the west side of the Skagway River to the Klondike Highway that will bypass downtown Skagway. A third possibility is to construct a road on the airport dike on the east side of the Skagway River.

A bypass truck route along the west side of the Skagway River does not appear to be feasible. Timing is one of the biggest stumbling blocks. Such a bypass road would take approximately three years to complete if funds were available and if the required environmental impact statement process went smoothly (Department of Transportation and Public Facilities (DOTPF) estimate). On the contrary, the lead time for the pipeline will probably be less than one and a half years. In other words, the bypass road probably couldn't be completed when it would be needed. (The three year estimate for construction of the road reflects design and construction time, as well as time involved in obtaining necessary permits and going through the required environmental impact statement process.) Financing the road construction project would be difficult. Federal matching funds for the three million dollar project (DOTPF estimate) are unlikely, as the federal government is not prone to funding parallel routes, especially when the traffic is relatively light.

One of the primary reasons for constructing a bypass road is to mitigate the potential adverse impacts of transshipment activities on tourism. Construction of a bypass road, however, might be a more significant nuisance for tourists and residents than having trucks rolling down State Street every fifteen minutes. Construction of a bypass road on the west side of the river would entail blasting of bedrock, dust and the sounds of heavy equipment reverberating off bedrock bluffs throughout the valley. A bypass road in this area could cause substantial environmental degradation and leave a permanent, readily visible scar on the face of AB Mountain.

Constructing a road on the airport dike is a more feasible alternative. Such a project would cost much less than the previous alternative and would take considerably less time to complete. Environmental problems would be relatively minimal as well. It appears that the airport dike could be converted to a bypass road with relatively little difficulty. Such a bypass road could conflict, however, with expansion of the airport runway, and there is serious potential for conflicts with the safe operation of the airport. The bypass route would cross the approach to the airport and parallel the runway. Traffic on this route could pose hazards for pilots attempting to land at the airport, particularly when visibility is poor or wind conditions are dangerous.

If the city decides to investigate this route, discussions will be held with DOTPF representatives to determine if the road could be located and designed to meet FAA requirements (e.g., in terms of setbacks from the runway and runway approach). Preliminary investiga-

tions indicated that it would be possible to construct a road along the dike that would meet FAA requirements. It is probable that the dike would need to be extended into the river to provide a margin of safety between the road and the runway, as well as between the proposed road and the river.

Funding for this route will probably not be available through the state or federal government for the same reasons mentioned for the previous alternative. It is possible, however, that Foothills Pipeline Limited would negotiate with the city to finance the road.

In the event that a bypass road along the airport dike is not feasible, it is recommended that the city focus its attention on mitigating the problems and hazards of transshipment-related truck traffic on State Street. Problems involved in using State Street include potential hazards to school children (the school is on State Street), congestion, noise and dust. To help resolve these problems, speed limits can be set to minimize congestion, noise and safety hazards, and dust producing areas can be treated to reduce dust. Truck traffic can be scheduled so it does not occur when children are going to and from school. Truck traffic should also be regulated when background noise is low (late evening) and people may be trying to sleep.

If truck traffic is allowed during the summer on the Klondike Highway, there will be conflicts with tourists and other travelers. This can be mitigated by coordinating truck traffic with tour buses and ferry traffic. Truck traffic shall be scheduled, to the greatest extent possible, when other traffic is usually light - at night for example. See transportation policies for further information.

If actual pipeline construction significantly disrupts travel on the Alcan Highway, Skagway may be able to capitalize on tourist traffic by encouraging motorists to use the Alaska Ferry system.

HOUSING

Transshipment activities may generate more than fifty jobs that will be filled by people from outside of Skagway. Most of these people can be accommodated in hotels during the winter. The percentage of project workers that are expected to bring family members would probably prefer to live in a house, apartment or temporary housing (mobile homes). If transshipment activities occur in the summer, there will not be enough available housing in Skagway to accommodate project workers. This shortage of housing can be filled by permanent conventional homes or by temporary housing. Permanent housing and facilities should be provided by a community only for the level of population expected after the transshipment activities are completed. Mobile homes will be accepted as a logical way to provide additional temporary housing. A mobile home park could be designed as a permanent addition to Skagway. (The trailers could be purchased by community members when the project is over.) A mobile home park could provide a

good living environment for project workers as well as provide a source of year-round or summer housing for the community.

Attention will be directed to the improvement of mobile home and mobile home park standards. Adverse impacts generally associated with mobile homes can be mitigated by locating trailer parks in appropriate areas, provision for amenities and through the use of good landscaping and site design. Playground, laundry facilities, open space, trees, landscaping and other amenities shall be required. Clustering mobile homes will reduce the cost of providing services and utilities. Clustering will also reduce fire hazards associated with scattered development and long response time.

If a permanent mobile home park is not desired, a temporary mobile park could be converted to a recreational vehicle park and an overnight camping area. For example, the Catholic Bishops' parcel, which is within walking distance of most of the attractions in Skagway, could be developed as a trailer court and be subsequently converted to a recreational vehicle park. Such use might conflict, however, with residential use in the area. Any project to provide temporary housing shall be designed to accommodate the long-term use of the parcel.

If temporary housing, such as mobile homes, are necessary for accommodating project employees, such units shall be located consistent with city plans and ordinances. Temporary units shall only be allowed for a maximum of three years. Temporary housing must be provided with adequate sewer and water facilities. If units cannot be located in areas serviced by sewer and water, the developer must pay the cost of extending sewer lines or developing a package sewage treatment plant. If existing sewage lines must be extended or a package treatment plant developed, such facilities must be located in areas suitable for a long-term mobile home park, or other residential or recreational vehicle use, after the temporary trailers are removed. Developers of areas for temporary housing must also pay for other services and utilities such as police and fire protection and solid waste disposal. Areas used for temporary housing must be screened from public roads. In cases where natural vegetation does not provide adequate screening, as deemed appropriate by the city, reasonable measures shall be taken to maintain the scenic qualities of the area (e.g., reevaluate siting, extend setbacks, or require landscaping).

Depending on the number of mobile homes that may be needed to house project workers and the willingness of landowners to lease or sell land, several areas are suitable for mobile homes (if necessary facilities are provided). These include parcels known as the church property, the old sanitarium site and the Catholic Bishops' parcel (see Figures 2-8 and 2-10). It is conceivable that the area known as Seven Pastures could be used for temporary housing; however, it would have to be adequately diked and secured from potential flood hazards. The Catholic Bishops' parcel on State Street between 15th and 17th Avenues would be a convenient location for a maximum of about twenty units. The possibility of locating trailers at the White Pass and Yukon Railroad tank farm north of the Skagway townsite has been mentioned. This is not an acceptable location for temporary housing. First of all, the area

is zoned industrial, which technically precludes residential use. Second, sewage and water facilities that would need to be developed for this site could not be used for permanent residential structures when the temporary dwellings are removed. Further, the temporary residential use of this land is not visually compatible nor is it compatible from a safety point of view. The WPYR parcel, north of the tank farm, could conceivably be developed as a trailer park; the church property or the sanitorium site would, however, be preferable. These sites would also be suitable for a recreational vehicle park and camping area.

EMPLOYMENT

Impacts of the pipeline transshipment will be more positive as the percentage of local people employed on the project increases. Not only will the economic rewards for the community be greater, but the demands for housing, utilities and services will be less. In order to facilitate maximum local employment, Foothills must concentrate its activities during the winter, when more local people are available for employment. Currently, seasonal tourism and construction employment during the summer months is substantial, leaving a surplus of labor available the remainder of the year. Winter transshipment will help balance this seasonal fluctuation for a few years. Foothills must also indicate what jobs will be available in the Skagway area and support training programs through or supplemental to the local school system for prospective local employees. Skagway must anticipate that people will come to town in hopes of employment during the transshipment project. Most of these people will not be employed. Skagway will discourage such migrants; however, provisions must be made for accommodating those that do come to Skagway.

ENTERTAINMENT

All recreational opportunities will be made available to project workers from outside. This will improve employee morale and reduce the probability that restless workers will create problems for the community.

Skagway shall anticipate and may even choose to encourage pipeline construction workers from interior Canada to come and "rest and relax" in Skagway. The city must evaluate its capacity to physically and perhaps culturally accommodate more seasonal tourists, particularly "tourists" whose interests extend beyond sightseeing and correspond more closely with visitors to Skagway in the days of the Klondike gold rush. The WPYR could serve to ferry pipeline workers on leave to Skagway.

POWER AND COMMUNICATION

The local power and telephone company is in the process of expanding its power generating capacity. Nonetheless, a sudden increase in demand could create problems. Foothills Pipeline Limited shall be required to bear the cost of any incremental rate increases due to their activities.

COORDINATION

The city manager will serve as liaison between the community, Foothills Pipeline Limited and other affected companies and agencies. The city manager can coordinate and monitor pipeline-related activities to maximize positive benefits to the community and minimize adverse impacts.

POLICIES

General Policies

To the greatest extent possible, transshipment of pipeline-related materials shall occur between October and May.

The City of Skagway shall encourage Foothills Pipeline Limited to cooperate with the city and other appropriate agencies and organizations to ensure that potentially adverse socioeconomic impacts are recognized and, to the extent reasonably practicable, minimized, and that positive impacts of the project are enhanced.

Foothills Pipeline Limited and the state shall provide to the City of Skagway, in a timely manner, nonproprietary information, reports, plans and summaries of studies in sufficient detail for its planning purposes.

Regulate transshipment-related activities to minimize potential adverse impacts.

Require Foothills Pipeline Limited to pay the entire cost for any services, utilities and facilities provided in their behalf (unless another equitable arrangement is reached).

Skagway shall amend its zoning ordinance to make suitable provisions for the location of and siting of temporary or mobile homes, preferably in mobile home parks. The city shall require adequate sewer and water service and shall require sufficient safeguards for fire and police protection.

Levy taxes on Foothills Pipeline Limited to compensate the city for the maintenance or necessary construction of the roads used for transshipment activities.

Employment Policies

Foothills Pipeline Limited shall take all appropriate and lawful steps to enhance opportunities for resident workers on the transshipment project; provide necessary training of Skagway residents to integrate them in the project workforce; and take all appropriate and lawful steps to enhance opportunities for local contractors and businesses.

Public Safety Policies

Foothills Pipeline Limited shall cooperate with public and private health and social service agencies to help assure the effective delivery of services to employees as well as to facilitate the successful and coordinated execution of strategies for preventing increases in human service problems.

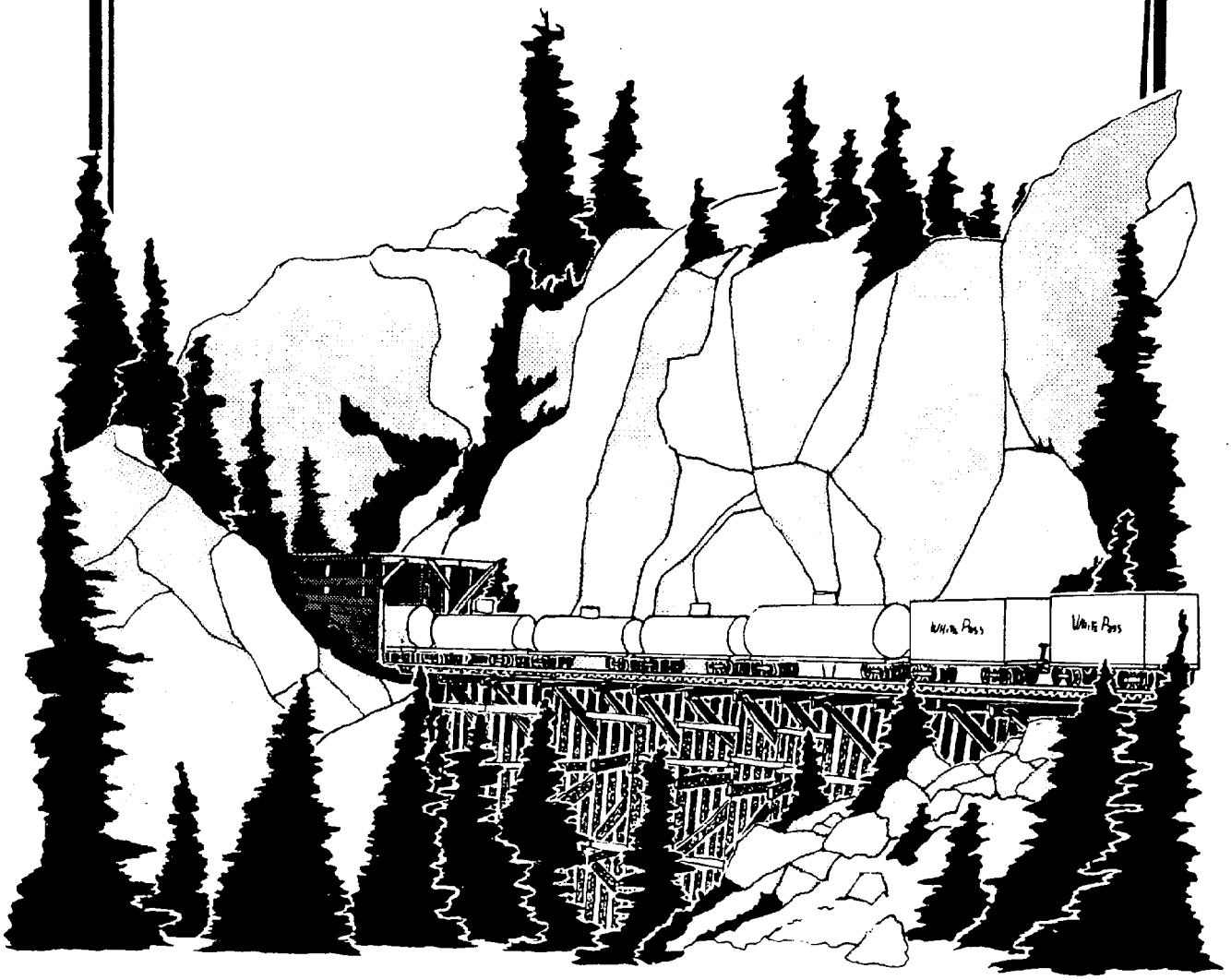
Before encouraging pipeline workers to visit Skagway from the interior, the city shall evaluate the capacity of transient accommodations and the capability of its police department in light of new social pressures.

Transportation Policies

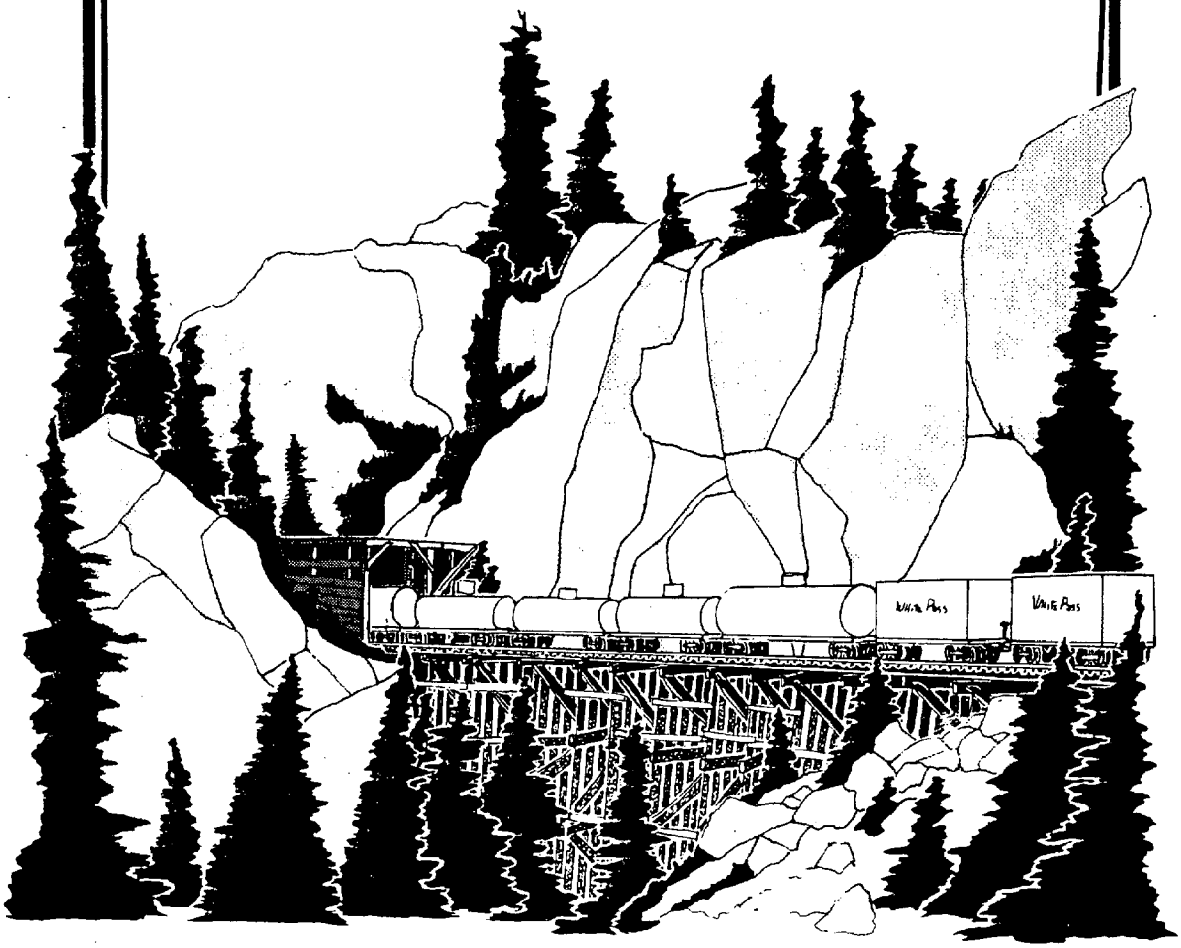
Schedule, to the maximum extent reasonably possible, pipeline-related traffic to minimize conflicts with travel by the public and to ensure the continued use of private access roads; coordinate arrival of Foothills' barges with the state ferry, cruise ships and other vessels to minimize congestion and conflicts with other industrial uses as well as tourism; limit, to the maximum extent reasonably possible, the impact of pipeline-related air traffic on the local traveling public; minimize project impact on public roadways; enforce appropriate speed limits to protect public safety, minimize noise and congestion; and enforce load limit requirements on the truck route.

CHAPTER III

ORGANIZATION & IMPLEMENTATION



COMMUNITY FINANCE PLAN



High Priority: Consists of projects and services which should be programmed for completion or substantial effort over the next five years. Many of the projects in this category could receive top priority ranking in subsequent capital improvements and services programs as the projects are implemented or completed. At least sixty percent of the respondents to the questionnaire favored these proposed actions.

Moderate, Long-Range Priority: These projects and services are recognized to be in the long-range interest of the city and should receive attention on a continuing basis. Emphasis on implementing these programs should be when the opportunity for funding presents itself; however, planning for these projects should receive high priority.

PUBLIC IMPROVEMENTS

Future priorities of economic development programs will be reflected in future overall economic development programs. The future developments and community facilities and services listings of the OEDP report will serve to update the following listing.

Top Priority

1. **Project Description - Port and Dock Improvement.** Construction of dolphins for cruise ship docking may be necessary for accommodating cruise ships that would otherwise have to be turned away. Upgrading and expansion of the southern portion of the White Pass dock is of immediate importance.

   a. City purchase of the White Pass dock facility for the purpose of improvement to accommodate large cruise ships.

   b. Construction of dolphins at the municipal ferry dock to accommodate moderate sized ships and pipeline transshipment activities.

   c. The small boat harbor is under construction and a contract for $1,247,000 has been let for completion in the summer of 1980.

Current Developments. Approximately $4.5 million has been appropriated for Skagway port improvements. Two million dollars would would be needed for facility purchase at the White Pass dock. The state has also allocated $775,000 for mooring dolphins and other improvements to the ferry/barge dock facility. The summer of 1980 marks the completion of the small boat harbor improvements.

The following is a summary of capital improvements, both public and private, and municipal services desired by the City of Skagway. Some of these programs and projects are in various degrees of completion and others have yet to be started. Potential funding sources for each project have been briefly summarized and contacts for each source have been noted. Table 3-1 lists the various projects by priority and designates the degree of completion and funding available.

The major sources of funding are state and federal grants and loans - sometimes requiring local matching funds. Local match funding usually comes from bonds, either general obligation (GO) or revenue bonds. In cases where bond money has run out - for example, for the water and sewer improvements projects in Skagway - the city may choose to levy a tax for that particular project. Operating revenues from public services are also a source of local funds, as are contributions of money or in-kind contributions. Certain state grants may also be utilized for local match money.

A complete financial statement of various funds of the City of Skagway for the year ending June 30, 1979 is provided in Appendix A. General sources of revenue are described at the end of the section as they are listed in the Alaska State Aid Catalogue.

The programs and plans mentioned in this section are subject to review for consistency (Sec. 307(d), CZMA) with the coastal management program. The major sources of information concerning state and federal programs are:

Alaska State Aid Catalogue
Published by: The Alaska Municipal League
Juneau Alaska

Catalogue of Federal Domestic Assistance
Published by: U.S. Office of Management and Budget
Washington, D.C.

These publications can be consulted for additional information concerning eligibility, type and amount of assistance available through the various programs.

PRIORITY RATING OF CAPITAL IMPROVEMENTS

Capital improvements for public use have been given a priority rating as follows:

Top Priority: Consists of projects and services which should receive immediate attention by the council. Most of these projects were endorsed by seventy-five percent of the respondents in the Skagway community planning questionnaire and work should continue or commence immediately, depending on the project.

Table 3-1

SKAGWAY MUNICIPAL SERVICES AND FACILITIES

Priority	Project Description	Types of Project	Status of Project	Funding Sources	Degree of Completion 1980	1981	1982	1983	1984	1985
Top										
1	Dock Improvements	Construction	Continuing	Federal, state, local						
	a) Dolphins	"	"	$775,000	°	✲				
	b) White Pass dock	Acquisition/ Rehabilitation	"	$2 million		°	✲			
	c) Small boat harbor	Construction	Contract let	$1,247,000		✲				
2	Solid Waste Management	Planning & Construction	Study underway	Federal, state, local	°					
3	Water System Improvements	Testing & Construction	Has not started	CEIP, federal, state	°					
4	Utility Upgrading and Alternative Energy Development (Hydropower)	Research, Planning & Construction	Study underway	Federal, local	°					
5	Planning for Newly Annexed and Municipal Selected Lands	Planning	Has not begun	Federal, state, local	°	✲				
6	State Campground (State Project)	Construction	Planning underway	State, $250,000 new funding	°					
7	Off-Street Parking	Construction	Has not started	State, federal, local		°				
8	Dyea Road Improvements	Construction	Funding in legislature	State, $200,000 federal, local	°	✲				
9	City Shoreline Park/Put and Take Fishery	Planning & Construction	Preliminary planning	State, federal, local, Chevron USA	°		✲			
10	Relocation of Fuel Facility	Construction, Moving Costs	Looking for acceptable water-dependent site	Chevron/White Pass	°	✲				

Legend
° Project Start-Up
✲ Project Complete

Table 3-1 (Continued)

Priority	Project Description	Types of Project	Status of Project	Funding Sources	Degree of Completion					
					1980	1981	1982	1983	1984	1985
High										
11	Sewer Collection System Improvements	Construction	Inactive	Federal, state			°			
12	Airport Improvements	Construction	Has not started	Federal, state			°			
13	Storm Sewers for Broadway St.	Construction	Has not started	Federal, state, local			°			
14	Clinic Expansion and Health Care Improvements	Planning & Construction (Pipeline impact)	Has not started	Federal, state, local - Foothills		°	*			
Moderate										
15	City Municipal Complex	Planning	Has not started	Federal, state local			°			
16	Swimming Pool	Planning	Has not started	State, city			°			
17	Yakutania Point Camping Area	Construction	Has not started	Federal, state				°		
18	Truck Bypass Road	Construction & Planning	Has not started	Federal, state						
19	Public Works Garage	Rehabilitation/ Maintenance	Has not started	State, local				°		
20	Historic Restoration	Construction, maintenance & maintenance	Continuing process	State, federal, private	°					
21	Skeet & Rifle Range	Relocation	Has not started	City, federal, state		°				
22	Paved Streets in Residential Areas	Construction	Has not started	City, federal, state					°	
Municipal Services										
1	Consulting - Short- or Long-Term Staff Assistance	Coordination & Development	Continuing	Local, federal, state		°				
2	Garbage Collection Equipment	Upgrade-Purchase	Continuing	Federal, state, local	*					

Legend
° Project Start-Up
* Project Complete

Table 3-1 (Continued)

Priority	Project Description	Types of Project	Status of Project	Funding Sources	Degree of Completion					
					1980	1981	1982	1983	1984	1985
3	Public Safety Funds	Increased Protection (pipeline impact)	Has not started	State, local - Foothills			°	*		
4	Tourism Promotion	Legislation for legalized gambling and public restroom	Has not started	State, local,				°		
5	Earth/Satellite TV station	Planning	Has not started	Private, city, state	°					

Legend
° Project Start-Up
* Project Complete

Applicable Funding Sources:

1. (PL 94-370) Coastal Energy Impact Program (308 Program) - This grant and loan program is designed to help communities minimize the social, economic and environmental disruption created by offshore oil and gas exploration and development and coastal energy activity. Applicants must show that they will be (or have been) impacted by energy development. The loans and/or grants may be used for planning new or expanded public facilities and services, repayment assistance on loans or to prevent, repair or replace "unavoidable" environmental and recreational losses. Planning grants that are not related to OCS energy activity are eighty percent federally funded and require local or state matching for the remainder. Other grants, loans or bond guarantees are one hundred percent federally funded.

2. (AS 30.15.00) Port Facilities Development - To aid municipalities in the improvement of municipally owned and operated port facilities. Available money is variable, due to fluctuating bond authorizations in each legislative session. Up to ninety percent of the project cost may be financed for municipalities under five thousand people.

   Contact: Dept. of Transportation and Public Facilities
   State of Alaska
   Pouch Z
   Juneau, AK 99801

3. (11.300) Economic Development - Grants and Loans for Public Works and Development Facilities - Grants for such public facilities as water and sewer systems, access roads to industrial parks or areas, port facilities, railroad sidings and spurs, public tourism facilities, vocational schools, flood control projects and site improvements for industrial parks. Qualified projects must fulfill a pressing need of the area and must: (1) tend to improve the opportunities for the successful establishment or expansion of industrial or commercial plants or facilities; (2) assist in the creation of additional long-term employment opportunities; or (3) benefit the long-term unemployed and members of low-income families or otherwise substantially further the objectives of the Economic Opportunity Act of 1964. In addition, proposed projects must be consistent with the currently approved overall economic development program for the area and for the district, if any, in which it will be located. JOINT FUNDING: This program is considered particularly suitable (eligible) for joint funding with closely related federal financial assistance programs in accordance with the provisions of of OMB Circular No. A-111. For programs that are not identified as particularly suitable or eligible for joint funding, applicant may consult the headquarters or field office of the appropriate funding agency for further information on statutory or other restrictions involved. The basic grant rate is fifty percent of the project

cost with a maximum disbursion of eighty percent of the cost. Grants are usually disbursed only after all contracts for construction have been awarded. EDA loan funds are normally disbursed when the construction of the project is seventy-five percent or more complete.

Contact: Director, Overall Economic Development Program (OEDP)
Economic Development Administration
Dept. of Commerce
701 "C" Street
Anchorage, AK 99501

4. Special legislative appropriations.

Agency Implementation: Department of Transportation, Division of Boats and Harbors

II. **Project Description - Solid Waste Management.** To locate an acceptable solid waste disposal site or find an alternative, economically feasible method of disposing of Skagway's solid waste (i.e., barge it to Juneau). Funding needed for planning and construction.

Current Developments. Skagway is included in an EPA regional study of waste disposal problems currently underway.

Applicable Funding Sources:

1. (AS 44.47) (701) Planning and Management Assistance - Administered by Division of Community and Regional Affairs (DCRA), this program is available for a wide variety of planning activities, including capital improvements. Planning grants are for two-thirds of the cost of the assisted project.

   Contact: Director, Div. of Community Planning
   Dept. of Community and Regional Affairs
   State of Alaska
   Pouch B
   Juneau, AK 99811

2. (66.504) Solid Waste Disposal Research Grants - This grant is to support and promote the coordinator of research and development in the area of collection, storage, utilization, salvage or final disposal of solid waste. Public and private agencies, state and local governments, and individuals may apply. A minimum of five percent cost sharing is required.

   Contact: Office of Research and Development
   Environmental Protection Agency
   701 "C" Street
   Anchorage, AK 99501

3. (66.451) Solid and Hazardous Waste Management Program Support Grants - This grant program is to assist in the development and implementation of state and local programs leading to the solution of solid waste management problems. State and substate solid waste agencies, authorities and organizations may apply. Matching requirements vary.

   Contact: EPA Regional Administrator
   701 "C" Street
   Anchorage, AK 99501

4. (66.452) Solid Waste Management Demonstrator Grants - This program is for the promotion of demonstration and application of solid waste management and resource recovery technologies which enhance the environment. It is also for studies of solid waste management, investigation and surveys. Formula and cost matching requirements vary. There are no deadlines for application.

   Contact: EPA Regional Administrator
   701 "C" Street
   Anchorage, AK 99501

5. (66.452) Solid Waste Management Training Grant - Programs for training persons in the management, supervision, design, operation or maintenance of solid waste management systems are developed with assistance from this grant. A minimum of five percent cost sharing is required. There are no application deadlines.

   Contact: EPA Regional Administrator
   701 "C" Street
   Anchorage, AK 99501

6. Solid Waste Disposal Grant (HCS CSSB 436) - If bonds are approved, grant monies could be available for the construction of a solid waste disposal site for up to fifty percent of the cost not paid by federal agencies.

   Contact: Dept. of Environmental Conservation
   Pouch O
   Juneau, AK 99801

III. **Project Description - Water System Improvements.** Hydrostatic pressure testing is necessary to determine those portions of the system most in need of repair and/or replacement. A systematic approach to the improvements can then be taken.

Current Developments. City has used $49,000 for emergency replacement of the waterline to the White Pass and Yukon Railroad dock. They have exhausted their bond money for this program.

Applicable Funding Sources:

1. (11.300) Economic Development Grants and Loans for Public Works and Development Facilities - See page 3-11.

2. (10.418) Water and Waste Disposal Systems for Rural Communities - Funds may be used for the installation, repair, improvement or expansion of a rural water system, including distribution lines, well, pumping facilities and costs related thereto. The installation, repair, improvement or expansion of a rural waste disposal system, including the collection and treatment of sanitary, storm and solid wastes. JOINT FUNDING: This program is considered particularly suitable (eligible) for joint funding with other closely related federal financial assistance programs in accordance with the provisions of OMB Circular No. A-111. For programs that are not identified as particularly suitable or eligible for joint funding, applicant may consult the headquarters or field office of the appropriate funding agency for further information on statutory or other restrictions involved. The applicant must (1) be unable to finance the proposed project from its own resources or through commercial credit at reasonable rates and terms, and (2) have the legal authority necessary for constructing, operating and maintaining the proposed facility or service and for obtaining, giving security for and repaying the proposed loan. Plans and specifications must be developed to comply with state and local health and pollution regulations and other requirements. Grants are made only when necessary to reduce the average annual residential user charges to a reasonable level. Normally, grants are considered only when the debt service portion of the average annual residential user cost exceeds one percent of the median income for the area to be served. Funds are allocated based on rural population and income. No matching funds are required.

   Contact: Administrator, Farmers Home Administration
   State Office
   824 S. Chugach
   Palmer, AK

3. (AS 46.03.030) Water Sewer Aid - Provides cost of capital improvements for water supply and sewage systems. State bonds are sold to provide a fund from which one-half of the nonfederally funded portion of a project, to a maximum of fifty percent, may be awarded to municipal applicants. The money may be used for engineering design, legal work or construction equipment, among other things. Applications may be submitted at any time.

   Contact: Commissioner, Alaska Dept. of Environmental Conservation
   Pouch O
   Juneau, AK 99801

Agency Implementation: City of Skagway/Alaska Department of Environmental Conservation

IV. Project Description - Utility Upgrading and Alternative Energy Developments. The present level of electric power and telephone service for Skagway are in need of upgrading. Alternative sources such as increased hydro power at Dewey Lake and hydroelectric development in the Skagway River valley and, eventually, West Creek should be investigated. Feasibility studies for wind and solar power should also be performed.

Current Developments. PUC has granted AP&T a rate increase to cover costs of improvements to the power and telephone systems.

Applicable Funding Sources:

1. (24.034) Research and Development in Fossil Energy - Project grants are awarded to assure the continued conduct of research and development and related activities in fields pertinent to the acquisition of an expanded fund of scientific, technical and practical knowledge in fossil energy matters. Contracts may provide for a variety of cost-sharing and incentive arrangements, including awards to individual inventors, joint ownership of federal-industry corporations and cost-shared demonstration projects. Financial support, in whole or in part, may be provided for such purposes as salaries, materials and supplies, equipment, travel, publication costs and services required for conducting research and development. Restrictions on the use of funds depend upon individual contract provisions. Support may be provided for work in such fields as conversion of coals to liquids or gases; clean combustion of coals; in situ recovery of fossil energy products from coal or oil shales; research to increase the recovery of petroleum and natural gas from reservoirs; advanced electric power generating systems, magnetohydrodynamic electric power generation utilizing fossil fuels, in particular, coals; basic materials science; supporting technologies in the conversion and utilization of fossil energy resources.

   Contact: (Headquarters office only)
   Office of the Assistant Administrator for
   Fossil Fuels
   Energy Research and Development Administration
   Washington, D.C. 20545
   (202)376-4000

2. (24.035) Research and Development in Energy Conservation - Project grants are awarded to provide financial support for basic and applied research and development undertaken to enhance present technology and develop new knowledge and procedures in the field of energy conservation. Financial support, in whole or in part, may be provided through industrial contracts and university grants for such purposes as salaries, materials and supplies, travel, publications costs and

services required for conducting the research and development. Restrictions on the use of funds depend on contract provisions. Support may be provided for research and development to (a) enhance the capability of electric power transmission and distribution systems by improving efficiency, reliability, economy and environmental acceptability; (b) provide a basis for government decisions regarding alternative transportation systems, especially vehicle systems for the future; (c) develop energy storage techniques applicable to electric utilities and propulsion and to new generating systems for energy forms not now in wide use; and (d) develop advance conversion systems to increase power plant efficiencies.

Contact: (Headquarters office only.) Questions on new proposals should be addressed to the appropriate headquarters division, as follows: For individuals and industrial and nonprofit organizations: Division of Procurement, C-167, ERDA, Washington, D.C. 20545. Telephone: (301)353-3202. For educational institutions: Division of University and Manpower Development Programs, ERDA, Washington, D.C. 20545. Telephone (202)376-9211.

3. 1980 Appropriate Technology Small Grants Program - This is a financial assistance program to encourage development, demonstration and promotion of small-scale energy technologies, processes or activities. Such devices must be appropriate to local conditions and serve local needs by using available skills and energy sources. Average grants for 1979 were $11,000. Applications must be submitted within sixty days of the opening date (this notice may be too late for application in 1980; however, interested parties can send for the information and prepare for 1981 funds). Funds are disbursed in early summer/late fall. Information may be obtained from the State Department of Energy and Power Development. Completed applications must be sent to the contact below.

Contact: U.S. Department of Energy
Region X
1992 Federal Building
915 Second Street
Seattle, WA 98174

Agency Implementation: Alaska State Power Authority

V. Project Description - Planning for Newly Annexed and Municipal Selected Land. Skagway will be receiving 500 acres as part of the city's municipal selection. Detailed land use planning will occur prior to releasing this land to the public.

Current Developments.

a. Annexed Lands. The City of Skagway annexed all lands from the Haines Borough boundary to the Canadian border. A specific policy and land management study needs to be initiated to determine the tax differential, services to be rendered by the city, proper zoning, land use and management agreements with state and federal agencies.

b. Municipal Selections. The City of Skagway is entitled to five hundred acres of state land, which must be selected from lands nominated for selection by the city by October 1980. The city council has assigned the manager the task of evaluating those lands which are best suited for municipal use and disposition to the public. Assistance is needed in land planning, evaluation, selection and disposal processes to ensure maximum benefit to the city. Incidental survey costs necessary to receive title to this land will also require grant assistance.

Applicable Funding Sources:

1. Management Program Administrative Grants 306 Money - This program is designed to provide financial and technical assistance to local governments for the administering of district coastal management programs. Any coastal resource districts may apply for funds, including any of the following containing a portion of Alaska's coastal zone: a unified home rule municipality or other organized borough which exercises planning and zoning authority; a home rule or first class city not within a borough which exercises planning and zoning authority; a second class city, if the city has a planning commission and is judged by the Commissioner of the Department of Community and Regional Affairs to have the capability to prepare and implement a coastal program; and a coastal resource service area in the unorganized borough. Aid may be in the form of program development grants and technical assistance. The program development grants are provided on a matching basis with at least twenty percent contributed from local funds or in-kind services. Technical assistance is provided, upon request, by the division's professional staff at no cost.

   Contact: Director, Division of Community Planning
   DCRA
   225 Cordova Street
   Anchorage, AK 99501

2. (AS 44.47) Planning and Management Assistance (701) - See page 3-12.

3. (10.414) Resource Conservation and Development Loans - This program provides loan assistance to local sponsoring agencies

in authorized areas where acceleration of a program of resource conservation, development and utilization will increase economic opportunities for local people. Assistance is in the form of insured/guaranteed loans. No matching is required and loan amounts range from $2,400 to $250,000. Loan funds may be used for (1) rural community public outdoor-oriented water based recreational facilities; (2) soil and water development, conservation, control and use facilities; (3) shift in land use facilities; (4) community water storage facilities; and (5) special purpose equipment to carry out the above purposes. Project must be located in an authorized RCD area. A loan for a single RCD measure cannot exceed $250,000.

Contact: Area Loan Specialist
Farmers Home Administration
824 S. Chugach
Palmer, AK
(907)745-4271

4. (11.306) Economic Development - State and Local Economic Development Planning - Project grants are awarded to develop the capability of state and local governments to undertake an economic development planning process. Grants may be used for planning, staff salaries and related administrative expenses. A minimum of twenty-five percent of the project cost must come from nonfederal funds.

Contact: Director, Overall Economic Development Program
Economic Development Administration
Department of Commerce
701 "C" Street
Anchorage, AK 99501

5. (11.418) Coastal Zone Management Program

Agency Implementation: Department of Community and Regional Affairs, Department of Natural Resources

VI. Project Description - A State Campground Will Be Developed On State-Owned Property North of Town. Campground development at Yakutania Point is also a possibility.

Current Developments. The plans for the park development are underway with a grant from the State Division of Parks for $348,000. It appears that other state funds will be forthcoming. A federal match has been requested, although it is not very hopeful the funding will come through for several years.

Applicable Funding Sources:

1. (PL 88-578) Land and Water Conservation Fund (Bureau of Outdoor Recreation Grants) - This program provides assistance in planning, acquisition and development of outdoor recreation areas and facilities. Funding will be appropriated according to the needs of the request and the amount available. A letter of intent to apply for funds must be submitted by February 15. An application packet is sent out and must be filed by May 15. Funds are allocated in the fall.

   Contact: Director, Division of Parks
   Department of Natural Resources
   819 Warehouse Avenue
   Anchorage, AK 99501

2. (AS 41.22.010-.030) Outdoor Recreation, Open Space and Historic Properties Development Fund - To assist in the cost of acquiring, developing or extending outdoor recreation sites and facilities, and in acquiring, preserving or protecting historic sites, buildings and monuments. This program is funded by bonds and is a supplement to the above. Municipalities may apply for up to one-half of the nonfederal money.

   Contact: Director, Division of Parks
   Department of Natural Resources
   819 Warehouse Avenue
   Anchorage, AK 99501

3. (AS 41.20.355) Trails and Footpaths - To provide for the establishment of public ways for trails and footpaths, up to one percent of the total yearly state and federal matching sum combined under the federal aid highways program may be appropriated annually from the general fund to DNR. Currently, there is no money in the program; however, money is expected to be appropriated in the next legislative session. Funds may come from bonds or direct appropriation.

   Contact: Director, Division of Parks
   Department of Natural Resources
   819 Warehouse Avenue
   Anchorage, AK 99501

4. Park and Recreation Technical Assistance - To provide technical assistance to state and local agencies in planning, developing and managing their park and recreation areas so as to help meet the park and recreation needs of the nation.

   Contact: National Park Service
   540 W. 5th Avenue
   Anchorage, AK 99501

Agency Implementation: Division of Parks

VII. Project Description - Off-Street Parking. Additional allocation and purchase of lands to be used to accommodate increased parking needs are essential in the historic district as well as other high use areas of town. Pipeline-related activities and tourism will result in increased traffic and parking needs in the future.

Current Developments. None.

Applicable Funding Sources:

1. (PL 94-370) Coastal Energy Impact Program - See page 3-11.

2. (AS 44.47) Planning and Management Assistance (701) - See page 3-12.

3. (11.300) Economic Development - Grant and Labor Loans for Public Works and Development Facilities - See page 3-14.

4. Economic Development Planning Program (302 Program) - This program works directly with the local OEDP.

   Contact: Director, Div. of Economic Enterprise
   Dept. of Commerce and Economic Development
   Pouch D
   Juneau, AK 99811

Agency Implementation: City of Skagway

VIII. Project Description - Dyea Road Improvements. The increased traffic along this road has created concern that a proportional increase in serious accidents will occur unless improvements are made.

Current Developments. The city has stressed this need to ADOT. The state legislature has appropriated $200,000 for the purpose of improving Dyea Road.

Applicable Funding Sources:

1. (PL 89-564, AS 44.19.025) Traffic Safety (Federal Highway Safety Act of 1966) - This is a cost reimbursement program to reduce traffic accident severity and loss. Any tax supported unit of state or local government having responsibilities in the field of traffic safety may apply. The match is 92.76 percent federal, 7.24 percent state or local.

   Contact: Highway Safety Planning Agency
   Department of Public Safety
   Pouch N
   Juneau, AK 99811

Agency Implementation: Department of Transportation, National Park Service

IX. **Project Description - City Shoreline Park.** A community park on the waterfront would require landscaping and some dredging of the creek to form a pool. The park would also serve as a fisheries enhancement project by providing a place to stock and catch salmon and thus stimulating the economy by attracting increased tourism.

Current Development. Planning underway. The shoreline park has been designated as an Area Meriting Special Attention (ASMA). Digging of the pond to establish the fish viewing area is contemplated in the summer of 1980. A grant has been applied for which would provide approximately $15,900 for design of the park. It appears that CZM funds will be available to finance construction of the park and perhaps support the fisheries enhancement program.

Applicable Funding Sources:

1. (PL 88-578) Land and Water Conservation Fund - See page 3-19.

2. (AS 91.22.010-.030) Outdoor Recreation, Open Space and Historic Properties Development Fund - See page 3-19.

3. (AS 41.20.355) Trails and Footpaths - See page 3-19.

4. (PL 94-370) Coastal Energy Impact Program (308) - See page 3-11.

5. (AS 44.47) Planning and Management Assistance (701) - See page 3-12.

6. (10.414) Resource Conservation and Development Loans - See page 3-17.

7. (AS 44.47.130 and 44.47.140) Rural Development Grant Program - Grants of up to $40,000 are awarded by the Department of Community and Regional Affairs to rural communities for the development of community facilities necessary in establishing a sound economic base. Eligible projects are those which provide permanent employment, a source of income to the community or demonstrate a direct relationship to community and/or economic development.

   Contact: Director, Division of Community and Rural Development
   Dept. of Community and Regional Affairs
   225 Cordova Street, Building F
   Anchorage, AK 99501

8. (AS 44.33.140-.180) Tourist Attraction Development Matching Grant Program - This program provides matching funds for the purpose of developing tourist attractions of historic or contemporary interest. Any political subdivision or nonprofit organization may apply. Funds will be matched one to one by the state for money or in-kind contributions.

Contact: Grants Officer
Division of Tourism
Dept. of Commerce and Economic Development
Pouch D
Juneau, AK 99811

9. Chevron, U.S.A., San Francisco, California (may contribute to development of project).

10. (PL 94-370) Alaska Coastal Management Program.

Agency Implementation: Alaska Department of Fish and Game, Department of Community and Regional Affairs

High Priority

X. **Project Description - Sewer Collection System Improvements.**

Current Developments. The City of Skagway is presently out of the sewer maintenance business. However, the collection system is badly in need of repair and replacement. If the city resumes responsibility for the sewage system, this program should be given top priority and actively pursued.

1. (11.300) Economic Development Grants and Loans for Public Works and Development Facilities - See page 3-11.

2. (10.418) Water and Waste Disposal Systems for Rural Communities - See page 3-14.

3. (AS 46.03.030) Water and Sewer Aid - See page 3-14.

Agency Implementation: Alaska Department of Environmental Conservation.

XI. **Project Description - Airport Improvements.** Skagway would like to expand the municipal airfield and construct a terminal building. The city would like to provide lighting and navigation aids to promote safety and provide for increased use.

Current Developments. Skagway has $227,000 appropriated for navigation aids, lighting and terminal facilities.

Applicable Funding Sources:

1. (20.102) Airport Development Aid Program (ADAP) - Project grants are awarded to assist public agencies in the development of a nationwide system of public airports adequate to meet the needs of civil aeronautics. Grants can be made for (1) land acquisition, (2) site preparation, (3) construction, alteration and repair of runways, taxiways, aprons and roads

within airport boundaries, (4) construction and installation of lighting utilities, navigational aids and certain offsite work, (5) safety equipment required for certification of airport facility, (6) security equipment required of the sponsor by the Secretary of Transportation by rule or regulation for the safety and security of persons and property on the airport, (7) snow removal equipment, (8) noise suppressing equipment, construction, landscaping and land acquisition for noise compatibility and (9) terminal development. Grants may not be made for the construction of hangars, parking areas for automobiles or for buildings not related to the safety of persons on the airport. Technical advisory services are also provided. Formula and cost matching requirements vary, with the maximum grant at 93.75% of the project cost. There are no application deadlines for submittal, but funds are limited.

Contact: FAA
701 "C" Street
Anchorage, AK 99501

2. (AS 35.05.020, 35.05.040 and 35.10.130) Municipal Airport Aid - To aid municipally-owned airports. Financial grants are awarded to provide matching funds for capital improvements being funded under ADAP. The municipality must match the state funds. The following information should be submitted in writing to the Office of the Commissioner of Transportation: (1) project description, with a preliminary cost estimate; (2) identification of funding source, including amount provided by the municipality and amounts sought from the state and FAA; (3) analysis or justification of need; (4) brief analysis or statement of current maintenance and operating costs for the airport (a copy of a current airport budget will be sufficient if available) and a forecast of the effect the project will have on M&O figures; (5) project schedule in brief outline form, indicating design, land acquisition and construction dates to provide a rough forecast of cash flow; and (6) identification of key personnel representing the municipality (staff or authorized consultant) who can be contacted if further information is needed.

Contact: Office of the Commissioner
Dept. of Transportation and Public Facilities
State of Alaska
Pouch Z
Juneau, AK 99811

Agency Implementation: Alaska Department of Transportation, Division of Aviation

XII. **Project Description - Storm Sewers for Broadway Street.** These are needed to improve the street and eliminate runoff damage to adjacent buildings in the historic district.

Current Developments. None.

Applicable Funding Sources:

1. (10.423) Community Facilities Loans - Guaranteed/insured loans are provided for community facilities, which include, but are not limited to, providing or supporting overall community development such as fire and rescue services, transportation, traffic control, community, social, cultural, health and recreational benefits, industrial and business development. Public and quasi-public bodies and associations may apply. Matching funds may be required. Funds are allocated to states based upon rural population and income. General obligation bonds only may fund these loans, no revenue bonds. The FHA would have to have approval from the State Historic Office.

   Contact: Administrator, Farmers Home Administration
   State Office
   824 S. Chugach
   Palmer, AK

2. (11.300) Economic Development - Grants and Loans for Public Works and Development Facilities - See page 3-11.

3. EDA Redevelopment Area Loan Program - These funds are disbursed to cities for reinvestment to promote economic developments.

   Contact: Economic Development Administration
   Dept. of Commerce
   701 "C" Street
   Anchorage, AK 99501

4. National Historic Preservation Act of 1966 - This act allows for assistance to be provided in the acquisition and restoration of historic properties. Cities, boroughs, organizations and individuals may apply for funds if the property for which they are requested is on the National Register of Historic Places. The program is fifty percent federally and fifty percent locally matched.

   Contact: Director
   Division of Parks
   Dept. of Natural Resources
   819 Warehouse Drive
   Anchorage, AK 99501

Agency Implementation: City of Skagway, with funding assistance.

XIII. Project Description - Clinic Expansion and Health Care Improvements.

Current Developments. None.

Applicable Funding Sources:

1. (10.423) Community Facilities Loans - See page 3-24.

2. (PL 93-641) Health Care Facilities - Federal construction funds are appropriated by Congress and are matched with state or local funds for the improvement of municipal health care facilities. State funds are normally the result of general obligation bond authorizations. The matching percentage is variable.

   Contact: Commissioner
   Dept. of Health and Social Services
   Pouch H-01
   Juneau, AK 99811

Agency Implementation: City of Skagway

Moderate: Long Term Priority

XIV. Project Description - City Municipal Complex. Skagway needs to develop plans or programs to acquire new facilities to house the city offices, magistrate's court, public offices, police department, etc.

Current Developments. None.

Applicable Funding Sources:

1. Public Buildings Cooperative Use Act of 1976 - Became law on October 18, 1976. The act directs the Administrator of the General Services Administration to acquire space for federal offices in buildings of historic, architectural or cultural significance unless use of such space would not prove feasible and prudent compared with available alternatives. The act directs the Administrator, prior to undertaking a planning survey, to determine the public buildings needs of the the federal government within a geographical area, to request the Chairman of the Advisory Council on Historic Preservation to identify existing buildings in the community that are of architectural, cultural or historic interest and that are suitable for purchase to convert into federal office space. The act states that buildings of "historic, architectural or cultural significance" include, but are not limited to, "buildings listed or eligible to be listed on the National Register..." The staff of the Advisory Council expects to begin drafting regulations for

implementation of the act this year. In the interim, the Advisory Council is putting together an informational mailing regarding the act for interested parties.

Contact: Administrator, General Services Administration
343 W. 1st Avenue
Anchorage, AK 99501

2. (10.423) Community Facilities Loans - See page 3-24.

3. (AS 44.49) Comprehensive Planning Assistance (701) - See page 3-12.

4. (AS 44.47.130 and 44.47.140) Rural Development Grant Program - See page 3-21.

Agency Implementation: City of Skagway

XV. **Project Description - Swimming Pool.** The City of Skagway would like to develop plans for the construciton of a municipal swimming pool.

Current Development. None.

Applicable Funding Sources:

1. (10.423) Community Facilities Loans - See page 3-24.

2. (AS 44.47) Planning and Management Assistance (701 Program) - See page 3-12.

Agency Implementation: City of Skagway

XVI. **Project Description - Yakutania Point Camping Area.** A minimally developed tent camping area in the city park at the point could be designated by supplying trail markers, a parking area and a boundary designation.

Current Developments. None.

Applicable Funding Sources:

1. (PL 88-578) Land and Water Conservation Fund - See page 3-19.

2. (AS 41.22.010-.030) Outdoor Recreation, Open Space and Historic Properties Development Fund - See page 3-19.

3. (AS 41.20.355) Trails and Footpaths - See page 3-19.

4. Park and Recreation Technical Assistance - To provide technical assistance to state and local agencies in planning, developing and managing their park and recreation areas so as to help meet the park and recreation needs of the nation.

Contact: National Park Service
540 W. 5th Avenue
Anchorage, AK 99501

Agency Implementation: Alaska State Division of Parks

XVII. **Project Description - Public Works Garage.** The present facility is in need of improvements and inadequate. A new facility is desired.

Current Developments. None.

Applicable Funding Sources:

1. (AS 44.47) Planning and Management Assistance (701 - See page 3-12.

2. (AS 44.47.130 and 44.47.440) Rural Development Grant Program - See page 3-21.

Agency Implementation: City of Skagway

XVIII. **Project Description - Historic Restoration.** Construction, repair and maintenance of properties in the Klondike Gold Rush National Historic Park is needed. Many historic buildings in need of repair are scattered throughout the city of Skagway.

Current Developments. Cooperative agreements have been entered into between the city and the National Park Service. Municipal functions and services of common interest within the historic district will be provided by the National Park Service (e.g., construction and repair of boardwalks, maintenance of historic Gold Rush Cemetery, police and fire protection, utility services, etc.). The National Park Service has completed the plans for repair work to City Hall. A historic restoration program grant is pending approval.

Applicable Funding Sources:

1. Maintenance Grants for Historic Properties - Assists in costs and maintenance of designated Alaska landmarks. Owners of the landmarks may apply for the funding only if the property is listed on the Alaska Landmark Register. The financing is fifty percent state and fifty percent local or private. Questions concerning funding application or nomination to the Register may be directed to the Chief Officer of History and Archaeology, Division of Parks.

   Contact: Director
   Division of Parks
   Dept. of Natural Resources
   819 Warehouse Drive
   Anchorage, AK 99501

2. Natural Historic Preservation Act of 1966 - See page 3-24.

3. (AS 41.22.010-.030) Outdoor Recreation, Open Space and Historic Properties Development Fund - See page 3-21.

4. Archaeological Investigation and Salvage (Interagency Archaeological Program) - Funds can be used to help finance state surveys and plans for historic preservation, staff salaries, equipment and materials, and travel necessary to accomplish the purpose of the program. Funds can be used for acquisition of historic property and to match development costs such as research, preparation of plans and specifications, project costs and certain in-kind donations. Not eligible are administrative costs following restoration phase, nor other expenses as specified in program policies. Funds dispersed to eligible communities under Housing and Community Act of 1974 may be used as nonfederal match in Historic Preservation Grants. JOINT FUNDING: This program is considered particularly suitable (eligible) for joint funding with closely related federal financial assistance programs in accordance with the provisions of OMB Circular No. A-111. For programs that are not identified as particularly suitable or eligible for joint funding, applicant may consult the headquarters or field office of the appropriate funding agency for further information on statutory or other restrictions involved. Although public and private owners of historic properties benefit from this program, they may not apply directly for the funds. Eligible applicants are the National Trust for Historic Preservation and states and territories as defined in the National Historic Preservation Act operating under programs administered by the State Historic Preservation Officer appointed by the governor. Funding is fifty percent federal and fifty percent state (public and/or private fund and/or allowable in-kind donations). The range of assistance is from $500 to $100,000, with an average of $25,000. Applications must be received by July 31 of the fiscal year preceding the year for which assistance is requested.

   Contact: State Historic Preservation Officer
   Dept. of Natural Resources
   819 Warehouse Drive
   Anchorage, AK

   Headquarters: Director
   Office of Archaeology and Historic Preservation
   National Park Service
   Dept. of the Interior
   Washington, D.C. 20240

5. Title I Home Improvement Loan Program - Provides FHA insurance for loans made by private financial institutions to finance property improvements that protect or increase the livability or utility of residential or other properties. Currently an owner of a single-family home can borrow up to

$10,000 for twelve years. Maximum loans on multi-family structures are $5,000 per dwelling unit, not to exceed $25,000. All loans are made at market rates.

Contact: HUD Area Office

6. Historic Preservation Loan Program - A new program which expands the existing Title I Home Improvements Loan Program by providing FHA insurance for loans to finance the preservation, restoration or rehabilitation of residential properties listed in or determined eligible for listing in the National Register, including all residential properties within a National Register district. Available from private lending institutions at market rates, these loans will be for up to $15,000 per dwelling unit (not to exceed $30,000) for fifteen years. (Community development block grants may be used to subsidize the market interest on both historic preservation and Title I loans.) Proposed improvements must be reviewed by SHPO's. The program is not yet operational, but preservation organizations can begin informing property owners and convincing local financial institutions of the need to make money available for loans.

   Contact: Secretary
   Dept. of Housing and Urban Development
   7th Street SW
   Washington, D.C. 20410

   or call: Title I Insured Loan Division
   (202)755-8686

7. (701) Comprehensive Planning Assistance - Can be used for the following preservation related activities, as long as they are part of a comprehensive plan: development of criteria for evaluation of historic properties; surveys; identification of historic properties subject to destruction and/or deterioration; consideration of the relationship of historic properties to other elements of comprehensive planning in the jurisdiction, determination of preliminary cost estimates for the rehabilitation or restoration of significant buildings or districts; preparation of district legislation, model preservation contracts and general administrative and budgetary measures; and preparation of a historic preservation program outlining action needed. The FY 1977 appropriation was $62.5 million. It is still unresolved whether (because of reduced funding for 701) communities receiving block grants will be permitted to use block grant funds for planning purposes as outlined in the 701 program.

   Contact: HUD Area Office

8. Coastal Zone Management Act of 1976 - Signed into law on July 26, 1976, this new act authorizes grants for the development of land management programs affecting the land and

water resources of a state's coastal zone. The management program for each coastal state must meet nine requirements to be eligible for grant funding. Significant for historic preservation is the requirement (effective as of October 1, 1978) that the management program include a planning process for the protection of, and access to, among other things, public coastal areas of environmental, recreational, historical, aesthetic, ecological or cultural value. This could be an important new opportunity for funding preservation planning. A total of $20 million has been authorized for the grants program for each of fiscal years 1977, 1978 and 1979. Final regulations for the program are expected by January 1977.

Contact:

9. (Chap. 139, SLA 1977) Historic District Revolving Loan Fund - Structures must be within the Historic Sites Advisory Committee (DNR). Assistance is in the form of a loan up to $100,000 per structure and may not exceed $1,500,000 for any one district.

   Contact: Director
   Division of Business Loans
   Dept. of Commerce and Economic Development
   Pouch D
   Juneau, AK 99811

10. (AS 44.33.140-180) Tourist Attraction Development Matching Grant Program - See page 3-21.

(For more information on funding, contact the National Park Service and request the folder entitled "Sources of Preservation Funding.")

XIX. Project Description - Relocation of Skeet and Firing Range.

Current Developments. The new state campground facility will occupy the former skeet location, consequently, a new location will be needed. A prime recommended location is the old landfill site on Dyea Road (AB Mountain) when another landfill site if formed.

Applicable Funding Sources:

1. (PL 88-578) Land and Water Conservation Fund - See page 3-19.

2. (AS 41.22.010-.030) Outdoor Recreation, Open Space and Historic Properties Development Fund - See page 3-19.

3. (AS 41.20.355) Trails and Footpaths - See page 3-19.

4. Park and Recreation Technical Assistance - To provide technical assistance to state and local agencies in planning,

developing and managing their park and recreation areas so as to help meet the park and recreation needs of the nation.

Contact: National Park Service
540 W. 5th Avenue
Anchorage, AK 99501

Agency Implementation: City of Skagway, Alaska State Division of Parks.

MUNICIPAL SERVICES

Top Priority

Project Description - Assistance to City Manager, Professional/ Technical Consulting and Short-Term Staff Assistance. The function will be to assist in the range of responsibilities and tasks necessary to carry out the objectives of this planning program and fulfill the variety of needs from tourist development to municipal land selections. Professional and technical assistance in achieving the city's long-range social and economic objectives is a necessary facet in accomplishing a community development program.

Current Developments.

a. Detailed land use facilities and tax planning for the city's new annexation.

b. Selection of subdivisions and disposal of municipal land settlement.

c. Development of programs for tourist enhancement and promotion.

Applicable Funding Sources:

1. Title 306 Monies - Management Program Administration Grants - See page 3-19.

2. (AS 44.47) Planning and Management Assistance (701) - See page 3-12.

3. (11.306) Economic Development - State and Local Economic Development Planning - See page 3-18.

4. CETA Program

See also Project Description - Tourism Promotion below for more funding sources.

Project Description - Development of Solid Waste Site. The city is in need of a suitable site for solid waste disposal.

Current Developments. The city has just purchased a new garbage truck and three sites for solid waste disposal have been approved by ADEC.

High Priority

Project Description - Tourism Promotion. Skagway would like to appoint someone to be in charge of promoting tourism. This person would probably have several functions, possibly including assisting the manager in building permit review and project development.

Current Developments. None.

Applicable Funding Sources:

1. (AS 44.33.140-.180) Visitor Information Center Matching Grant Program - This program provides matching funds to communities or nonprofit organizations that undertake programs to operate local visitor information centers or to provide travel information to the public. Funds may also be used to construct visitor information facilities or to refurbish existing facilities. The state will match on a one-to-one basis money and/or in-kind contributions. Application forms may be acquired from the Grants Officer at the following address.

   Contact: Director
   Division of Tourism
   Dept. of Commerce and Economic Development
   Pouch D
   Juneau, AK 99811

2. (11.300) Economic Development - Grants and Loans for Public Works and Development Facilities - See page 3-11.

3. (11.951) Matching Funds, U.S. Travel Service - The funds are available to states, cities, municipalities, private or public nonprofit organizations and others to encourage foreign residents to visit the U.S. and to improve services for foreign visitors in the country. Federal funding will not exceed fifty percent of the project cost and must be matched by state or other nonfederal source.

   Contact: (Headquarters office only)
   Director
   Office of State-City Affairs
   U.S. Travel Service
   Dept. of Commerce
   Washington, D.C. 20230

Agency Implementation: State Division of Parks (DNR), U.S. National Park Service

Moderate Priority

Project Description - Public Safety Funds. The city would like to provide increased fire and police protection.

Current Developments. None.

Applicable Funding Sources:

1. (10.423) Community Facilities Loans - See page 3-24.
2. (PL 94-370) Coastal Energy Impact Program (308 Program) - See page 3-11.

GENERAL REVENUE SOURCES

State Aid to Local Governments (Revenue Sharing Program - Municipal Services)

Nature and Purpose of Program. Provides general state aid.

Who May Apply. Incorporated cities, organized boroughs of any class and volunteer fire departments in the unorganized borough.

Authorized Legislation. AS 43.18.010-.045. Administered under Administrative Regulations 19 AAC 30.010.140.

Administrative Agency. Division of Local Government Assistance, Department of Community and Regional Affairs.

Type of Assistance. For eligible services rendered as of July 1 of the entitlement (fiscal) year, financial support is provided. The categories include: police protection, fire protection, air or water pollution control, land use planning, parks and recreation, small boat harbors, ports, airports or transit systems, public and ice roads, hospitals, health services, health facilities and state construction aid for hospitals and health facilities.

How Program is Financed. One hundred percent state financed.

How to Apply. Application forms and instructions are sent by the Department of Community and Regional Affairs to all cities, boroughs and volunteer fire departments in the unorganized borough during August of each year. Completed applications must be received by the Department postmarked no later than November 1st in order to qualify.

Contact. Director
Department of Community and Regional Affairs
State of Alaska
Pouch B
Juneau, AK 99811

Shared Revenue - Amusement and Gaming Devices

Nature and Purpose of Program. Provides that fifty percent of the gross revenue from this source, excluding distribution, fees, penalties and cost of collection, shall be returned to the local government in which the revenue is collected.

Who May Apply. Organized boroughs and cities of the first and second class.

Authorized Legislation. AS 43.35.050.

Administrative Agency. Department of Revenue.

Type of Assistance. Financial.

How Program is Financed. One hundred percent state financed.

How to Apply. Application not necessary; refunds are made automatically.

Contact. Department of Revenue
Administrative Services Division
State of Alaska
Pouch SA
Juneau, AK 99811

(Field Offices - for information only)
675 Seventh Avenue, Fairbanks, AK 99701
103 State Office Building, Ketchikan, AK 99901
201 East Ninth, Anchorage, AK 99501

Shared Revenue - Aviation Fuel Tax

Nature and Purpose of Program. Provides that sixty percent of the proceeds of the aviation fuel tax will be returned to the municipality where collection is made.

Who May Apply. Municipalities who own airports or who operate and maintain state owned airports under lease or contract with the Division of Aviation.

Authorized Legislation. AS 43.40.010 (e).

Administrative Agency. Department of Revenue.

Type of Assistance. Financial.

How Program is Financed. One hundred percent state financed.

How to Apply. Application not necessary; refunds are made automatically.

Contact. Department of Revenue
Administrative Services Division
State of Alaska
Pouch SA
Juneau, AK 99811

(Field Offices - for information only)
675 Seventh Avenue, Fairbanks, AK 99701
103 State Office Building, Ketchikan, AK 99901
201 East Ninth, Anchorage, AK 99501

Shared Revenue - Business License

Nature and Purpose of Program. In 1979 the Department of Revenue will return sixty percent of 1978 business license fees collected within a local government to that taxing authority. Because businesses will not pay taxes on their 1979 gross receipts, the source for 1980 payments under this program will change. The legislature has established a municipal assistance fund which will draw on at least ten percent of the corporate income tax revenues. Payments from the fund to municipalities will be based on the shared revenues that the local governments receive during fiscal year 1978. If the amount in the fund exceeds the total paid out during the year, the Department will distribute the excess according to the population.

Who May Apply. Organized boroughs and cities of any class.

Authorized Legislation. AS 43.70.08 (AS 43.20.016 for 1980 thereafter).

Administrative Agency. Department of Revenue.

Type of Assistance. Financial.

How Program is Financed. One hundred percent state financed.

How to Apply. Application not necessary; refunds are made automatically.

Contact. Department of Revenue
Administrative Services Division
State of Alaska
Pouch SA
Juneau, AK 99811

(Field Offices - for information only)
675 Seventh Avenue, Fairbanks, AK 99701
103 State Office Building, Ketchikan, AK 99901
201 East Ninth, Anchorage, AK 99501

Shared Revenue - Electric and Telephone Cooperatives

Nature and Purpose of Program. Provides that all gross revenue taxes in excess of the amount expended for collection will be returned to local government on a proportional basis.

Who May Apply. An organized borough or city of any class.

Authorized Legislation. AS 10.25.570.

Administrative Agency. Department of Revenue.

Type of Assistance. Financial.

How Program is Financed. One hundred percent state financed.

How to Apply. Application not necessary; refunds are made automatically.

Contact. Department of Revenue
Administrative Services Division
State of Alaska
Pouch SA
Juneau, AK 99811

(Field Offices - for information only)
675 Seventh Avenue, Fairbanks, AK 99701
103 State Office Building, Ketchikan, AK 99901
201 East Ninth, Anchorage, AK 99501

Shared Revenue - Fisheries Taxes

Nature and Purpose of Program. Provides for a refund of ten percent of the fisheries tax collected within the local government unit with an additional ten percent refund to the organized boroughs in which the tax was collected.

Who May Apply. Organized boroughs and cities of the first class, including home rule cities.

Authorized Legislation. AS 43.75.130 and 43.75.135.

Administrative Agency. Department of Revenue.

Type of Assistance. Financial.

How Program is Financed. One hundred percent state financed.

How to Apply. Application not necessary; refunds are made automatically.

Contact. Department of Revenue
Administrative Services Division
State of Alaska
Pouch SA
Juneau, AK 99811

(Field Offices - for information only)
675 Seventh Avenue, Fairbanks, AK 99701
103 State Office Building, Ketchikan, AK 99901
201 East Ninth, Anchorage, AK 99501

Shared Revenue - Liquor Licenses

Nature and Purpose of Program. Provides for refund on semi-annual basis of liquor license fees collected (excluding wholesale licenses) to the local government in which the fees are collected.

Who May Apply. Organized boroughs and cities of all classes, provided that such entities actively enforce federal, state and local liquor laws. Must have local police protection, not including Alaska State Troopers.

Authorized Legislation. AS 04.10.460.

Administrative Agency. Department of Revenue.

Type of Assistance. Financial.

How Program is Financed. One hundred percent state financed.

How to Apply. Application not necessary; refunds are made automatically.

Contact. Department of Revenue
Administrative Services Division
State of Alaska
Pouch SA
Juneau, AK 99811

(Field Offices - for information only)
675 Seventh Avenue, Fairbanks, AK 99701
103 State Office Building, Ketchikan, AK 99901
201 East Ninth, Anchorage, AK 99501

National Forest Receipts Shared Revenue

Nature and Purpose of Program. Provides for the distribution of National Forest Receipts to boroughs and unified governments based upon the area of national forest located within the borough or unified government.

Who May Apply. Boroughs and unified governments which include National Forest acreage.

Authorized Legislation. AS 41.15.180.

Administrative Agency. Department of Community and Regional Affairs.

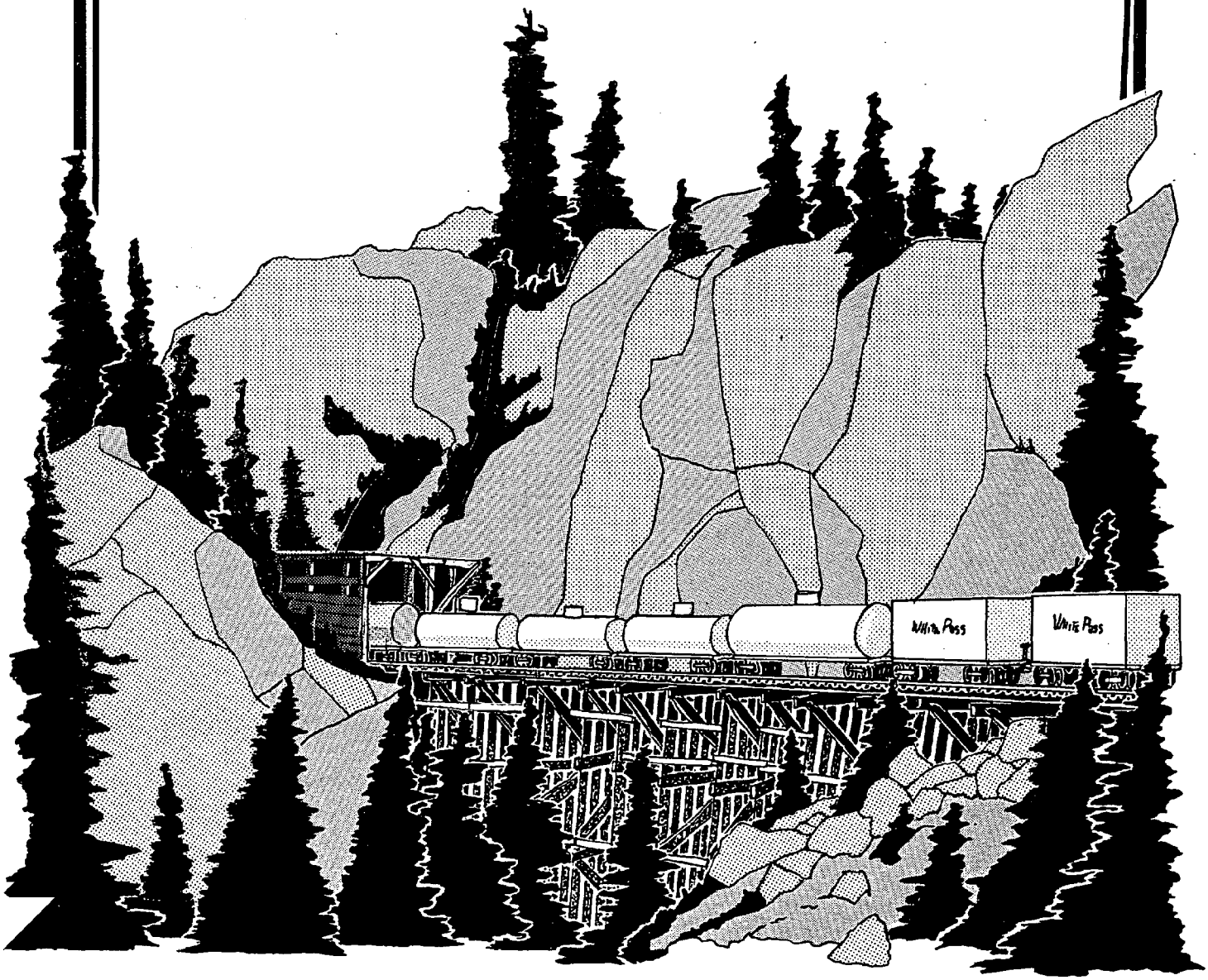
Type of Assistance. Financial.

How Program is Financed. One hundred percent federal receipts which are redistributed by the state proportional to the area of the national forest located within the borough or the unified government boundaries. The fund shall be used for public schools or roads.

How to Apply. Annual payment is automatically made to qualified boroughs or unified governments.

Contact. Commissioner
Department of Community and Regional Affairs
Pouch B
Juneau, AK 99811

CODE AMENDMENTS



TITLE 18 - BUILDING REGULATIONS
CHAPTER 50

The following recommendations to the city code are given to aid in the implementation of the management plan. They will be formally adopted by ordinance, subject to possible revision, after approval of the coastal management program by the Alaska Coastal Policy Council.

Sec. 18.50.010 - Definitions

As used in this chapter, the following terms shall have the meaning indicated below:

Add: Temporary Structure - Any structure or mobile building which does not meet Uniform Building Code, Plumbing Code and National Electric Code requirements for a permanent structure.

Add: Sec. 18.50.020 - Mobile Homes and Temporary Structures Located Outside Mobile Home Park District

No mobile home or temporary structure may be located outside a mobile home park district unless such mobile home was in place prior to the enactment of this ordinance. A temporary occupancy permit may be issued by the city council not to exceed one year, provided the applicant shows cause. Cause is a verified shortage of the type of space within permanent structures necessary to carry out the intended functions. The council may grant up to a one year extension. The applicant will be required to post a bond in the amount of the estimated cost of removing the temporary structure at the end of the permit period.

Delete: Sec. 18.50.020 - Locations South of 15th Avenue

No mobile home or mobile homes may be located or positioned south of 15th Avenue, Skagway, Alaska. Exception: any existing mobile home located south of 15th Avenue may remain so long as such mobile home continues to be owned, expressly, constructively or otherwise, by the person possessing said mobile home at the date of the enactment of this provision and so long as such mobile home complies with other applicable ordinances, regulations and statutes.

Delete: Sec. 18.50.040 - Exemptions

Mobile homes shall be exempt from compliance with any of the provisions of this chapter in the following situations: (a) Storage. A mobile home not in use for residential or commercial purposes may be stored or parked in a restricted residential, general residential or multiple residential zone only if such mobile home is not connected to any utility service, is

located to the rear of the principal dwelling on the lot, parcel or tract where such mobile home is stored, and is stored in a garage or behind a solid fence or plantings of sufficient height to shield such mobile home from view of the adjoining property. Not more than one such mobile home may be parked on any such residential lot, parcel or tract.

Add: Sec. 18.50.040(b) Construction Functions. Construction firms may use a mobile home for a temporary office and/or living quarters provided the same is connected with utilities at the work site during the period of construction and provided a temporary use permit is granted by the building official for a period not to exceed six months.

TITLE 95 ZONING

Chapter - Section
10. Zoning Ordinances
Add: New Districts
95.10.052 Mobile Home/Camper Parks Zone - MH
95.10.092 Waterfront Industrial Zone - WI
95.10.094 Light Industrial and Commercial Zone - IC
95.10.096 Waterfront Public Use Zone - WPU
95.10.098 Light Industrial Zone - LI
95.10.112 Supplementary District Regulations

Section 95.10.020 - Use Districts and Map

A. Districts - The City of Skagway is hereby divided into the following use districts:

New Districts

Add:	95.10.052	Mobile Home/Camper Parks Zone - MH
Add:	95.10.092	Waterfront Industrial Zone - WI
Add:	95.10.094	Light Industrial and Commercial Zone - IC
Add:	95.10.096	Public Use Zone - PU
Add:	95.10.098	Light Industrial Zone - LI

Sec. 95.10.030 Conservation-Residential Zone - CR

Add: INTENT: The intent of the CR district is to apply to those rural lands not requiring normal city service and utilities.

Sec. 95.10.040 Single-Family Residential - RS

Add: INTENT: The intent of the RS zone is to provide a low density residential atmosphere served by a full range of city services and utilities, including sewer, water, and fire and police protection.

A. Uses Permitted
Three uses permitted by exception.

Delete: e. trailer courts - 1 through 6.

Sec. 95.10.050 Multiple Family Residential - RM

Add: INTENT: The intent of the RM district is to provide locations close to commercial and employment areas where a more intense use of residential property is permitted. It is also intended that the RM district be located to maximize proximity to public facilities - police, fire, library, school and parks - and also be directly accessible to major streets and not be located so as to overload sewer and water collection and distribution systems or cause traffic increase in low density residential areas.

C. Minimum Lot Requirements
Delete: 1. lot width - 50 feet
Add: a. one and two family dwelling - 50 feet
b. three to six units - add 10 feet per unit
c. six or more units - 90 feet

Add: G. Minimum Yard Space
1. Twenty percent of the foot area must be in some type of natural vegative cover not permitted for parking or storage of motor vehicles.

Add: H. Buffer Requirement
1. When an apartment unit of four or more units is constructed adjacent to a single family use a ten foot wide screen buffer is required unless property is in same ownership

Add: **Sec. 95.10.052 Mobile Home/Camper Park - MH**

INTENT: The provisions of the MH district are intended to apply to areas wherein mobile home spaces are provided within a managed mobile home park that is constructed according to minimum standards and guided by a carefully drawn plan of development. The standards, restrictions and procedures required herein are designed to assure that mobile home parks will provide an adequate residential environment. It is further intended that camper trailer parks be constructed according to the provisions of this district.

A. Uses Permitted
   1. Principal Uses
      a. mobile homes
      b. administration buildings, customary laundry and service buildings
      c. community centers and recreation facilities intended to serve residents of the mobile home park
   2. Accessory Uses
      a. customary accessory uses and structures clearly incidental to one or more permitted uses and structures
   3. Uses Permitted by Exception
      a. convenience commercial uses as accessory to a mobile home park limited to:
         (1) dry goods
         (2) food and grocery or drug stores
         (3) laundromat, laundry and dry cleaning pick-up stations
         (4) hardware or garden supply store
         (5) newsstand or book store
      b. commercial uses as permitted by exception in "a" require that:
         (1) such uses shall not occupy over five percent of the area of the mobile home park
         (2) the mobile home park shall contain a total area of at least twenty acres or more
         (3) public access to such uses shall be limited access from an internal park street
      c. recreation vehicles and camper space rentals are permitted at a density of twelve spaces per acre, provided other provisions of this section are met as specified.
         (1) a sewage dumping station connected to a sewer system approved by the Alaska Department of Environmental Conservation (ADEC) is provided
         (2) a water supply approved by DEC for public use is provided at a central location for RV and camper use
         (3) public restroom and shower facilities are provided at a rate of one set of facilities per twenty-five camper spaces and such facilities are connected to an approved sewage system
         (4) that all the open space and recreation space requirements for a mobile home park are met
         (5) one-way streets will be permitted, provided such are adequately marked and designed for one-way traffic flow - minimum traffic-way width for one-way twelve feet, right-of-way twenty feet
         (6) a camper trailer park may be part of an overall mobile home park application, but the camper park must be a separate design element on a minimum three-acre parcel

B. Uses Prohibited - All uses except those permitted within the MH zoning district or any use of and/or structure not of a character indicated under permitted principal and accessory uses or permitted by exception.

C. Minimum Lot Requirements
1. lot area mobile home - 4,000 sq. ft.
   lot area camper - 2,500 sq. ft.
2. lot width mobile home - 40 ft.
   lot width camper - 25 ft.
3. lot depth mobile home - 80 ft.
   lot depth camper - 50 ft.
4. density per acre mobile home - 8 units
   density per acre camper - 12 units

D. Minimum Yard Requirements
1. front - 10 ft. - all mobile homes must be
2. side - 10 ft. - seperated by 30 ft. if not within
3. rear - 10 ft. - 300 ft. of city fire hydrant
4. exterior boundary of park - 25 ft.

E. Maximum Height of Buildings
1. Two stories, not to exceed 25 ft.

F. Special Requirements for MH Mobile Home/Camper Park Districts
1. Site Plan. A building permit for a mobile home/camper park shall be issued only after review and approval of a site plan by the planning commission. To aid in the planning commission's recommendation, a scaled and dimensioned site plan and topographic map of the development, prepared by a qualified engineer, land surveyor, architect or community planner, shall be submitted. The site plan shall show, but shall not be limited to:
   a. proposed standards for development, including restrictions of the use of the property, density standards and park regulations
   b. location of buildings and mobile homes in relation to property and lot lines
   c. location of off-street parking spaces and bays, internal circulation ways, ingress and egress points for the site
   d. public and semi-public open spaces, community facilities and landscaped areas, walls, patio and service areas (including garbage disposal and snow removal areas), driveways and walkways, as well as provision for maintenance of all common areas
   e. plans for the provision of utilities, including water, sewer and drainage facilities and including also any provision for connection with public utilities
   f. plans for protection of abutting properties

   If, after certification of the plan, any change therein is desired, application shall be filed with the planning commission to modify or change the plan.

2. Required Recreational Area. The following amounts of land shall be designated and developed for recreational purposes within each mobile home park site:
   a. 30-100 spaces - four hundred square feet for each mobile home or camper space
   b. over 100 - two hundred square feet for each additional mobile home or camper space
   c. there shall be at least one recreational area in each park not less than ten thousand square feet in area, excluding steep slopes, water surface or periodically flooded or inundated land. Water surface or periodically flooded or inundated land which is usable and maintained for recreation purpose may be used for a maximum of one-fourth of the required recreation area in excess of ten thousand square feet. In addition, each two square feet of water surface or area of periodically flooded or inundated land shall be considered as only one square foot of land for purposes of fulfilling this requirement
3. Required Buffers. A ten foot green area is required adjacent to a public street and shall be attractive and maintained at all times. This required buffer may be included within a required setback
4. Required Internal Street Improvements. All lots or spaces within a mobile home park shall have direct and uninterrupted access restricted to mobile home park streets; such streets shall have direct access to a public right-of-way. Installation of all internal streets, easements and other improvements to the mobile home park development shall be in conformance with the following:
   (a) dedication of streets and easements within the boundaries of a mobile home park are not required
   (b) mobile park streets shall have a minimum of two feet of gravel for all street improvements
   (c) streets in mobile home parks shall be constructed to meet the following standards:
      (1) major streets - thirty feet of right-of-way and twenty-four feet of drivable road surface
      (2) minor streets - twenty-four feet of right-of-way and twenty feet of drivable road surface
      (3) dead end streets - limited to five hundred feet in length and shall provide a terminal with a right-of-way diameter of not less than seventy feet and surface diameter of not less than sixty feet
5. Required Lot Frontage. Each mobile home park lot must have a minimum of fifteen feet of frontage on a mobile home part street on on a common off-street parking facility or access aisle thereto.

Sec. 95.10.054 Mixed Use Zone - MU

Intent: The provisions of the MU district are intended to apply to those areas which will be subject to a variety of types of urban development in the foreseeable future and are accessible to community water and/or sewer facilities and are directly accessible to major transportation routes (i.e., upper Skagway valley). It is further intended that specific design requirements and review procedures be complied with to avoid adverse impacts on adjoining properties due to the diverse nature of the land uses permitted within this zoning district. Proposed uses shall be subject to the same policies and standards outlined in 95.10.112 to ensure adequate use separation and compatibility. In addition, the zoning district standards applicable to the proposed use shall apply as minimum standards.

Industrial Uses and Temporary Uses

Noxious uses, primarily those uses permitted in industrial zone I, are not permitted except by exception granted as part of permit approval after public hearing by the governing body. Temporary use of property for pipeline and energy related purposes such as staging areas for transshipment activities or construction camps, etc., will also be permitted on a temporary basis with an annual permit review by the planning commission.

Administrative Procedure: Except for single family homes, all applications within the multi-use zone shall be processed as significant projects receiving planning commission review and approval.

Site Plan: Proposals receiving planning commission review shall be required to submit a site plan. The site plan shall become part of said application and be binding upon the applicant. Minimum requirements for submission of a site plan for review shall be drawn to an appropriate engineer's scale showing:

(a) The boundary of the site, topography and physical conditions such as water bodies, vegetative cover and steep grades;
(b) The use and the approximate size, location and height of all proposed buildings and other structures;
(c) Off street parking and loading plans, including circulation plans for vehicular/pedestrian movement;
(d) Approximate location and size of open spaces, landscaped areas and buffers for the screening of adjoining properties, highways, waterfront, etc.;
(e) Approximate location and width of all utility easements or rights-of-way;
(f) Clearing and grading plan, indicating vegetation and soil to be retained, removed or relocated, along with a proposal for filling any water and/or wetland, where permitted;
(g) Total acreage of the site and the calculated density for the project, including number of dwelling units for residential use by type and square footage of gross floor area for industrial and commercial development;

(h) Optional:
  (1) drawings indicating the general architectural themes, appearance and representative building types;
  (2) definitive covenants, grants, easements, dedications and restrictions to be imposed on land buildings and structures;

(i) The planning commission shall have the authority to require design features such as fences, screens, setbacks, buffers, roadway and access improvements and other development restrictions which they determine would be in the best interest of surrounding property owners, public safety, welfare and community character.

Permit Approval: Public hearing on the submittal shall be scheduled upon application for permit review, not more than forty-five days from date of acceptance by the manager. The state and federal review agencies shall have twenty days to respond in writing upon receipt of a permit package from the manager. It shall be the prerogative of the manager to determine which review agencies will participate in the review process.

Sec. 95.10.060 Neighborhood Business Zone

Add:INTENT: The intent of the district is to provide convenient commercial goods and services adjacent to or within residential areas, provided the location of such activity does not add traffic congestion to minor residential streets or detract from adjoining residential use.

C. Minimum Lot Requirement
  Delete: 1. Lot Area - 2500 sq. ft.
  Delete: 2. Lot Width - 25 ft.
  Add: 1. Lot Area - 10,000 sq. ft.
  Add: 2. Lot Width - 100 ft.

Add:G. Buffer Requirement
  1. When adjoining a residential use or residential zoning district, a ten foot vegetative buffer screen is required unless property is in the same ownership.

Sec. 95.10.070 General Business Zones - BG

INTENT: The intent of this district is to provide the use structure for the commercial activity which serves the economic convenience of the city. The district is further intended to be located adjacent to the historic district to help provide the commercial core for auto-oriented businesses but not compete with the redevelopment objectives of the historic district.

G. Buffer Requirement
  1. When adjoining a residential use or residential zoning district, a ten foot vegetative buffer screen is required unless property is in the same ownership.

Sec. 95.10.080 Skagway Historic Zone - BH

Add: INTENT: The intent of this district is to protect and enhance the historic heritage and character of Skagway. It is further the intent of this district to provide the economic flexibility necessary to restore the historic structures so important to the community economic base.

Sec. 95.10.090 Industrial Zone - I

Add: INTENT: The intent of the industrial district is to provide a location where heavy industrial and outside storage activities can be located without providing a hazard or visual detriment to the city.

G. Buffer Requirement
When adjoining a residential use or residential zoning district, a ten foot vegetative buffer screen is required.

Sec. 95.10.092 Waterfront Industrial Zone

INTENT: The intent of this zone is to provide for water-dependent and water-related heavy industrial and transportation-related uses.

A. Uses Permitted
1. Water dependent industrial use

B. Uses Permitted by Exception
1. Water related industrial uses
2. Uses that are not water dependent or related for which there is no feasible inland alternative to meet the public need for the use or activity

C. Uses Prohibited
1. Residential use - including temporary residential use
2. Junk yards
3. Advertising signs
4. All uses that may be noxious or injurious by reason of the production or emission of dust, smoke, refuse, odor, gas, fumes, noise, vibration or similar substances or conditions
5. Nonwater-dependent or -related uses of any nature

D. Minimum Lot Requirements
1. Lot area - 5,000 square feet
2. Lot width - 50 feet

E. Setbacks - structures that do not require a water edge location shall be setback fifty feet from the ordinary high water mark (OHWM) unless exempted by city council action

F. Height Limit of thirty-five feet shall be reviewed so as not to obstruct use of this waterfront

G. Buffers
   1. Buffers shall be established between industrial uses and adjacent nonindustrial uses
   2. Buffers shall be established between industrial areas and major public transportation routes.
   3. Buffers shall be of adequate width, plant and soil composition as reasonably determined by the city to effectively protect shorelines and adjacent properties from visual and noise intrusion which would otherwise occur.
   4. Buffers shall not be used for storage of industrial equipment or materials or for waste disposal.

Sec. 95.10.094 Light Industrial and Commercial - IC

A. Uses Permitted
   1. Principal Uses - water dependent or related light industrial or commercial use
   2. Accessory Uses - uses or structures customarily accessory and clearly subordinate to permitted principal uses, as determined by the planning commission
   3. Uses Permitted by Exception
      a. uses that are not water dependent or related for which there is no feasible and prudent inland alternative to meet the public need for the use or activity
      b. dwelling units on the same premises with permitted principal uses for occupancy by the owner thereof
      c. uses deemed to be similar or the same as permitted uses for this zone

B. Uses Prohibited
   1. Any use or structure not of a character indicated under permitted principal and accessory uses or permitted by exception
   2. All uses that may be noxious or injurious by reason of the production or emission of dust, smoke, refuse, odor, gas, fumes, noise, vibration or similar substances or conditions
   3. Mobile homes
   4. Outdoor advertising signs except as allowed by other portions of this ordinance

C. Minimum Lot Requirements
   1. Lot area - 2,500 square feet
   2. Lot width - 25 feet

D. Minimum Yard Requirements - as for BN

E. Maximum Height of Buildings - two stories not to exceed twenty-five feet.

Sec. 95.10.096 Public Use Zone - PU

INTENT: The intent of this zone is to provide for the development and operation of recreational facilities without encroachment from incompatible uses.

A. Uses Permitted
   1. Principal uses
      a. fishery enhancement
      b. sportfishing
      c. parks
      d. interpretive facilities
   2. Accessory Uses
      a. uses accessory to the function of the park or fishery enhancement program, including parking areas, fish cleaning area, restrooms

B. Uses Prohibited
   1. Residential use
   2. Industrial use
   3. Swimming during fishing season
   4. Any use or structure not of a character indicated under permitted principal and accessory uses or permitted by exception

C. Setbacks - structures shall be located one hundred feet upland from the ordinary high water mark (OHWM). This does not apply to water dependent uses.

D. Maximum Height of Buildings - one story not to exceed twenty feet

Sec. 95.10.098 Light Industrial - LI

INTENT: The intent of this zone is to provide for light industrial development that is compatible with adjoining property.

A. Uses Permitted
   1. Principal Uses
      a. uses integral to the function of the airport
      b. light manufacturing
      c. storage consistent with FAA regulations
      d. maintenance facilities
      e. transportation services
   2. Accessory Uses
      a. passenger terminal
      b. uses and structures customarily accessory and clearly subordinate to principle uses
   3. Uses Permitted by Exception
      a. other uses deemed to be similar or the same as permitted uses for this zone as determined by the planning department

B. Uses Prohibited
   1. Residential use
   2. Any use or structure not of a character indicated under permitted principal and accessory uses or permitted by exception
   3. Heavy industrial use
   4. Uses that interfere with the safe functioning of the airport

C. Minimum Lot Requirement
   1. Lot area - 2,500 square feet
   2. Lot width - 25 feet

D. Maximum Height of Buildings
   1. Height limits must be consistent with FAA regulations where applicable
   2. In areas not covered by FAA regulations, structures shall not exceed thirty feet in height

E. Performance Requirements
   1. Storage and waste disposal
      a. no highly flammable or explosive liquids, solids or gases shall be stored in bulk above ground, except tanks or drums of fuel connected directly with energy devices or heating applicances located and operated on the same lot as the tanks or drums of fuel
      b. all outdoor storage facilities for fuel, raw materials and products and all fuel, raw materials and products stored outdoors shall be enclosed by an approved safety fence
      c. no material or wastes shall be deposited upon a lot in such a form or manner that they may be transported off the lot by natural causes or forces, nor shall any substance which can contaminate a stream or watercourse or otherwise render such stream or watercourse undesirable as a source of water supply or recreation or which will destroy aquatic life, be allowed to enter any stream or watercourse
      d. all materials or wastes which might cause fumes or dust or which constitute a fire hazard or which may be edible or otherwise attractive to rodents or insects shall be stored outdoors only if enclosed in containers adequate to eliminate such hazards
      e. all outdoor storage facilities for fuel, raw materials, products, waste or similar material shall be shielded from view of the public highways and any residential or recreational use
   2. Smoke - state standards are used
   3. Dust, fumes, vapors and gases - state standards are used
   4. Heat - no use shall produce heat perceptible beyond its lot lines.

5. Odor - no use other than agricultural shall emit odorous gases or other odorous matter in such quantities as to be offensive at any point on or beyond its lot lines.
6. Glare - no use shall produce a strong, dazzling light or a reflection of a strong, dazzling light beyond its lot lines. In general, lighting fixtures that shield the reflector or lens or any high brightness surface from viewing angle above sixty degrees from horizontal shall be utilized.
7. Noise - The sound level of any operation (other than the operation of motor vehicles or other transportation facilities, operations involved in the construction or demolition of structures, emergency alarm signals to time signals) shall not exceed the decibel levels in the designated octave bands as stated below. Sound pressure levels shall be measured at the property line upon which the emission occurs. The maximum permissible sound pressure levels for smooth and continuous noise shall be as follows. (All of the decibel levels stated below shall apply in each case.)

Frequency Band (Cycles per Second)	Maximum Permitted Sound-Pressure Level (Decibels)
0 - 150	67
150 - 300	59
300 - 600	52
600 - 1200	46
1200 - 2400	40
2400 - 4800	34
Above 4800	32

If the noise is not smooth and continuous or is radiated during sleeping hours, one or more of the corrections below shall be added to or subtracted from each of the decibel levels given above.

Type of Operation or Character of Noise	Corrections in Decibels
Noise occurs between the hours of 10:00 p.m. and 7:00 a.m.	-3
Noise occurs less than five percent of any one-hour period	+5
Noise is of periodic character (hum, scream, etc.) or is of impulsive character (hammering, etc.). (In the case of impulsive noise, the correction shall apply only to the average pressure during an impulse and impulse peaks shall not exceed the basic standards given above.)	-5

8. Vibrations - no use shall cause earth vibrations or concussions detectable beyond its lot lines without the aid of instruments, with the exception of vibration produced as a result of transportation or construction activity.

Sec. 95.10.100 Definitions

Add: Buffer (visual screen) - A parcel of land at least ten feet in width consisting of natural vegetative materials of an evergreen variety which effectively screens from sight noncompatible land uses. Fences are permitted as part of a visual screen; however, they must consist of natural material and be of adequate height (six feet) to shield incompatible land use from view. Corrugated metal, chain link with metal or plastic strips or like fencing materials are examples of prohibited fencing materials.

Add: Camper Park - A parcel of land three acres or more designed, constructed, equipped, operated, managed and maintained for the purpose of providing space for vehicles and tent camping on a temporary basis.

Add: Camping Vehicle or Trailer - A vehicle designed to be used for camping and temporary housing not over eight feet wide which can be transported over normal highways.

Add: Mobile Home - A detached dwelling unit intended for occupancy by a single family suitable for year-round occupancy which is equipped with wheels or has provisions for attachment with wheels and arrives at the site complete and ready for occupancy except for minor and incidental unpacking, assembly and connections.

Add: Mobile Home Park - A parcel of land three acres or more designed, constructed, equipped, managed and maintained for the purpose of providing spaces for rent or lease of mobile homes or for sale within a managed condominium arrangement.

Delete: Trailer Camp, Park or Lot - Any area or premises where space for two or more trailers or mobile homes may be rented or otherwise obtained for occupancy or camping, but not including automobile or trailer sales lots on which unoccupied house trailers are parked for inspection and sales. See in particular Chapter 50, Title 18, Section 18.50.010 for definitions relating to mobile homes.

Delete: Trailers - Shall include trailers, trailer coaches, house cars, railroad cars for home occupation and pickup campers. It shall be synonymous with mobile home as defined in Section 18.50.010.

Add: Water-Dependent Use - A use or activity which can be carried out only on, in or adjacent to water areas because the use requires access to the waterbody.

Add: Water-Related Use - A use or activity which is not directly dependent upon access to a water body, but which provides goods or services that are directly associated with water-dependence and which, if not located adjacent to the water, would result in a public loss of quality in the goods or services offered. Water-related uses include industrial uses such as fish processing and storage facilities, warehouse facilities, port stores, marine services and other facilities which must be located within easy walking distance or loading/unloading distance of the docks.

Sec. 95.10.11 General Provisions and Exceptions

Delete: G. Trailers
1. No trailers shall be used, erected or otherwise placed in any district unless it is in a permitted trailer court, approved by the planning commission.

Add: G. Mobile Homes
1. No mobile home shall be used, erected or otherwise placed in any district unless it is in a permitted mobile home park or zoning district permitting such use.

Add: Permit Review Procedure/Water Dependent and Related Use - All water-dependent and water-related uses subject to the state standard and local policies and standards of Section 95, with the exception of single family residential, shall require review and recommendation by the manager, and appropriate state and federal review agencies, with final authorization by the planning commission at a scheduled public hearing. The applicant shall be required to submit plans and data which:

- show compliance with the policies and standards
- are reproductive and available in an amount determined by the manager upon submission
- show the site plan (requirements same as multiple use zone)

Permit Approval: Public hearing on the submittal shall be scheduled upon application for permit review, not to exceed more than forty-five days from date of acceptance by the manager. The state and federal review agencies shall have twenty days to respond in writing upon receipt of a permit package from the manager. It shall be the prerogative of the manager to determine which review agencies will participate in the review process.

Add: **95.10.112 Coastal Management Policies and Standards for Uses and Activities**

INTENT: The policies and standards of the Skagway Coastal Management Program are intended to augment the district requirements of this zoning ordinance and are designed to require that the minimum standards outlined are met in the development approval process. The applicability of the standard is either dependent upon the type of proposed use in some cases and are uniformly applicable in others such as minimum standards for hazardous lands. It is further intended that no building permit be granted or use of permitted until the city building official determines the proposal is in compliance with this section. (The policies and standards are those listed in Chapter II.)

Sec. 95.10.150 Off-Street Parking Area Regulations

A. Off-Street Parking
Buildings other than dwellings:

Delete: (7) trailer park - one private parking space for each trailer space

Add: (7) mobile home - two parking spaces for each mobile home

B. General Conditions

Add: (7) uses in the BH Skagway historic district are exempt from parking requirements, provided however that new structures provide off street loading and unloading areas accessible from streets and alleys other than Broadway

Add: (8) an off street parking space shall have the minimum dimensions of nine feet in width by eighteen feet in length

Add: (9) entrance and exits - each parking space shall be directly accessible from a street, alley or other public right-of-way or from an adequate access aisle or driveway leading to or from a street, alley or other public right-of-way. Except for one or two-family dwellings, all off street parking facilities shall be so arranged that no automobile shall have to back into any street. All entrance and exit driveways shall not be permitted closer than twenty-five feet from a street intersection.

Add: (10) aisle widths - all off-street parking areas providing four or more parking spaces shall be constructed with aisle widths with the following minimum dimensions, based upon the angle of the parking stall to the access aisle:

Parking Stall Angle	Aisle Width
30 degrees	11 feet
45 degrees	13 feet
50 degrees	14.5 feet
55 degrees	16 feet
60 degrees	17.5 feet
90 degrees	22 feet

Aisles shall be twenty feet in width when not designed to serve a particular parking configuration
or when designed to serve parallel parking.

Delete: **Chapter 60 Mobile Homes**

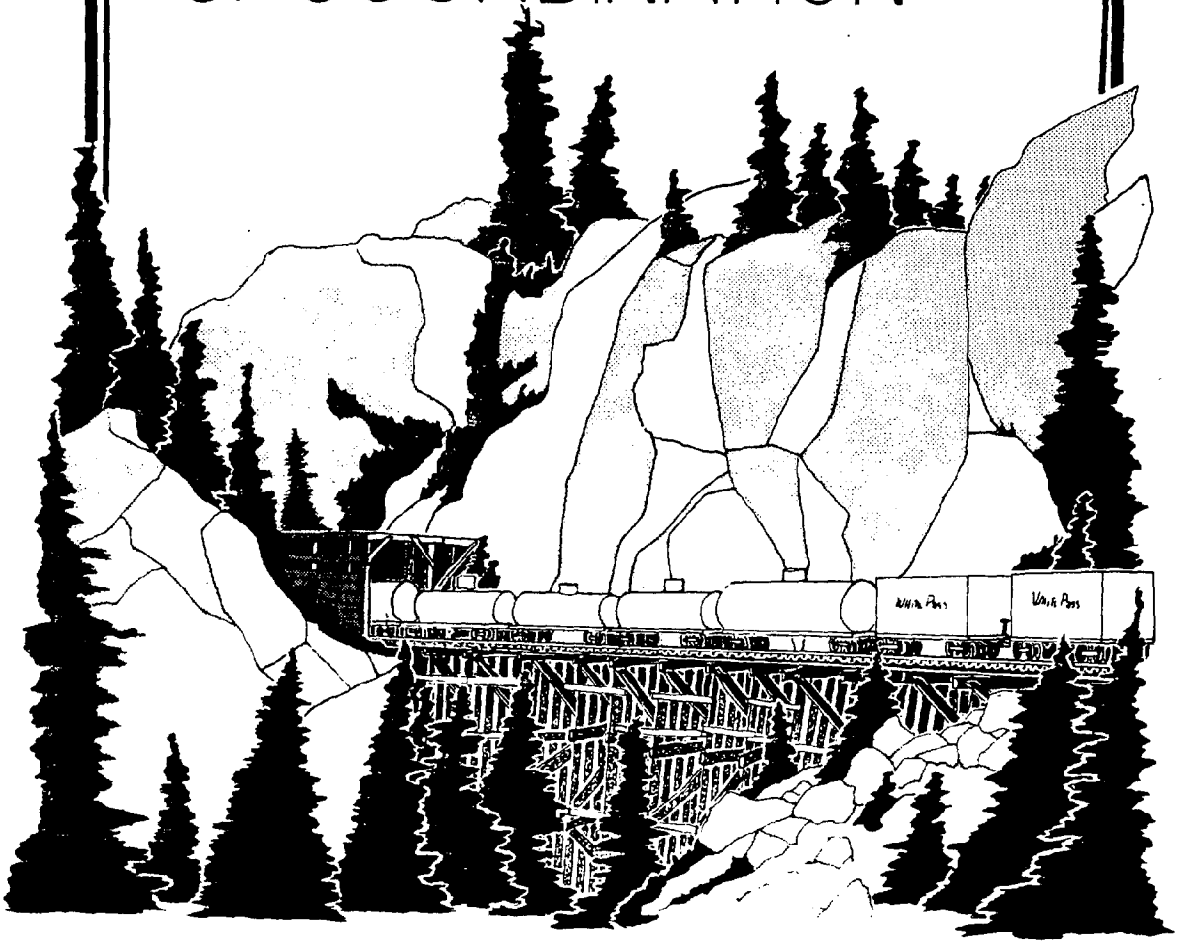
Delete: **Sec. 95.60.010 Definitions**

Delete: **Sec. 95.60.020 Locations Prohibited**

Delete: **Sec. 95.60.030 Other Locations South of 15th Avenue**

Add: **Chapter 60 Nonconforming Uses and Structures**

MUNICIPAL ORGANIZATION ADMINISTRATION & COORDINATION



The coastal management act requires that each district program include a description of the district program organization for coastal management. Budgetary and staff needs and, where appropriate, a schedule for necessary reorganization must be included.

EXISTING CITY ORGANIZATION

The City of Skagway is a first class city which exercises planning and zoning authority within its municipal limits. The form of government is a council/manager arrangement (Figure 3-1).

The mayor is chief presiding officer at all council meetings, is an ex-officio councilman and has all the rights and duties of a councilman except that he may not vote except in case of a tie. The mayor has no regular administrative duties except that he signs resolutions that the council may require.

The city manager is the chief administrative officer of the city. He is responsible to the council for all city affairs, including:

- the appointment and removal of all city personnel
- the administration of all departments responsible for enforcement of the city's ordinances and civil laws
- advising the council as to future needs of the city
- performing other duties as specified by ordinance or required by the council

The city manager serves at the pleasure of the city council and may be dismissed at any time, subject to the terms and conditions of his contract.

The city council is the chief legislative body of the city and its authority generally consists of ordinance-making authority for the overall city. The council responsibility also includes allocation of the operating capital for all improvements and budgets for the city, including authorization of expenditures for public monies. The council also provides the direction to the city manager in the handling of city affairs. The council has six committees, which are each headed by a councilman and assisted by two other councilmen. These committees are finance, public safety, public works, health and welfare, civic affairs, and parks and recreation. These are internal working committees of the council and are also utilized in advising the manager on administrative direction. There are also five appointed advisory committees to the council. These are the port authority, the planning commission (the city council sits as the planning commission and has assumed all powers and duties), the museum board, the council on tourism and the overall economic development committee. Under the direction of the manager, there are four operating departments and consulting services. The manager presently utilizes, on a consulting basis, a city attorney, an

assessor, an appraiser, an engineer and a surveyor. Planning is also conducted on a consulting basis during the development of this program. The line operations under the manager are police, fire and emergency medical, public works, city clerk, treasurer and harbor master.

Police

The police department presently consists of a chief and two officers. They operate a complete communications system and are involved in maintaining public safety and welfare, and animal control. The police department is responsible for the enforcement of city and state civil and criminal law enforcement matters.

Fire/Emergency Medical

The fire and emergency medical departments are staffed by a volunteer chief and twenty-six other volunteers. The department has six pieces of mechanical equipment.

Public Works

The public works department consists of a crew of four individuals, including a crew operator, mechanic, plumber and a garbage collector and sewage treatment plant operator.

City Clerk/Treasurer

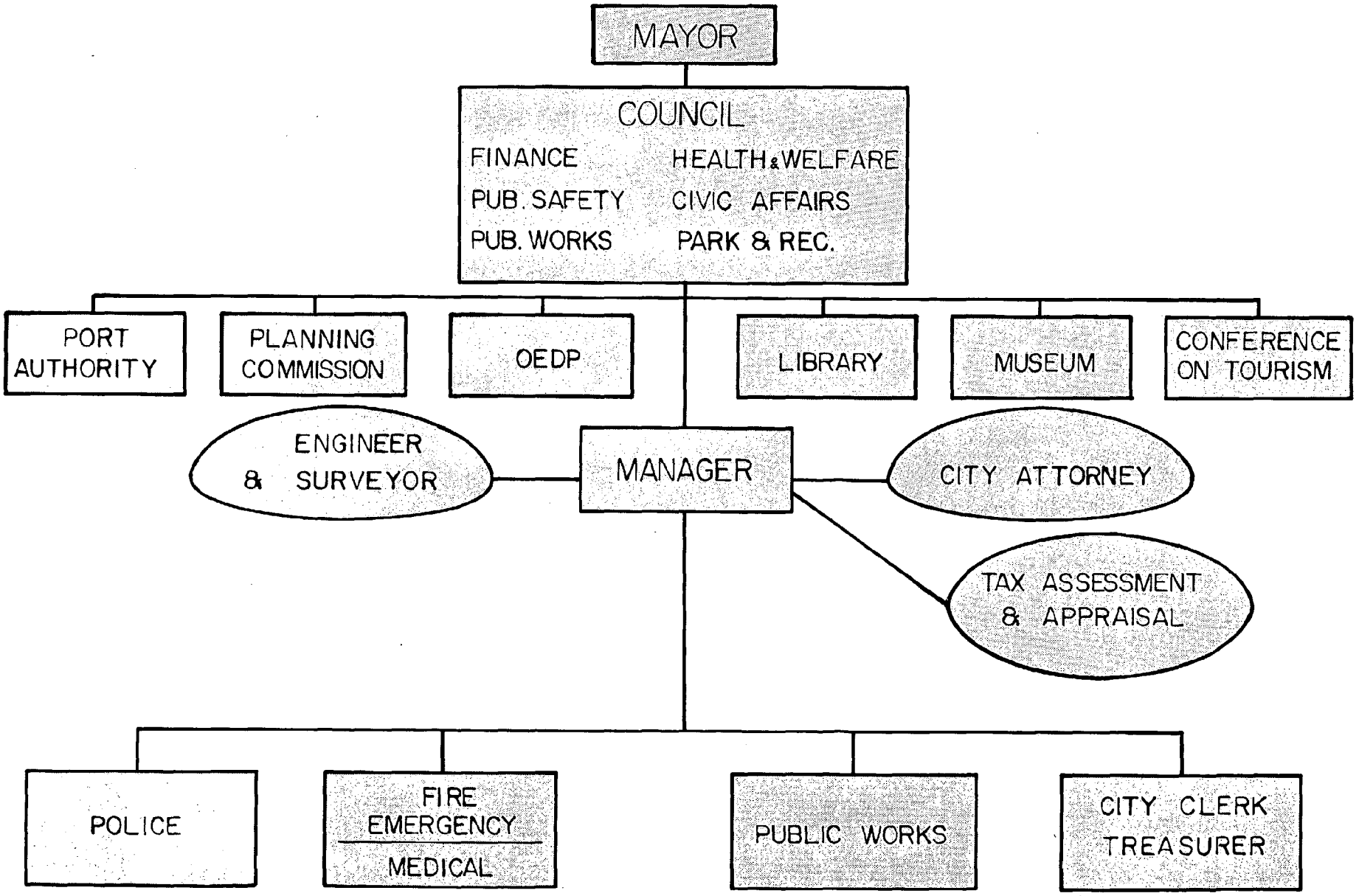
Two full time employees and one part time employee handle the duties of city clerk and treasurer. Their responsibilities include clerical assistance for the city manager, keeping council minutes, ledgers and journals, and public contact.

Planning Commission

In Skagway, the city council performs all the administrative and advisory functions of a planning commission. The city manager has been charged with review of building permits and the administration and enforcement of zoning and subdivision regulations. Before the recent decision for the council and manager to assume planning and zoning responsibilities, an appointed planning commission was charged with the responsibility of administering Title 95.

CITY OF SKAGWAY ORGANIZATIONAL CHART

FIGURE 3-1



PROGRAM IMPLEMENTATION

The manager is the chief administrative officer, charged with carrying out the elements of this program. In Skagway, the city manager is responsible for those administrative functions which are associated with community development and economic growth, including transportation and port development, coastal management, building permit review and enforcement, planning commission administration, application and procurement of federal and state grants, research for overall economic development program, and carrying out the day-to-day functions of implementing the adopted coastal management and energy impact program.

The city council presently sits as the board of adjustment and planning commission and handles the review and authorization of exception variances and administrative appeals. They also review major projects for authorization as determined applicable by the manager or council. This determination of significant review has not yet been administratively determined, as the ordinances establishing these procedures was established in February 1980.

Subdivision

The planning commission (city council) is the subdivision review authority under Section 95.20.040. A preliminary plat is required to be submitted for review and approval by the council, which must act within sixty days or the plat is considered approved. Upon approval of a preliminary plat, the applicant must submit a final plat within six months for planning commission approval.

Permit Review/Project Approval/Appeals

Section 95.10.170 of the Skagway code, Approval by the Planning Commission, provides that certain buildings, structures and uses are subject to planning commission approval and that those subject projects be accompanied by plans and data required by the specific type of application requested. Such review and decision shall be accomplished within forty-five days of the application with the clerk. The manager has the review authority and is authorized to approve routine applications that are not at variance with the code. The present routing for permit application flows from the clerk to the fire chief to the manager for permit authorization. Building permits outlined in Section 95.10.180 follow the same administrative routing, but require action within thirty days. Review of permit requests within the historic district integrate park system review prior to issuance.

Permit Review Procedure/Water Dependent and Related Use

All water-dependent and water related uses subject to the state standard and local policies and standards of Section 95, with the ex-

ception of single family residential, shall require review and recommendation by the manager and appropriate state and federal review agencies, with final authorization by the planning commission at a scheduled public hearing. The applicant shall be required to submit plans and data that:

- show compliance with the policies and standards
- are reproductive and available in an amount determined by the manager upon submission
- include a site plan (requirements same as multiple use zone)

Permit Approval. Public hearing on the submittal shall be scheduled upon application for permit review not more than forty-five days from date of acceptance by the manager. The state and federal review agencies shall have twenty days to respond, in writing, upon receipt of a permit package from the manager. It shall be the prerogative of the manager to determine which review agencies will participate in the review process.

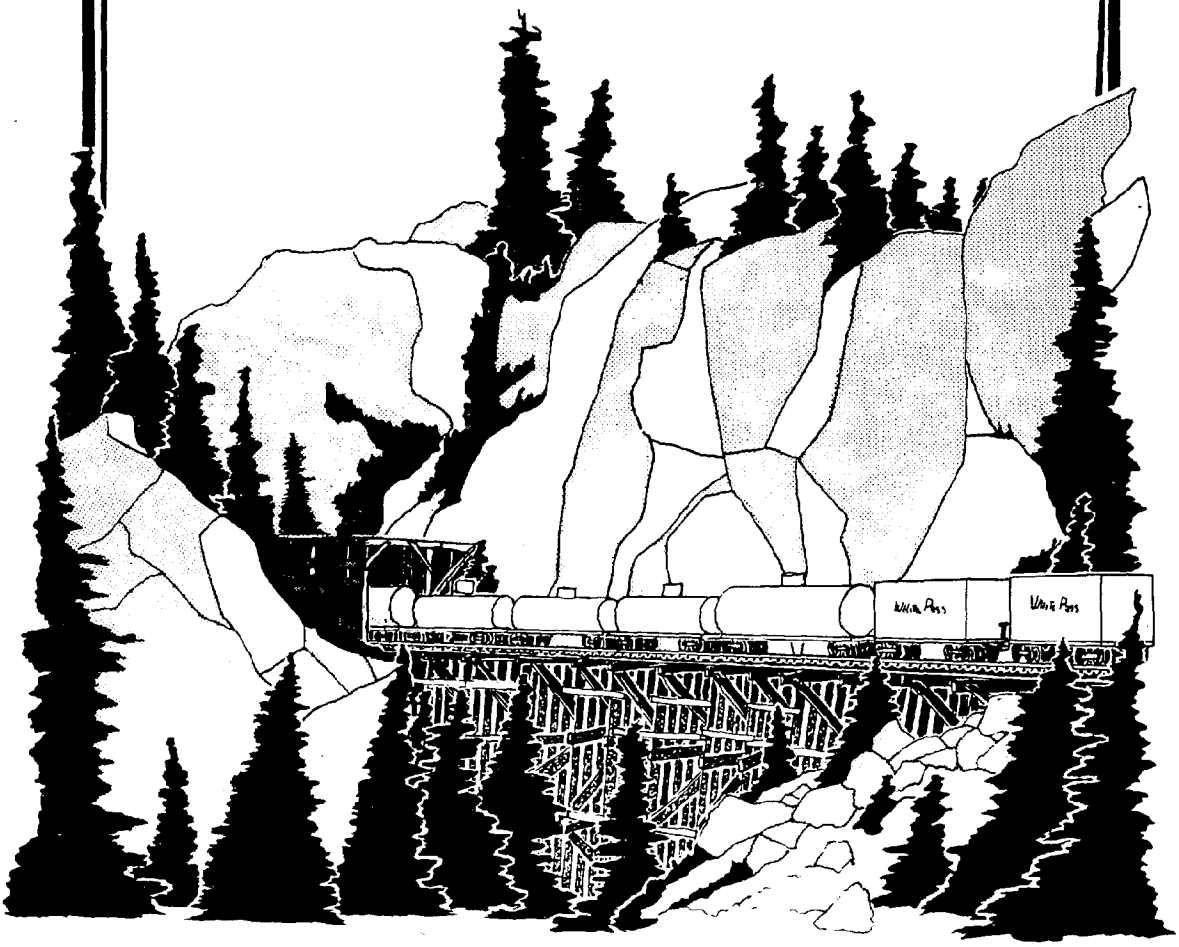
Project Assistance

Consulting services, including engineering, economic feasibility, marketing, legal, planning, architectural, surveying, etc., are designed to assist in actual program development and will be utilized on an as-needed basis chargable to the project. Internships are also a means of gaining assistance on an as-needed basis without adding personnel to the city payroll. Interns could be used to work on tourism-related functions as well as assist the manager in the more mundane tasks of grant research and writing.

Funding Sources

Title 306 monies (Coastal Management Implementation Funds) could be used for (personnel) costs, supplies, overhead equipment and feasibility studies. Also, Farmer Home Administration has funds for staff assistance. EDA may have some staffing funds because the city has an overall economic development plan. CETA also represents a potential source for personnel funding needs, along with the state aid programs for tourist attraction and development (see municipal funding plan).

APPENDICES



CITY OF SKAGWAY

GATEWAY TO THE GOLD RUSH OF "98"
P. O. BOX 415 SKAGWAY, ALASKA 99840

To: Citizens of Skagway

The City of Skagway is initiating a coastal management and community development program. This program effort will include a comprehensive land use plan and a program for municipal services, capital improvements and community finance. The purpose is to assist in formulating the direction of future community efforts.

The Skagway Community Planning Questionnaire was developed so that each resident of Skagway would have the opportunity to participate early in the planning process. This questionnaire will be used to help identify and prioritize community issues and directions. The results of the questionnaire will also aid the city and state in the directing of expenditures of public monies and future government actions.

This questionnaire is a major part of the public participation efforts which include local interviews, public meetings and workshops. Participation in planning for Skagway's future at this time is important because federal and state law require that local, state and federal government actions have to be consistent with our adopted plans and programs. Therefore, your efforts to produce a plan which reflects the concerns and desires of the residents of Skagway is essential.

Your careful consideration in answering this questionnaire will be greatly appreciated. We have placed two per P.O. box so that a two member household may express their views separately, however, please fill out only one questionnaire per person. Additional copies will be available at City Hall for anyone who may have been overlooked. Please return completed questionnaires to designated boxes at the post office or City Hall before December 7, 1979. The results of the questionnaire will be tabulated and presented on Monday, December 17 at 7:00 p.m. at our first community planning meeting, to be held in the multipurpose room at Skagway School. We will also explain the purpose of this planning effort, present the information gathered to date and discuss the issues and answer any questions you may have.

I hope to see you in attendance.

Yours truly,

Robert F. Messegee
Mayor

SKAGWAY COMMUNITY PLANNING QUESTIONNAIRE

DEMOGRAPHICS

(your name and address are not necessary)

Yes	No		Age (check one)					
84	2	City resident	13	Under 25	30	26 to 40		
74	10	Employed	28	41 to 10	3	Over 60		

Where Employed (if more than one, indicate primary occupation with "1" and secondary with "2")

23	Railroad or docks	14	Housewife	6	Sales & Service
14	Government	10	Self employed	7	Other
2	Retired	0	Student	5	Seasonally

ISSUES

The following questions are designed to sample your opinion concerning issues facing Skagway. You should check "yes" or "no" concerning your attitude as to whether governments (local, state and federal) should be involved in resolving the issue, which in many cases involves the expenditure of public monies. Remember, your city government will be directed by the results of this questionnaire, so please take the time to participate.

TOURISM AND RECREATION

Yes	No	
65	19	Development of state and federal campgrounds, recreational vehicle and camping spaces as a matter of priority.
65	19	Development of offstreet parking areas and regulations to accommodate both pedestrian and vehicular tourist traffic.
42	25	Accommodation of additional cruise ships by expansion of dock facilities.
35	28	Expansion of the museum in the present city hall building.
72	12	Promote the continued operation of the White Pass and Yukon Railroad in recognition of its unique economic role and historic value.
59	24	Development of a multi-use community, civic and convention center complex. 25 New Facility 25 Historical Building
57	22	Expansion of tourism industry into new areas and seasons, such as sport fisheries, winter recreation developments and conventions.

Yes	No	
73	11	Expand communication and coordination efforts between the city, National Park Service, White Pass & Yukon Railroad and tour companies.
53	31	Support state legislation to permit local option for legalized gambling to enhance the city economic base.

PORT DEVELOPMENT

Yes	No	
63	20	Provision for mooring dolphins and/or additional floats at the state ferry/city barge landing floating dock facility to ac commodate cruise ships.
67	16	Support arrangements which would allow multiple use of existing private industrial dock facilities to help accommodate tourist and recreational users.
58	25	Promote utilization and expansion of existing dock facilities and dockside staging areas for pipeline transshipment and related activities.
52	32	Study the potential for development of a new multiple use municipal dock facility west of the ore dock to accommodate heavy use such as pipeline transshipment and large cruise ships.

COMMUNITY PROGRAMS AND SERVICES

Yes	No	
72	12	A timely and common sense resolution of the sewage treatment facility conflict with EPA to provide realistic protection of the public and environment at a reasonable operation cost acceptable to the community.
60	24	Joint use by state district/magistrate court of the museum facility in the city hall building.
66	17	Expand the community education program, offering recreation and adult education programs and facilities for everyone.
60	24	Place additional funds into public safety, including fire protection, police and emergency medical services.
67	16	Expand educational/recreational programs and opportunities for school children.
64	20	Develop, review and revise ordinances such as traffic, parking, building, zoning, signs, etc., which enhance and enrich the development of historic and community value and character.

COMMUNITY FACILITIES

Yes	No	
79	5	Continued upgrading and expansion of sewage and water collection and distribution system which will reduce long-term operation and maintenance cost.
81	3	The upgrading of garbage collection equipment and economic resolution of solid waste disposal problem.
51	33	Pave additional streets in the residential areas.
54	28	Provision of storm sewers on Broadway and Main St. from 11th St. south.
33	47	Build new educational facilities, including classrooms, labs, etc.
50	34	Build new recreational facilities such as athletic fields, swimming pools and ski trails.
54	29	Airport improvements including navigation aids, runway expansion and terminal building.
73	7	Development of small-scale hydroelectric or wind-generated power plant to provide more economic primary source of electricity for the community.
48	28	Development of city offices and police as part of a community civic and convention center complex.

20 New Facility 11 Historical Building

OIL AND GAS PIPELINES

Yes	No	
63	21	Would you like to see major pipeline transshipment activities occurring in Skagway.
46	35	Expansion of existing port and harbor facilities and the State Street truck route to accommodate pipeline activities.
60	18	Regulate pipeline-related use of port facilities and Carcross Highway activities for pipeline uses so they do not interfere with tourism.
28	46	Develop mobile home parks and associated temporary housing.
68	9	Levy taxes on pipeline activities to be used for community improvements.
61	13	Support regulation of development activities which minimize adverse impacts of pipeline activities.
47	30	Develop a new port facility and truck route west of town to minimize heavy industrial activity and truck traffic in and near town.

TRANSPORTATION

Yes	No	
52	26	Is transportation access to and from the city adequate?
34	36	Develop a new highway linking Skagway with Juneau and Haines.
71	10	Improve ferry scheduling.
50	30	Marine shuttle linking Skagway, Haines and Juneau.
38	39	Improve air scheduling.
61	19	Maintenance of Carcross Highway to allow winter travel.
64	16	Upgrade the Dyea Road to make it safer.
56	23	Improvements to airport, including navigational aids, runway expansion and upgrading and construction of a passenger terminal.

NATURAL AND HISTORIC RESOURCES

Please indicate the overall direction that you feel federal and state natural resource management efforts should be directed in the Taiya Inlet-Skagway area. Check one.

22 Develop natural resources such as water, timber, fisheries and scenic value for maximum economic benefit when such demand arises.

41 Balance natural resource management to provide for some industrial and recreational development, timber, fish and wildlife harvest, while protecting the natural beauty and important wildlife habitats.

18 Maximize preservation of the natural scenic quality and wildlife habitats, allowing only a few carefully designed public use developments.

Which resource developments do you feel state and federal natural resource management efforts should be directed? Remember, the area in consideration for this question includes the entire area between the Canadian border and Haines Borough boundary.

Yes	No	
72	10	Develop alternative energy sources, such as wind and hydroelectric power, to support potential future industrial developments.
43	34	Develop maximum access for sport hunting, fishing and camping opportunities.
66	11	Preserve Skagway's historic buildings and natural beauty through careful planning, regulations and restoration.
56	22	Lobby for the expenditure of adequate sums of money by the Federal Parks Service to restore the Skagway National Historic Park.
48	32	Initiate sport fisheries rehabilitation and big game enhancement projects.

LAND DISPOSAL

(Check one of these choices)

The 500 acres of municipal land selected by the City of Skagway from the state should be:

23 disposed into private hands as soon as patent is obtained.

40 disposed of after a plan for disposal, use, access and public benefit is adopted by the City Council.

5 retained and designated for public, used only to be traded in the future for other lands.

If sold, the monies gained from the sale of municipal lands should be used as follows:

22 for reduction of the bonded indebtedness obligations of the city.

7 for an interest-bearing land management fund to be used for purchase of other real estate for public needs.

34 used as local match for federal and state funded community improvement programs.

ISSUE PRIORITY

In order to emphasize which issue areas are most important and the priority of where public energies and monies should be concentrated, assign a priority (1, 2, 3 or 4) to each of the seven major issue categories, with no more than three issues assigned to a given priority. The priorities are defined as follows.

Priority 1: The basic purpose of government and necessary for community well-being and order.

Priority 2: Desired for community development, efficient government operations and service.

Priority 3: Desired, but not necessary for government operations and community development.

Priority 4: Government should have minimum role or no involvement, activities should be left to the private sector.

Just place the number 1, 2, 3 or 4 in front of the following categories. Remember, you can only assign the same number (priority) a maximum of three times.

___ Tourism and Recreation
___ Port Development
___ Community Services
___ Community Facilities
___ Oil and Gas Pipeline Developments
___ Transportation
___ Natural Resource Management
___ Land Disposal

City of Skagway

GENERAL FUND

STATEMENT OF REVENUE

For the Year Ended June 30, 1979

	Estimated Revenue	Actual Revenue	Actual Over (Under) Estimated
GENERAL PROPERTY TAXES			
Real property	$ 321,924	$ 318,336	$ (3,588)
Personal property	58,740	57,890	(850)
Total general property taxes	$ 380.664	$ 376,226	$ (4,438)
LICENSES AND PERMITS			
Dog licenses	$ 300	$ 501	$ 201
Building permits	400	147	(253)
Liquor licenses	4,000	3,900	(100)
Taxi licenses	700	745	45
Total licenses and permits	$ 5,400	$ 5,295	$ (107)
FINES, INTEREST AND PENALTIES			
Fines	$ 2,000	$ 2,202	$ 202
Tax interests and penalties	1,500	3,908	2,408
Other interest	7,500	22,439	14,989
Total fines, interest and penalties	$ 11,000	$ 28,599	$ 17,599
REVENUE FROM THE STATE OF ALASKA			
Business licenses	$ 5,000	$ 70,230	$ 65,230
Gaming licenses	350	24	(326)
Shared revenues	48,000	43,750	(4,250)
State grants		65,561	65,561
Total revenue from the State of Alaska	$ 53,350	$ 179,565	$ 126,215
UTILITIES			
Water	$ 42,500	$ 45,537	$ 3,037
Garbage	43,750	12,655	(31,095)
Garbage contract	2,500	2,371	(129)
Sewer	61,250	25,662	(35,588)
Water and sewer connection	250	1,095	845
Total utilities	$ 150,250	$ 87,320	$ (62,930)
MUSEUM			
Admission	$ 16,000	$ 13,181	$ (2,819)

City of Skagway

GENERAL FUND

STATEMENT OF REVENUE

For the Year Ended June 30, 1979

	Estimated Revenue	Actual Revenue	Actual Over (Under) Estimated
REVENUE FROM FEDERAL GOVERNMENT			
Shared revenue	$ 44,000	$ 48,882	$ 4,882
RENTALS			
Land	$ 28,000	$ 33,405	$ 5,405
Equipment	--	338	338
Magistrate's office	900	900	--
Boat moorage	6,000	8,216	2,216
Total rentals	$ 34,900	$ 42,859	$ 7,959
MISCELLANEOUS			
Hanousek Park admissions	$ 1,500	$ 2,565	$ 1,065
Maps	50	56	6
Ambulance calls	200	585	385
Miscellaneous	6,000	845	(5,155)
Funerals	600	402	(198)
Miscellaneous city work	--	34	34
Donations	--	200	200
Utility deposits	--	125	125
Public Works work orders	--	7,364	7,364
Police revenue	--	1,062	1,062
Westours boat	7,200	7,402	202
Sale of city equipment	--	4,543	4,543
Total miscellaneous	$ 15,500	$ 25,183	$ 9,633
Total Revenue	$ 711,114	$ 807,108	$ 95,994

NOAA COASTAL SERVICES CENTER LIBRARY
3 6668 14101 7477