

**SOUTHEAST ALASKA
SUBAREA CONTINGENCY PLAN**

**SENSITIVE AREAS
SECTION**

	Introduction	D-1
PART ONE	Information Sources.....	D-3
PART TWO	Areas of Environmental Concern	D-7
	A. Background/Criteria	D-7
	B. Areas of Major Concern	D-7
	C. Areas of Moderate Concern	D-8
	D. Areas of Lesser Concern	D-9
	E. Areas of Local Concern.....	D-10
PART THREE	Resource Sensitivity	D-14
PART FOUR	Biological and Human Use Resources.....	D-21
	A. Habitat Types.....	D-21
	B. Biological Resources	D-29
	1. Threatened and Endangered Species	D-29
	2. Fish and Wildlife	D-30
	3. Vegetation.....	D-50
	C. Human Use Resources	D-53
	1. Fish Hatcheries and Associated Ocean Net Pens.....	D-53
	2. Aquaculture Sites.....	D-53
	3. Historic Properties	D-58
	4. Subsistence and Personal Use Harvests.....	D-58
	5. Commercial Fishing.....	D-60
	6. Sport Fishing and Hunting.....	D-63
	7. Recreational Sites and Facilities	D-63
	8. Commercial Tourism	D-72
	9. Marinas and Ports	D-72
	10. Fish Processing	D-72
	11. Logging Facilities	D-72
	12. Water Intake/Use	D-75
PART FIVE	Land Management.....	D-82
	A. Land Management Designations.....	D-82
	B. Land Management Maps.....	D-84
ATTACHMENT ONE	Log Transfer Facilities	

(This Page Intentionally Blank)

SENSITIVE AREAS: INTRODUCTION

This section is intended for use by the On-Scene Coordinators (OSC) during the initial phase of a spill event to assist in ascertaining the location and presence of spill-sensitive biological and cultural resources, services, and users in this subarea. This information is specific to this subarea. No attempt has been made to duplicate information contained in easily accessible existing documents. This section, therefore, must be used in conjunction with the referenced materials and informational contacts identified herein. More detailed and current data should be available from on-scene resource experts when they become engaged in the response. This information is geared toward early response. If appropriate, natural resources trustees may be conducting natural resource damage assessment (NRDA) activities in conjunction with response activities. Information regarding NRDA activities should be directed to the natural resources trustees or to their appointed NRDA Liaison.

Often, the most detailed, up-to-date biological and resource use information will come from people who live and work in the impacted area. People from the local community are often knowledgeable sources for information related to fishing, hunting, non-consumptive outdoor sports, and subsistence use. They may also have a good idea of which spill response techniques (especially exclusion and diversion booming) are practicable under prevailing weather and current conditions.

The Alaska Regional Response Team (ARRT) has adopted several documents (see the *Alaska Federal/State Preparedness Plan for Response to Oil & Hazardous Substance Discharges/Releases [Unified Plan]*) that address decision making to help protect sensitive areas and resources. These documents (and their location) include:

- *Oil Dispersant Guidelines for Alaska* (see *Unified Plan* Annex F, Appendix 1)
- *In Situ Burning Guidelines for Alaska* (see *Unified Plan* Annex F, Appendix 2)
- *Wildlife Protection Guidelines for Alaska* (see *Unified Plan* Annex G)
- *Alaska Implementation Guidelines for Federal OSCs for the Programmatic Agreement on Protection of Historic Properties during Emergency Response under the National Oil and Hazardous Substances Pollution Contingency Plan Protection of Historic Properties* (see *Unified Plan* Annex M)

In addition, Federal OSCs in Alaska are working in cooperation with the U.S. Department of the Interior and the National Marine Fisheries Service to ensure response activities are conducted meet Endangered Species Act requirements, in accordance with the 2001 *Inter-Agency Memorandum of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act National Oil and Hazardous Substances Pollution Contingency Plan* (see *Unified Plan* Annex K).

In addition, Annex N of the *Unified Plan* includes *Shoreline Cleanup and Assessment Guidelines*, which provide helpful information on cleanup options by shoreline type.

Section G of the Subarea Contingency Plan contains site-specific Geographic Response Strategies (GRSs) for use by responders in protecting key sensitive areas. In addition, Environmental Sensitivity Index (ESI) maps have been produced that illustrate selected sensitive resources and shoreline types.

This section and the guidelines in the *Unified Plan* are also intended for use by facility/vessel operators in developing industry oil spill prevention and contingency plans. For an operator's facility or area of operation, industry contingency plans describe: (a) environmentally sensitive areas and areas of public concern; (b) how sensitive areas would be prioritized during a spill event; and (c) response strategies to

protect sensitive areas at risk. The information in industry plans should be consistent with subarea contingency plans.

The definition of sensitive resources and their geographic locations requires use of field observations and data available from published and non-published materials or through additional field work. Identifying relative priorities among resources and resource uses takes considerable coordination and discussion among resource management agencies. With the limited time and funds available for subarea contingency plan development (there are ten such plans covering the state of Alaska), not all the detailed information about every possible resource at risk is included. Future updates to this document will continue to add information relevant to response activities.

Many of the maps presented in this section are available on-line through the Internet at:

<http://www.asgdc.state.ak.us/maps/cplans/subareas.html>

Suggestions, comments, and more current information are requested. Please contact either

Alaska Department of Fish and Game
Habitat Division
333 Raspberry Road
Anchorage, Alaska 99518
267-2541 fax: 267-2464

U.S. Department of the Interior
Office of Environmental Policy & Compliance
1689 C Street, Room 119
Anchorage, Alaska 99501
271-5011 fax: 271-4102

SENSITIVE AREAS: PART ONE – INFORMATION SOURCES

Agency	Resources	Point of Contact
FISH AND WILDLIFE AND HABITAT RESOURCES		
Alaska Department of Fish and Game	fish, shellfish, birds, terrestrial mammals, marine mammals	Division of Habitat Juneau 465-4105
U.S. Department of the Interior	migratory birds, sea otters, endangered species, anadromous fish in freshwater, bald eagles, wetlands	Office of Environmental Policy & Compliance Anchorage 271-5011
U.S. Department of Commerce, National Marine Fisheries Service	sea lions, seals, whales, endangered marine species and listed anadromous fish in marine waters	Protected Resources Division Juneau 586-7235
U.S. Department of Commerce, National Marine Fisheries Service	essential fish habitat	Habitat Conservation Division Juneau 586-7636
U.S. Department of Commerce, National Marine Fisheries Service	effects of oil on fisheries resources, hydrocarbon chemistry, dispersants	Alaska Fisheries Science Center Auke Bay Laboratory 789-6000
U.S. Department of Agriculture, U.S. Forest Service	national forest lands	Tongass National Forest Ketchikan 225-3101
University of Alaska	rare and endangered plants	Alaska Natural Heritage Program Anchorage 257-2785
CULTURAL AND ARCHAEOLOGICAL SITES		
Alaska Department of Natural Resources	historic sites, archaeological sites, national register sites	Alaska Office of History and Archaeology Anchorage 269-8721
U.S. Department of the Interior	archaeological/historical sites in park and wildlife refuge system units, public lands, Native allotments/trust lands; sunken vessels	Office of Environmental Policy & Compliance Anchorage 271-5011
U.S. Department of Agriculture, U.S. Forest Service	archaeological/historical sites on national forest lands	Tongass National Forest Ketchikan 225-3101
SHORELINE TYPES		

Agency	Resources	Point of Contact
U.S. Department of Commerce, National Oceanic & Atmospheric Administration	Environmental Sensitivity Index (ESI) maps and ESI shoreline habitats	Scientific Support Coordinator Anchorage 271-3593
U.S. Department of Commerce, National Marine Fisheries Service	ShoreZone imagery and mapped habitat data	Steve Lewis Juneau 596-7858
LAND OWNERSHIP AND CLASSIFICATIONS/DESIGNATIONS		
Alaska Department of Natural Resources	state lands, state parks and recreation areas, state forests, tidelands	Division of Mining, Land, and Water Juneau 465-3400
Alaska Department of Fish and Game	state game refuges, state critical habitats	Division of Habitat Juneau 465-4105
U.S. Department of the Interior	national parks and preserves, national historic sites, national monuments, national wildlife refuges, public lands, national recreation areas, wild and scenic rivers, wilderness areas, Native trust lands	Office of Environmental Policy & Compliance, Anchorage 271-5011
U.S. Department of Agriculture U.S/. Forest Service	national forests, national monuments, wild and scenic rivers, wilderness areas, research natural areas	Tongass National Forest Ketchikan 225-3101
U.S. Department of Defense	military installations and reservations	Alaska Command Anchorage 552-3944

Agency	Resources	Point of Contact
Local Governments: <ul style="list-style-type: none"> – Angoon – Craig – City of Haines – Hoonah – Hydaberg – City and Borough of Juneau – Kake – Ketchikan Gateway Borough – Klawock – Pelican – Petersburg – City and Borough of Sitka – Skagway – Thorne Bay – Wrangell – City and Borough of Yakutat 	municipal and private lands, and rights-of-way coastal program special areas, plans, policies	For the current local government contact information, go to B. Resources Section, Part One Community Profiles For the current tribal contact information, go to B. Resources Section, Part Three Information Directory, Native Organizations and Federally Recognized Tribes
COMMERCIAL HARVEST		
Alaska Department of Fish and Game	fishing permits, seasons	Commercial Fisheries Division Juneau 465-4210
Alaska Department of Natural Resources	tideland leases, logging on private lands	Division of Mining, Land, and Water Juneau 465-3400
Alaska Department of Environmental Conservation	seafood processing	Division of Environmental Health Juneau 269-7644
U.S. Department of Commerce National Marine Fisheries Service	groundfish and halibut allocations, seasons, and permits	Sustainable Fisheries Division Juneau 586-7228
SUBSISTENCE, PERSONAL, AND SPORT USES		
Alaska Department of Fish and Game	subsistence and personal uses statewide and navigable waters, sport hunting and fishing	Sport Fish Division Juneau 465-4280
U.S. Department of the Interior	subsistence uses on Federal lands and reserved waters; subsistence uses of: sea otters and migratory birds	Office of Environmental Policy & Compliance, Anchorage 271-5011
U.S. Department of Commerce, National Marine Fisheries Service	subsistence use of: whales, porpoises, seals, sea lions	Protected Resources Division Juneau 586-7235
U.S. Department of Commerce National Marine Fisheries Service	subsistence halibut	Sustainable Fisheries Division Juneau 586-7228

Agency	Resources	Point of Contact
U.S. Department of Agriculture U.S. Forest Service	Subsistence, personal, and sport uses on National Forest lands and waters	Tongass National Forest Ketchikan 225-3101
RECREATION AND TOURISM USES		
Alaska Department of Natural Resources	State parks and recreation areas, anchorages, boat launches, campgrounds, State public lands	Division of Mining, Land, and Water Juneau 465-3400
Alaska Department of Fish and Game	sport hunting and fishing	Division of Habitat Juneau 465-4105
Alaska Department of Commerce, Community & Economic Development	seasonal events and activities, travel, outdoor activities, local visitor bureaus, tourism industries	Alaska Office of Tourism Development Juneau 465-5478
U.S. Department of Agriculture U.S. Forest Service	Campgrounds, cabins, recreation areas, trails, within the national forest system	Tongass National Forest Ketchikan 225-3101
U.S. Department of the Interior	recreation uses in park and wildlife refuge system units and Federal public lands	Office of Environmental Policy & Compliance, Anchorage 271-5011
WATER INTAKE AND USE FACILITIES		
Alaska Department of Environmental Conservation	public drinking sources & water wells, treatment, and storage; fish processing facilities	Division of Water Juneau 465-5180
Alaska Department of Fish and Game	hatcheries, ocean net pens and release sites, aquaculture	Division of Habitat Juneau 465-4105
Alaska Department of Natural Resources	tidelands leases, aquaculture sites, private logging camps and log transfer facilities	Division of Mining, Land, and Water Juneau 465-3400
U.S. Coast Guard	marinas and docks, mooring buoys	Sector Juneau Juneau 463-2450

SENSITIVE AREAS: PART TWO – AREAS OF ENVIRONMENTAL CONCERN

A. BACKGROUND/CRITERIA

The following relative priority listing was developed by the Sensitive Areas Work Group, with representatives from state and federal agencies and the private sector. The list prioritizes resources into designations of major, moderate, and lesser concern. Resources are not prioritized within each designation. These designations are for consideration in initial spill response activities; they are not applicable to extended clean-up activities. This prioritization scheme must be used in conjunction with spill-specific information (e.g., size and location of spill, type of product, trajectory) to determine the actual protection priorities for that discharge.

The following criteria were developed as tools to establish levels of concern. These criteria are not listed in priority order.

CRITERIA FOR RELATIVE PRIORITY RATING

- Human economic disruption -- economic/social value; human food source disruption, health/safety
- Mortality – wildlife, fish, other organisms (how many potentially killed in relation to abundance)
- Animal displacement and sensitivity to displacement
- Aesthetic degradation
- Habitat availability and rarity
- Sublethal effects, including sensitivity to physical or toxic effects of oil and hazardous substances, and long-term affects to habitat, species, or both
- Threatened and endangered species, and/or other legal designation
- Persistent concentration of oil or hazardous substances
- Reproduction rate or recolonizing potential
- Relative importance to ecosystem
- Potential for physical contact with spill--pathway of oil or hazardous substances
- Resource sensitivity to response measures

B. AREAS OF MAJOR CONCERN

Shoreline Geomorphology - Coastal Habitat Types:

- Estuaries
- Sheltered Tidal Flats
- Sheltered Rocky Shores
- Marsh/Supratidal Wet Meadows
- Kelp Beds
- Eelgrass Beds
- Intertidal Areas of High Diversity

Threatened or Endangered Species Habitat:

- Sea Lion Rookeries and Haulouts
- Humpback Whale Year-round Concentrations

Harbor Seal Haulouts (>50 seals)

Seabird Colonies (>500 birds)

Marbled Murrelet Nearshore Feeding Concentrations (>50 birds)

Waterfowl/Shorebird Migratory, Molting, and Winter Concentrations
(>500, any Number of Harlequin Ducks, Loons, Swans, Black Oyster Catchers)

Large Anadromous Fish Streams (>10,000 fish peak escapement)

Eulachon Spawning Concentrations (including seal, sea lion and eagle feeding concentrations)
Herring (including capelin, hooligan, sandlance) Spawning Areas
Nearshore Juvenile Marine Fish-Rearing in Kelp and Reefs
Sea Otter Concentrations (>100 individuals)

Land Management Designations:

Federal: Wild and Scenic Rivers
National Natural Landmarks
National Wildlife Refuges
National Parks and Preserves
Designated Wilderness Areas
Resource Natural Areas
State: Refuges
Sanctuaries
Critical Habitat Areas
State Park-Managed Lands
Municipal: Parks
Natural Areas
Conservation Easements (intertidal and subtidal)

Cultural Resources/Archaeological Sites:

National Historic Landmarks
Burial Sites
National Register Eligible Sites
Intertidal Sites

Subsistence and Personal Use Harvest Areas:

High-use Salmon Harvest Areas (>10% of local households)
High-use Marine Invertebrates Harvest Areas (>10% of local households)

High Commercial Use Areas:

Intensive Commercial Fishing by season
Salmon Hatchery and Ocean Pens
Shore-based Fish Processing Plants during operation
Set-net Fisheries (e.g., Yakutat forelands)
Mariculture Farms

High Recreational Use Areas

High-use Commercial Wildlife Viewing (e.g., eagles, bears, marine mammals)

Waterfront Buildings on Pilings

Marinas and Harbors

Floating Camps

C. AREAS OF MODERATE CONCERN

Shoreline Geomorphology - Coastal Habitat Types:

Exposed Tidal Flat
Cobble Beaches (overlying and filling bedrock basins in the intertidal zone)

Cutthroat, Dolly Varden, Steelhead Streams and Estuaries

Cetacean Concentrations (non-humpback)

Harbor Seal Haulouts (10-50 seals)

Sea Otter Established Populations (low density)

Seabird Colonies (100-500 birds)

Waterfowl/Shorebird Migratory, Molting, and Winter Concentrations (250-500 birds)

Osprey Feeding Concentrations (e.g., Wrangell Narrows)

Anadromous Fish Streams (500-10,000 total escapement or 100-500 pink/chum salmon)

- Subsistence and Personal Use Harvest Areas:
 - Intensive Personal-use Clamming
 - Marine Mammal Subsistence Use
- Commercial Harvest Areas:
 - Intensive Crabbing
 - Abalone Harvesting
- Recreational Use Areas:
 - Moderate-use Commercial Wildlife Viewing
 - Recreation Areas
 - Non-estuarine Sport-fishing Streams
- Land Management Designations:
 - Federal:
 - National Monuments (non-wilderness)
 - Native Allotments
 - Indian Reservations
- Cultural Resources/Archaeological Sites:
 - Un-surveyed, High-probability Sites
 - Shipwreck in Tidal or Beach over 50 Years Old

D. AREAS OF LESSER CONCERN

- Shoreline Geomorphology - Coastal Habitat Types:
 - Sheltered Gravel Beaches
 - Sheltered Sand and Gravel Beaches
- Harbor Seal Haulouts (<10 seals)
- Peregrine Falcon Nesting Cliffs
- Waterfowl Nearshore Molting Areas (<250 birds)
- Bald Eagle Nests
- Seabird Colonies (< 100 birds)
- Waterfowl/Shorebird Migratory, Molting, and Winter Concentrations (< 250 birds)
- Anadromous Fish Streams (<500 total escapement or <100 pink/chum salmon)
- Herring Winter Concentrations
- Subsistence and Personal Use Harvest Areas:
 - Low-use Invertebrates Harvest
- Commercial Harvest Areas:
 - Houseboats (moveable)
 - Log Transfer Facility
 - Log Storage
 - Floating (moveable) Fish Processor
- Recreational Use Areas:
 - Intensive Sport-fishing by Season
 - Recreation facilities (cabin, campground, tent platform, dock/mooring, boat launch)
 - Undeveloped Recreation Areas
- Land Management Designations:
 - Federal:
 - Public Lands
 - National Forests
 - National Preserves
 - State:
 - General Public Lands
- Cultural Resources/Archaeological Sites:
 - Sites Adjacent to Shorelines (inland over 300 feet elevation)
 - Unsurveyed, Low-probability Sites
 - Surveyed with no Sites
 - Shipwreck not Tidal or Beach and Less Than 50 Years Old

E. AREAS OF LOCAL CONCERN

Some areas within the subarea warrant special attention due to the presence of highly productive wildlife habitat, the ability to sustain a large part of a villages subsistence needs, the occurrence of unusual historical sites or large mineral deposits, recreation, energy development, hazardous areas, or the presence of important fisheries. These have been identified as Areas Meriting Special Attention, Important Use Areas, Special Use Areas, or Sensitive Areas through the Hydaburg Coastal Management Program; Angoon Coastal Management Program and Areas Meriting Special Attention Plan for Mitchell, Hood and Chaik-Whitewater Bays; Petersburg and Kupreanof Coastal Management Program; Port of Skagway and Skagway River Area Meriting Special Attention Plans; Sitka District Coastal Management Program; Yakutat Coastal Management Plan Update. This also includes an area identified by the National Marine Fisheries Service. They are summarized below.

Designated Area	Reasons For Designation	Land Ownership/ Villages To Contact
Amalga Trench	The majority of herring in northern Southeast Alaska inside waters overwinter (November-March) between Benjamin Island and Tee Harbor (in the Amalga Trench). This is an important food resource for whales and pinnipeds during this time period.	National Marine Fisheries Service
Berners Bay	Herring, eulachon, and capelin spawning; anadromous streams; high concentration of bird and marine mammals during fish spawning; high recreational use; concern due to commercial infrastructure (Kensington Mine)	Juneau
The Brothers Islands	Sealion haulout (1500 animals year round), abundant forage fish	
Benjamin Island	Seasonally important sealion haulout	
Chaik-Whitewater Bay	Harbor seal haulout location. Waterfowl shorebirds spring and fall concentration area. Brown bear spring concentration area. Provides bald eagle, fish and marine mammal habitat. Contains anadromous fish streams. Some subsistence activities occur here. Presence of eighteen archaeological sites. Offers recreational opportunities and has traditional value.	Native, State (tidelands and submerged lands), US Forest Service
Hetta Cove-Eek Inlet	Important area for traditional and customary subsistence harvesting of fish and wildlife. Presence of seven historic/archeological sites. Offers recreational opportunities.	Alaska Department of Fish and Game (management of fishery resources), Haida Corporation and US Forest Service (Eek Lake and Eek Inlet uplands), Sealaska Corporation (Hetta Cove and Lake uplands), State (aquatic areas),

Designated Area	Reasons For Designation	Land Ownership/ Villages To Contact
Hood Bay (south of Angoon)	Waterfowl shorebirds spring and fall concentration area. Brown bear spring concentration area. Provides bald eagle, fish and marine mammal habitat. Contains anadromous fish streams. Some subsistence activities occur here. Presence of eleven cultural sites. Offers recreational opportunities and has traditional value.	Alaska Pulp Corporation, Federal, Native, Private, State (tidelands and submerged lands), US Forest Service
Hydaburg River Tidelands	Important area for traditional and subsistence usage of fish and wildlife. Spawning and rearing habitat for anadromous fish. Source for all domestic water in Hydaburg. Presence of one historical site. Offers recreational opportunities.	City of Hydaburg, Haida Corporation, private, Sealaska Corporation, Forest Service
Jackson Island (south of Sukkwan Island)	Important area for traditional and subsistence usage of fish and other natural resources (e.g. drift logs and trapping). One historic/archeological site present. Offers recreational opportunities.	State
Mitchell Bay	Waterfowl shorebirds spring and fall concentration area. Nesting and brood rearing concentration areas for the Trumpeter Swan. Brown bear spring concentration area. Provides bald eagle, fish and marine mammal habitat. Contains anadromous fish streams. Some subsistence activities occur here. Presence of 37 prehistoric and historic sites. Offers recreational opportunities and has traditional value.	City of Angoon, Kootznoowoo Corporation, Sealaska, State (tidelands and submerged lands), US Forest Service
McFarland Islands- Dunbar Inlet	Important area for traditional and subsistence harvesting of herring roe, mink, land otter and drift logs. Presence of historic/archeological sites. Offers recreational opportunities.	State
Mountain Point	Human use area. Off-shore and on-shore fishery. Herring spawn along the shore.	None stated
Port Chilkoot- Portage Cove	None stated	None stated
Port of Skagway	Human use area. Provides habitat for a variety of wildlife and fish. Affords scenic and recreational opportunities.	City of Skagway, Malcolm Moe, State, White Pass and Yukon Route Railroad
Saltery Point-Crab Trap Cove	Important area for traditional and customary subsistence usage of fish and wildlife. Presence of one historic/archeological site. Offers recreational opportunities.	Haida Corporation, State (aquatic areas, tidelands)
Sitka Sound	Diverse nearshore fish assemblages and major herring spawning area	
Skagway River	Human use area. Source of city drinking water. Provides habitat for a variety of wildlife and fish. It is anadromous water. Affords scenic and recreational opportunities.	City of Skagway, private, State, US Forest Service
Swan Lake	Protection of water quality (freshwater ecosystem). Maintenance of local fish and swan populations. Important recreational area.	None stated

Designated Area	Reasons For Designation	Land Ownership/ Villages To Contact
Upper George Inlet	Shoreline provides critical winter range for deer. Provides habitat and spawning area for a variety of wildlife and fish (including bald eagles, black bears, harbor seals, herring and salmon).	None stated
West Coon Island	Harbor seals are found in high numbers along the shore. A bald eagle nest is located on the western shore.	None stated
Whitman Lake Area	Shoreline provides critical winter range for deer. Supports recreational sportfishing.	None stated
Wrangell Narrows	None stated	None stated

An August 2000 survey of Native tribes in the subarea yielded additional information about sensitive areas near villages, as viewed from the local perspective. The tribes that responded to the survey, as listed below, have indicated their primary sites of concern and the reasons for their importance.

1. Craig Community Association

Sensitive Area	Reasons For Designation
Saint Nicholas Lake	Drinking water source
Fish Egg Island	Herring spawning grounds
Saint Nicholas River	Salmon spawning
Crab Creek	Salmon spawning

2. Hydaburg Cooperative Association

Sensitive Area	Reasons For Designation
Hetta	Subsistence activities
Eek	Subsistence activities
Kasook	Subsistence activities
Hydaburg beachfront and watershed	Subsistence activities
Sakwaan	Subsistence activities

3. Klawock Cooperative Association

Sensitive Area	Reasons For Designation
All beach areas	Home sites
Perafroovich Island	Old graveyard site
Alberta Island	Subsistence activities
Klawock Narrows	Industry and wastewater treatment plants
Mouth of Klawock River	Subsistence activities

4. Organized Village of Kasaan

Sensitive Area	Reasons For Designation
Kasaan Bay	Subsistence activities, cultural/traditional uses
Karta Bay	Subsistence activities, cultural/traditional uses
Salt Chuck	Subsistence activities, cultural/traditional uses
12 mile Arm	Subsistence activities, cultural/traditional uses
Cholmndly/Skowl Arm	Subsistence activities, cultural/traditional uses

5. Sitka Tribe of Alaska

Sensitive Area	Reasons For Designation
Katlai Bay	Salmon streams, important/close watershed
Nakwasina Bay, Sound	Salmon streams, marine mammals
Silver Bay	Hatchery, salmon streams
Indian River	Closest anadromous stream, important watershed
Starrigavan Wetland Area	Wetland close to town, spawning habitat

6. Wrangell Cooperative Association

Sensitive Area	Reasons For Designation
Harbor entrance	Not stated
Public beaches	Not stated
Petroglyph beach	Not stated

7. Yakutat Tlingit Tribe

Sensitive Area	Reasons For Designation
Monti Bay	Village surrounds bay
Inner Islands	Subsistence activities
Disenchantment Bay	Large seal population
Yakutat coast line	Commercial fishing, recreation
Icy Bay	Subsistence activities

SENSITIVE AREAS: PART THREE – RESOURCE SENSITIVITY

The following sensitivity tables were developed by the State and Federal Natural Resources Trustees with legislative responsibility for management and protection of these resources. This includes the following agencies: National Marine Fisheries Service, U.S. Fish and Wildlife Service, National Park Service, Bureau of Land Management, Alaska Department of Fish and Game, and Alaska Department of Natural Resources. This information is a summary derived from recent field studies, research reports, long-term monitoring, stakeholder input, and local knowledge. Periods and/or conditions when resources are of varying levels of concern (low, medium, high) with respect to affects from an oil spill are noted in the following tables.

SHORELINE GEOMORPHOLOGY

CATEGORY	LOW	MEDIUM	HIGH
Coastal Habitat Types	Fine-grained sand beaches Exposed wave-cut platforms Exposed rocky shores	Gravel beaches Mixed sand & gravel beaches Exposed tidal flats Coarse grained sand beaches Riprap structures	Marshes Eelgrass beds Sheltered tidal flats Sheltered rocky flats
Lake And River Habitat Types	Exposed rocky cliffs & banks Bedrock shores & ledges, rocky shoals Eroding scarps/bank in unconsolidated sediment Exposed man-made structures	Sand beaches & bars Mixed sand & gravel beaches/bars Gravel beaches/bars Gently sloping banks Exposed flats Riprap	Sheltered scarps in bedrock Vegetated steep sloping bluffs Sheltered man-made structures Vegetated low banks Sheltered sand & mud & muddy substrates Marshes
Upland Habitat Types	Alpine tundra Mesic/dry tussock tundra	Low shrub vegetation Dwarf shrub mat and cushion tundra	Riparian willow

SEA OTTERS

CATEGORY	LOW	MEDIUM	HIGH
Abundance		< 20	> 100
Susceptibility			Year around
Human Harvest	Year around		

Critical Life Periods J F M A M J J A S O N D

Present nearshore =====
Pupping =====

STELLER SEA LIONS

CATEGORY	LOW	MEDIUM	HIGH
Abundance			
Susceptibility		Year around	
Human Harvest	June 1 – Aug 31	April 1 – May 31	Sept 1 – July 31

Critical Life Periods **J F M A M J J A S O N D**

Pupping	===
Molting	=====
On rookeries	=====
On haulouts	=====

HARBOR SEALS

CATEGORY	LOW	MEDIUM	HIGH
Abundance (on Haulouts)			10 or more
Pups Present on Haulouts			Pups present
Susceptibility		Year around	
Human Harvest	June 1 – July 31	Jan, May, Aug, Sept	Feb 1 – Apr 30 Oct 1 – Dec 31

Critical Life Periods **J F M A M J J A S O N D**

Pupping	=====
Molting	=====
On haulouts	=====

WHALES and PORPOISES

(Killer and Humpback Whales, Dall and Harbor Porpoise)

CATEGORY	LOW	MEDIUM	HIGH
Abundance	< 10	10 +	
Susceptibility	Oct 1 - May 1	Aug 1 -Sept 30	
Human Harvest	No Harvest		

Critical Life Periods **J F M A M J J A S O N D**

Present nearshore _____

BEARS

CATEGORY	LOW	MEDIUM	HIGH
Susceptibility ^{1,2}	Nov 1 - April 30	May 1 - June 30 Sept 1 - Oct 31	July 1 - Aug 30
Commercial Value	Nov 1 - May 31 July 1 - Aug 31	June 1 - June 30	Sept 1 - Oct 31
Human Harvest	Nov 1 - April 15		April 15 - Oct 31

1. Bear densities and susceptibility to oil impacts increases through spring as more individuals emerge from dens and move to coastal areas.
2. Bear densities and susceptibility to oil impacts decreases through the summer depending upon the availability of fish in lower reaches of streams.
3. Black bear hunting season closed July and August, brown bear hunting season closed June-August

Critical Life Periods J F M A M J J A S O N D

Denning =====

Spring coastal concentrations =====

Salmon stream concentrations =====

SITKA BLACK-TAILED DEER

CATEGORY	LOW	MEDIUM	HIGH
Susceptibility	May 1 - Nov 15		Nov 15 - April 30
Human Harvest	Jan 1 - July 31		Aug 1 - Dec 31

Critical Life Periods J F M A M J J A S O N D

Fawning period =====

Foraging along coast =====

MARBLED MURRELET NEARSHORE FEEDING CONCENTRATIONS

CATEGORY	LOW	MEDIUM	HIGH
Abundance			>50
Susceptibility		year around	

Critical Life Periods J F M A M J J A S O N D

Nesting/rearing =====

Nearshore feeding =====

SEABIRDS

CATEGORY	LOW	MEDIUM	HIGH
Abundance	< 100	100 - 500	> 500
Susceptibility	Nov 1 - Jan 31	Feb 1 - March 31	April 1 – Oct 31
Species Diversity	1 – 3	4 – 6	> 6
Human Harvest*	June 1 - April 19		April 20 - May 31

* Seabird eggs utilized by Native communities.

Critical Life Periods **J F M A M J J A S O N D**

On colonies _____

Feeding near colonies =====

RAPTORS (generally eagles)

CATEGORY	LOW	MEDIUM	HIGH
Abundance	< 1 nest/3 coastal miles	1 nest/1 to 3 coastal miles	> 1 nest/coastal mile
Susceptibility			year around

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
-----------------------	---	---	---	---	---	---	---	---	---	---	---	---

Nesting/rearing	=====
-----------------	-------

Present near coast

WATERFOWL AND SHOREBIRDS

CATEGORY	LOW	MEDIUM	HIGH
Abundance	< 250	250 – 500	> 500
Susceptibility	Nov 1 - Jan 31*	Feb 1 - April 14 May 16 - Aug 14	April 15 – May 15 Aug 15 - Oct 31
Species Diversity	1 – 3	4 – 6	> 6
Human Harvest	June 1 – Aug 31	Dec 1 - Dec 31	(season closed) Sept 1 - Nov 30

* In unique locations where waterfowl concentrate during the winter, their susceptibility would be high.

Critical Life Periods **J F M A M J J A S O N D**

Spring migration =====

Nesting/rearing =====

Fall migration =====

Winter concentrations

HERRING, CAPELIN, HOOLIGAN, SANDLANCE

CATEGORY	LOW	MEDIUM	HIGH
Abundance (Biomass in Tons)	< 500	500 - 5,000	> 5,000
Susceptibility	Oct 1 - Feb 28	March 1 - March 31	April 1 - Sept 30
Human Harvest	Jan 1 - Feb 28	June 1 - Dec 31	March 1 - May 31

Critical Life Periods J F M A M J J A S O N D

Spawning =====
 Present nearshore =====
 Winter aggregations =====

SALMON (Including hatchery fish)

CATEGORY	LOW	MEDIUM	HIGH
Abundance	< 500 spawners (pink & chum) < 50 spawners (sockeye) < 1,000 spawners (coho)	500 - 25,000 (pink & chum) 50 - 1,000 (sockeye) 1,000 - 5,000 (coho)	> 25,000 (pink & chum) > 1,000 (sockeye) > 5,000 (coho)
Susceptibility	Dec 1 - Jan 31	Feb 1 - April 30 Nov 1 - Nov 30	May 1 - Oct 31
Species Diversity	2 or less	2 - 3	4 and greater
Human Harvest		Oct 10 - May 15	May 15 - Oct 10

Critical Life Periods J F M A M J J A S O N D

Adults nearshore =====
 Spawning in streams =====
 Spawning intertidally =====
 Eggs/young development =====
 Smolt outmigration =====

FRESHWATER FISH SPECIES

Arctic Grayling			
CATEGORY	LOW	MEDIUM	HIGH
Susceptibility	Nov 1 - March 31	June 1 - Oct 31	April 1 - May 31
Human Harvest	Nov 1 - March 31	Oct 1 - Oct 31	April 1 - Sept 30

Critical Life Periods J F M A M J J A S O N D

Adults Near Shore =====
 Spawning in Lakes =====
 Eggs/Young Development =====

Dolly Varden			
CATEGORY	LOW	MEDIUM	HIGH
Susceptibility	Dec 1 - Feb 28	June 1 - Aug 31	March 1 - May 31 Sept 1 - Nov 30
Human Harvest	Jan 1 - Feb 28	June 1 - Aug 31 Nov 1 - Dec 31	March 1 - May 31 Sept 1 - Oct 31

Critical Life Periods J F M A M J J A S O N D

Adults Near Shore =====

Spawning in Streams =====

Eggs/Young Development =====

Cutthroat Trout			
CATEGORY	LOW	MEDIUM	HIGH
Susceptibility	Dec 1 - Feb 28	June 1 - Aug 31	March 1 - May 31 Sept 1 - Nov 30
Human Harvest	Jan 1 - Feb 28	June 1 - Aug 31 Nov 1 - Dec 31	March 1 - May 30 Sept 1 - Oct 31

Critical Life Periods J F M A M J J A S O N D

Adults Near Shore =====

Spawning in Streams =====

Eggs/Young Development =====

Rainbow Trout/Steelhead			
CATEGORY	LOW	MEDIUM	HIGH
Susceptibility	Oct 16 - Nov 30	Dec 1 - Feb 28	March 1 - Oct 15
Human Harvest	Oct 16 - Nov 30	Dec 1 - Feb 28	March 1 - Oct 15

Critical Life Periods J F M A M J J A S O N D

Adults Near Shore =====

Spawning in Streams =====

Eggs/Young Development =====

CLAMS AND OTHER MARINE INVERTEBRATES (CHITONS)

CATEGORY	LOW	MEDIUM	HIGH
Susceptibility			year around
Human Harvest		June 1 - Aug 31	Sept 1 - May 31

Critical Life Periods J F M A M J J A S O N D

Spawning =====

Planktonic larvae =====

LAND MANAGEMENT DESIGNATIONS

CATEGORY	LOW	MEDIUM	HIGH
FEDERAL LANDS	Public Lands National Forest Preserves	National Parks Wildlife Refuges	Wild & Scenic Rivers National Natural Landmarks Wilderness Areas
STATE LANDS	Public Lands ¹	State Parks	Critical Habitats Refuges Sanctuaries

1. Includes submerged lands out to 3 miles, and historic bays and inlets

CULTURAL RESOURCES/ARCHAEOLOGICAL SITES

CATEGORY	LOW	MEDIUM	HIGH
HISTORICAL AND ARCHAEOLOGICAL SITES	Cultural Resources that do not meet National Register criteria	National Register eligible sites (excluding villages sites) Sites adjacent to shorelines	National Historical Landmarks Burial sites National Register eligible village sites Intertidal sites

SENSITIVE AREAS: PART FOUR – BIOLOGICAL AND HUMAN USE RESOURCES

The background information contained in this section is a mixture of references to readily available documents, knowledgeable contacts, and data not readily available elsewhere.

A. HABITAT TYPES

Shoreline habitats have been defined and ranked according to Environmental Sensitivity Index (ESI) standards produced by the National Oceanic and Atmospheric Administration (NOAA) in *Environmental Sensitivity Index Guidelines* (October 1997). NOAA has produced the ESI maps in interactive digital formats, available by purchase from NOAA or they can be accessed on the internet at through the State of Alaska website: <http://www.asgdc.state.ak.us/maps/cplans/subareas.html>.

The Southeast Alaska ESI index maps are located here:

http://www.asgdc.state.ak.us/maps/cplans/se/PDFS/ESI_DATA/INDICES.PDF

Updated ESI mapping information and instructions can be found on the internet at the following NOAA website:

[http://archive.orr.noaa.gov/topic_subtopic_entry.php?RECORD_KEY%28entry_subtopic_topic%29=entry_id,subtopic_id,topic_id&entry_id\(entry_subtopic_topic\)=74&subtopic_id\(entry_subtopic_topic\)=8&topic_id\(entry_subtopic_topic\)=1](http://archive.orr.noaa.gov/topic_subtopic_entry.php?RECORD_KEY%28entry_subtopic_topic%29=entry_id,subtopic_id,topic_id&entry_id(entry_subtopic_topic)=74&subtopic_id(entry_subtopic_topic)=8&topic_id(entry_subtopic_topic)=1)

1. **Benthic Habitats**

Benthic (near bottom) habitats have lower vulnerability to oil than the intertidal zone, but contamination by floating slicks (dissolved and particulate fractions) is likely at depths less than 100 feet if oil remains in the area for several days. Areas continually exposed to floating oil (e.g. harbors) show accumulation of hydrocarbon fractions (PAHs) in sediments and biota at 100 feet depth. Kelp beds are susceptible to floating oil because the fronds of bull kelp reach near or to the surface, depending on tide stage. Eelgrass beds are also subject to oil exposure because of their proximity to surface spilled oil at low tide (a few feet) and their extension into the intertidal zone. Benthic submerged aquatic vegetation in or near intertidal zone is at risk by oil slicks.

2. **Shoreline Habitats**

Habitats (estuarine, large lacustrine and riverine) ranked by ESI standards from least (#1) to most (#10) sensitive (see the following table) are described below:

ESI #1--Exposed impermeable vertical substrates: exposure to high wave energy or tidal currents on a regular basis, strong wave-reflection patterns common, substrate is impermeable with no potential for subsurface penetration, slope of intertidal zone is 30 degrees or greater, attached organisms are hardy and accustomed to high hydraulic impacts.

ESI #2--Exposed impermeable substrates, non-vertical: exposure to high wave energy or tidal currents on a regular basis, strong wave-reflection patterns regular, substrate is impermeable with no potential for subsurface penetration over most of intertidal zone, slope of intertidal zone is less than 30 degrees, there can be accumulated but mobile sediments at the base of cliff, attached organisms are hardy and accustomed to high hydraulic impacts.

ESI #3--Semi-permeable substrate: substrate is semi-permeable with oil penetration less than 10 cm, sediments are sorted and compacted, slope is less than 5 degrees, sediment and potential for rapid burial mobility is low, surface sediments are subject to regular reworking by waves, there are relatively low densities of infauna.

ESI #4--Medium permeability substrate: permeable with oil penetration up to 25 cm, slope from 5 to 15 degrees, rate of sediment mobility is high with accumulation of up to 20 cm of sediments in a single tidal cycle, sediments are soft with low trafficability, low densities of infauna.

ESI #5--Medium to high permeability substrate: substrate of medium to high permeability which allows oil penetration up to 50 cm, spatial variations in distribution of grain sizes with finer ones at high tide line

and coarser ones in the storm berm and at toe of beach, 20 percent is gravel, slope between 8 and 15 degrees, sediment mobility is high during storms, sediments are soft with low trafficability, low populations infauna and epifauna except at lowest intertidal levels.

ESI #6--High permeability substrates: substrate is highly permeable with oil penetration up to 100 cm, slope is 10 to 20 degrees, rapid burial and erosion of shallow oil can occur during storms, high annual variability in degree of exposure and frequency of wave mobilization, sediments have lowest trafficability of all beaches, natural replenishment rate is the lowest of all beaches, low populations of infauna and epifauna except at lowest intertidal levels.

ESI #7--Exposed flat permeable substrate: flat (less than 3 degrees) accumulations of sediment, highly permeable substrate dominated by sand, sediments are well saturated so oil penetration is limited, exposure to wave or tidal-current energy is evidenced in ripples or scour marks or sand ridges, width can vary from a few meters to one kilometer, sediments are soft with low trafficability, high infaunal densities.

ESI #8--Sheltered impermeable substrate: sheltered from wave energy and strong tidal currents, substrate of bedrock or rocky rubble, variable in oil permeability, slope greater than 15 degrees with a narrow intertidal zone, high coverage of attached algae and organisms.

ESI #9--Sheltered flat semi-permeable substrate: sheltered from wave energy and strong tidal currents, substrate is flat (less than 3 degrees) and dominated by mud, sediments are water-saturated so permeability is low, width varies from a few meters to one kilometer, sediments are soft with low trafficability, infaunal densities are high.

ESI #10--Vegetated wetlands: marshes and swamps with various types of emergent herbaceous grasses and woody vegetation over flat mud to sand substrate--highly organic mud is common.

Alaska ShoreZone Coastal Habitat Mapping. An on-going coastal habitat mapping effort is producing an on-line database, digital maps, and color aerial imagery and videos of the coastline in the subarea. This geo-referenced data set collected at low tide includes coastal geomorphology and biological habitat for some intertidal and shallow subtidal areas.

Responders have access to several useful tools through the ShoreZone web portal. Low altitude video and high resolution still photos are available with longitude and latitude and presented spatially on base maps (basic maps, topos, and satellite images). Also, habitat maps can be generated online for attributes such as Oil Residency Index, ESI, and sensitive biota (e.g. eelgrass).

The National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Alaska Regional Office hosts the Alaska ShoreZone web portal at this website:

<http://alaskafisheries.noaa.gov/shorezone/>

The Nature Conservancy, an Alaska ShoreZone partner, also hosts an informative online website which has links to ShoreZone information. It can be accessed at <http://www.shorezone.org>

ESI Habitat Ranking			
ESI No.	Estuarine (Marine)	Lacustrine (Lake)	Riverine (Large Rivers)
1 A	Exposed rocky cliffs	Exposed rocky cliffs	Exposed rocky banks
1 B	Exposed sea walls	Exposed sea walls	Exposed sea walls
2	Exposed wave-cut platforms	Shelving bedrock shores	Rocky shoals; bedrock ledges
3	Fine- to medium-grained sand beaches	Eroding scarps in unconsolidated sediments	Exposed, eroding banks in unconsolidated sediments
4	Coarse-grained sand beaches	Sand beaches	Sandy bars and gently sloping banks
5	Mixed sand and gravel beaches	Mixed sand and gravel beaches	Mixed sand and gravel bars and gently sloping banks
6 A	Gravel beaches	Gravel beaches	Gravel bars and gently sloping banks
6 B	Riprap	Riprap	Riprap
7	Exposed tidal flats	Exposed flats	Not present
8 A	Sheltered rocky shores	Sheltered scarps in bedrock	Vegetated, steeply sloping bluffs
8 B	Sheltered sea walls	Sheltered sea walls	Sheltered sea walls
9	Sheltered tidal flats	Sheltered vegetated low banks	Vegetated low banks
10 A	Saltwater marshes		
10 B	Freshwater marshes	Freshwater marshes	Freshwater marshes
10 C	Freshwater swamps	Freshwater swamps	Freshwater swamps

"Environmental Sensitivity Index Guidelines" (October 1995) NOAA Technical Memorandum NOS ORCA 92

Eelgrass beds. Eelgrass (*Zostera marina*) beds are a habitat of special concern. Eelgrass beds provide important habitat for fish and invertebrates, especially juveniles, and are susceptible to nearshore disturbance. Eelgrass beds are particularly vulnerable to degradation from marine hydrocarbon spills and chronic pollution from shore-based development because oil has a longer residency time in typical eelgrass habitat, fine grained sediments on protected beaches. Eelgrass habitat maps created with the Alaska ShoreZone mapping project data (link above) can provide eelgrass distribution maps throughout the subarea.

Eelgrass is found on approximately 8% of the shoreline of southeastern Alaska (estimate based on the approximately 60% of the SE coastline that has been mapped by the ShoreZone project as of 2008). A table and map of selected eelgrass beds sampled for fish assemblages and eelgrass characteristics by the National Marine Fisheries Service Auke Bay Laboratories in Juneau, follows. A map of beach seine sample locales 1998-2010 as well as fish species caught may be found at:

<http://www.fakr.noaa.gov/habitat/fishatlas>.

Eelgrass (*Zostera marina*) sites sampled by Auke Bay laboratories, NOAA fisheries 1998-2010.

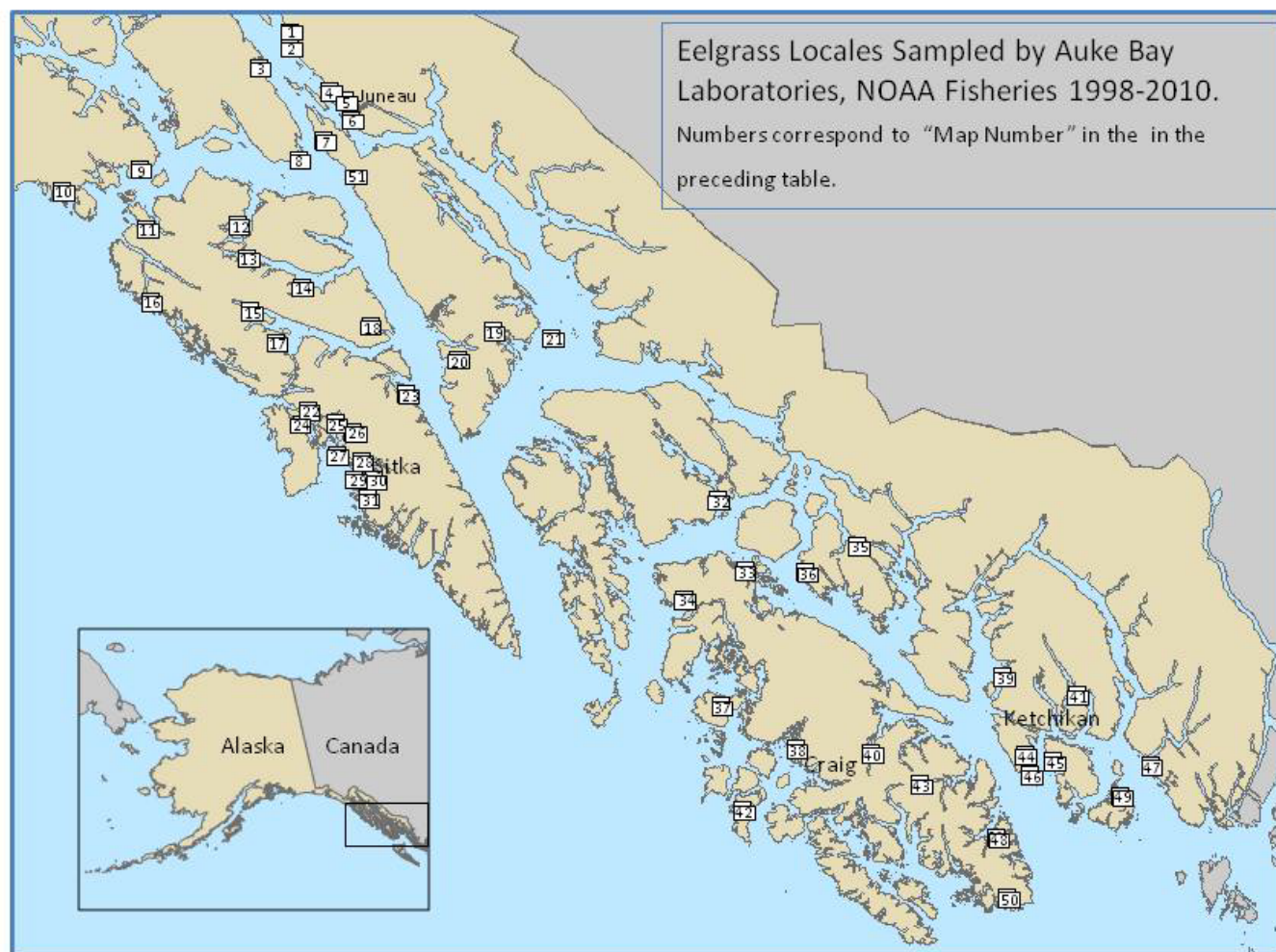
In the table below, "Map#" indicates the location of general sampling locales on the figure following the table. Each locale may have several sampling sites. "Priority" indicates eelgrass meadows of particular interest (M= monitoring sites, that have been sampled over several years, R = sites adjacent residential or recreational areas, E = sites adjacent commercial or public development, H= sites with high habitat value). Priority designations do not imply that other sites do not have importance. Latitude and longitude are reported in decimal degrees.

Map #	Locale	Sub Locale	Priority	Latitude	Longitude
1	Mainland/ Juneau	Berners Bay		58.6719	134.9148
1	Mainland/ Juneau	Berners Bay		58.6693	134.9127
1	Mainland/ Juneau	Berners Bay	M	58.6686	134.9121
2	Mainland/ Juneau	Bridget Cove	R	58.6421	134.9556
2	Mainland/ Juneau	Bridget Cove	M,R	58.6348	134.9480
2	Mainland/ Juneau	Bridget Cove	R	58.6303	134.9449
2	Mainland/ Juneau	Bridget Cove		58.6285	134.9425
2	Mainland/ Juneau	Bridget Cove		58.6274	134.9453
3	Mainland/ Juneau	St. James Bay	R	58.6100	135.2094
3	Mainland/ Juneau	St. James Bay	R	58.5731	135.1825
2	Mainland/ Juneau	Sunshine Cove	R	58.6084	134.9326
4	Mainland/ Juneau	Tee Harbor	R	58.4309	134.7648
5	Mainland/ Juneau	Waydelich Creek	R	58.3819	134.6603
5	Mainland/ Juneau	Auke Nu Cove	M,E	58.3809	134.6918
5	Mainland/ Juneau	Indian Cove	R	58.3774	134.7009
5	Mainland/ Juneau	Auke Village	R	58.3757	134.7256
5	Mainland/ Juneau	Bay Creek	M,E,R	58.3853	134.6517
5	Mainland/ Juneau	Mendenhall Pen.	R	58.3603	134.6462
9	Mainland	Dundas Point		58.3355	136.2052
6	Douglas Island	Fish Creek		58.3315	134.6080
10	Mainland	Torch Bay		58.3306	136.7715
6	Douglas Island	Peterson Creek	M	58.3018	134.6813
7	Admiralty Island	Funter Bay	M, R	58.2569	134.9003
7	Admiralty Island	Funter Bay		58.2553	134.9106
7	Admiralty Island	Funter Bay	M, R	58.2553	134.9097
7	Admiralty Island	Funter Bay		58.2550	134.9058
11	Chichagof Island	Port Althorp		58.1111	136.2789
11	Chichagof Island	Port Althorp		58.1094	136.2750
12	Chichagof Island	Neka Bay		58.0500	135.6725
12	Chichagof Island	Neka Bay		58.0497	135.6706
12	Chichagof Island	Neka Bay		57.9894	135.5976
13	Chichagof Island	Tenakee Inlet		57.9445	135.7302
13	Chichagof Island	Tenakee Inlet		57.8936	135.6225
13	Chichagof Island	Tenakee Inlet		57.8714	135.6157
16	Chichagof Island	Islas Bay		57.8437	136.3763
16	Chichagof Island	Islas Bay		57.8310	136.3945
14	Chichagof Island	Tenakee Springs		57.7758	135.1911

14	Chichagof Island	Tenakee Springs		57.7756	135.1914
15	Chichagof Island	Hoonah Sound		57.7597	135.7931
15	Chichagof Island	Hoonah Sound		57.7431	135.7931
14	Chichagof Island	Tenakee Springs		57.7387	135.2709
14	Chichagof Island	Tenakee Springs	M	57.7367	135.3836
14	Chichagof Island	Tenakee Springs		57.7366	135.3847
14	Chichagof Island	Tenakee Springs	M	57.7364	135.3875
15	Chichagof Island	Hoonah Sound		57.6166	135.6247
17	Chichagof Island	Ushk Bay		57.5705	135.6400
17	Chichagof Island	Ushk Bay		57.5656	135.6544
17	Chichagof Island	Ushk Bay		57.5628	135.6572
17	Chichagof Island	Ushk Bay		57.5618	135.6116
18	Chichagof Island	Sitkoh Bay		57.5325	134.9761
18	Chichagof Island	Sitkoh Bay		57.5303	134.9767
19	Admiralty Island	Pybus Bay		57.3872	134.1761
19	Admiralty Island	Pybus Bay		57.3764	134.1836
20	Admiralty Island	Chaik Bay	M	57.3142	134.4711
20	Admiralty Island	Chaik Bay	M	57.3133	134.4728
21	Brothers Islands	Brothers Islands	H	57.2928	133.8150
22	Baranof Island	St. John Baptist Bay	H	57.2834	135.5501
22	Baranof Island	St. John Baptist Bay	H	57.2834	135.5502
23	Baranof Island	Cosmos Cove		57.2428	134.8811
23	Baranof Island	Cosmos Cove		57.2425	134.8717
24	Baranof Island	Krestof Sound		57.2417	135.6227
25	Baranof Island	Nakwasina Sound		57.1975	135.3842
25	Baranof Island	Nakwasina Sound	M	57.1975	135.3833
25	Baranof Island	Nakwasina Sound		57.1964	135.3853
25	Baranof Island	Nakwasina Sound	M	57.1964	135.3847
26	Baranof Island	Katlian Bay		57.1859	135.3478
26	Baranof Island	Katlian Bay		57.1645	135.3112
26	Baranof Island	Katlian Bay		57.1644	135.3104
26	Baranof Island	Katlian Bay		57.1640	135.3144
26	Baranof Island	Katlian Bay		57.1529	135.3610
27	Baranof Island	Middle Island	R	57.0931	135.4494
27	Baranof Island	Middle Island	R	57.0923	135.4481
28	Baranof Island	Sitka	R	57.0494	135.32194
28	Baranof Island	Sitka		57.0436	135.3037
29	Baranof Island	Pirate Cove		56.9853	135.3753

29	Baranof Island	Pirate Cove		56.9852	135.3753
29	Baranof Island	Pirate Cove	M	56.9849	135.3713
29	Baranof Island	Pirate Cove	M	56.9844	135.3717
29	Baranof Island	Pirate Cove		56.9853	135.3756
30	Baranof Island	Sandy Cove		56.9788	135.3172
30	Baranof Island	Sandy Cove	M	56.9786	135.3108
30	Baranof Island	Sandy Cove		56.9782	135.3117
30	Baranof Island	Sandy Cove	M	56.9781	135.3119
31	Baranof Island	Redoubt Bay		56.9110	135.3260
31	Baranof Island	Redoubt Bay		56.9106	135.3246
31	Baranof Island	Kanga Bay		56.8788	135.3411
32	Kupreanof Island	Kah Sheets Bay		56.5183	133.0969
32	Kupreanof Island	Kah Sheets Bay		56.5167	133.0958
33	Prince of Wales I.	Exchange Cove		56.2478	133.0781
33	Prince of Wales I.	Exchange Cove		56.2111	133.0683
34	Prince of Wales I.	Calder Bay		56.1950	133.5167
34	Prince of Wales I.	Calder Bay		56.1936	133.5169
35	Etolin Island	Olive Cove		56.1917	132.3033
35	Etolin Island	Olive Cove		56.1886	132.3164
36	Etolin Island	Steamer Bay		56.1575	132.6978
36	Etolin Island	Steamer Bay		56.1531	132.6911
37	Heceta Island	Warm Chuck Inlet		55.7758	133.5319
37	Heceta Island	Warm Chuck Inlet		55.7708	133.5361
37	Heceta Island	Warm Chuck Inlet		55.7581	133.4708
37	Heceta Island	Warm Chuck Inlet		55.7564	133.4711
38	Prince of Wales I.	Klawock Inlet		55.5778	133.0941
38	Prince of Wales I.	Klawock Inlet		55.5772	133.0944
38	Prince of Wales I.	Klawock Lagoon	M , R	55.54796	133.0937
39	Revillagigedo I	Naha Bay		55.5446	131.7032
38	Prince of Wales I.	Klawock Inlet		55.5361	133.1056
38	Prince of Wales I.	Klawock Inlet		55.5358	133.1053
38	Prince of Wales I.	Klawock Inlet		55.5208	133.1617
38	Prince of Wales I.	Klawock Inlet		55.5003	133.1647
38	Prince of Wales I.	Klawock Inlet		55.5000	133.1644
38	Prince of Wales I.	Klawock Inlet		55.4875	133.1414
38	Prince of Wales I.	Klawock Inlet		55.4872	133.1414
38	Prince of Wales I.	Ballena Island		55.4764	133.1881
40	Prince of Wales I.	Twelve Mile Arm		55.4283	132.6594

40	Prince of Wales I.	Twelve Mile Arm		55.4156	132.6881
41	Revillagigedo I.	Thorne Arm		55.3868	131.2886
42	Baker Island	Port San Antonio		55.3658	133.5856
42	Baker Island	Port San Antonio		55.3575	133.5869
43	Prince of Wales I.	Cholmondeley S.		55.2541	132.4418
44	Gravina Island	Bostwick Inlet		55.2364	131.7500
44	Gravina Island	Bostwick Inlet		55.2342	131.7300
45	Annette Island	Sylburn Harbor		55.1782	131.5791
46	Gravina Island	Dall Bay		55.1561	131.7498
47	Mainland	Kah Shakes Cove		55.0426	130.9995
47	Mainland	Kah Shakes Cove		55.0418	130.9973
48	Prince of Wales I.	Moira Sound		54.9711	132.0924
49	Duke Island	Reef Harbor		54.9684	131.2492
50	Prince of Wales I.	Nichols Bay		54.7401	132.1536



3. Upland Habitats

At this time, no uplands or wetlands classifications directly related to sensitivity to oil spills has been identified. A general wetlands classification has been developed by the U.S. Fish and Wildlife Service, National Wetlands Inventory, in Anchorage. Considerable mapping of wetlands has been completed, some of which are available in a Geographic Information System database (see the following figure). Updated map data is being placed on the National Wetlands Inventory Internet web site:

<http://wetlands.fws.gov/>

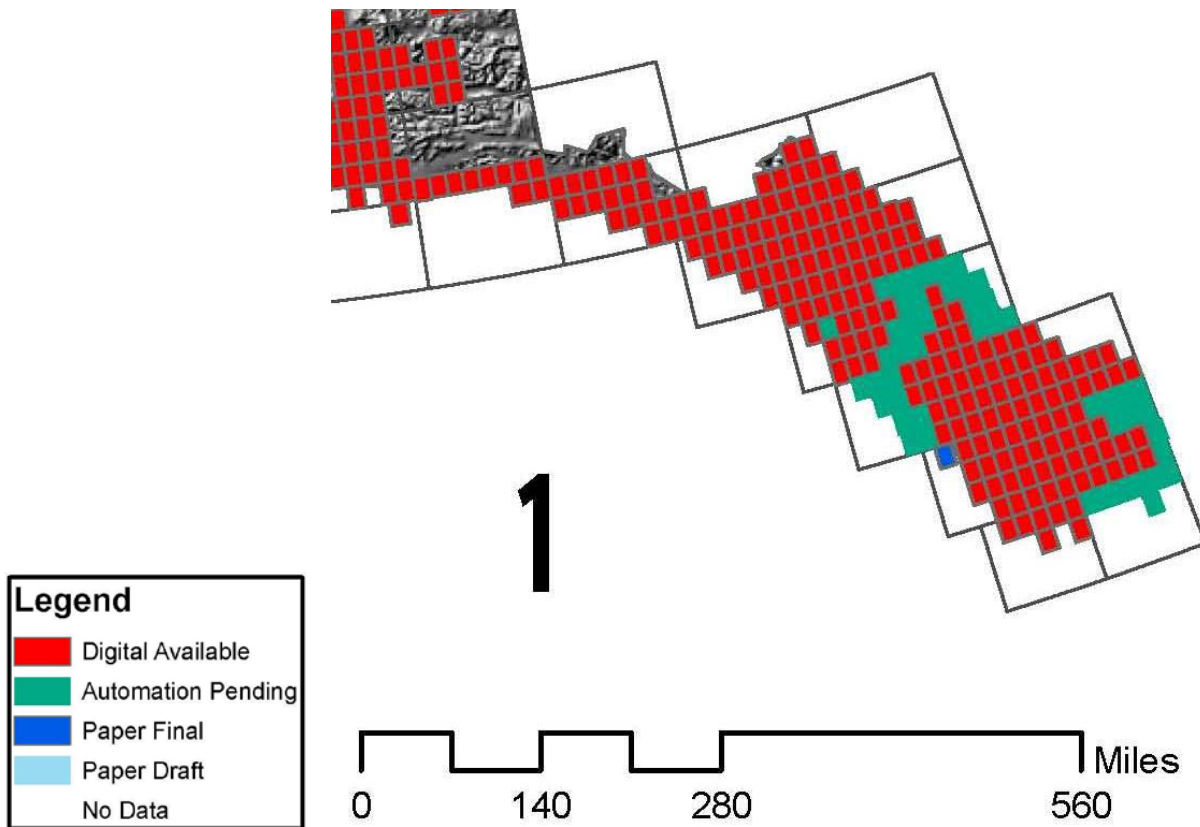
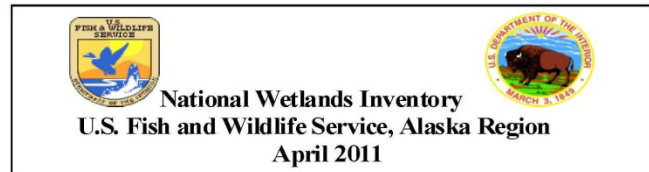
Wetland Status Map

<http://alaska.fws.gov/fisheries/nwi/index.htm>

Where to get Wetland Data:

For digital data, go to the following web address and click on map of Alaska:
<http://wetlandsfws.er.usgs.gov/wtinds/launch.html>

For paper maps, contact
Wildlife and Fisheries Sciences
South Dakota State University
Box 2140B, Room 138, SNP
Brookings, SD 57007-1696
Telephone: (605) 688-5890
<http://wfs.sdstate.edu/wfsdept/nwi/nwi.html>
SDSU_WETLAND@sdstate.edu



B. BIOLOGICAL RESOURCES

1. **Threatened and Endangered Species**

Federally listed threatened and endangered species are protected under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.). If response strategies are proposed in locations where migratory birds and/or marine mammals listed as threatened and/or endangered are (or may be) present, the Federal On-Scene Coordinator will need to immediately consult with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service (as appropriate) regarding the proposed strategies, in accordance with the Endangered Species Act Memorandum of Understanding (see the **Unified Plan, Annex K**). The following species^a and critical habitat occur in this subarea:

Endangered Species Act of 1973 Protected Species and Critical Habitat			
Listed species	Stock	Latin Name	Status*
Short-tailed albatross**		<i>Diomedea albatrus</i>	Endangered
Yellow-billed loon**		<i>Gavia adamsii</i>	Candidate
Kittlitz's murrelet**		<i>Brachyramphus brevirostris</i>	Candidate
Sperm whale*		<i>Physeter catodon</i>	Endangered
Fin whale*		<i>Balaenoptera physalus</i>	Endangered
Blue whale*		<i>Balaenoptera musculus</i>	Endangered
Sei whale*		<i>Balaenoptera borealis</i>	Endangered
Humpback whale*		<i>Megaptera novaeangliae</i>	Endangered
Northern right whale*		<i>Eubalaena japonica</i>	Endangered
Gray whale*	W N Pacific	<i>Eschrichtius robustus</i>	Endangered
Steller sea lion*		<i>Eumetopias jubatus</i>	Threatened
Snake River Sockeye Salmon*		<i>Onchorynchus nerka</i>	Endangered
Snake River Fall Chinook Salmon*		<i>Onchorynchus tshawytscha</i>	Threatened
Snake River Spring/Summer Chinook Salmon*		<i>Onchorynchus tshawytscha</i>	Threatened
Puget Sound Chinook Salmon*		<i>Onchorynchus tshawytscha</i>	Threatened
Lower Columbia River Chinook*		<i>Onchorynchus tshawytscha</i>	Threatened
Upper Willamette River Chinook Salmon*		<i>Onchorynchus tshawytscha</i>	Threatened
Upper Columbia River Spring Chinook Salmon*		<i>Onchorynchus tshawytscha</i>	Endangered
Upper Columbia River Steelhead*		<i>Onchorynchus mykiss</i>	Endangered
Snake River Basin Steelhead*		<i>Onchorynchus mykiss</i>	Threatened
Lower Columbia River Steelhead*		<i>Onchorynchus mykiss</i>	Threatened
Upper Willamette River Steelhead*		<i>Onchorynchus mykiss</i>	Threatened
Middle Columbia River Steelhead*		<i>Onchorynchus mykiss</i>	Threatened
Designated Critical Habitat			
Species Group	General Reference Area		
Steller Sea Lions	See the table and map on pages D-43 – D-45.		

*Managed by the National Marine Fisheries Service

**Managed by the U.S. Fish and Wildlife Service

^a In its definition of species, the Endangered Species Act of 1973, as amended, includes the traditional biological species concept of the biological sciences and “any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature” (16 U.S.C. 1532). The National Marine Fisheries Service uses the term *evolutionarily significant unit* as synonymous with *distinct population segment* and lists Pacific salmon accordingly. For the purposes of section 7 consultations, these are all “species.”

Candidates are species for which there is enough information on their biological status and threats to propose them as endangered or threatened, but for which development of a proposed listing regulation is precluded by other higher priority listing activities.

For updated information available on the Internet:

U.S. Fish and Wildlife Service Regional Threatened and Endangered Species web site:

<http://alaska.fws.gov/fisheries/endangered/index.htm>

The National Marine Fisheries Service Regional Threatened and Endangered Species web site:

http://www.fakr.noaa.gov/protectedresources/esa/ak_specieslst.pdf

Alaska Department of Fish and Game Threatened and Endangered Species web site:

<http://www.wildlife.alaska.gov/index.cfm?adfg=endangered.main>

For Steller sea lion critical habitat and no-entry zones, consult pages D-43 – D-45, below, and please visit the NMFS website: <http://www.fakr.noaa.gov/protectedresources/stellers/habitat.htm>.

2. Fish and Wildlife

(a) Fish

The subarea is rich in biological resources. Dense concentrations of marine organisms are present, including five species of salmon, halibut, herring, crab, shrimp, and clams. Abundant marine vegetation, such as kelp, seagrass, and salt marsh plants are critical components of the coastal ecosystem. In addition to supporting sizeable commercial fisheries, those resources are used for subsistence and by sport hunters and fishermen. More information can be obtained on the Alaska Department of Fish and Game Internet website at <http://www.adfg.alaska.gov>.

Essential Fish Habitat (EFH)

In 1996 Congress added new habitat provisions to the Magnuson-Stevens Fishery Conservation and Management Act, the federal law that governs U.S. marine fisheries management. Under the Magnuson-Stevens Act, each fishery management plan must describe and identify EFH for the fishery, minimize to the extent practicable the adverse effects of fishing on EFH, and identify other actions to encourage the conservation and enhancement of EFH. Federal agencies must consult with the National Marine Fisheries Service on any action they authorize, fund, or undertake that may adversely affect EFH, and the National Marine Fisheries Service must provide conservation recommendations to federal and state agencies regarding any action that would adversely affect EFH. Reference information for EFH in the subarea as identified by the National Marine Fisheries Service, can be found on their internet site at:

<http://alaskafisheries.noaa.gov/habitat/efh.htm>.

An additional EFH resource is their interactive mapping internet site:

<http://www.habitat.noaa.gov/protection/efh/habitatmapper.html>

Finfish

Fish species most vulnerable to an oil spill are those with life stages that use intertidal habitat and more than 100 species of fish were identified in recent nearshore habitat surveys. Those species include: anadromous fish, such as salmon, trout, Dolly Varden char, and eulachon; groundfish such as walleye pollock, Pacific cod, rock sole, yellowfin sole, starry flounder, English sole, butter sole, and copper, dusky, brown, black, dark, and quillback rockfish, and; forage fish such as Pacific herring, Pacific sandlance, capelin, eulachon, shiner perch, Pacific sandfish, and surf smelt. Useful survey information, nearshore species distribution, and nearshore habitat information can be found at:

<http://alaskafisheries.noaa.gov/habitat/fishatlas/>

Anadromous fish migrate to and from marine areas from spring through fall, using coastal lagoons, estuaries and river deltas as habitat while making physiological adjustments to travel between

marine and fresh water. River deltas are also important rearing and wintering areas for pink and chum salmon that spawn intertidally. Estuaries and lagoons provide important summer habitat for juvenile anadromous fish, but are generally not used in winter. The Alaska Department of Fish and Game Anadromous Waters Catalog Maps may be found at the following web site:

<http://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=maps.selectMap&Region=SEA>

Salmon produced in Southeast Alaska support important commercial fisheries ranging from stock specific nearshore fisheries to mixed stock fisheries offshore. Adult salmon are in freshwater from mid-April through early December, depending on the species of salmon and the stream system. Salmon eggs incubate in stream gravels over the winter. Juvenile salmon emerge from the gravel in spring and may rear in fresh water for up to four years before migrating to sea. Attachment two of this document provides average salmon escapement or average peak index counts for salmon streams in the Southeast Alaska area.

Pink and chum salmon fry have only a brief period of freshwater residence and enter salt water soon after emergence from the spawning beds. The fry reside in nearshore areas for several weeks before migrating offshore. Pink salmon spend one year at sea and chum salmon spend three or four years at sea before returning to spawn. They feed primarily on zooplankton.

Sockeye salmon are most often present in stream systems with lakes that they can access from salt water. Juveniles usually spend one to three years rearing in lakes before migrating to sea in the spring as smolts. Sockeye salmon spend one to four years at sea before returning to their natal stream to spawn. Sockeye salmon feed primarily on zooplankton throughout their life history.

The chinook salmon is Alaska's state fish and is the largest of all Pacific salmon, with weights of individual fish commonly exceeding 30 pounds. Adult chinook salmon enter fresh water from July to September and juveniles spend one year in fresh water before going to sea. Only a few spawning populations of chinook salmon occur in southeast Alaska, but many rear for two to five years in inshore marine waters of the subarea. In fresh water they feed on plankton and insects while at sea they eat relatively large prey such as fish and squid. Unlike other salmon species, they are available to commercial and sport fishers all year which also makes them vulnerable to inshore marine pollutants year round.

Coho salmon occur in nearly all accessible bodies of fresh water from large transboundary watersheds to small tributaries throughout Southeast Alaska. Coho salmon enter spawning streams from July to November, usually during periods of high runoff. Juvenile coho salmon rear from one to four years in freshwater and may spend summers in estuaries. Coho salmon go to sea between March and June and spend eighteen months at sea before returning to natal streams to spawn. Coho feed primarily on insects in freshwater and on fish in marine areas.

Rainbow trout, cutthroat trout, and Dolly Varden char have both resident and anadromous life history forms in southeast Alaska. Resident fish complete their entire life cycle in fresh water and anadromous fish return to freshwater spawning and wintering areas from April through December.

Resident rainbow trout generally spawn during May and June. The anadromous form (steelhead) spawn from mid April to June and adults that survive spawning return to the ocean in mid-May to June. Fry emerge several weeks to months later. Steelhead rear two to five years in freshwater before emigrating to offshore rearing areas where they spend one to four years before returning to spawn. Drainages supporting the most significant populations in Southeast Alaska include the Situk, Naha, Karta, Thorne, and Ahrnklin River. In addition to sport fisheries for steelhead, there are also directed Federal subsistence fisheries in all streams in Southeast according to conditions specified on a Federal subsistence fishing permit.

Cutthroat trout are the most common trout in the subarea and occur as both resident and anadromous (sea-run) forms in streams and lakes throughout Southeast Alaska. They spawn from March to early June. Sea-run cutthroat trout usually winter in lakes, and adults and smolts migrate to nearshore marine feeding areas and natal stream spawning areas in early spring.

Dolly Varden char spawn from September to October; fry emerge in April and May. All but the smallest streams provide habitat for resident and rearing Dolly Varden, which feed primarily on insects. After several years in fresh water Dolly Varden may become anadromous. Anadromous fish reside in nearshore marine areas during the summer feeding on small fish and invertebrates, but spend winters in lakes after spawning.

Forage Fish – Fish considered forage species are typically small schooling fish found in open water. However, juveniles of many forage fish species spend part of their lives in the shallow vegetated nearshore areas and there would be more vulnerable to effects of an oil spill. Forage fish are critically important in the subarea food web as many seabirds, fish, and marine mammals rely on them as prey. These fish feed primarily on plankton and provide the trophic link between primary production (plankton) and the apex predator species (e.g., salmon and groundfish) that commercial fisheries rely on. Some of these species also support important commercial fisheries.

Eulachon are among the most common forage fish in the Gulf of Alaska and are also anadromous, migrating to streams throughout the subarea to spawn in April or May. Spawning eulachon provide a spring feast for bears, eagles, killer whales, seals, sea lions, gulls, and humans. Drainages with eulachon migrations include the Unuk (Eulachon), Stikine, Taku, Mendenhall, Chilkat, Antler, and Lace rivers in Southeast; and the Situk near Yakutat.

Pacific herring occur widely across the subarea in water depths from 50 to 100 meters. In Alaska, spawning is first observed in the southeastern archipelago during mid-March. Spawning is confined to shallow, vegetated areas in the intertidal and subtidal zones. Juvenile herring hatch in about two weeks and may rear in nearshore areas for several months before moving offshore.

Herring are an important food source for many marine mammals in Southeast Alaska. Steller sea lions, humpback whales, gray whales, and killer whales are all known to forage on herring. Steller sea lions, and probably harbor seals, aggregate at herring spawning areas to feed.

Capelin are not as numerous in southeast Alaska as in other areas of the State, but are important forage for higher trophic predators such as seabirds and marine mammals because of their high oil content. They spawn on sandy to small gravel beaches, but the timing and location of spawning varies considerably from year to year.

Pacific sand lance are another abundant forage species in southeast Alaska. Sand lance generally spawn from mid November to mid December along sandy shorelines.

Other Forage Fish – Other species in nearshore areas that contribute to the forage base include Pacific sandfish and smelt. Adult Pacific sandfish generally occur at depths of 100 to 200 meters over sand or mud bottoms but enter nearshore areas to spawn among algae and may school in bays throughout the subarea. Smelt, including surf smelt and longfin smelt are common but not abundant throughout the subarea and enter nearshore areas to spawn along sandy shorelines at widely varying times and locations. Krill are a very important source of food for marine mammals and birds in Southeast Alaska, including Endangered Species Act-listed species. Krill are also an important source of food for other forage fish upon which marine mammals and birds rely.

Groundfish are defined for the purpose of management by the State of Alaska as any marine finfish except halibut, osmerids, herring, and salmonids. Several species in this group support important commercial sport and subsistence fisheries in the subarea and juveniles rearing in southeast Alaska also contribute to offshore fisheries. Juvenile pollock, greenling, and sculpin make up a significant portion of the diet of species such as salmon and marine mammals.

Pacific halibut are not considered groundfish because they are managed exclusively by the International Pacific Halibut Commission. For the purpose of this discussion, however, we include Pacific halibut with groundfish.

Groundfish species common in Southeast Alaska include: Pacific halibut, arrowtooth flounder, flathead sole, yellowfin sole, starry flounder, rock sole, Pacific cod, Pacific tomcod, walleye pollock, copper

rockfish, dusky rockfish, quillback rockfish, yelloweye rockfish, sablefish, kelp greenling, rock greenling, whitespotted greenling, lingcod, and sculpin.

Flatfish such as flounder, sole, and halibut live on low gradient bottoms throughout the subarea. Large species such as Pacific halibut and arrowtooth flounder generally inhabit deeper more open water areas while smaller flatfish species are more likely to inhabit shallow bays.

Pacific halibut are found throughout southeastern Alaska and support important commercial, sport, and subsistence fisheries. They spawn in deep water from 180 to 460 meters from November to January. Older halibut spend winters in deep water along the continental shelf. In summer, adult halibut move to shallow coastal waters (depths of 30 to 300 meters) to forage on fish and invertebrates.

Yellowfin sole and starry flounder spawn and rear in shallow subtidal areas of bays and estuaries. Yellowfin sole juveniles stay in the nearshore area for 3 to 5 years. Starry flounder are resident in shallow flats, estuaries, and lagoons throughout their life. These fish feed intertidally on clam siphons, small fish, and invertebrates.

Rock sole and flathead sole inhabit deeper areas of bays, but often move into nearshore areas to forage.

Pacific cod and walleye pollock are common in the subarea, primarily inhabiting straits, channels, and deep bays in the region. Adults are pelagic and are most abundant in water depths from 100 to 300 meters, but commonly occupy a much larger depth range. Juveniles are also pelagic and generally occupy the upper 60 meters of the water column. They feed primarily on pelagic invertebrates (e.g., euphasids) and small fish. These fish spawn in late winter or early spring and due to their abundance, they are extremely important to the ocean's food web.

Rockfish in the subarea are most abundant along the outer Pacific coast, but also inhabit nearshore reefs and high current areas in inside waters. There are about 30 different species of rockfish in the subarea. Rockfish are long-lived, ovoviparous fish, which become sexually mature between 5 and 15 years of age. *Copper rockfish* commonly inhabit shallow bays and often feed and rear in eelgrass. *Quillback*, *black*, *dark*, and *dusky rockfish* inhabit nearshore areas characterized by kelp beds, but may also be found with *yelloweye rockfish* on deeper reefs. The juveniles of many rockfish, that as adults live in deep offshore waters are found on nearshore reefs. These fish feed on small fish and invertebrates.

Adult sablefish are demersal species that generally inhabit depths greater than 200 meters. Adult sablefish inhabit some of the deeper straits in the subarea. Sablefish spawn at depth in late winter and the pelagic larvae and juveniles migrate inshore over the next few months. Juvenile sablefish rear for 2 to 3 years in nearshore waters, including the bays and channels in southeast Alaska. Adults feed opportunistically on live prey or as scavengers, while juveniles feed on pelagic invertebrates and small fish.

Greenling are generally abundant in the subarea and the common species are generally separated by habitat. As you might expect, *Kelp greenling* are abundant in kelp and algae beds and *rock greenling* are most common adjacent to nearshore reefs. *Whitespotted greenling* are most common in bays and estuaries. Juvenile greenling are pelagic and are important as forage in some areas.

Lingcod typically inhabit nearshore rocky reefs and high current areas from 10 to 100 meters in depth. They migrate inshore to spawn in the fall and return to areas farther offshore in winter. Along the Pacific coast juvenile lingcod are common in shallow bays, but they rarely use such areas in inside waters. Lingcod are increasingly popular as sport fish and from 1990-1999 an average of 2,259 fish were harvested in Southeastern Alaska sport fishery.

Literally dozens of sculpin species are abundant in southeast Alaska. Most are benthic, inhabiting bottoms ranging from vertical rock faces to mud bottom bays. Some, such as the crested sculpin, are pelagic. Nearly all feed on invertebrates and small fish. Their abundance makes them important as forage for some commercially harvested species.

Sharks and skates – Species in the subarea include the *spiny dogfish shark*, *Pacific sleeper shark*, *salmon shark*, *Alaska skate*, *big skate*, and *longnose skate*. Spiny dogfish are common throughout

the subarea and are locally abundant in water less than 150 meters deep over soft bottoms near current junctions. Spiny dogfish are opportunistic feeders and will scavenge or eat many kinds of live prey. The Pacific sleeper shark may grow to 10 meters in length and is one of the largest sharks in the world. Generally considered a scavenger, the sleeper is often one of the first animals to show up at sunken whale carcasses. Salmon sharks are often found near the surface and feed mostly on fish. Skates are common in bays and shallow flats where there is not too much current. Skates feed primarily on clams and other infauna.

Shellfish

Crustaceans (including shrimp and crabs) are important in the diet of many species ranging from forage fish to baleen whales.

Dungeness Crabs are found from the intertidal region to a depth of 230 meters in Southeast Alaska. Dungeness crabs are most common on sand or muddy-sand bottoms in the subtidal region, and are often found in or near eelgrass beds. However, they can also be found on a number of other substrata including various mixtures of silt, sand, pebble, cobble, and shell. Juvenile Dungeness crabs are found in similar habitats to adults, but they generally occupy shallower depths than adults. Juvenile crabs can be very abundant in the intertidal zone, but also occur in shallow subtidal areas. Survival of young crabs is greatest in habitats such as intertidal zones and eelgrass beds, where they can gain refuge from predators. It is widely distributed and can be found as far north as Cook Inlet and Prince William Sound and south to Magdalena Bay, Mexico. This crab supports both a commercial fishery and a personal use fishery in Alaska. Commercial Dungeness crab harvests from Southeast Alaska have averaged 2.2 million pounds per season.

Three species of King Crab are located in Southeast Alaska: red, blue, and brown. Red king crab larvae generally exhibit a diel movement being most abundant in the upper water column during the day and deeper at night. Young of the year crab occur at a depth of 50 meters or less. They are solitary and need high relief habitat or coarse substrate such as boulders, cobble, shell hash, and living substrates such as bryozoans and stalked ascidians. Between the ages of two and four years, there is a change in habitat needs and a tendency for the crab to form pods consisting of thousands of crabs. Podding generally continues until four years of age (about 6.5 centimeters), when the crabs move to deeper water and join adults in the spring migration to shallow water for spawning. Adult red king crabs occur to a depth of 365 meters; preferred habitat for reproduction is water less than 90 meters. Red and blue kings can occur from the intertidal zone to 180 meters or more. Golden king crabs live mostly between 180–730 meters, but can occur from 90–900 meters.

A near peak harvest of red king crabs occurred in the 1980/81 season, but three years later the fishery crashed, as harvests were down sixty-fold, and the four top historical producing areas were closed completely to red king crab fishing for the first time. Red king crab populations have remained depressed statewide (except in Southeast Alaska) since 1983.

Tanner Crab larvae are strong swimmers and perform diel vertical migrations in the water column (down at night). They usually stay near the depth of the chlorophyll maximum during the day. The length of time larvae take to develop is unknown, although it has been estimated at only 12 to 14 days. After settling to the bottom, Tanner crabs are widely distributed at depths up to 473 meters. Females are known to form high density mating aggregations consisting of hundreds of crabs per mound at depths less than 30 meters. The mounds likely form in the same general location each year, but the location of the mounds is largely undocumented. They form the basis of a thriving domestic fishery from Southeastern Alaska north through the Bering Sea. The peak hatching period for tanner crabs is usually between April and June.

Pacific Weathervane scallops are found on sand, gravel, and rock bottoms from 45-180 meters throughout Southeast Alaska. Sexually maturity occurs at age 3 or 4 and scallops are of commercially harvestable size at 6 to 8 years. Scallops are found in beds (areas of abundant numbers). Scallops are dioecious and they spawn in June and July where the spermatozoa and ova are released into the water. Around one month later, hatching occurs and the larvae drift with the tides and currents. After two or three weeks the

larvae will have gained shell weight, settled to the bottom, and attached to seaweed. Scallops may live to age 18 and they feed by filtering microscopic plankton from the water. They have been commercially harvested throughout Alaska on a sporadic basis due to overharvesting of scallop beds, more lucrative fisheries, and market conditions.

Bay scallops occur shallower than weathervane scallops (15-60 meters). They are more easily collected by divers and are frequently harvested in this manner. They are more vulnerable to oil exposure than weathervane scallops as adults.

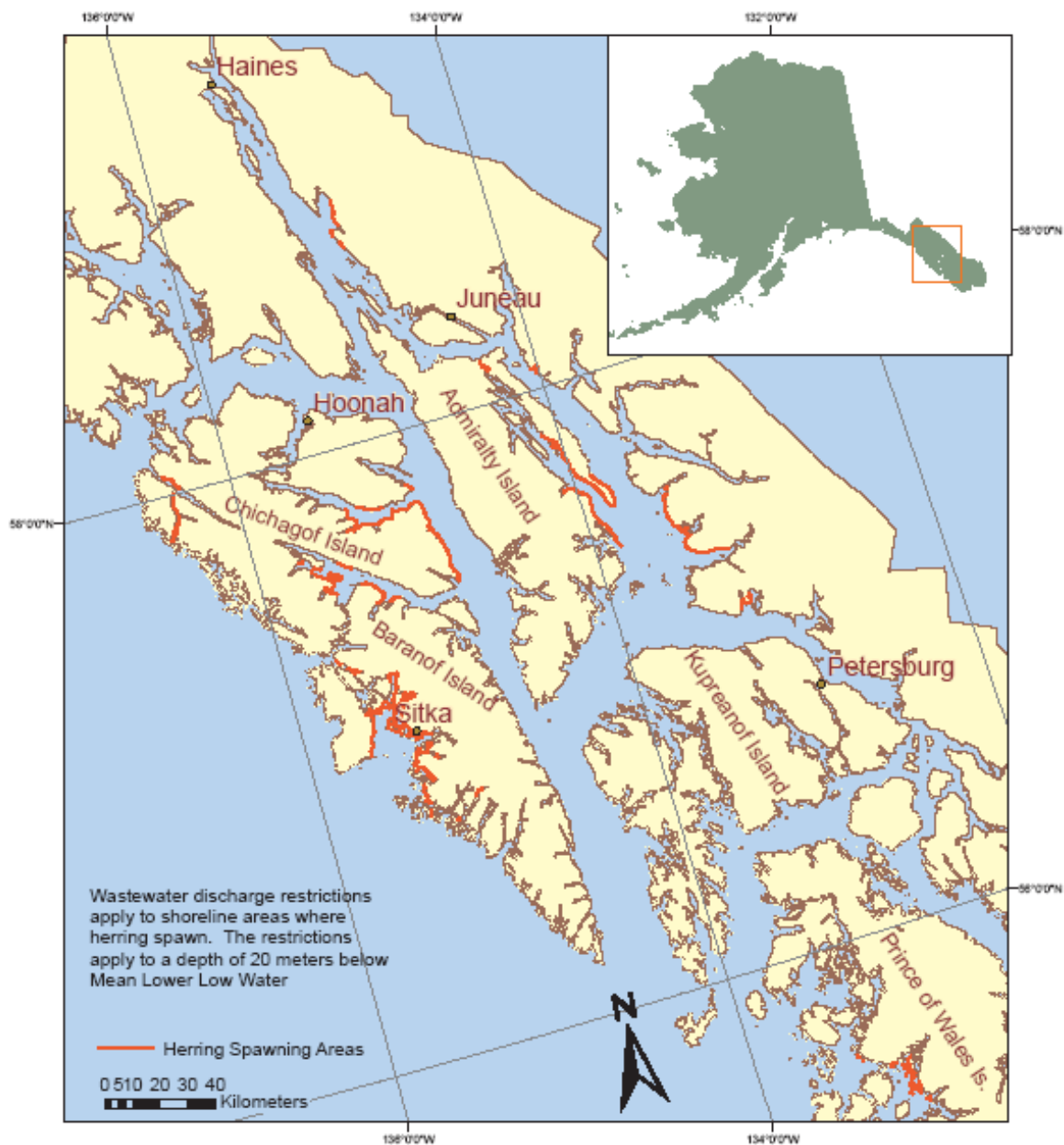
Shrimp – Pandalid shrimp (northern pink shrimp, humpy/flexed shrimp, coonstripe shrimp, spot shrimp and sidestripe/giant red shrimp) are distributed throughout most major bays and certain nearshore and offshore areas in Southeast Alaska. Coonstripes and spot shrimp are generally associated with rock piles, coral, and debris-covered bottoms, whereas pinks, sidestripes, and humpies typically occur over muddy bottom. Pink shrimp occur over the widest depth range (18-1500 meters). Humpies and coonstripes usually inhabit shallower waters (5-370 meters). Spot shrimp seem to be caught in the greatest concentrations around 110 meters, but range from 3 to 460 meters. Sidestripes are typically found from 45 to 640 meters, but most concentrations occur in waters deeper than 73 meters. Most shrimp migrate seasonally from deep to shallow waters. The major pot shrimp fisheries occur in Cook Inlet, Prince William Sound, and Southeast Alaska and usually total less than 500,000 pounds annually. Spot shrimp are the primary species caught in the waters of Southeast Alaska.

Clams – Razor clams are filter feeders subsisting on plankton. They live in surf-swept and somewhat protected sand beaches of the open ocean throughout Southeast Alaska. They are found from approximately 1 meter above the mean low water level down to depths of 55 meters. Pacific little neck clams are commercially harvested throughout Southeast Alaska.

Blue mussels are found throughout the Southeastern Alaska and are found through the intertidal zone up to a depth of five meters densely packed around rock, wood, or other solid structure.

Herring Spawning Areas Northern Southeast Alaska

Alaska Department of Environmental Conservation, November 2005



Not for Navigational purposes, map for identification of the herring spawning areas only
Data source: Alaska Department of Fish and Game, Commercial Fisheries Division

Herring Spawning Areas Southern Southeast Alaska

Alaska Department of Environmental Conservation, November 2005



(b) Birds

Important Bird Habitats/Communities

Large numbers of waterfowl, seabirds and shorebirds are present during the spring and fall migrations. The Stikine and Mendenhall river deltas and Yakutat and Bering Glacier forelands areas are particularly important staging areas. Many birds also breed in the region during the summer and a large duck population overwinters in sheltered areas. Major seabird breeding colonies are located on St. Lazaria, Forrester and Hazy Islands. Smaller colonies are also present throughout the region. Recent surveys have also been completed by the Fish and Wildlife Service for marbled and Kittlitz's murrelets and wintering water birds in Southeast.

The Alaskan Seabird Colony Catalog is an automated database that contains the distributions of breeding seabirds and the relative size of all the colonies in Alaska. The data reports indicating estimated species composition and numbers for seabird colonies of Southeast Alaska are summarized from the catalog. The maps display colony locations. The Alaska Seabird Colony Catalog is maintained by the U.S. Fish and Wildlife Service, Division of Migratory Bird Management. The database may be accessed at:

<http://alaska.fws.gov/mbmp/mbm/northpacificseabirds/colonies/default.htm>

Important Bird Species/Groups

Many of the Southeast's birds are water birds. Some are year-round residents, and many more species pass through the area during spring and fall migration periods. Some northern breeding seaducks spend the winter in Southeast Alaska. In May, large concentrations of seabirds feed on the dense concentrations of prey fish and shorebird flocks feed on invertebrates in coastal mudflats and marshes. Nesting of the Southeast's birds occurs in a wide variety of habitats: cliffs, gravel bars in streams, peatland bogs, hollows in dead trees, rockpiles, burrows, trees and at the base of tree trunks, or marsh grasses along the edges of lakes. An Alaskan bird list may be found at the following website:

<http://www.npwrc.usgs.gov/resource/othrdata/chekbird/r7/alaska.htm>

A Juneau bird checklist may be found at the following website:

<http://www.npwrc.usgs.gov/resource/othrdata/chekbird/r7/juneau.htm>

A checklist for Glacier Bay National Park and Preserve is available at the following website:

http://www.nps.gov/glba/naturescience/upload/bird_list.pdf

Waterfowl – Spring and fall concentration areas for waterfowl include the Blacksand Island and Situk River tidal flat areas, Dry Bay, Chilkat Inlet, Mendenhall Wetlands State Game Refuge, Stikine River Flats, and Burroughs Bay. Winter residents and migrants include common loon, yellow-billed loon, Pacific loon, red-throated loon, horned grebe, red-necked grebe, western grebe, and pelagic cormorant. Wintering seaducks include Barrow's and common goldeneye, harlequin duck, long-tailed duck, white-winged scoter, surf scoter, and black scoter. Large flocks of non-breeding scoters reside in coastal waters all summer. Harlequin ducks are the only seaduck that nests in Southeast Alaska. Nesting waterfowl are Vancouver Canada geese (that also winter in the subarea), mallard, and common and red-breasted merganser. Green-winged and blue-winged teal may nest in the extensive freshwater wetlands in the Yakutat area.

Seabirds – Common gull and gull-like birds include the glaucous-winged, mew, herring, and Thayer's and Bonaparte's gulls, black-legged kittiwake, Arctic tern and forked-tailed and Leach's storm petrel. Aleutian tern and the Caspian tern are less commonly found. Common murre, pigeon guillemot, Cassin's and rhinoceros auklets, horned and tufted puffins, and marbled and Kittlitz's murrelets are also found along the coast.

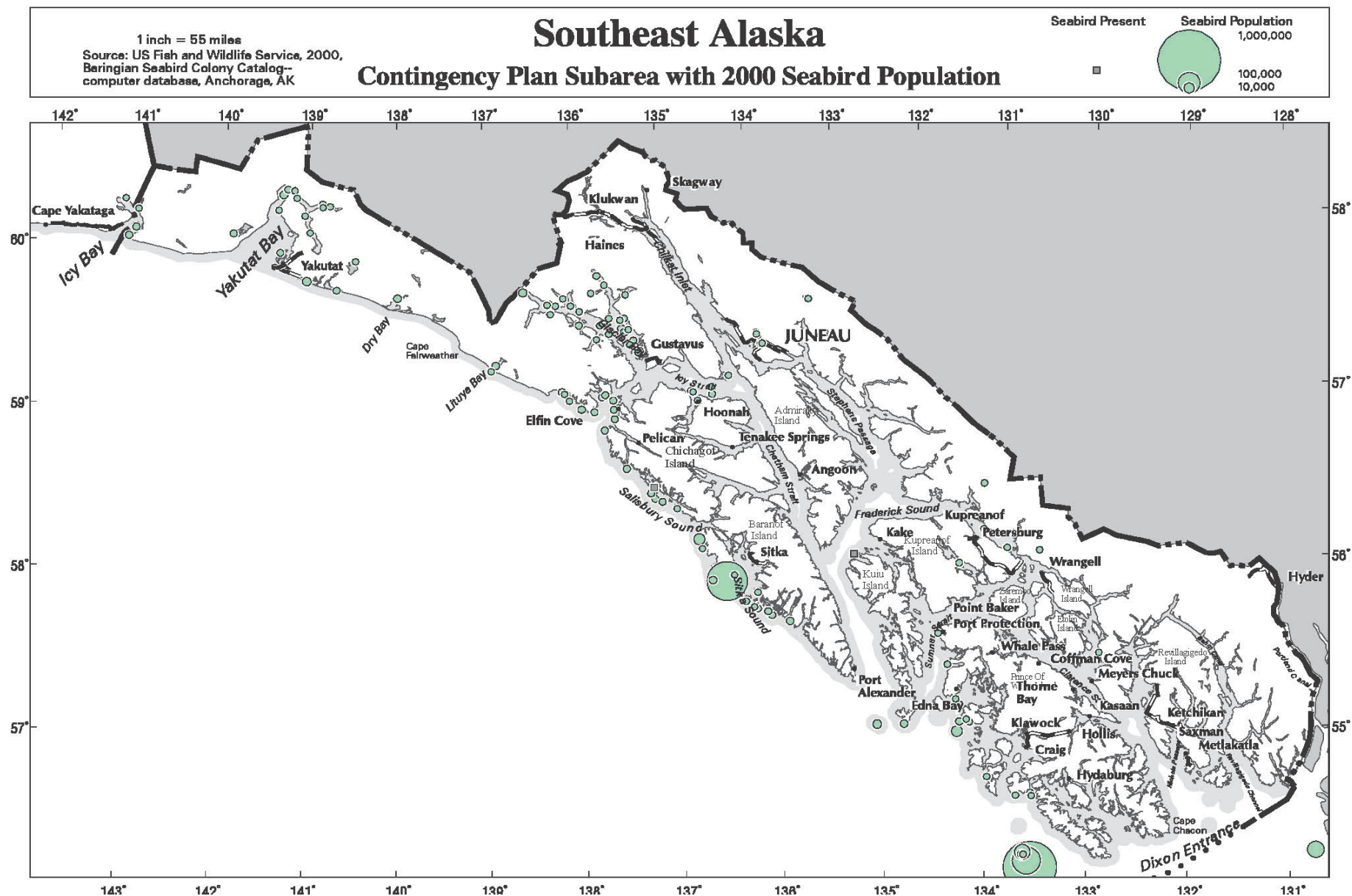
Shorebirds – Southeastern Alaska's shorelines provide a varied assortment of invertebrates for shorebirds to feed on. Shorebirds present, particularly during migration periods, include black oystercatcher; black and ruddy turnstones; dunlin; western, rock, least and pectoral sandpipers; surfbird; black-bellied and

semipalmated plover; red knot; greater and lesser yellowlegs; spotted sandpiper; common snipe; and long and short-billed dowitchers. Spring migratory species include: Hudsonian and marbled godwit and whimbrel. Great blue herons reach the northern limit of their breeding range in southern Southeast Alaska.

Passerines – The upland mosaic of Southeast Alaska habitats provide nesting, resting and feeding areas for a variety of birds. Species most closely associated with coastal areas include the rufous hummingbird, belted kingfisher, violet-green swallow, tree swallow, common raven, northwestern crow, American dipper, winter wren, yellow warbler, Wilson's warbler, savannah sparrow, fox sparrow, Lincoln's sparrow, and song sparrow. Sandhill cranes regularly pass through the subarea during migration, using Mendenhall Wetlands Refuge, for example, and Sandhill cranes use the Stikine Flats as a stopover during fall migration (they are usually present from mid-September through early October).

Raptors known to inhabit Southeast Alaska coastal areas include bald eagle, northern harrier, and osprey. Less common are short-eared owl, merlin, gyrfalcon and Peale's peregrine falcon. Although Alaskan bald and golden eagles are not on the endangered species list, they are fully protected (including their nests and nest trees) under the Bald Eagle Protection Act of 1940 and the Migratory Bird Treaty Act of 1918 as amended. Spill response activities that could affect these species should be coordinated with the U.S. Fish and Wildlife Service.

A large population of bald eagles nest along the coastal areas during spring and summer and many are year-round residents. Concentrations of bald eagles are commonly found in association with major spawning events by species including salmon, herring and eulachon. The largest eagle concentrations are found near Haines, along the Chilkat River from September through January, and along the lower Stikine River from April through early May.



(c) Marine Mammals

The Marine Mammal Protection Act of 1972 affords protections to all marine mammals. Any oil spill response activities that could affect marine mammals should be coordinated with the National Marine Fisheries Service or the U.S. Fish and Wildlife Service. Marine mammals that occur in Southeast Alaska and under the jurisdiction of the National Marine Fisheries Service are: harbor seal, elephant seal, Steller sea lion, California sea lion, Northern fur seal, humpback whale, gray whale, killer whale, sei whale, sperm whale, beluga whale, Cuvier's beaked whale, harbor porpoise, Dall's porpoise, and Pacific white-sided dolphin. The Northern sea otter is the one marine mammal in Southeast Alaska that is under the jurisdiction of the U.S. Fish and Wildlife Service.

The harbor seal, Steller sea lion, Northern sea otter, humpback whale, Dall's porpoise, harbor porpoise, and killer whale are present in Southeast Alaska waters year around. Sperm whales are probably in Southeast Alaska waters year around as well. Their numbers are highest on the outer coast of Southeast Alaska and in Chatham Strait during the summer months. Several species of baleen whale, including the gray whale, migrate through Southeast Alaska in the spring, summer, and fall on their way to and from feeding areas. Dense aggregations of humpback whales are present in Southeast Alaska from March-December, with smaller numbers present in January and February.

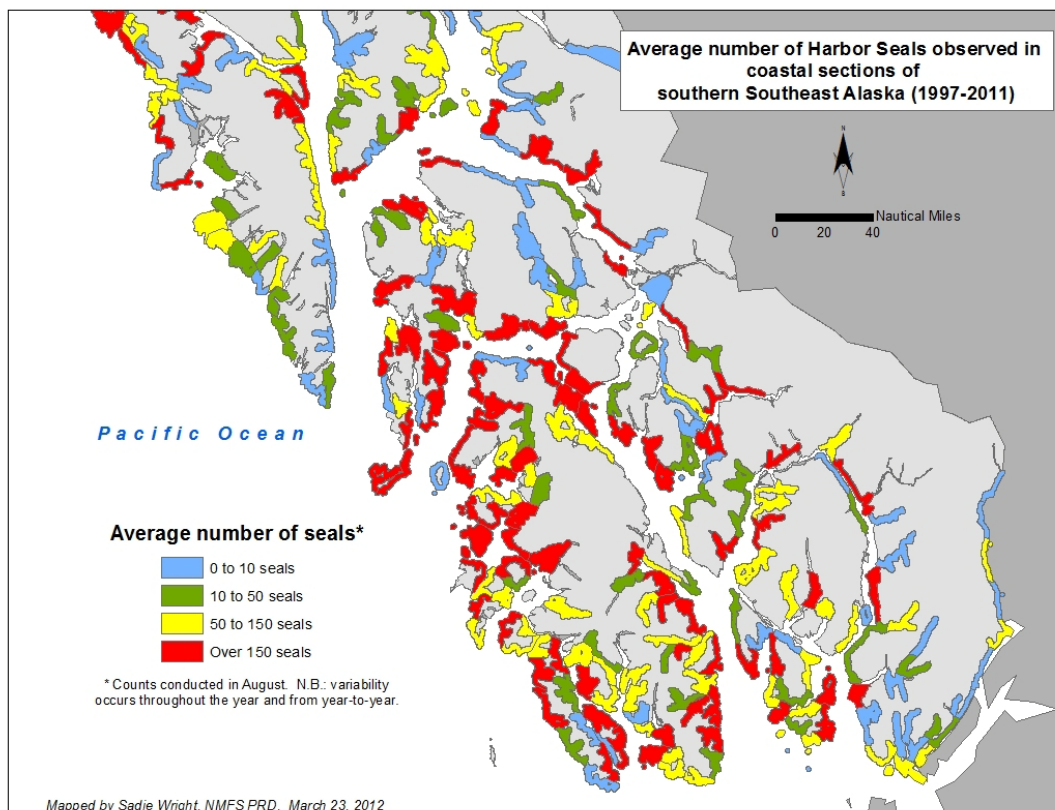
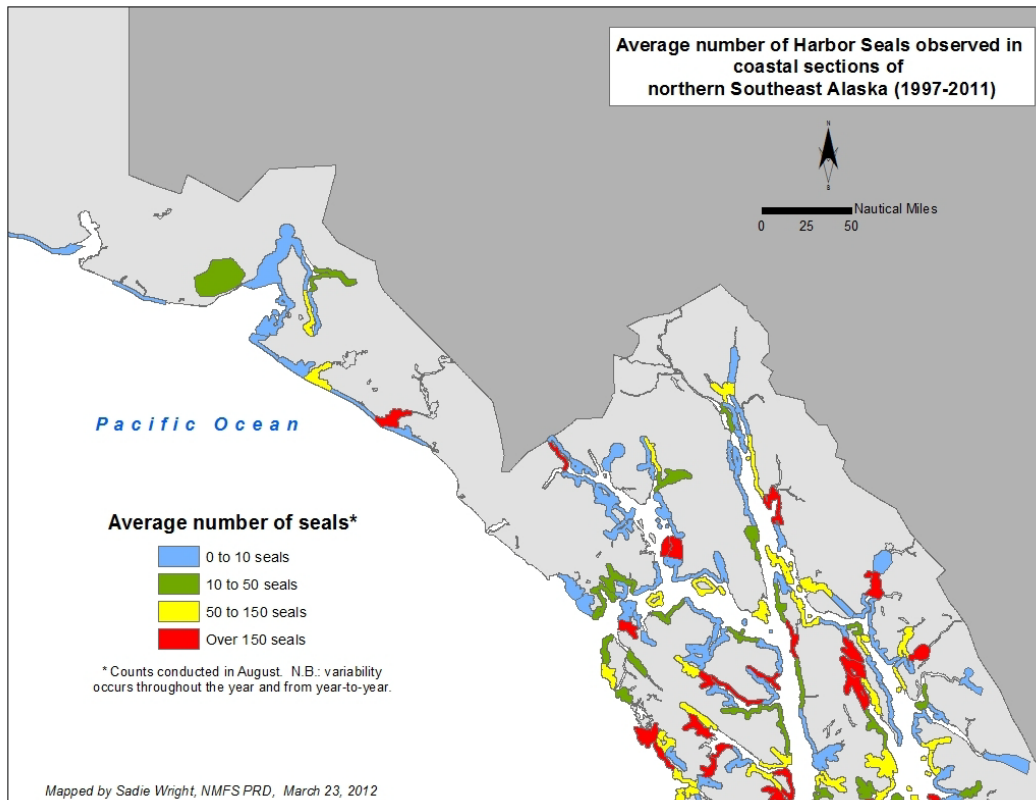
Humpback Whales are the large whales most frequently observed swimming or feeding close to shore along the coast in Southeast Alaska (see map on page D-50). Nearly 3-5,000 humpback whales can be found in Southeast Alaska, with higher numbers occurring between March-December. Although very few humpback whales skip annual winter migration, humpback whales are present in Southeast Alaska year around. The year around presence of humpback whales in Southeast Alaska is due to whales leaving late to migrate to the breeding grounds overlapping with whales returning early to Alaska from the breeding grounds. Winter aggregations of humpback whales in Southeast Alaska are related to the availability of krill and herring.

In Southeast Alaska humpback whales primarily feed on krill. Fish such as herring, capelin, and sandlance are also important. To a lesser extent, other zooplankton, salmon fry, and juvenile pollock are part of their diet. See the following distribution map based on Southeast Alaska Humpback Whale distribution from boat-based surveys, 2004-2009. This map was compiled by the National Park Service using data collected from 2004 through 2009. The data used are not corrected for survey effort, but the map does provide a relatively accurate picture of humpback whale hotspots in Southeast Alaska.

Gray Whales feed predominately on infaunal invertebrates. They appear to feed by lying on their sides and suctioning sediment from the sea floor, which they then filter for invertebrates. Gray whales are known to feed on herring eggs in Southeast Alaska. The eastern North Pacific population of gray whale has been delisted, but the western North Pacific population is still listed as endangered under the Endangered Species Act.

Harbor Seals are found year around in Southeast Alaska in nearshore waters all the way out to the shelf break on the outer coast (see following maps). Harbor seals tend to concentrate in estuaries, protected waters, and tidewater-glacier fjords. Habitats used for haulouts include cobble and sand beaches, tidal mud flats, offshore rocks and reefs, and ice when available. Harbor seals enter lakes and river on a seasonal basis.

Harbor seal haulouts are used for pupping, molting and resting, and may be used year around; peak haulout use occurs during June through early October. Pupping occurs between late May and early July; most pups are born during the first three weeks of June, and pups nurse for about three weeks. Births of harbor seals are not restricted to a few major sites (as is the case for many other species of pinnipeds), but occur at many haulout sites. Some areas or particular haulout sites (e.g., glacial fjords) have disproportionately high numbers of pups, which may be especially vulnerable to the fouling effects of oil spills. The total Alaska harbor seal population is estimated at 150,000.



Steller Sea Lions from both the threatened Eastern distinct population segment and the endangered Western distinct population segment occur in Southeast Alaska. The Eastern Distinct Population Segment is more common. Territorial breeding behavior occurs on the rookeries from May through August, and pupping occurs from late May to early July, with most pups born in June. Steller sea lions show a high fidelity to rookeries and often return to the same rookery to breed year after year. Major rookeries and haulouts are designated as critical habitat for this listed species. The table and map below provides critical habitat locations for Steller sea lions.

Steller Sea Lion Rookery & Haulout Locations		
Site	Latitude	Longitude
Akwe River	59.282 N	139.041 W
Benjamin ²	58°33.7' N	134°54.8' W
Berners Bay	58.757 n	135.017 W
Biali Rock ^{1, 2, 4}	56°42.7' N	135°20.5' W
Biorka (Kaiuchali) ^{2, 3}	56°50.0' N	135°34.0' W
Cape Addington ²	55°26.3' N	133°49.3' W
Cape Bartolome	55°13.8' N	133°37.0' W
Cape Bingham	58°05.6' N	136°32.5' W
Cape Cross ²	57°54.7' N	136°34.1' W
Cape Fairweather	58°47.5' N	137°56.3' W
Cape Ommaney ²	56°10.5' N	134°42.3' W
Circle Point	58°07.5' N	134°04.8' W
Coronation ²	55°55.7' N	134°17.0' W
Dorothy	58°14.2' N	134°03.4' W
Dry Bay	59.130 N	138.264 W
Easterly	55°53.7' N	132°05.3' W
Eldred Rock	58°58.3' N	135°13.3' W
Emmons	57°36.4' N	135°31.4' W
Etolin	56°20.2' N	132°31.9' W
False Point	57°22.0' N	133°51.6' W
Forrester Complex ¹	54°50.3' N	133°31.6' W
Forrester/Forrester Island	54°50.3' N	133°31.6' W
Forrester/Sea Lion Rk.	54°50.6' N	133°32.1' W
Forrester/C Horn Rk.	54°50.8' N	133°33.0' W
Forrester/Lowrie	54°51.7' N	133°32.2' W
Forrester/North Rk	54°52.4' N	133°33.7' W
Funter bay	58.217 N	134.918 W
Gran Point ²	50°08'2" N	135°14'6" W
Graves Rock ^{1, 2, 4}	58°14.3' N	136°45.4' W
Grindall	55°26.4' N	132°06.5' W
Grindle Island	55°26'5" N	132°07'5" W
Harbor Point	58°36.3' N	137°38.2' W
Hazy ¹	55°52.0' N	134°34.0' W
Horn Cliff	56°50.7' N	132°47.2' W
Inian	58°16.3' N	136°24.0' W
Jacob Rock	56°47.3' N	135°29.8' W
Larch Bay	56°12.6' N	134°44.2' W
Ledge Point ²	58°48'5" N	130°45'5" W
Ledge (Gran) Point	59°08.0' N	135°14.4' W
Little Island	58.541 N	135.042 W
Lull Point ²	57°18'0" N	135°48'5" W

Steller Sea Lion Rookery & Haulout Locations		
Site	Latitude	Longitude
Met Pt. (Lynn Canal)	58°56.0' N	135°10.0' W
Mist	57°59.3' N	133°50.7' W
Patterson Point	56°32.4' N	134°38.2' W
Pinta Rocks	57°05.2' N	134°00.7' W
Point Carolus	58°22.0' N	136°02.0' W
Point Lull	57°18.6' N	134°48.4' W
Point Marsden	58°03.0' N	134°48.5' W
Point Marsh	54°42.6' N	132°17.1' W
Point Rock (Point Islet)	55°09.2' N	132°38.3' W
Rocky island	58.176 N	135.034 W
Round Rock	57°15.6' N	133°56.1' W
Sail	57°21.1' N	133°43.3' W
Sakie Point	55°03.3' N	133°14.2' W
Sea Lion Island	57°17.0' N	135°53.0' W
Sea Lion Rock (Puffin Bay)	56°15.1' N	134°49.9' W
St. Lazaria Island	56°59.2' N	135°42.3' W
Sitkagi Bluffs	58.708 N	140.650 W
South Marble	58°38.7' N	136°02.8' W
Stephens Passage (Point League)	57°36.4' N	133°38.5' W
Sunset ²	57°30.0' N	133°35.2' W
Sukoi Islets	56°55.0' N	132°59.0' W
Tenakee Cannery Pt.	57°46.5' N	135°04.3' W
The Brothers	57°16.3' N	133°52.4' W
The Sisters	58°10.3' N	135°15.4' W
Timbered ²	55°41.8' N	133°47.7' W
Tlingit (Case) Point	58°45.2' N	136°14.9' W
Turnabout	57°07.8' N	133°58.3' W
Turnaround Island	57°08'0" N	133°59'0" W
Venisa	58°18.7' N	136°51.0' W
West Rock	54°48.8' N	131°29.7' W
White Sisters ¹	57°38.1' N	136°15.4' W
Wolf Rock	55°01.2' N	133°29.2' W
Yasha	56°57.8' N	134°33.5' W

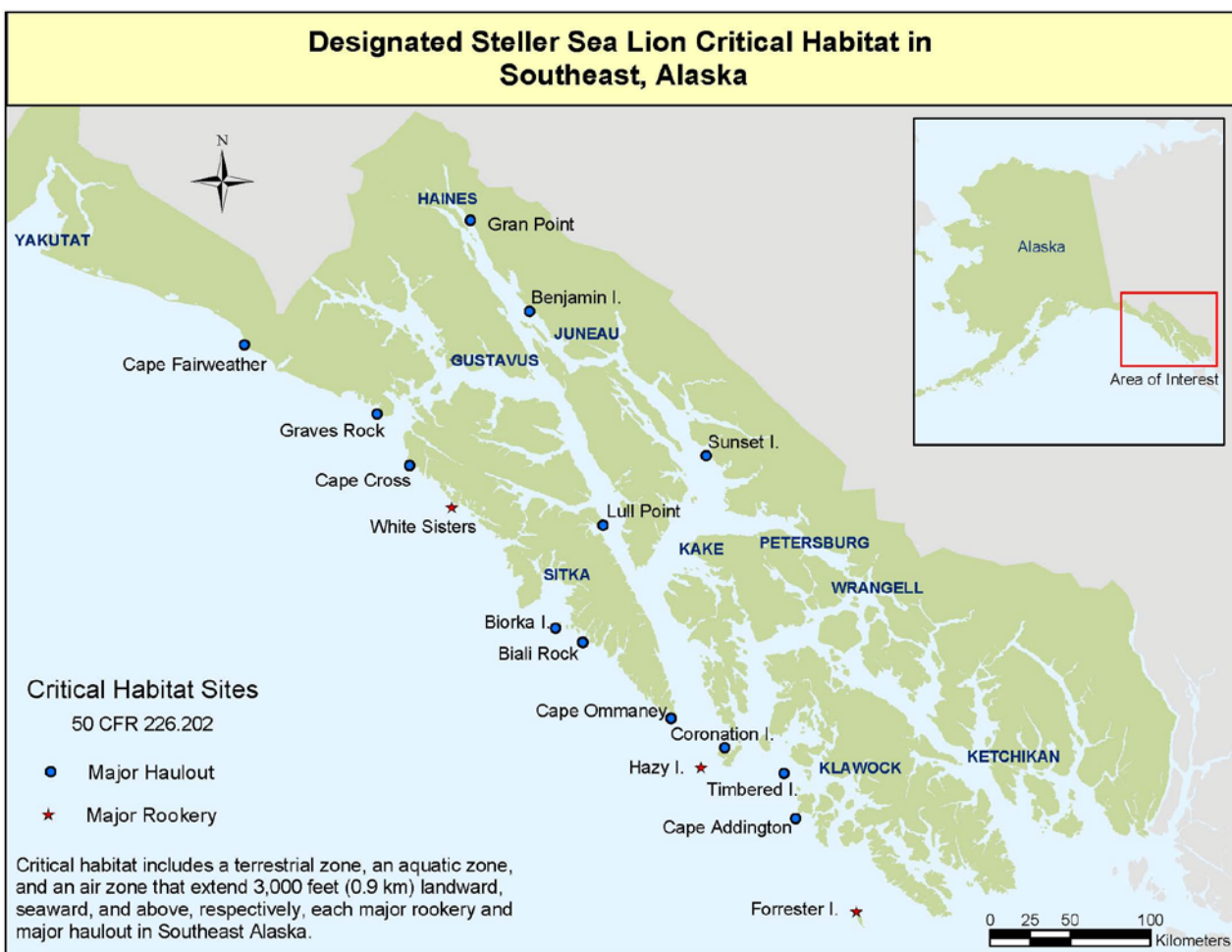
1 Rookery Sites

2 Haulout with more than 200 animals counted

3 Haulout currently located at Kaiuchali Island, Dennis McAllister, Alaska Department of Fish and Game, personal communication, March 1993

4 Added as rookeries in 2002

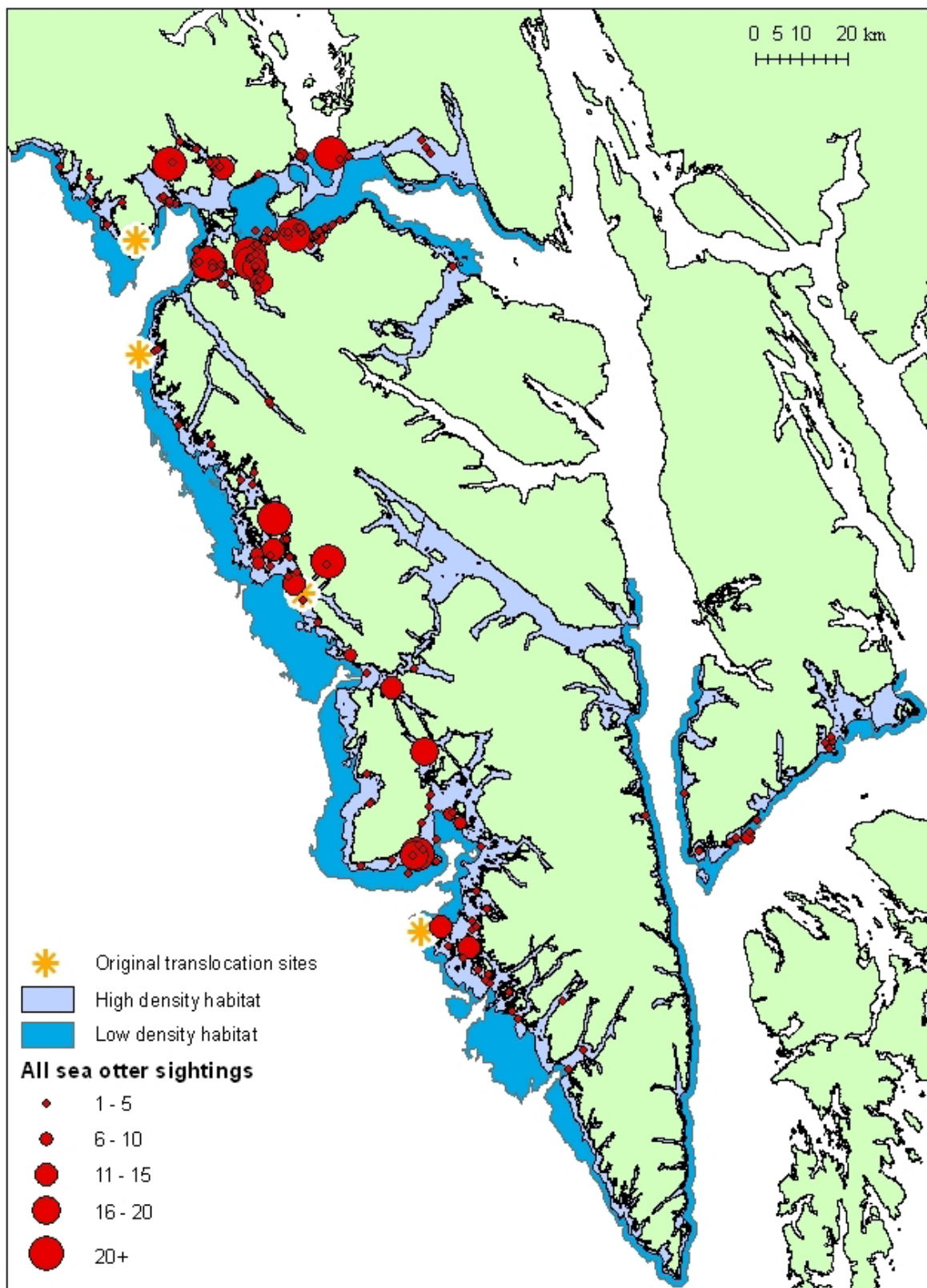
Steller Sea Lion Critical Habitat Map



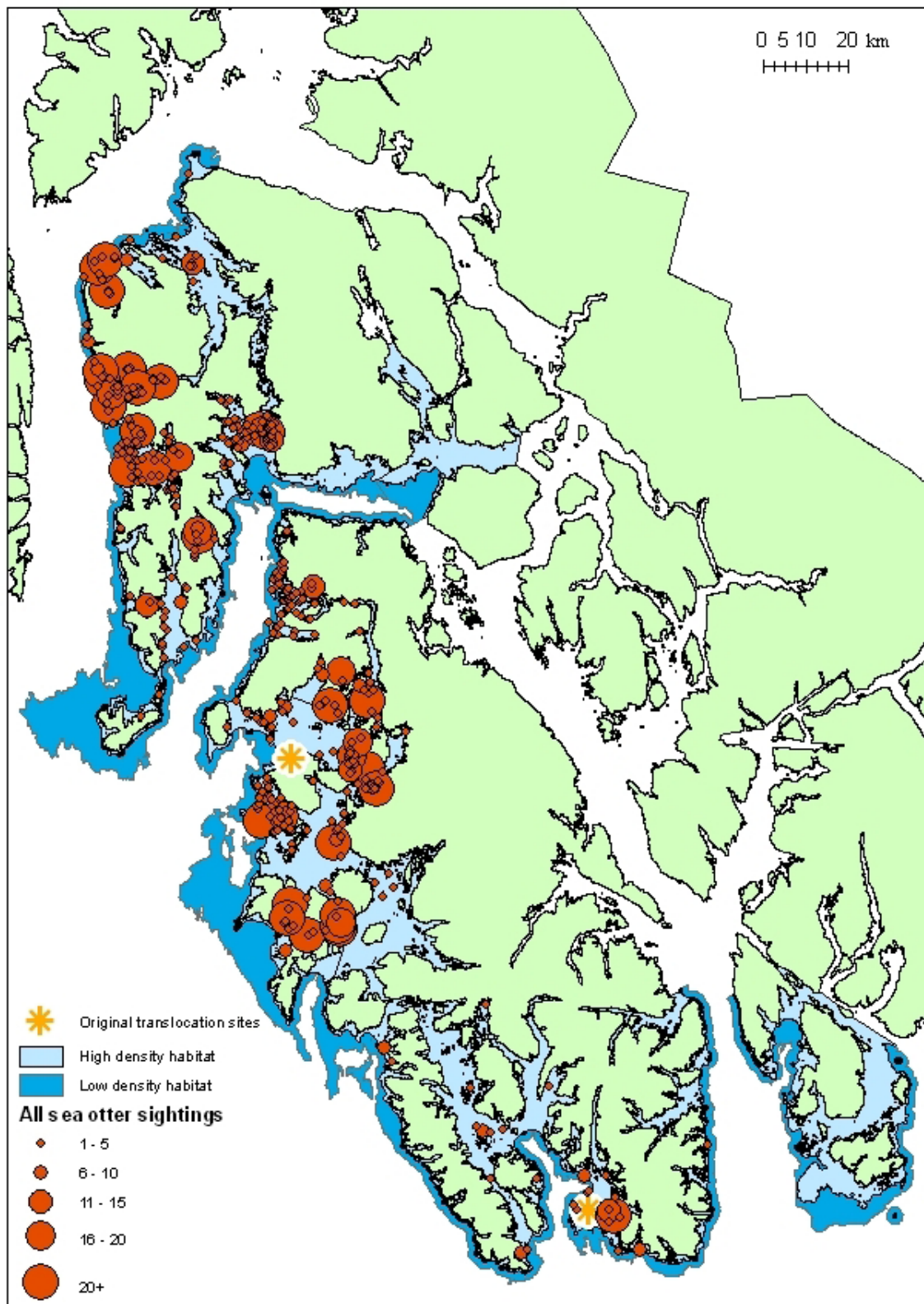
~~~~~

Sea Otters are generally found in shallow (< 40m), nearshore areas where they feed on bottom-dwelling invertebrates (see the following maps). Sea otters depend on their fur to thermoregulate since they lack an insulating layer of fat (blubber). Although perhaps as few as 2,000 total animals existed in 1911 because of over harvesting, most of the sea otter habitat in Alaska has now been repopulated. The principal exception is Southeast Alaska where the population remained stagnant for a long while, though numbers have been increasing rapidly over past few decades; this is in part due to the reintroduction of otters in the 1960s. Sea otter distribution maps are provided below.

## Sea Otters in Southeast Alaska — Map 1 of 2

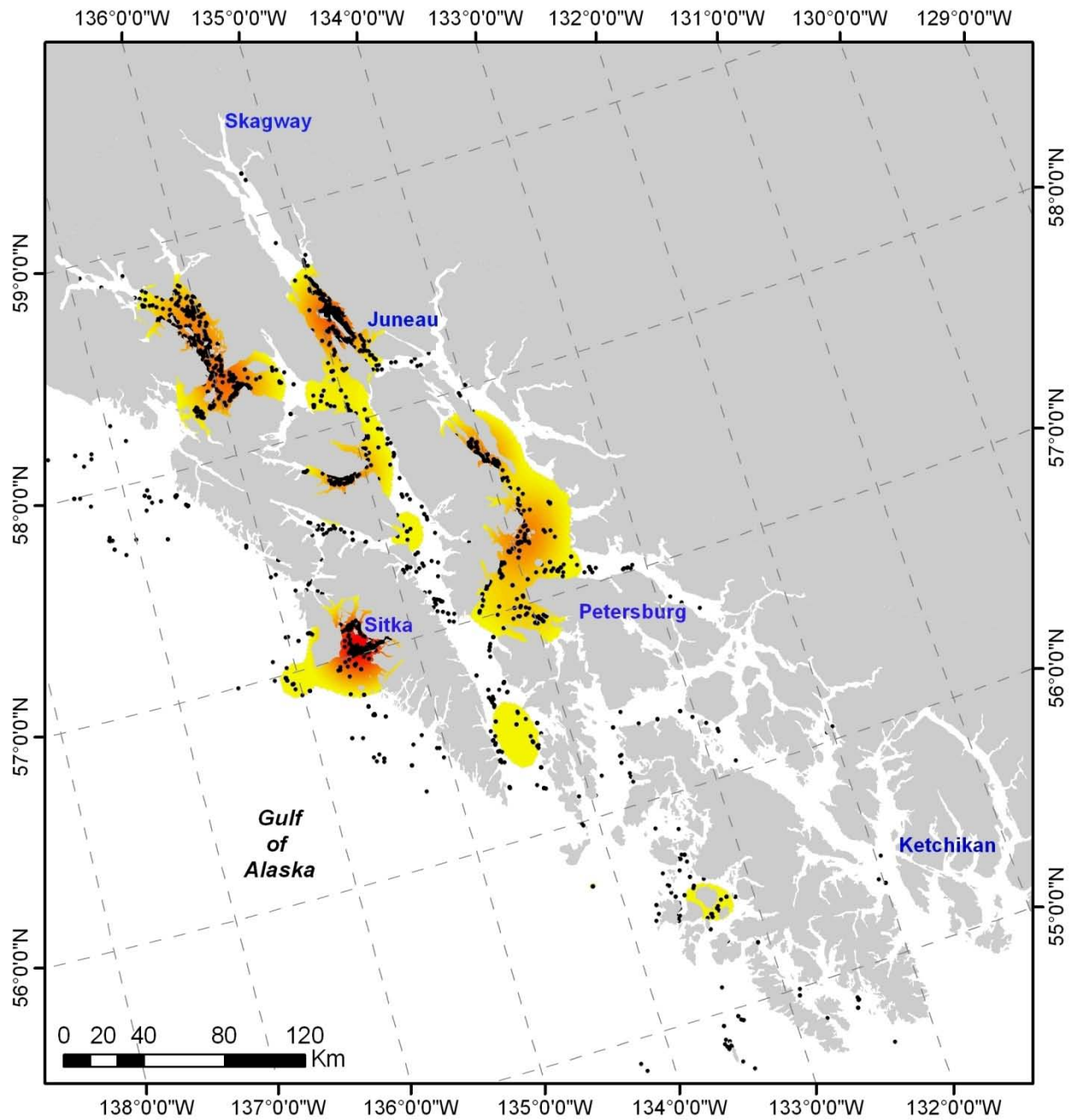


## Sea Otters in Southeast Alaska — Map 2 of 2





## Humpback Whale Distribution, 2004-2009



#### (d) Terrestrial Mammals

Several species of terrestrial mammals are present. Brown and black bear, moose, Sitka black-tailed deer, wolves, mountain goats, river otter, mink and weasels are common in coastal areas. It should be noted that several of these mammals are transient through coastal areas (bear, deer, goats, wolves) on a daily basis, but their fleeting presence should not influence management decisions for oil spill response. These mammals may spend more time in coastal areas during winter months when forage becomes scarce at high elevations. River otter, mink and weasels are an exception to this general statement.

Sitka black-tailed deer is native to the coastal rain forests of Southeast Alaska. During summer, deer generally feed on herbaceous vegetation and the green leaves of shrubs and evergreen forbs and woody browse in the winter. During low snow years, evergreen forbs such as bunchberry and trailing bramble are preferred. During periods of deep snow, woody browse such as blueberry, yellow cedar and hemlock, and arboreal lichens are used. Also during heavy snow years, deer use the intertidal areas to feed on fucus and various macroalgae.

Roosevelt and Rocky Mountain Elk were successfully transplanted to Etolin Island near Petersburg in 1987. Sightings of elk have been documented on several adjacent islands.

Moose occur in multiple habitats found in the Southeastern Alaskan region, ranging from aquatic and riparian floodplains to subalpine willow-dominated areas. Sedge meadows, ponds and lakes with extensive aquatic vegetation, riparian and subalpine willow stands, and forested areas provide important summer habitat for moose, where they feed on sedges, equisetum, pond weeds, and grasses. Important winter habitat includes shrub-dominated alpine and riparian areas and forested areas. During fall and winter, moose consume large quantities of willow, birch, and aspen twigs. Calving occurs after a gestation of about 230 days, usually in mid-May and early June, and frequently in isolated marshy lowlands.

Brown Bears occur throughout Southeastern Alaska except on the islands south of Frederick Sound. Bear concentrations may be found along rivers when spawning salmon are present. Brown bears consume a wide variety of foods including: berries, grasses, sedges, horsetails, cow parsnip, fish, ground squirrels, carrion, and roots of many kinds of plants. Brown bears enter dens beginning in late October, with most bears denning by mid December. Bears emerge from their dens as early as mid March, depending on weather conditions. Brown bears visit tidal flats from mid-late April through late June to graze on the grass and sedge communities. Use of intertidal areas decreases during mid-summer, although individuals will visit to dig clams or scavenge beached carcasses. Once the salmon return to streams in August, bears concentrate along the streams near tidewater to feed. Brown bears will stay near salmon streams until the runs play out, sometimes into October. Brown bear spring concentration areas include the Blacksand Spit near Situk, on Bear Island around Dry Bay, by the Chilkat and Lutak Inlet, Dry Strait, Stikine River, Pack Creek and the Stan Price State Wildlife Sanctuary, and Grant Creek. Brown Bear concentrations along fish streams include the Chilkat River, Stikine River, Situk River, Pack Creek, Unuk River, Klahini River and dozens of smaller rivers and streams throughout their range.

Black Bears -In Southeast Alaska, black bears occupy most islands with the exceptions of Admiralty, Baranof, Chichagof, and Kruzof. These are inhabited by brown bears. Both species occur on the southeastern mainland. The black bear is omnivorous, and consume freshly sprouted green vegetation, carrion, fresh kills of young moose and deer, and berries. Black bears have similar concentration areas as mentioned above for brown bears.

Furbearers- Beavers, coyotes, red foxes, lynx, marten, mink, muskrats, land otters and wolverines are all present in the Southeastern Alaska. Historical information on population status is mostly anecdotal. Sealing monitors harvests of beavers, lynx, land otters and wolverines. Lynx, wolverines, and coyotes are relatively scarce in the area.

In the Southeastern Alaska area, beaver, mink, and river otter are common inhabitants of aquatic and riparian floodplain and wetland areas, including marshes, ponds, lakes, streams, and rivers. Mink are considered to be common to abundant throughout the subarea. They prey on a variety of animals and

feed on anything they can capture and kill. They are adapted to capture aquatic and terrestrial prey including mammals, fish, birds, amphibians, crustaceans, and insects. Fish are their main food item. Diet of the river otters consist of fish, crustaceans, amphibians, insects, birds, and mammals.

Wolves and Foxes are found throughout Southeastern Alaska, including the major islands where deer would be adequate prey. Wolves are carnivores, and in most of mainland Alaska moose and/or caribou are their primary food, with Dall sheep being important in limited areas. In Southeast Alaska, Sitka black-tailed deer, mountain goats, beaver, and fish are the most important sources of food. During summer, small mammals including voles, snowshoe hares, beaver, and occasionally birds are supplements in the diet. Wolves and foxes select den sites where unfrozen, well-drained soils occur (e.g., dunes, river banks, and moraines). Wolves may initiate den construction in mid-April with pups being born from mid May through early June. Dens may be occupied until August. Red foxes have a reproductive pattern similar to that of wolves.

### 3. Vegetation

Rare plant species are identified below, as documented by the Alaska Natural Heritage Program. The map on the following page identifies the general locations of these rare plants.

| Rare Plants Known from the Southeast Subarea |            |                                  |                                  |
|----------------------------------------------|------------|----------------------------------|----------------------------------|
| Global Rank                                  | State Rank | Scientific Name                  | Common Name                      |
| G1                                           | S1         | <i>Botrychium sp 1</i>           |                                  |
| G1G2Q                                        | S1         | <i>Isoetes truncata</i>          | Truncate quillwort               |
| G2G3                                         | S2         | <i>Polystichum setigerum</i>     | Alaska holly fern                |
| G3                                           | S1         | <i>Cirsium edule</i>             | Edible thistle                   |
| G3                                           | S1         | <i>Ligusticum calderi</i>        | Calder's lovage                  |
| G3                                           | S1S2       | <i>Glyceria leptostachya</i>     | Slim-head manna grass            |
| G3                                           | S2         | <i>Phyllospadix serrulatus</i>   | Serrulate surf-grass             |
| G3                                           | S2         | <i>Poa laxiflora</i>             | Loose-flowered bluegrass         |
| G3                                           | S2         | <i>Senecio moresbiensis</i>      |                                  |
| G3                                           | S2S3       | <i>Phacelia mollis</i>           | Coffee creek scorpion-weed       |
| G3                                           | S3         | <i>Draba ruaxes</i>              | Ranier whitlow-grass             |
| G3                                           | S3         | <i>Romanzoffia unalaschensis</i> | Alaska mistmaiden                |
| G3                                           | S3         | <i>Thlaspi arcticum</i>          | Arctic pennycress                |
| G3                                           | S2         | <i>Botrychium ascendens</i>      | Upward-lobed moonwort            |
| G3G4                                         | S3         | <i>Platanthera chorisiana</i>    | Choriso bog-orchid               |
| G4                                           | S1         | <i>Polystichum kruckebergii</i>  |                                  |
| G4                                           | S1S2       | <i>Phyllodoce empetriformis</i>  | Pink mountain-heath              |
| G4                                           | S2         | <i>Eleocharis kamtschatica</i>   | Kamchatka spike-rush             |
| G4                                           | S2         | <i>Galium kamtschaticum</i>      | Boreal bedstraw                  |
| G4                                           | S2         | <i>Taxus brevifolia</i>          | Pacific yew                      |
| G4                                           | S2S3       | <i>Malaxis paludosa</i>          | Bog adder's-mouth                |
| G4                                           | S3         | <i>Abies amabilis</i>            | Pacific silver fir               |
| G4                                           | S3         | <i>Asplenium viride</i>          |                                  |
| G4                                           | S3S4       | <i>Draba lacteal</i>             | Milky whitlow-grass              |
| G4                                           | S4         | <i>Euphrasia mollis</i>          | Subalpine eyebright              |
| G4                                           | S1         | <i>Hymenophyllum wrightii</i>    | Wright's filmy fern              |
| G4                                           | S2S4       | <i>Castilleja parviflora</i>     | Small-flowered indian-paintbrush |
| G4G5                                         | S1         | <i>Cypripedium montanum</i>      | Mountain lady's-slipper          |
| G4G5                                         | S1         | <i>Scirpus subterminalis</i>     | Water bulrush                    |
| G4G5                                         | S1S2       | <i>Isoetes occidentalis</i>      |                                  |



| Rare Plants Known from the Southeast Subarea |            |                                             |                              |
|----------------------------------------------|------------|---------------------------------------------|------------------------------|
| Global Rank                                  | State Rank | Scientific Name                             | Common Name                  |
| G4G5                                         | S2         | <i>Lonicera involucrate</i>                 | Fly honeysuckle              |
| G4G5                                         | S4         | <i>Cassiope lycopodioides</i>               | Clubmoss bell-heather        |
| G4Q                                          | S3         | <i>Pedicularis macrodonta</i>               | Muskeg lousewort             |
| G4T2T3                                       | S2S3       | <i>Stellaria ruscifolia ssp aleutica</i>    |                              |
| G5                                           | S1         | <i>Arnica mollis</i>                        | Hairy arnica                 |
| G5                                           | S1         | <i>Campanula scouleri</i>                   | Scouler's bell-flower        |
| G5                                           | S1         | <i>Carex bebbii</i>                         | Bebb's sedge                 |
| G5                                           | S1         | <i>Carex interior</i>                       | Inland sedge                 |
| G5                                           | S1         | <i>Carex praegracilis</i>                   | Clustered field sedge        |
| G5                                           | S1         | <i>Dulichium arundinaceum</i>               | Three-way sedge              |
| G5                                           | S1         | <i>Lactuca biennis</i>                      | Tall blue lettuce            |
| G5                                           | S1         | <i>Listera convallarioides</i>              | Broad-leaved twayblade       |
| G5                                           | S1         | <i>Melica subulata</i>                      | Alaska onion grass           |
| G5                                           | S1         | <i>Polygonum minimum</i>                    | Leafy dwarf Knotweed         |
| G5                                           | S1         | <i>Rorippa curvisiliqua</i>                 | Curve-pod yellowcress        |
| G5                                           | S1         | <i>Salix prolixa</i>                        | MacKenzie willow             |
| G5                                           | S1         | <i>Stachys emersonii</i>                    |                              |
| G5                                           | S1S2       | <i>Carex athrostachya</i>                   | Joint-spike sedge            |
| G5                                           | S2         | <i>Agrostis thurberiana</i>                 | Thurber bentgrass            |
| G5                                           | S2         | <i>Mimulus lewisii</i>                      | Lewis monkeyflower           |
| G5                                           | S2         | <i>Minuartia biflora</i>                    | Mountain stitchwort          |
| G5                                           | S2         | <i>Mitella nuda</i>                         | Naked bishop's-cap           |
| G5                                           | S2         | <i>Mitella trifida</i>                      | Pacific bishop's-cap         |
| G5                                           | S2         | <i>Phacelia sericea</i>                     | Silky scorpion-weed          |
| G5                                           | S2         | <i>Poa leptocoma</i>                        | Bog bluegrass                |
| G5                                           | S2         | <i>Salix hookeriana</i>                     | Hooker willow                |
| G5                                           | S2         | <i>Spiraea douglasii</i>                    | Douglas spirea               |
| G5                                           | S2         | <i>Vicia Americana</i>                      | American purple vetch        |
| G5                                           | S2S3       | <i>Draba incerta</i>                        | Yellowstone whitlow-grass    |
| G5                                           | S2S3       | <i>Phacelia franklinii</i>                  | Franklin's phacelia          |
| G5                                           | S2S3       | <i>Physocarpus capitatus</i>                | Pacific ninebark             |
| G5                                           | S3         | <i>Crassula aquatica</i>                    | Water pygmy-weed             |
| G5                                           | S3         | <i>Cystopteris Montana</i>                  | Mountain bladder fern        |
| G5                                           | S3         | <i>Lycopodium inundatum</i>                 |                              |
| G5                                           | S3         | <i>Lycopus uniflorus</i>                    | Northern bugleweed           |
| G5                                           | S3         | <i>Sedum oreganum</i>                       | Oregon stonecrop             |
| G5                                           | S3         | <i>Zannichellia palustris</i>               | Horned pondweed              |
| G5                                           | S3S4       | <i>Malaxis monophyllos</i>                  | White adder's-mouth          |
| G5                                           | S4         | <i>Primula eximia</i>                       |                              |
| G5                                           | S4         | <i>Stellaria crassifolia</i>                | Fleshy stitchwort            |
| G5                                           | S4         | <i>Woodsia glabella</i>                     | Smooth woodsia               |
| G5                                           | S1         | <i>Sedum divergens</i>                      | Spreading stonecrop          |
| G5                                           | S2         | <i>Platanthera orbiculata</i>               | Large roundleaf orchid       |
| G5                                           | S3         | <i>Viola selkirkii</i>                      | Great-spurred violet         |
| G5T2                                         | S1         | <i>Salix reticulata ssp glabellcarpa</i>    | Smooth-fruited netleaf       |
| G5T2Q                                        | S2         | <i>Arnica lessingii ssp norbergii</i>       | Norberg arnica               |
| G5T2Q                                        | S2         | <i>Dodecatheon pulchellum ssp alaskanus</i> | Alaskan pretty shooting-star |

| Rare Plants Known from the Southeast Subarea |            |                                             |                              |
|----------------------------------------------|------------|---------------------------------------------|------------------------------|
| Global Rank                                  | State Rank | Scientific Name                             | Common Name                  |
| G5T2T4                                       | S2S4       | <i>Gentianella propinqua ssp aleutica</i>   | Aleutian four-parted gentian |
| G5T3Q                                        | S3         | <i>Carex lenticularis var dolia</i>         | Goose-grass sedge            |
| G5T4                                         | S1S2       | <i>Crataegus douglasii var douglasii</i>    |                              |
| G5T5                                         | S1         | <i>Nymphaea odorata ssp odorata</i>         |                              |
| G5T5                                         | S1         | <i>Poa douglasii ssp macrantha</i>          |                              |
| G5T5                                         | S1         | <i>Salix planifolia ssp planifolia</i>      |                              |
| G5T5                                         | S1S2       | <i>Geum aleppicum var strictum</i>          |                              |
| G5T5                                         | S2         | <i>Betula papyrifera var commutata</i>      | Western paper birch          |
| G5T5                                         | S2S3       | <i>Cypripedium calceolus ssp parviflora</i> | Small yellow laddyslipper    |
| G5T5                                         | S3         | <i>Glehnia littoralis ssp leiocarpa</i>     |                              |
| G5T5Q                                        | S2         | <i>Glyceria striata ssp stricta</i>         | Fowl manna-grass             |
| G5T5Q                                        | S2         | <i>Symphoricarpos albus ssp laevigatus</i>  |                              |
| GU                                           | S2         | <i>Platanthera gracilis</i>                 | Slender bog-orchid           |

#### Species Ranks used by The Alaska Natural Heritage Program:

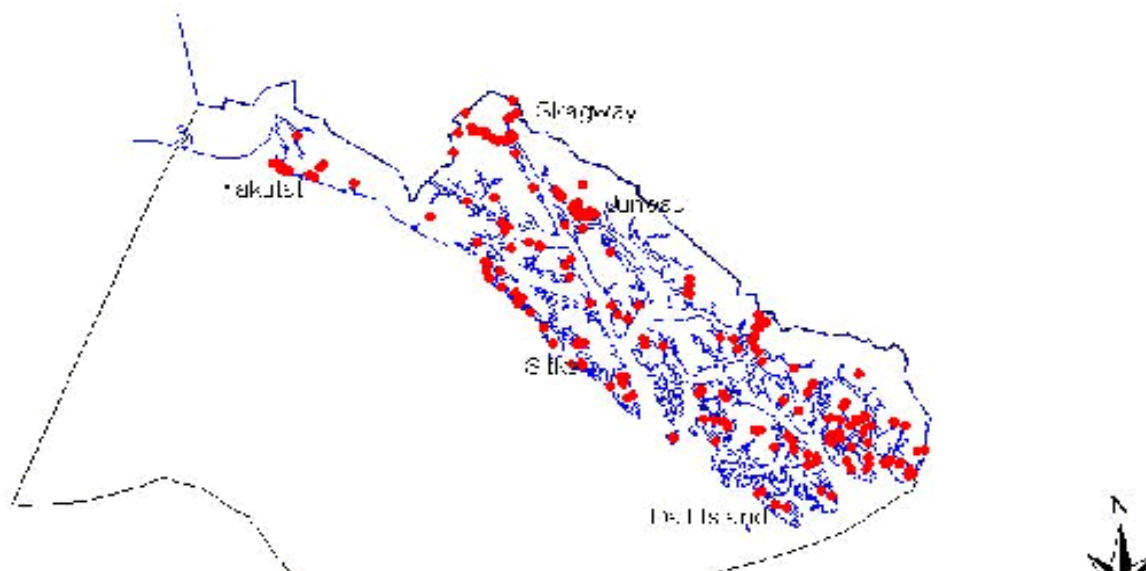
##### Species Global Rankings

- G1: Critically imperiled globally. (typically 5 or fewer occurrences)  
G2: Imperiled globally. (6-20 occurrences)  
G3: Rare or uncommon globally. (21-100 occurrences)  
G4: Apparently secure globally, but cause for long-term concern (usually more than 100 occurrences)  
G5: Demonstrably secure globally.  
G#GU: Rank of species uncertain, best described as a range between the between the two ranks.  
G#Q: Taxonomically questionable.  
G#T#: Global rank of species and global rank of the described variety or subspecies of the species.

##### Species State Rankings

- S1: Critically imperiled in state. (usually 5 or fewer occurrences)  
S2: Imperiled in state. (6-20 occurrences)  
S3: Rare or uncommon in state. (21-100 occurrences)  
S4: Apparently secure in state, but with cause for long-term (usually more than 100 occurrences)  
S5: Demonstrably secure in state.  
S#S#: State rank of species uncertain, best described as a range between the two ranks.

#### Known Rare Plant Locations for the Southeast Alaska Subarea Contingency Plan



## **C. HUMAN USE RESOURCES**

### **1. Fish Hatcheries and Associated Ocean Net Pens**

There are currently 24 operating hatcheries in the Southeast Subarea. The species raised include trout and all five species of Pacific salmon. Hatcheries and their associated ocean net pen release sites are shown in the table on the next page.

Ocean net pens are located at

Auke Bay  
Fritz Cove  
Gilbert Bay  
Etolin Island  
Shrimp Bay

The hatchery activities most vulnerable to spill injury include fry rearing and release at the hatcheries or associated ocean net pen sites, terminal harvests, and egg takes. However, since the timing of these activities varies by hatchery and species, it is difficult to generalize about what activity occurs, and when, although spring and summer tend to be the most critical times. Hatchery managers should be contacted for specific information. Contact numbers are listed in the table below. A map showing hatchery locations around Southeast Alaska follows. Additional information on hatcheries and ocean net pens may be obtained from the Alaska Department of Fish and Game.

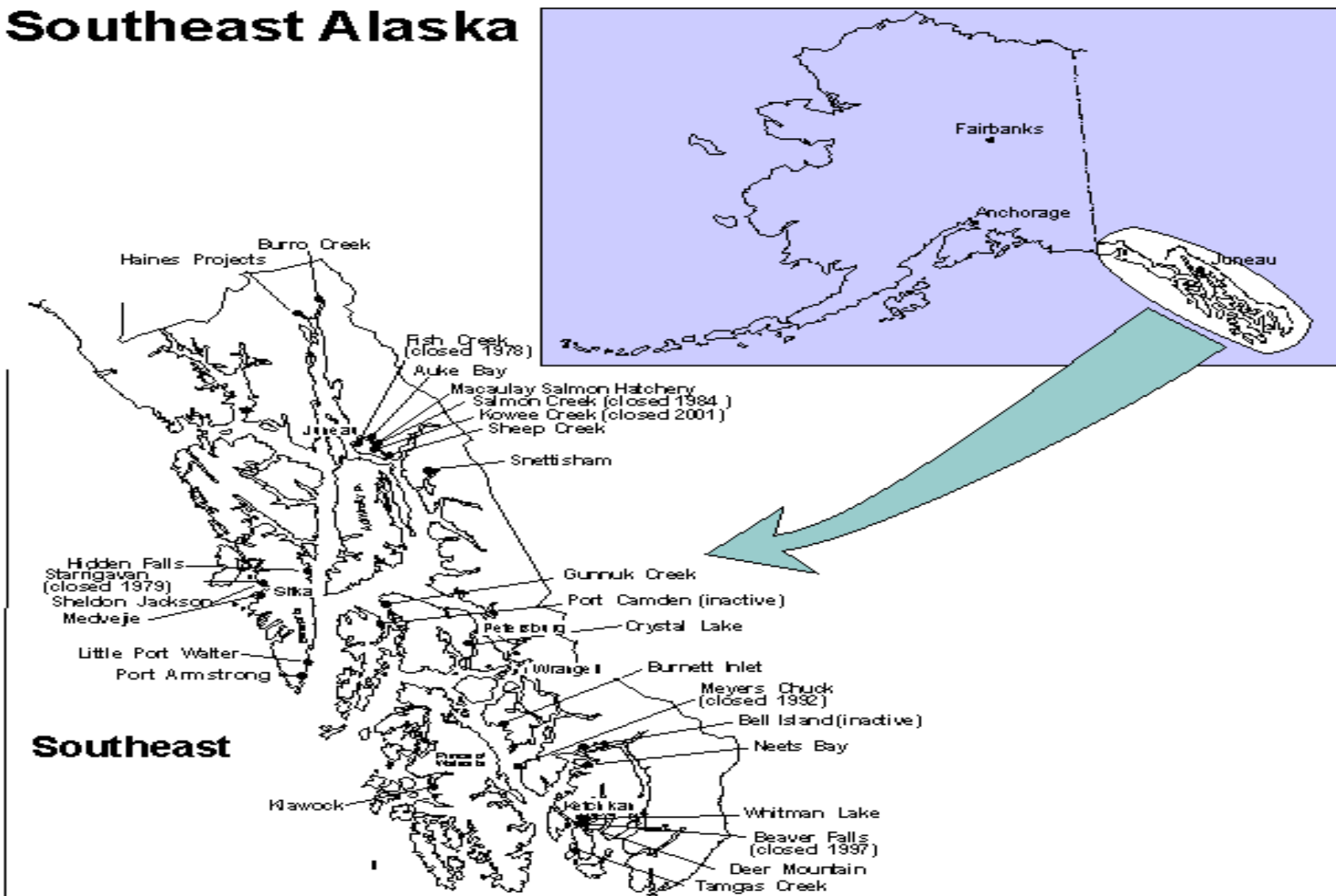
### **2. Aquaculture Sites**

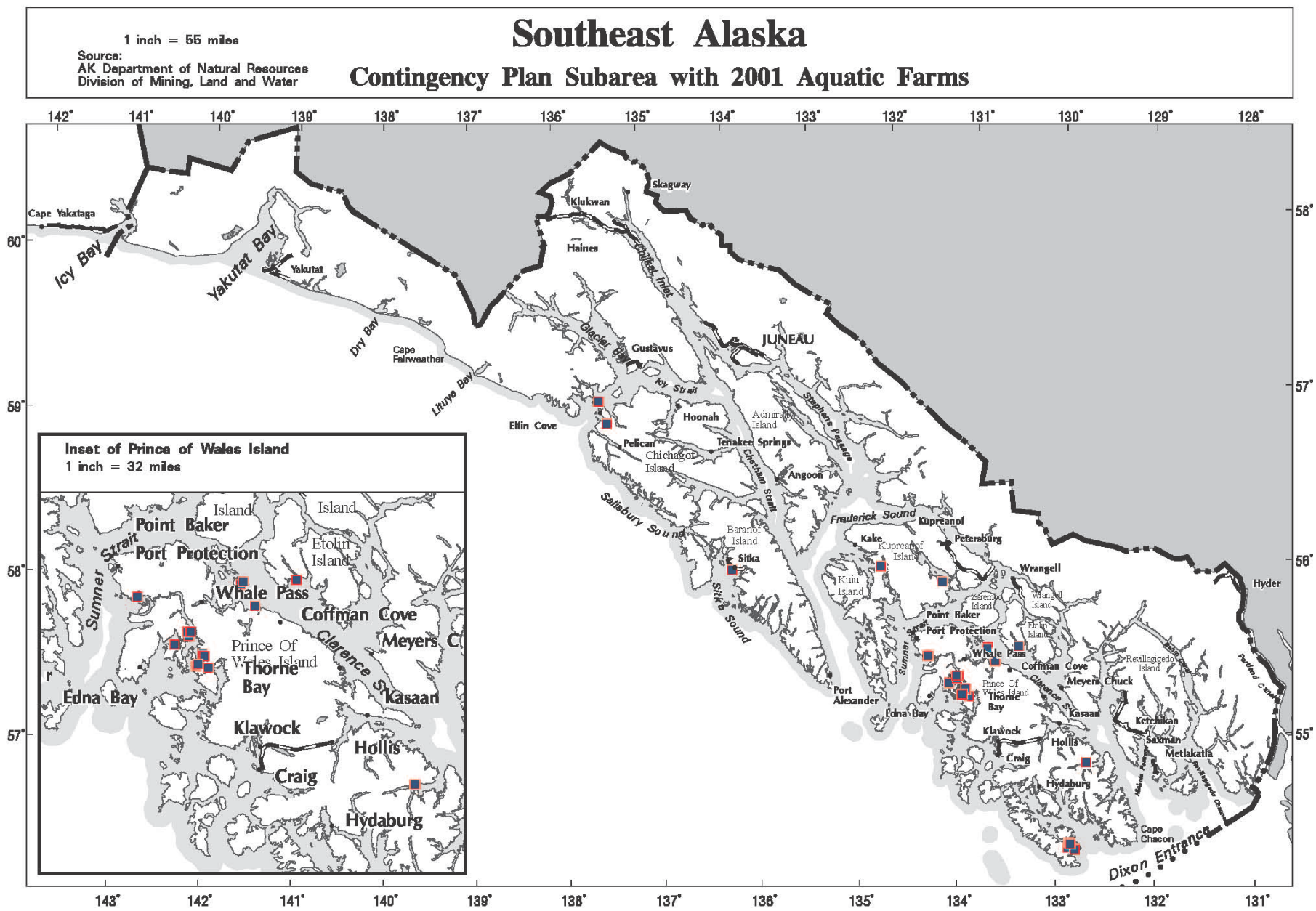
Several aquatic farms are currently operating in Southeast. Most are growing oysters, although there is also interest in blue mussels, scallops, and kelp. The number of farms may increase. The locations of currently permitted farms are indicated on the following map and chart. Aquatic farms are vulnerable to spill injury on a year-round basis since the organisms are continuously submerged in the water column or are being held intertidally. The timing of the harvest varies. A general map showing locations of aquatic farms appears on page D-60. For more information contact the Alaska Department of Fish and Game or the Alaska Department of Natural Resources. For detailed maps of aquatic farms, go to the internet site at the following website:

<http://www.asgdc.state.ak.us/maps/cplans/subareas.html#southeast>

| <b>Fish Hatcheries</b>                                                                  |                                                                                      |
|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>Operator, Hatchery, City, Phone</b>                                                  | <b>Species</b>                                                                       |
| <b>Southern Southeast Regional Aquaculture Association:</b>                             |                                                                                      |
| Whitman Lake Hatchery, Ketchikan (225-2635)                                             | chum, coho, chinook and sockeye                                                      |
| Beaver Falls Hatchery, Ketchikan (225-9605)                                             | sockeye and coho                                                                     |
| Neets Bay Hatchery, Ketchikan (247-8790)                                                | chum, coho and chinook                                                               |
| Crystal Lake Hatchery, Petersburg, 772-4772                                             | chinook, coho and steelhead                                                          |
| Burnett Inlet Hatchery, Wrangell (874-2250)                                             | pink, chum, coho, and chinook                                                        |
| <b>American Aquaculture Corp.:</b>                                                      |                                                                                      |
| Bell Island Hatchery (not operational), Ketchikan, (214-363-2070)                       | chinook, coho, and steelhead trout                                                   |
| <b>Ketchikan Tribal Hatchery Corp.:</b>                                                 |                                                                                      |
| Deer Mountain Hatchery, Ketchikan, (225-6760)                                           | chinook, Coho, steelhead, and rainbow trout                                          |
| <b>Prince of Wales Hatchery Association:</b>                                            |                                                                                      |
| Klawock River Hatchery, Craig (755-2231)                                                | coho, sockeye, and steelhead                                                         |
| <b>Northern Southeast Regional Aquaculture Association:</b>                             |                                                                                      |
| Hidden Falls Hatchery, Sitka, (788-3215)                                                | chum, coho and chinook                                                               |
| Medvejie Creek Hatchery, Sitka (747-5863)                                               | chum, coho, pink, and chinook                                                        |
| Port Camden Hatchery (no longer operational)<br>Kuiu Island (747-6850)                  | chum                                                                                 |
| Haines Hatchery, Haines (766-3110)                                                      | chum and sockeye                                                                     |
| <b>Sheldon Jackson College Aquaculture Program:</b>                                     |                                                                                      |
| Sheldon Jackson Hatchery, Sitka (747-5209)                                              | pink, chum, coho, chinook and steelhead                                              |
| <b>Douglas Island Pink and Chum, Inc.:</b>                                              |                                                                                      |
| Snettisham Hatchery, Douglas<br>(586-3838, dial 11 at the tone)                         | sockeye                                                                              |
| Gastineau Channel Hatchery, Juneau (463-5113)                                           | pink, chum, coho, and chinook                                                        |
| Kowee Creek Hatchery, Juneau (463-5113)                                                 | steelhead trout                                                                      |
| Sheep Creek Hatchery, Juneau (586-3663)                                                 | pink, chum and coho                                                                  |
| <b>Kake Nonprofit Fisheries Corp.:</b>                                                  |                                                                                      |
| Gunnuk Creek Hatchery, Kake (789-2964)                                                  | pink, chum and coho                                                                  |
| <b>Burro Creek Farms:</b>                                                               |                                                                                      |
| Burro Creek Hatchery, Skagway (983-2355)                                                | pink, chum, coho, and chinook                                                        |
| <b>Armstrong-Keta, Inc.:</b>                                                            |                                                                                      |
| Port Armstrong Hatchery, Sitka (568-2228)                                               | pink, chum, coho, and chinook                                                        |
| <b>National Marine Fisheries Service:</b>                                               |                                                                                      |
| Little Port Walter Research Station, Sitka Borough<br>[Marine Radio WRY8219] (723-4457) | Chinook, coho, pink, and chum salmon; Dolly Varden char, and steelhead               |
| Auke Creek Research Station, Juneau (789-6064)                                          | Sokeye, coho, pink, and chum salmon; Dolly Varden char, cutthroat trout, and sculpin |

# Locations of Hatcheries in Southeast Alaska





| Southeast Alaska Authorized Aquatic Farmsites<br>(Alaska Department of Natural Resources) |                                                                           |                                                      |         |                     |                                      |                                                          |
|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------------|---------|---------------------|--------------------------------------|----------------------------------------------------------|
| File Number                                                                               | Customer Name<br>Business Name                                            | Address<br>Phone                                     | Acreage | Species             | Mtrs*<br>Lat/Long                    | Bay/Cove                                                 |
| 105287                                                                                    | Munhoven, Donald                                                          | Po Box 6335<br>Ketchikan AK<br>99901                 | 2.78    | Oysters             | C067s083e15<br>560358-<br>1323317    | Unnamed<br>Bay/Mosman<br>Island                          |
| 105303                                                                                    | Nicholson, Don Canoe<br>Lagoon Oyster<br>Company                          | Po Box 18062<br>Coffman Cove AK<br>99918<br>329-2253 | 6.4     | Oysters             | C066s081e28<br>560750-<br>1325329    | Canoe Lagoon /<br>Fools Bay, Clam<br>Gulch, West<br>Pass |
| 105308                                                                                    | Pugh, Jr., John<br>Kahli Cove Shellfish,<br>Llc                           | Box Nki #357<br>Ketchikan AK<br>99950 789-5866       | 4.22    | Oysters             | C068s079e31<br>559252-<br>1332590    | Canoe Lagoon<br>And Fools Bay                            |
| 105899                                                                                    | Lyle, Alexander<br>Emily Island Oysters                                   | Box 1775<br>Petersburg AK<br>99833 772-4697          | 2.53    | Oysters             | C061s079e07<br>563543-<br>1330807    | Little Duncan<br>Bay                                     |
| 106146                                                                                    | Mottet, Madelon<br>Southeast Alaska<br>Bioresearch                        | 704 Sawmill Creek<br>Sitka AK 99835<br>747-3862      | 6       | Oysters             | C056s063e02<br>570240-<br>1352200    | Whiting Harbor                                           |
| 106252                                                                                    | Henderson, Tom<br>Pearl Of Alaska                                         | Po Box 505 Kake<br>AK 99830<br>723-2469              | 13.8    | Oysters             | C058s074e34<br>567963-<br>1337448    | Stedman Cove                                             |
| 106258                                                                                    | Belk, Doris J<br>Token Bay Seafoods                                       | Po Box 358<br>Craig AK 99921<br>874-2687x2355        | 3.79    | Oysters             | C068s078e07<br>555911-<br>1332445    | Unnamed<br>Bay/Marble<br>Island                          |
| 106571                                                                                    | Lacroix, Stephan<br>Sea Farms<br>Alaska/Coho Cove<br>Aquafarm             | Po Box 5686<br>Ketchikan AK<br>99901                 | 6.48    | Geoduck             | C 076s 092e<br>24 552721-<br>1313680 | Coho Cove                                                |
| 106572                                                                                    | Zaugg, Gary<br>Pac Alaska/South<br>Sykes Aquafarm                         | 519 Pittenger St<br>Ketchikan AK<br>99901            | 7.5     | Geoduck             | C 077s 095e<br>27 551662-<br>1310840 | South Sykes                                              |
| 106576                                                                                    | Morin, Kurtis<br>Alaska Shellfish<br>Aquaculture<br>Project/Ape Pt Aquafa | Po Box 619 Ward<br>Cove AK 99928                     | 4.8     | Geoduck             | C076s094e26<br>552412-<br>1310947    | N Of Ape Pt.                                             |
| 106577                                                                                    | Morin, Kurtis<br>Alaska Shellfish<br>Aquaculture Project/Pt<br>Alava      | Po Box 619 Ward<br>Cove AK 99928                     | 6.45    | Geoduck             | C 077s 095e<br>07 552004-<br>1311660 | Port Alava                                               |
| 106584                                                                                    | Munhoven, Don<br>Rocky Bay<br>Oysters/Moseman Inlet<br>Aquafarm           | Po Box 6335<br>Ketchikan AK<br>225-5328              | 7.53    | Oysters             | C067s083e03<br>560512-<br>1323326    | Mosman Inlet                                             |
| 106834                                                                                    | Manning, Thomas<br>Krestof Clam<br>Company                                | 622 Hemlock Way<br>Juneau AK 99801<br>463-3431       | 1       | Geoduck             | C054s062e03<br>572106-<br>1355426    | Krestof Sound                                            |
| 106835                                                                                    | Manning, Thomas<br>Krestof Clam<br>Company                                | 622 Hemlock Way<br>Juneau AK 99801<br>463-3431       | 1       | Geoduck             | C037s063e25<br>586360-<br>1349478    | Bridget Cove                                             |
| 106843                                                                                    | Pugh, Jr., John<br>Kahli Cove Shellfish<br>Llc                            | Box Nki #357<br>Ketchikan AK<br>99950 321-0844       | 2       | Littleneck<br>Clams | C068s078e36<br>559283-<br>1332525    | Kahli Cove                                               |



| Southeast Alaska Authorized Aquatic Farmsites<br>(Alaska Department of Natural Resources) |                                                        |                                                    |         |                                     |                                      |                      |
|-------------------------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------|---------|-------------------------------------|--------------------------------------|----------------------|
| File Number                                                                               | Customer Name<br>Business Name                         | Address<br>Phone                                   | Acreage | Species                             | Mtrs*<br>Lat/Long                    | Bay/Cove             |
| 106844                                                                                    | Bakker, Cornelius                                      | Po Box 282<br>Olympia WA 98507<br>360-791-2833     | 8.6     | Geoduck                             | C078s095e14<br>551004-<br>1310555    | Slate Island         |
| 106845                                                                                    | Bakker, Cornelius                                      | Po Box 282<br>Olympia WA 98507<br>360-866-7159     | 1       | Geoduck                             | C075s089e34<br>553284-<br>1318637    | Gravina Island       |
| 106848                                                                                    | Zaugg, Gary<br>Pac Alaska                              | 519 Pittenger St<br>Ketchikan AK<br>99901 225-5566 | 5.1     | Geoduck                             | C075s089e27<br>553319-<br>1318635    | Gravina Island       |
| 106850                                                                                    | Lacroix, Stephen<br>Sea Farms Alaska                   | Po Box 5686<br>Ketchikan AK<br>99901               | 5.4     | Geoduck                             | C 075s 089e<br>34 553253-<br>1318658 | Gravina Island       |
| 106991                                                                                    | Wyatt, Eric<br>Blue Starr Alaskan<br>Oysters           | Po Box Nki #441<br>Ketchikan AK<br>99950 594-6334  | 0.95    | Oysters                             | C068s078e05<br>560019-<br>1333797    | Tokeen Bay           |
| 106994                                                                                    | King, Art<br>Naukat West<br>Homeowners Assoc.          | Po Box Nki #1<br>Ketchikan AK<br>99950 629-4266    | 0.08    | Flupsy                              | C069s080e19<br>558695-<br>1332160    | Tuxekan<br>Narrows   |
| 107001                                                                                    | Lacroix, Stephen<br>Sea Farms Alaska                   | Po Box 5686<br>Ketchikan AK<br>99901 247-5687      | 3.88    | Geoduck                             | C077s094e14<br>551936-<br>1312150    | Pt Alava #1          |
| 107002                                                                                    | Morin, Kurt<br>Alaska Shellfish<br>Aquaculture Project | Po Box 619<br>Ward Cove AK<br>99928 247-4865       | 3.5     | Geoduck                             | C076s092e23<br>552634-<br>1313916    | Coho Cove            |
| 107075                                                                                    | Lacroix, Stephen<br>Sea Farms Llc                      | Po Box 5686<br>Ketchikan AK<br>99901 247-5687      | 4.71    | Geoduck                             | C077s094e14<br>551957-<br>1312165    | Pt Alava #2          |
| 107077                                                                                    | Lacroix, Stephen<br>Sea Farms Llc                      | Po Box 5686<br>Ketchikan AK<br>99901 247-5687      | 4.93    | Geoduck                             | C077s095e34<br>551527-<br>1310812    | Black Island         |
| 107577                                                                                    | Lyle, Alexander<br>Emily Island Oysters                | Box 1775<br>Petersburg AK<br>99833 772-4697        | .93     | Oysters                             | C061s079e07<br>563543-<br>1330807    | Little Duncan<br>Bay |
|                                                                                           | <b>TOTAL FILES:</b>                                    | 26                                                 |         | *meridian, township, range, section |                                      |                      |

### 3. Historic Properties

The subarea contains a multitude of known and unidentified archaeological and historic sites. These sites are not identified here, in order to protect them from scavenging. Oil spills and hazardous substance releases may result in direct and/or indirect impacts to those sites. On-Scene Coordinators are responsible for ensuring that response actions take the protection of historic properties into account and that the statutory requirements for protecting them are met. Annex M of the Unified Plan outlines Federal On-Scene Coordinator responsibilities for protecting historic properties and provides an expedited process for compliance with Section 106 of the National Historic Preservation Act during the emergency phase of a response.

### 4. Subsistence and Personal Use Harvests

Subsistence-related uses of natural resources play an important role in the economy and culture of many communities in Southeast Alaska. A subsistence economy may be defined as follows:

...an economy in which the customary and traditional uses of fish, wildlife and plant resources contribute substantially to the social, cultural and economic welfare of families



in the form of food, clothing, transportation and handicrafts. Sharing of resources, kinship-based production, small scale technology and the dissemination of information about subsistence across generational lines are additional characteristics.

Before 1990, the State of Alaska made all decisions regarding the management of fish and wildlife resources and harvest opportunities. In 1990, however, Federal agencies became responsible for assuring a Federal subsistence priority on Federal public lands, and in 1999 on Federal reserved waters. The Federal Subsistence Board adopts subsistence regulations that are administered by various Federal agencies on Federal public lands. State regulations still apply on all lands, and the State is still the manager of fish and wildlife on all lands and waters in Alaska. As a consequence, the number of agencies involved in regulating subsistence uses has increased. Therefore, in the event of a spill, more extensive coordination will be required in order to address subsistence resources. Regulations regarding subsistence harvest can also be expected to undergo regular modification. Current information on harvest regulations can be obtained from the Alaska Department of Fish and Game Subsistence Division or the U.S. Fish and Wildlife Service Office of Subsistence Management.

In the event of a spill, communication and coordination related to marine mammal species and subsistence harvest should occur through the existing co-management structure maintained between the National Marine Fisheries Service and various Alaska Native Organizations to cooperatively manage marine mammal subsistence resources in Alaska. Co-management agreements between the agency and these organizations set forth operational structures for the conservation and management of marine mammal populations, with the goal of maintaining population levels which allow for sustainable subsistence use by Alaska Natives, while carrying out the goals of the Marine Mammal Protection Act to maintain these populations as significant functioning elements of the ecosystem upon which they depend. This partnership and management structure relies on shared decision-making based on consensus to promote the sustained health of marine mammals, and to promote scientific research, identify and resolve conflicts, and provide information to harvesters and the public. Alaska Native Organizations with species of concern in this sub-area plan are the Alaska Native Harbor Seal Commission, and The Sea Otter and Steller Sea Lion Commission.

The following charts showing seasonal rounds of activity, are included for several of the many rural subsistence-using communities in order to illustrate the species harvested and the times of year when harvesting occurs. This information can be used during a spill event in order to determine the communities threatened or impacted by the discharge, and the specific food sources at risk of contamination. Contacts for many potentially affected communities are identified in the Response Section, Part One.

#### **Southeast Personal Use Harvest**

Personal use harvests in Southeast Alaska may potentially\* occur as follows:

|                              |                                                                           |
|------------------------------|---------------------------------------------------------------------------|
| Shrimp fishery               | all year                                                                  |
| Dungeness crab fishery       | all year                                                                  |
| Brown king crab fishery      | all year                                                                  |
| Red & blue king crab fishery | all year (west of Cape Spencer)<br>July 1-March 31 (east of Cape Spencer) |
| Tanner crab fishery          | all year                                                                  |
| Clam fishery                 | all year                                                                  |
| Abalone fishery              | all year                                                                  |
| Herring fishery              | all year                                                                  |
| Bottomfish fishery           | all year                                                                  |
| Halibut fishery              | February 1-December 31                                                    |
| Smelt fishery                | all year                                                                  |
| Salmon fishery               | all year (in most waters)                                                 |

### **Yakutat Personal Use Harvest**

Personal use harvests in the Yakutat region may potentially\* occur as follows:

|                             |                        |
|-----------------------------|------------------------|
| Shrimp fishery              | all year               |
| Dungeness crab fishery      | all year               |
| King crab fishery           | all year               |
| Tanner crab fishery         | all year               |
| Clam fishery                | all year               |
| Herring fishery             | all year               |
| Bottomfish fishery          | all year               |
| Halibut fishery             | February 1-December 31 |
| Smelt fishery               | all year               |
| Salmon set gill net fishery | July 1-September 30    |

**\*NOTE:** All personal use fisheries occur under sport fishing regulations and may be opened or closed by emergency order, if the Alaska Department of Fish and Game ascertains that conditions warrant such actions. Also, harvest regulations and seasons can change from year to year. The dates given above indicate periods when fisheries are commonly, but not always, open.

## **5. Commercial Fishing**

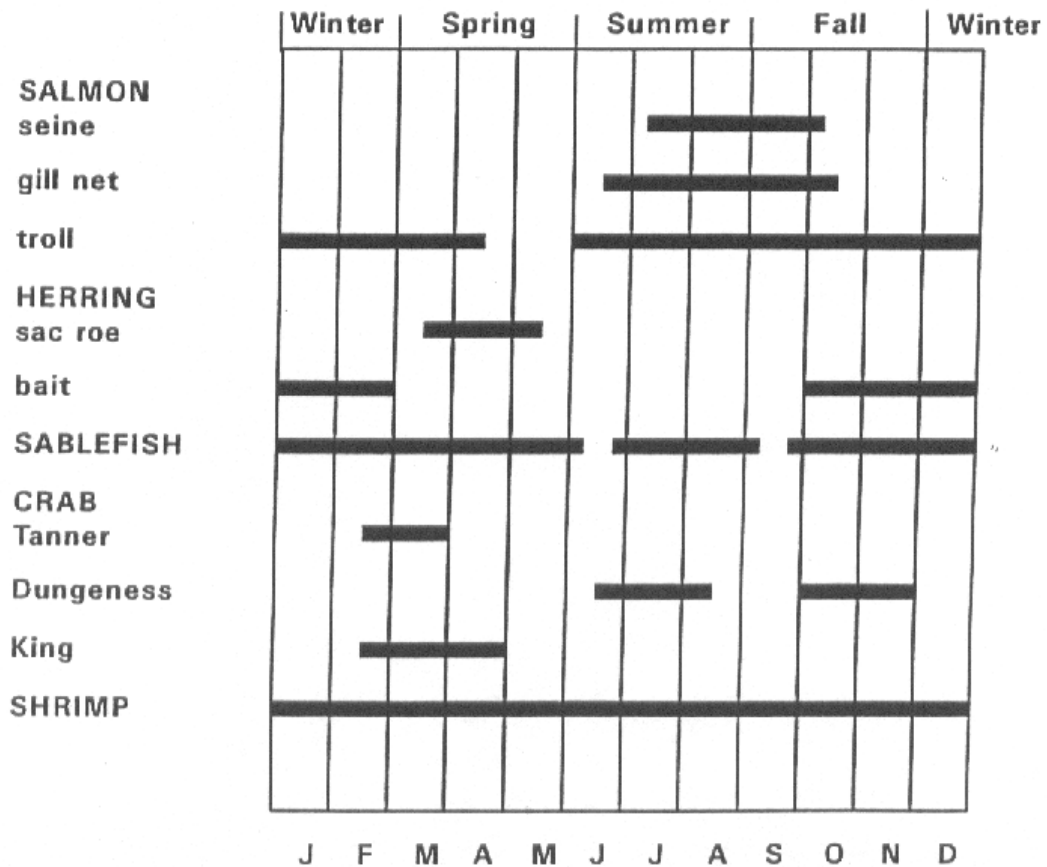
The following tables provide seasonal information on the major commercial fisheries in the subarea. It must be remembered, however, that all fishing seasons are subject to emergency openings and closures. Most seasons are only open for a portion of the seasons specified in the regulations. Also, fishing regulations and seasons can change from year to year. Specific information on which species are currently being harvested may be obtained from the Alaska Department of Fish and Game Division of Commercial Fisheries. As fishing periods are adjusted yearly by emergency openings and closures, contact Alaska Department of Fish & Game for current fishing periods. Updated information may be found at their Commercial Fisheries website:

<http://www.adfg.alaska.gov/index.cfm?adfg=fishingCommercial.main>

Salmon are the most important commercial species in the subarea, with pink salmon comprising the majority of the catch. Other profitable fisheries target herring; sablefish; Tanner, Dungeness and brown king crab; shrimp; and sea cucumbers.

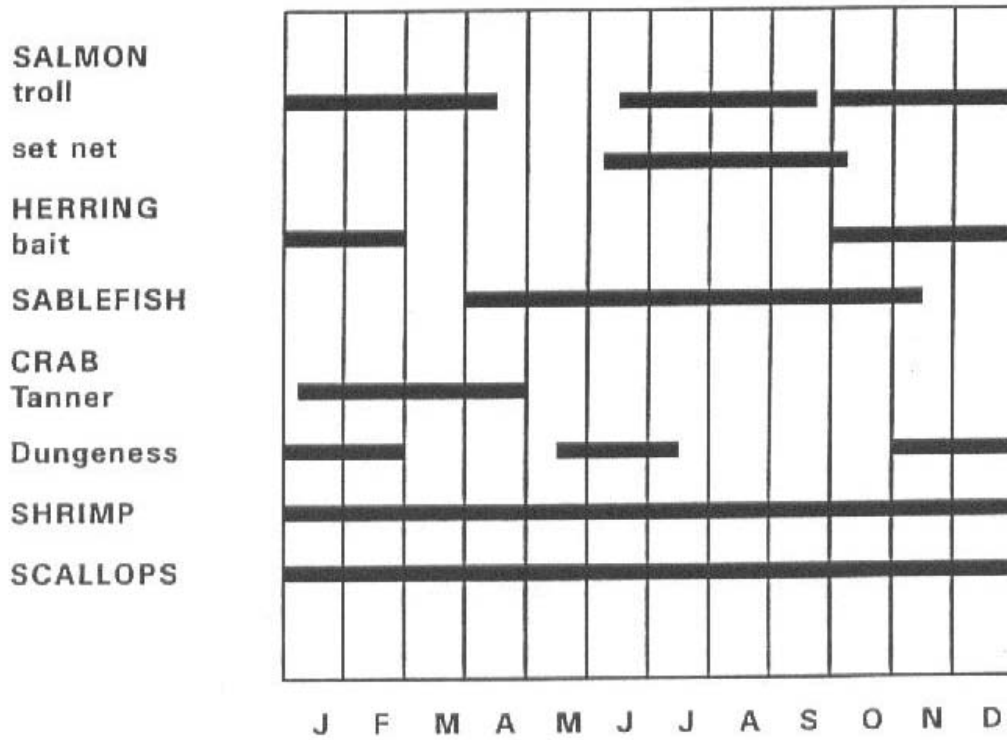
# COMMERCIAL FISHING SEASONS

## SOUTHEAST ALASKA



Times are approximate

# COMMERCIAL FISHING SEASONS YAKUTAT AREA



Times are approximate

## 6. Sport Fishing and Hunting

Brown and black bears concentrate in coastal marshes from April to mid-June to feed on the newly emergent sedges and grasses. They are commonly hunted in these coastal areas during the spring hunting season, from mid-March to end of May. A high proportion of the bear hunts are by guided hunters. Oiled beaches could interfere with these guided hunts through general fouling of the coastline and possible impacts to bears from ingestion of oiled vegetation. Popular bear hunting areas also indicate areas with potential safety issues during response to an oil spill.

Sport fishing in marine waters occurs year-round for king salmon, Dolly Varden, rockfish, and shellfish. Sport fishing for halibut is closed during January. However, fishing pressure is greatest from May to October due to calmer waters, warmer weather conditions, and more abundant sport fish in nearshore waters. Contact the Alaska Department of Fish & Game for current seasons within the area of the spill. Updated information may be found at their Sport Fish web site:

<http://www.adfg.alaska.gov/index.cfm?adfg=fishingSport.main>

## 7. Recreational Sites and Facilities

### (a) Parks, Picnic Areas, and Campgrounds

#### National Forests

Recreational sites and facilities found throughout southeast Alaska on the Tongass National Forest have been mapped on the forest's Geographic Information System. For a variety of recreation maps and information for the Tongass, consult Forest Service website:

<http://www.fs.fed.us/r10/tongass/recreation/recreation.shtml>.

For information contact:

|                                                 |                      |
|-------------------------------------------------|----------------------|
| Forest Supervisor, Tongass National Forest, KTN | 228-6281             |
| Admiralty National Monument, Juneau             | 586-8790 or 790-7472 |
| Craig Ranger District, Craig                    | 826-3271 or 826-1600 |
| Hoonah Ranger District, Hoonah                  | 945-3631 or 945-1209 |
| Juneau Ranger District, Juneau                  | 586-8800 or 790-7443 |
| Ketchikan-Misty Fjords Ranger District, KTN     | 225-2148 or 228-4100 |
| Petersburg Ranger District, Petersburg          | 772-3871 or 772-5900 |
| Sitka Ranger District, Sitka                    | 747-4218             |
| Thorne Bay Ranger District, Thorne Bay          | 828-3304 or 828-3210 |
| Wrangell Ranger District, Wrangell              | 874-2323 or 874-7500 |
| Yakutat Ranger District, Yakutat                | 784-3359             |

#### National Parks

**Glacier Bay National Park and Preserve** contact: Superintendent, Gustavus, 697-2230. High use recreation areas are noted below.

- **Upper West and East Arms of Glacier Bay.** Most popular destination for all park visitors, including cruise, tour, charter and private motorboats and kayaks.
- **Lower Glacier Bay, including Bartlett Cove and Berg Bay.** Popular for sportfishing and boating due to proximity to park headquarters at Bartlett Cove.
- **Beardslee Islands.** Second most popular destination for sea kayaks. Also popular for small motorboats.
- **Hugh Miller/Scidmore/Charpentier Inlets and Adams Inlet.** Popular destination for small boats, including kayaks.

- **Marble Islands.** Most popular tour and charter boat stop for watching seabirds.
- **Tour boat camper drop-off points.** The park designates three points where the day tour boat drops-off kayakers and campers up-bay. The sites are normally rotated after two years to allow site impacts to heal. the oil spill coordinator could get the current sites from the park.
- **Dundas Bay.** Most popular destination for small boats and kayaks outside Glacier Bay proper.
- **Dry Bay/Alsek River/East Alsek River.** Most use of Dry Bay is related to commercial fishing - a set gillnet fishery in the East and Alsek rivers and along the beach either side of the mouth of both rivers. A large number (1,000+) of rafters also float the Alsek River, which is tidally influenced for at least 5 miles from the mouth.

**Wrangell-St. Elias National Park and Preserve** contact: Superintendent, Glennallen, 822-5235.

**Sitka National Historic Park** contact: Superintendent, Sitka, 747-6281.

**Klondike Gold Rush National Historic Park** contact: Superintendent, Skagway, 983-2921.

### **State Parks**

For an index map of the state parks in the subarea (and for more detailed information of each park), go to the web link at <http://dnr.alaska.gov/parks/aspunits/soeastmappage.htm>.

The following park units have significant ocean and beach frontage and would be adversely affected by any oil or hazardous substance in the water:

**Totem Bight State Historical Park**, 12 acres, T74S, R90E, CRM. A small historic site with totems and a clan house that provides excellent roadside views of Tongass Narrows, located 12 miles north of Ketchikan on the highway.

**Refuge Cove State Recreation Site**, 13 acres, T74S, R90E, CRM. A small sandy beach area with heavy local community use, located about 10 miles north of downtown Ketchikan.

**Settlers Cove State Recreation Site**, 38 acres, T73S, R90E, CRM. A very popular sandy beach area for children and adults, located about 18 miles north of Ketchikan on the road system.

**Petroglyph Beach State Historic Site**, 7 acres, T62S, R83E, CRM. A small beach site with ancient petroglyphs in the sand, gravel and rocky shore, located within downtown Wrangell and often a destination for tours.

**Halibut Point State Recreation Site**, 22 acres, T65S, R63E, CRM. A small local community park with heavy use and extensive sandy and rocky beaches, within 5 miles of downtown Sitka.

**Old Sitka State Historical Park**, 264 acres, T65S, R63E, CRM. A boat launch and trail system are used extensively by locals and tourists, located within 10 miles of downtown Sitka.

**Point Bridget State Park**, 2800 acres, T37S, R63E, CRM. A large park with extensive beaches and rocky shores along Lynn Canal 39 miles north of Juneau on the road system. Two public cabins are available for use, and one is on the shoreline.

**Chilkat State Park**, 6,045 acres, T30, 31, 32S, R59,60E, CRM. A large peninsula 5 miles south of Haines on the road system with camping, boat launch and trails along rocky coast line with some beaches.

**Eagle Beach State Recreation Area**, 640 acres, T38 & 39S, R64E, CRM. A large estuarine system of beaches and rivers located 28 miles north of Juneau on the road system.

The following **Marine Parks** all have good anchorages, protected waters, and good landing beaches. All of the Marine Parks are to be included as a series of anchorages that stretch the full length of the Panhandle and connect with a similar system in British Columbia.

**St. James Bay State Marine Park**, 10,220 acres, T37S R62E CRM. This is a large bay with several islands, coves salmon streams, and an extensive area of tideflats. The bay supports a large population of

shrimp and crab that are harvested commercially. There is also an associated harbor with only a narrow passage for entry. This harbor is the site of a large hatchery release of salmon. High use.

**Sullivan Island State Marine Park**, 2,163 acres, T34S R61E. This park is on the southern tip of Sullivan Island which has two important anchorages and several sandy beaches. Low use.

**Chilkat Islands State Marine Park**, 6,560 acres, T32S R60E. T33S R61E, This is a series of islands off the tip of the Chilkat Peninsula. Low use.

**Magoun Islands State Marine Park**, 1,135 acres, T54S R62E CRM. This park is a group of tightly knit islands with many small coves and beaches west of Sitka. There is also one large lagoon that is only accessible by boat at high tides. This area is primarily used for fishing, clamming, and hunting. Moderate use.

**Big Bear/Baby Bear State Marine Park**, 1,023 acres, T51S R61E CRM. This park is a series of protected islands and bays in Peril Straits north of Sitka. Good fishing and hunting. Moderate use.

**Grindall Island State Marine Park**, 484 acres, T47S R87E CRM. This park is an isolated island west of Ketchikan that has a public use cabin on it. The area is mainly used for diving fishing, and other intertidal activities. The southern tip of the island is an established sealion haulout. Moderate use.

**Dall Bay State Marine Park**, 585 acres, T77S, R91E, CRM. A bay providing sheltered anchorage on Gravina Island, about 20 miles south of Ketchikan.

**Thom's Place State Marine Park**, 1,198 acres, T66S, R86E, CRM. A bay providing sheltered anchorage on Wrangell Island, about 20 miles south of Wrangell.

**Beecher Pass State Marine Park**, 660 acres, T72S, R74E, CRM. A group of islands along a sheltered portion of the inland passage about 25 miles south of Petersburg.

**Joe Mace Island State Marine Park**, 62 acres, T64S, R75E, CRM. A small island near the community of Point Baker, used for community recreation.

**Security Bay State Marine Park**, 500 acres, T58S, R70E, CRM. A large bay with protected anchorages off Chatham Strait on the north end of Kuiu Island.

**Taku Harbor State Marine Park**, 700 acres, T44S, R70E, CRM. A large protected bay with a state-maintained float for medium sized yachts up to 60 feet, located about 35 miles south of Juneau.

**Oliver Inlet State Marine Park**, 560 acres, T43S, R68E, CRM. A small lagoon bay at low tide levels with a public use cabin situated on the head end of Seymour Canal. A small tram on steel rails is available to transport gear about ½ mile to the cabin from Oliver Inlet. Located about 15 miles south of Juneau.

**Funter Bay State Marine Park**, 162 acres, T42S, R64E, CRM. A large protected bay on the northwest end of Admiralty Island about 40 miles west of Juneau. Two floats are available for boat tie-up.

**Channel Islands (Shelter, Bird, Gull, Aaron, Lincoln, Little, Battleship, Benjamin, Portland Caugland, etc. Islands) State Marine Park**, 3560 acres, T39S, R64E, CRM. The park is located 25 northwest of Juneau in Auke Bay and Favorite Channel. A cabin is available on Shelter Island and the area is accessible by small boat.

**Black Sands Beach State Marine Park**, 640 acres, T76S, R91E, CRM. A small beach and several islands within six miles of downtown Ketchikan.

**Sealion Cove State Marine Park**, 630 acres, T53S, R60E, CRM. A beautiful open-coast sandy beach with a trail from Kalinin Bay, located about 35 miles north of Sitka.

**Fort Rosseau Causeway State Historical Park**, Township 56 South, Range 63 East, CRM.

**In addition**, the following state park areas are undeveloped:

1. Mill Creek near Wrangell
2. Pavlov Harbor near Freshwater Bay/ Chichagof Island
3. High Island near Kuiu Island
4. Salmon Bay near Prince of Wales Island
5. Joe/Grant Island near Grant Island/ Clover Passage
6. Hole in the Wall near Prince of Whales Island
7. Benton Island near Clover Passage

### **Local Parks**

This document does not include most city or borough parks at this time. Three city park/recreation areas that were former federal surplus properties are Shoemaker Bay Recreational Area (City of Sitka), Totem Square (City of Sitka), and Seaplane Ramp/Turnaround Site (City of Wrangell).

### **Wildlife Viewing**

There are many people, including charter and tour operators that participate in wildlife viewing in the subarea. In addition to the parks listed above, there are sites within the Alaska Maritime National Wildlife Refuge that are visited, including the following: Saint Lazaria Island; Hazy Island group; and Forrester Island complex. Other wildlife viewing areas include Stikine River Flats, Anan Creek, Fish Creek (Hyder), and Pack Creek.

### **(b) Public Use Cabins**

For information go to this Internet website: <http://www.alaskacenters.gov/cabins.cfm>

### **Alaska State Park Maps**

**An interactive state park map is available at the ADNR website:**  
<http://dnr.alaska.gov/parks/aspro/statemap.htm>

**Maps and charts for the Alaska State Parks in the Southeast Subarea appear below by city, as follows: 1. Haines; 2. Juneau; 3. Ketchikan; 4. Sitka; 5. Wrangell**

#### **Chart Key**

|                                           |                                    |                                        |
|-------------------------------------------|------------------------------------|----------------------------------------|
| <b>CS</b> = Camp sites                    | <b>W</b> = Water, drinkable        | <b>C</b> = Cabins                      |
| <b>CL</b> = Camping limit                 | <b>S</b> = Picnic shelter          | <b>D</b> = Daily parking fee           |
| <b>CF</b> = Camping fee                   | <b>Tr</b> = Trails                 | <b>F</b> = Fishing                     |
| <b>P</b> = Picnic sites                   | <b>H</b> = Historical feature      | <b>*</b> = Tent camping only           |
| <b>T</b> = Toilet                         | <b>B</b> = Boat launch             | <b>**</b> = Annual passes not accepted |
| <b>/a</b> = Facilities are ADA accessible |                                    | <b>***</b> = Sanitary dump station     |
| <b>SRA</b> = State Recreation Area        | <b>SP</b> = State Park             | <b>DU</b> = Day Use                    |
| <b>SRS</b> = State Recreation Site        | <b>SMP</b> = State Marine Park     | <b>GU</b> = Group Use                  |
| <b>SHP</b> = State Historical Park        | <b>SWP</b> = State Wilderness Park | <b>CG</b> = Campground                 |
| <b>SHS</b> = State Historic Site          | <b>TH</b> = Trailhead              | <b>BL</b> = Boat Launch                |

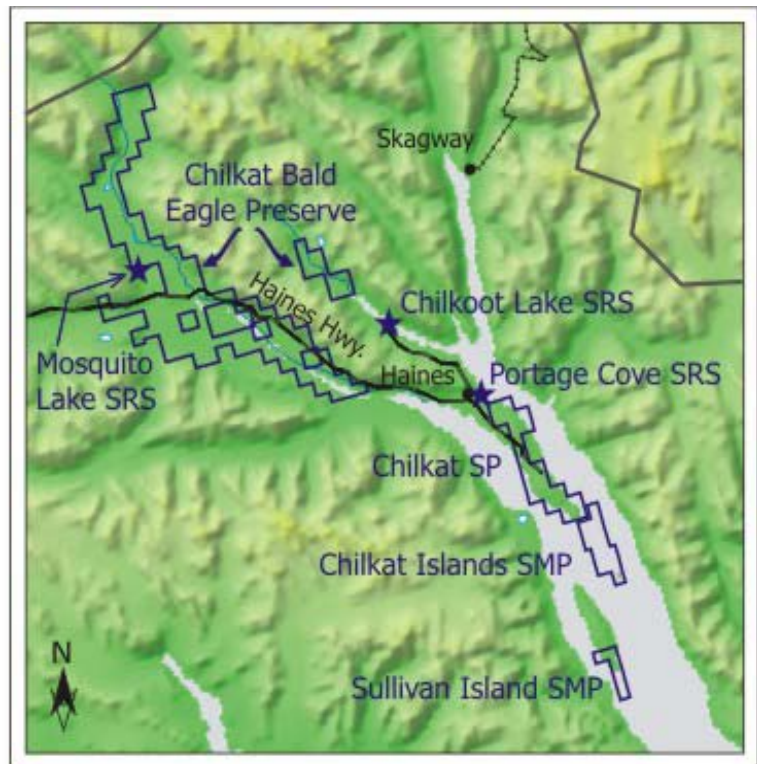
For further information: <http://dnr.alaska.gov/>, or call 269-8700 (ADNR, Division of Parks and Outdoor Recreation)



# Alaska State Parks near Haines in Southeast Alaska



*This map is not intended to be used as a navigational aid.*



| Park Unit                   | Acres  | CS | CL | CF | P           | T   | W | S | Tr   | H | B | C | D | F | Location         |
|-----------------------------|--------|----|----|----|-------------|-----|---|---|------|---|---|---|---|---|------------------|
| Chilkat Bald Eagle Preserve | 49,320 |    |    |    |             | T   | W |   | Tr/a |   |   |   |   | F | 8-30 Haines Hwy. |
| Chilkat Islands SMP         | 6,560  |    |    |    | Undeveloped |     |   |   |      |   |   |   |   | F | No road access   |
| Chilkat SP                  | 9,837  | 15 | 15 | CF | 4           | T/a | W | S | Tr   |   | B |   |   | F | 7 Mud Bay Rd.    |
| Chilkoot Lake SRS           | 80     | 32 | 7  | CF |             | T/a | W | S |      |   | B |   |   | F | 10 Lutak Rd.     |
| Mosquito Lake SRS           | 10     | 5  | 15 | CF |             | T   | W |   |      |   | B |   |   | F | 27.2 Haines Hwy  |
| Portage Cove SRS *          | 7      | 9  | 7  | CF | 3           | T   | W |   |      |   |   |   |   | F | 1 Beach Rd.      |
| Sullivan Island SMP         | 2,163  |    |    |    | Undeveloped |     |   |   |      |   |   |   |   | F | No road access   |

# Alaska State Parks near Juneau in Southeast Alaska



*This map is not intended to be used as a navigational aid.*

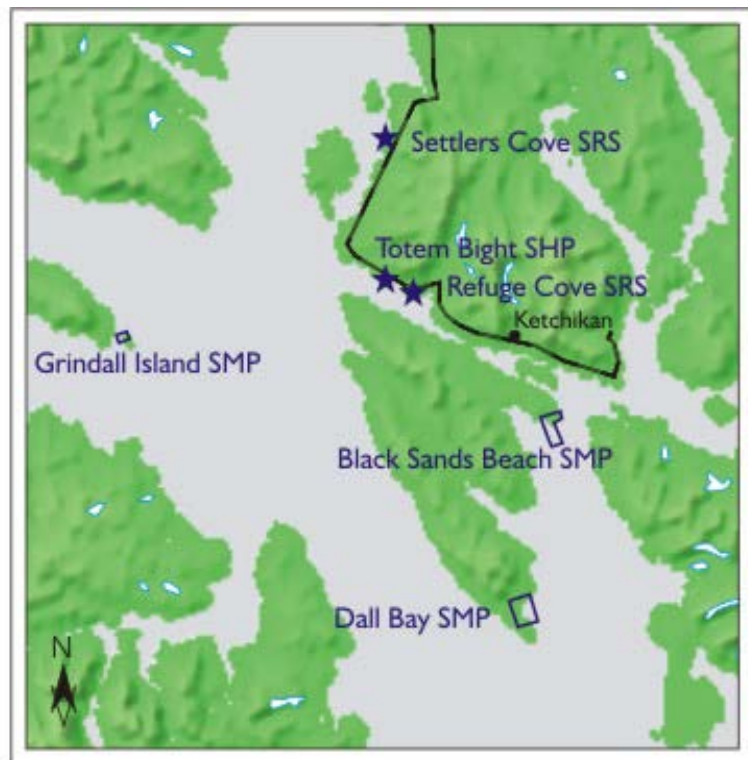


| Park Unit           | Acres  | CS | CL | CF | P           | T   | W | S | Tr | H   | B | C | D | F | Location           |
|---------------------|--------|----|----|----|-------------|-----|---|---|----|-----|---|---|---|---|--------------------|
| Eagle Beach SRA     | 590    |    |    |    | 10          | T   |   |   | Tr |     |   |   | D | F | 29 Glacier Hwy.    |
| Ernest Gruening SHP | 12     |    |    |    |             |     |   |   |    | H   |   |   |   | F | 24 Glacier Hwy.    |
| Funter Bay SMP      | 162    |    |    |    | Undeveloped |     |   |   |    |     |   |   |   | F | No road access     |
| Johnson Creek SRS   | 8      |    |    |    | Undeveloped |     |   |   |    |     |   |   |   | F | 5.5 N Douglas Hwy. |
| Juneau Trail System | 15 mi. |    |    |    |             |     |   |   | Tr | H   |   |   |   |   | Juneau Area        |
| Oliver Inlet SMP    | 560    |    |    |    |             | T   |   |   | Tr |     |   | C |   | F | No road access     |
| Point Bridget SP    | 2,800  |    |    |    |             | T   |   |   | Tr |     |   | C |   | F | 38.5 Glacier Hwy.  |
| Shelter Island SMP  | 3,560  |    |    |    | 6           | T   |   |   | Tr |     |   |   |   | F | No road access     |
| St. James Bay SMP   | 1,022  |    |    |    | Undeveloped |     |   |   |    |     |   |   |   | F | No road access     |
| Taku Harbor SMP     | 700    |    |    |    | Undeveloped |     |   |   |    |     |   |   |   | F | No road access     |
| Wickersham SHS      | .5     |    |    |    |             | T/a |   |   |    | H/a |   |   |   |   | 213 - 7th Street   |

## Alaska State Parks near Ketchikan in Southeast Alaska



*This map is not intended to be  
used as a navigational aid.*

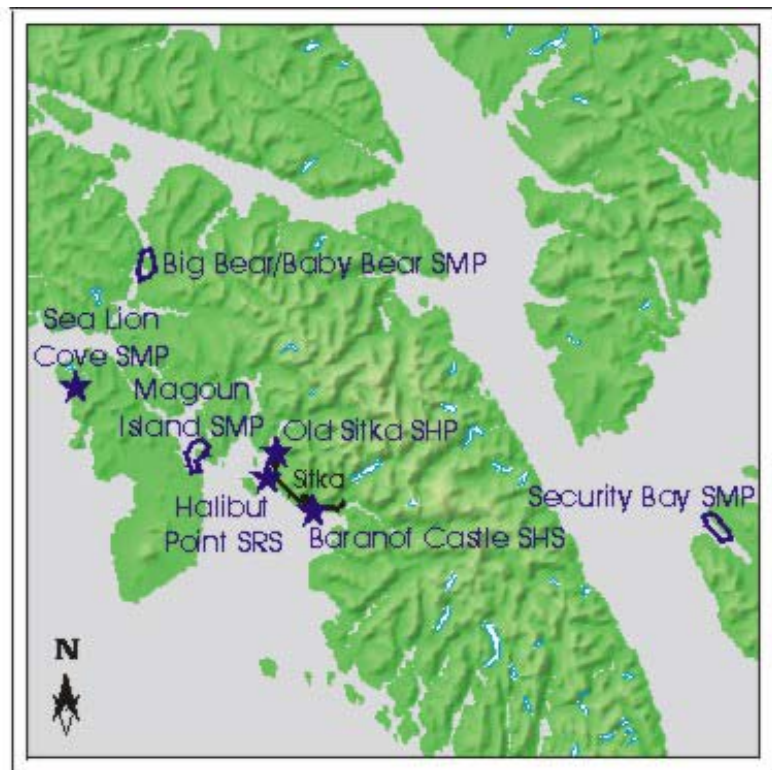


| Park Unit             | Acres | CS | CL | CF | P           | T   | W   | S   | Tr   | H   | B | C | D | F | Location         |
|-----------------------|-------|----|----|----|-------------|-----|-----|-----|------|-----|---|---|---|---|------------------|
| Black Sands Beach SMP | 640   |    |    |    | Undeveloped |     |     |     |      |     |   |   |   | F | No road access   |
| Dall Bay SMP          | 585   |    |    |    | Undeveloped |     |     |     |      |     |   |   |   | F | No road access   |
| Grindall Island SMP   | 240   |    |    |    |             | T   |     |     | Tr   |     |   | C |   | F | No road access   |
| Refuge Cove SRS       | 13    |    |    |    | 14          | T   |     |     |      |     |   |   |   | F | 8.7 N Tongass Rd |
| Settlers Cove SRS     | 76    | 14 | 7  | CF | 12          | T/a | W/a | S/a | Tr/a |     |   |   |   | F | 18 N Tongass Rd  |
| Totem Bight SHP       | 33    |    |    |    |             | T/a | W/a |     | Tr/a | H/a |   |   |   |   | 10 N Tongass Rd  |

# Alaska State Parks near Sitka in Southeast Alaska



*This map is not intended to be used as a navigational aid.*



| Park Unit              | Acres | CS | CL | CF | P           | T   | W | S | Tr   | H   | B | C | D | F | Location        |
|------------------------|-------|----|----|----|-------------|-----|---|---|------|-----|---|---|---|---|-----------------|
| Baranof Castle SHS     | 1     |    |    |    |             |     |   |   |      | H/a |   |   |   |   | Lincoln St.     |
| Big Bear/Baby Bear SMP | 1,023 |    |    |    | Undeveloped |     |   |   |      |     |   |   |   | F | No road access  |
| Halibut Point SRS      | 40    |    |    |    | 9           | T/a | W | S | Tr   |     |   |   |   | F | 4.4 Halibut Rd. |
| Magoun Islands SMP     | 1,135 |    |    |    | Undeveloped |     |   |   |      |     |   |   |   | F | No road access  |
| Old Sitka SHP          | 212   |    |    |    |             | T/a |   |   | Tr/a | H/a | B |   |   | F | 7.5 Halibut Rd. |
| Sea Lion Cove SMP      | 630   |    |    |    |             |     |   |   | Tr   |     |   |   |   | F | No road access  |
| Security Bay SMP       | 500   |    |    |    | Undeveloped |     |   |   |      |     |   |   |   | F | No road access  |



# Alaska State Parks near Wrangell in Southeast Alaska



*This map is not intended to be  
used as a navigational aid.*



| Park Unit            | Acres | CS | CL | CF | P           | T | W | S | Tr | H | B | C | D | F | Location       |
|----------------------|-------|----|----|----|-------------|---|---|---|----|---|---|---|---|---|----------------|
| Beecher Pass SMP     | 660   |    |    |    | Undeveloped |   |   |   |    |   |   |   |   | F | No road access |
| Joe Mace Island SMP  | 62    |    |    |    | Undeveloped |   |   |   |    |   |   |   |   | F | No road access |
| Petroglyph Beach SHS | 7     |    |    |    |             |   |   |   | Tr | H |   |   |   | F | Grave St.      |
| Thom's Place SMP     | 1,198 |    |    |    | Undeveloped |   |   |   |    |   |   |   |   | F | No road access |

## 8. Commercial Tourism

A mail survey of commercial wildlife tour operators in Southeast Alaska in 1989 documented the level and types of wildlife viewing areas important to tourism in coastal areas. There were at least 120 businesses offering wildlife viewing in the region in 1989.

The following organizations can be contacted with requests for specific information on location and timing of recreation and tourism activities. Although the primary function of these organizations is not to provide such information, the individual members will be quite knowledgeable about environmental conditions and will often be willing to share information.

|                                               |          |
|-----------------------------------------------|----------|
| Alaska Office of Tourism Development          | 465-2012 |
| Alaska State Chamber of Commerce              | 586-2323 |
| Alaska Native Tourism Council                 | 274-5400 |
| Alaska Wilderness Recreation & Tourism Assoc. | 463-3038 |
| Tongass National Forest                       | 747-4236 |

## 9. Marinas and Ports

(See the *Resources Section*: both the Community Profiles and the Information Directory)

## 10. Fish Processing

The seafood processing companies with permits from the Alaska Department of Environmental Conservation are listed on the web pages below. See also the following website:

[http://alaska.state.gov/alaska/seafood\\_listing.cfm](http://alaska.state.gov/alaska/seafood_listing.cfm)

[Retort Processors \(Cannery\)](#): Processors approved to produce shelf-stable, non-refrigerated seafood product in cans, jars, or retort plastic pouches.

[Land-based Processors](#): Processors approved to produce fresh, frozen, salted, or formulated seafood products at a land based facility.

[Vessel Processors](#): Processors approved to produce fresh, frozen, salted, or formulated seafood products onboard a large floating vessel facility.

[Direct Market Fishing Vessels](#): Processors approved to produce fresh and frozen seafood products of their own catch onboard a small floating boat facility.

[Shellfish Dealers](#): Processors approved to grow, harvest, or buy shellstock (oysters, clams, or mussels) and can pack the shellstock or shuck and pack the shellfish (without shell) for sale.

[Shellfish Harvesters](#): Harvests shellstock and delivers to processor or shipper.

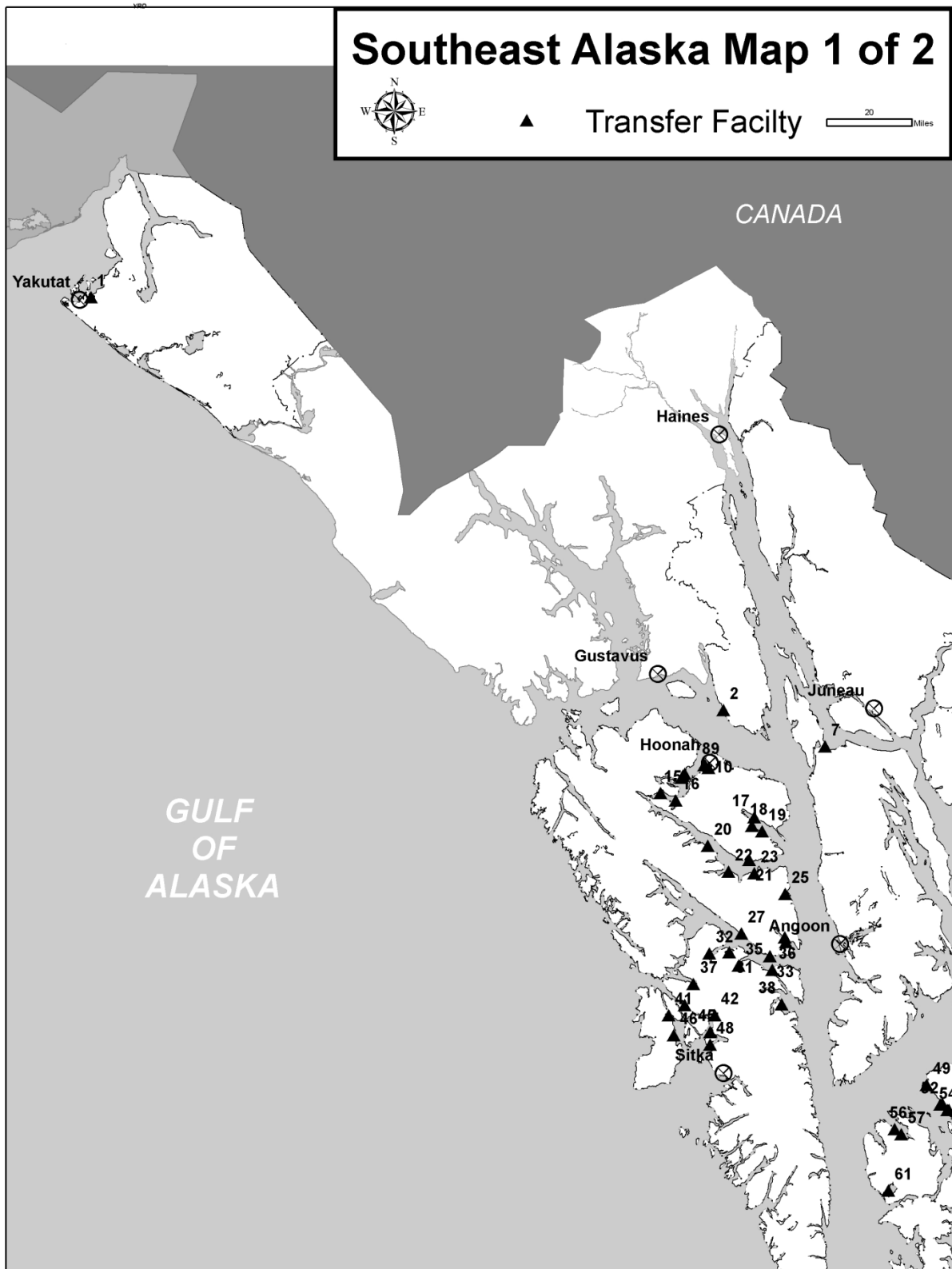
[Geoduck Dive Vessel](#): A vessel approved by the ADEC for the harvest of geoducks.

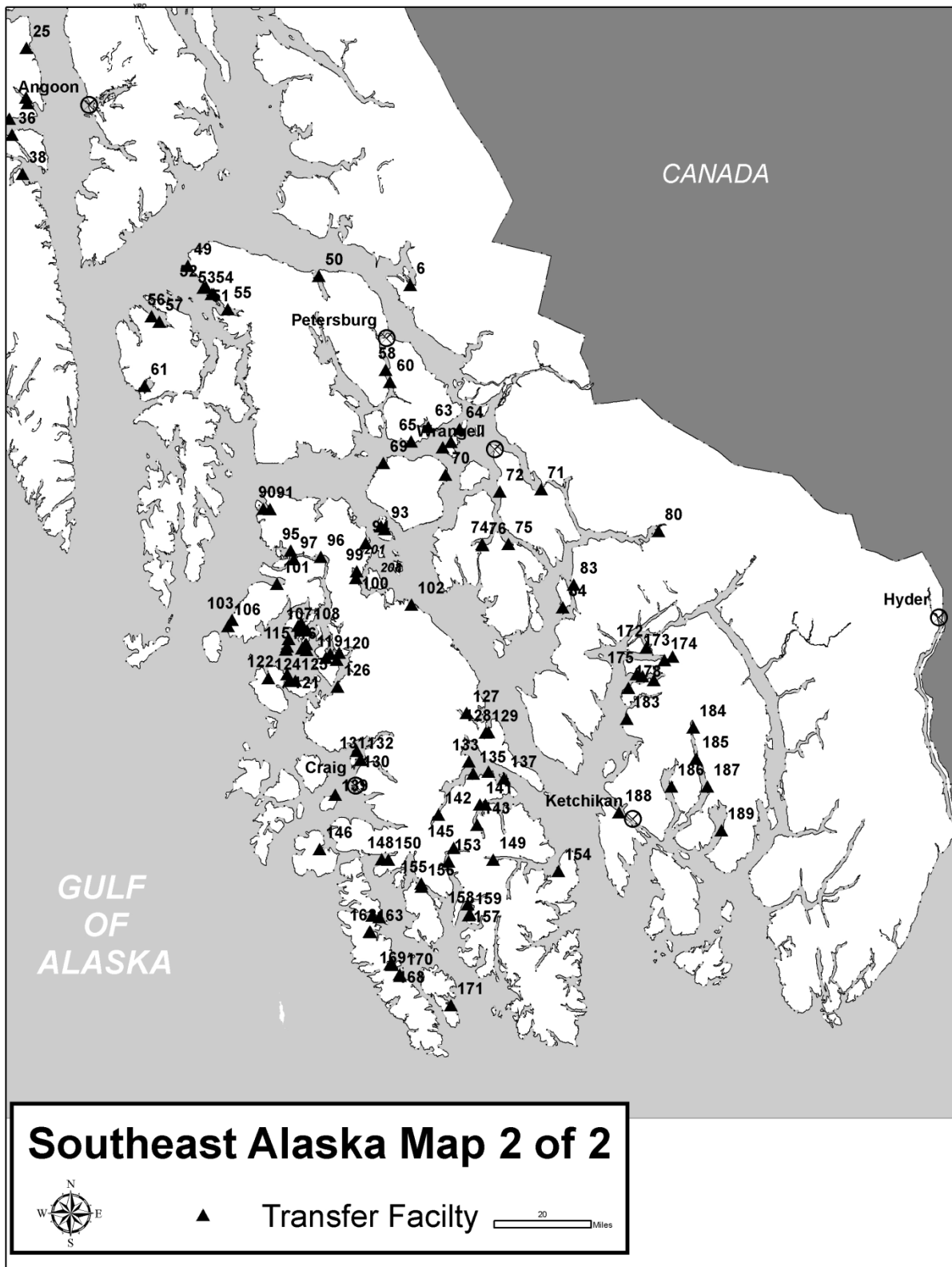
## 11. Logging Facilities

All logging facilities on the Tongass National Forest are mapped on the U.S. Forest Service's Geographic Information System (GIS). Consult the tables in Attachment One at the end of this section, and the Transfer Facility maps below for more information.

The following organizations can be contacted with requests for specific information on location and timing of logging activities. Although the primary function of these organizations is not to provide such information, individual members can be quite knowledgeable about the current situation and environmental conditions and will often be willing to share information.

|                                               |                           |
|-----------------------------------------------|---------------------------|
| Tongass National Forest, Timber Staff Officer | Alaska Forest Association |
| Petersburg                                    | Ketchikan                 |
| 772-5882                                      | 225-6114                  |







## 12. Water Intake and Use

The table on the following pages was generated by the Alaska Department of Environmental Conservation, Division of Environmental Health – Drinking Water Program. The table includes all regulated sources, as well as community systems:

- Community Water Systems, Non-Transient/Non-Community Community Waters Systems (Formerly referred to as Class A Public Water Systems)
- Transient/Non-Community (Formerly referred to as Class B Water Systems)
- Non-Public (Class C Public Water Systems)

This list is best used when combined with the internet web map applications:

- [http://dec.alaska.gov/eh/dw/DWP/protection\\_areas\\_map.html](http://dec.alaska.gov/eh/dw/DWP/protection_areas_map.html)

By typing the ID number from this list into the web application, one is able to visually see where the public water systems are located. The information can be viewed in [ArcMap](#), [ArcGIS Explorer](#), [ArcGIS JavaScript](#), and [Google Earth](#).

The ADEC's Drinking Water Watch (<http://146.63.9.103:8080/DWW/>) provides contact information for each public water system. Additional information about facility owners may be obtained from the ADEC Drinking Water Program at 866-956-7656.

# SOUTHEAST SUBAREA WATER INTAKE / USE / WELL SYSTEMS

| Facility_ID | State ID  | Name                         | Location    | State Identifier | Local Name                      | Federal Designation                  | Source                                              |
|-------------|-----------|------------------------------|-------------|------------------|---------------------------------|--------------------------------------|-----------------------------------------------------|
| 29610       | AK2110106 | Echo Ranch Bible Camp        | Juneau      | WL001            | WI Well-Dining Hall             | Transient/Non-Community Water System | Groundwater                                         |
| 29604       | AK2110106 | Echo Ranch Bible Camp        | Juneau      | WL002            | WI Bath House                   | Non-Community Water System           | Groundwater                                         |
| 29566       | AK2110106 | Echo Ranch Bible Camp        | Juneau      | WL003            | WI Well-Health Station          | Transient/Non-Community Water System | Groundwater                                         |
| 29571       | AK2110110 | Taku Glacier Lodge           | Juneau      | WL001            | WI Well                         | Transient/Non-Community Water System | Groundwater                                         |
| 29592       | AK2110318 | Churchill Park               | Juneau      | WL001            | WI Switzer Spring               | Community Water System               | Groundwater                                         |
| 29570       | AK2110342 | Juneau                       | Juneau      | WL002            | Last Chance Basin Well #2       | Community Water System               | Groundwater                                         |
| 48185       | AK2110342 | Juneau                       | Juneau      | WL004            | Last Chance Basin Well #4       | Community Water System               | Groundwater                                         |
| 48186       | AK2110342 | Juneau                       | Juneau      | WL005            | Last Chance Basin Well #5       | Community Water System               | Groundwater                                         |
| 48184       | AK2110342 | Juneau                       | Juneau      | WL003            | Last Chance Basin Well #3       | Community Water System               | Groundwater                                         |
| 48183       | AK2110342 | Juneau                       | Juneau      | WL001            | Last Chance Basin Well #1       | Community Water System               | Groundwater                                         |
| 30134       | AK2110342 | Juneau                       | Juneau      | IN001            | In Salmon Creek Reservoir       | Community Water System               | Surface Water                                       |
| 29545       | AK2110449 | Thunder Mountain Mobile Park | Juneau      | WL001            | WI Well 1                       | Community Water System               | Groundwater                                         |
| 47453       | AK2110449 | Thunder Mountain Mobile Park | Juneau      | WL003            | WI Well 3                       | Community Water System               | Groundwater                                         |
| 47452       | AK2110449 | Thunder Mountain Mobile Park | Juneau      | WL002            | WI Well 2                       | Community Water System               | Groundwater                                         |
| 47592       | AK2110449 | Thunder Mountain Mobile Park | Juneau      | WL004            | WI Well 4                       | Community Water System               | Groundwater                                         |
| 29556       | AK2110520 | Rainbow Glacier Camp         | Haines      | WL001            | WI Well                         | Transient/Non-Community Water System | Groundwater                                         |
| 29528       | AK2110562 | Chilkat Indian Village       | Klukwan     | WL001            | WI Spring                       | Community Water System               | Groundwater Under Direct Influence of Surface Water |
| 29597       | AK2110601 | Skagway-Well No. 1           | Skagway     | WL003            | WI Well #3                      | Community Water System               | Groundwater                                         |
| 29619       | AK2110601 | Skagway-Well No. 2           | Skagway     | WL002            | WI Well #2                      | Community Water System               | Groundwater                                         |
| 29608       | AK2110601 | Skagway-Well No. 3           | Skagway     | WL001            | WI Well #1                      | Community Water System               | Groundwater                                         |
| 29555       | AK2110619 | Haines                       | Haines      | WL002            | WI Piedad Loop Overflow         | Community Water System               | Groundwater                                         |
| 30479       | AK2110619 | Haines                       | Haines      | IN001            | In Lilly Lake                   | Community Water System               | Surface Water                                       |
| 29675       | AK2110643 | Eaglecrest Ski Area          | Juneau      | IN001            | In Infiltration Gallery         | Non-Community Water System           | Surface Water                                       |
| 29567       | AK2110821 | Covenant Life Center         | Glacier Bay | WL001            | WI Well In Well House           | Community Water System               | Groundwater                                         |
| 29630       | AK2110839 | Mosquito Lake State Rec Site | Haines      | WL001            | WI Artesian Well                | Non-Public (Class C Water System)    | Groundwater                                         |
| 29546       | AK2110847 | Chilkoot Lake                | Haines      | WL002            | WI Pump                         | Non-Public (Class C Water System)    | Groundwater                                         |
| 29588       | AK2110847 | Chilkoot Lake                | Haines      | WL001            | WI Pump At Lake                 | Non-Public (Class C Water System)    | Groundwater                                         |
| 30076       | AK2110855 | Haines Ferry Terminal        | Haines      | IN001            | In Surface Source Army Property | Non-Community Water System           | Surface Water                                       |
| 30221       | AK2110871 | Thane Ore House              | Juneau      | IN001            | In Thane Ore House              | Non-Community Water System           | Surface Water                                       |

| Facility_ID | State ID  | Name                               | Location   | State Identifier | Local Name                     | Federal Designation                  | Source        |
|-------------|-----------|------------------------------------|------------|------------------|--------------------------------|--------------------------------------|---------------|
| 29547       | AK2110902 | Bear Creek Camp                    | Haines     | WL001            | WI Bear Creek Camp             | Non-Public (Class C Water System)    | Groundwater   |
| 29539       | AK2111102 | Chilkat State Park                 | Haines     | WL001            | WI Pump By Cabin               | Non-Public (Class C Water System)    | Groundwater   |
| 29562       | AK2111102 | Chilkat State Park                 | Haines     | WL002            | WI Campground Pump             | Non-Public (Class C Water System)    | Groundwater   |
| 29629       | AK2111233 | Kensington Mine Camp - Comet Beach | Juneau     | WL001            | Well                           | Non-Public (Class C Water System)    | Groundwater   |
| 29580       | AK2111241 | Alaska Pure Mountain Spring Water  | Juneau     | WL001            | WI Spring                      | Transient/Non-Community Water System | Groundwater   |
| 29557       | AK2111275 | Dalton Cache Border Station        | Haines     | WL001            | WI Dalton Cache Border Station | Transient/Non-Community Water System | Groundwater   |
| 29589       | AK2111446 | Yukon Building                     | Juneau     | WL001            | WI Well                        | Non-Public (Class C Water System)    | Groundwater   |
| 29568       | AK2111449 | Sheep Creek Portal Camp            | Juneau     | WL001            | WI Groundwater                 | Non-Public (Class C Water System)    | Groundwater   |
| 29591       | AK2111457 | Crystal Cathedrals Water           | Skagway    | WL002            | WI East Well                   | Community Water System               | Groundwater   |
| 29623       | AK2111457 | Crystal Cathedrals Water           | Skagway    | WL001            | WI West Well                   | Community Water System               | Groundwater   |
| 29529       | AK2111462 | Adlersheim Lodge                   | Juneau     | WL001            | WI Unamed Well                 | Non-Public (Class C Water System)    | Groundwater   |
| 29626       | AK2111465 | Gold Rush Trail Camp               | Skagway    | WL001            | WI Well                        | Transient/Non-Community Water System | Groundwater   |
| 29530       | AK2111470 | Elfin Cove                         | Elfin Cove | WL001            | WI Spring 01                   | Transient/Non-Community Water System | Groundwater   |
| 29784       | AK2111472 | Bear Track Inn                     | Gustavus   | IN001            | In Homestead Creek             | Non-Community Water System           | Surface Water |
| 29936       | AK2111475 | East Icy Bay                       | Yakutat    | IN001            | Unamed Pond                    | NP (Class C Water System)            | Surface Water |
| 29593       | AK2111476 | Gustavus Airport                   | Gustavus   | WL001            | WI Well                        | Transient/Non-Community Water System | Groundwater   |
| 29598       | AK2111487 | Chilkat Bald Eagle Preserve        | Haines     | WL001            | WI Well                        | Non-Public (Class C Water System)    | Groundwater   |
| 29637       | AK2111513 | Doc Warners Fish Camp              | Haines     | IN001            | In Duncan Creek                | Non-Community Water System           | Surface Water |
| 29769       | AK2111523 | Shrine Of St. Therese              | Juneau     | IN001            | In Shrine Creek                | Non-Community Water System           | Surface Water |
| 46746       | AK2111526 | Chilkat River Adventures           | Haines     | WL001            | WI Well                        | Transient/Non-Community Water System | Groundwater   |
| 46339       | AK2111535 | Boardwalk Wilderness Lodge         | Thorne Bay | IN001            | In Rain Catchment              | NP (Class C Water System)            | Surface Water |
| 46346       | AK2111539 | NPS- Dyea Ranger Station           | Skagway    | WL001            | WI Well                        | Non-Public (Class C Water System)    | Groundwater   |
| 46348       | AK2111540 | Jewell Gardens                     | Skagway    | WL001            | WI Well                        | Non-Public (Class C Water System)    | Groundwater   |
| 45931       | AK2111541 | United Methodist Camp              | Juneau     | WL003            | WI Well 003                    | Non-Public (Class C Water System)    | Groundwater   |
| 45747       | AK2111541 | United Methodist Camp              | Juneau     | WL001            | WI Main Well                   | Non-Public (Class C Water System)    | Groundwater   |
| 46558       | AK2111544 | Skagway Border Station             | Skagway    | WL001            | WI Skagway Border Station      | Transient/Non-Community Water System | Groundwater   |
| 46059       | AK2111550 | Alsek River Lodge                  | Yakutat    | WL001            | WI Well                        | Non-Public (Class C Water System)    | Groundwater   |
| 46061       | AK2111553 | NOAA Family Housing Yakutat        | Yakutat    | WL001            | WI Well                        | Non-Public (Class C Water System)    | Groundwater   |
| 46329       | AK2111555 | White Pass Rv Park                 | Skagway    | WL001            | WI Well                        | Transient/Non-Community Water System | Groundwater   |
| 46333       | AK2111556 | Ak Connections Shelter Lodge       | Juneau     | IN001            | In Water Collection Pond       | NP (Class C Water System)            | Surface Water |

| Facility_ID | State ID  | Name                              | Location        | State Identifier | Local Name                    | Federal Designation                    | Source                                              |
|-------------|-----------|-----------------------------------|-----------------|------------------|-------------------------------|----------------------------------------|-----------------------------------------------------|
| 47295       | AK2111560 | Homeshore Cafe                    | Gustavus        | WL001            | Well                          | Transient/Non-Community Water System   | Groundwater                                         |
| 47263       | AK2111561 | Kensington Mine Jualin Labor Camp | Juneau          | IN001            | Intake Johnson Creek          | Non-Transient/Non-Comm'ty Water System | Surface Water                                       |
| 47776       | AK2111562 | Gustavus Lds Church               | Gustavus        | WL001            | Gustavus Lds Church           | NP (Class C Water System)              | Groundwater Under Direct Influence of Surface Water |
| 29611       | AK2113536 | 33 Mile Roadhouse                 | Haines          | WL001            | WI Well                       | Transient/Non-Community Water System   | Groundwater                                         |
| 30412       | AK2113560 | Hecla Greens Creek Hawk Inlet     | Juneau          | IN001            | In Cannery Creek              | Non-Transient/Non-Comm'ty Water System | Surface Water                                       |
| 29856       | AK2119205 | Hecla Greens Creek 920 Level      | Juneau          | IN001            | In Greens Creek               | Non-Transient/Non-Comm'ty Water System | Surface Water                                       |
| 30471       | AK2120012 | Vallenar View MobileHomePark      | Ketchikan       | IN001            | In Whipple Creek              | Community Water System                 | Surface Water                                       |
| 30196       | AK2120020 | Clover Pass Resort                | Ketchikan       | IN001            | In Clover Pass Resort         | Non-Community Water System             | Surface Water                                       |
| 30155       | AK2120046 | Homestead Trailer Park            | Ketchikan       | IN001            | In Homestead Creek            | NP (Class C Water System)              | Surface Water                                       |
| 29827       | AK2120062 | Shoup Street Service Area         | Ketchikan       | IN001            | Shoup Street Service Area     | NP (Class C Water System)              | Surface Water                                       |
| 47762       | AK2120101 | Mecca Bar                         | Ketchikan       | RC001            | Rain Catchment                | Transient/Non-Community Water System   | Groundwater                                         |
| 30392       | AK2120127 | Saxman                            | Saxman          | IN001            | In Unnamed Creek              | Community Water System                 | Surface Water                                       |
| 29941       | AK2120135 | Wards Cove Packing Co.            | Ketchikan       | IN001            | Wards Cove Packing Co.        | NP (Class C Water System)              | Surface Water                                       |
| 30325       | AK2120143 | Wrangell                          | Wrangell        | IN001            | In Municipal Reserviors       | Community Water System                 | Surface Water                                       |
| 30265       | AK2120169 | City Of Klawock (Half Mile Cr.)   | Klawock         | IN001            | (Half Mile Creek)             | Community Water System                 | Surface Water                                       |
| 60          | AK2120169 | City Of Klawock (Three Mile Cr.)  | Klawock         | Proposed         | (Threemile Creek)             | Community Water System                 | Surface Water                                       |
| 29829       | AK2120193 | Craig Public Works                | Craig           | IN001            | In North Fork Lake            | Community Water System                 | Surface Water                                       |
| 30296       | AK2120216 | Thorne Bay                        | Thorne Bay      | IN001            | In Water Lake                 | Community Water System                 | Surface Water                                       |
| 30137       | AK2120224 | Hydaburg                          | Hydaburg        | IN001            | In Hydaburg River             | Community Water System                 | Surface Water                                       |
| 30037       | AK2120232 | Ketchikan Public Utilities        | Ketchikan       | IN001            | In Ketchikan Lakes            | Community Water System                 | Surface Water                                       |
| 30422       | AK2120240 | Silver Bay - Wrangell Sawmill     | Wrangell        | IN001            | Silver Bay - Wrangell Sawmill | NP (Class C Water System)              | Surface Water                                       |
| 29943       | AK2120313 | Gildersleeve Grace Harbor         | Dall Island     | IN001            | Unnamed Creek                 | NP (Class C Water System)              | Surface Water                                       |
| 29684       | AK2120436 | Coffman Cove                      | Coffman Cove    | IN001            | In Chum Creek                 | Community Water System                 | Surface Water                                       |
| 29830       | AK2120452 | Mountain Point Service Area       | Ketchikan       | IN001            | In Forks Creek                | Community Water System                 | Surface Water                                       |
| 30439       | AK2120541 | Hollis School                     | Hollis          | IN001            | In No Name Pond               | NP (Class C Water System)              | Surface Water                                       |
| 29759       | AK2120567 | Waterfall Resort                  | Prince of Wales | IN001            | In Unnamed Surface Water      | Non-Community Water System             | Surface Water                                       |
| 30180       | AK2120575 | Clover Pass Christian School      | Ketchikan       | RC001            | Rain Catchment                | Non-Transient/Non-Comm'ty Water System | Groundwater                                         |
| 29672       | AK2120591 | Yes Bay Resort                    | Yes Bay         | IN001            | In Surface Creek              | Non-Community Water System             | Surface Water                                       |
| 30107       | AK2120606 | Kasaan                            | Kasaan          | IN001            | In Linckum Creek              | Community Water System                 | Surface Water                                       |
| 29817       | AK2120703 | Orton Ranch                       | Naha Bay        | IN001            | In Unnamed Surface Water      | NP (Class C Water System)              | Surface Water                                       |

| Facility_ID | State ID  | Name                                     | Location           | State Identifier | Local Name                   | Federal Designation                    | Source        |
|-------------|-----------|------------------------------------------|--------------------|------------------|------------------------------|----------------------------------------|---------------|
| 47763       | AK2120729 | Ward Cove Market                         | Ward Cove          | RC001            | Rain Catchment               | Transient/Non-Community Water System   | Groundwater   |
| 47761       | AK2120737 | Lighthouse Grocery                       | Ketchikan          | RC001            | Rain Catchment               | Transient/Non-Community Water System   | Groundwater   |
| 29685       | AK2120745 | Point Baker Trading Post                 | Point Baker        | IN001            | In Point Baker Trading Post  | NP (Class C Water System)              | Surface Water |
| 29930       | AK2121018 | Long Island-Evergreen Logging            | Long Island        | IN001            | In Unnamed Stream            | NP (Class C Water System)              | Surface Water |
| 47760       | AK2121026 | Knudsen Cove Marina                      | Knudsen Cove       | RC001            | Rain Catchment               | Transient/Non-Community Water System   | Groundwater   |
| 30243       | AK2121034 | Clover Bay Lodge                         | Clover Bay         | IN001            | In Clover Bay Lodge          | Non-Community Water System             | Surface Water |
| 29987       | AK2121042 | Natzuhini Camp                           | Prince of Wales    | IN001            | In Unnamed Stream            | NP (Class C Water System)              | Surface Water |
| 47758       | AK2121076 | Point Higgins Elem. School               | Ketchikan          | RC001            | Rain Catchment               | Non-Transient/Non-Comm'ty Water System | Groundwater   |
| 29641       | AK2121081 | Klawock Heenya Corp.                     | Klawock            | IN001            | Klawock Heenya Corp.         | NP (Class C Water System)              | Surface Water |
| 30384       | AK2121093 | Sportsmans Cove Lodge                    | Prince of Wales    | IN001            | In Unknown                   | Non-Community Water System             | Surface Water |
| 30074       | AK2121107 | Whales Resort                            | Prince of Wales    | IN001            | Unnamed Stream               | NP (Class C Water System)              | Surface Water |
| 29600       | AK2121123 | Port Protection                          | Port Protection    | WL001            | WI Spring                    | Community Water System                 | Groundwater   |
| 29665       | AK2121131 | Salmon Falls Resort, Ltd.                | Ketchikan          | IN001            | In Surface Water Source      | Non-Community Water System             | Surface Water |
| 30247       | AK2121188 | Naukati Bay Camp                         | Naukati Bay        | IN001            | In Unnamed Creek             | NP (Class C Water System)              | Surface Water |
| 30048       | AK2121262 | Craik Logging                            | Neets Bay          | IN001            | Unnamed Creek                | NP (Class C Water System)              | Surface Water |
| 29728       | AK2121288 | Gildersleeve - Dog Salmon Cr.            | Dora Bay           | IN001            | Gildersleeve -Dog Salmon Cr. | NP (Class C Water System)              | Surface Water |
| 30172       | AK2121414 | Mill Park Trailer Court                  | Wrangell           | IN001            | In Unnamed Creek             | NP (Class C Water System)              | Surface Water |
| 30095       | AK2121425 | Phoenix Logging - Fire Cove              | Fire Cove          | IN001            | No Name Creek                | NP (Class C Water System)              | Surface Water |
| 30472       | AK2121428 | KPC Accommodation Barge                  | Bradford Canal     | IN001            | Miner's Creek                | NP (Class C Water System)              | Surface Water |
| 29991       | AK2121433 | Marguerite Bay                           | Marguerite Bay     | IN001            | In Un-Named Stream           | NP (Class C Water System)              | Surface Water |
| 29706       | AK2121467 | El Capitan Lodge                         | El Capitan Passage | IN001            | In Creek                     | Non-Community Water System             | Surface Water |
| 30401       | AK2121474 | George Inlet Lodge                       | George Inlet       | IN001            | In Creek                     | NP (Class C Water System)              | Surface Water |
| 30149       | AK2121478 | Herring Bay Association                  | Ketchikan          | IN001            | Whitman Creek                | Community Water System                 | Surface Water |
| 29953       | AK2121484 | Silver Bay Portage Bay Camp              | Portage Bay        | IN001            | Unnamed Creek                | NP (Class C Water System)              | Surface Water |
| 47757       | AK2121485 | Wal-Mart - Ketchikan Store               | Ketchikan          | RC001            | Rain Catchment               | Non-Transient/Non-Comm'ty Water System | Groundwater   |
| 29764       | AK2121486 | Metlakatla Indian Community-Chester Lake | Metlakatla         | IN001            | Chester Lake                 | Community Water System                 | Surface Water |
| 30119       | AK2121486 | Annette Water System-Yellow Hill Lake    | Annette Island     | IN002            | Yellow Hill Lake             | Community Water System                 | Surface Water |
| 45913       | AK2121489 | Grace Harbor                             | Grace Harbor       | IN001            | In Stream                    | Non-Community Water System             | Surface Water |
| 46352       | AK2121491 | Mcfarlands Floatel                       | Prince of Wales    | WL001            | WI Well                      | Non-Public (Class C Water System)      | Groundwater   |
| 46689       | AK2121496 | Alaska Rainwater Bottling                | Ketchikan          | IN002            | Whitman Lake                 | NP (Class C Water System)              | Surface Water |

| Facility_ID | State ID  | Name                             | Location               | State Identifier | Local Name                    | Federal Designation                    | Source        |
|-------------|-----------|----------------------------------|------------------------|------------------|-------------------------------|----------------------------------------|---------------|
|             |           | Company                          |                        |                  |                               |                                        |               |
| 47565       | AK2121501 | George Inlet Cannery             | Ketchikan              | IN001            | In Creek                      | Non-Community Water System             | Surface Water |
| 47735       | AK2121506 | Renaissance Water Bottling Plant | Ketchikan              | IN001            | Connell Lake                  | Non-Transient/Non-Comm'ty Water System | Surface Water |
| 30309       | AK2130017 | Angoon Public Water              | Angoon                 | IN001            | In Auk'tah Lake               | Community Water System                 | Surface Water |
| 29934       | AK2130041 | Beachcomber Inn PvtWS            | Scow Bay-Petersburg    | IN001            | In Beachcomber Inn            | NP (Class C Water System)              | Surface Water |
| 30455       | AK2130067 | Hoonah PWS                       | Hoonah                 | IN001            | In Ear Mountain               | Community Water System                 | Surface Water |
| 48201       | AK2130075 | Sitka                            | Sitka                  | IN002            | In Indian River               | Community Water System                 | Surface Water |
| 29916       | AK2130075 | Sitka                            | Sitka                  | IN001            | In Blue Lake                  | Community Water System                 | Surface Water |
| 29899       | AK2130083 | Kake Municipal Water             | Kake                   | IN001            | In Gunnuk Creek               | Community Water System                 | Surface Water |
| 30212       | AK2130114 | Rowan Bay PvtWS                  | Rowan Bay              | IN001            | In Rowan Bay Pws              | NP (Class C Water System)              | Surface Water |
| 30151       | AK2130122 | Pelican Utilities                | Pelican                | IN001            | In Pelican Creek              | Community Water System                 | Surface Water |
| 29721       | AK2130148 | Petersburg                       | Petersburg             | IN001            | In City Creek Reservoir       | Community Water System                 | Surface Water |
| 30213       | AK2130148 | Petersburg                       | Petersburg             | IN003            | In Cabin Creek Reservoir      | Community Water System                 | Surface Water |
| 30379       | AK2130148 | Petersburg                       | Petersburg             | IN002            | In Water Truck Reservoir      | Community Water System                 | Surface Water |
| 29737       | AK2130156 | Port Alexander PvtWS             | Port Alexander         | IN001            | In Humpy Creek                | Community Water System                 | Surface Water |
| 29579       | AK2130164 | Glacier Bear Lodge               | Yakutat                | WL001            | WI Glacier Bear Lodge         | Transient/Non-Community Water System   | Groundwater   |
| 29625       | AK2130172 | Yakutat PvtWS                    | Yakutat                | WL002            | WI Arco, 2 Wells              | Community Water System                 | Groundwater   |
| 29587       | AK2130172 | Yakutat PvtWS                    | Yakutat                | WL003            | WI Arco Well #2               | Community Water System                 | Groundwater   |
| 29533       | AK2130172 | Yakutat PvtWS                    | Yakutat                | WL001            | WI Ridge, 2 Wells             | Community Water System                 | Groundwater   |
| 29954       | AK2130198 | Bartlett Cove Water Sys          | Bartlett Cove          | IN001            | In Alder Creek                | Non-Transient/Non-Comm'ty Water System | Surface Water |
| 29730       | AK2130229 | Excursion Inlet Cannery          | Haines-Excursion Inlet | IN001            | In Unnamed Spring             | Non-Community Water System             | Surface Water |
| 29605       | AK2130237 | Gustavus Inn                     | Gustavus               | WL001            | WI Well                       | Transient/Non-Community Water System   | Groundwater   |
| 46067       | AK2130342 | Alaska Airlines Yakutat          | Yakutat                | WL002            | WI New Well                   | Transient/Non-Community Water System   | Groundwater   |
| 29615       | AK2130350 | Tonka View Trl Court             | Petersburg             | WL001            | WI Well                       | Non-Public (Class C Water System)      | Groundwater   |
| 29574       | AK2130423 | Yakutat Airport Lodge            | Yakutat                | WL001            | WI Well                       | Transient/Non-Community Water System   | Groundwater   |
| 30345       | AK2130554 | Hobart Bay                       | Hobart Bay             | IN001            | Unnamed Creek                 | NP (Class C Water System)              | Surface Water |
| 29535       | AK2130596 | Gustavus Water System            | Gustavus               | WL001            | WI Well                       | Non-Transient/Non-Comm'ty Water System | Groundwater   |
| 29679       | AK2130619 | Mt. Bether Bible Center          | Hoonah                 | IN001            | In Game Creek                 | NP (Class C Water System)              | Surface Water |
| 29544       | AK2130659 | Starrigavan Rec. Area, Sitka     | Sitka                  | WL001            | WI Starrigavan Cmpgrnd, Sitka | Non-Transient/Non-Comm'ty Water System | Groundwater   |
| 29554       | AK2130659 | Starrigavan Rec. Area, Sitka     | Sitka                  | WL002            | WI Well                       | Non-Transient/Non-Comm'ty Water System | Groundwater   |

| Facility_ID | State ID  | Name                          | Location     | State Identifier | Local Name                       | Federal Designation                  | Source        |
|-------------|-----------|-------------------------------|--------------|------------------|----------------------------------|--------------------------------------|---------------|
| 29617       | AK2130669 | Twin Creek RV Park            | Petersburg   | WL001            | WI Spring                        | Non-Public (Class C Water System)    | Groundwater   |
| 30208       | AK2130693 | Silver Bay Logging, Cube Cove | Admiralty I. | IN001            | In Silver Bay Logging, Cube Cove | NP (Class C Water System)            | Surface Water |
| 29536       | AK2130705 | Leonards Landing & Ldg.       | Yakutat      | WL002            | WI Well #2 Manager's Apt         | Transient/Non-Community Water System | Groundwater   |
| 29561       | AK2130705 | Leonards Landing & Ldg.       | Yakutat      | WL001            | WI Well #1 Bunkhouse             | Transient/Non-Community Water System | Groundwater   |
| 29618       | AK2130716 | Ross Rentals 4-Plex           | Yakutat      | WL001            | WI Glacier Bear 4-Plex           | Non-Public (Class C Water System)    | Groundwater   |
| 29603       | AK2130732 | Glacier Bear New Motel        | Yakutat      | WL001            | WI Well                          | Non-Public (Class C Water System)    | Groundwater   |
| 29537       | AK2131110 | Glacier Bay Country Inn       | Gustavus     | WL001            | WI Sand Point Well               | Transient/Non-Community Water System | Groundwater   |
| 30063       | AK2131118 | Aqua Of Alaska                | Petersburg   | IN001            | Crystal Lake                     | NP (Class C Water System)            | Surface Water |
| 29790       | AK2133333 | Whalers Cove Lodge            | Angoon       | IN001            | In Surface Ponds                 | Non-Community Water System           | Surface Water |

# SENSITIVE AREAS: PART FIVE – LAND MANAGEMENT

## A. LAND MANAGEMENT DESIGNATIONS

### 1. Access to Lands

Land ownership must be determined and landowners contacted to evaluate incident-specific protection priorities, obtain land-use permitting requirements, and obtain permission to access lands. Native corporation lands, as well as local, State, and Federal government lands often require special use permits. If an incident affects private lands or Native Allotments, permission to enter lands should be sought from the landowner. The local Borough government is often the best source of private land ownership records.

### 2. State

The State of Alaska owns the majority of tide and submerged lands within the state. Tide and submerged lands and those areas located between the mean high tide line and three miles distance offshore. Submerged lands are those located beneath the line of ordinary high water along navigable water bodies. The Alaska State Legislature has classified certain areas as being essential to wildlife and fisheries resources. These areas are designated as a Game Refuge, Critical Habitat Area, or Game Sanctuary. Other designated lands are State Parks or Forests.

The following State protected areas may be located at the web page:

<http://www.adfg.alaska.gov/index.cfm?adfg=protectedareas.locator>

Yakataga State Game Refuge: Established in 1976 to protect spring and fall resting and feeding habitat for migrating waterfowl and shorebirds. The refuge is best known for Canada geese, ducks and bald eagles. Over 178 species of birds have been seen in the refuge, with the largest number present in April and May. The area is also used for wildlife viewing, hunting, fishing and boating. For further information regarding the Refuge, please see the Yakataga State Game Refuge Management Plan. See the web site at: <http://www.adfg.alaska.gov/index.cfm?adfg=yakataga.main>

Chilkat River State Critical Habitat Area: Established in 1972 to protect the up to 3,500 bald eagles that gather to feed on late-run chum salmon. The greatest eagle concentrations occur during mid to late November. The area also provides winter moose habitat. Wildlife viewing is popular. See the web site at: <http://www.adfg.alaska.gov/index.cfm?adfg=chilkatriver.main>

Mendenhall Wetlands State Game Refuge: Established in 1976 to protect natural habitat and game populations, especially waterfowl. For further information regarding the Refuge, please see the Mendenhall Wetlands State Game Refuge Management Plan. See the web site at: <http://www.adfg.alaska.gov/index.cfm?adfg=mendenhallwetlands.main>

Dude Creek State Critical Habitat Area: Established in 1988 to protect the wet meadow habitat which is a key resting area for lesser sandhill cranes during their spring and fall migrations. Local residents use the area for recreation. See the web site at: <http://www.adfg.alaska.gov/index.cfm?adfg=dudecreek.main>

Stan Price State Game Sanctuary: Established in 1990 to provide permanent protection for brown bears, other fish and wildlife populations, and the scientific, aesthetic and educational values of the area. See the web site at: <http://www.adfg.alaska.gov/index.cfm?adfg=stanprice.main>

### 3. Federal

See also Part Four, Recreational Sites and Facilities, for National Parks and National Forests information.

Alaska Maritime National Wildlife Refuge: The Gulf of Alaska Unit of the Refuge includes some of the islands, rocks and forelands along the coast of the Gulf of Alaska. Alaska Maritime consists of over 2,400 islands, headlands, rocks, islets, spires, and reefs along the Alaskan coast, stretching from Southeast Alaska to Cape Lisburne on the Chukchi Sea. The Refuge is synonymous with seabirds. About 75



percent of Alaska's marine birds (15 to 30 million of 55 species) use the Refuge. The Refuge is also home to thousands of sea lions, seals, walrus, and sea otters.

Wildlife viewing, photography and backpacking are primary uses of the Refuge. The Refuge was established in 1980. Additional information may be found on the website:

<http://www.r7.fws.gov/nwr/akmar/index.htm> The Refuge is managed out of Homer, and includes several islands in Southeast:

- Petrel Island
- Forrester Island
- Lowrie Island
- Wolf Rock
- Hazy Islands
- St. Lazaria Island

**Glacier Bay National Park and Preserve:** Established as a National Monument in 1925, and a National Park and Preserve in 1980, the park has also been designated a World Biosphere Reserve and World Heritage Site. The Park and Preserve cover 3,283,000 acres in Southeast Alaska. Most visitors arrive on cruise ships and tour boats. The only road is 10 miles from the tiny town of Gustavus. Currently glaciers cover 1,375 square miles or 27% of the Park. There are over 50 named glaciers, 7 of which are active tidewater glaciers that calve icebergs into the sea. Most park glaciers originate between elevations from 8,000 to 15,000 feet. Mount Fairweather is the tallest peak at 15,325. Humpback whales summer in the Bay. There are over 160 species of marine and estuarine fish, 242 species of birds, 41 species of mammals and 3 species of amphibians in the Park and Preserve. For more information go to:

<http://www.nps.gov/glba/index.htm>

**Wrangell-St. Elias National Park and Preserve:** Established in 1980, the 13 million acre Park and Preserve abut the border and Canada's Kluane National Park--together they have been designated on the World Heritage List as outstanding natural areas. The area contains the North American continent's largest assemblage of glaciers and its greatest collection of mountain peaks over 16,000 feet in elevation. The Malaspina glacier is larger than the state of Rhode Island. Mount Saint Elias, at 18,008 feet, is the second highest peak in the United States. Wilderness backpacking, fishing and hunting, car camping, river running, cross-country skiing and mountain climbing are principal uses. The Dall sheep population is considered one of the finest in the world. Additional information may be found on the website:

<http://www.nps.gov/wrst/index.htm>

**Sitka National Historic Park:** Alaska's oldest national park was established as Sitka National Monument in 1910 to commemorate the 1804 Battle of Sitka, as well as to preserve Native totemic art. All that remains of the last major conflict between Europeans and Alaska Natives is the site of the Tlingit fort and battlefield, located in the heart of this scenic 113-acre park, which features the Totem Trail. The Park is located on the western coast of mountainous Baranof Island at the mouth of the Indian River, an important regional salmon stream. For more information go to: <http://www.nps.gov/sitk/index.htm>

**Klondike Gold Rush National Historic Park:** Gold! Headlines read in 1897, starting the Klondike Gold Rush. Thousands, hoping to ease the woes of economic depression, sold farms, dropped businesses and boarded ships to follow their dreams north. Today Klondike Gold Rush NHP commemorates the bravery the stampeders that took the epic voyage by protecting the trails, historic boomtowns and buildings of the Klondike Gold Rush era. The Chilkoot Trail, Skagway historic district, Dyea, and the Klondike Gold Rush International Historical Park are all part of the "gold rush" experience. For more information go to: <http://www.nps.gov/klgo/index.htm>

**Tongass National Forest:** The Tongass National Forest is the largest unit in the national forest system, covering almost 17 million acres. Though home to the world's largest temperate rain forest, almost half of the Tongass is covered by ice, water, wetlands and rock. There are 11,000 miles of shoreline. Congress designated 5.7 million acres to be managed as Wilderness. Misty Fiords and Admiralty Island have been designated as National Monuments and wilderness areas. Bald eagles, whales, porpoises,

seals, and sea otters are prevalent. All five species of Pacific salmon—chum, Coho, king, pink and sockeye—depend upon the streams and waters of the Tongass for spawning before making their way out to the rich seas nearby. Dolly Varden, rainbow, steelhead, and cutthroat trout are other Southeast Alaska inhabitants. Mining, fishing, timber, and recreation/tourism are economic drivers. For more information go to <http://www.fs.usda.gov/tongass> .

## **B. LAND MANAGEMENT MAPS**

The Alaska Department of Natural Resources, under agreement with the Alaska Department of Environmental Conservation, produced digital base and land management maps for each of the subareas using their ARC-INFO based Geographic Information System. The following land management maps provide an index to the Public Land Record and should not be viewed as legal documents. These maps are available on the internet at: <http://www.asgdc.state.ak.us/maps/cplans/subareas.html>

For more current detailed information on specific land status, go to the Bureau of Land Management's Spatial Data Management System web site at <http://sdms.ak.blm.gov/isdms/imf.jsp?site=sdms> and click on the Generalized Land Status layer. Also, consult with individual boroughs and communities for the latest information.

# Land Management Designations Map Legend

<http://www.asgdc.state.ak.us/maps/cplans/base/LegendPage.pdf>

## Primary Data Sources







- Contingency Plan (C-Plan) Regional Boundaries: Alaska Department of Environmental Conservation (ADEC) (scale approximately 1:1 million; automated in 1995 by ADNR from 18AAC 75.495 specifications).
- State Land Ownership: Alaska Department of Natural Resources (ADNR), Land Administration System (section-level resolution; April 2012).
- State Legislatively Designated Areas: ADNR, Land Administration System (section-level resolution; April 2012).
- Alaska Native Claims Settlement Act, Bureau of Land Management (section-level resolution; April 2012).
- Native Allotments: Patented/Conveyed: Spatial data; Bureau of Land Management (SDMS: Spatial Data Management System (<http://sdms.ak.blm.gov>), March 30, 2005) Tabular data; Bureau of Land Management (ALIS: Alaska Land Information System, June 2012)
- Conservation System Units; Bureau of Land Management (1991) and ADNR edits since then (February 1998).
- Wilderness Designations:
  - U.S. Geological Survey (1:2 million scale; May 1995).
  - U.S. Fish & Wildlife Service (1:2 million scale; May 1995).
  - U.S. Forest Service (1:63,360; May 1995).
  - U.S. National Park Service (1:63,360; May 1995).
  - Bureau of Land Management Wilderness Study Areas (2004)
- Military Lands; Bureau of Land Management (section-level resolution; April 2008)
- Coastline: ADNR, Land Records Information Section; US Geological Survey; US Forest Service, Chugach; US Forest Service, Tongass; EVOS Trustee Council, (February 1998).
- Streams and Lakes: Digital Chart of the World, Defense Mapping Agency 1:1 million scale; 1991 data released by Environmental Systems Research Institute.
- Roads & Railroads: Digital chart of the World, Defense Mapping Agency (1:1 million scale; 1991 data released by Environmental Systems Research Institute.
- Geographic Place Names: Dictionary of Alaska Place Names (1967) and U.S. Geological Survey Quadrangle Maps. (1:1 million scale; automated by U.S. Geological Survey, and annotated by ADNR, June 1998).
- Borough Boundaries: Alaska Department of Community & Regional Affairs (1987) (1:250,000 scale) and ADNR (1987).
- Native Corporation Boundaries: ADNR (approximately 1:1 million scale; automated from U.S. Census Bureau digital files, verified and updated by ADNR, July 1995).

## Master Legend

### Land Management

|                                                                                                                                                                                        |                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
|  National Forests, Monuments, Recreation, and Conservation Areas                                      |  State Patented Tentatively Approved or Other State Acquired Lands |
|  National Park System                                                                                |  Both State and ANCSA Lands Within a Section                      |
|  National Wildlife Refuges                                                                          |  ANCSA Patented or Interim Conveyed                              |
|  National Wild and Scenic Rivers Outside National Park System and Outside National Wildlife Refuges |  Federal Designated Wilderness Areas                             |
|  Bureau of Land Management Public Lands                                                             |  State Selected (ANILCA Topplings included)                      |
|  National Petroleum Reserve - Alaska (NPPA)                                                         |  State Wildlife, Park, Forest, and Other Multiple Use Areas      |
|  Major Military                                                                                     |  ANCSA Selected                                                  |
|                                                                                                                                                                                        |  Native Allotments                                               |

### Other Map Features

-  C-Plan Boundary (On land)
-  C-Plan Boundary (Offshore)
-  Borough Boundary
-  Native Corporation Boundary
-  Wilderness Study Area (BLM)
-  main\_roads Major Highways

### To Re-Order Maps

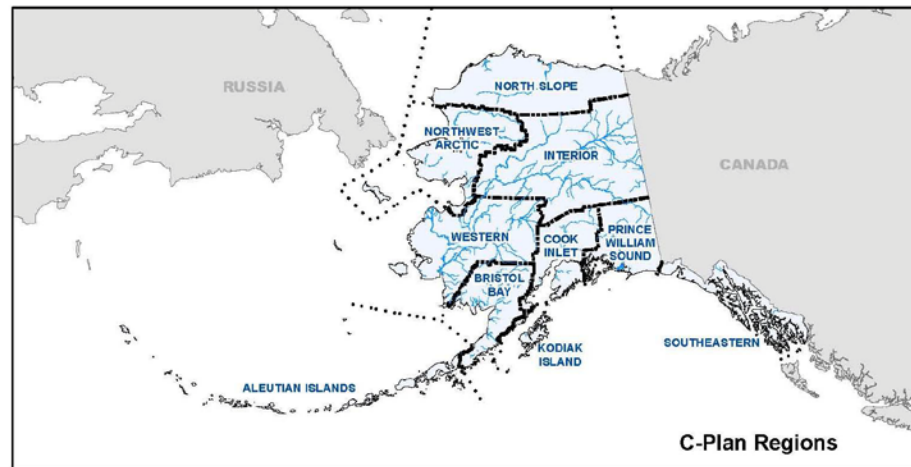
This legend page and the Sensitive Areas Land management maps were produced using ArcGIS software and output as digital postscript files.

To purchase copies of the Sensitive Areas Land Management maps, please contact:

Alaska Department of Natural Resources  
Division of Support Services  
Information Resource Management  
550 W. 7th Avenue, Suite 706  
Anchorage, Alaska 99501  
(907)269-8833

## CONTINGENCY PLANNING

### Sensitive Areas Land Management Maps



## Hierarchy for Depicting Land Ownership

The land management maps in this C-Plan series depict ownership according to the following hierarchy (e.g., any portion of a section that is State Patented or Tentatively Approved causes the whole section to be depicted as State land):

1. State Municipal Entitlements or Land Exchanges or other Land Disposals.
2. Patented Disposed Federal Lands (Native Allotments or Private Parcels).
3. State Patented or Tentatively Approved (includes casetypes 101-114, 115-117, 128-129).
4. Alaska Native Claims Settlement Act (ANCSA) Patented or Interim Conveyed.
5. Major Military
6. National Wildlife Refuges, National Park System Units.
7. National Wild & Scenic Rivers outside National Park System Units and National Wildlife Refuges.
8. National Forests and Monuments, National Petroleum Reserve-Alaska, National Recreation Areas and National Conservation Areas.
9. Bureau of Land Management Public Lands.

Note: Cross-hatched areas indicate an overlay of State-Selected lands (including Alaska National Interest Lands Conservation Act topplings) and Alaska Native Claims Settlement Act-Selected lands.

Note: The Alaska Maritime National Wildlife Refuge (NWR) is not completely depicted. Areas where it is depicted are shaded, however, they are not outlined. The Alaska Maritime NWR is described as follows:

The Alaska Maritime NWR consists of all public lands, including submerged waters and interests therein on islands, islets, rocks, reefs, spires, and designated capes and headlands in the coastal areas and adjacent seas of Alaska within five designated subunits: Chukchi Sea, Bering Sea, Aleutian Islands, Alaska Peninsula, and Gulf of Alaska Units; and includes an undetermined quantity of submerged land, if any, retained in Federal ownership at the time of statehood around Kodiak and Afognak Islands. The refuge is generally depicted on the USGS maps entitled, "Alaska Maritime National Wildlife Refuge" dated October 1979.

## Background

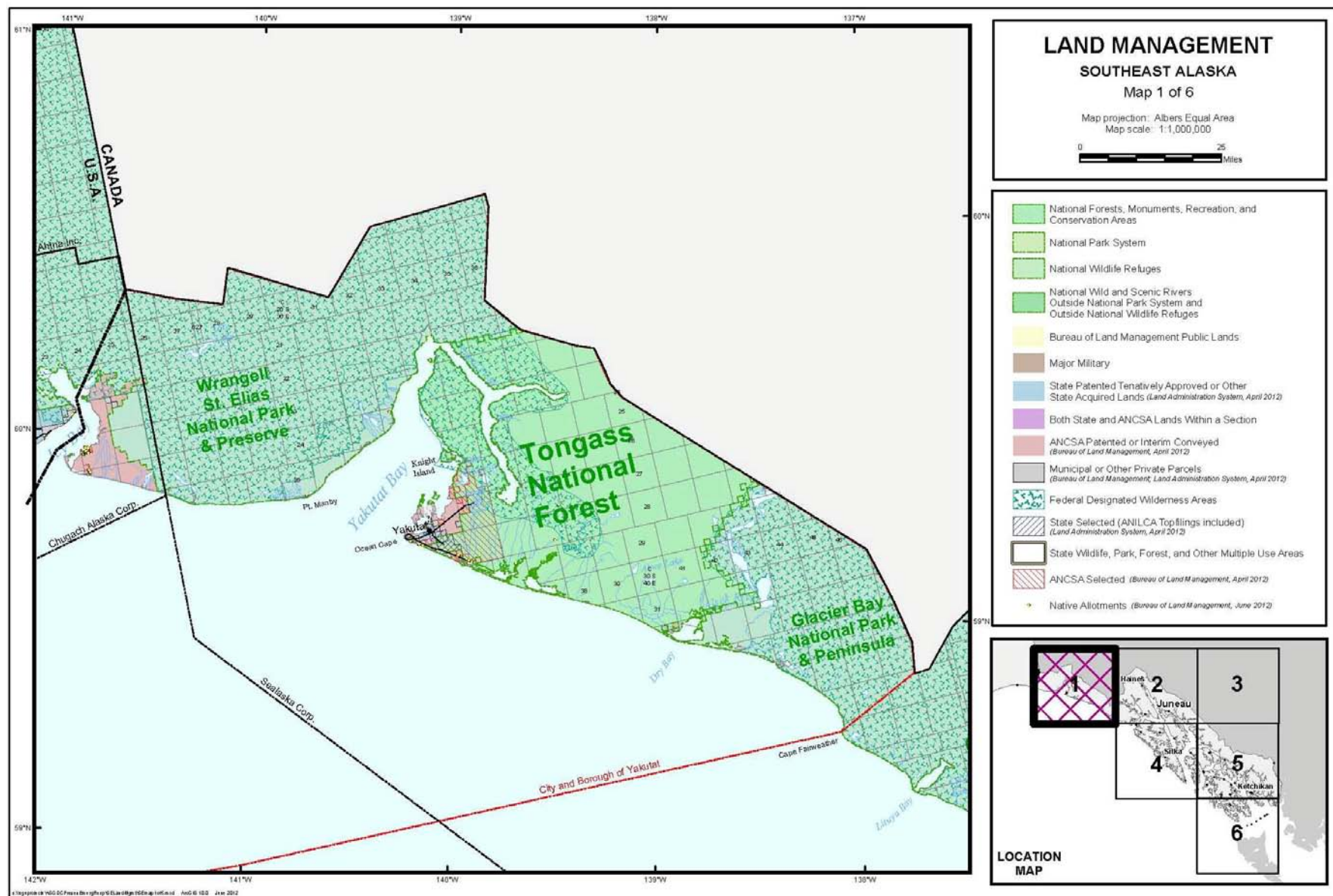
The Alaska Department of Natural Resources (ADNR), under agreement with the Alaska Department of Environmental Conservation (ADEC), produced digital land management maps for each of the Contingency Plan (C-Plan) Region Subareas, using an ArcGIS based Geographic Information System (GIS). The following land management maps provide an index to the Public Land Record and should not be viewed as legal documents. More detailed State Status Plats portraying State land ownership by township are available at the Alaska Department of Natural Resources' Public Information Centers. To view the state's land records online, visit the following web address: <http://plats.landrecords.info> Master Title Plats portraying Federal and Alaska Native Claims Settlement Act land ownership are available at the Bureau of Land Management's Public Room, Federal Building.

The land management maps summarize land ownership and represent a hierarchical, section-level index to the underlying detailed land ownership.

The State of Alaska makes no expressed or implied warranties (including warranties of merchantability and fitness) with respect to the character, function, or capabilities of this product or its appropriateness for any user's purposes. In no event will the State of Alaska be liable for any incidental, indirect, special, consequential or other damages suffered by the user or any other person or entity whether from use of the product, any failure thereof or otherwise, and in no event will the State of Alaska's liability to you or anyone else exceed the fee paid for the product.

# Land Management Designations Map #1 of 6

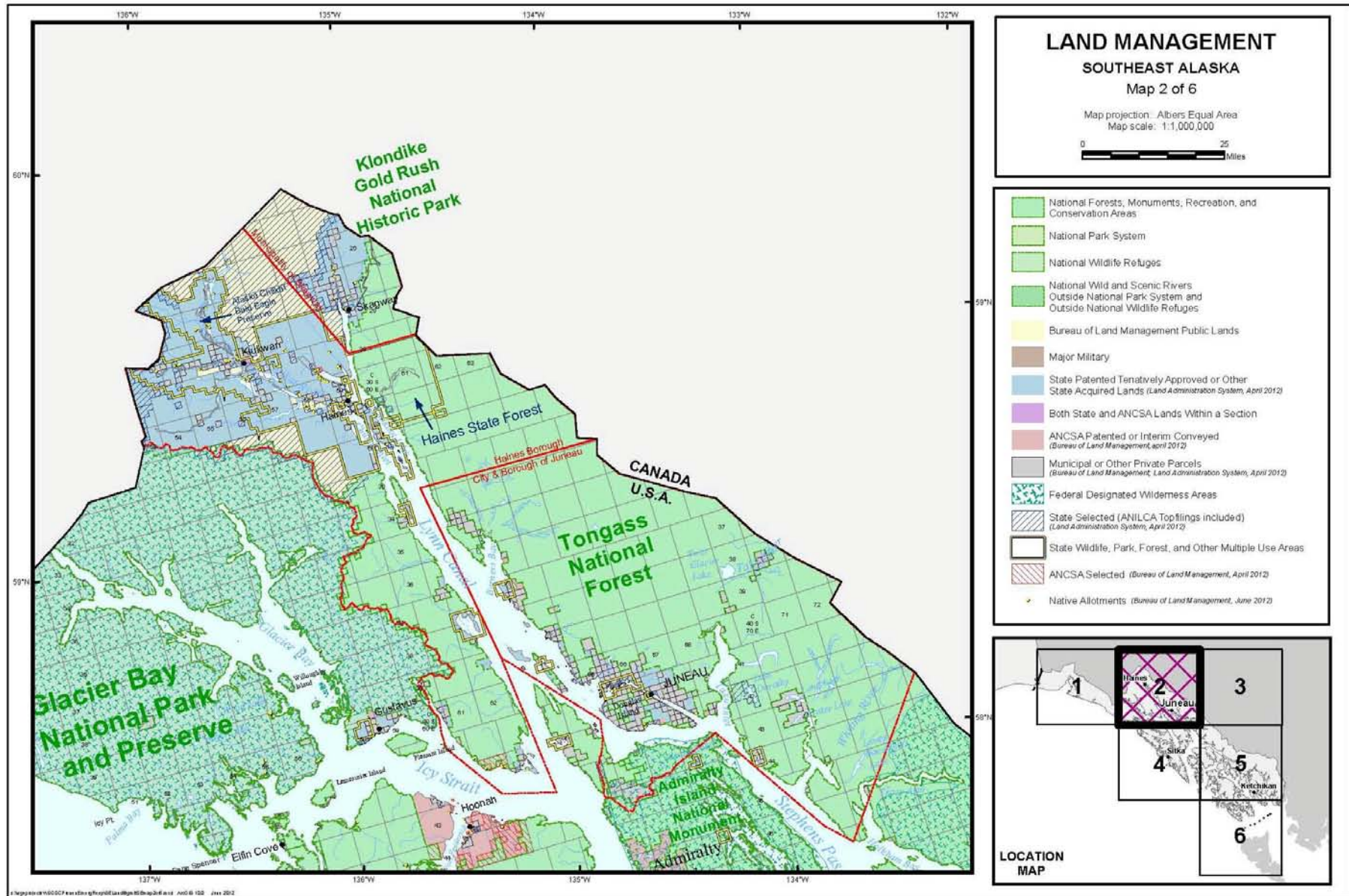
<http://www.asgdc.state.ak.us/maps/cplans/se/SEmap1of6.pdf>





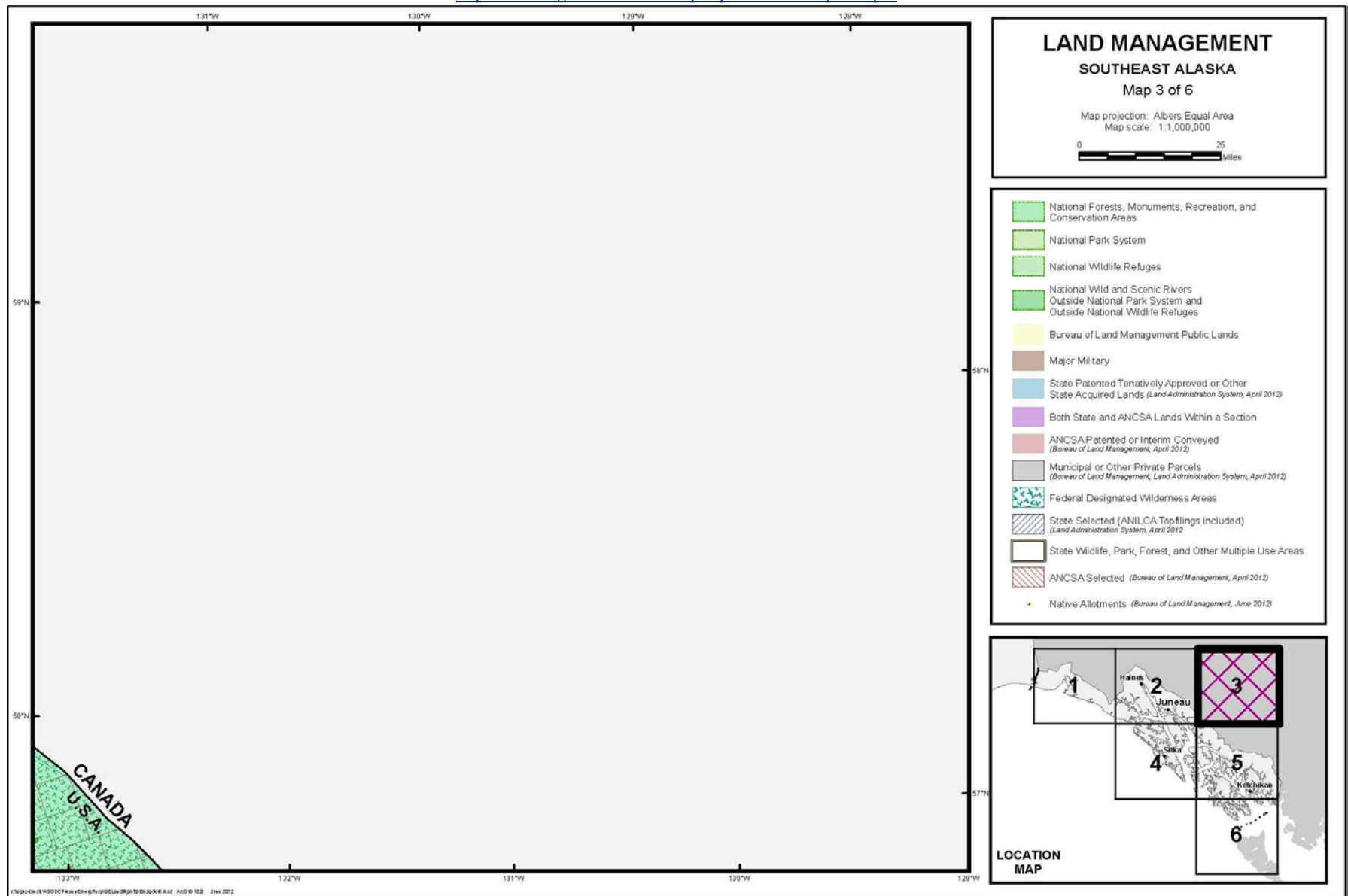
# Land Management Designations Map #2 of 6

<http://www.asgdc.state.ak.us/maps/cplans/se/SEmap2of6.pdf>



# Land Management Designations Map #3 of 6

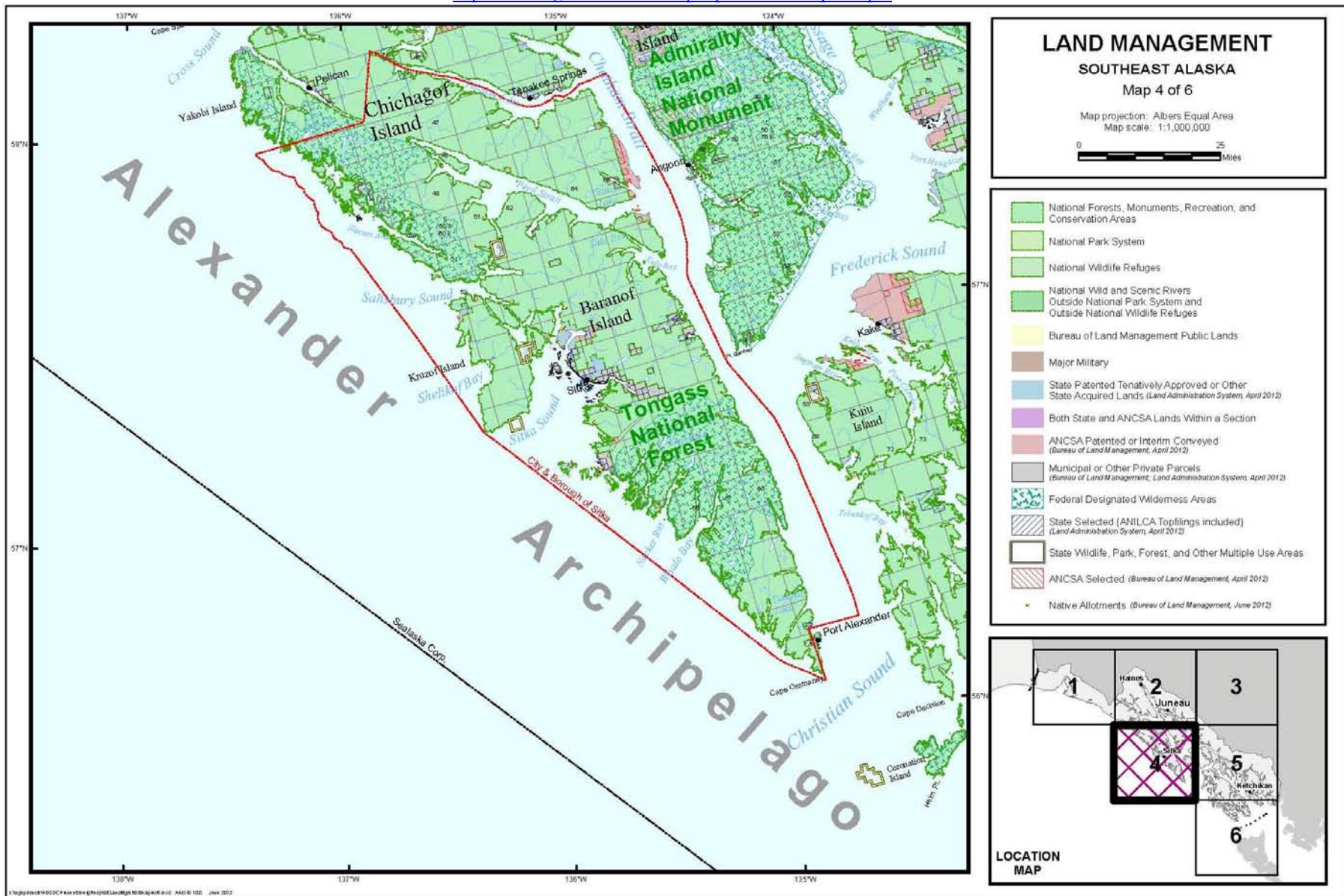
<http://www.asgdc.state.ak.us/maps/cplans/se/SEmap3of6.pdf>





# Land Management Designations Map #4 of 6

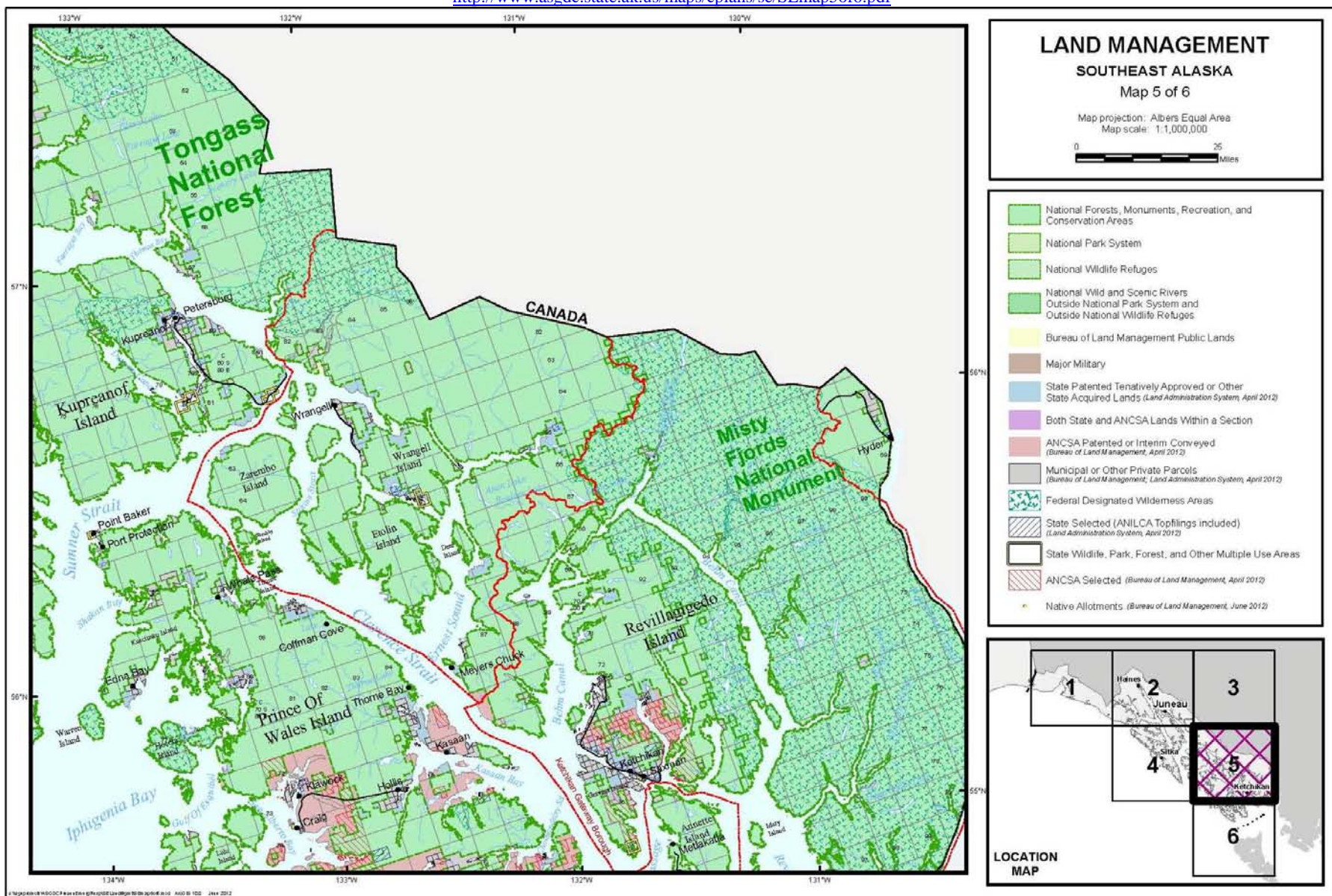
<http://www.asgdc.state.ak.us/maps/cplans/se/SEmap4of6.pdf>





# Land Management Designations Map #5 of 6

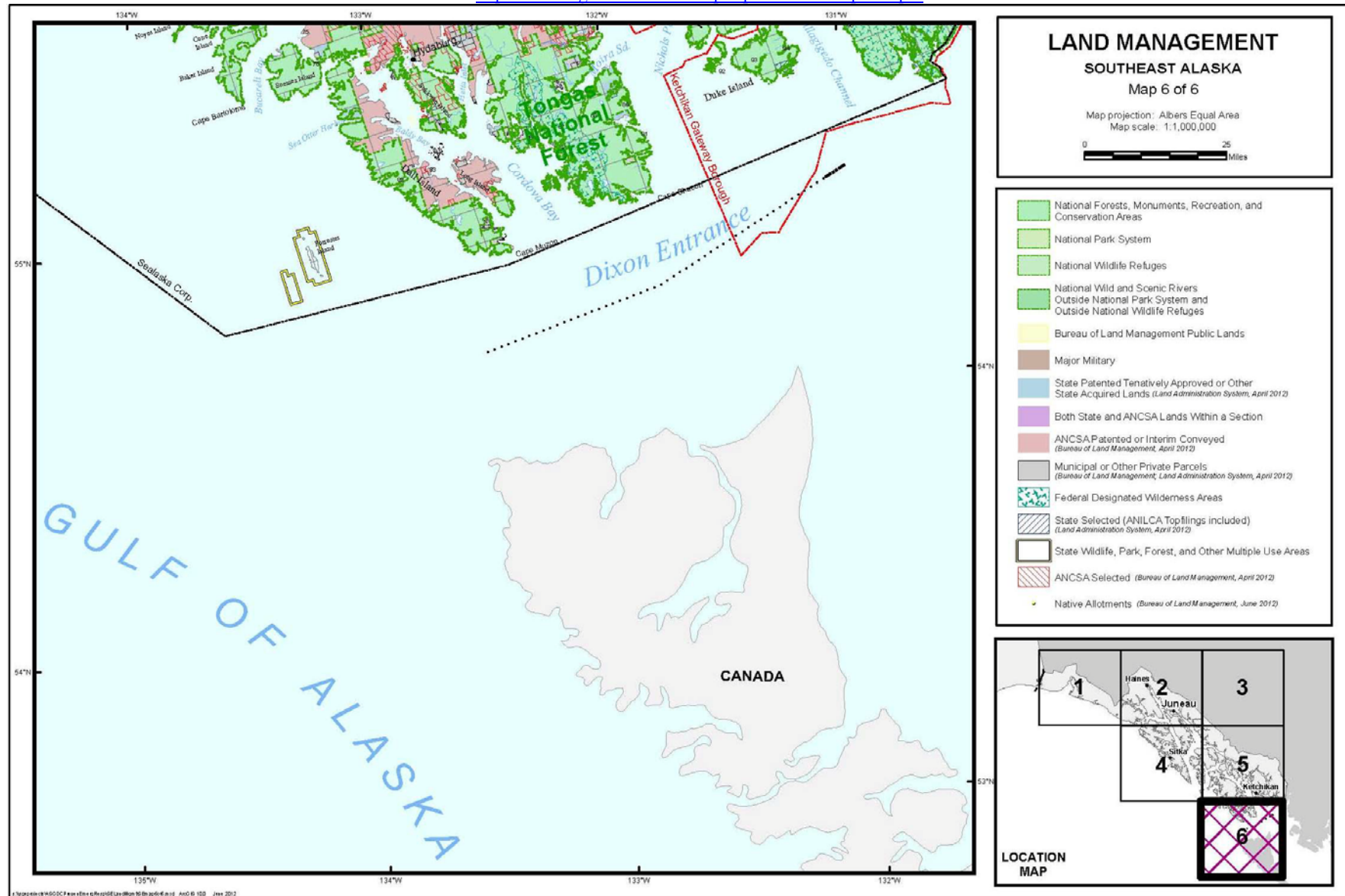
<http://www.asgdc.state.ak.us/maps/cplans/se/SEmap5of6.pdf>





# Land Management Designation Map #6 of 6

<http://www.asgdc.state.ak.us/maps/cplans/se/SEmap6of6.pdf>



# SOUTHEAST SUBAREA CONTINGENCY PLAN: ATTACHMENT ONE

## Log Transfer Facilities

| <i>LTF #</i> | <i>LTF Name</i>     | <i>Built</i> | <i>Town ship</i> | <i>Range</i> | <i>Section</i> | <i>Longitude</i> | <i>Latitude</i> | <i>Remarks</i>                      | <i>Core Of Eng Name</i> | <i>Status</i> | <i>Life</i> | <i>Core Of Eng Permit Process</i> | <i>Permit Owner</i> |
|--------------|---------------------|--------------|------------------|--------------|----------------|------------------|-----------------|-------------------------------------|-------------------------|---------------|-------------|-----------------------------------|---------------------|
| 1            | Sawmill Cove        | Y            | 27s              | 34e          | 21             | 139 42 45.3638   | 59 33 56.5201   |                                     | Yakatat Bay 6           | E             | P           | Pre85                             | FS                  |
| 2            | Homeshore           | Y            | 14s              | 61e          | 25             | 135 21 06.4219   | 58 17 25.9850   |                                     | Icy Strait 6            | E             | P           | Pre85                             | FS                  |
| 6            | Thomas Bay          | Y            | 56s              | 79e          | 35             | 132 48 59.9662   | 56 58 00.4392   |                                     | Frederick Sound 28      | E             | T           | Pre85                             | FS                  |
| 7            | Young Bay           | Y            | 43s              | 65e          | 1              | 134 35 48.4613   | 58 10 22.7370   |                                     |                         | E             | P           |                                   | FS                  |
| 8            | Hoonah Ship Moorage | Y            | 43s              | 61e          | 32             | 135 28 07.6165   | 58 06 01.6103   |                                     | Port Frederick 47       | E             |             | Pre85                             | Huna Totem Corp     |
| 9            | Long Island Ltf     | Y            | 43s              | 61e          | 32             | 135 27 53.3635   | 58 05 58.6703   |                                     | Port Frederick 47       | E             |             | Pre85                             | Huna Totem Corp     |
| 10           | Long Island         | Y            | 44s              | 61e          | 4              | 135 26 16.1813   | 58 05 58.9523   | Unloading ramp for fuel & equipment |                         | E             | P           |                                   | NC                  |
| 11           | West Port Ltf       | Y            | 44s              | 60e          | 9              | 135 35 39.4843   | 58 04 07.2987   |                                     | Port Frederick 46       | E             |             | Pre85                             | Sealaska            |
| 13           | West Port Storage   | Y            | 44s              | 60e          | 9              | 135 36 20.2801   | 58 03 44.0945   |                                     | Port Frederick 46       | E             |             | Pre85                             | Sealaska            |
| 14           | W. Port Frederick   | Y            | 44s              | 60e          | 16             | 135 36 32.9517   | 58 03 19.9703   | Unloading ramp for fuel & equipment |                         | E             | T           | Pre85                             | FS                  |
| 15           | Eight Fathom Bight  | Y            | 45s              | 63e          | 11             | 135 44 39.5093   | 58 00 06.0567   |                                     | Port Frederick 29&45    | E             | T           | Pre85                             | FS                  |
| 16           | Salt Lake Bay       | Y            |                  |              | 0              | 135 38 43.8602   | 57 58 38.5789   |                                     | Port Frederick 41       | E             | T           | PRE85                             | FS                  |
| 17           | Seal Creek          | Y            |                  |              | 36             | 135 08 25.2573   | 57 55 40.8379   |                                     | Chatham Strait 90       | E             | T           | PRE85                             | FS                  |
| 18           | N. Kennel Creek     | Y            |                  |              |                | 135 09 16.3848   | 57 53 54.9174   |                                     |                         | E             | T           | Pre85                             | FS                  |
| 19           | Fresh Water Bay     | Y            | 46s              | 64e          | 17             | 135 05 23.5310   | 57 52 47.5968   | Old A-Frame location                | Chatham Strait 99&77    | E             | P           | Pre85                             | FS                  |
| 20           | Inbetween           |              | 47s              | 65e          | 6              | 135 26 01.5339   | 57 49 34.3959   |                                     | Tenakee Inlet 24        | E             | T           | Pre85                             | FS                  |
| 21           | Indian River        |              |                  |              | 0              | 135 10 00.7177   | 57 46 56.8235   |                                     | Tenakee Inlet 21        | E             | P           | Pre85                             | FS                  |
| 22           | Crab Bay            | Y            | 48s              | 62e          | 1              | 135 17 48.1232   | 57 44 27.2112   |                                     | Tenakee Inlet 20        | E             | T           | Pre85                             | FS                  |
| 23           | Corner Bay          | Y            | 48s              | 63e          | 1              | 135 07 57.5007   | 57 44 13.7193   |                                     | Tenakee Inlet 25        | E             | P           | Pre85                             | FS                  |
| 27           | False Island        | Y            | 50s              | 60e          | 18             | 135 12 26.0536   | 57 31 55.9365   |                                     | Peril Strait 14&25      | E             | T           | Pre85                             |                     |
| 29           | Sitkoh Bay          | Y            | 55s              | 62e          | 26             | 134 55 54.0377   | 57 31 15.2179   |                                     | Chatham Strait 65       | E             | T           | Pre85                             | FS                  |
| 30           | Sitkoh Bay S.       | Y            | 50s              | 65e          | 23             | 134 55 23.7176   | 57 30 18.2302   |                                     | Chatham Strait 63       | E             | T           | Pre85                             | FS                  |
| 31           | Appleton Cove       | Y            | 51s              | 65e          | 10             | 135 16 43.9672   | 57 28 03.4632   |                                     | Appleton Cove 4         | E             | T           | Pre85                             | FS                  |

| <b>LTF #</b> | <b>LTF Name</b>      | <b>Built</b> | <b>Town ship</b> | <b>Range</b> | <b>Section</b> | <b>Longitude</b> | <b>Latitude</b> | <b>Remarks</b>  | <b>Core Of Eng Name</b> | <b>Status</b> | <b>Life</b> | <b>Core Of Eng Permit Process</b> | <b>Permit Owner</b> |
|--------------|----------------------|--------------|------------------|--------------|----------------|------------------|-----------------|-----------------|-------------------------|---------------|-------------|-----------------------------------|---------------------|
| 32           | Rodman Bay           | Y            | 51s              | 62e          | 11             | 135 24 24.2116   | 57 27 42.7104   |                 | Rodman Bay 2            | E             | T           | Pre85                             | FS                  |
| 37           | Fish Bay             | Y            |                  |              | 0              | 135 30 01.0824   | 57 21 20.9826   |                 |                         | E             | T           | Pre85                             | APC                 |
| 38           | Basin W.             | Y            |                  |              | 0              | 134 56 37.5500   | 57 17 36.8511   | Called Kelp Bay |                         | E             | T           | Pre85                             | FS                  |
| 39           | St. John Baptist Bay | Y            |                  |              | 0              | 135 33 03.6871   | 57 17 01.7221   |                 | St. John Baptist Bay 1  | E             | T           | Post85                            | FS                  |
| 41           | Eagle River          | Y            | 53s              | 61e          | 25             | 135 39 04.7433   | 57 14 49.8425   |                 |                         | E             | T           | Pre85                             | FS                  |
| 42           | Nakwasina N.E.       | Y            |                  |              | 0              | 135 21 39.4245   | 57 15 04.9416   |                 |                         | E             | T           | Pre85                             | FS                  |
| 45           | Nakwasina            | Y            |                  |              | 0              | 135 23 20.2990   | 57 11 39.3095   |                 |                         | E             | T           | Pre85                             | FS                  |
| 46           | Mud Bay              | Y            |                  |              | 0              | 135 36 57.4552   | 57 10 48.6562   |                 |                         | E             | T           | Pre85                             |                     |
| 48           | Lisianski            | Y            |                  |              | 0              | 135 23 13.2780   | 57 09 07.3526   |                 |                         | E             | T           | Pre85                             |                     |
| 49           | Point Macartney Ltf  | Y            |                  |              | 0              | 134 01 50.9608   | 57 01 32.4139   |                 | Frederick Sound 24      | E             | P           | Pre85                             | Kake Tribal         |
| 50           | Portage Bay          | Y            |                  |              | 0              | 133 18 53.1175   | 56 59 43.8277   |                 | Frederick Sound 18      | E             | P           | Pre85                             | Fs                  |
| 51           | Kake Ship Moorage    | Y            |                  |              | 0              | 133 55 56.4767   | 56 57 47.0998   |                 | Keku Strait 25          | E             |             | Offshore                          | Sealaska            |
| 52           | Grave Island Storage | Y            |                  |              | 0              | 133 56 41.0184   | 56 57 37.8593   |                 | Keku Strait 27          | E             |             | Offshore                          | Sealaska            |
| 53           | Portage Bay Ltf      | Y            |                  |              | 0              | 133 53 21.7170   | 56 56 30.9674   |                 | Keku Strait 10          | E             |             | Pre85                             | Kake Tribal         |
| 54           | Portage Bay Storage  | Y            |                  |              | 0              | 133 54 03.8173   | 56 56 30.7870   |                 | Keku Strait 10          | E             |             | Pre85                             | Kake Tribal         |
| 55           | Hamilton Bay         | Y            | 57s              | 74e          | 30             | 133 48 44.0841   | 56 53 48.1780   |                 | Keku Strait 26          | E             | P           | Pre85                             | FS                  |
| 56           | W. Saginaw           | Y            |                  |              | 0              | 134 13 35.9814   | 56 52 29.5504   |                 |                         | E             | T           | Pre85                             | FS                  |
| 57           | Saginaw Bay          | Y            | 58s              | 71e          | 12             | 134 11 05.4915   | 56 51 29.6829   |                 | Frederick Sound 34      | E             | T           | Post85                            | FS                  |
| 58           | Tonka Mountain       | Y            | 59s              | 79e          | 34             | 132 57 17.6105   | 56 42 49.5174   |                 | Wrangell Narrows 127    | E             | P           | Pre85                             | FS                  |
| 60           | Papke's Landing      | Y            |                  |              | 0              | 132 55 57.0539   | 56 40 38.7128   |                 |                         | E             | P           | Pre85                             | ST                  |
| 61           | Rowan Bay            | Y            | 60s              | 71e          | 17             | 134 15 46.4934   | 56 40 00.2516   |                 | Chatham Strait 60       | E             | T           | Pre85                             | FS                  |
| 63           | Blind Slough         | Y            |                  |              | 0              | 132 43 41.8707   | 56 32 34.7190   |                 |                         | E             | T           | Pre85                             | FS                  |
| 64           | Rynda Island         | Y            | 61s              | 82e          | 35             | 132 33 42.0255   | 56 32 09.4656   |                 | Sumner Strait 78        | E             | T           | Pre85                             | FS                  |
| 65           | Woodpecker Cove      | Y            | 62s              | 81e          | 18             | 132 49 25.3965   | 56 30 01.4479   |                 | Sumner Strait 86        | E             | T           | Pre85                             | FS                  |
| 66           | Sokolof              | Y            |                  |              | 0              | 132 36 31.2979   | 56 29 52.1279   |                 |                         | E             | T           | Pre85                             | FS                  |
| 68           | Vank                 | Y            |                  |              | 0              | 132 39 08.9771   | 56 28 52.5033   |                 |                         | E             | T           | Pre85                             | FS                  |
| 69           | St. John's Harbor    | Y            | 63s              | 80e          | 5              | 132 58 22.1012   | 56 26 14.5622   |                 | Sumner Strait 81        | E             | P           | Pre85                             | FS                  |
| 70           | Deep Bay             | Y            |                  |              | 0              | 132 38 21.8943   | 56 23 57.5588   |                 | Sikine Strait 4         | E             | P           | Pre85                             | FS                  |
| 71           | Earl West Cove       | Y            | 64s              | 85e          | 3              | 132 07 38.9417   | 56 21 02.6906   |                 | Eastern Passage 12      | E             | P           | Pre85                             | FS                  |

| <b>LTF #</b> | <b>LTF Name</b>      | <b>Built</b> | <b>Town ship</b> | <b>Range</b> | <b>Section</b> | <b>Longitude</b> | <b>Latitude</b> | <b>Remarks</b> | <b>Core Of Eng Name</b> | <b>Status</b> | <b>Life</b> | <b>Core Of Eng Permit Process</b> | <b>Permit Owner</b>  |
|--------------|----------------------|--------------|------------------|--------------|----------------|------------------|-----------------|----------------|-------------------------|---------------|-------------|-----------------------------------|----------------------|
| 72           | Pat's Creek          | Y            |                  |              | 0              | 132 21 01.3454   | 56 20 48.2483   |                |                         | E             | P           | Pre85                             | FS                   |
| 25           | Basket Bay           | Y            |                  |              |                | 134 56 07.3771   | 57 40 08.1010   |                | Chatham Strait 57       | E             | T           | Pre85                             | FS                   |
| 33           | Todd                 | Y            |                  |              |                | 135 01 21.9743   | 57 27 24.1997   |                | Peril Strait 21         | E             | T           | Pre85                             | FS                   |
| 35           | Saook Bay            | Y            |                  |              |                | 135 13 04.7616   | 57 25 19.5829   |                | Saook Bay 1             | E             | T           | Post85                            | FS                   |
| 36           | Hanus Bay            |              |                  |              |                | 135 00 24.6642   | 57 24 35.2870   |                | Peril Strait 29         | E             | T           | Pre85                             | FS                   |
| 74           | Anita Bay 2          | Y            | 65s              | 84e          | 32             | 132 26 56.0680   | 56 11 29.8485   |                | Anita Bay 2             | E             | T           | Pre85                             | FS                   |
| 75           | Olive Cove           | Y            |                  |              | 0              | 132 18 30.6911   | 56 11 24.5303   |                | Zimovia Strait 33       | E             | T           | Pre85                             | FS                   |
| 76           | Anita Bay 1          | Y            |                  |              | 0              | 132 26 51.7470   | 56 11 18.7526   |                | Anita Bay 1             | E             | T           | Pre85                             | FS                   |
| 80           | Bradfield Canal      | Y            | 65s              | 90e          | 21             | 131 30 19.4203   | 56 13 01.8053   |                |                         | E             | T           | Pre85                             | FS                   |
| 171          | Long Island          | Y            | 44s              | 61e          | 4              | 132 39 12.6236   | 54 49 08.2357   |                | Port Frederick 47       | E             | T           | Pre85                             |                      |
| 172          | Hassler Island       | Y            | 69s              | 90e          | 22             | 131 35 22.6665   | 55 52 16.6390   |                | Behm Canal 43           | E             | T           | Pre85                             | FS                   |
| 173          | Klu Bay              | Y            | 69s              | 91e          | 34             | 131 27 01.5309   | 55 50 32.1497   |                | Behm Canal 49           | E             | T           | Pre85                             | FS                   |
| 174          | Shrimp Bay           | Y            | 70s              | 91e          | 5              | 131 29 43.3563   | 55 49 58.0570   |                | Behm Canal 44           | E             | T           | Pre85                             | FS                   |
| 175          | Neets Chin           | Y            | 70s              | 90e          | 20             | 131 38 41.8305   | 55 47 33.3526   |                |                         | E             | T           | Pre85                             | FS                   |
| 176          | Neets Clam           | Y            | 70s              | 90e          | 21             | 131 36 51.6357   | 55 47 11.0578   |                |                         | E             | T           | Pre85                             | FS                   |
| 177          | Fire Cove            | Y            | 70s              | 90e          | 25             | 131 33 13.7696   | 55 46 28.1106   |                | Neets Bay 8             | E             | T           | Pre85                             | FS                   |
| 178          | South West Neets     | Y            | 70s              | 89e          | 36             | 131 41 22.4034   | 55 45 11.1863   |                | Neets Bay 12            | E             | T           | Pre85                             | FS                   |
| 183          | Francis Cove         | Y            | 72s              | 89e          | 1              | 131 42 11.1822   | 55 39 39.6946   |                |                         | E             | T           | Pre85                             | FS                   |
| 184          | Upper Carroll Inlet  | Y            | 72s              | 92e          | 17             | 131 21 16.6023   | 55 37 46.9275   |                | Carroll Inlet 23        | E             | T           | Pre85                             | FS                   |
| 185          | Shelter Cove         | Y            | 73s              | 93e          | 18             | 131 20 39.9464   | 55 32 09.3730   |                | Carroll Inlet 20        | E             | T           | Post85                            | FS                   |
| 186          | Coon Cove            | Y            | 74s              | 92e          | 18             | 131 28 44.3706   | 55 27 17.8873   |                |                         | E             | T           | Pre85                             | Cape Fox Co          |
| 187          | Shoal Cove           | Y            | 74s              | 93e          | 16             | 131 17 25.6847   | 55 27 04.8592   |                | Carroll Inlet 7         | E             | P           | Pre85                             | FS                   |
| 188          | Pacific Log & Lumber | Y            | 75s              | 90e          | 8              | 131 45 29.3276   | 55 23 01.5477   | Mill Site      |                         | E             | P           |                                   | Pacific Log & Lumber |
| 189          | Elf Point            | Y            | 75s              | 93e          | 36             | 131 13 28.9648   | 55 19 13.4576   |                | Thorne Arm 6            | E             | T           | Post85                            | FS                   |
| 83           | Frosty Bay           | Y            | 67s              | 87e          | 16             | 131 57 55.3526   | 56 03 51.5730   |                | Ernest Sound 18         | E             | T           | Post85                            | FS                   |
| 84           | Deer Island W.       | Y            | 67s              | 87e          | 6              | 132 01 38.7587   | 55 59 53.2371   |                | Ernest Sound 11         | E             | T           | Post85                            | FS                   |
| 90           | Labouchere Bay       | Y            | 64s              | 76e          | 19             | 133 37 09.3240   | 56 18 09.7625   |                | Sumner Strait 54        | E             | T           | Pre85                             | FS                   |
| 91           | Port Protection      |              | 64s              | 75e          | 20             | 133 35 01.5035   | 56 18 06.7780   |                | Summer Strait 11        | E             |             |                                   | KPC                  |
| 92           | Bushy Island         |              |                  |              |                | 132 59 23.1514   | 56 14 52.7111   |                | Clarance Strait 66      | E             | T           |                                   | FS                   |
| 93           | Shrubby              | Y            | 65s              | 80e          | 13             | 132 58 10.6856   | 56 14 25.2220   |                | Clarance Strait 29      | E             | T           | Pre85                             | FS                   |
| 94           | Exchange Cove        |              | 65s              | 80e          | 29             | 133 04 19.4278   | 56 11 55.6632   |                |                         | E             |             |                                   |                      |
| 95           | Calder               | Y            | 66s              | 77e          | 3              | 133 28 24.3138   | 56 10 39.8919   |                |                         | E             | T           | Pre85                             | FS                   |
| 96           | El Capitan           | Y            | 66s              | 78e          | 11             | 133 18 44.0289   | 56 09 31.7945   |                |                         | E             | T           | Pre85                             | FS                   |
| 97           | Sutter Creek         | Y            | 66s              | 77e          | 14             | 133 27 27.2706   | 56 09 07.7074   |                | Shakan Strait 4         | E             | T           | Pre85                             |                      |
| 99           | Whale Pass           | Y            | 66s              | 79e          | 25             | 133 07 15.3506   | 56 06 53.5001   |                |                         | E             | T           | Pre85                             |                      |
| 100          | Whale Pass West      | Y            | 67s              | 79e          | 1              | 133 07 35.1523   | 56 05 44.3811   |                |                         | E             | T           | Pre85                             | FS                   |

| <b>LTF #</b> | <b>LTF Name</b>         | <b>Built</b> | <b>Town ship</b> | <b>Range</b> | <b>Section</b> | <b>Longitude</b> | <b>Latitude</b> | <b>Remarks</b> | <b>Core Of Eng Name</b> | <b>Status</b> | <b>Life</b> | <b>Core Of Eng Permit Process</b> | <b>Permit Owner</b> |
|--------------|-------------------------|--------------|------------------|--------------|----------------|------------------|-----------------|----------------|-------------------------|---------------|-------------|-----------------------------------|---------------------|
| 101          | Shipley                 | Y            | 67s              | 77e          | 8              | 133 32 47.0282   | 56 04 45.4320   |                | Sumner Strait 62        | E             | T           | Pre85                             | KPC                 |
| 102          | Coffman Cove            | Y            | 67s              | 81e          | 35             | 132 49 50.9089   | 56 00 50.3397   |                | Clarence Strait 24      | E             | T           | Pre85                             | FS                  |
| 103          | Cape Pole               | Y            | 68s              | 75e          | 22             | 133 47 08.8924   | 55 58 16.1010   |                | Sumner Strait 21        | E             | T           | Pre85                             | FS                  |
| 104          | Orr Island West         | Y            | 68s              | 77e          | 24             | 133 25 05.4152   | 55 57 41.7452   |                |                         | E             | T           | Pre85                             | FS                  |
| 105          | Marble Island East      | Y            | 68s              | 77e          | 24             | 133 26 04.0912   | 55 57 12.6043   |                |                         | E             | T           | Pre85                             | FS                  |
| 106          | S. Cape Pole            | Y            | 68s              | 75e          | 28             | 133 48 27.6387   | 55 57 10.8897   |                |                         | E             | T           | Pre85                             | FS                  |
| 107          | Orr Island Sw           | Y            | 68s              | 77e          | 25             | 133 25 11.0130   | 55 56 25.9458   |                |                         | E             | T           | Pre85                             | FS                  |
| 108          | Orr Island E            | Y            | 68s              | 78e          | 29             | 133 23 13.8212   | 55 56 25.5089   |                |                         | E             | T           | Pre85                             | FS                  |
| 110          | White Cliff Island      | Y            |                  |              |                | 133 29 07.4655   | 55 54 49.9611   |                |                         | E             | T           | Pre85                             | FS                  |
| 111          | Orr Island South        | Y            | 69s              | 78e          | 11             | 133 23 45.4137   | 55 53 58.1038   |                |                         | E             | T           | Pre85                             | FS                  |
| 112          | Orr Island Se           | Y            | 69s              | 78e          | 12             | 133 23 28.4491   | 55 53 56.9399   |                |                         | E             | T           | Pre85                             | FS                  |
| 113          | Eagle Island E          | Y            | 69s              | 78e          | 17             | 133 29 39.0801   | 55 53 33.1817   |                |                         | E             | T           | Pre85                             | FS                  |
| 114          | Owl Island              | Y            | 69s              | 78e          | 14             | 133 24 52.9929   | 55 53 10.4963   |                |                         | E             | T           | Pre85                             | FS                  |
| 115          | Eagle Island S          | Y            | 69s              | 78e          | 18             | 133 30 02.6604   | 55 52 56.8179   |                |                         | E             | T           | Pre85                             | FS                  |
| 116          | Hoot Island             | Y            | 69s              | 78e          | 13             | 133 23 26.0671   | 55 52 52.1202   |                |                         | E             | T           | Pre85                             | FS                  |
| 117          | Naukati                 | Y            | 69s              | 79e          | 24             | 133 13 08.2180   | 55 52 22.5780   |                | Tuxekan Passage 6       | E             | T           | Pre85                             | FS                  |
| 118          | Tuxekan Jinhi E.        | Y            | 69s              | 79e          | 23             | 133 15 55.2493   | 55 52 11.2437   |                |                         | E             | T           | Pre85                             | ST                  |
| 119          | Tuxekan Jinhi W.        | Y            |                  |              |                | 133 17 21.0398   | 55 51 29.5172   |                |                         | E             | T           | Pre85                             | ST                  |
| 120          | Nichen Cove             | Y            | 69s              | 79e          | 25             | 133 13 46.8619   | 55 51 08.7396   |                | Tuxekan Passage 2       | E             | T           | Pre85                             | FS                  |
| 121          | Camp Is.(Hecata)        | Y            | 70s              | 78e          | 20             | 133 29 41.6660   | 55 48 34.8447   |                | Sea Otter Sound 5       | E             | T           | Pre85                             | FS                  |
| 122          | Port Alice              | Y            | 70s              | 77e          | 15             | 133 35 34.9851   | 55 47 51.3305   |                | Davidson Inlet 8        | E             | T           | Pre85                             | FS                  |
| 124          | Camp S.W.               |              | 70s              | 78e          | 20             | 133 29 05.0117   | 55 47 21.8403   |                |                         | E             |             |                                   | FS                  |
| 125          | Camp S.E.               |              | 70s              | 78e          | 21             | 133 27 04.7917   | 55 47 21.6379   |                |                         | E             |             |                                   | FS                  |
| 126          | Winter Harbor           | Y            | 70s              | 79e          | 25             | 133 13 40.2104   | 55 46 17.7162   |                | Tuxekan Passage 7       | E             | T           | Pre85                             | FS                  |
| 127          | Thorne Bay              | Y            | 71s              | 84e          | 28             | 132 32 50.1373   | 55 41 21.2909   |                | Clarence Strait 21      | E             | T           | Pre85                             | KPC                 |
| 128          | Tolstoi Bay Ltf         | Y            |                  |              |                | 132 25 59.2709   | 55 37 50.0489   |                | Tolstoi Bay 1           | E             |             | Post85                            | SEALASKA            |
| 129          | Tolstoi Bay Storage     | Y            |                  |              |                | 132 26 57.9816   | 55 37 45.8729   |                | Tolstoi Bay 1           | E             |             | Post85                            | SEALASKA            |
| 130          | Wadleigh Island Storage | Y            | 73s              | 81e          | 9              | 133 07 44.5847   | 55 34 48.9966   |                | Klawock Inlet 59        | E             |             | Pre85                             | SEALASKA            |
| 131          | Klawock Island Dock     | Y            |                  |              |                | 133 06 32.4801   | 55 33 16.0557   |                | Klawock Inlet 53        | E             |             | Pre85                             | KIDCO               |
| 132          | Kidco Ltf               | Y            | 73s              | 81e          | 9              | 133 06 29.9457   | 55 33 10.7311   |                | Klawock Inlet 51; 56    | E             |             | Pre85                             | KIDCO               |
| 133          | Sandy Point Ltf         | Y            |                  |              |                | 132 32 24.6014   | 55 32 41.2254   |                | Kasaan Bay 52           | E             |             | Post85                            | SEALASKA            |
| 134          | Little Coal Bay         | Y            | 73s              | 85e          | 26             | 132 26 18.8189   | 55 30 48.5139   |                | Kasaan Bay 51           | E             | T           | Post85                            | FS                  |
| 135          | Kina Cove Storage       | Y            | 73s              | 78e          | 29             | 132 31 04.2601   | 55 30 28.3609   |                | Kasaan Bay 43           | E             |             | Post85                            | SEALASKA            |
| 137          | Kasaan Island Ltf       | Y            | 74s              | 84e          | 33             | 132 21 19.5446   | 55 29 35.0948   |                |                         | E             |             | Unknown                           | KAVILCO             |

| <b>LTF #</b> | <b>LTF Name</b>          | <b>Built</b> | <b>Town ship</b> | <b>Range</b> | <b>Section</b> | <b>Longitude</b> | <b>Latitude</b> | <b>Remarks</b> | <b>Core Of Eng Name</b> | <b>Status</b> | <b>Life</b> | <b>Core Of Eng Permit Process</b> | <b>Permit Owner</b> |
|--------------|--------------------------|--------------|------------------|--------------|----------------|------------------|-----------------|----------------|-------------------------|---------------|-------------|-----------------------------------|---------------------|
| 139          | Trocadero Ltf            | Y            | 74s              | 80e          | 15             | 133 14 34.2888   | 55 27 00.2826   |                |                         | E             |             | Unknown                           | SHAAN SEET          |
| 140          | Little Goose Bay Storage | Y            | 74s              | 85e          | 35             | 132 27 25.8300   | 55 24 56.7972   |                | Skowl Arm 21            | E             |             | Post85                            | SEALASKA            |
| 141          | Cabin Creek Ltf          | Y            | 74s              | 85e          | 34             | 132 29 10.3138   | 55 24 56.4619   |                | Skowl Arm 21            | E             |             | Post85                            | SEALASKA            |
| 142          | East 12 Mile North       | Y            | 75s              | 84e          | 7              | 132 42 12.9066   | 55 23 15.8787   |                | Twelvemile Arm 1        | E             | T           | Post85                            | FS                  |
| 143          | Polk Inlet               | Y            | 75s              | 85e          | 21             | 132 30 05.8015   | 55 21 21.0057   |                | Skowl Arm 16            | E             | P           | Pre85                             | FS                  |
| 145          | Sulzer Ltf               | Y            |                  |              |                | 132 37 37.2361   | 55 17 17.3885   |                | Hetta Inlet 11          | E             |             | Post85                            | SEALASKA            |
| 146          | Suemez                   | Y            | 76s              | 79e          | 12             | 133 19 37.7052   | 55 17 16.1892   |                | Ulloa Channel 4         | E             | P           | Pre85                             | FS                  |
| 148          | Soda Bay Storage         | Y            |                  |              |                | 133 00 08.7026   | 55 15 23.9062   |                | Soda Bay 1              | E             |             | Post85                            | SEALASKA            |
| 149          | W. Arm Cholmondeley      | Y            | 76s              | 86e          | 27             | 132 25 13.7740   | 55 15 03.8657   |                | Cholmondeley Sound 28   | E             | T           | Post85                            | FS                  |
| 150          | Soda Bay Ltf             | Y            | 76s              | 82e          | 29             | 132 58 05.5561   | 55 15 18.6303   |                | Soda Bay 1              | E             |             | Post85                            | SEALASKA            |
| 153          | Copper Mountain Ltd      | Y            | 76s              | 84e          | 12             | 132 39 17.3359   | 55 14 50.6579   |                | Hetta Inlet 8           | E             |             | Post85                            | SEALASKA            |
| 154          | Lancaster Cove           | Y            | 77s              | 88e          | 12             | 132 04 57.5115   | 55 12 47.6279   |                | Cholmondeley Sound 16   | E             | T           | Post85                            | FS                  |
| 155          | Salterty Point Ltf       | Y            | 77s              | 84e          | 20             | 132 47 51.6299   | 55 11 00.3717   |                | Sukkwai Strait 12       | E             |             | Pre85                             | Haida Corp          |
| 156          | Crab Trap Cove Storage   | Y            | 77s              | 84e          | 20             | 132 47 49.0284   | 55 10 25.2527   |                | Sukkwai Strait 12       | E             |             | Offshore                          | SEALASKA            |
| 157          | North Nutkwa Ltf         | Y            |                  |              |                | 132 33 30.4069   | 55 07 07.9026   |                | Nutkwa Inlet 3          | E             |             | Post85                            | SEALASKA            |
| 158          | South Nutkwa Ltf         | Y            | 78s              | 85e          | 23             | 132 32 57.2001   | 55 05 24.8108   |                | Nutkwa Inlet 4          | E             |             | Post85                            | SEALASKA            |
| 159          | South Nutkwa Storage     | Y            | 78s              | 85e          | 23             | 132 33 08.8747   | 55 05 12.3913   |                | Nutkwa Inlet 4          | E             |             | Post85                            | SEALASKA            |
| 160          | Clam Island Storage      | Y            | 78e              | 82e          | 21             | 133 03 18.6991   | 55 05 22.7569   |                | Tlevak Strait 11        | E             |             | Pre85                             | SEALASKA            |
| 161          | View Cove Ltf            | Y            | 78e              | 82e          | 23             | 133 01 01.1948   | 55 05 04.9639   |                | Tlevak Strait 11; 6     | E             |             | Pre85                             | SEALASKA            |
| 162          | Coco Harbor Ltf          | Y            | 79s              | 82e          | 9              | 133 04 10.8145   | 55 02 27.2701   |                | Tlevak Strait 16        | E             |             | Post85                            | SEALASKA            |
| 163          | Coco Harbor Storage      | Y            | 79s              | 82e          | 9              | 133 03 52.9276   | 55 02 26.5102   |                | Tlevak Strait 16        | E             |             | Post85                            | SEALASKA            |
| 166          | Rose Inlet Ship Moorage  | N            | 80s              | 63e          | 7              | 132 57 26.6557   | 54 56 52.3028   |                | Rose Inlet 2            | E             |             | Offshore                          | SEALASKA            |
| 167          | Rose Inlet Ltf           | N            | 80s              | 83e          | 7              | 132 57 51.4746   | 54 56 37.4536   |                | Rose Inlet 2            | E             |             | Post85                            | SEALASKA            |
| 168          | Rose Inlet Storage       | N            | 80s              | 83e          | 7              | 132 57 20.5729   | 54 56 31.3726   |                |                         | E             |             | Post85                            | SEALASKA            |
| 169          | Grace Harbor Strg        | Y            | 80s              | 83e          | 28             | 132 54 58.3315   | 54 54 48.8058   |                | Dixon Entrance 12       | E             |             | Pre85                             | SEALASKA            |
| 170          | Grace Harbor Ltf         | Y            | 80s              | 83e          | 28             | 132 54 46.7781   | 54 54 31.8856   |                | Dixon Entrance 12       | E             |             | PRE85                             | SEALASKA            |