SOUTHEAST SUBAREA CONTINGENCY PLAN

POTENTIAL PLACES OF REFUGE SECTION

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POTENTIAL PLACES OF REFUGE: PART ONE – INTRODUCTION

Α. PURPOSE AND SCOPE

This Potential Places of Refuge (PPOR) Section provides a decision-making tool for lead responders to employ during an unplanned or emergency event involving a vessel. A "place of refuge" is defined as a location where a vessel needing assistance can be temporarily moved to, and where actions can then be taken to stabilize the vessel, protect human life, reduce a hazard to navigation, and/or protect sensitive natural resources and other uses of the area (e.g., subsistence collection of mussels, commercial fishing, recreational boating).

A place of refuge may include constructed harbors, ports, natural embayments, potential grounding sites, or offshore waters. This section identifies potential docking, anchoring, mooring, and grounding locations that may be selected as places of refuge in the Southeast Subarea. Actual designation of a place of refuge will always be an incident-specific decision, one made through consultation but ultimately by the U.S. Coast Guard, Captain of the Port for Juneau Alaska.

The Southeast Subarea has many miles of environmentally sensitive coastline. In addition to sensitive shoreline habitats such as marshes, sheltered tidal flats, and exposed tidal flats, Southeast Alaska supports a number of sensitive biological resources, including birds, fish and shellfish, and marine mammals. Information about sensitive areas associated with PPOR may be found in the Sensitive Areas Section of the Southeast Subarea Contingency Plan (SCP). Response strategies to protect sensitive areas and identified locations of public concern associated with a place of refuge may be found in the Geographic Response Strategies Section of the SCP.

The Southeast Subarea lands are managed under a variety of land use management plans including the following:

- Northern Southeast Area Plan, October, 2002
- Revised Land Resource Management Plan for the Tongass National Forest, 1997
- > City and Borough of Juneau Coastal Management Plan, 2008
- City of Craig Coastal Management Plan, 2007
- Skagway Municipality Coastal Management Plan, 2007
- > City of Hoonah Coastal Management Plan, 2007
- > City of Thorne Bay Coastal Management Plan, 2007
- City and Borough of Yakutat Coastal Management Plan, 2008
- City of Pelican Coastal Management Plan, 2007
- ➤ Haines Borough Coastal Management Plan, 2007
- City and Borough of Sitka Coastal Management Plan, April 8, 2007
- ➤ Ketchikan Gateway Borough, Coastal Management Plan, 2008
- > Yakataga Area Plan, April 1995
- > Juneau State Land Plan, December 1993
- Central/Southern Southeast Area Plan, November 2000
- Prince of Wales Area Plan, October 1998, Amended May 2008
- ➤ General Management Plan, Glacier Bay, National Park, 1984

The Southeast region of Alaska is widely used for marine commerce. Log transport ships, fuel barges, freighters, container ships, ferries, and cruise ships make routine stops at Southeast Alaska ports. Also, commercial fishing boats, sport fishing charter boats, and privately-owned vessels regularly use local

harbors and docks.

There is no perfect docking, mooring, anchoring, or grounding site for all vessels in all situations. Deep draft vessels, such as freighters and cruise ships, cannot be taken to certain locations. Some areas will have depths too deep for setting a secure anchorage. Some ports may have shallow approaches or small bays, and deep draft ships cannot enter these locations. However, shallow draft vessels, such as fishing vessels and charter vessels, may be able to utilize these shallower ports. The multitude of possible sites of refuge for these shallow draft vessels in Southeast Alaska precluded listing them all. Therefore, this class of vessel has not been addressed in these documents. For the purposes of this section, vessels have been divided into two categories: deep draft and light draft.

Deep Draft Vessels are vessels that exceed 20,000 Gross Tons. These vessels have drafts of 25 to 60 feet and range in size from 450 to 1,000 feet long. Cruise ships, container ships, and tank vessels are the predominant deep draft vessels operating in the Southeast Subarea.

Light Draft Vessels are vessels of 300 to 20,000 Gross Tons. These vessels have drafts of up to 25 feet and range in size from 200 to 450 feet in length. Small freighters, catcher-processors, and ferries are the most common light draft vessels operating in Southeast Alaska.

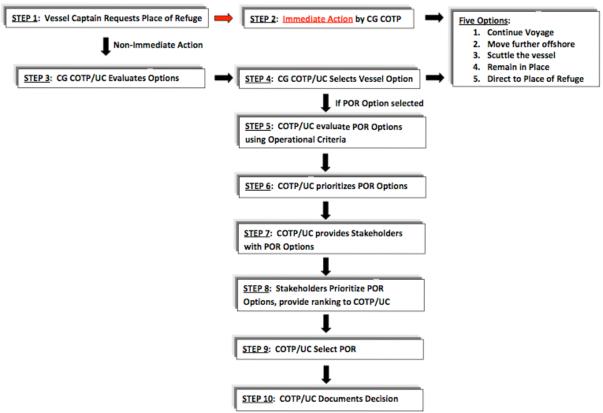
The information in this section may be used for a vessel of any size that has suffered an incident that creates need for a temporary place of safe refuge, but it is focused on deep draft and light draft size vessels, since there are more potential places of refuge for shallow draft vessels. Some potential places of refuge appropriate only for shallow draft vessels are designated, however many more potential places of refuge for shallow draft vessels exist in Southeast Alaska.

В. HOW TO USE THE POTENTIAL PLACES OF REFUGE SECTION

The extensive regional and location-specific information provided in the Potential Place of Refuge documents is intended to help assist the COTP and/or Unified Command in the often challenging decision-making process.

The "Guidelines for Places of Refuge Decision-Making" (Annex O of the Unified Plan) will be used for places of refuge decision-making in the Southeast Subarea. As outlined in the guidelines, when the U.S. Captain of the Port (COTP) receives a request from a vessel master or his/her representative to move a vessel to a place of refuge - or in the event there are no individuals on board the vessel authorized to make the request, or the vessel has been abandoned and the COTP needs to consider moving the vessel to a place of refuge – the COTP will initiate the decision-making process in Appendix 1 of Annex O. As outlined in Steps 2 and 3 in Appendix 1, if the COTP/Unified Command (UC) determines that places of refuge should be considered for an incident-specific response, the information in the Southeast PPOR document may be used to provide background information to help expedite the incident-specific place of refuge decision. The steps of the decision-making process are summarized as follows:

Decision-Making Process - Places of Refuge



Part Three of this section contains the site-specific information for the PPOR in the Southeast Subarea. An index map (Figure H-11) at the beginning of Part Three shows the map locations of the PPOR. Each PPOR map consists of two parts: 1) a map page showing a locator map, picture, and detailed nautical charts; and 2) a table page providing site information and local site conditions. All geographic data was collected using Mercator Projection, North American Datum 1983.

C. REFERENCES

Alaska Regional Response Team. October 2004. Alaska Federal/State Preparedness Plan for Response to Oil and Hazardous Substance Discharges/Releases, Annex O, Guidelines for Places of Refuge Decision-Making.

Dept of Commerce - National Oceanic & Atmospheric Administration (NOAA), National Ocean Survey can provide detailed hydrographic charts of PPOR locations upon request. Contact Dave Neander, Dave.Neander@noaa.gov, (206) 526-6949, NOAA/ORR, 7600 Sand Point Way, NE, Seattle, WA 98115.

International Maritime Organization (IMO). July 17, 2003. Draft Assembly Resolutions Finalized by Nav. 49, Annex 1 Guidelines On Places Of Refuge For Ships In Need of Assistance.

Pacific States/British Columbia Task Force. December 2004. Guidelines for Places of Refuge

U.S. Coast Guard, Marine Safety Office Southeast, 2007. Southeast Alaska Marine Firefighting Contingency Plan.

Useful Websites:

Alaska Dept. of Environmental Conservation, Southeast PPOR homepage http://dec.alaska.gov/spar/perp//ppor/home.htm

Alaska Dept. of Environmental Conservation, Southeast GRS homepage http://dec.alaska.gov/spar/perp//grs/home.htm

Southeast Subarea maps, including general maps, land use and management maps, biologically sensitive area maps, most environmentally sensitive area maps, and environmentally sensitive index maps http://www.asgdc.state.ak.us/maps/cplans/subareas.html#southeast

Unified Plan and all Subarea Contingency Plans http://dec.alaska.gov/spar/perp/plan.htm

Alaska Dept. of Natural Resources, Southeast Public Access Atlas http://dnr.alaska.gov/mlw/planning/easmtatlas/

U.S Bureau of Land Management. Alaska Land Information System. http://www.ak.blm.gov/alis/

National Marine Fisheries Service, ShoreZone imagery and mapping data http://alaskafisheries.noaa.gov/shorezone/

D. WHO TO CONTACT FOR INPUT

Comments and recommendations on these PPOR are welcomed, and please send them to either of the following agencies:

> Alaska Department of Environmental Conservation Prevention and Emergency Response Program 555 Cordova Street Anchorage, AK 99501

United States Coast Guard Captain of the Port, Southeast Alaska 2760 Sherwood Lane Suite 2A Juneau, AK 99801-8545

POTENTIAL PLACES OF REFUGE: PART TWO – DEVELOPMENT

A workgroup of interested and knowledgeable stakeholders developed the PPOR section over the course of 2009-2010, guided by the Alaska Regional Response Team's "Guidelines for Places of Refuge Decision-Making," (available along with additional information in the **Unified Plan, Annex O**). The workgroup arrived at a consensus on the potential places of refuge and submitted this document to the Subarea Committee for approval and inclusion in the Southeast Subarea Contingency Plan. The workgroup participants represented the following organizations:

Alaska Department of Environmental Conservation

Alaska Department of Fish and Game

Alaska Department of Natural Resources

Central Council Tlingit & Haida Indian Tribes of Alaska

City & Borough of Juneau

City & Borough of Sitka

City of Skagway

Cruise Line Agencies of Alaska

Ketchikan Gateway Borough

National Oceanic and Atmospheric Administration

Royal Caribbean Cruise Line

Southeast Alaska Conference

Southeast Alaska Pilots Association

Southeast Alaska Petroleum Resource Organization

Southeast Stevedoring

U.S. Coast Guard (Sector Juneau and District 17)

U.S. Environmental Protection Agency

U. S. Department of the Interior – Office of Environmental Policy and Compliance US Fish and Wildlife Service US National Park Service

Α. RISK IDENTIFICATION

The first step in the PPOR process began with identifying vessel traffic patterns and determining where possible vessel distress incidents might arise. The workgroup and the ADEC contractor researched available information to determine vessel routes and destinations, along with major risk factors in the Southeast Subarea. Maps were developed, depicting the following risk and logistical information:

- *Locations of bulk fuel facilities* (Figure H-1);
- *Location of noncrude carrier routes* (Figure H-2):
- *Locations of cruise ship and ferry traffic* (Figure H-3);
- Locations of hatcheries (Figure H-4);
- *Locations of aquatic farms and mariculture sites* (Figure H-5);
- Locations of spill response equipment depots, nearshore equipment packages, and communities with spill response agreements (Figure H-6);
- Locations of geographic response strategies (Figure H-7);
- Locations of major airports (Figure H-8);
- Locations of major oil spill events (Figure H-9).

The compilation of all of the above logistical maps can be seen in Figure H-10: *Location of all Risk Factors Combined.*

B. <u>FEASIBILITY</u>

The second step, identifying all of the feasible places of refuge within the Southeast Subarea, began with an appraisal of all possible candidate locations: natural embayments, anchorages, moorings, docks, and piers, as well as potential grounding sites. From this effort, the workgroup determined that 88 locations could serve as potential places of refuge, dependent upon a variety of factors, including vessel type and wind direction.

The ADEC contractor created a site assessment matrix (Table H-2) and key (Table H-1). The matrix consists of identified sites in each row, with information about risk factors and site selection criteria in the columns. The information presented for each site includes the following:

- PPOR identification
- Name
- Location
- Maximum vessel size
- Anchorage swing room & depth or dock face length & depth
- Bottom type of refuge site
- Exposure/protection at refuge site
- Conflicting uses
- Sensitive resources in area
- Response options
- Distance to population centers
- Distance to alternate PPOR

The PPOR identification method begins with either a "D" or "L" which indicates the appropriate size vessel for the site: "D" corresponds to deep draft vessels; "L" equates to light draft vessels. Following the letter is a number which indicates the response zone in which the site is located. This is then followed by a number which is a unique site identifier with no importance attached to the magnitude of the number.

The site assessment matrix contains potentially suitable emergency anchorage, docking, and moorage based on operational factors such as water depth, swing room, exposure/protection, and navigational approach. Sites are grouped by the individual response zones and then by the maximum vessel size category suitable for the site.

C. SPECIFIC DECISION-MAKING FACTORS

The third step consisted of identifying specific factors that should be considered as part of the site assessment process. These factors, identified in the matrix, include the following:

- Distance from population and logistics centers;
- Proximity to environmentally sensitive areas, wildlife resources, threatened or endangered species or habitats, and/or historic properties;
- ❖ Location-specific uses, such as fisheries, mariculture sites, tourism and recreational use, subsistence use, and the location of public or private facilities;
- * Response factors, such as booming feasibility and the proximity to existing Geographic Response Strategy sites; and
- ❖ Distance to the closest alternative PPOR.

D. MATRIX and RISK ASSESSMENT MAPS

The site assessment matrix, the matrix key, and the risk assessment maps appear below and can also be accessed online:

Table H-1: Site Assessment Matrix Key

http://www.dec.state.ak.us/spar/perp/seakpor/101221_SEPPOR_SAM_KEY.pdf

Table H-2: Site Assessment Matrix,

http://www.dec.state.ak.us/spar/perp/seakpor/101221_SEPPOR_SAM.pdf

Figures H-1 to H10:

http://www.dec.state.ak.us/spar/perp/seakpor/101228SEAKpporriskmapsHR.pdf

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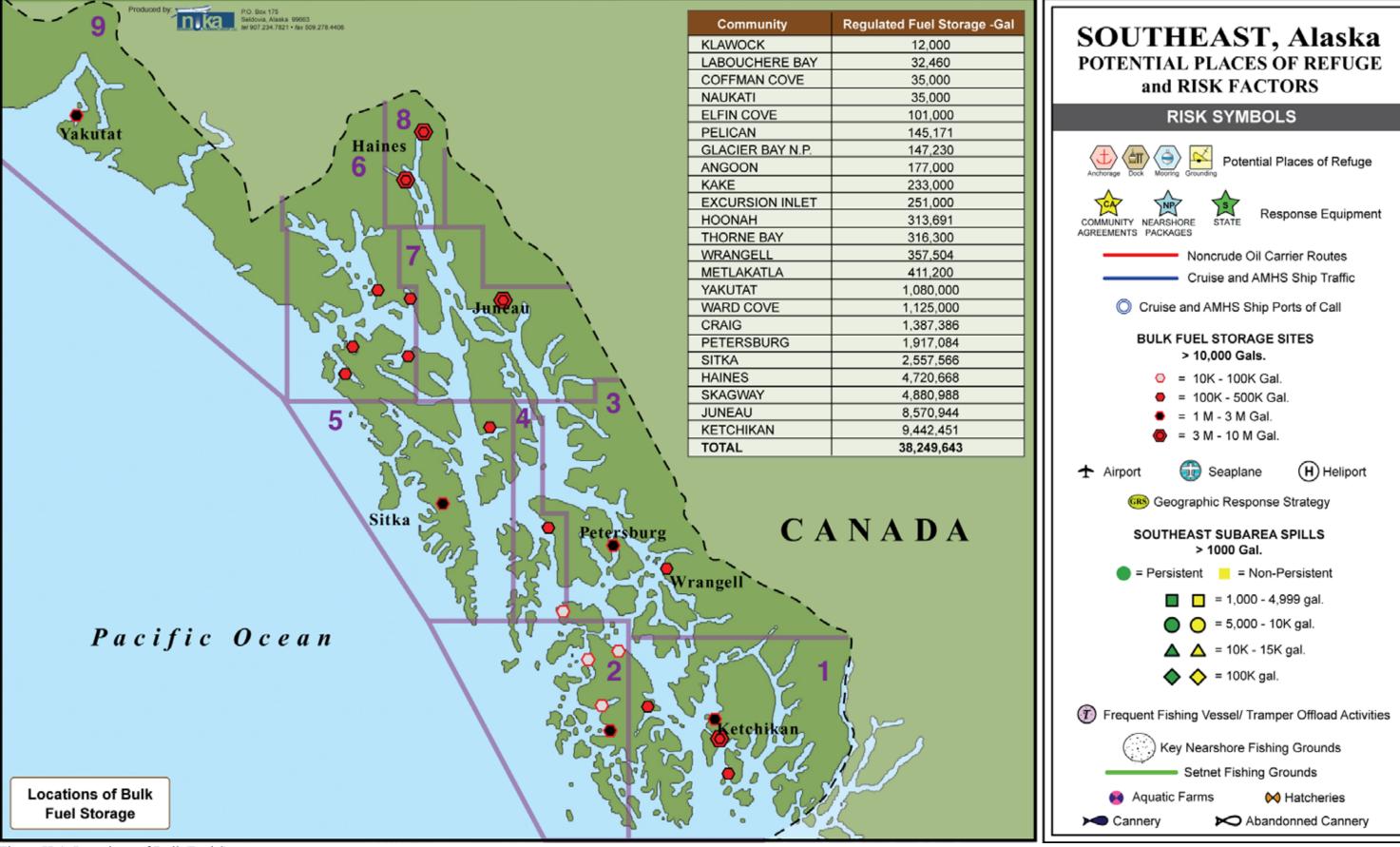


Figure H-1. Locations of Bulk Fuel Storage.

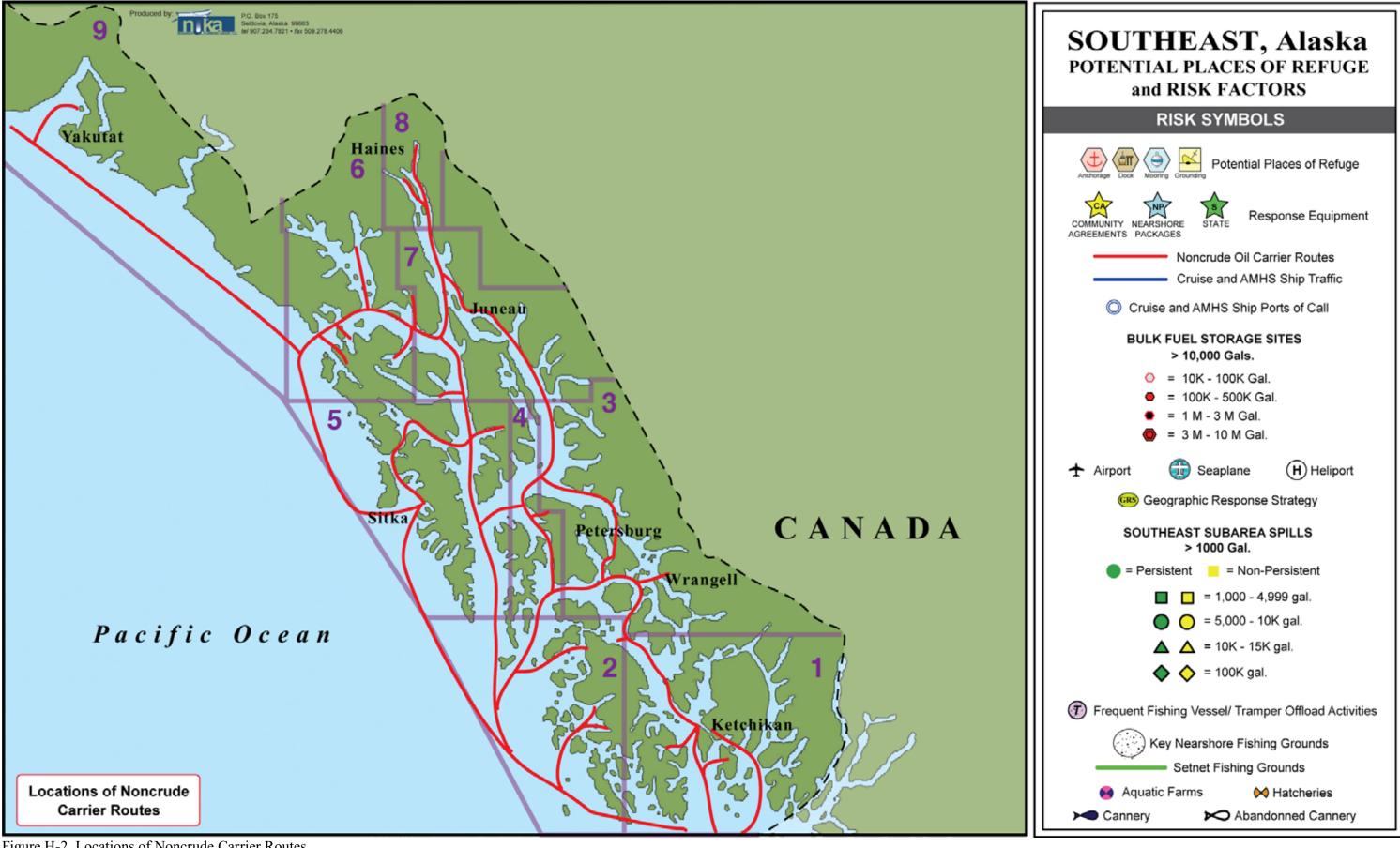


Figure H-2. Locations of Noncrude Carrier Routes.

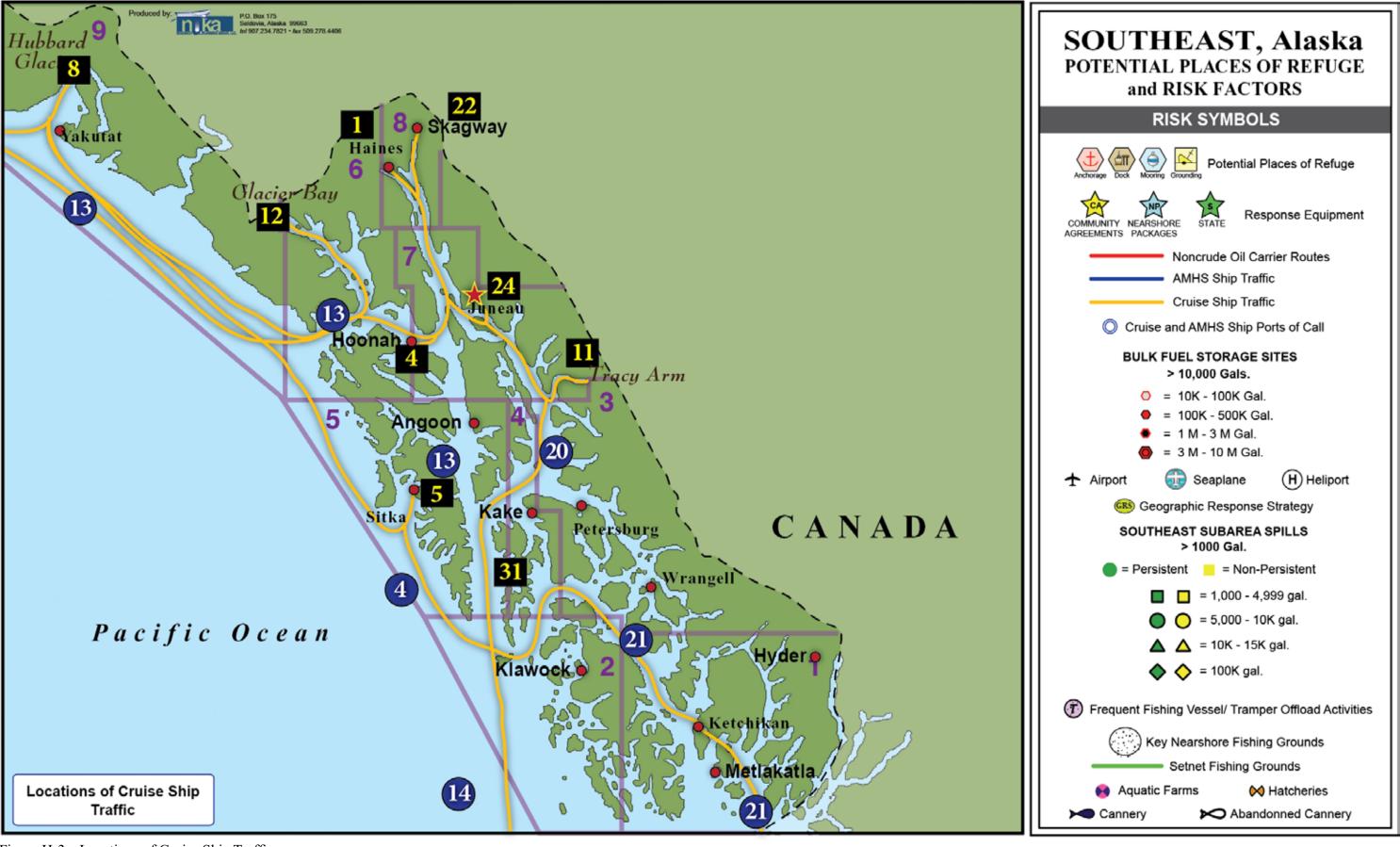


Figure H-3a. Locations of Cruise Ship Traffic.

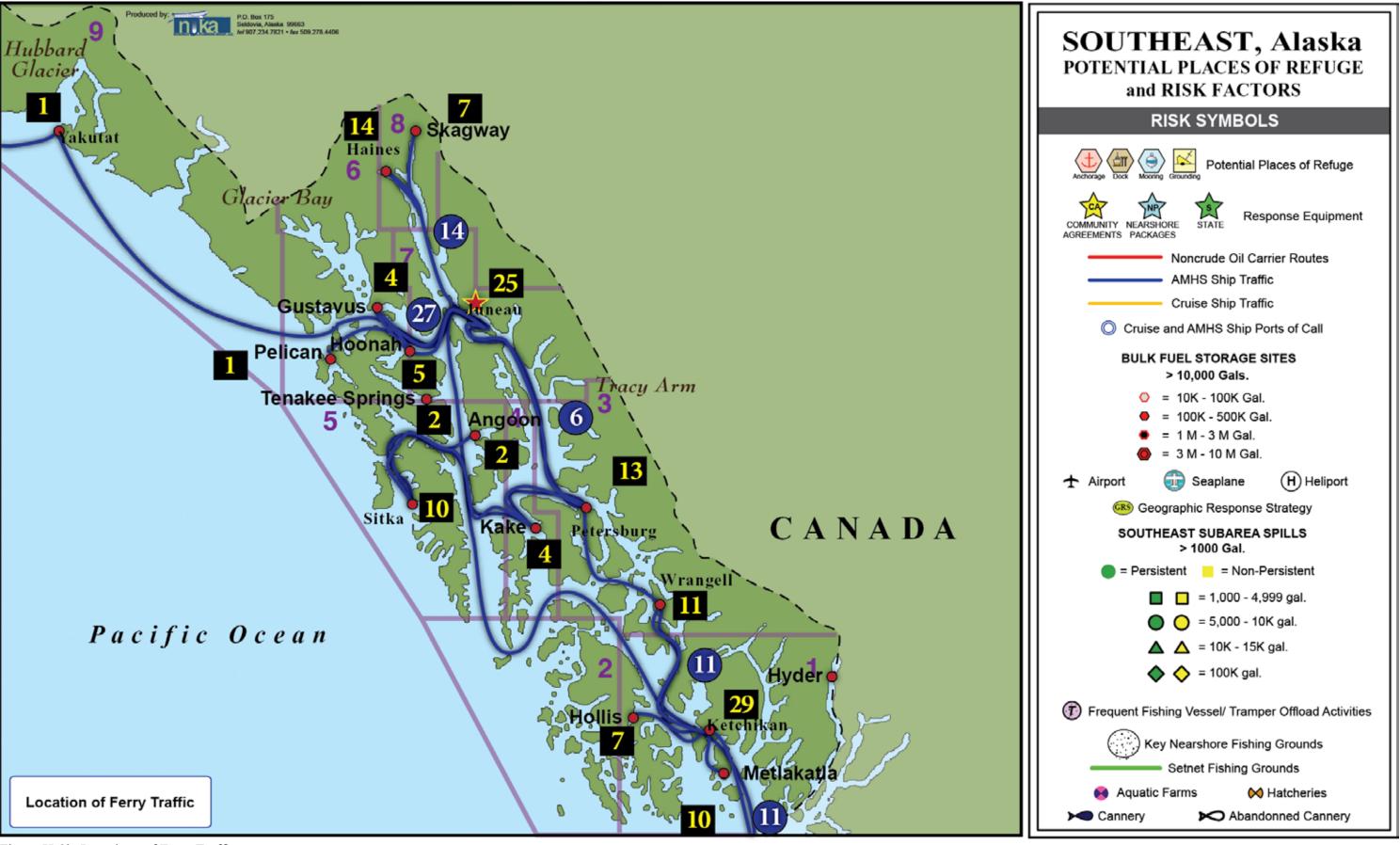


Figure H-3b. Locations of Ferry Traffic.

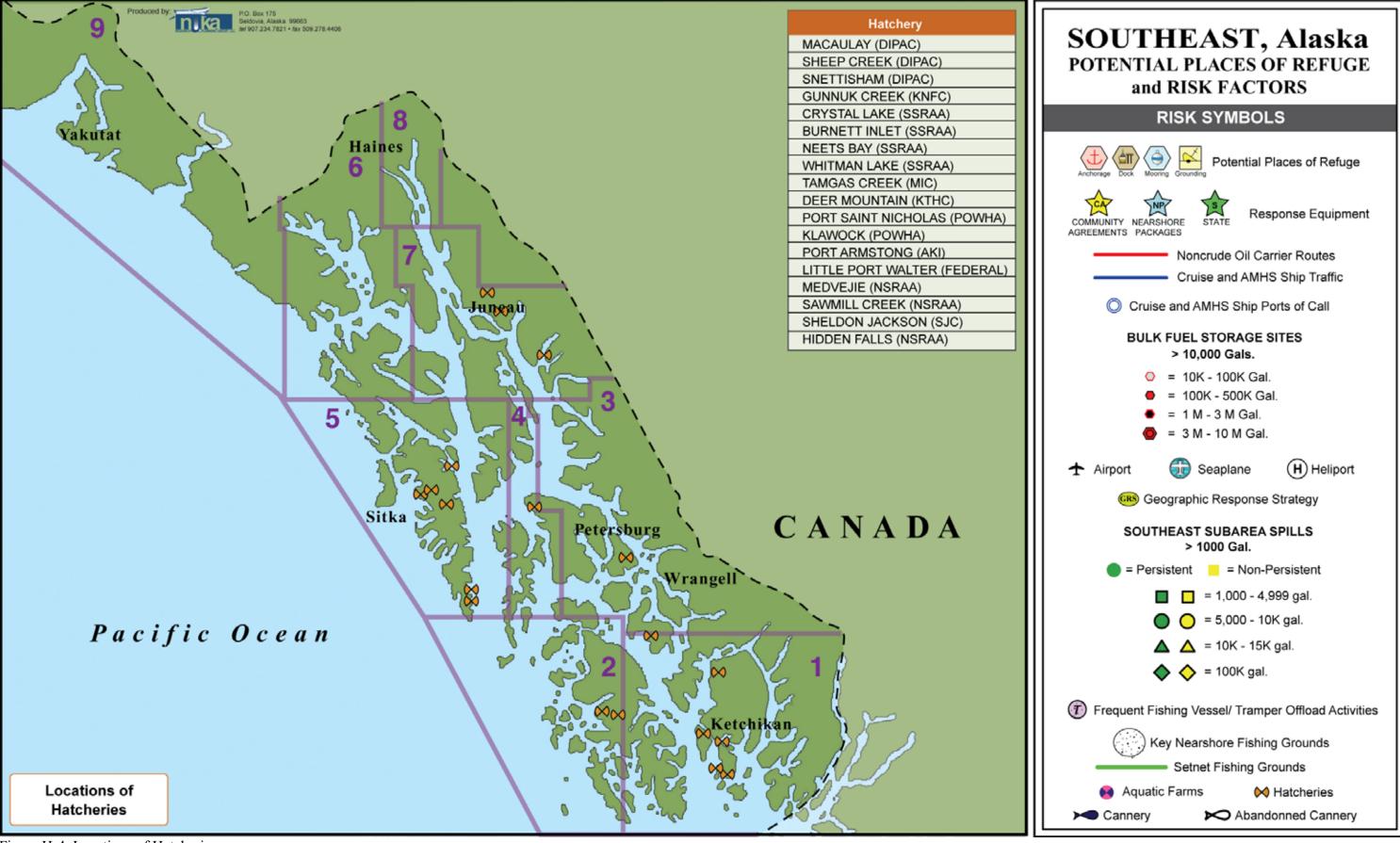


Figure H-4. Locations of Hatcheries.

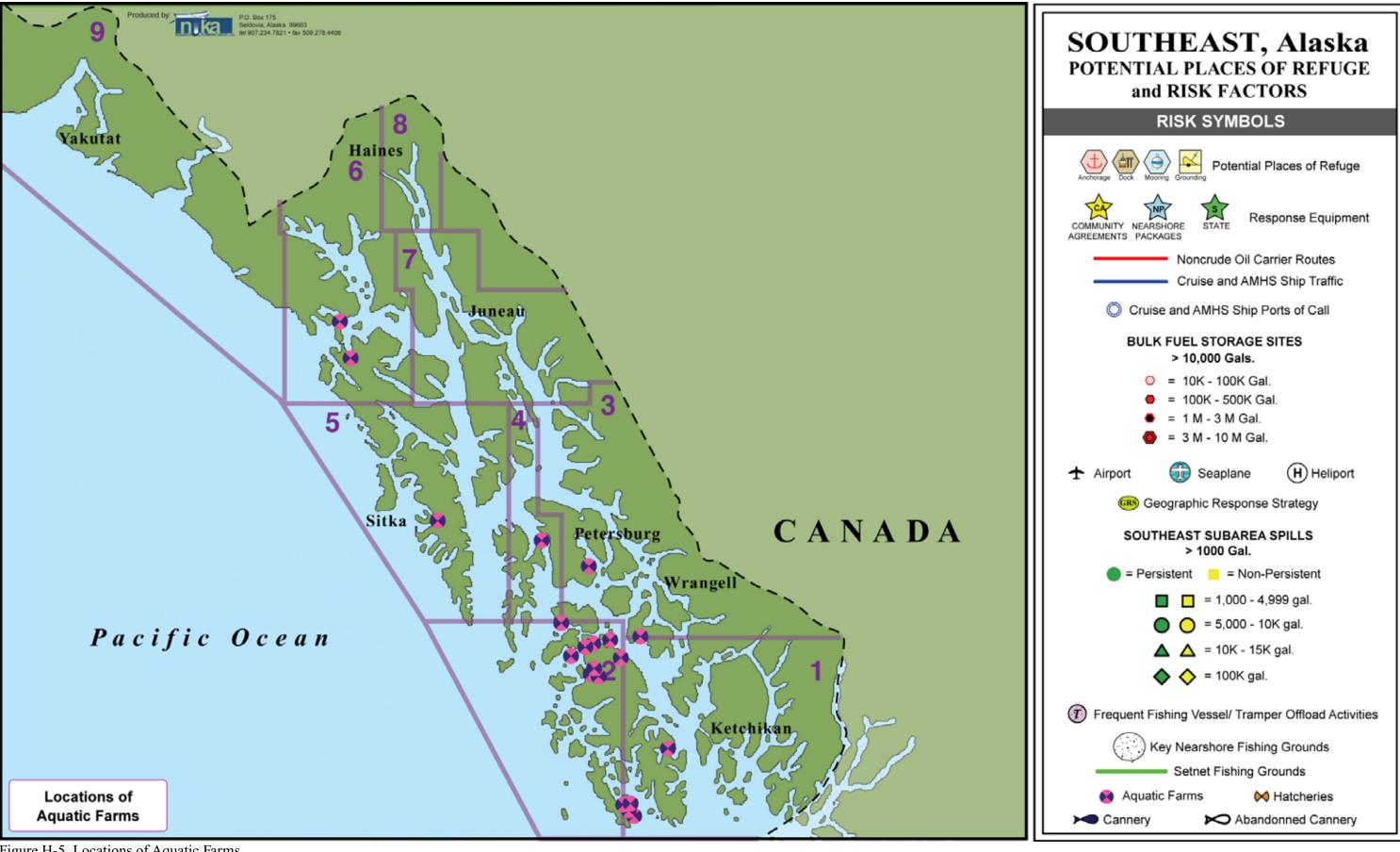


Figure H-5. Locations of Aquatic Farms.

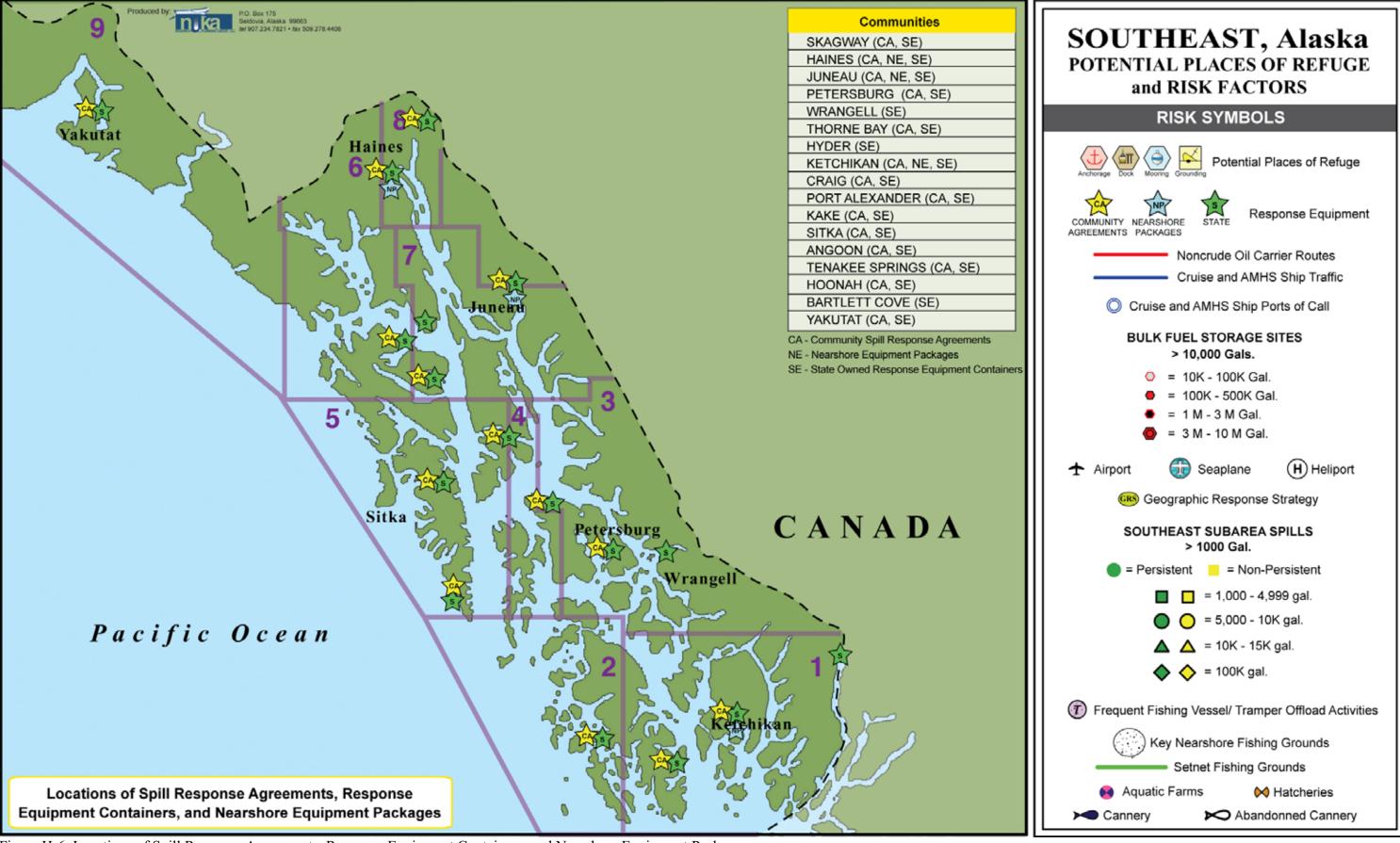


Figure H-6. Locations of Spill Response Agreements, Response Equipment Containers, and Nearshore Equipment Packages.

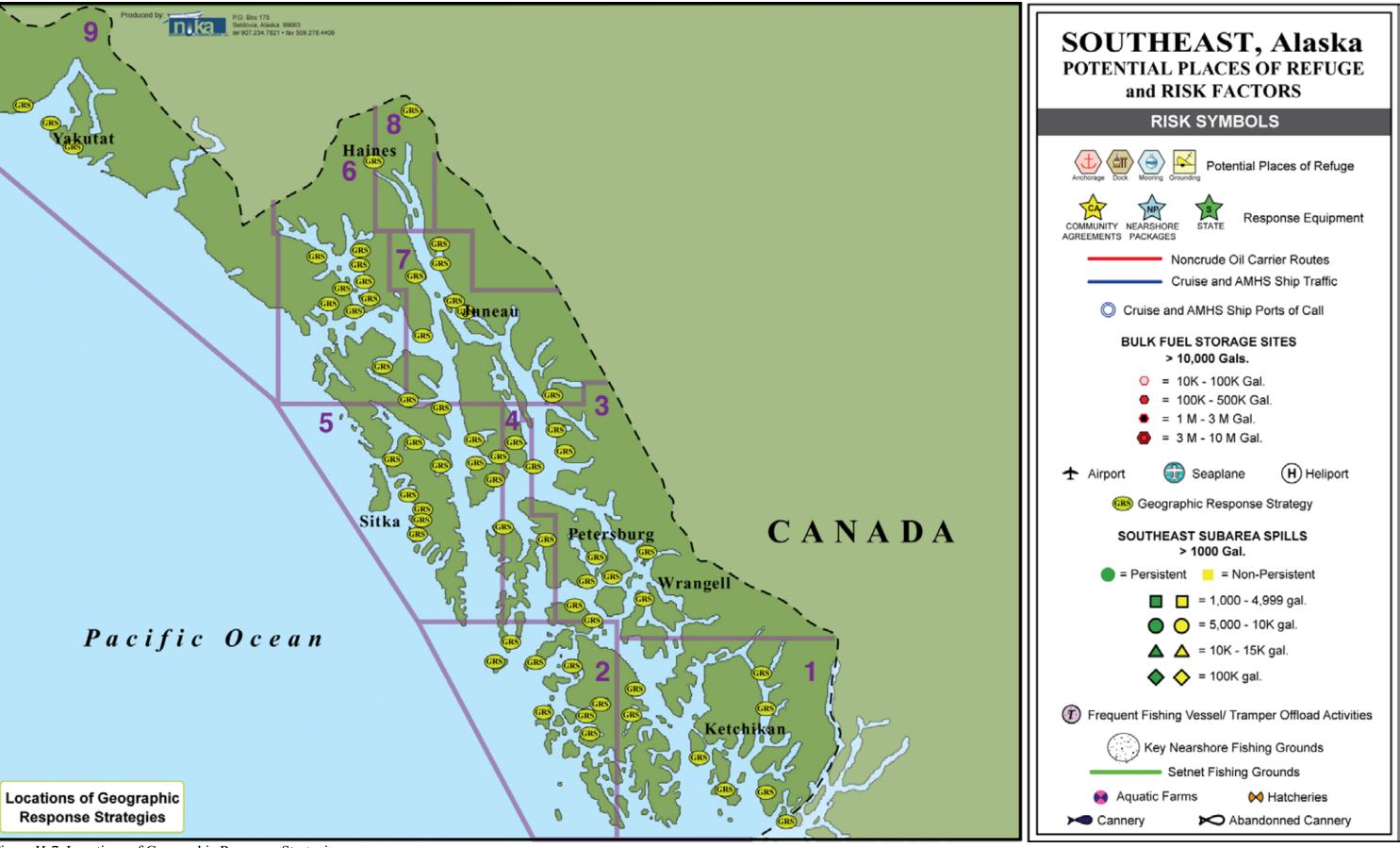


Figure H-7. Locations of Geographic Response Strategies.

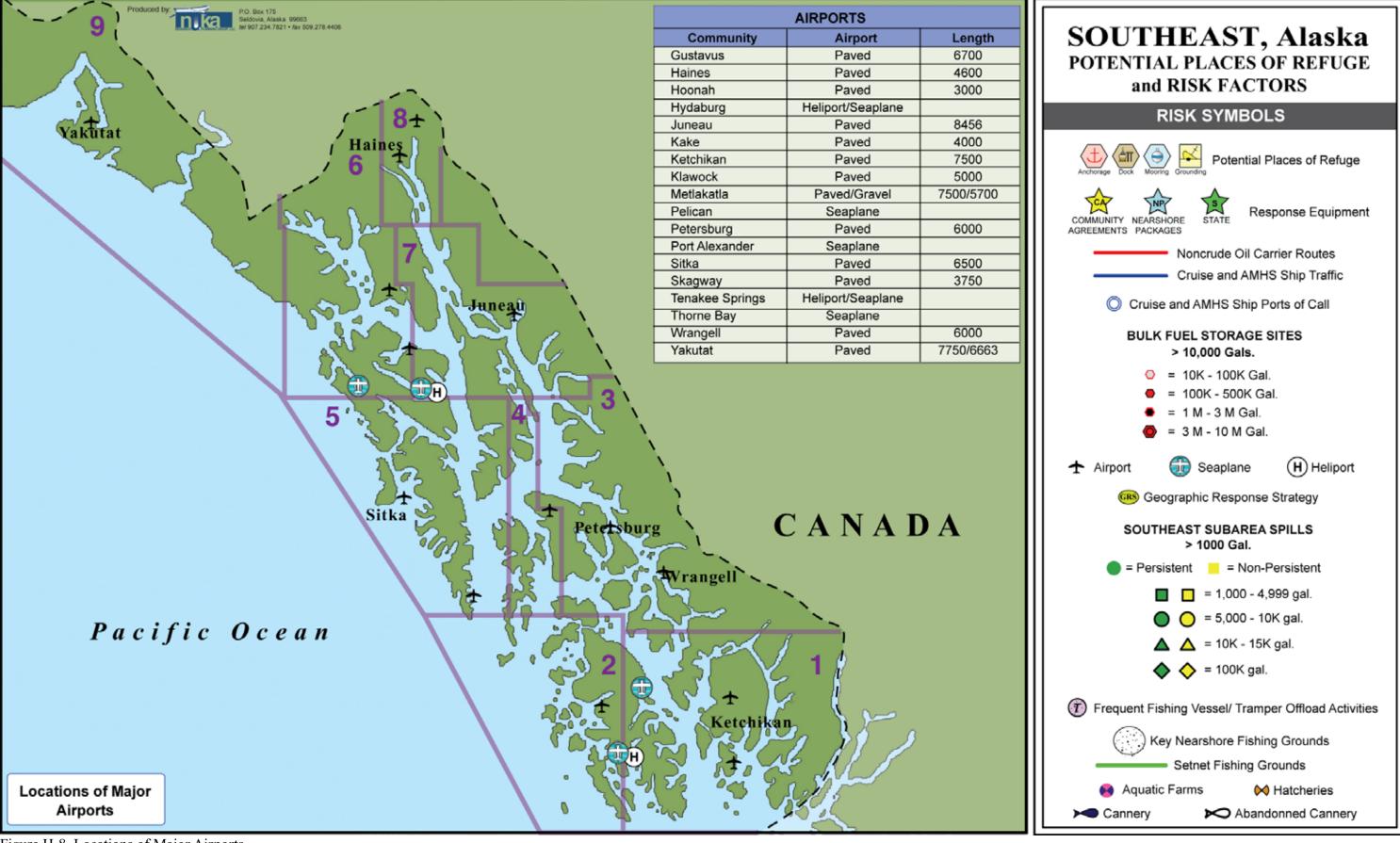


Figure H-8. Locations of Major Airports.

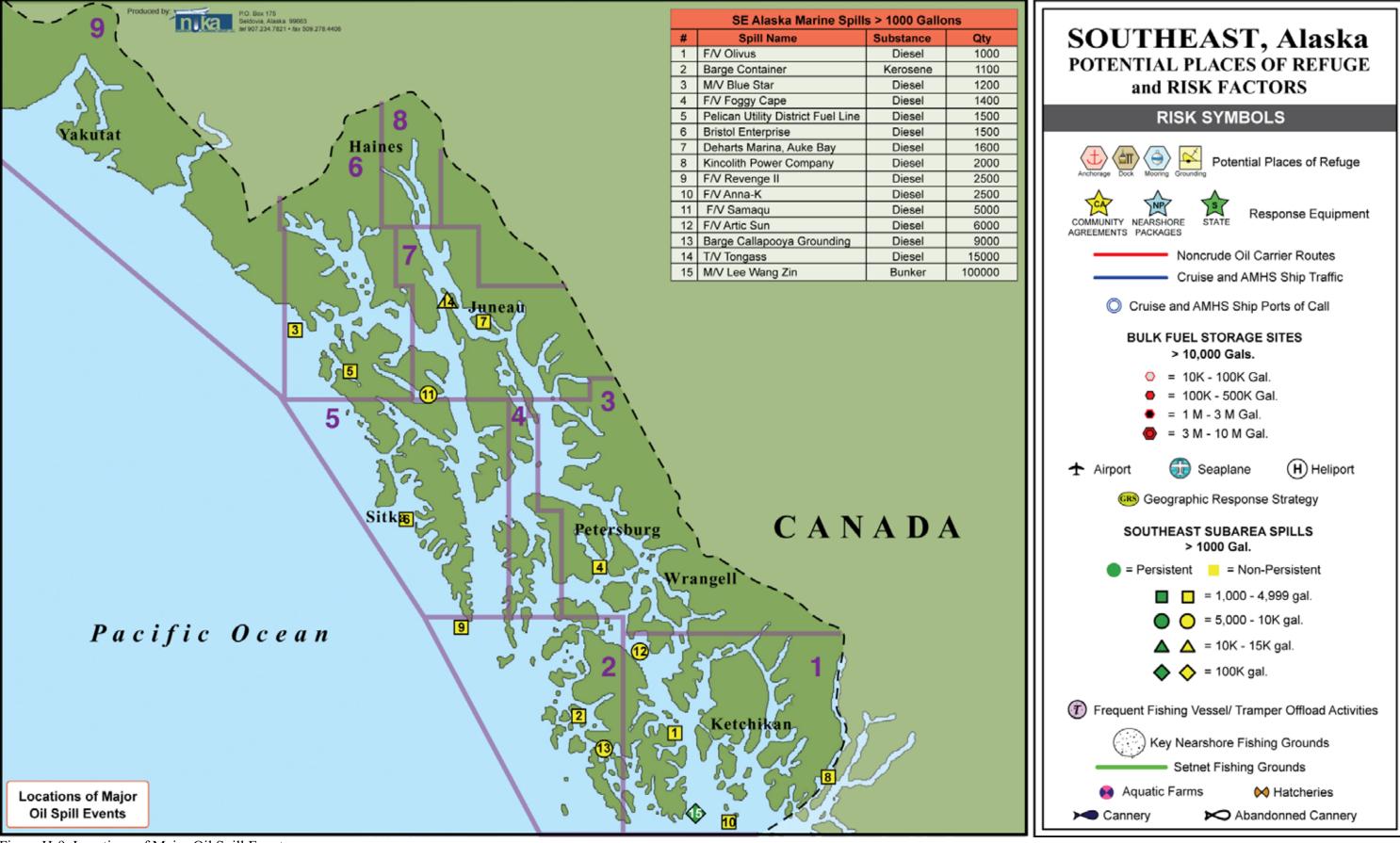


Figure H-9. Locations of Major Oil Spill Events.

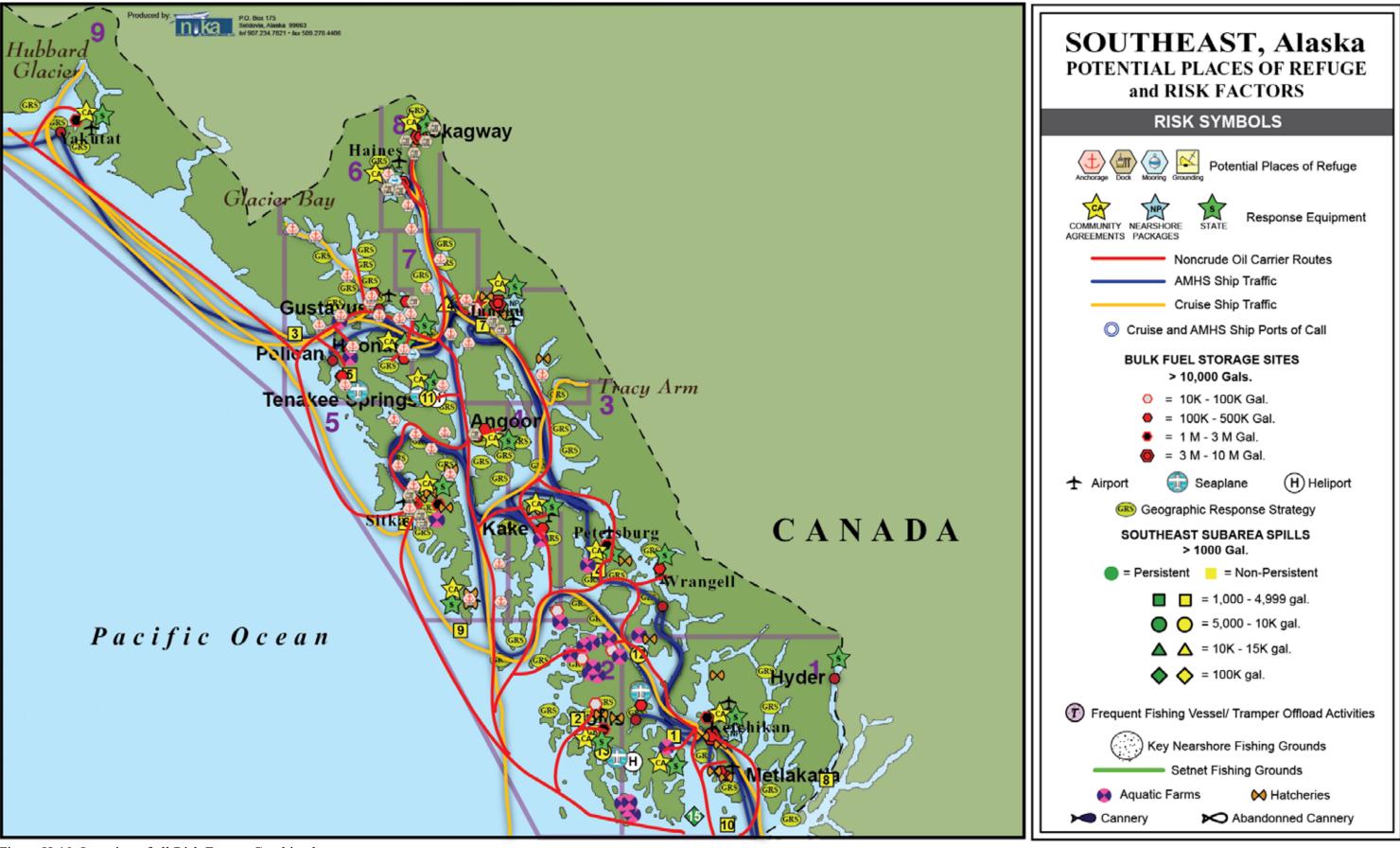


Figure H-10. Location of all Risk Factors Combined.

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POTENTIAL PLACES OF REFUGE: PART THREE – PPOR MAPS

Index of PPOR Maps

The PPOR Workgroup developed nine PPOR Maps within the Southeast Subarea to correspond with the response zones established by oil spill responders in the area. The maps aid in the site assessment process. These maps, larger in scale than the risk assessment maps in Part Two, show a small portion of the subarea in more detail. Figure H-11 provides an overview of the subarea, identifying the location of each PPOR map. Each one has been assigned an identifying number, which has no relevance other than as a map identifier.

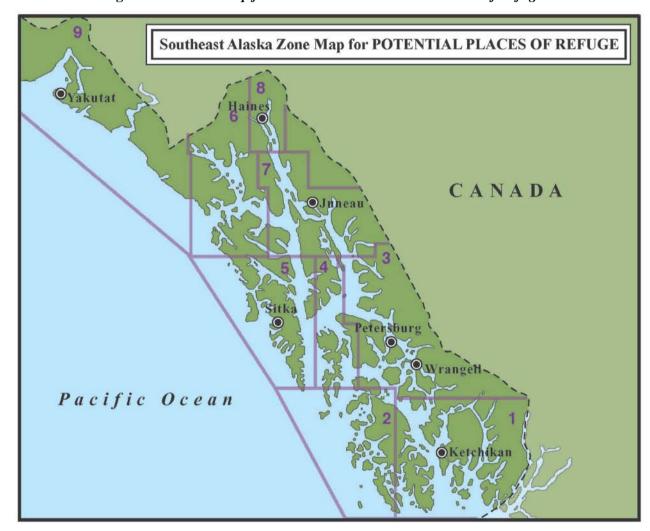


Figure H-11: Zone Map for Southeast Alaska Potential Places of Refuge.

PPOR Maps

Each PPOR map consists of two parts: 1) a graphic showing a locator map, pictures, and detailed nautical charts showing the location of anchorages, docks, and moorings and other information critical to the selection of a place of refuge; and 2) a series of tables providing site information regarding local site conditions, environmental sensitivities and other considerations.

The maps are presented below and are also available online:

Southeast PPOR Map Zone 1

http://www.dec.state.ak.us/spar/perp/seakpor/101221seppormap01LR.pdf

Southeast PPOR Map Zone 2

http://www.dec.state.ak.us/spar/perp/seakpor/101221seppormap02LR.pdf

Southeast PPOR Map Zone 3

http://www.dec.state.ak.us/spar/perp/seakpor/101221seppormap03LR.pdf

Southeast PPOR Map Zone 4

http://www.dec.state.ak.us/spar/perp/seakpor/101221seppormap04LR.pdf

Southeast PPOR Map Zone 5

http://www.dec.state.ak.us/spar/perp/seakpor/101221seppormap05LR.pdf

Southeast PPOR Map Zone 6

http://www.dec.state.ak.us/spar/perp/seakpor/101222seppormap06LR.pdf

Southeast PPOR Map Zone 7

http://www.dec.state.ak.us/spar/perp/seakpor/101222seppormap07LR.pdf

Southeast PPOR Map Zone 8

http://www.dec.state.ak.us/spar/perp/seakpor/101222seppormap08LR.pdf

Southeast PPOR Map Zone 9

http://www.dec.state.ak.us/spar/perp/seakpor/101222seppormap09LR.pdf



Port Chester and Metlakatla City Dock viewed from the southwest.



Alaska Ship & Drydock facilities viewed from the north.



Ward Cove viewed from the northeast.

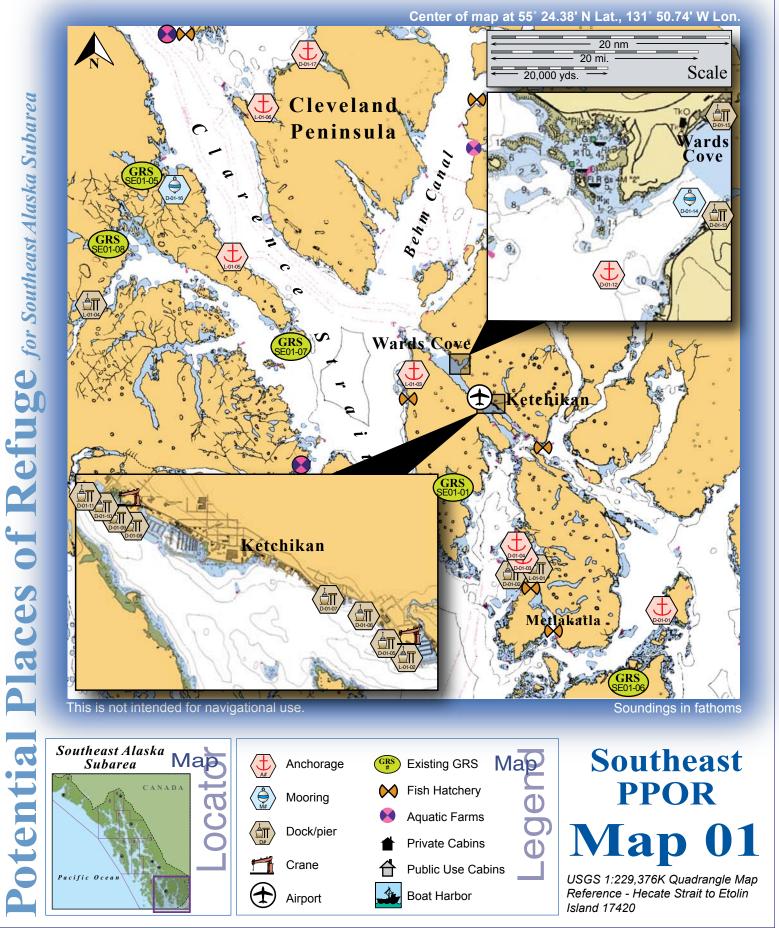


The Port of Ketchikan viewed from the southeast.



Tolstoi Bay Moorage viewed from the northeast.

Southeast Alaska SCP: PPOR, Part One



NUKA Research & Planning Group, LLC.

Harbor and supporting services are present in Metlakatla. Tongass National Forest Small Boat Harbor is ongass National Forest-waterfront facilities arine services docks ar piers in Metlakatla Weather Dependent SE01-05 Geographic Response Strategies

16 to D-01-17

Closest Alternative PPOR for a

					Site Cor	siderations for PF	OR Zone 01 of the So	utheast Alaska Subarea							
	Mary Island	Metlakatla City Dock	Port Chester	Nichols Passage	Ketchikan Berth 1&2	Ketchikan Berth 3	Ketchikan Berth 4	AK Marine Lines	Ferry Terminal-1	Ferry Terminal-2	Alaska Ship & Drydock	Ward Cove	Boyer Towing Dock	Ward Cove Mooring	Former Pulp Mill D
ID Number	D-01-01	D-01-02	D-01-03	D-01-04	D-01-05	D-01-06	D-01-07	D-01-08	D-01-09	D-01-10	D-01-11	D-01-12	D-01-13	D-01-14	D-01-15
Human Health & Safety	•		•	1	•		1		1					<u> </u>	<u> </u>
Community-distance to (nm)	23 to Ketchikan	0 to Metlakatla	.5 to Metlakatla	2.5 to Metlakatla	0 to Ketchikan	0 to Ketchikan	0 to Ketchikan	0 to Ketchikan	0 to Ketchikan	0 to Ketchikan	0 to Ketchikan	0 to Ketchikan	0 to Ketchikan	0 to Ketchikan	0 to Ketchikar
Health Care Facilities	Full Hospital Services in Ketchikan		Clinic Services in Metlakat	la		•		•	Full Hospital S	Services in Ketchika	n			•	•
Natural Resources Considerations	•				•										
Fish & Wildlife	Spawning salmon & herring, seals, waterfowl	Spa	awning salmon, seals, water	erfowl					Spawning salmon	& herring, seals, wat	erfowl				
Threatened & Endangered Species	·				I		١	lone (2010)							
Sensitive Areas	Adjacent area designated sensitive by SE GRS Workgroup	Not De	signated	Adjacent area designated sensitive by SE GRS Workgroup	1				Not	Designated					
Other Stakeholder Considerations					<u> </u>										
Fisheries	Salmon, Herring, Groundfish, Crab		Salmon, Groundfish, Cral	ס					Salmon, Herri	ng, Groundfish, Cra	b				
Historic Properties	Greatianen, Grab						Historic Properties a	re present throughout the area.							
Mariculture*	None		None						Hatchery operation	ns in the Ketchikan	area				
Subsistence	Low level subsistence use		High local subsistence us	e					Low level	subsistence use					
Tourism/Recreation						High level recreational us	e throughout the area-sport fi	shing, wildlife viewing, excursion	ns, camping, cruise ships, h	unting					
Waterfront Public Facilities/Parks	Tongass National Forest-No waterfront facilities	Small boat harbor and so	upporting services are pres National Forest	sent in Metlakatla. Tongass				Municipality owned small	boat harbor and supporting	services are preser	nt in Ketchikan Tongass	National Forest.			
Waterfront Private Facilities	None present	Marine s	services docks and piers in	Metlakatla					Numerous marine	services docks and	piers.				
Response and Salvage Resource Conside	eration														
Al-Weste Deeps Manage	N.		Marthan Barandari					Ver				Weather December	Vi-	Weather	
Ability to Boom Vessel	No		Weather Dependent					Yes				Weather Dependent	Yes	Dependent	Yes
Geographic Response Strategies	SE01-06	None	(2009)	SE01-01			1		No	ne (2009)	ī		1	1	1
Closest Alternative PPOR for a same sized vessel	23 to D-01-05	.5 to D-01-03	.5 to D-01-02	2.5 to D-01-02	.2 to D-01-06	.2 to D-01-07	.2 to D-01-06	.2 to D-01-09	.1 to D-01-10	.2 to D-01-10	.2 to D-01-09	.6 to D-01-14	.1 to D-01-14	.1 to D-01-13	.5 to D-01-14
		Site Consid	derations for PPOR	Zone 01 of the Southe	east Alaska Subarea	ı						nership informati			
	Tolstoi Bay Moorage	Vixen Inlet	Metlakatla Ferry Dock	Ketchikan Berth 1-C & 1-D	Vallenar Bay	Hollis Ferry Dock	Lyman Anchorage	Union Bay				e website: http://			
ID Number	D-01-16	D-01-17	L-01-01	L-01-02	L-01-03	L-01-04	L-01-05	L-01-06	cf.adfg.state.a	k.us/geninfo	/enhance/mai	ricult/maricult.ph	np		
Human Health & Safety		·													
Community-distance to (nm)	6 to Thorne Bay	17 to Thorne Bay	0 to Metlakatla	0 to Ketchikan	9 to Ketchikan	1 to Hollis	15 to Thorne Bay	14 to Thorne Bay		Site ID N	umber and Ve	essel Size Class	ification		
Health Care Facilities	Clinic Services	in Thorne Bay	Clinic Services in Metlakatla	Full Hospital Ser	vices in Ketchikan	EMS in Hollis	Clinic Service	es in Thorne Bay	D = Deep Draft	Vessel-length	s to 1,000 ft or g	reater, 20-40 ft of dr	raft, greater than 10	,000 GT	
Natural Resources Considerations			Wellakalla			<u> </u>			L = Light Draft \	essel-up to 4	50 feet in length,	draft up to 20 ft			
Fish & Wildlife	Spa	wning salmon, seals, waterfo	owl	Spawning salmon & h	erring, seals, waterfowl	Spawning salmon, seals, waterfowl	Spawning salmon &	herring, seals, waterfowl		Stakoholdo	re for PDOD	Zone 01 of the	Southoast Alas	ka Subaraa	
Threatened & Endangered Species				None	(2010)	Scals, wateriowi			·	Organizatio		Zone or or the s	Conta		
Эрешез	Adjacent area designated					Adjacent area			Alaska Depart			Resource Mar		<u> </u>	
Sensitive Areas	sensitive by SE GRS Workgroup		Not De	signated	designated sensitive by SE GRS Not Designated Not Designated Not Designated Not Designated Alaska Department of Natural Resources Resource Manager State His								ric Preservation	on Officer	
Other Stakeholder Considerations	rromgroup					Workgroup			Cape Fox Cor			CEO	lagor, otato i noto	110110001144	011 0111001
		0.4				Salmon, Groundfish,		0 15 1 0 1	Central Counc		la Tribal	President			
Fisheries		Salmon, Groundfish, Crab		Salmon, Herring,	Groundfish, Crab	Crab	Salmon, Herring	g, Groundfish, Crab	City of Hydabu		ia mai	Mayor			
Historic Properties				Historic Properties are pre	esent throughout the area.				City of Ketchik			Manager			
Mariculture*		None	·	Hatchery operations			None		Hydaburg Coo		ociation	President			
Subsistence	High local subsistence	Low level subsistence use	High local subsistence	l ow level su	osistence use	High local	l ow level s	ubsistence use	Haida Corpora	•		President			
	activities		activities			subsistence activities		220.000100 000	Ketchikan Gat		jh	Manager			
Tourism/Recreation		High	level recreational use thro	ughout the area-sport fishing	, wildlife viewing, excursio	ns, camping, cruise ships	s, hunting		Katabilan Indi			Descident			

Ketchikan Indian Corporation President Metlakatla Indian Community Mayor Native Allotments Dept of the Interior-Regional Environmental Officer

President

President

Forest Supervisor

Mayor

Tables continued on next page.

.2 to D-01-02

16 to D-01-16

Municipality owned small boat harbor and

Numerous marine services docks and piers

.2 to D-01-05

None (2009)

Fongass National Forest

Weather Dependent

8 to D-01-13

Hollis Ferry dock and

SE01-08

26 to L-01-05

Tongass National Forest-No waterfront facilities

Weather Dependent

None (2009)

16 to L-01-05

17 to L-01-03

Organized Village of Kasaan

Sealaska Corporation

Tongass National Forest

Thorne Bay

Table continued

Ice

			Physic	al and Operational Chara	cteristics for PPOR	Map 01 of the Sout	heast Alaska Subare	a			
	Mary Island	Metlakatla City Dock	Port Chester	Nichols Passage	Ketchikan Berth 1&2	Ketchikan Berth 3	Ketchikan Berth 4	AK Marine Lines	Ferry Terminal-1	Ferry Terminal-2	Alaska Ship & Drydock
D Number	D-01-01	D-01-02	D-01-03	D-01-04	D-01-05	D-01-06	D-01-07	D-01-08	D-01-09	D-01-10	D-01-11
Location (in the general area)	55°03.23'N 131°16.25'W	55°07.74'N 131°34.14'W	55°07.92'N 131°33.48'W	55°09.98'N 131°36.70'W	55°20.40'N 131°38.76'W	55°20.58'N 131°39.00'W	55°20.64'N 131°39.36'W	55°21.12'N 131°41.40'W	55°21.24'N 131°41.70'W	55°21.30'N 131°41.76'W	55°21.30'N 131°41.94'W
Maximum Vessel Size		1	•	De	ep Draft Vessels- lengths to	1000 feet or greater, 20-40 fee	et of draft, greater than 10,000	GT	•	1	1
Type of Berthing	Anchorage	Dock	A	nchorage				Dock			
Contact	Harbormaster 907.874.3736	Harbormaste	r 907.866.4646	N/A		Harbormaster 907.228.5632	2	Manager 907.225.7660	Terminal Mana	ger 907.225.6182	Director 907.225.7199
Navigational Approach	Approach from the SW or N	Approach from the	N via marked channel	Approach from the S or N			NW or SE via	marked channel-Approach ha	as little maneuvering room.		
Minimum Water Depths (MLLW)	32 fathoms	35 ft.	21 fathoms	23 fathoms	30-40 ft.	40 ft.	35 ft.	35 ft.	35 ft.	40 ft.	35 ft.
Maximum Vessel Draft	40 ft. +	30 ft.	40 ft. +	40 ft. +	30 ft.	35 ft.	30 ft.	30 ft.	30 ft.	35 ft.	30 ft.
Swing Room or Dock Face (w/ dolphins)	6000 ft.	400 ft.	2800 ft.	3000 ft.	1605 ft.	575 ftface 864 fttotal	400 ftface 850 fttotal	400 ft.	550 ft.	450 ft.	560 ft.
Bottom Type	Sand, gravel	N/A	Mud, rocky	Gravel				N/A			
Nearest Alternative Dock/Piers	23 nm to D-01-05	13.5 nm to D-01-05	13 nm to D-01-05	13 nm to D-01-05	.2 nm to D-01-06	.2 nm to D-01-07	.2 nm to D-01-06	.2 nm to D-01-09	.1 nm to D-01-10	.1 nm to D-01-09	.2 nm to D-01-09
Nearest Alternative Anchorage	24 nm to D-01-02	.5 nm to D-01-03	2.5 nm to D-01-04	2.5 nm to D-01-03	5 nm to D-01-12	4.5 nm to D-01-12	4 nm to D-01-12	3 nm to D-01-12	2.8 nm to D-01-12	2.8 nm to D-01-12	2.6 nm to D-01-12
Prevailing Winds				Strongest winds		and SE. May through Septem rcent of the time from Octobe	ber NW winds dominate. E ar r through February	d SE winds blow			
Currents	Tidal currents at the anchorage under 1.5 knots	Currents under 1 knot	Minimal current at the anchorage.	Minimal current at the anchorage.		The tida	al current in Tongass Narrows	is generally weak. Areas arou	und Idaho Rock report currents a	pprox. 2.5 knots.	
Tides	Mean High 14.5 ft. (Higher 15.4) Mean Low 1.5(Lower - 4.5)	Mean High	13.8 ft. (Higher 14.7) Mean Lo	w 1.5 (Lower -4.5)			Mean Hi	gh 14.5 ft. (Higher 15.4) Mear	n Low 1.6 (Lower 0.0)		
Sea Conditions	Exposed to swells from the NE	She	ltered	Sheltered				Sheltered			
Shelter from Severe Storms	Sheltered from E-W storms			Sheltered from E & W storms				Sheltered			
Fog				Freque	nt throughout the year. Advec	ction fog may present problem	ns, particularly from July to Se	ptember.			
Ice					Ice may form in bays f	rom November until May if	colder conditions prevail.				

				Physical and Opera	tional Characteristic	s for PPOR Map 01 o	f the Southeast Alas	ska Subarea				
	Ward Cove	Boyer Towing Dock	Ward Cove Mooring	Former Pulp Mill Dock	Tolstoi Bay Moorage	Vixen Inlet	Metlakatla Ferry Dock	Ketchikan Berth 1-C & 1-D	Vallenar Bay	Hollis Ferry Dock	Lyman Anchorage	Union Bay
D Number	D-01-12	D-01-13	D-01-14	D-01-15	D-01-16	D-01-17	L-01-01	L-01-02	L-01-03	L-01-04	L-01-05	L-01-06
Location (in the general area)	55°23.52'N 131°44.76'W	55°23.82'N 131°43.68'W	55°23.88'N 131°43.92'W	55°24.36'N 131°43.56'W	55°38.84'N 132°26.06'W	55°49.94'N 132°06.81'W	55°07.14'N 131°32.82'W	55°20.33'N 131°38.64'W	55°23.50'N 131°51.39'W	55°29.47'N 132°37.51'W	55°32.70'N 132°17.31'W	55°45.01'N 132°12.17'W
Maximum Vessel Size		Deep Draft Vess	sels- lengths to 1000 feet or gr	eater, 20-40 feet of draft, greater	than 10,000 GT				Light Draft Vessel - up to 45	50 feet in length, draft up to 20 f	eet	
Type of Berthing	Anchorage	Dock	Mooring	Dock	Mooring	Anchorage	De	ock	Anchorage	Dock	Anch	orage
Contact	N/A	Terminal Manaç	ger 907.225.2090	907.228.6618	Sealaska Corp. 907.225.9444	N/A	Terminal Manager 907.225.6182	Harbormaster 907.228.5632	N/A	Terminal Manager 907.225.6182	1	I/A
Navigational Approach		Approa	ach from the E		Approach from the N	Approach from the E-NW	Approach from the W via marked channel	NW or SE via marked channel-Approach has little maneuvering room.	Approach from the N	NW from Kasaan Bay	Approach from the N-SW	Approach from the N
Minimum Water Depths (MLLW)	30 fathoms	40 ft.	26 fathoms	30 ft.	73 fathoms	28 fathoms	24 ft.	20 ft.	32 fathoms	25 ft.	9 fathoms	34 fathoms
Maximum Vessel Draft	40 ft+.	35 ft.	40 ft.+	25 ft.	40	0 ft.+	20 ft.	15 ft.	20 ft. +	2) ft.	20 ft. +
Swing Room or Dock Face (w/ dolphins)	1500 ft.	750 ft.	600 ft.	800 ft.	1800 ft.	3000 ft.	280 ft.	860 ft.	3000 ft.	200 ft.	1500 ft.	2400 ft.
Bottom Type	Mud			N/A		Rocky	N	N/A	Sand	N/A	Rocky	Sand, gravel
Nearest Alternative Dock/Piers	1.5 nm to D-01-13	0.7 to D-01-15	0.6 nm to D-01-13	0.5 nm to D-01-13	31 nm to D-01-13	37 nm to D-01-13	1 nm to D-01-02	.2 nm to D-01-05	8 nm to D-01-13	33 nm to D-01-13	20 nm to D-01-13	35 nm to D-01-13
Nearest Alternative Anchorage	0.6 nm to D-01-14	0.7 nm to D-01-13	0.6 nm to D-01-12	0.5 nm to D-01-14	16 nm to D-01-17	16 nm to D-01-16	1 nm to D-01-03	4 nm to D-01-12	13 nm to D-01-12	26 nm to L-01-05	17 nm to L-01-03	16 nm to L-01-05
Prevailing Winds				8		out of the N, E, and SE. May t nore than 50 percent of the tin			s blow			
Currents	The tidal current in Tonga	ass Narrows is generally weak	k. Areas around Idaho Rock re	port currents approx. 2.5 knots.	Minimal current at moorage.	Minimal current at anchorage.	Currents under 1 knot.	The tidal current in Tongass Narrows is generally weak.	Minimal current at anchorage.	. Currents under 1 knot.	Minimal currer	nt at anchorage.
Tides	Mean High 14.8 ft. (Higher 15.7) Mean Low 1.6 (Lower -5.5)				Mean High 14.8 ft. (Highe 15.7) Mean Low 1.5 (Lower -4.5)	Mean High 15.7 ft. (Higher 16.5) Mean Low 1.5 (Lower -4.5)	Mean High 13.8 ft. (Higher 14.7) Mean Low 1.5 (Lower -4.5)	Mean High 14.5 ft. (Higher 15.4) Mean Low 1.6 (Lower 0.0)	Mean High 14.4 ft. (Higher 15.3) Mean Low 1.4 (Lower -4.5)	Mean High 14.7 ft. (Higher 1	5.6) Mean Low 1.6 (Lower -4.5)	Mean High 15.7 ft. (Higher 16.5) Mean Low 1.5 (Lower -4.5)
Sea Conditions	Sheltered				Sheltered from NW-SE			Sheltered from NW-SE		Sheltered from the W-E	Sheltered from W-E	
Shelter from Severe Storms			Sheltered			Exposed to swell from the W-N	She	ltered	Exposed to the NW-N	Sheltered	Exposed to the N	Exposed to swell from the N
Fog					Frequent throughout	the year. Advection fog may	present problems, particularl	ly from July to September.		•		

Ice may form in bays from November until May if colder conditions prevail.

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Crab Bay, Klawock & Craig viewed from the north.



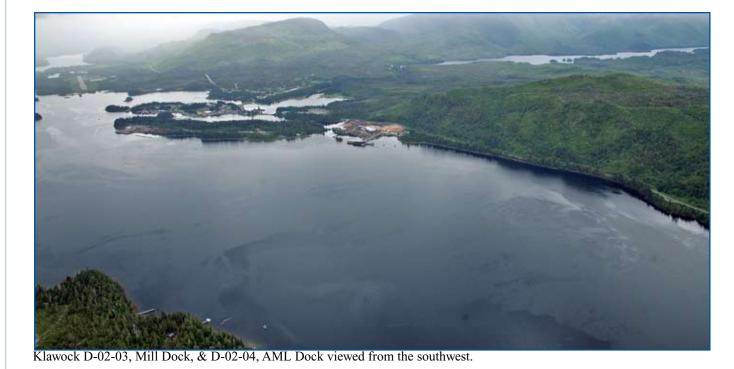
Admiralty Mine dock viewed from the north.

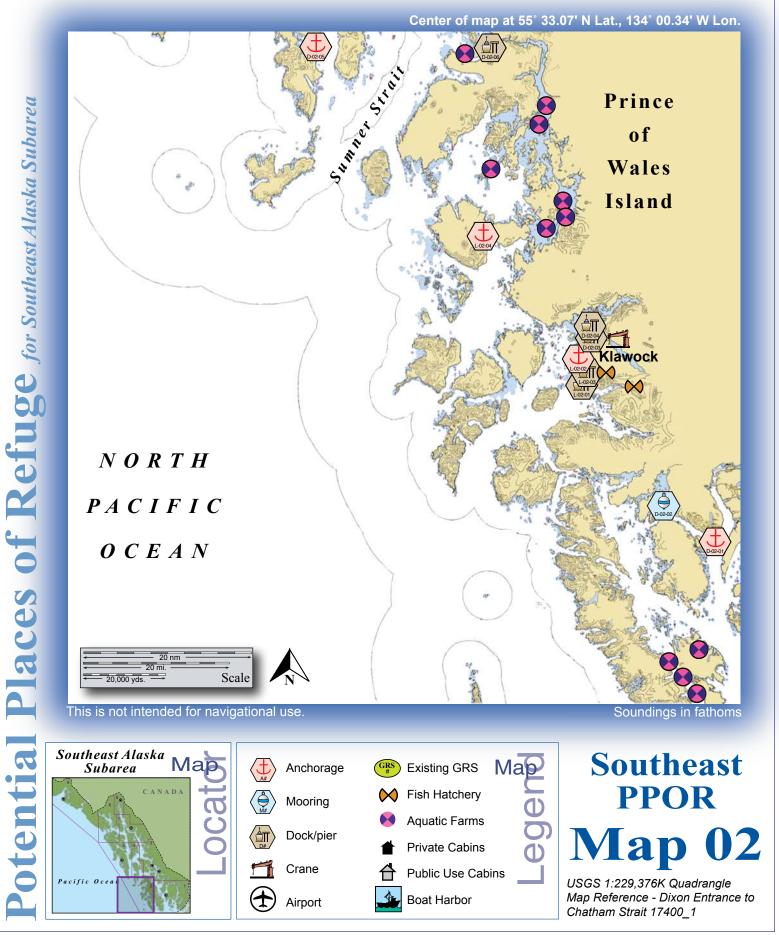


Craig viewed from the north.



Saltery Point Moorage viewed from the north.





NUKA Research & Planning Group, LLC.

			Site Considera	ations for PPOR Zone	02 of the Southeas	st Alaska Subarea				
	Alder Cove Anchorage	Saltery Point Moorage	Klawock Mill Dock	Klawock AML Dock	Kell Bay	Admiralty Mine Dock	Craig City Dock	Crab Bay Anchorage	Petro-Marine Dock	Warm Chuck In
ID Number	D-02-01	D-02-02	D-02-03	D-02-04	D-02-05	D-02-06	L-2-01	L-2-02	L-2-03	L-2-04
ıman Health & Safety										
Community-distance to (nm)	7 to Hydaburg	1.5 to Hydaburg	0 to Klawock	0 to Klawock	55 to Craig	63 to Craig	0 to Craig	0.3 to Craig	0 to Craig	22 to Craig
Health Care Facilities	Clinic Service	es in Hydaburg	Clinic Service	es in Klawock			Clinic service	es in Craig		
tural Resources Considerations	!	'		<u>'</u>						
Fish & Wildlife	Spawning salmon & herring, seals, waterfowl	Spawning salmon, seals, waterfowl	Spawning salmon & h	erring, seals, waterfowl	Spawning salmor	n, seals, waterfowl	Spawr	ning salmon & herring, seals, water	fowl	Spawning salmo seals, waterfow
Threatened & Endangered Species					None (20	10)				
Sensitive Areas	Not Designated	Saltery Point-Crab Trap Cove Area Meriting Special Attention		Not Desig	nated		Adjacent area designated	important habitat by Craig Coastal	Management Program	Not Designate
ner Stakeholder Considerations		<u>. </u>								
Fisheries	Salmon, Groundfish, Crab	Salmon, Groundfish, Crab	Salmon, Herring,	, Groundfish, Crab	Salmon, Gro	undfish, Crab	S	almon, Herring, Groundfish, Crab		Salmon, Groundt Crab
Historic Properties		.		ŀ	Historic Properties are prese					
Mariculture*	None	None	Hatchery opera	tions in the area.	None	Mariculture activities in the area		Hatchery operations in the area.		None
Subsistence	Low level subsistence use	1	High local subsistence use		Low level sul	bsistence use		High local subsistence use		Low level subsiste use
Tourism/Recreation			High	n level recreational use through	out the area-sport fishing, w	rildlife viewing, excursions, ca	imping, cruise ships, hunting			
Waterfront Public Facilities/Parks	Tongass National Forest-No waterfront facilities	Small boat harbor and supporting services are present in Hydaburg. Tongass National Forest		boat harbor and supporting lock. Tongass National Forest.	Tongass National Fore	st, no services available	Municipality owned small boar	harbor and supporting services ar National Forest.	e present in Craig. Tongass	Tongass Nation Forest, no servic available.
Waterfront Private Facilities	None present	Marine services docks and piers in Hydaburg.	Additional marine services	docks and piers in Klawock.	None	present	Additional	marine services docks and piers in	n Craig.	None present
sponse and Salvage Resource Consideration	n									
Ability to Boom Vessel	No	Weather Dependent	Yes	Yes	No	Yes	Yes	Weather Dependent	Yes	Weather Depend
Geographic Response Strategies		,			None (20	10)		1	.	1
Closest Alternative PPOR for a same sized vessel	7 to D-02-02	7 to D-02-01	.75 to D-02-04	.75 to D-02-03	27 to D-02-06	27 to D-02-05	.75 to L-02-03	.2 to L-02-03	.2 to L-02-02	22 to L-02-02

Geographic Response Strategies Closest Alternative PPOR for a same sized vessel	7 to D-02-02 Alder Cove Anchorage	7 to D-02-01 Physical	.75 to D-02-04	.75 to D-02-03	None (2010 27 to D-02-06	27 to D-02-05		1					
vessel	/ to D-02-02			.75 to D-02-03	27 to D-02-06	27 to D-02-05			None (2010)				
	Alder Cove Anchorage	Physical	and Operational C			27 to D-02-03	.75 to L-02-03	.2 to L-02-03	.2 to L-02-02	22 to L-02-02			
	Alder Cove Anchorage		•	haracteristics for F	PPOR Map 02 of the	Southeast Alaska	Subarea						
7		Saltery Point Moorage	Klawock Mill Dock	Klawock Island Dock	Kell Bay	Admiralty Mine Dock	Craig City Dock	Crab Bay Anchorage	Petro-Marine Dock	Warm Chuck Inlet			
ID Number	D-02-01	D-02-02	D-02-03	D-02-04	D-02-05	D-02-06	L-02-01	L-02-02	L-02-03	L-02-04			
Location-(In the general area of) 5	55°06.84'N 132°38.58'W	55°11.10'N 132°48.24'W	55°32.40'N 133°06.42'W	55°33.24'N133°06.66'W	56°09.48'N134°06.36'W	56°09.60'N133°28.08'W	55°28.62'N133°09.24'W	55°29.04'N133°09.00'W	55°29.28'N133°08.52'W	55°45.36'N133°29.82'W			
Maximum Vessel Size		Deep Draft Vessels- lengt	hs up to 1000 feet, 20-40	feet of draft, greater than	10,000 GT		Light	Draft Vessel - up to 450 fe	eet in length, draft up to 2) feet			
Type of Berthing	Anchorage	Moorage	Do	ock	Anchorage	Do	ck	Anchorage	Dock	Anchorage			
Contact	N/A	Sealaska Timber Corp. 907.225.9444	Viking Lumber Co. 907.755.8880	Office 907.225.9444	N/A	Select Resources Inc.1800.579.9314	Harbor master 907.826.3404	N/A	Plant Manager 907.826.3296	N/A			
Navigational Approach	Approach from the SW	SE through Sukkwan Strait		channel from San Alberto ay	Approach from the E via Affleck Canal	Approach via Shakan Strait	Approach via	marked channel from Sa	n Alberto Bay	Approach from the SE			
Minimum Water Depths (MLLW)	9 fathoms	6 fathoms	42 feet	37 feet	11 fathoms	34 feet	20 feet	9 fathoms	20 feet	18 fathoms			
Maximum Vessel Draft	40 ft. +	30 ft.	35 ft.	30 ft.	40 ft. +	30 ft.	15 ft.	20 ft. +	15 ft.	20 ft. +			
Swing Room or Dock Face (w/ dolphins)	3000 ft.	800 ft.	500 ft. face 900 ft. total	440 ft.	3000 ft.	250 ft.	72 ft.	1200 ft.	100 ft.	1800 ft.			
Bottom Type	Mud, Shells	N/A		N/A	Mud	N/A	N/A	Mud	N/A	Rocky			
Nearest Alternative Dock/Piers 73 n	nm to D-01-02 (Metlakatla)	80 nm to D-01-02 (Metlakatla)	0.75 nm to D-02-04	0.75 nm to D-02-03	28 nm to D-02-06	55 nm to D-02-03	0.75 nm to L-02-02	0.5 nm to L-02-01	0.75 nm to L-02-01	20 nm to L-02-01			
Nearest Alternative Anchorage	7.5 nm to D-02-02	7.5 nm to D-02-01	50 nm to D-02-05	50 nm to D-02-05	53 nm to D-03-02	28 nm to D-02-05	0.5 nm to L-02-02	20 nm to L-02-04	0.5 nm to L-02-02	20 nm to L-02-02			
Prevailing Winds		Strongest winds are usu	ually out of the N, E, and	SE. May through Septemb	per NW winds dominate. E	and SE winds blow more	than 50 percent of the tim	ne from October through F	ebruary				
Currente	t currents in the Inlet. Minimal	The average maximum current is about 1.3 knots and sets NW with the flood and SE with the ebb.	Minimal curren	ats at the docks.	Minimal currents at the anchorages	currents unreported at the dock.	Light currents. The flood	current sets toward the w sets off the wharf.	harf and the ebb current	Light currents in the Strait. Minimal currents at the anchorages			
	Mean High 11.8 ft. (Higher 12.7) Mean Low 1.5 (Lower -4.0) Mean Low 1.5 (Lower -4.0) Mean High 12.0 ft. (Higher 10) Mean Low 0.0 (Lower -4.0) Mean High 10.4 ft. (Higher 11.2) Mean Low 1.5 (Lower -4.0) Mean High 10.9 ft. (Higher 11.7) Mean Low 1.3 (Lower -4.0) Mean High 10.9 ft. (Higher 11.7) Mean Low 1.3 (Lower -4.0)								Mean High 9.3ft. (Higher 10.2) Mean Low 0.0 (Lower -4.0)				
Sea Conditions Expos	osed to swells from the N & S	Sheltered	Chal	Itered	Sheltered	Sheltered		Sheltered		Exposed to swell from the SE			
Shelter from Severe Storms She	neltered from E & W storms	SHellered	Sile	ilereu	Sileileieu	Shellered		Sileileieu		Sheltered from storms from the SW-SE			
Fog				Frequent	throughout the year. Heav	riest from June-July.							
Ice				Ice can form in bay	ys from November until Ma	ay if colder conditions prev	ail.						

Site ID Number and Vessel Size Classification

D = Deep Draft Vessel-lengths to 1,000 ft or greater, 20-40 ft of draft, greater than 10,000 GT

L = Light Draft Vessel-up to 450 feet in length, draft up to 20 ft

	PPOR Zone 02 of the laska Subarea
Organization	Contact
Alaska Department of Fish & Game	Resource Manager
Alaska Department of Natural Resources	Resource Manager, State Historic Preservation Officer
Central Council Tlingit-Haida Tribal	President
City of Craig	Mayor
City of Klawock	Mayor
Klawock Heenya Corporation	President
Native Allotments	Dept of the Interior-Regional Environmental Officer
Sealaska Corporation	President
Shaan-Seet Inc.	President
Tongass National Forest	Forest Supervisor

*For current mariculture operations, ownership information and locations, consult the ADF&G mariculture website: http://www.cf.adfg.state.ak.us/geninfo/enhance/maricult/maricult.php



L-03-03, anchorage area near Salmon Bay viewed from the north.



Steamer Bay viewed from the south.



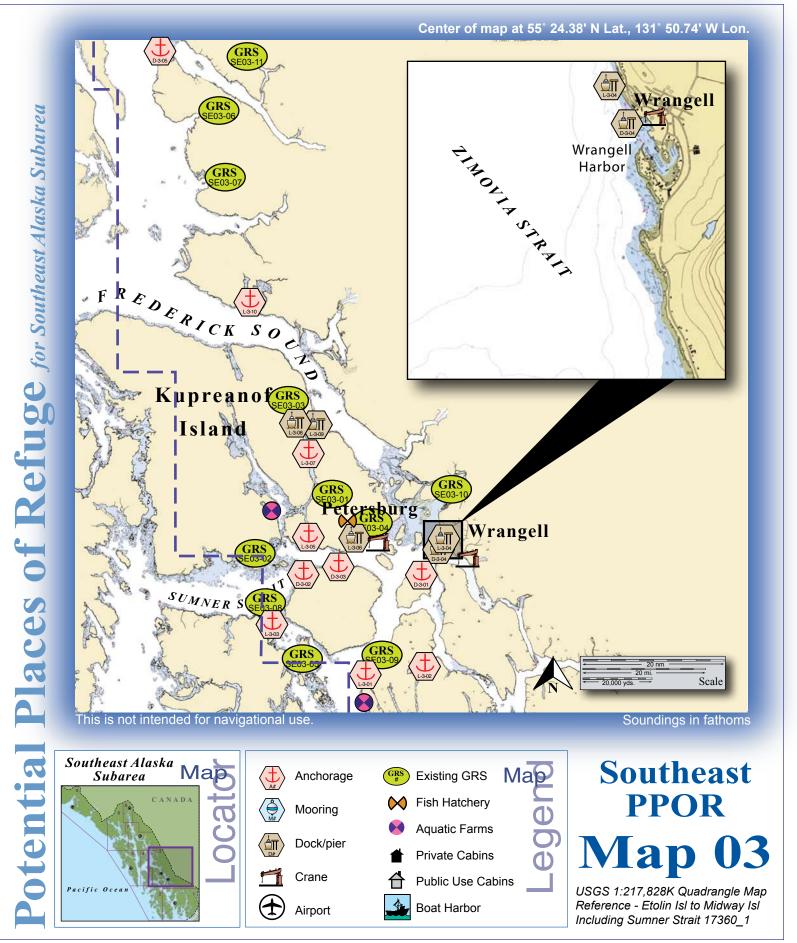
Wrangell Cruiseship Wharf, Ferry Dock and Woronkofski Anchorage viewed from the east.



Petersburg Ferry Terminal and Scow Bay Anchorage viewed from the north.



Entrance to Farragut Bay, L-03-10, viewed from the northwest.



NUKA Research & Planning Group, LLC.

					Site Conside	rations for PPOR	Zone 03 of the S	Southeast Alask	a Subarea						
	Woronkofski Island	St. John Harbor	Baht Harbor	Wrangell Cruise Vessel Wharf	Holkum Bay	Steamer Bay	Anita Bay	Near Salmon Bay	Wrangell Ferry Terminal	Point Alexander	South Mitkof Ferry Terminal	Scow Bay Anchorage	Petersburg Ferry Dock	Petersburg Ocean Beauty Dock	Farragut Bay
ID Number	D-3-01	D-3-02	D-3-03	D-3-04	D-3-05	L-3-01	L-3-02	L-3-03	L-3-04	L-3-05	L-3-06	L-3-07	L-3-08	L-3-09	L-03-10
man Health & Safety															
Community-distance to (nm)	2.5 to Wrangell	20 to Wrangell	14 to Wrangell	0 to Wrangell	40 to Juneau	24 to Wrangell	17 to Wrangell	30 to Wrangell	0 to Wrangell	20 to Wrangell	12 to Wrangell	2.5 to Petersburg	0 to Petersburg	0 to Petersburg	23 to Petersbu
Health Care Facilities		Clinic Service	es in Wrangell		Full Hospital Services in Juneau	5		Clinic Service	es in Wrangell				Clinic Service	ces in Petersburg	
ural Resources Considerations															
Fish & Wildlife							Spawning salr	non & herring, seals,	waterfowl						
Threatened & Endangered Species							None (20	010)							
Sensitive Areas	MESA-63-Stikine River Flats nearby	Not Desi	ignated	MESA-63-Stikine River Flats nearby. Area designated sensitive by SE GRS Workgroup	Not Designated	Area designated sensitive by SE GRS Workgroup	Not Designated	Area designated sensitive by SE GRS Workgroup	MESA-63-Stikine River Flats nearby.	Area designated sensitive by SE GRS Workgroup	MESA-63-Stikine River Flats nearby. Area designated sensitive by SE GRS Workgroup.	Area design	ated sensitive by SE	GRS Workgroup	Not Designat
er Stakeholder Considerations															
Fisheries							Salm	ion, Groundfish, Crab							
Historic Properties						Historio	Properties are prese	nt throughout the are	а.						
Mariculture*								None							-
Subsistence	High local subsistence use		Low level loc	al subsistence use		High local subsistence use	Low level local	subsistence use			High local s	ubsistence use			Low level lo subsistence
Tourism/Recreation					High le	vel recreational use thro	oughout the area-spo	rt fishing, wildlife view	ing, excursions, campin	ıg, cruise ships, hunt	ing				
Waterfront Public Facilities/Parks	Municipality owned small boat harbor and supporting services are present in Wrangell. Tongass National Forest.	Tongass National F availa		Municipality owned small boat harbor and supporting services are present in Wrangell. Tongass National Forest.	Tongass National Forest-no services available.	Tongass National Forest-no services available.		Forest-no services lable.	Municipality owned small boat harbor and supporting services are present in Wrangell. Tongass National Forest.	Tongass National Forest-no services available.	State Ferry Dock and small pier and road access to Petersburg. Tongass National Forest		small boat harbor and Petersburg. Tongass I	d supporting services are National Forest.	Tongass Nati Forest-no sen available.
Waterfront Private Facilities	Marine services docks and piers in Wrangell Marine services docks and piers in Petersburg								None						
ponse and Salvage Resource Consider	ation		1	<u> </u>		1				T	1	1			
Ability to Boom Vessel	Weather D	ependent	No	Yes	Yes		Weather Dependent		Yes	Weather Dependent	Yes	Weather Dependent		Yes	Weather Depe
Geographic Response Strategies	SE01-06	None (2009)		SE01-01	None (2009)	SE03-09		SE03-08		SE03-02	SE03-04		SE03-03		None (201
Closest Alternative PPOR for a same	2.5 nm to D-03-04	6 nm to D-02-03	6 nm to D-02-02	2.5 nm to D-03-01	25 nm to D-07-02	16 nm to L-03-03	17 nm to L-03-04	6 nm to L-04-02	11 nm to L-03-06	11 nm L-03-06	11 nm L-03-05	.5 nm to L-03-09	.5 nm to L-03-09	.5 nm to L-03-08	27 nm to L-0

	Site ID Number and V	essel Size Classification
		reater, 20-40 ft of draft, greater than 10,000 GT
ıv	L = Light Draft Vessel-up to 450 feet in length	n, draft up to 20 ft
•	Stakeholders for P	POR Zone 03 of the
		aska Subarea
	Organization	Contact
urg	Organization	
	Alaska Department of Fish & Game	Resource Manager
	Alaska Department of	Resource Manager,
	Natural Resources	State Historic
	ivaluiai Resources	Preservation Officer
	City & Borough of Wrangell	Manager
	City of Petersburg	Manager
	Central Council	President
ed	Tlingit-Haida Tribal	President
		Dept of the Interior-
	Native Allotments	Regional
		Environmental Officer
	Petersburg Indian Association	President
	Sealaska Corporation	President
ise	Tongass National Forest	Forest Supervisor
onal	Wrangell Cooperative Association	President
ices		

*For current mariculture operations, ownership information and locations, consult the ADF&G mariculture website: http://www.cf.adfg.state.ak.us/geninfo/enhance/maricult/maricult.php

					Physical and	Operational Chara	cteristics for PPOR	Map 03 of the Sou	theast Alaska Suba	rea					
	Woronkofski Island	St. John Harbor	Baht Harbor	Wrangell Cruise Vessel Wharf	Holkum Bay	Steamer Bay	Anita Bay	Near Salmon Bay	Wrangell Ferry Terminal	Point Alexander	South Mitkof Ferry Terminal	Scow Bay Anchorage	Petersburg Ferry Doc	Petersburg Ocean Beauty Dock	Farragut Bay
ID Number	D-03-01	D-03-02	D-03-03	D-03-04	D-03-05	L-03-01	L-03-02	L-03-03	L-03-04	L-03-05	L-03-06	L-03-07	L-03-08	L-03-09	L-03-10
Location-(In the general area of)	56°26.16'N 132°25.91'W	56°26.76'N 133°00.06'W	56°27.21'N 132°48.56'W	56°28.20'N 132°23.28'W	57°45.28'N 133°39.38'W	56°10.52'N 132°42.49'W	56°12.00'N 132°25.14'W	56°17.54'N 133°06.74'W	56°28.44'N 132°23.46'W	56°31.04'N 132°57.85'W	56°31.92'N 132°42.71'W	56°46.00'N 132°58.47'W	56°48.54'N 132°58.56'V	56°48.90'N 132°57.54'W	57°07.29'N 133°14.58'W
Maximum Vessel Size	Deep D	raft Vessels- lengths up to	1000 feet, 20-40 feet of 0	draft, greater than 10,000	GT				Lig	ght Draft Vessel - up to 45	60 feet in length, draft up to	20 feet		•	
Type of Berthing		Anchorage		Dock		Anch	orage		Dock	Anchorage	Dock	Anchorage		Dock	Anchorage
Contact		N/A		Harbormaster 907.874.3736		N	//A		Harbormaster 907.874.3736	N/A	Terminal Operations Manager	N/A	Terminal Operations Manager	Plant Manager 206.285.6800 (Oct-March) 907.772.4242 (April-Sept)	N/A
Navigational Approach	N from Stikine Strait or SE from Chichagof Strait	Approach from the E	or W in Sumner Strait	Approach from the W	Approach from the SW-NW	Approach from the N	Approach from E via Zimovia Strait	Approach from the W	Approach from the W	Approach from the S	Approach from the SE	Approach from the N or S	Approach f	rom the NW or NE	Approach from the S
Minimum Water Depths (MLLW)	19 fathoms	4.5 fathoms	24 fathoms	35 ft.	26 fathoms	17 fathoms	25 fathoms	24 fathoms	24 ft.	11 fathoms	20 ft.	12 fathoms	28 ft.	20 ft.	25 fathoms
Maximum Vessel Draft	40 ft. +	20 ft.	40 ft. +	30 ft.	40 ft.	30 ft. +	20 ft. +	20 ft. +	20 ft.	20 ft. +	15 ft.	20 ft. +	20 ft. +	15 ft.	20 ft. +
Swing Room or Dock Face (w/ dolphins)	4000 ft.	2000 ft.	3000 ft.	720 ft.	3000 ft.	1800 ft.	2400 ft.	1200 ft.	626 ft.	1600 ft.	80 ft.	900 ft.	600 ft.	300 ft.	2500 ft.
Bottom Type	Mud	Sand, Mud, Gravel	Clay	N/A	Clay, Sand	Shells	Mud	Mud	N/A	Mud, Sand	N/A	Mud, Shells		N/A	Gravel, Rocky, Mud
Nearest Alternative Dock/Piers	2.5nm to D-03-04	21nm to D-03-04	19 nm to D-03-04	88 nm to Ketchikan Docks	41 nm to Juneau Docks	25 nm to Wrangell Docks	20 nm to Wrangell Docks	20 nm to L-03-06	0.3 nm to D-03-04	11 nm to L-03-06	12 nm to Wrangell Docks	2.5nm to Petersburg Docks	0.5nm to L-03-09	0.5nm to L-03-08	24 nm to L-03-09
Nearest Alternative Anchorage	12 nm to D-03-03	6 nm to D-03-04	6 nm to D-03-02	2.5nm to D-03-01	24 nm to D-07-02	16 nm to L-03-03	17 nm to D-03-01	6 nm to L-04-02	2.5nm to D-03-01	13 nm to L-04-02	11 nm L-03-05	16 nm L-03-05	2.5 nm to L-03-07	2.5 nm to L-03-07	26.5 nm to L-03-07
Prevailing Winds				Str	ongest winds are usually o	out of the N, E, and SE. M	ay through September N\	W winds dominate. E and	SE winds blow more than	50 percent of the time fro	m October through Februa	ary			
Currents	Tidal currents in the area are variable.	Currents up to 1.2 to 2 to the Strait. Significantly mare	ore current in constricted	Tidal currents in the area are variable.	Minimal currents at the anchorage.	Currents up to 1.2 to 2 knots in the wide parts of the Strait. Minimal currents at the anchorage.	Minimal currents at the anchorage.	Currents in the bay are minimal. Nearby currents can approach 3 knots.	Tidal currents in the area are variable.	Currents up to 1 to 2 knots in the wide parts of the Strait. Significantly more current in constricted areas.	Currents in the bay are minimal. Nearby currents can approach 3 knots.		rent varies throughout thurg, the velocity of the cu		Currents in the bay are minimal.
Tides	Mean High 14.8 ft. (Higher 15.7) Mean Low 1.5 (Lower - 5.5)	Mean High 13.8 ft. (Hi 0.0(Low		Mean High 14.8 ft. (Higher 15.7) Mean Low 1.5 (Lower -5.5)	Mean High 14.5 ft. (Higher 15.4 Mean Low 1.5 (Lower 0.0)	Mean High 15.4 ft. (Higher 16.3 Mean Low 1.4 (Lower -4.5)	Mean High 14.8 ft. (Higher 15.7) Mean Low 1.5 (Lower -5.5)	Mean High 13.7 ft. (Higher 14.6) Mean Low 1.6(Lower -4.5)	Mean High 14.8 ft. (Higher 15.7) Mean Low 1.5 (Lower -5.5)		gher 15.7) Mean Low 1.5 er -5.5)	Mean High 14.	8 ft. (Higher 15.7) Mean	Low 1.4 (Lower -4.5)	Mean High 14.8ft. (Higher 15.4) Mean Low 1.5(Lower -5.0)
Sea Conditions	Exposed to swells from the NE-NW	Exposed to swells	s from the E & W	Exposed to swells from the W	Exposed to swells from the W	Exposed to swells from the NE	Sheltered	Exposed to swells from the N	Exposed to swells from the W	Exposed to swells from the SW	Sheltered	Sheltered	Sheltered	Sheltered	Exposed to swells from the S
Shelter from Severe Storms	Sheltered from E-W storms	Sheltered from	N & S storms	Sheltered from N-S	Sheltered from W-E	Sheltered from N-E	Sileitered	Sheltered from N	Sheltered from N-S	Sheltered from W-S	Griefiered	Onellered	Officialed	Official	Sheltered from W-E
Fog								ghout the year. Heaviest f	· · · · · · · · · · · · · · · · · · ·						-
Ice					Ice from nearby glaciers	and outflow from rivers w	vith ice in spring may pres	sent navigational hazards.	Ice may form in bays from	n November until May if co	older conditions prevail.				



L-04-06 Gambier Bay entrance viewed from the west.



D-4-01-Saginaw Bay viewed from the north.

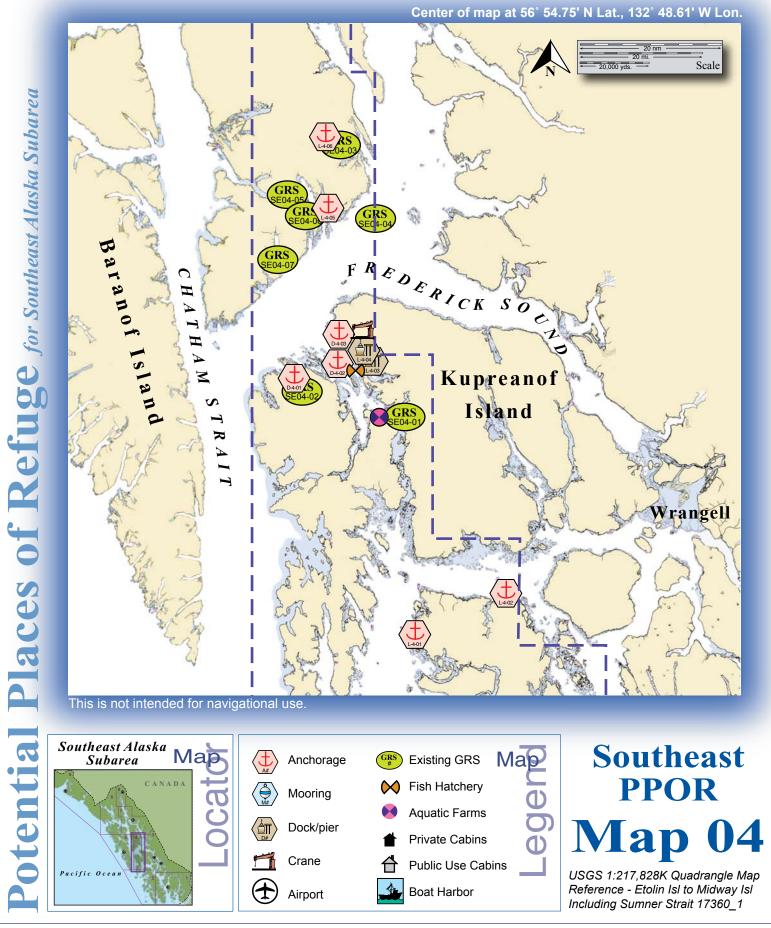


Kake Anchorage and Kake viewed from the northwest.



Kake Cargo Dock and Ferry Terminal viewed from the northeast.





NUKA Research & Planning Group, LLC.

Site ID Number and Vessel Size Classification D = Deep Draft Vessel-lengths to 1,000 ft or greater, 20-40 ft of draft, greater than 10,000 GT

L = Light Draft Vessel-up to 450 feet in length, draft up to 20 ft

			Site Consideration	ns for PPOR Zone 04 o	f the Southeast Alaska	Subarea					or PPOR Zone 04 of th st Alaska Subarea	
	Saginaw Bay	Keku Strait	Kake Anchorage	Calder Rocks	California Bay	Kake Cargo Dock	Kake Ferry Terminal	Pybus Bay	Gambier Bay	Organization Alaska Departmen	t of Resource Manager	
ID Number	D-4-01	D-4-02	D-4-03	L-4-01	L-4-02	L-4-03	L-4-04	L-4-05	L-04-06	101101101110	Posouroo Managor	
luman Health & Safety			<u> </u>							Alaska Departmen Natural Resources	State Historic	
Community-distance to (nm)	15 to Kake	15 to Kake	1 to Kake	55 to Wrangell	33 to Wrangell	0 to Kake	0 to Kake	21 to Kake	37 to Kake	Cape Fox	Preservation Officer CEO	
Health Care Facilities		Clinic Services in Kake		Clinic Service	es in Wrangell		Clinic Servic	es in Kake		Corporation Central Council		
Natural Resources Considerations										Tlingit-Haida Triba		
Fish & Wildlife	Spawning salmon, seals, otters, waterfowl, seabirds	Spawning salmon, s	eals, otters, waterfowl	Spawning salmon, seals, otters, waterfowl, seabirds		Spav	wning salmon, seals, otters, water	rfowl		City of Kake Kake Tribal Corporation	Mayor President	
Threatened & Endangered Species					None (2010)					Native Allotments	Dept of the Interior- Regional Environme	
Sensitive Areas	Not Designated	Adjacent area designated se	nsitive by SE GRS Workgroup	Not Des	signated		Adjacent area designated sensitive by SE GRS Workgroup					
Other Stakeholder Considerations										Organized Village Kake	Of President	
Fisheries					Salmon, Groundfish, Crab					Sealaska Corporat	tion President	
Historic Properties				Historic Pr	roperties are present throughou	t the area.				*For current m	ariculture operatio	
Mariculture*	None	None	Hatchery operations in the Kake area	None	Hatchery operations in the Ketchikan area	Hatchery operations in the Kake area	Hatchery operations in the Kake area	None	None	ownership info	ormation and	
Subsistence	Low level subsistence use	High local su	bsistence use	Low level sub	bsistence use	High local su	ubsistence use	Low level su	bsistence use	mariculture we	sult the ADF&G	
Tourism/Recreation			High level rec	reational use throughout the ar	rea-sport fishing, wildlife viewin	g, excursions, camping, cruise	ships, hunting				tate.ak.us/geninfo/	
Waterfront Public Facilities/Parks	Tongass National Forest-No waterfront facilities		orting services are present in National Forest	Tongass National Fores	st-No waterfront facilities		porting services are present in s National Forest	Tongass National Fore	st-No waterfront facilities		cult/maricult.php	
Waterfront Private Facilities	None present	Marine services do	cks and piers in Kake	None p	present	Marine services do	cks and piers in Kake	None	present			
Response and Salvage Resource Conside	eration											
Ability to Boom Vessel			Weather Dependent			Υ	/es	Weather	Dependent			
Geographic Response Strategies	None (2010)	SE)4-02	None	(2010)	SEC	04-02	SE04-03	SE04-06			
Closest Alternative PPOR for a same sized vessel	15 nm to D-04-03	2 nm to D-04-03	2 nm to D-04-02	23 nm to L-04-02	6 nm to L-03-03	.3 nm to L-04-04	.3 nm to L-04-03	21 nm to L-04-04	22 nm to L-04-05			

		, o								
	Saginaw Bay	Keku Strait	Kake Anchorage	Calder Rocks	California Bay	Kake Cargo Dock	Kake Ferry Terminal	Pybus Bay	Gambier Bay	
ID Number	D-04-01	D-04-02	D-04-03	L-04-01	L-04-02	L-04-03	L-04-04	L-04-05	L-04-06	
Location-(In the general area of)	56°53.48'N 134°12.39'W	56°58.86'N 134°05.17'W	56°58.68'N 133°58.50'W	56°15.03'N 133°39.08'W	56°23.43'N 133°13.57'W	56°57.54'N 133°54.84'W	56°57.66'N 133°55.32'W	57°18.93'N 134°02.46'W	57°28.98'N 134°02.16'W	
Maximum Vessel Size	Deep Draft Vessels- lengths up to	1000 feet, 20-40 feet of dra	aft, greater than 10,000 GT		Liç	ght Draft Vessel - up to 450				
Type of Berthing			Anchorage			Do	ock	Anchorage		
Contact			N/A			Harbor Master	907.785.3251	N/A		
Navigational Approach	NW from Frederick Sound	Approach	from the NW	Approach from the NW or SW	Approach from the N	Approach	from the NW	Approach from the S	Approach from the E	
Minimum Water Depths (MLLW)	10 fathoms	7 fathoms	22 fathoms	20 fathoms	33 fathoms	15 ft.	15 ft.	17 fathoms	25 fathoms	
Maximum Vessel Draft	40 ft. +	40 ft.	40 ft. +	20	ft. +	12 ft.	12 ft.	20) ft. +	
Swing Room or Dock Face (w/ dolphins)	4200 ft.	3200 ft.	2400 ft.	3000 ft.	2400 ft.	300 ft.	300 ft.	1800 ft.	5000 ft.	
Bottom Type	Mud, Shells	Sand, Shells	Gravel, Shells	Sand, Shells	Mud, Shells	N	/A	Mud		
Nearest Alternative Dock/Piers	100 nm to deep draft docks in Juneau	92 nm to to deep d	raft docks in Juneau	12 nm to dock in Shakan Bay D-02-06	24 nm to Wrangell docks	0.3 nm to L-04-04	0.3 nm to L-04-03	24 nm to L-04-04	38 nm to L-04-04	
Nearest Alternative Anchorage	15nm to D-04-03	2 nm to D-04-03	2 nm to D-04-02	23 nm to L-04-02	6 nm to L-03-03	0.5 nm to	D-04-03	18 nm to L-04-06	18 nm to L-04-05	
Prevailing Winds	5	Strongest winds are usually	out of the N, E, and SE. M	ay through September NW	winds dominate. E and SE	winds blow more than 50 p	ercent of the time from Oct	tober through February		
Currents	Frederick Sound has currents up to 1.2 knots. Significantly more current in constricted areas.	wide parts. Significantly r	up to 1.2 to 2 knots in the more current in constricted eas.	Light current	s in the Strait. at the anchorages.	wide parts. Significantly r	up to 1.2 to 2 knots in the nore current in constricted eas.	are significant.	Minimal currents at the anchorages.	
Tides	Mean High 13.1 ft. (Higher 14) Mean Low 1.5 (Lower -4.0)		r 14) Mean Low 1.4 (Lower ł.0)	Mean High 10.9 ft. (Higher 11.7) Mean Low 1.4(Lower -4.0)	Mean High 13.1 ft. (Higher 14) Mean Low 1.5 (Lower -4.0)	,	r 14) Mean Low 1.4 (Lower .0)	Mean High 13.4 ft. (Higher 14.3) Mean Low 1.5(Lower -5.0)	Mean High 14.0 ft. (Higher 14.9) Mean Low 0.0 (Lower 5.5)	
Sea Conditions	Expos	ed to swells from the NW		Exposed to swells from the SW-NW	Exposed to swells from Exposed to swells from					
Shelter from Severe Storms	Shelt	tered from NE-W storms		Sheltered from NW-SW Sheltered from S Sheltered						
Fog				Frequent through	nout the year. Heaviest fron	n June-July.				
Ice	Ice can form in bays from November until May if colder conditions prevail.									

Physical and Operational Characteristics for PPOR Map 04 of the Southeast Alaska Subarea

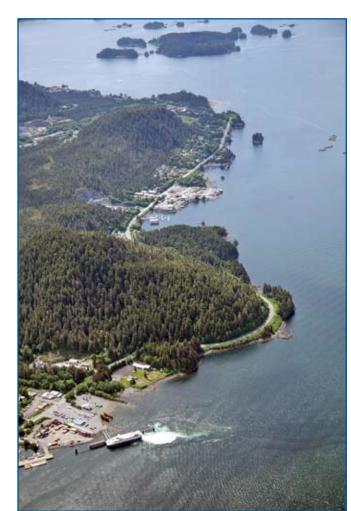
NOTE: Sensitive resource information can be found on other maps which can be accessed through the sensitive area section of the Southeast Alaska Subarea Contingency Plan: http://dec.alaska.gov/spar/perp/plans/scp_se.htm



Angoon Ferry Terminal viewed from the south.



L-05-10 Point Elizabeth Anchorage viewed from the northeast.



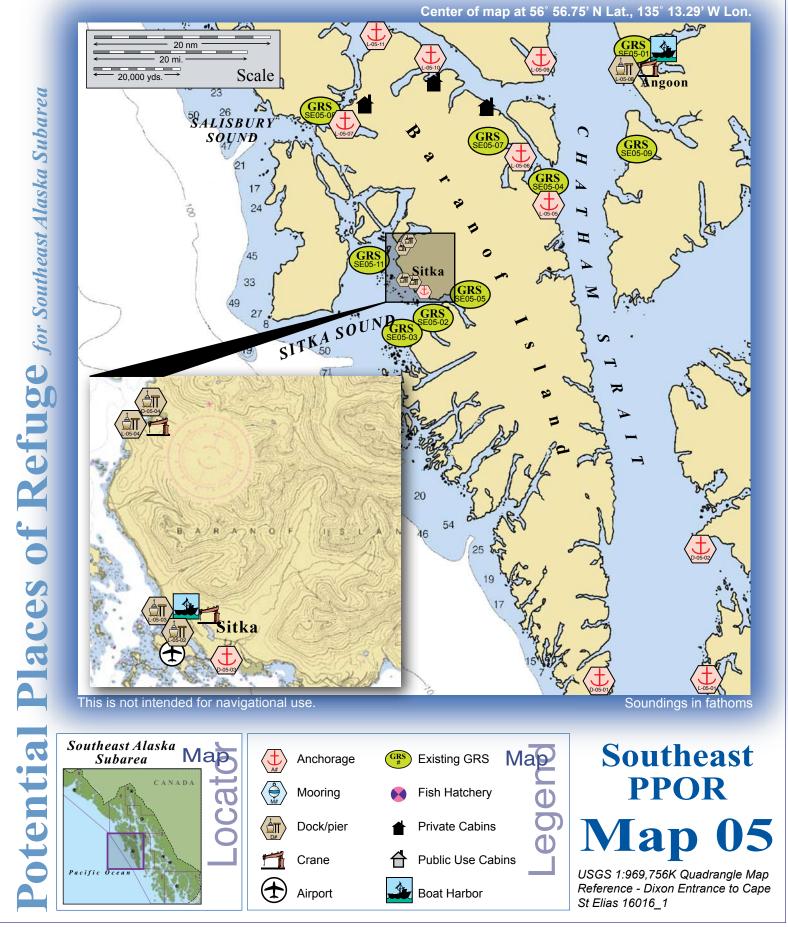
Sitka Ferry Terminal and Samson Tug Dock viewed from the northeast.



L-05-09-Florence Bay viewed from southeast.



The East Anchorage and Sitka Harbor viewed from the southeast.



NUKA Research & Planning Group, LLC.

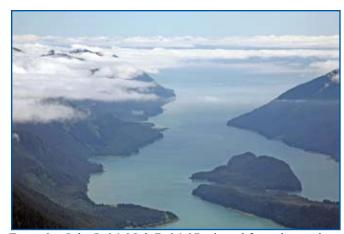
					Site Consi	derations for PPO	R Zone 05 of the Sou	theast Alaska Subarea							
	Port Conclusion	Tebenkof Bay	Eastern Anchorage	Samson Tug Dock	Port Malmesbury	USCG Dock	Sitka City Dock	Sitka Ferry Dock	Kasnyku Bay	Kelp Bay	Fish Bay	Angoon Ferry Terminal	Florence Bay	Point Elizabeth	Deadman Reach
ID Number	D-05-01	D-05-02	D-05-03	D-05-04	L-05-01	L-05-02	L-05-03	L-05-04	L-05-05	L-05-06	L-05-07	L-05-08	L-05-09	L-05-10	L-05-11
Human Health & Safety	•			•		•				•	•			•	
Community-distance to (nm)	5 to Port Alexander	22 to Port Alexander	1.5 to Sitka	0 to Sitka	13 to Port Alexander		0 to Sitka		18 to Angoon	20 to Angoon	33 to Sitka	2 to Angoon	12 to Angoon	24 to Angoon	40 to Sitka
Health Care Facilities	EMS services in	n Port Alexander	Full Hospital S	Services in Sitka	EMS services in Port Alexander		Full Hospital Services in	Sitka	Clinic Service	s in Angoon	Full Hospital Services in Sitka	CI	linic Services in Angoon		Full Hospital Services in Sitka
Natural Resources Considerations															
Fish & Wildlife	Spawning salmon, seals, waterfowl concentrations	Spawning s	salmon, seals, waterfowl con	centrations	Spawning salmon, seals, otters, waterfowl concentrations	Spawning salmon,	nerring, seals, otters, waterfo	wl and seabird concentrations	Spawning salmon, sea Steller sea lie		Spawning salmon, herring, seals, otters, waterfowl	Spawning salmon, seal	s, otters, waterfowl concen	trations, humpback wh	ale concentration
Threatened & Endangered Species	Steller sea lions (threatened) haul-out at Cape Ommaney	None	Steller sea lions (th	reatened) in the area	None	:	Steller sea lions (threatened)	in the area	Steller sea lion ha	ulout in the area	None	Steller sea lions (thr	reatened) in the area	N	one
Sensitive Areas	No designated areas	Designated Wilderness Area	Area of the Sitka Coastal sensitive by SE GRS V	as a Special Management Mgt. Plan. Area designated Vorkgroup. MESA-62 St. Sitka Sound.	Not Designated		s. These locales are a Speci- lan. Designated high priority	al Management Area of the Sitka by SE GRS Workgroup.	Designated high priority by SE GRS Workgroup.		e Special Management ka Coastal Mgt. Plan.	Area designated high priority by SE GRS Workgroup.	These locales are a Spe	cial Management Area Mgt. Plan.	of the Sitka Coastal
Other Stakeholder Considerations															
Fisheries	Salmon, Gro	undfish, Crab	Salmon, Ground	fish, Crab, Herring	Salmon, Groundfish, Crab		Salmon, Groundfish, Crab,	Herring	Salmon, Crab	, Groundfish	Salmon, Groundfish, Crab, Herring		Salmon, Crab, Gro	oundfish	
Historic Properties							Historic properties are	present throughout the area.							
Mariculture*	Little Port Walter Fish Hatchery nearby	None	Hatchery and Shellfis	sh Mariculture present	None Present	н	atchery and Shellfish Maricul	ture present	Hatchery rearing pens nearby			None p	present		
Subsistence	High local subsistence use	Low level subsistence use	High local su	bsistence use	Low level subsistence use						e-salmon, herring, crab				
Tourism/Recreation		1		1	<u> </u>	ligh recreational use thr	oughout the area-sport fishing	g, wildlife viewing, excursions, ca	mping, cruise ships, hur	nting	_	1			
Waterfront Public Facilities/Parks	Tongass National Forest-No waterfront facilities	Tebenkof Bay Wilderness Area-no waterfront facilities	Municipality owned small boat harbor and supporting services are present in Sitka. Tongass National Forest	Starrigavan State Parks, Old Sitka State Historical Park, Starrigavan Forest Service campground. Sitka Harbor nearby	Tongass National Forest- No waterfront facilities	supporting services a	d small boat harbor and re present in Sitka. Tongass nal Forest .	Starrigavan State Parks, Old Sitka State Historical Park, Starrigavan Forest Service campground. Sitka Harbor nearby	Tongass National Fo		Tongass National Forest-Small cabin in bay	State Ferry Terminal	Tongass Natio	nal Forest-No waterfror	nt facilities
Waterfront Private Facilities	None	present	Numerous marine se	rvices docks and piers	None	N	umerous marine services doc	ks and piers	None	Private Docks	None	Private facilities in Angoon		None	
Response and Salvage Resource Consider	ration														
Ability to Boom Vessel	Weather I	Dependent	Weather Dependent	Yes	Weather Dependent	Yes		Yes		Weather Depender	t	Yes	\	Weather Dependent	
Geographic Response Strategies	None	(2009)	SE05-02,03,05,11	SE05-11	None (2009)		SE05-02,03,05,11		SE05-04	SE05-07	None (2009)	SE05-01		None (2009)	
Closest Alternative PPOR for a same sized vessel	20 to D-05-02	20 to D-05-01	9 to D-05-04	9 to D-05-03	12 to D-05-01	.25 to L-05-03	.25 to L-05-02	7 to L-05-03	8.75 to L-05-06	8.75 to L-05-05	15 to L-05-11	12 to L-05-09	12 to L-05-08	8.5 to L-05-11	8.5 to L-05-10

Site ID Number and Vessel Size Classification

D = Deep Draft Vessel-lengths to 1,000 ft or greater, 20-40 ft of draft, greater than 10,000 GT L = Light Draft Vessel-up to 450 feet in length, draft up to 20 ft *For current mariculture operations, ownership information and locations, consult the ADF&G mariculture website: http://www.cf.adfg.state.ak.us/geninfo/enhance/maricult/maricult.php

Stakeholders for PPOR Z	one 05 of the Southeast Alaska Subarea
Organization	Contact
Alaska Department of Fish & Game	Resource Manager
Alaska Department of Natural Resources	Resource Manager, State Historic Preservation Officer
Angoon Community Association (IRA)	President
Central Council Tlingit-Haida Tribal	President
City and Borough of Sitka	Municipal Administrator
City of Angoon	Mayor
City of Port Alexander	Mayor
Native Allotments	Dept of the Interior-Regional Environmental Officer
Sealaska Corporation	President
Sitka Tribe of Alaska (IRA)	Chairperson
Tongass National Forest	Forest Supervisor

Second S													<u> </u>	'	•	
Note 1						Physical ar	nd Operational Char	acteristics for PPO	R Map 05 of the Sout	theast Alaska Subarea						
Part		Port Conclusion	Tebenkof Bay	Eastern Anchorage	Samson Tug Dock	Port Malmesbury	USCG Dock	Sitka City Dock	Sitka Ferry Dock	Kasnyku Bay	Kelp Bay	Fish Bay	Angoon Ferry Terminal	Florence Bay	Point Elizabeth	Deadman Reach
Description Section	ID Number	D-05-01	D-05-02	D-05-03	D-05-04	L-05-01	L-05-02	L-05-03	L-05-04	L-05-05	L-05-06	L-05-07	L-05-08	L-05-09	L-05-10	L-05-11
Part	Location (in the general area)	56°15.89'N 134°39.89'W	56°32.31'N 134°18.09'W	57°02.27'N 135°18.22'W	57°07.74'N 135°22.98'W	56°16.77'N 134°16.61'W	57°03.00'N 135°20.72'W	57°03.24'N 135°20.88'W	57°07.98'N 135°22.75'W	57°12.91'N 134°50.93'W	57°18.63'N 134°56.70'W	57°22.64'N 135°35.12'W	57°28.33'N 134°33.97'W	57°29.89'N 134°52.82'W	7 57°30.34'N 135°16.26'W	57°33.33'N 135°28.51'\
Contact N → September 1 Per Notice 1 Per Notice 1 Per Notice 2 Per N	Maximum Vessel Size	Deep Draft Vess	sels- lengths to 1000 feet or	greater, 20-40 feet of draft, g	reater than 10,000 GT					Light Draft Ve	essel - up to 450 feet in length,	draft up to 20 feet				
No.	Type of Berthing		Anchorage		Dock	Anchorage		Dock			Anchorage		Dock		Anchorage	
Non-signal page page page page page page page page	Contact	N	I/A		907.747.8559	N/A					N/A		907.788.3653		N/A	
Maximum Vessel Draft	Navigational Approach	NE	s-sw	SW	sw	w			SW	E	E	W	S via marked channel	SE	NW-E	S-NE
Sing Room or Dock Face 2000 ft. 3000 f	Minimum Water Depths (MLLW)	41 fathoms	20 Fathoms	13 Fathoms	60/25 ft.	30 fathoms	42/22 ft.	37 ft.	30 ft.	33 fathoms	26 fathoms	33 fathoms	24 ft.	28 fathoms	27 fathoms	28 fathoms
Macric Minimal current is anothors Minimal current is anotho	Maximum Vessel Draft		40 ft.		Varies No minimum depth 20 ft. 32 ft. 25 ft. No minimum depth, limited by approach and swing room 20 ft. No minimum depth, limited by approach and								and swing room			
Nameral Allernative Dock/Plers 79 m to D-05-04 97 m to D-05-04 8 m to D-05-04 8 m to D-05-04 8 m to D-05-04 8 m to D-05-04 25 m to L-05-03 25 m to L-05-03 25 m to L-05-03 97 m to D-05-03 8.75 m to L-05-05 15 m to L-05-05 15 m to L-05-09 12.5 to L-05-08 24 m to L-05-08 22.5 m to L-05-08 22.5 m to L-05-03 25 m to L-05-03 97 m to D-05-03 8.75 m to L-05-05 15 m to L-05-05 15 m to L-05-09 12.5 to L-05-08 24 m to L-05-08 22.5 m to L-05-08 22.5 m to L-05-08 25 m to L-05-08 25 m to L-05-08 25 m to L-05-09 12.5 to L-05-08 24 m to L-05-08 22.5 m to L-05-09 12.5 to L-05-08 24 m to L-05-08 25 m to L-05-09 12.5 to L-05-08 24 m to L-05-08 22.5 m to L-05-09 12.5 to L-05-08 12.5		2000 ft.	3000 ft.	2400 ft.	300/250 ft.	2400 ft.	283/185 ft.	350 ft.	460 ft.	1000 ft.	1700 ft.	2600 ft.	200 ft.	1500 ft.	2700 ft.	2400 ft.
Nearest Alternative Dock/Hers Flam to Lib-0-04 Flam to Lib-0-0-0	Bottom Type	Rocky	Gravel, Rocky, Hard	Mud	N/A	Rocky		N/A		Mud	Rocky	Mud	N/A	Hard	Hard	Mud, Sand, Hard
Frevailing Winds Strongest winds are usually out of the N, E, and SE. May through September NW winds dominate. E and SE winds blow more than 50 pertent of the time from October through February Currents Strongest winds are usually out of the N, E, and SE. May through September NW winds dominate. E and SE winds blow more than 50 pertent of the time from October through February Currents Strongest winds are usually out of the N, E, and SE. May through September NW winds dominate. E and SE winds blow more than 50 pertent of the time from October through February Currents Strongest winds are usually out of the N, E, and SE. May through September NW winds dominate. E and SE winds blow Strongest winds are usually out of the time from October through February Currents Strongest winds are usually out of the N, E, and SE. May through September NW winds dominate. E and SE winds blow Strongest winds are usually out of the time from October through February Currents Strongest winds are usually out of the N, E, and Strongest winds dominate. E and SE winds blow Strongest winds are usually out of the time from October through February Currents Strongest winds are usually out of the time from October through February Currents Strongest winds are usually out of the time from October through February Currents In anchorage The current is between 1.4 and 2.5 knots in Peril Strait, and such that and 2.5 knots in Peril Strait, and such that and 2.5 knots in Peril Strait, and such that and 2.5 knots in Peril Strait, and such that and 2.5 knots in Peril Strait, and such that and 2.5 knots in Peril Strait, and such that and 2.5 knots in Peril Strait, and such that and 2.5 knots in Peril Strait, and such that and 2.5 knots in Peril Strait, and such that and 2.5 knots in Peril Strait, and such that and 2.5 knots in Peril Strait, and such that and 2.5 knots in Peril Strait, and such that and 2.5 knots in Peril Strait, and such that and 2.5 knots in Peril Strait, and such that and 2.5 knots in Per	Nearest Alternative Dock/Piers	79 nm to D-05-04	97 nm to D-05-04	8 nm to D-05-04		13 nm to D-05-01	.25 nm to L-05-03	.25 nm to L-05-02	.5 nm to D-05-04	18.75nm to L-05-08	19 nm to L-05-08	25 nm to L-05-04	12.5 nm to L-05-09	12.5 to L-05-08	24 nm to L-05-08	32.5 nm to L-05-08
Currents	Nearest Alternative Anchorage	20 nm to D-05-02	20 nm to D-05-01	77 nm to D-05-01	8 nm to D-05-03	60 nm to L-05-04	4 nm to D-05-03	4 nm to D-05-03	9 nm to D-05-03	8.75 nm to L-05-06	8.75 nm to L-05-05	15 nm to L-05-11	54 nm L-04-03	17 nm to L-05-10	8.5 nm to L-05-11	8.5 nm to L-05-10
Currents Minimum currents in anchorage Mean High 10.5 ft. (Higher 11.4) Mean High 10.5 ft. (Higher 11.4) Mean Low 1.5 (Lower -4.0) Sea Conditions Shelter of from Severe Storms Mean High 10.5 ft. (Higher 11.4) Mean Low 1.5 (Lower 1.5) Sheltered from N-Se storms Minimum currents in anchorage Minimum currents in anchorage Mean High 10.5 ft. (Higher 11.4) Mean Low 1.5 (Lower 1.5) Mean High 10.5 ft. (Higher 11.4) Mean High 10.5 ft. (Higher 11.4) Mean High 10.5 ft. (Higher 11.4) Mean Low 1.5 (Lower -4.0) Mean High 10.5 ft. (Higher 11.4) Mean High 12.4 ft. (Higher 11.5) Mean Low 1.5 (Lower -4.0) Mean High 10.5 ft. (Higher 11.4) Mean High 12.4 ft. (Higher 11.5) Mean Low 1.5 (Lower -4.0) Mean High 10.5 ft. (Higher 11.5) Mean Low 1.5 (Lower -4.0) Mean High 10.5 ft. (Higher 11.5) Mean Low 1.5 (Lower -4.0) Mean High 12.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 12.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 12.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5) Mean Low 1.5 (Lower -4.0) Mean High 13.4 ft. (Higher 13.5	Prevailing Winds						Strongest winds a				and SE winds blow					
Tides 11.4) Mean Low 1.5 (Lower -4.0) 11.8) Mean Low 1.5 (Lowe	Currents	N	Minimum currents in anchora	age	Minimal current at the dock	Currents under 1 knot	Currents under 1 k	not in Sitka Harbor		Minimum curre	ents in anchorage	and 2.5 knots in Peril Strait,			Minimum currents in anchora	ge
Sea Conditions the NE S to E Sheltered from Severe Storms Sheltered from Severe Storms Sheltered from N-SE storms Sheltered from N-SE Sheltered from N-S Shelte	Tides	11.4) Mean Low	Mean Low 11.8) Mean Low 1.5 9.9) Mean Low 1.5 9.9) Mean Low 1.5 9.9) Mean Low 1.5 13.6) Mean Low 1.6 (Lower - (Higher 14.7) Mean Low 1.6 (Lower - 0.0) Mean Low 1.5 13.6) Mean Low 1.6 (Lower 0.0)									1.6 (Lower -5.0)				
Shelter from Severe Storms Sheltered from SE-N storms Sheltered from N-SE storms Sheltered from N-SE storms Sheltered from N-SE storms Sheltered from N-SE sheltered from N-SE sheltered from N-SE storms Sheltered from N-SE storms Sheltered from N-SE sheltered from N-SE sheltered from N-SE sheltered from N-SE storms Sheltered from N-SE sheltered	Sea Conditions				Sheltered			Sheltered		Exposed to swells from SE	Sheltered	Exposed to swells from W	Sheltered			
Frequent throughout the year. Chatham Strait area is often clear during foggy weather on the outer coast	Shelter from Severe Storms			Shellered	Gneitereu	Sheltered from NE-SE		Shellered		Sheltered from S-N	Ghelleteu	Sheltered from N-S	Ghellered	Sheltered from E-W	Sheltered from E, N, S	Sheltered from N-W
	Fog			·		·	Frequent t	hroughout the year. Chath	am Strait area is often clear	during foggy weather on the	outer coast	·		·		



Excursion Inlet,L-06-05 & D-06-07, viewed from the north.



Excursion Inlet Dock viewed from the northwest.

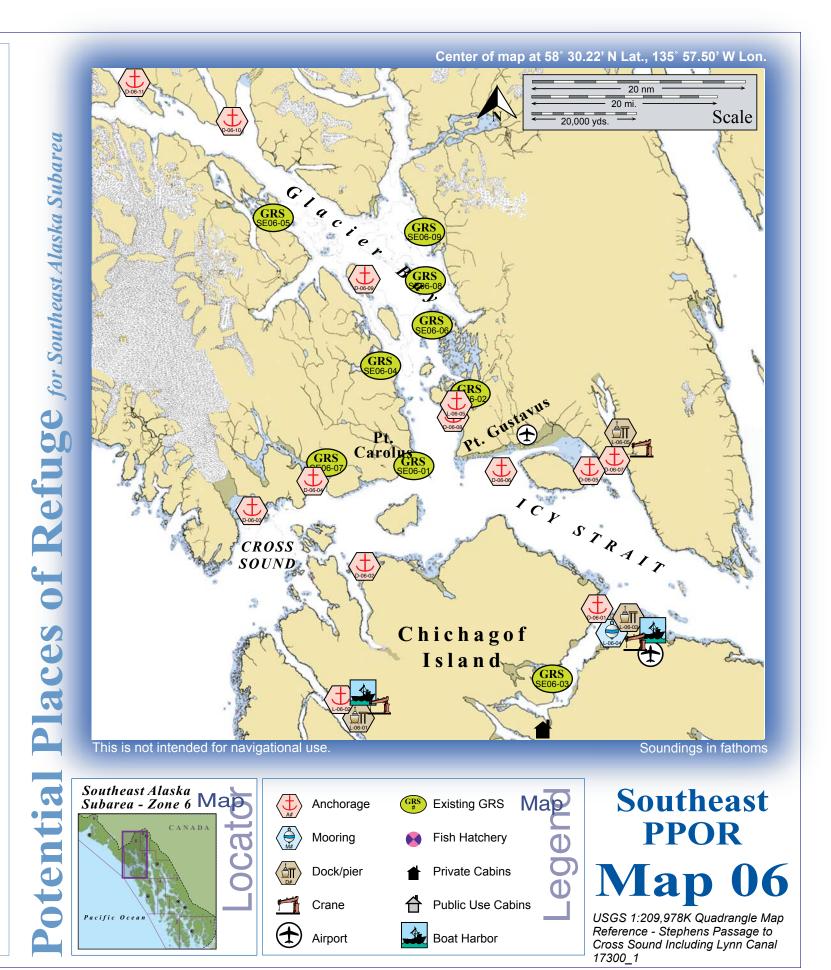


Bartlett Cove Viewed from the south.



Viewed from the southwest, D-06-06 and uncompleted pier to service Gustavus (2010).





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						Site Consid	derations for PF	POR Zone 06 of	f the Southeast	Alaska Subarea	a						
	Port Frederick Anchorage- Halibut Rock	Idaho Inlet	Taylor Bay	Dundas Bay	East Pleasant Island	West Pleasant Island	Excursion Inlet	Outer Bartlett Cove	Drake Island Anchorage	Composite Island	Russell Island	Pelican Ferry Terminal	Lisianski Inlet	Hoonah Ferry Terminal	Hoonah Moorage	Excursion Inlet Cannery Dock	Inner Bartlett Cove
ID Number	D-06-01	D-06-02	D-06-03	D-06-04	D-06-05	D-06-06	D-06-07	D-06-08	D-06-09	D-06-10	D-06-11	L-06-01	L-06-02	L-06-03	L-06-04	L-06-05	L-06-06
Human Health & Safety																	
Community-distance to (nm)	2.25 to Hoonah	19 to Gustavus	28 to Gustavus	21 to Gustavus	7 to Gustavus	2.5 to Gustavus	3.5 to Gustavus	1.5 to Gustavus	20 to Gustavus	38 to Gustavus	44 to Gustavus	0 to Pelican	1.5 to Pelican	.25 to Hoonah	2.25 to Hoonah	12 to Gustavus	.5 to Gustavus
Health Care Facilities	Community Clinic at Hoonah with limited emergency services				Communit	y Clinic at Gustavus v	with limited emergen	cy services					t Pelican with limited cy services		at Hoonah with limited ncy services		at Gustavus with limited ncy services
Natural Resources Considerations																	
Fish & Wildlife	Spawning salmon, seals, otters, seabird concentrations	Spawning salmon	awning salmon, seals, otters, seabird concentrations Spawning salmon, seals, otters Spawning salmon, seals, otters Spawning salmon, seals, otters, seabird & waterfowl concentrations waterfowl concentrations spawning salmon, seals, otters, seabird s								Spawning salmon, seals, otters, seabird & waterfowl concentrations						
Threatened & Endangered Species		No listed species present in the immediate area. Stellers sea lion (threatened) feed throughout the area.															
Sensitive Areas	No	ot Designated		Area designated as sensitive by SE GRS Workgroup	Not Designated	Area designated as sensitive by SE GRS Workgroup	Not Designated	Area o	designated as sensitiv	e by SE GRS Work	group	Not De	signated		s sensitive by SE GRS rkgroup	Not Designated	Area designated high priority by SE GRS Workgroup.
Other Stakeholder Considerations																	
Fisheries									Salmon, Groundfish,	Crab							
Historic Properties								Historic pro	perties are present th	roughout the area.							
Mariculture*	None	N	earby in Port Althro	р							None	9					
Subsistence	High level of subsistence use-salmon, intertidal					Lowlevel local s	subsistence use					н	igh level of subsistence	e use-salmon, intert	idal	Low level of	subsistence use
Tourism/Recreation							High Recreatio	nal Use-Sport fishin	g, wildlife viewing, car	mping, excursion ve	ssels and cruise sh	nips					
Waterfront Public Facilities/Parks	Municipality owned small boat harbor and supporting services are present. Tongass National Forest	Glacier Bay Nation	nal Park-No public v	waterfront facilities	Tongass National F	Forest and Glacier Ba waterfront facilities	y National Park-No	Glacier Bay I	National Park-Public S	Small Boat Dock in E	Bartlett Cove	supporting services	small boat harbor and are present. Tongass al Forest		al Forest-Small Boat iilable in Hoonah	Tongass National Forest-No public waterfront facilities	Glacier Bay National Park- Public Small Boat Dock in Bartlett Cove
Waterfront Private Facilities	Private docks and cargo services nearby			None present			Active Cannery Facility		Glacier Bay Lodge a	nd Visitors Center			Private docks and ca	rgo services nearby	r	Active cannery facility	Glacier Bay Lodge and Visitors Center
Response and Salvage Resource Consi	deration																
Ability to Boom Vessel					Wea	ather Dependent						Yes	Weather Dependent	Yes	Weather Dependent	Yes	Weather Dependent
Geographic Response Strategies	SE06-03	None	(2009)	SE06-06,07	None (2009)	SE06-01	None (2009)	SE06-02	SE06-04,06,08	SE06-08,09	SE06-05	None	(2009)	SI	E06-03	None (2009)	SE06-02
Closest Alternative Place of Refuge for same sized vessel	14 to D-06-05	9.5 to D-06-03	9.5 to D-06-02	9.5 to D-06-02	2.5 to D-06-06	2.5 to D-06-05	2.5 to D-06-05	10 to D-06-07	17 to D-06-08	11 to D-06-11	11 to D-06-10	1.5 to L-06-02	1.5 to L-06-01	2 to L-06-04	2 to L-06-03	18 to L-05-03	26 to L-06-03
Site ID Number of	nd Vaccal Siza Classifica	ation							Stakeholders fo	or PPOR Zone 00	6 of the Southe	ast Alaska Subar	ea				

D = Deep Draft Vessel-lengths to 1,000 ft or greater, 20-40 ft of draft, greater than 10,000 GT

L = Light Draft Vessel-up to 450 feet in length, draft up to 20 ft

*For current mariculture operations, ownership information and locations, consult the ADF&G mariculture website: http://www.cf.adfg.state.ak.us/geninfo/enhance/maricult/maricult.php

Organization Organization Organization Organization Alaska Department of Fish & Game Resource Manager Dept of the Interior-Regional Environmental Officer Dept of the Interior-Regional Environmental Office City of Gustavus Glacier Bay National Park Native Allotments Alaska Department of Natural Resources Resource Manager, State Historic Preservation Officer City of Hoonah Hoonah Indian Association (IRA) Sealaska Corporation Central Council Tlingit-Haida Tribal City of Pelican Huna Totem Corporation Tongass National Forest Forest Supervisor

Physical and Operational Characteristics for PPOR Map 06 of the Southeast Alaska Subarea

						•											
	Port Frederick Anchorage- Halibut Rock	Idaho Inlet	Taylor Bay	Dundas Bay	East Pleasant Island	West Pleasant Island	Excursion Inlet	Outer Bartlett Cove	Drake Island Anchorage	Composite Island	Russell Island	Pelican Ferry Terminal	Lisianski Inlet	Hoonah Ferry Termina	l Hoonah Moorage	Excursion Inlet Cannery Docl	k Inner Bartlett Cov
ID Number	D-06-01	D-06-02	D-06-03	D-06-04	D-06-05	D-06-06	D-06-07	D-06-08	D-06-09	D-06-10	D-06-11	L-06-01	L-06-02	L-06-03	L-06-04	L-06-05	L-06-06
Location (in the general area)	58°07.88'N 135°30.39'W	58°12.51'N 136°11.48'W	/ 58°17.45'N 136°32.70'W	/ 58°20.36'N 136°20.31'W	58°21.50'N 135°31.59'W	0'N 135°31.59'W 58°21.56'N 135°47.09'W 58°22.45'N 135°27.24'W 58°26.42'N 135°55.70'W 58°39.27'N 136°11.52'W 58°53.79'N 136°35.14'W 58°57.28'N 136°52.66							57°58.72'N 136°15.01'W	/ 58°06.99'N 135°27.38'W	58°06.16'N 135°28.14'V	V 58°24.97'N 135°26.82'W	58°27.13'N 135°54.9
Maximum Vessel Size	Deep Draft Vessels- lengths to 1000 feet or greater, 20-40 feet of draft, greater than 10,000 GT											Light Draft Vessel - up to	150 feet in length, draft up	to 20 feet			
Type of Berthing						Anchorage						Dock	Anchorage	Dock	Mooring	Dock	Anchorage
Contact		N/A										907.735.2212 Harbor Master	N/A	907.945.3292 Ferry Office	907.945.3670 Harbor Master	907.586.4244- Operations Mgr	r. N/A
Navigational Approach	N from South Passage	N from South Passage	Approach from the S	Approach from the S	Approach from the SE	Approach from the S-W	Approach from the S	Approach from the W	Approach from the N-Si	Approach from the S	Approach from the SW	Approach from the NW	Approach from the NW	Approach from the W	Approach from the NW	Approach from the S	Approach from the
Minimum Water Depths (MLLW)	13 fathoms	20 fathoms	32 Fathoms	12 Fathoms	23 Fathoms	31 Fathoms	14 Fathoms	21 fathoms	14 fathoms	24 fathoms	30 fathoms	20 ft.	20 fathoms	25 ft.	28 fathoms	25 ft.	28 fathoms
Maximum Vessel Draft		40 ft. +		40 ft.	40) ft. +	40 ft.	40 ft. +	40 ft.	40 ft. +	40 ft.	20 ft. (tidal dependent)			20 ft.		
Swing Room or Dock Face (w/ dolphins)	3600 ft.	3600 ft.	3000 ft.	3000 ft.	4200 ft.	6000 ft.	3000 ft.	3600 ft.	3600 ft.	2400 ft.	2000 ft.	185 ft.	1200 ft.	400 ft.	1200 ft.	130 ft.	2800 ft.
Bottom Type	Rocky	Mud	Shells	Mud, Rocky		N	Лud		Rocky	Mud, Sand	Mud	N/A	Gravel	N/A	N/A	N/A	Mud
Nearest Alternative Dock/Piers	65 nm to Juneau Docks	95 nm to dock in Sitka	97 nm to dock in Sitka	104 nm to dock in Sitka	75 nm to Juneau Docks	s 85 nm to Juneau Docks	88 nm to Juneau Docks	107 nm to Juneau Docks	120 nm to Juneau Docks	140 nm to Juneau Docks	150 nm to Juneau Docks	s 45 nm to L-06-03	1.5 nm to L-06-01	45 nm to L-06-01	1 nm to L-05-03	25 to L-05-03	27 nm to L-05-03
Nearest Alternative Anchorage	14 to D-06-05	9 nm to D-06-04	7 nm to D-06-04	9 nm to D-06-03	3 nm to D-06-07	13 nm to D-06-05	3 nm to D-06-05	10 nm to D-06-06	16 nm to D-06-08	11 nm to D-06-09	10 nm to D-06-10	1.5 to L-06-02	37 nm to L-06-06	1.5nm to L-06-04	16 to L-07-01	19 nm to D-06-04	25 to L-06-04
Prevailing Winds					S	trongest winds are usually	out of the N, E, and SE. N	May through September N	NW winds dominate. E and	d SE winds blow more tha	in 50 percent of the time fr	om October through Februa	ary				
Currents	Cross Sound has currents up to 1.2 to 2 knots in the wide parts. Significantly more current in constricted areas.	Cross Sound has	currents up to 1.2 to 2 knots of the current in constri		Light currents in t	the Strait. Minimal currents	s at the anchorages	Currents in the channel are significant.		Current has little velocity	у	Little current at dock face	Light current	Little current at dock face	Light current	Light current at dock face.	Currents in the cha are significant.
Tides	Mean High 9.6 ft. (Higher 10.4) Mean Low 1.5 (Lower -0.0)	Mean High 9.6	ft. (Higher 10.4) Mean Lov	v 1.5 (Lower -0.0)	Mean High 13.5	5 ft. (Higher 14.5) Mean Lo	ow 1.5 (Lower 0.0)	Mean High 13.7 ft. (Higher 14.6) Mean Low 1.6(Lower -4.5)	Mean High 15.1ft. (Higher 16) Mean Low 1.7 (Lower -4.5)	Mean High 15.6ft. (Higher 16.5) Mean Low 1.7 (Lower -4.5)	v	Mean High 9.5 ft. (Higher 10.4) Mean Low 1.4 (Lower -4.0)	Mean High 9.5 ft. (Higher 10.4) Mean Low 1.4 (Lower -4.0)	Mean High 13.4 ft. (Higher 14.8) Mean Low 1.5 (Lower 0.0)	Mean High 13.4 ft. (Higher 14.8) Mean Lov 1.5 (Lower 0.0)	Mean High 13.5 ft. (Higher 14.5 Mean Low 1.5 (Lower 0.0)	Mean High 13.7 f (Higher 14.6) Mean 1.6(Lower -4.5)
Sea Conditions	Exposed to swells from the N	Exposed to swells from the N	Exposed to swells from the S	Exposed to swells from the S	Exposed to swells from the S-W	Exposed to swells from the SE	Exposed to swells from the S	Exposed to swells from the SW	Exposed to swells from the N			Shel	tered			Exposed to swells from S	Exposed to swells f
Shelter from Severe Storms	Sheltered from E-W storms Sheltered from W-E storms Sheltered from N-S Sh																
Fog								Frequent thro	ughout the year. Heavies	t from June-July.							<u> </u>
laa								les son form in hour fre	om November until May if	calder canditions provide							



The Port of Juneau viewed from the south.



The Port of Juneau viewed from the northwest.

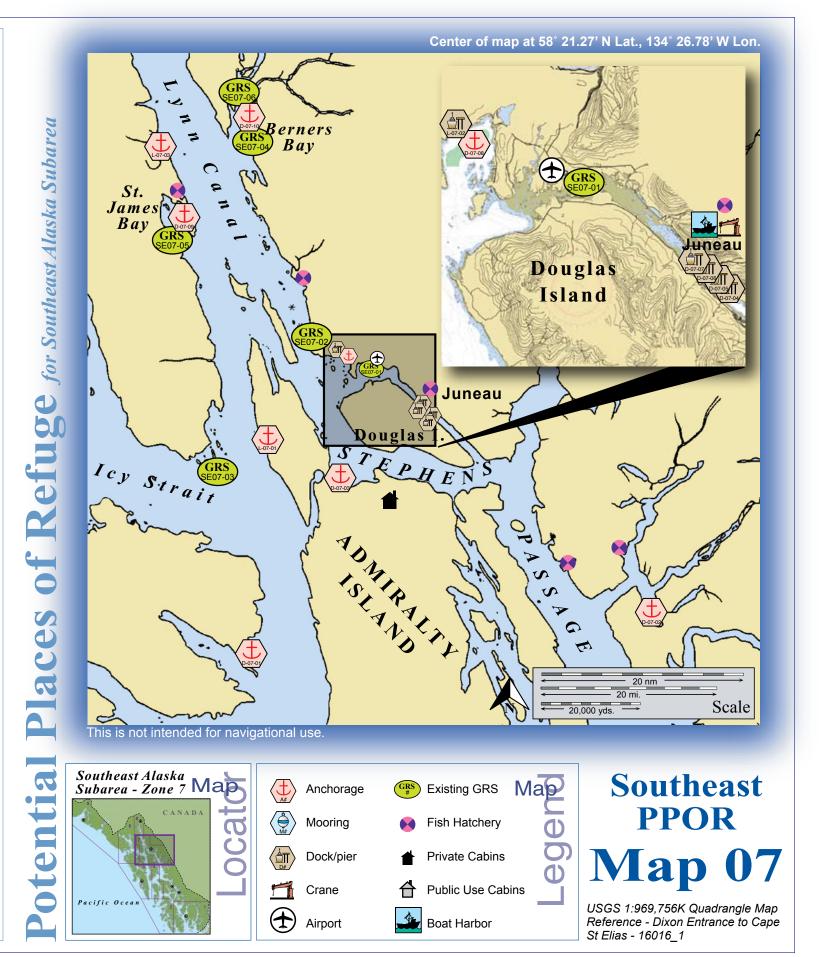


Auke Bay viewed from the southwest.



Funter Bay viewed fromt the southwest.





NUKA Research & Planning Group, LLC.

					Site Considerations f	or PPOR Zone 07 of the	Courthoant Alask	o Cuboros					
					Site Considerations i		Southeast Alask	a Subarea	ı	l			
	Lyoukeen Cove	Gilbert Bay	Young Bay	AJ Dock	South Franklin Dock	Cruise Ship Terminal/ Steamship Wharf	USCG Dock	Auke Bay	St James Bay	Berners Bay	Funter Bay	Auke Bay Ferry Terminal	William Henry Bay
ID Number	D-07-01	D-07-02	D-07-03	D-07-04	D-07-05	D-07-06	D-07-07	D-07-08	D-07-09	D-07-10	L-07-01	L-07-02	L-07-03
Human Health and Safety													
Community-distance to (nm)	27 to Tenakee Springs	37 to Juneau	26 to Juneau	1 to Juneau	.5 to Juneau	.5 to Juneau	0 to Juneau	8 to Juneau (via road system)	53 to Juneau	58 to Juneau	21 to Hoonah	12 to Juneau (via road system)	59 to Juneau
Health Care Facilities	Community Clinic at Tenakee Springs with limited emergency services				Full	hospital services at Juneau					Community Clinic at Hoonah with limited emergency services	Full hospital ser	vices at Juneau
Natural Resources Considerations													
Fish & Wildlife	Spawning salmon, seals, otters	Spawning salmon, seals, otters, seabird concentrations	Spawning salmon, seals, otters		Spawning salmo	n, seals, otters, seabird and sho	prebird concentrations		Spawning salmon, seals, sea lions, otters	Spawning salmon and herring, seals, sea lions, otters, seabird and shorebird concentrations	Spawning salmon, seals, otters	Spawning salmon, seals, otters, seabird and shorebird concentrations	Spawning salmon, seals, sea lions, otters
Threatened & Endangered Species	No listed species present in the immediate area Stellers sea lions (threatened) haul out nearby No listed species present in the immediate area haul of												Stellers sea lions (threatened haul out nearby
Sensitive Areas	No designated areas MESA-61 nearby. Area designated as sensitive by SE GRS Workgroup Area designated as sensitive by SE GRS Workgroup. MESA-61 nearby. Area designated as sensitive by SE GRS Workgroup. MESA-61 nearby. Area designated as sensitive by SE GRS Workgroup.												
Other Stakeholder Considerations			<u> </u>										
Fisheries						Salmon, Groundfish	n, Crab						
Historic Properties						Historic propertie	es are present througho	out the area.					
Mariculture*	None	Salmon Hatchery	None			Salmon Hatchery				None		Salmon Hatchery	None
Subsistence	Low level loo	al subsistence					Hig	h level of subsistence use-salmon, ir	ntertidal				
Tourism/Recreation					High Recre	eational Use-Sport fishing, wildli	fe viewing, excursion ve	essels, cruise ships, camping, huntin	g				
Waterfront Public Facilities/Parks	Tongass National Fores	st -No waterfront facilities	Tongass National Forest - Small recreational cabin in Admiralty Cove	Junea	au Port and Harbor. Freight ha	ndling services, cranes, boat la	unch, tidal grid. Tongas	s National Forest	Tongas	s National Forest -No waterf	front facilities	Juneau port and harbor. Freight handling services, cranes, boat launch, tidal grid. Tongass National Forest.	Tongass National Forest -No waterfront facilities
Waterfront Private Facilities	None present Small private dock Numerous private docks and cargo handling capabilities. Numerous private docks and cargo handling capabilities. None present Numerous private docks and cargo handling capabilities.										None present		
Response and Salvage Resource Consid	sideration												
Ability to Boom Vessel	Weather Dependent Yes Weather Dependent Yes Weather Dependent									Weather Dependent			
Geographic Response Strategies		None (2009)	None (2009) SE07-01 SE07-01,02 SE07-05 SE07-04,06 SE07-03 SE07-01,02 None (20							None (2009)			
Closest Alternative Place of Refuge for same sized vessel	30 to D-06-01	25 to D-03-04	24 to D-07-04	.25 to D-07-05	.25 to D-07-04	.25 to D-07-05	.3 to D-07-06	10 to D-07-03	12 to D-07-10	12 to D-07-09	23 to L-06-02	1 to D-07-08	14 to L-08-01

Site ID Number and Vessel Size Classification

D = Deep Draft Vessel-lengths to 1,000 ft or greater, 20-40 ft of draft, greater than 10,000 GT

L = Light Draft Vessel-up to 450 feet in length, draft up to 20 ft

*For current mariculture operations, ownership information and locations, consult the ADF&G mariculture website: http://www.cf.adfg.state.ak.us/geninfo/enhance/maricult/maricult.php

Stakeholders for PPOR Zone	07 of the Southeast Alaska Subarea
Organization	Contact
Alaska Department of Fish & Game	Resource Manager
Alaska Department of Natural Resources	Resource Manager, State Historic Preservation Officer
Central Council Tlingit-Haida Tribal	President
City and Borough of Juneau	Mayor
Haines Borough	Mayor
Native Allotments	Dept of the Interior-Regional Environmental Officer
Sealaska Corporation	President
Tongass National Forest	Forest Supervisor

Exposed to swells from the W

Sheltered from NW-SE

Physical and Operational Characteristics for PPOR Map 07 of the Southeast Alaska Subarea

	Lyoukeen Cove	Gilbert Bay	Young Bay	AJ Dock	South Franklin Dock	Cruise Ship Terminal/ Steamship Wharf	USCG Dock	Auke Bay	St James Bay	Berners Bay	Funter Bay	Auke Bay Ferry Terminal	William Henry Bay
ID Number	D-07-01	D-07-02	D-07-03	D-07-04	D-07-05	D-07-06	D-07-07	D-07-08	D-07-09	D-07-10	L-07-01	L-07-02	L-07-03
Location (in the general area)	57°53.03'N 134°57.71'W	57°57.22'N 133°42.19'W	58°10.61'N 134°40.80'W	58°17.38'N 134°23.87'W	58°17.46'N 134°23.64'W	58°17.82'N 134°24.24'W	58°17.88'N 134°24.72'W	58°22.19'N 134°40.04'W	58°36.09'N 135°10.09'W	58°46.00'N 134°57.20'W	58°14.34'N 134°54.58'W	58°22.86'N 134°41.10'W	58°43.11'N 135°14.25'W
Maximum Vessel Size				Deep Draft Vessels- len	gths to 1000 feet or greater, 2	0-40 feet of draft, greater than	10,000 GT				Light Draft Vessel	- up to 450 feet in length, draft u	p to 20 feet
Type of Berthing		Anchorage			De	ock			A	nchorage		Dock	Anchorage
Contact		N/A		Port Manager 907.586.1282	Operations Director 907.463.3900	Port Director 907.586.0292	Duty Officer 907.463.2248			N/A		907.465.3941	N/A
Navigational Approach	Approach from the E	Approach from the N	Approach from the N-E		Approach using marke	ed channel from the SE		Approach from the SW	Approach from the S	Approach from the SW	Approach from the W	Approach from the SW	Approach from the NE
Minimum Water Depths (MLLW)	24 Fathoms	30 Fathoms	22 Fathoms	34 ft.	30 ft.	27-35 ft.	36 ft.	29 Fathoms	10 Fathoms	27 Fathoms	27 Fathoms	26 ft.	13 Fathoms
Maximum Vessel Draft	40 ft.	40 ft.	40 ft.	30 ft.	30 ft. (Tidal Dependent)	27 ft. (Tidal Dependent)	35 ft.	40 ft.	40 ft.	40 ft.	20 ft.	20 ft.	20 ft.
Swing Room or Dock Face (w/ dolphins)	3600 ft.	2800 ft.	3000 ft.	380 ft. (1100ft.)	960 ft.	1700 ft.	760 ft.	3600 ft.	2400 ft.	3000 ft.	1500 ft.	850 ft.	900 ft.
Bottom Type	Sand	Mud	Mud, Gravel		N	I/A		Mud	Mud, Pebbles	Mud	Shells, Pebble	N/A	Sand
Nearest Alternative Dock/Piers	73 nm to Port of Juneau	36 nm to D-07-04	25 nm to D-07-04	.25 nm to D-07-05	.25 nm to D-07-04	.25 nm to D-07-05	.3 nm to D-07-06	30 nm to D-07-04	48 nm to D-07-04	38 nm to D-08-01	49 nm to D-07-04	31 nm to D-07-04	30 nm to L-07-02
Nearest Alternative Anchorage	35 nm to D-06-01	25 nm to D-03-04-Holkham Bay	12 nm to D-07-09	22 nm to D-07-03	22.25 nm to D-07-03	22.5 nm to D-07-03	23 nm to D-07-03	10 nm to D-07-03	12 nm to D-07-10	12 nm to D-07-09	23 nm to L-06-02	1 nm to D-07-09	14 nm to L-08-01
Prevailing Winds					SE Winds prevail year	ar round. SE gales may occur	at any season, but they are n	much more frequent in winter	than in summer.				
Currents	Minimal currents at anchorage	Significant currents at entrance to the bay	Minimal currents at anchorage		Mid-channel currents to 2 kr	nots. Less current in wharves.			Minimal cu	rents at anchorage		Minimal current at dock face	Minimal currents at anchorage
Tides	N/A	Mean High 14.9 ft. (Higher 15.8) Mean Low 1.5 (Lower -5.5)	Mean High 14.2 ft. (Higher 15.0) Mean Low 1.3 (Lower -6.0)		Mean High 15.3 ft. (Higher 16	6.3) Mean Low 1.6 (Lower 0.0)		Mean High 15.0 ft. (Higher 15.9) Mean Low 1.5 (Lower 0.0)	Mean High 14.8 ft. (Higher 1	5.7) Mean Low 1.6(Lower -6.0)	Mean High 14.2 ft. (Higher 15.1) Mean Low 1.6 (Lower -6.0)	Mean High 15.0 ft. (Higher 15.9 Mean Low 1.5 (Lower 0.0)	Mean High 14.8 ft. (Higher 15.7) Mean Low 1.6 (Lower -6.0)
	·		·		·	·	·	Exposed to swells from the		Exposed to swells from the			Exposed to swell from

Frequent throughout the year. Heaviest from June-July.

Generally ice free.

Sheltered from W-E storms

Sheltered from W-SE

Sheltered from W-S

Sheltered

Sheltered from S-N storms Sheltered from W-E storms Exposed to storms from the NW

Exposed to swells from the N

Exposed to swells from the E Exposed to swells from the N

Shelter from Severe Storms

Fog

Sheltered from E-N



Lutak Dock and Ferry Terminal viewed from the east.



D-08-01 Port Chilkoot Wharf viewed from the east.

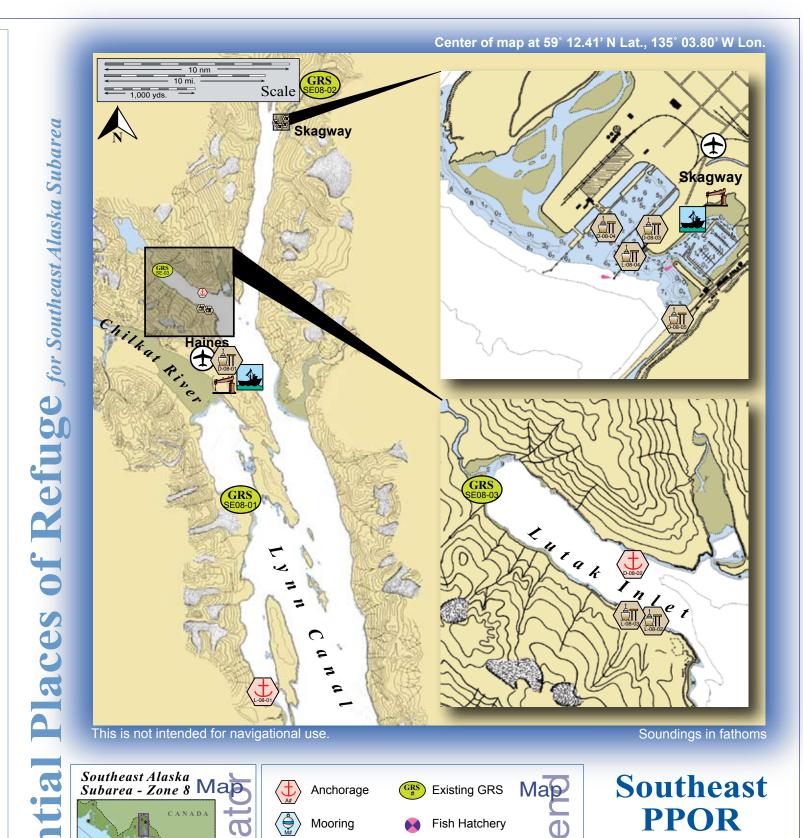


Sullivan Island Anchorage viewed from the northwest.



Skagway port facilities viewed from the north.





Private Cabins

Boat Harbor

Public Use Cabins

Dock/pier

Crane

Airport

NUKA Research & Planning Group, LLC.

USGS 1:77,812K Quadrangle Map Reference - Lynn Canal Point Sherman to Skagway - 17317_1

			Site Con	siderations for F	PPOR Zone 08 of the	Southeast Alaska Sul	parea					
	Port Chilkoot Wharf	Lutak Inlet Anchorage	Broadway Dock	Ore Dock	Railroad Dock	Sullivan Island	Haines Ferry Terminal/Lutak Dock	Haines Municipal Dock	Skagway Ferry and Barge Terminal			
ID Number	D-08-01	D-08-02	D-08-03	D-08-04	D-08-05	L-08-01	L-08-02	L-08-03	L-08-04			
Human Health & Safety												
Community-distance to (nm)	0 to Haines	6 to Haines	0 to Skagway	0 to Skagway	0 to Skagway	21 to Haines	3 to Haines	3 to Haines	0 to Skagway			
Health Care Facilities					Community Clinics in Hai	nes and Skagway with emer	gency services					
Natural Resources Considerations												
Fish & Wildlife					Spawning sal	mon, seal, otters, eagle nest	ing					
Threatened & Endangered Species				No listed speci	es present in the immediate	area. Stellers sea lion (threa	tened) feed throughout the area.					
Sensitive Areas		by. Area designated as sensitive by SE GRS Workgroup. Area designated as sensitive by SE GRS Workgroup. No designation MESA-60 nearby. Area designated as sensitive by SE GRS Workgroup. Area designated as sensitive by SE GRS Workgroup. Area designated as sensitive by SE GRS Workgroup.										
Other Stakeholder Considerations												
Fisheries					Salr	non, Groundfish, Crab						
Historic Properties					Historic propertie	s are present throughout the	area.					
Mariculture*	None	Salmon Hatchery			None		Salmon I	latchery	None			
Subsistence	No	Low level local subsistence		No			Low level local subsistence		No			
Tourism/Recreation				High Recrea	ational Use-Sport fishing, wil	dlife viewing, camping, excur	sion vessels and cruise ships					
Waterfront Public Facilities/Parks		boat harbor and supporting nes. Tongass National Forest.		oat harbor and suppo ay. Tongass National		Tongass National Forest -N waterfront facilities	o Municipality owned small boat have present in Haines. To		Municipality owned small boat harbor and supporting servare present in Skagway. Tongass National Forest.			
Waterfront Private Facilities		piers in the Haines area. Cranes g capabilities present.		nd piers in the Skagwandling capabilities pres	y area. Cranes and freight sent.	None Present	Numerous small docks and pie and freight handling		Numerous small docks and piers in the Skagway area. Cr and freight handling capabilities present.			
Response and Salvage Resource Conside	ration											
Ability to Boom Vessel	Yes	Weather Dependent		Yes		Weather Dependent		Υ	es			
Geographic Response Strategies	None (2009)	SE08-03		SE08-02		None (2009)	SE08	3-03	SE08-02			
Closest Alternative Place of Refuge for same sized vessel	3.5 to D-08-02	3.5 to D-08-01	.1 to D-08-04	.1 to D-08-03	.1 to D-08-04	26 to L-08-03	.1 to L-08-03	.1 to L-08-02	.1 to D-08-03			
Site ID Number and Vessel	Size Classification	*For current mariculture		Quanti ii		St	akeholders for PPOR Zone 08 of the So		Contact Organization Cont			
D = Deep Draft Vessel-lengths to 1,000 ft or greater, L = Light Draft Vessel-up to 450 feet in length, draft u		information and location mariculture website: http://ak.us/geninfo/enhance/	tp://www.cf.adfg.state.	Organization Alaska Department of Fish & Alaska Department of Natural Central Council Tlingit-Haida	Game Resource Manager Resources Resource Manager, State	Chilkoot Historic Preservation Officer City of H	laines Mayor Nat	Organization nicipality of Skagway Mayor ive Allotments Dept of the Interior alaska Corporation President	Contact Organization Cont Skaqua Traditional Council Tribal Chair r-Regional Environmental Officer Tongass National Forest Forest Supe			

	Physical and Operational Characteristics for PPOR Map 08 of the Southeast Alaska Subarea												
	Port Chilkoot Wharf	Lutak Inlet Anchorage	Broadway Dock	Ore Dock	Railroad Dock	Sullivan Island	Haines Ferry Terminal/Lutak Dock	Haines Municipal Dock	Skagway Ferry and Barge Terminal				
ID Number	D-08-01	D-08-02	D-08-03	D-08-04	D-08-05	L-08-01	L-08-02	L-08-03	L-08-04				
Location (In the general area)	59°14.04'N 135°26.34'W	59°17.70'N 135°28.50'W	59°27.02'N 135°19.46'W	59°27.01'N 135°19.62'W	59°26.77'N 135°19.47'W	58°55.86'N 135°21.50'W	59°16.94'N 135°27.83'W	59°17.19'N 135°28.72'W	59°26.94'N 135°19.56'W				
Maximum Vessel Size	Deep	Draft Vessels- lengths to 1000 f	eet or greater, 20-40 feet of	draft, greater than 10,000 G	ST		Light Draft Vessel - up to 45	0 feet in length, draft up to 2	20 feet				
Type of Berthing	Dock	Anchorage		Dock		Anchorage		Dock					
Contact	Harbormaster 907.766.2448	N/A	Ор	erations Manager 907.983.2	2214	N/A	Terminal Operations 907.766.2111	Harbormaster 907.766.2448	Harbormaster 907.983.2628				
Navigational Approach	Approach from the E	Approach from the E Approach from the SE Approach from the SW Approach from the SW Approach from the SW Approach from the SW											
Minimum Water Depths (MLLW)	40 Feet	40 Feet 41 Fathoms 35 Feet 45-90 Feet 24-43 Feet 19 Fathoms 23 Feet 12-23 Feet 25 Feet											
Maximum Vessel Draft	35 ft.	40 ft.	30 ft.	40 ft.	40 ft.	20 ft.	20 ft.	20 ft.	20 ft.				
Swing Room or Dock Face (w/ dolphins)	915 ft.	2400 ft.	800 ft.	1000 ft.	1850 ft.	2000 ft.	640 ft.	750 ft.	385 ft.				
Bottom Type	N/A	Mud		N/A		Mud		N/A					
Nearest Alternative Dock/Piers	13.5 nm to D-08-03	5 nm to D-08-01	.1 nm to D-08-04	.1 nm to D-08-03	.15 nm to D-08-03	23 nm to L-08-02	.25 nm to L-08-03	.25 nm to L-08-02	.1 nm to D-08-03				
Nearest Alternative Anchorage	5 nm to D-08-02	44 nm to D-07-08	12.5 nm to D-08-02	12.5 nm to D-08-02	12.5 nm to D-08-02	16 nm to D-08-02	2 nm to D-08-02	2 nm to D-08-02	14.5 nm to D-08-02				
Prevailing Winds		SE winds prev	vail year round. SE gales ma	ay occur at any season, but	they are much more freque	ent in winter than in summer. High	n shores funnel and intensif	y the SE winds.					
Currents			Currents i	n Lynn Canal have a velocit	y of 0.3 to 1 knot in the S pa	art, diminishing in velocity toward	I the head.						
Tides	Mean High 15.8 ft. (Higher 16	Mean High 15.8 ft. (Higher 16.8) Mean Low 0.0 (Lower -6.0) Mean High 15.7 ft. (Higher 16.7) Mean Low 1.6 (Lower 0.0) Mean High 15.8 ft. (Higher 16.8) Mean Low 0.0 (Lower -6.0) Mean High 15.7 ft. (Higher 16.7) Mean Low 1.6 (Lower 0.0)											
Sea Conditions	Sheltered Exposed to swells from the N Sheltered												
Shelter from Severe Storms		Shelt	ered from severe storms			Sheltered from NE-NW storms		Sheltered from severe s	storms				
Fog				Frequent th	roughout the year. Heavies	t from June-July.							
Ice	Generally ice free.												

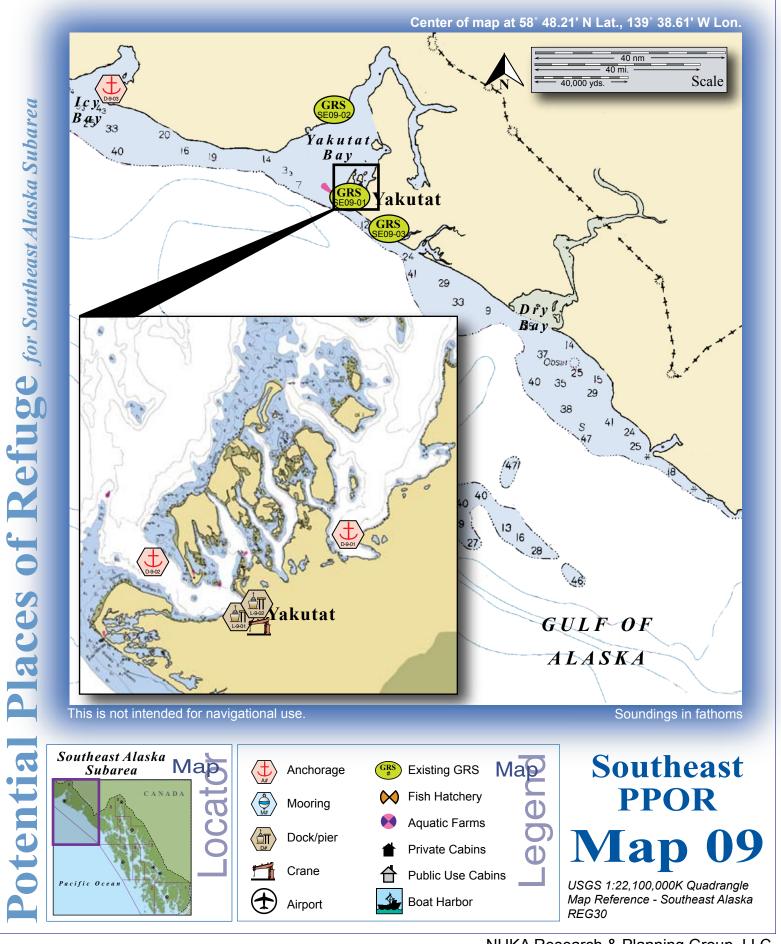


Monti Bay viewed from the east.



Johnstone Passage and Sea Otter Bay viewed from the south.





NUKA Research & Planning Group, LLC.

Ice

	Site Considera	tions for PPOR Zone 09 of the	ne Southeast Alaska Subarea	a								
	Broken Oar Anchorage	Monti Bay Anchorage	Point Riou Anchorage	Yakutat City Dock	Ocean Cape Dock							
ID Number	D-09-01	D-09-02	D-09-03	L-09-01	L-09-02							
Human Health & Safety												
Community-distance to (nm)	0.5 to `	Yakutat	56 to Yakutat	0 to '	Yakutat							
Health Care Facilities			Clinic Services in Yakutat									
Natural Resources Considerations												
Fish & Wildlife		Spawning salmon, seals, waterfowl, seabirds										
Threatened & Endangered Species	None (2010)											
Sensitive Areas	Adjacent area designated sensitive by SE GRS Workgroup Not Designated Adjacent area designated sensitive by SE GRS Workgroup											
Other Stakeholder Considerations												
Fisheries			Salmon, Groundfish, Crab									
Historic Properties		Histori	c Properties are present throughout th	e area.								
Mariculture*			None									
Subsistence	High local sul	bsistence use	Low level subsistence use	High local su	ubsistence use							
Tourism/Recreation		hout the area-sport fishing, wildlife ping, cruise ships, hunting			ghout the area-sport fishing, wildlifnping, cruise ships, hunting							
Waterfront Public Facilities/Parks	Municipality owned small boat harbor in Ya	r and supporting services are present kutat.	Wrangell-St. Elias National Park- No services available	Municipality owned small boat harbo	or and supporting services are pre akutat.							
Waterfront Private Facilities	Marine services docks and piers in Yakutat None Marine services docks and piers in Yakutat											
Response and Salvage Resource Consideration												
Ability to Boom Vessel	Yes	Weather	Dependent	,	Yes							
Geographic Response Strategies	SE09-01 None (2010) SE09-01											
Closest Alternative PPOR for a same sized vessel	ssel 12 nm to D-09-02 12 nm to D-09-01 56 nm to D-09-02 0.2 nm to L-09-02 0.2 nm to L-09-02											

Site ID Number and Vessel Size Classification
D = Deep Draft Vessel-lengths to 1,000 ft or greater, 20-40 ft of draft, greater than 10,000 GT
L = Light Draft Vessel-up to 450 feet in length, draft up to 20 ft

Stakeholders for PPOR Zone 09 of the Southeast Alaska Subarea					
Organization Contact					
Alaska Department of Fish & Game	Resource Manager				
Alaska Department of Natural	Resource Manager, State Historic				
Resources	Preservation Officer				
Chugach Alaska Corporation	President				
City and Borough Yakutat	Manager				
Native Allotments	Dept of the Interior-Regional Environmental Officer				
Sealaska Corporation	President				
Tongass National Forest	Forest Supervisor				
Wrangell-St. Elias National Park	Dept of the Interior-Regional Environmental Officer				
Yak-Tat Kwaan, Incorporated	President				
Yakutat Tlingit Tribe	President				

*For current mariculture operations, ownership information and locations, consult the ADF&G mariculture website: http://www.cf.adfg.state.ak.us/geninfo/enhance/maricult/maricult.php

	Broken Oar Anchorage	Monti Bay Anchorage	Point Riou Anchorage	Yakutat City Dock	Ocean Cape Dock	
ID Number	D-09-01	D-09-02	D-09-03	L-09-01	L-09-02	
Location-(In the general area of)	59°34.38'N 139°39.90'W	59°33.66'N 139°48.48'W	59°55.62'N 141°27.00'W	59°32.70'N 139°44.34'W	59°32.88'N 139°44.04'W	
Maximum Vessel Size	Deep Draft Vessels- lengths up to 1000 feet, 20-40 feet of draft, greater than 10,000 GT			Light Draft Vessel - up to 450 feet in length, draft up to 20 feet		
Type of Berthing	Anchorage			Dock		
Contact	Harbormaster 907.784.3491		N/A	Harbormaster 907.784.3491		
Navigational Approach	N from Yakutat Bay	W from Yakutat Bay	Approach from the S	W via Monti Bay		
Minimum Water Depths (MLLW)	49 fathoms	26 fathoms	10 fathoms	35 ft.	53 ft.	
Maximum Vessel Draft	40 ft. +			20 ft. +		
Swing Room or Dock Face (w/ dolphins)	1500 ft.	3000 ft.	2400 ft.	112 ft.	400 ft.	
Bottom Type	Mud, Shells	Sand	Mud	N/A		
Nearest Alternative Dock/Piers	N	earest Deep Draft Docks are in Prince	William Sound	0.2 nm to L-09-02	0.2 nm to L-09-01	
Nearest Alternative Anchorage	12 nm to D-09-02	12 nm to D-09-01	56 nm to D-09-02	2.5 nm to D-09-01	2.6 nm to D-09-01	
Prevailing Winds	Easterlies and southeasterlies are frequent year round.					
Currents	Complex currents exist in Yakutat Bay. Minimal currents at the anchorages.		Minimal currents at the anchorages.	Complex currents exist in Yakutat Bay. Minimal currents at the docks.		
Tides	Mean High 9.2 ft. (Higher 10.1) Mean Low 1.4 (Lower -4.0)		Mean High 9.0 ft. (Higher 9.9) Mean Low 1.4 (Lower -4.5)	Mean High 9.2 ft. (Higher 10.1) Mean Low 1.4 (Lower -4.0)		
Sea Conditions	Chaltarad	Exposed to swells from the W	Exposed to swells from the N	Sheltered		
Shelter from Severe Storms	Sheltered	Sheltered from N-S storms	Sheltered from E-W storms			
Fog	Frequent throughout the year. Heaviest from June-July.					

Use extreme caution, ice from glaciers can cause

hazards to navigation.

Ice can form in bays from November until May if colder conditions prevail.

Physical and Operational Characteristics for PPOR Map 09 of the Southeast Alaska Subarea

Ice can form in bays from November until May if colder conditions prevail.