

PRINCE WILLIAM SOUND SUBAREA CONTINGENCY PLAN

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BACKGROUND: PART ONE – SUPPORT INFORMATION

A. SUBAREA PLAN

This Subarea Contingency Plan (SCP) supplements the Alaska Federal/State Preparedness Plan for Response to Oil and Hazardous Substance Discharges/Releases (the **Unified Plan**). The SCP in conjunction with the Unified Plan describes the strategy for a coordinated federal, state and local response to a discharge or substantial threat of discharge of oil or a release of a hazardous substance from a vessel, offshore facility, or onshore facility operating within the boundaries of the Prince William Sound Subarea. For its planning process, the federal government has designated the entire state of Alaska as a planning “region” and the western half of the state as a planning “area.” The State of Alaska has divided the state into ten planning regions of which one is the “Prince William Sound Region.” As part of the Unified Plan, this SCP addresses this Prince William Sound Region or, to avoid confusion with federal terms, Subarea.

The SCP shall be used as a framework for response mechanisms and as a pre-incident guide to identify weaknesses and to evaluate shortfalls in the response structure before an incident. The plan also offers parameters for vessel and facility response plans under OPA 90. Any review for consistency between government and industry plans should address the recognition of economically and environmentally sensitive areas and the related protection strategies, as well as a look at the response personnel and equipment (quantity and type) available within the area (including federal, state, and local government and industry) in comparison to probable need during a response.

As defined by Alaska regulations, the Prince William Sound Subarea is the area of the state south of 63° 30' North latitude, west of 142° West longitude, and east of the Cook Inlet Subarea (which is that area encompassed by the boundaries of the Kenai Peninsula Borough, the Municipality of Anchorage, and the Matanuska-Susitna Borough) including adjacent shorelines and state waters, and having as its seaward boundary a line drawn in such a manner that each point on it is 200 nautical miles from which the territorial sea is measured. (18 AAC 75.495)

B. SUBAREA DESCRIPTION

Prince William Sound is an extensive body of water with an area of about 2,500 square miles and 3,500 miles of shoreline. The entrance to the Sound is 58 miles across and extends from Cape Puget to Point Whittshed. The entrance is also protected by a series of islands: Montague (which experienced as much as 35 feet of uplift during the 1964 earthquake), Hinchinbrook, and Hawkins Islands. Most of the islands and peninsulas are tree-covered with rocky and sometimes precipitous shorelines. Located next to the entrance on the eastern part of the Sound is the Copper River Delta which has extensive tidal flats that support a variety of wildlife.

The Prince William Sound region is characterized by isolated coastal and inland communities. Valdez, Whittier and Cordova are the major communities along the coastline. The Glenn, Richardson, and Edgerton Highways transect the region. Several inland communities plus Valdez are connected to this interior highway network which provides transportation routes to the larger communities of Fairbanks and Anchorage.

The town of Valdez is located at the northeastern end of Port Valdez, a body of water approximately 12 miles long and 2.5 miles wide, located in northeast Prince William Sound. The port is a natural deep water fjord, virtually surrounded by mountains, and the most northerly ice-free port in Alaska. From Port Valdez the water route proceeds southwest through Valdez Narrows to Valdez Arm and into Prince

William Sound. The shoreline is dominated by steeply inclined rock walls with occasional sloping, rocky beaches and gravel deltas.

Extensive sand-silt-rock tidal flats are found east of Valdez at the mouths of the Lowe River and Mineral Creek. The Port itself has a maximum depth of 810 feet, a shallow sill of 390 feet, and an average depth of 675 feet. Tidal currents within the port are not strong, generally less than .75 knots. Wind-driven currents dominate surface movement during high wind periods but waves rarely exceed 3 feet.

The city of Cordova sits on the east side of Orca Inlet which is located in southeast Prince William Sound. The two most prominent features are Mount Eyak and Mount Eccles which are directly above the town. Due to the 1964 earthquake, as much as 6.3 feet of uplift was experienced in Orca Inlet. The average flood tide is approximately 1.8 knots and the average ebbtide is approximately 1.0 knot.

The town of Whittier is located at the end of Passage Canal, a fjord on the northwestern side of Prince William Sound, and has rail connection to Anchorage and the highway system. This port serves as one of the major ocean vessel-railroad transfer points for the State of Alaska.

Industrial facilities within the subarea include the Trans Alaska Pipeline system (TAPS) and Valdez Marine Terminal located in Valdez, and a number of seafood processing facilities, the majority in Cordova and Valdez.

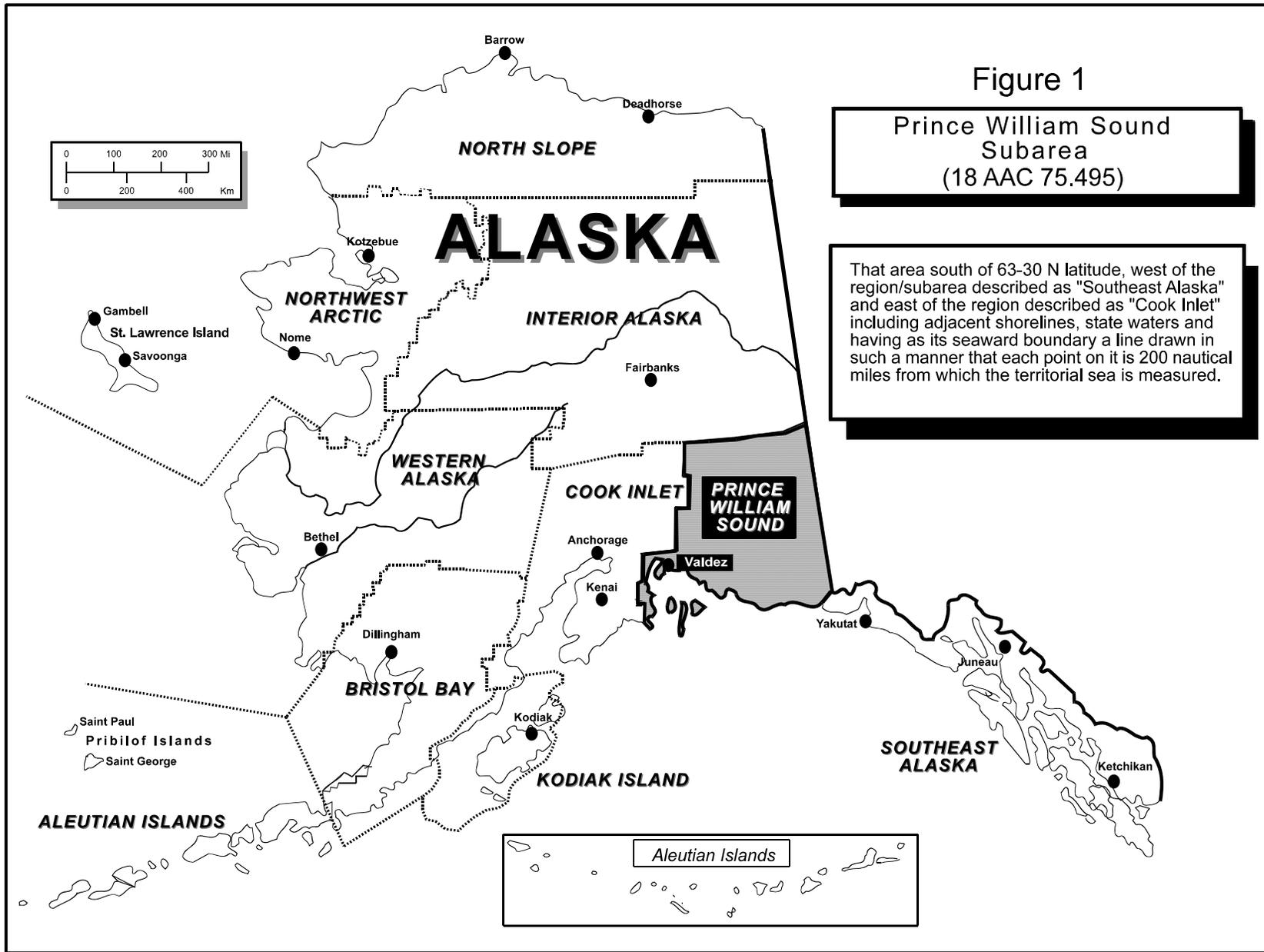


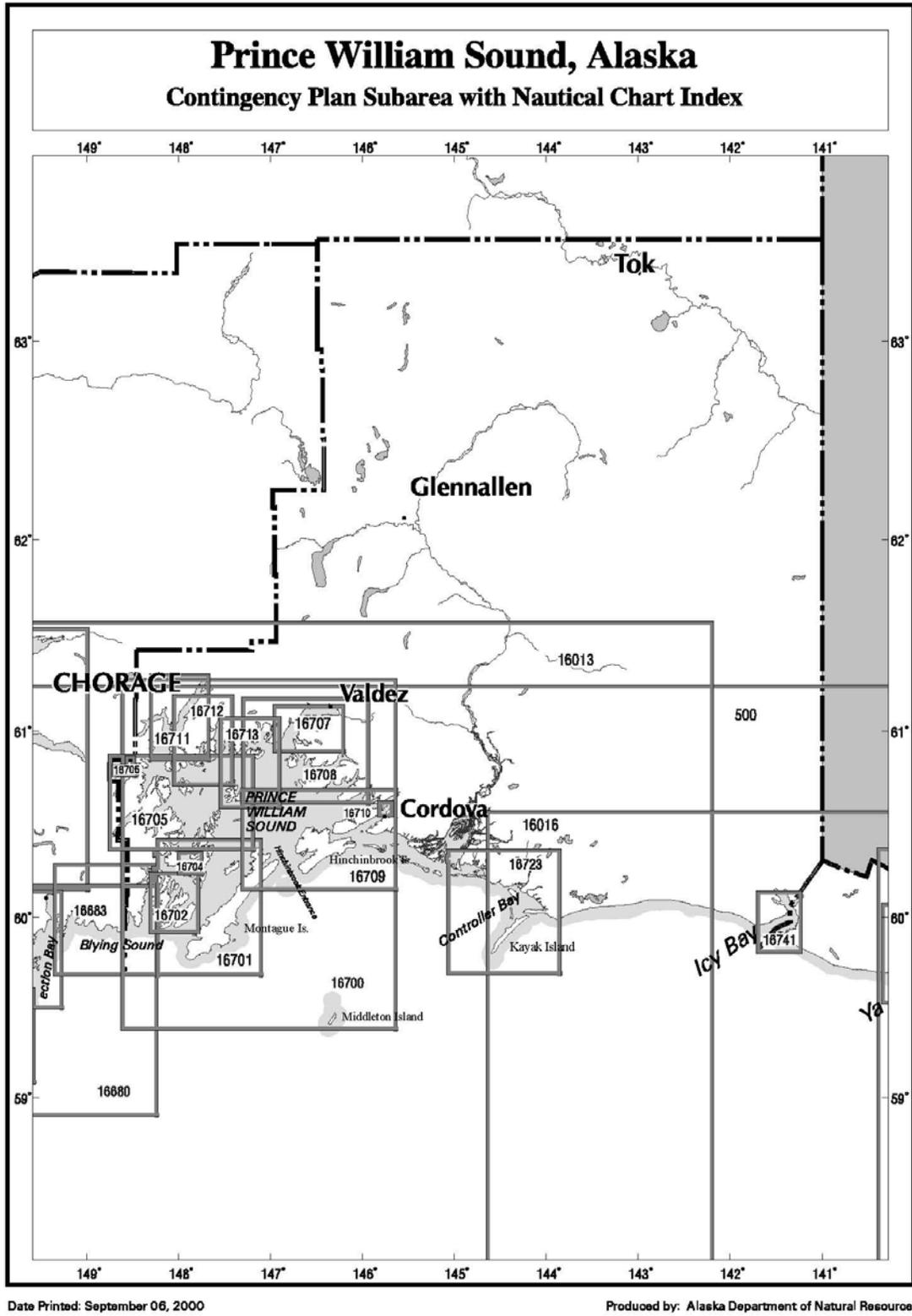
Figure E-2: PWS Detailed Subarea Map



Figure E-3: PWS USGS Topo Map Index



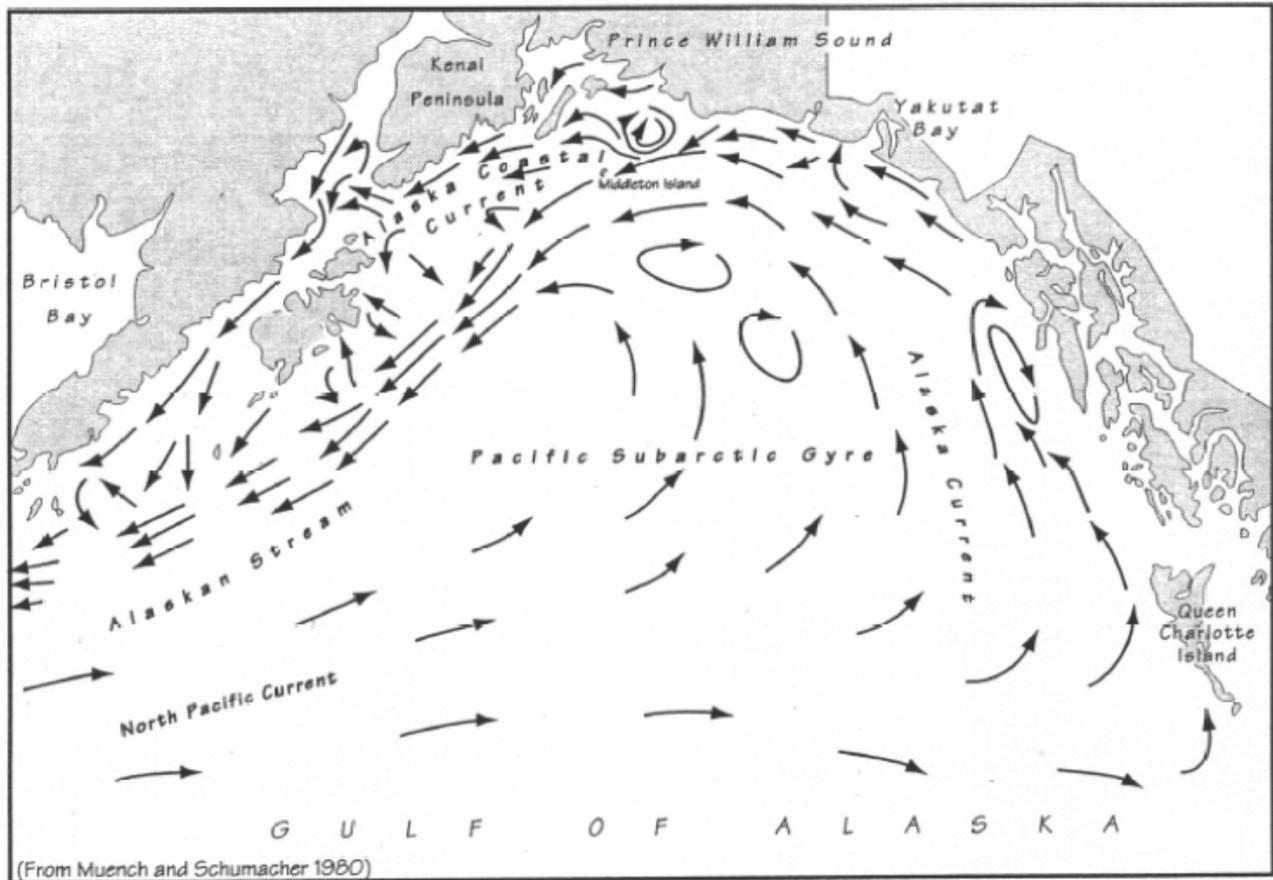
Figure E-4: PWS Nautical Chart Map Index



The NOAA charts immediately after this page are also available at the following website:

<http://www.asgdc.state.ak.us/maps/cplans/base/AK-Circ.pdf>

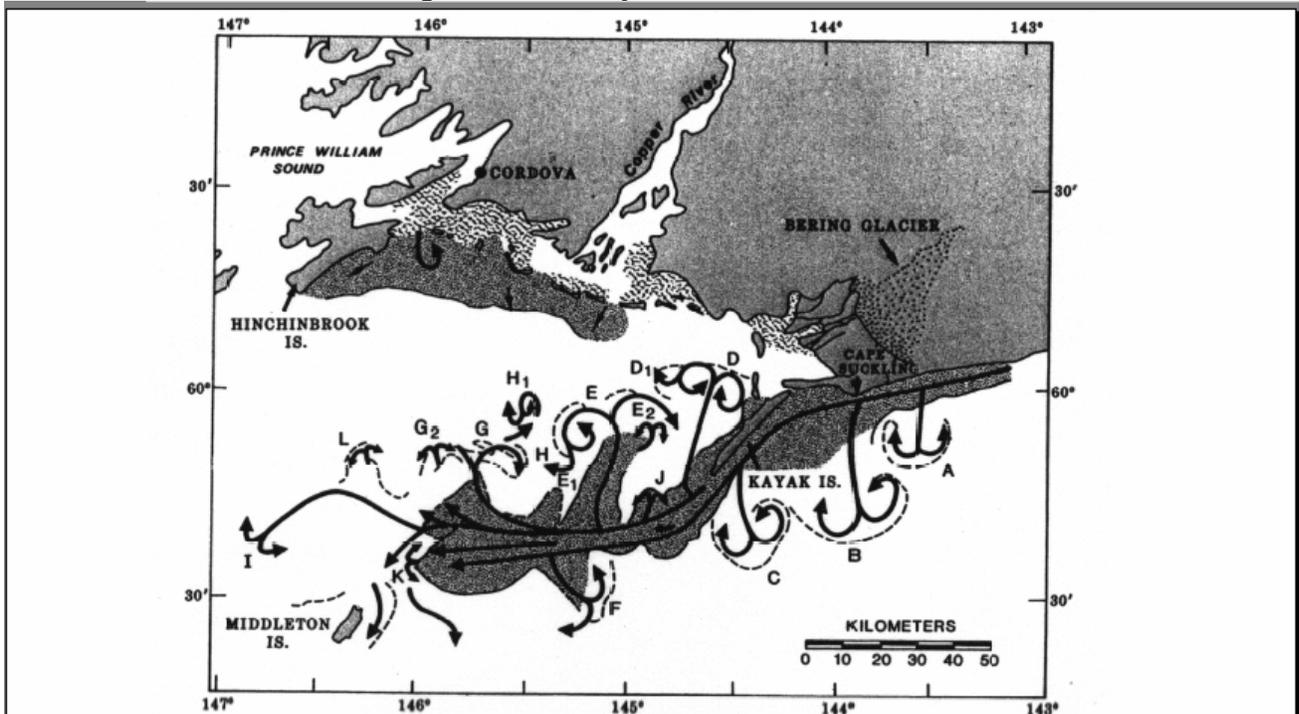
Figure E-5: Net Surface Currents – Gulf of Alaska



Net surface currents in the Gulf of Alaska

Muench, R.D. and J.D. Schumacher; 1980, Physical oceanographic and meteorological conditions in the Northwest Gulf of Alaska, NOAA Techni Memorandum ERL PMEL-22; Seattle: Pacific Marine Environmental laboratory, National Oceanic and Atmospheric Administration.

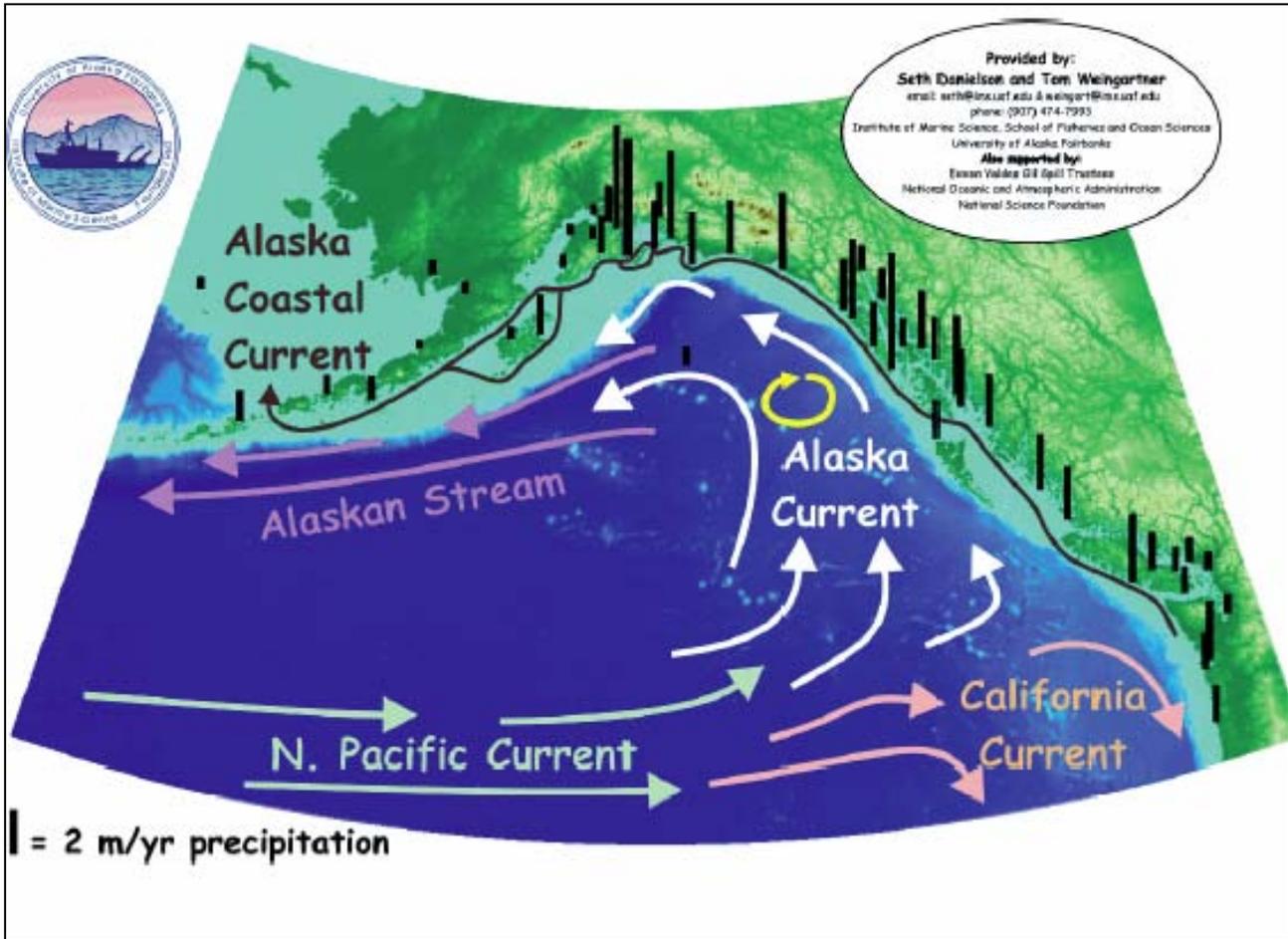
Figure E-6: Kayak Island - Eddies



Analysis of surface flow around Kayak Island, showing multiple dipole eddies.

Ahlnas, K. et.al., 1987, Multiple Dipole Eddies in the Alaska Coastal Current Detected with Landsat Thematic Mapper Data, JGR, 92, No. C12, p. 13,041-13,047; Nov. 15.

Figure E-7: Alaska Current Patterns



C. AREA OF RESPONSIBILITY

The Prince William Sound Subarea is that area described earlier in part B. The Prince William Sound Captain of the Port (COTP) Zone for the U.S. Coast Guard is included in this subarea. The PWS COTP Zone comprises the area within the boundary which starts at Cape Puget at 148° 26' W. longitude, 59° 56.06' N. latitude, and proceeds northerly to 61° 30' N. latitude; thence easterly to the International Boundary between the United States and Canada; thence southerly along the International Boundary to 60° 18.7' N. latitude; thence southwesterly to the sea at 60° 01.3' N. latitude 142° W. longitude; thence southerly along 142° W. longitude to the outermost boundary of the EEZ; thence along the outermost boundary of the EEZ to 148° 26' W. longitude to the place of origin at Cape Puget at 59° 56.06' N. latitude.

The Prince William Sound Subarea is divided into Coastal and Inland Zones to determine federal agency responsibility. In accordance with current Memoranda of Understanding, the Coast Guard is the predesignated FOSC for the Coastal Zone which encompasses all navigable waters seaward of the mean high tide line and an area of shoreline 1,000 yards inland of the coastline. The Environmental Protection Agency is the predesignated FOSC for the Inland Zone which encompasses all lands, rivers, streams, and drainages inward of the 1000-yard wide band which parallels the Alaskan coastline.

The State of Alaska places jurisdiction of spill response for the Prince William Sound Subarea under the Central Alaska Response Team (CART) of the Department of Environmental Conservation. The SOSC for the CART is the predesignated SOSC for the entire Prince William Sound Subarea.

D. REGIONAL STAKEHOLDER COMMITTEE

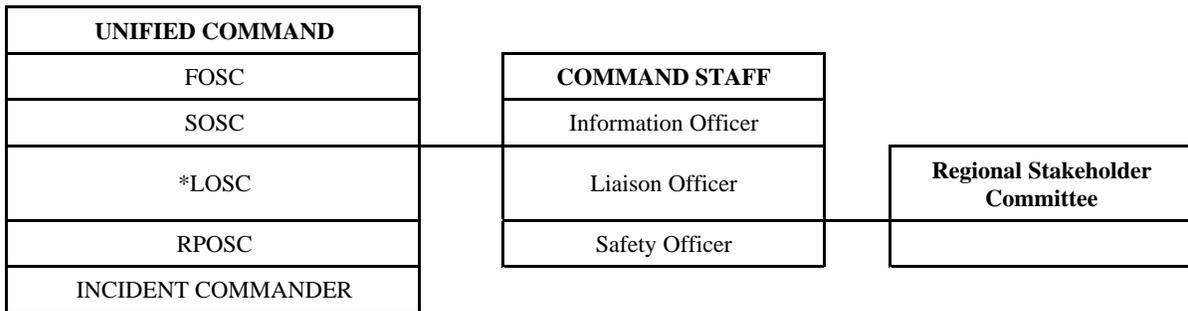
A Regional Stakeholder Committee (RSC) will normally be activated for significant incidents that involve resources under the jurisdiction of several agencies. The RSC was previously referred to as the Multi-Agency Coordination Committee (MAC). Unlike the MAC defined in the ICS of the National Interagency Incident Management System, the RSC for a spill response does not play a direct role in setting incident priorities or allocating resources. The RSC can advise the Unified Command (under the guidance of the Community Liaison Officer) and provide comments and recommendations on incident priorities, objectives and action plans.

Figure 3 provides the general location of the regional RSC in relation to the Unified Command organizational structure. Additionally, the suggested/potential membership of the RSC is provided in Figure 3. Membership on the RSC is dependent upon the location of the incident and the interests or jurisdiction of the affected communities, landowners, and special interest groups. During incidents where there is no FOSC, federal agencies with jurisdictional responsibilities for resources at risk could participate as a member of the RSC, thus retaining their input on containment, oversight, and cleanup.

As indicated above, the RSC is not directly involved in tactical operations, though some of its members may be. The RSC's role is to convey to the Unified Command information relating to the authority, concerns and expertise of its members. RSC members recommend to the Unified Command overall objectives and priorities and review the Incident Action Plans.

RSC activities will be coordinated by the Community Liaison Officer. RSC discussions will be documented and recommendations and dissenting opinions occurring outside of RSC meeting with the Unified Command will be communicated to the Unified Command through the Liaison Officer. The RSC will be chaired initially by the Community Liaison Officer. After convening, the RSC will then elect its own chair.

**Figure E-8: PWS Regional Stakeholder Committee
ICS Organizational Position and Membership**



Suggested Membership:

- Prince William Sound Regional Citizens Advisory Council
 - Representatives or Community Emergency Coordinators from affected communities. These may include:
 - Chenega Bay
 - Chitina
 - Cordova
 - Glennallen
 - Kenny Lake
 - Mentasta Lake
 - Northway Junction
 - Paxson
 - Tanacross
 - Tazlina
 - Tok
 - Valdez
 - Chistochina
 - Copper Center
 - Gakona
 - Gulkana
 - McCarthy
 - Northway
 - Northway Village
 - Slana
 - Tatitlek
 - Tetlin
 - Tonsina
 - Whittier
 - Private landowners
 - Federally-recognized tribes, Native corporations, organizations and communities
 - Special interest groups affected by the incident
- * The Local On-Scene Coordinator is part of the Unified Command and the Incident Commander during an incident as long as there is an immediate threat to life, health and safety. The LOSC may also be part of the Unified Command during incidents which occur within the local jurisdictional authority and where significant local resources are committed to the response.

E. REGIONAL CITIZENS ADVISORY COUNCIL

The Prince William Sound Regional Citizens Advisory Council (RCAC) is a local citizens group with an Oil Pollution Act of 1990-mandated role in PWS spill response activities. In this role, the RCAC participates with the incident management team at the emergency operations center and monitors on-water activities during a spill. The RCAC has four primary tasks to perform during a spill: observe, verify, inform, and advise.

By observing and verifying emergency spill response and cleanup efforts, the RCAC is able to properly inform local residents, communities and concerned groups. The RCAC also provides information on local knowledge and concerns to incident commanders that can prove valuable to operational decisions. The RCAC is a resource for the Unified Command and participates in the Regional Stakeholder Committee when it is established and functioning for a spill response.

Specific responsibilities of the RCAC include:

- Providing a voice for local communities and citizens in the policies and decisions that affect them.
- Advising the oil industry and the public on oil spill prevention and response, and ways to mitigate the environmental impact of terminal, offshore oil facilities, and tanker operations.
- Monitoring terminal, tanker, and offshore oil facilities operations and implementation of spill prevention and response plans.
- Increasing public awareness of private oil industry's current capabilities in spill prevention and response, and the environmental impacts of oil transportation.
- Fostering long term partnership between industry, government and local communities.
- Conducting independent research.
- Participating in, monitoring, and critiquing actual spill responses, spill drills, deployment exercises, and spill simulations conducted by industry. The RCACs also assist industry and regulatory agencies in drill planning and post-drill evaluations.
- Participating in the Regional Stakeholder Committee.
- Preparing and maintaining an RCAC Emergency Response Plan outlining the Council's role and operating procedures in the event of a major spill.

F. SUBAREA COMMITTEE

The primary role of the Subarea Committee is to act as a preparedness and planning body for the subarea. The Subarea Committee consists of the predesignated FOSCs and SOSCs for the subarea and, depending upon the event or the issues to be addressed, local government representatives. Each member is empowered by their own agency to make decisions on behalf of the agency and to commit the agency to carrying out roles and responsibilities as described in this plan and the Unified Plan. The predesignated Federal On-Scene Coordinators for the area (EPA & USCG) will serve as chairpersons of the committee.

The Subarea Committee is encouraged to solicit advice, guidance or expertise from all appropriate sources and establish work groups as necessary to accomplish the preparedness and planning tasks. Work group participants may include facility owners/operators, shipping company representatives, cleanup contractors, emergency response officials, marine pilot associations, academia, environmental groups, consultants, response organizations and representatives from regional citizens' advisory councils.

Subarea Committee Members

The Prince William Sound Subarea Committee is comprised of the following:

U.S. Coast Guard, COTP Prince William Sound
U.S. Environmental Protection Agency
Alaska Department of Environmental Conservation
and local government where applicable

Subarea Work Groups

The Prince William Sound Subarea Committee relies on the input from the three work groups listed below. The Subarea Committee welcomes interested participants to serve on work groups in accordance with each individual's area of expertise and the particular needs of the work groups.

- The Sensitive Areas Work Group is chaired by a representative from the Department of Interior. The primary purpose of the Sensitive Areas Work Group is to develop and maintain the Sensitive Areas section of the plan.
- The Logistics Work Group is chaired by a representative from the ADEC. The primary purpose of the Logistics Work Group is to develop and maintain the Resources Section of the plan.
- The Operations Work Group is chaired by a representative from the U.S. Coast Guard. The primary purpose of the Operations Work Group is to develop and maintain the Response Section, the Hazmat Section, and the Scenarios Section of the plan.

Membership on the work groups can vary and fluctuate but the list below provides some of the regular participants:

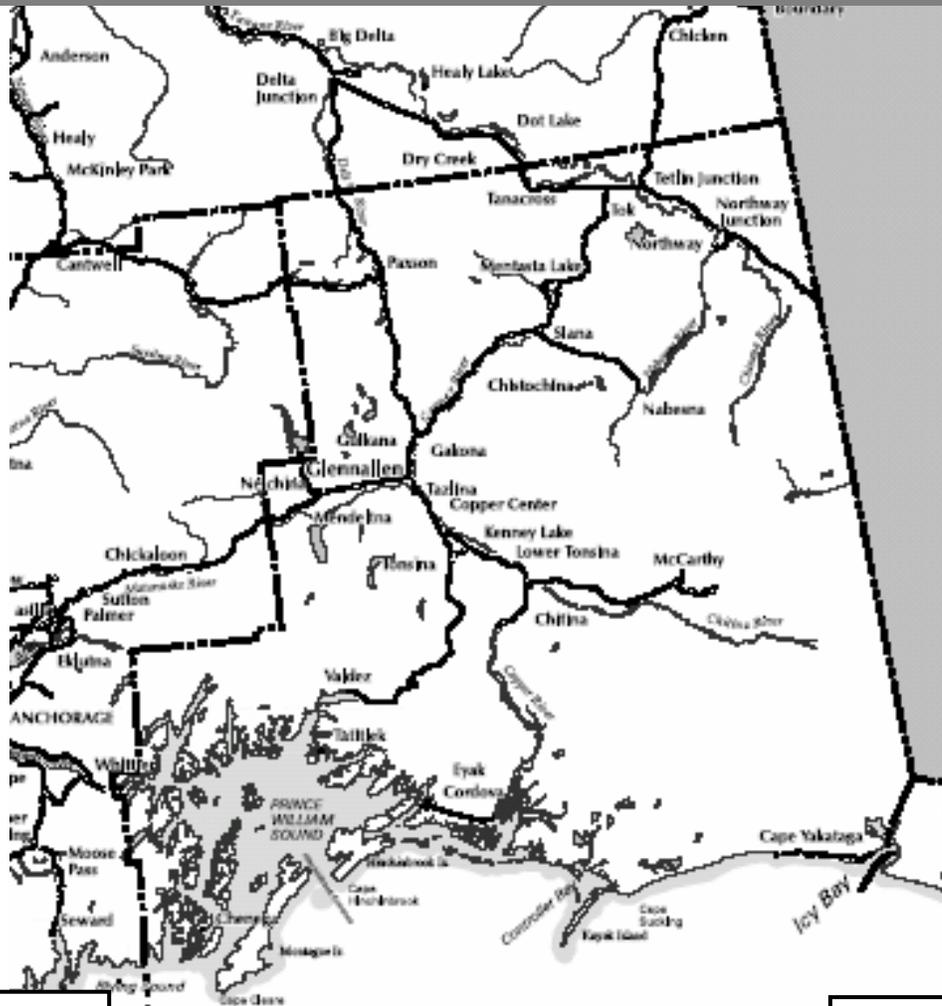
- PWS Regional Citizens Advisory Council
- City of Cordova
- City of Valdez
- Village of Tatitlek
- Village of Chenega
- representatives from LEPCs and other local governments
- Alyeska Pipeline Service Company
- Alyeska Ship Escort Response Vessel System (SERVS)

- British Petroleum Oil Shipping Company
- ConocoPhillips Alaska Inc.
- representatives from other industry and commercial concerns
- Alaska Department of Environmental Conservation
- Alaska Department of Fish and Game
- Alaska Department of Natural Resources
- U.S. Coast Guard, COTP, MSO Valdez
- USCG 17th District
- U.S. Department of Interior, Office of Environmental Policy and Compliance
- U.S. Department of Interior, Fish and Wildlife Service
- U.S. Forest Service
- National Oceanic and Atmospheric Administration
- National Marine Fisheries Service

Each of the above work groups are also involved in reviewing and providing comments on the other sections of the plan (including the Geographic Response Strategies section.)

Figure E-9:

Planning Organization Prince William Sound Subarea Contingency Plan



**STATE
AGENCIES**

**FEDERAL
AGENCIES**

LOCAL AGENCIES

INDUSTRY



BACKGROUND: PART TWO – RESPONSE POLICY AND STRATEGIES

The strategy for responding to a specific spill or hazmat incident depends upon numerous factors. The strategy can change as the situation changes. As a general rule, the strategies listed below should be used as a guide in developing an effective response. Consider all factors that may affect the particular situation and revise/modify/expand these priorities as the situation dictates. The strategies are further delineated in the procedures contained in the Response Section. Additional information can be found in the **Unified Plan**.

A. FEDERAL RESPONSE ACTION PRIORITIES/STRATEGIES

The following priorities are general guidelines for response to a pollution incident within the COTP Prince William Sound zone. They are based on the premise that the safety of life is of paramount importance in any pollution incident, with the protection of property and the environment, although important, being secondary. Nothing in this part is meant to indicate that higher priority items must be completed before performing a lower priority task. They may be carried out simultaneously or in the most logical sequence for each individual incident.

- Priority One - Safety of Life - for all incidents which may occur, the safety of personnel, including response personnel, must be given absolute priority. No personnel are to be sent into an affected area without first determining the hazards involved and that adequate precautions have been taken to protect personnel.
- Priority Two - Safety of Vessel/Facility and Cargo - the facility and/or vessel and its cargo shall become the second priority.
- Priority Three - Protection of the Environment by elimination of the pollution source - containment and recovery of oil in the open water must be effected expeditiously to preclude involvement of the beaches and shorelines. Due to remote locations and restricted accessibility, it is extremely difficult to protect the majority of the coastline by diversion or exclusion methods. Therefore, securing the source and open water containment and recovery is especially critical and should normally be the first line of defense to protect the environment. Likewise, spills which occur on land or in upland water courses will be dammed, boomed, diked, etc., as feasible to prevent the spread of the pollutant downstream. NOTE: *In situ* burning (Unified Plan, Annex F for checklist) of a vessel and its pollutant may be an alternative considered by the OSCs; this strategy places environmental protection priorities above saving the vessel and its cargo.
- Priority Four - Protection of the Environment by diversion/exclusion, dispersion, or in-situ burning. In the event that the location of a spill or the weather conditions do not permit open water recovery, protection of the shoreline becomes paramount, especially areas of greatest sensitivity. It is not possible to protect some areas entirely or even in part. It may be necessary to sacrifice some areas in order to achieve the best overall protection of the environment. The OSC may consider *in situ* burning as a response option. Refer to the **Unified Plan** for an *in situ* burning checklist. The use of dispersants must be considered early in the response phase while the oil is in the open water. Subpart J of the NCP and the **Unified Plan (Annex F)** address in detail the responsibilities of the OSC in the use of chemicals.
- Priority Five - Protection of the Environment by beach cleanup and the use of Sacrificial Areas. It may not be possible to protect the entire shoreline from oil. In fact, it may be allowed purposely to come ashore in some areas as an alternative to damaging others. Selection of the proper shoreline cleanup technique depends on many different factors including the following:

- Type of substrate
- Amount of oil on the shoreline
- Depth of oil in the sediment
- Type of oil (tar balls, pooled oil, viscous coating, etc.)
- Trafficability of equipment on the shoreline
- Environmental or cultural sensitivity of the oil shoreline
- Prevailing oceanographic and meteorological conditions

The best way to minimize debate over the most appropriate response is to involve all interested government and private agencies. The shoreline assessment groups shall attempt to agree on the amount and character of the oil that is on the shorelines, anticipate interactions between the stranded oil and the environment, and the geological and ecological environment of the involved shorelines. Once a consensus is met, a process is necessary to determine the proper treatment required.

Shoreline cleanup options may include the use of physical and/or chemical processes. Chemical shoreline cleanup products may increase the efficiency of water-washing during the cleanup of contaminated shorelines. However, the product must be listed on the EPA National Contingency Plan Product Schedule and authorization must be obtained from the ARRT and the government on-scene coordinator at the spill. Physical shoreline cleaning methods include techniques such as: natural recovery, manual sorbent application, manual removal of oiled materials, low pressure flushing (ambient temperature), vacuum trucks, warm water washing, high pressure flushing, manual scraping, mechanical removal using heavy equipment. Bioremediation is also considered as a shoreline cleaning method. Bioremediation is the application of nutrients to the shoreline to accelerate the natural biodegradation of oil. The OSC shall request site-specific guidelines for source protection measures required during shoreline cleanup operations.

B. STATE OF ALASKA RESPONSE PRIORITIES

1. **Safety:** Ensure the safety of persons involved, responding, or exposed to the immediate effects of the incident.
2. **Public Health:** Ensure protection of public health and welfare from the direct or indirect effects of contamination of drinking water, air, and food.
3. **Environment:** Ensure protection of the environment, natural and cultural resources, and biota from the direct or indirect effects of contamination.
4. **Cleanup:** Ensure adequate containment, control, cleanup and disposal by the responsible party or supplement or take over when cleanup is inadequate.
5. **Restoration:** Ensure assessment of contamination and damage and restoration of property, natural resources and the environment.
6. **Cost Recovery:** Ensure recovery of costs and penalties to the Response Fund for response, containment, removal, remedial actions, or damage.

BACKGROUND: PART THREE – AREA SPILL HISTORY

The following spill history was obtained from the Alaska Department of Environmental Conservation and U.S. Coast Guard records. This partial listing includes only the more significant spills or hazardous material releases. This abbreviated spill history is provided to give an overall view of the vast array of facility and transportation-related accidents that can occur. Prince William Sound supports a wide variety of marine vessel traffic including everything from the smallest pleasure craft to the crude oil supertankers calling on the Alyeska Marine Terminal in Port Valdez.

The cities of Valdez, Cordova, Glennallen, Mentasta and many other small villages are not immune to oil discharges or hazardous material releases. The number of fuel transfers that take place in these towns is staggering, thus the opportunity for a spill is greatly increased.

The most notable spill in Prince William Sound was the Exxon Valdez incident. This led to the passing of the Oil Pollution Act of 1990 which greatly improved oil spill response capabilities in the United States.

A. NAVIGABLE WATERS (SPILLS GREATER THAN OR EQUAL TO 1,000 GALLONS)

Date	Incident	Volume and Substance
01/03/89	T/V Thompson Pass, Berth 4, Valdez	60,000 to 75,000 gallons - North Slope Crude
01/16/89	T/V Cove Leader, Berth 3, Valdez	2,500 to 3,000 gallons - North Slope Crude
03/24/89	T/V Exxon Valdez, Bligh Reef	10,800,000 gallons - North Slope Crude
03/04/90	PWS Aquaculture, Cannery Creek Hatchery	2,200 gallons - Diesel
06/01/91	F/V Kristine, Montague Island	1,800 gallons - Diesel
02/29/92	F/V Granny Rosa, Galena Bay	1,500 gallons - Diesel
02/94	Tesoro Fuel Dock	1,000 gallons - Diesel
05/21/94	T/V Eastern Lion	8,400 gallons - North Slope Crude
08/95	M/V Crane (Cordova)	2,100 gallons - Diesel/Oil
03/96	F/V SS Viking (Montague Island)	2,000 gallons - Diesel
1/26/97	Valdez Petro Star Refinery	4,200 gallons - Crude
7/21/97	49er Barge Vessel Incident Between Kodiak and Cordova	2,604 gallons - Diesel (hull failure)
2/9/99	Vessel Incident (Near Naked Island)	1,000 gallons - Diesel (punctured fuel tank)
2/17/99	Valdez Marine Terminal	8,400 gallons - Diesel (overfill)
7/13/99	Valdez Marine Terminal	1,100 gallons - Diesel (Gauge/Site Glass Failure)
7/14/99	Valdez Marine Terminal	1,100 gallons - Diesel (overfill)

Date	Incident	Volume and Substance
7/26/01	M/V Vanguard (North of Glacier Island)	2,000 gallons – Diesel (Vessel Sank)
8/4/01	F/V Windy Bay (Olsen Island)	35,000 gallons – Diesel (Vessel Sank)
2/13/02	Valdez Marine Terminal	3,065 gallons - Diesel (Crack in pipe, line)
5/15/02	Valdez Marine Terminal	1,050 gallons – Non-Crude Oil, other (Line Failure)
9/9/02	Valdez Marine Terminal (Fire Suppression System)	5,500 gallons - Unknown (Human Error)
12/12/02	Valdez Marine Terminal (Ballast Water Treatment Tank)	1,050 gallons – Ballast Water (Leak in pipe, line)

B. INLAND SPILL HISTORY (SPILLS GREATER THAN OR EQUAL TO 1,000 GALLONS)

Date	Incident
09/26/88	Service Oil Co., Mile 30 Richardson Highway 1,000 gallons - Diesel
02/15/89	ADOT/PF, Thompson Pass 7,000 gallons - Diesel
05/16/89	Columbus Distributor, Mile 166 Glenn Highway 1,400 gallons - Gasoline
6/05/89	Stratton Oil Co., Mile 116 Glenn Highway 10,000 gallons - Gasoline
12/15/89	U.S. Army, Mile 139 Richardson Highway 5,000 gallons - Diesel
04/25/90	ADOT/PF, Cordova 5,000 gallons - Fuel Oil
04/30/90	ADOT/PF, Thompson Pass 1,200 gallons - Diesel
4/26/91	USCG, Potato Point, Port Valdez 3,500 gallons - Diesel
04/26/92	USCG, Potato Point, Port Valdez 5,000 gallons - Diesel
11/07/95	TransAlaska Pipeline System (Pump Station 10) 5,800 pounds - Halon
1/08/95	TransAlaska Pipeline System (Pump Station 10) 5,800 pounds - Halon

Date	Incident
04/20/96	TransAlaska Pipeline System (Check Valve 92) 34,073 gallons - North Slope Crude Oil
08/26/96	TransAlaska Pipeline System (Pump Station 10) 2,300 pounds - Halon
10/09/96	Gakona Junction Village Roadhouse 7,000 gallons - Diesel
01/26/97	Petro Star Refinery (Valdez) 4,200 gallons - Crude Oil
02/17/99	Valdez Petroleum Terminal Tank #18 8,400 gallons – Diesel
8/16/99	TransAlaska Pipeline System (Pump Station 10) 4,400 pounds – Halon
10/19/99	Cordova - Eyak Lake - Waste Oil Release 1,000 gallons – Waste Oil (containment overflow)
7/28/00	Richardson Highway South – Mile 19 Gravel Pit 2,000 gallons – Asphalt (Cause unknown)
8/3/01	Cordova - Orca Power Generation Plant 1,500 gallons – Diesel (Tank Overfill)
12/31/01	Chitina Electric Power Plant 1,000 gallons – Diesel (Valve failure)

C. HAZMAT RELEASE HISTORY

Listed below is a brief synopsis of significant releases of hazardous substances in the region. This information was collected from the ADEC spill database; a complete list is available through ADEC.

Date	Incident
10/1/96	DOTPF Yard (Tok) 5 gallons - Toluene 2,4-Diisocyanate (Cargo Not Secured)
5/3/97	Valdez Marine Terminal-Land Power Vapor Area 1 gallon – Sulfuric Acid (Cause Unknown)
10/18/98	Valdez – Nautilus Seafoods 5 pounds – Anhydrous Ammonia (Valve Failure)
6/7/99	Valdez Small Boat Harbor – F/V Taku 1 pound – Anhydrous Ammonia (Equipment Failure)
6/9/99	Valdez – Nautilus Seafoods 20 pounds – Anhydrous Ammonia (Human Error)
3/24/00	Valdez – Nautilus Seafoods 1 gallon – Anhydrous Ammonia (Line Failure)
5/12/01	Valdez Marine Terminal 1 gallon – Hydrogen Peroxide (Equipment Failure)
9/20/02	Valdez Small Boat Harbor – F/V Taku 1 pound – Anhydrous Ammonia (Seal Failure)
9/26/02	Valdez – Nautilus Seafoods 2 gallons – Anhydrous Ammonia (Human Error)
8/5/03	Valdez – Nautilus Seafoods (MP 1.5 at Crooked Creek Salmon Overlook) 2 gallons – Sulfuric Acid (Cargo not secured)
7/23/03	Valdez Marine Terminal 1 gallon – Hydrochloric Acid (Leak)
7/23/03	Valdez Marine Terminal 1 gallon – Hydrochloric Acid (Line Failure)
6/13/04	Valdez – Nautilus Seafoods Approx. 30 lbs of Anhydrous Ammonia (Leak)
6/27/04	Valdez – F/V Steelhead 20 lbs of Freon22 (broken fitting)
8/8/04	Valdez – Nautilus Seafoods 1 pound – Anhydrous Ammonia (Human Error)
3/13/05	Valdez – Nautilus Seafoods Approx. 5 lbs of Anhydrous Ammonia (under investigation)

D. CLOSER LOOK AT SOME NOTEWORTHY SPILLS

January 3, 1989 T/V Thompson Pass

Location: Berth 4, Valdez Marine Terminal

Product: 60,000 to 75,000 gallons of ANS crude oil

An oily sheen was initially observed in while the vessel was offloading at a southern port. During on-loading operations at the Valdez Marine Terminal, crude oil was released through a crack in the hull.

March 24, 1989 T/V Exxon Valdez

Location: Near the mouth of the Valdez Arm, off Bligh I. in Prince William Sound

Product: Nearly 11 million gallons of ANS crude oil

Just after midnight, the supertanker Exxon Valdez, containing more than 53 million gallons of oil, ran aground on the charted rocks of Bligh Reef after exiting the prescribed tanker navigation lanes in an effort to avoid icebergs from nearby Columbia Glacier. The impact ruptured eight of the eleven cargo tanks. Oil spewed out of the tanker in such quantities that, for a while, the slick stood at over two feet thick in places. Within 36 hours after the grounding, and with the weather holding calm, air reconnaissance reported the oil slick to be 10 miles long and 3 to 7 mile wide. Despite calm weather for the first three days, spill response efforts were stymied by confusion, lack of equipment, and misunderstandings over proper response and control. A major storm, boasting winds up to 73mph, blasted through the Sound on Sunday night, March 26, spreading oil in all directions and coating the first of many miles of shoreline. Eventually, over 1200 miles of coastline would be impacted by oil, including the outer Kenai coast and islands, reaching the mouth of Kachemak Bay, and out to Kodiak Island and the Alaskan Peninsula. Exxon mounted a major shoreline cleanup effort during the summer of 1989, and similar but much reduced cleanup activities during the summers of 1990 and 1991. Recent studies report various parts of the coastal ecosystem still exhibiting negative effects from the oil spill.

April 20, 1996 TAPS Check Valve 92

Location: Alyeska Pipeline MP 593.7, at check valve 92, about 7 miles south of Pump Station 10.

Product: 34,073 gallons of ANS Crude Oil

The leak was caused by a leak in the by-pass valve threadlet. Alyeska discovered crude oil in two metal culvert access pipes about 60 feet north of check valve 92. About 16 inches of crude (about 100 gallons) was pumped from the pipes. Oil seeped into the pipes at a rate of about 6 - 8 gallons per hour. Alyeska reduced the pipeline throughput from 1.5 million barrels per day to 700,000 barrels per day, and pumped crude oil from the storage tanks at PS 10 to make storage available in case the line needs to be evacuated for repairs. An Incident Management Team was activated and based at Pump Station 10. Four task forces were organized to address the spill. Task force 1 excavated in the area around check valve 92. Task force 2 excavated near the metal culvert pipes and located the leading edge of the spill. Task force 3 established a contaminated soil stockpile and Task Force 4 provided decon. DEC and Joint Pipeline Office staff responded and monitored initial and follow-on response actions and reviewed cleanup plans.

August 4, 2001 F/V Windy Bay

Location: Olsen Rock, east of Olsen Island, northern Prince William Sound

Product: 35,000 gallons of diesel

The F/V Windy Bay ran aground at 10:45 am and sank at 1:56 pm in about 1000 feet of water. The vessel contained 35,000 gallons of diesel fuel at the time of sinking. The vessel also carried 100 gallons lube oil and 300-500 gallons hydraulic fluid. An on scene responder estimated the daily release rate at about 60 gallons fuel a day. Because of the great depth for the boom anchoring systems, oversized

anchors and buoys were mobilized. The Coast Guard, Dec, Alaska Chadux and SERVS responded to the incident. Containment boom was deployed to protect identified sensitive areas. The open-water recovery operations applied two Current Buster systems. Wildlife in the area included numerous seabirds, bald eagles, sea otters, sea lions, and humpback whales. Seven dead oiled birds were recovered (6 Marbled Murrelets and 1 Scoter). USF&WS otter specialists demobilized after observing that sixty otters in the area exhibited normal behavior and did not appear to have suffered any impacts. One SCAT team assessed shorelines for oil-impacts. Approximately 5.7 miles of shoreline were surveyed. Beach cleanup crews worked on Little Fairmont and Little Olsen Island. Natural flushing supplemented with low-pressure water spray was used on the oiled shoreline at these locations.

E. PWS Risk Assessment Maps: The maps on the following pages were prepared as part of the risk assessment process during the development of the potential places of refuge section (Section H) of this plan.

Prince William Sound Alaska

POTENTIAL PLACES OF REFUGE and RISK FACTORS

RISK SYMBOLS

- Anchorage
- Dock
- Mooring
- Grounding
- Potential Places of Refuge
- SERVIS
- USCG
- Response Equipment Depot
- Response Barge
- Seasonal Response Barge
- Tanker Route
- Secondary Tanker Route
- Cruise and AMHS Ship Traffic
- Small Cruise Ship Traffic
- Secondary Ferry Route

Cruise and AMHS Ship Ports of Call

BULK FUEL STORAGE SITES

- .5k-10,000 bbl.
- 10k-39,999 bbl.
- 40k-99,999 bbl.
- 100k-299,999 bbl.
- 300K-500,000 bbl.
- more than 500,000 bbl.

PWS SUBAREA SPILLS >999 gallons 1989-2004

= Persistent = Non-Persistent

- 1K-2,999 gal.
- 3K-5,999 gal.
- 6K-8,999 gal.
- 9K-11,999 gal.
- 12K-14,999 gal.
- 15K-17,999 gal.
- 18K+ gal.

Lingering Oil from 1989 Exxon Valdez Oil Spill

Frequent Fishing Vessel/Tramper Offload Activities

Key Nearshore Fishing Grounds

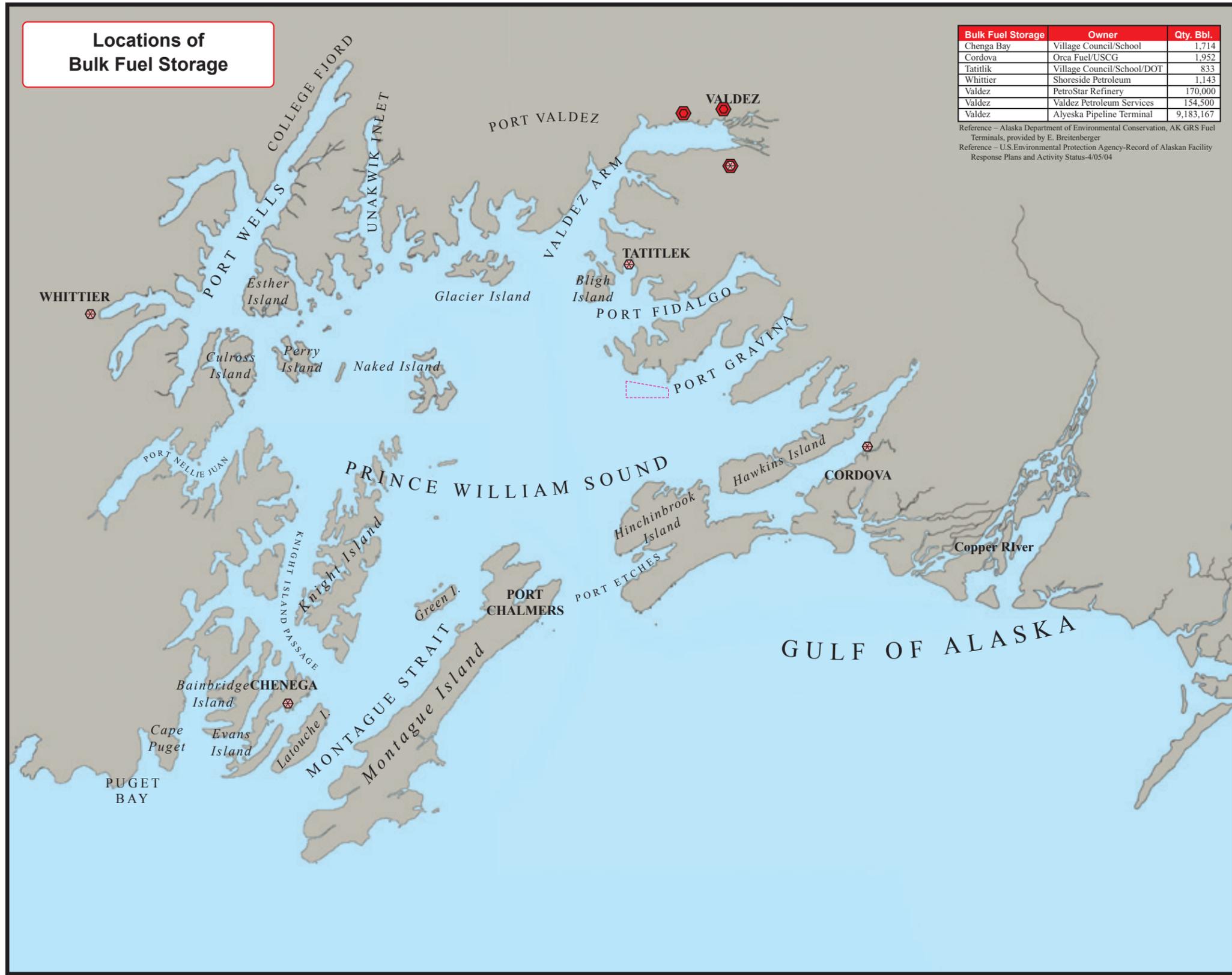
Hatchery

Remote Release Site

Locations of Bulk Fuel Storage

Bulk Fuel Storage	Owner	Qty. Bbl.
Chenga Bay	Village Council/School	1,714
Cordova	Orca Fuel/USCG	1,952
Tatitlik	Village Council/School/DOT	833
Whittier	Shoreside Petroleum	1,143
Valdez	PetroStar Refinery	170,000
Valdez	Valdez Petroleum Services	154,500
Valdez	Alyeska Pipeline Terminal	9,183,167

Reference - Alaska Department of Environmental Conservation, AK GRS Fuel Terminals, provided by E. Breitenberger
Reference - U.S. Environmental Protection Agency-Record of Alaskan Facility Response Plans and Activity Status-4/05/04



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Figure E-10. Locations of Bulk Fuel Storage.

Prince William Sound Alaska

POTENTIAL PLACES OF REFUGE and RISK FACTORS

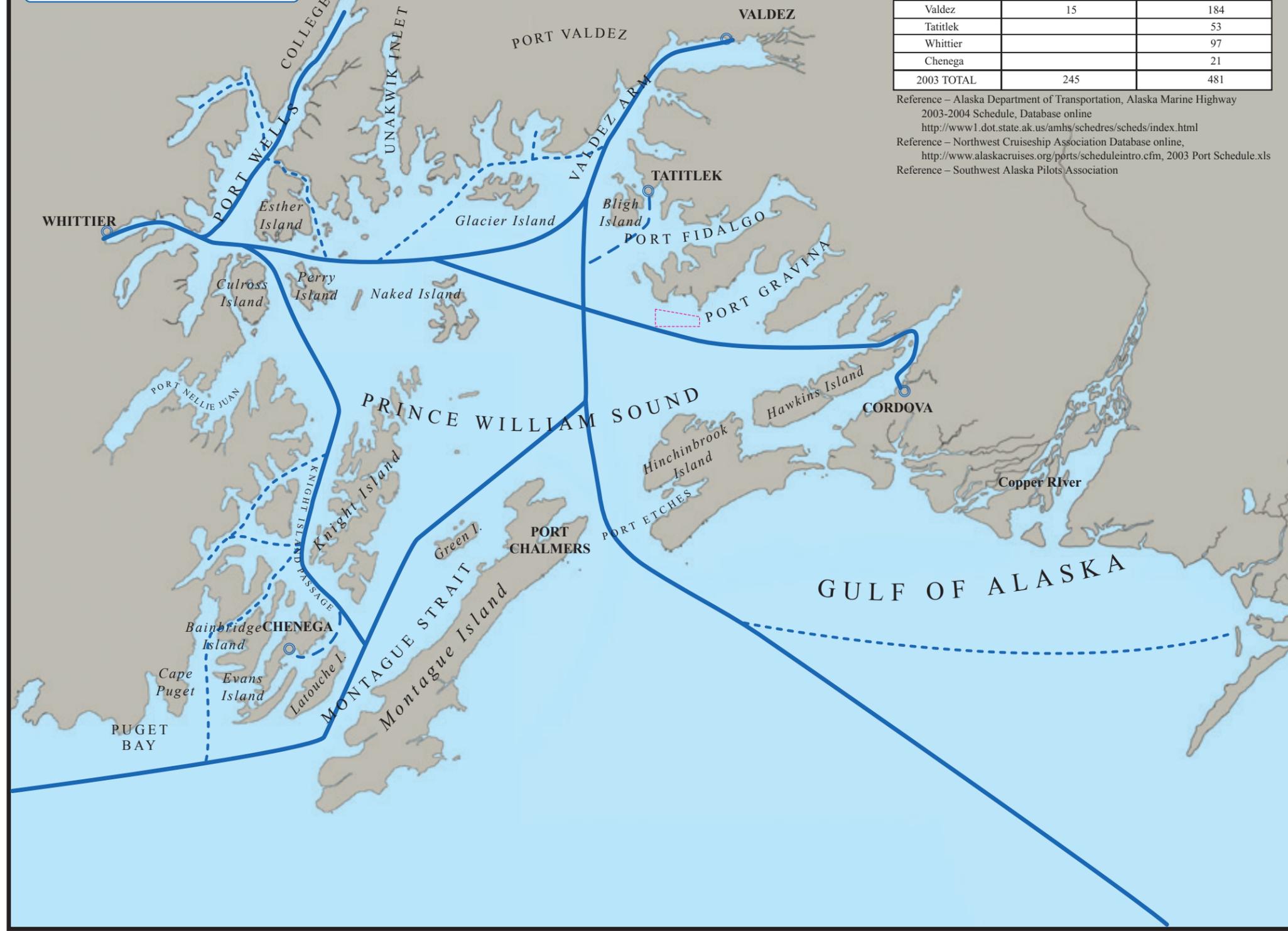
RISK SYMBOLS

- Anchorage
- Dock
- Mooring
- Grounding
- Potential Places of Refuge
- SERVIS Response Equipment Depot
- RADAR Response Equipment Depot
- USCG Response Equipment Depot
- DEP Response Equipment Depot
- Response Barge
- Seasonal Response Barge
- Tanker Route
- Secondary Tanker Route
- Cruise and AMHS Ship Traffic
- Small Cruise Ship Traffic
- Secondary Ferry Route
- Cruise and AMHS Ship Ports of Call
- BULK FUEL STORAGE SITES**
- .5k-10,000 bbl.
- 10k-39,999 bbl.
- 40k-99,999 bbl.
- 100k-299,999 bbl.
- 300K-500,000 bbl.
- more than 500,000 bbl.
- PWS SUBAREA SPILLS >999 gallons 1989-2004**
- = Persistent
- = Non-Persistent
- 1K-2,999 gal.
- 3K-5,999 gal.
- 6K-8,999 gal.
- 9K-11,999 gal.
- 12K-14,999 gal.
- 15K-17,999 gal.
- 18K+ gal.
- Lingering Oil from 1989 Exxon Valdez Oil Spill
- Frequent Fishing Vessel/Tramper Offload Activities
- Key Nearshore Fishing Grounds
- Hatchery
- Remote Release Site

Port	# of Cruise Ship Visits	# of Ferry Vessel Visits
College Fiord	129	
Cordova	1	126
Seward	100	
Valdez	15	184
Tatitlek		53
Whittier		97
Chenega		21
2003 TOTAL	245	481

Reference – Alaska Department of Transportation, Alaska Marine Highway 2003-2004 Schedule, Database online
<http://www1.dot.state.ak.us/amhs/schedres/scheds/index.html>
 Reference – Northwest Cruiseship Association Database online,
<http://www.alaskacruises.org/ports/scheduleintro.cfm>, 2003 Port Schedule.xls
 Reference – Southwest Alaska Pilots Association

Primary Traffic Routes for State Ferries & Cruise Ships



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Figure E-11. Primary Traffic Routes for State Ferries and Cruise Ships.

Prince William Sound Alaska

POTENTIAL PLACES OF REFUGE and RISK FACTORS

RISK SYMBOLS

- Anchorage
- Dock
- Mooring
- Grounding

- SERVIS
- RADAR
- USCG
- DEP

- Response Equipment Depot
- Response Barge
- Seasonal Response Barge
- Tanker Route
- Secondary Tanker Route
- Cruise and AMHS Ship Traffic
- Small Cruise Ship Traffic
- Secondary Ferry Route

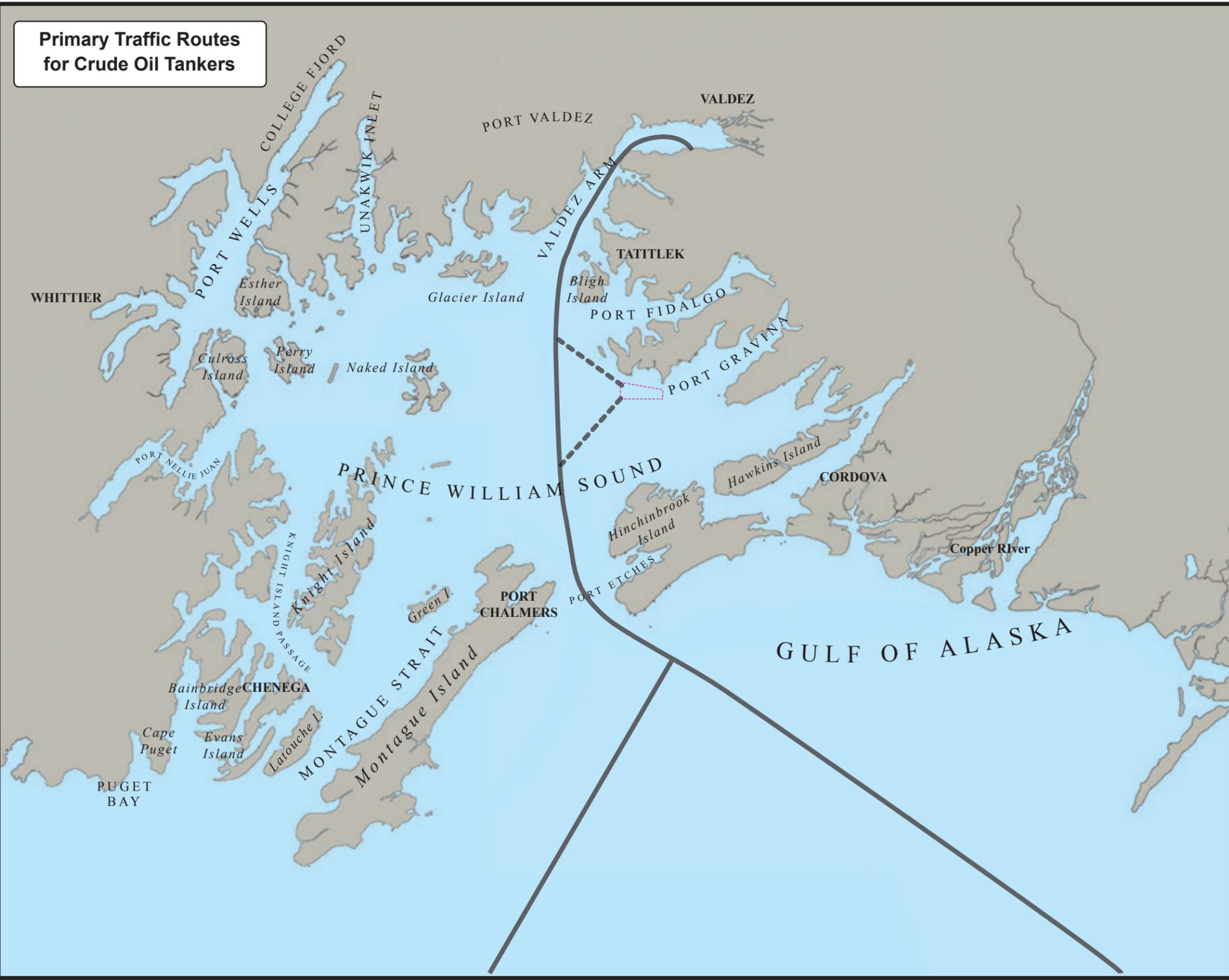
- Cruise and AMHS Ship Ports of Call

- BULK FUEL STORAGE SITES**
- .5k-10,000 bbl.
 - 10k-39,999 bbl.
 - 40k-99,999 bbl.
 - 100k-299,999 bbl.
 - 300K-500,000 bbl.
 - more than 500,000 bbl.

- PWS SUBAREA SPILLS >999 gallons 1989-2004**
- = Persistent
 - = Non-Persistent

- 1K-2,999 gal.
- 3K-5,999 gal.
- 6K-8,999 gal.
- 9K-11,999 gal.
- 12K-14,999 gal.
- 15K-17,999 gal.
- 18K+ gal.

- Linger Oil from 1989 Exxon Valdez Oil Spill
- Frequent Fishing Vessel/Tramper Offload Activities
- Key Nearshore Fishing Grounds
- Hatchery
- Remote Release Site



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Figure E-12. Primary Traffic Routes for Crude Oil Tankers.

Prince William Sound Alaska

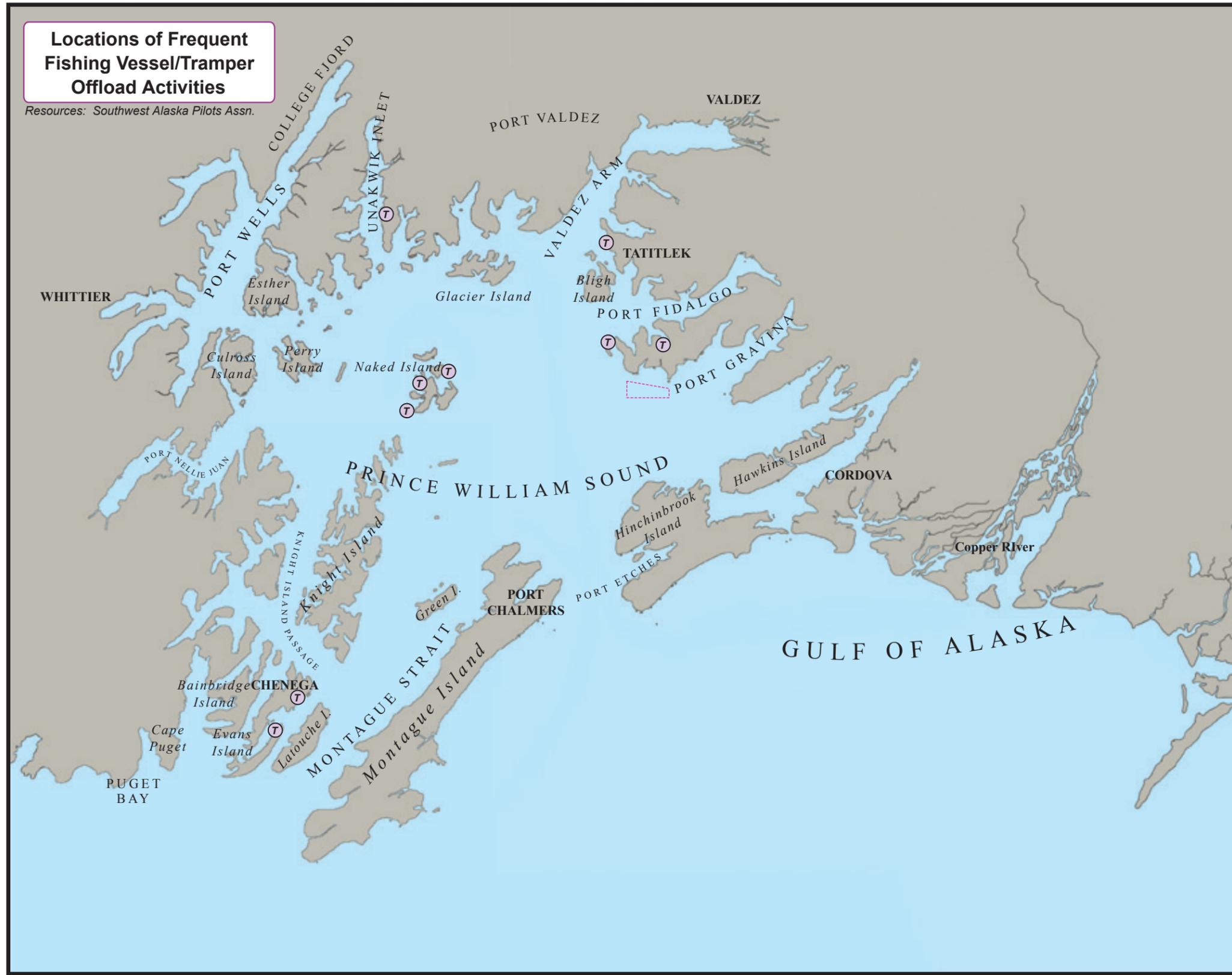
POTENTIAL PLACES OF REFUGE and RISK FACTORS

RISK SYMBOLS

- Anchorage
- Dock
- Mooring
- Grounding
- Potential Places of Refuge
- SERIS
- TASCO
- USCG
- ADEP
- Response Equipment Depot
- Response Barge
- Seasonal Response Barge
- Tanker Route
- Secondary Tanker Route
- Cruise and AMHS Ship Traffic
- Small Cruise Ship Traffic
- Secondary Ferry Route
- Cruise and AMHS Ship Ports of Call
- BULK FUEL STORAGE SITES**
- .5k-10,000 bbl.
- 10k-39,999 bbl.
- 40k-99,999 bbl.
- 100k-299,999 bbl.
- 300K-500,000 bbl.
- more than 500,000 bbl.
- PWS SUBAREA SPILLS >999 gallons 1989-2004**
- = Persistent
- = Non-Persistent
- 1K-2,999 gal.
- 3K-5,999 gal.
- 6K-8,999 gal.
- 9K-11,999 gal.
- 12K-14,999 gal.
- 15K-17,999 gal.
- 18K+ gal.
- Lingering Oil from 1989 Exxon Valdez Oil Spill
- Frequent Fishing Vessel/Tramper Offload Activities
- Key Nearshore Fishing Grounds
- Hatchery
- Remote Release Site

Locations of Frequent Fishing Vessel/Tramper Offload Activities

Resources: Southwest Alaska Pilots Assn.



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Figure E-13. Locations of Frequent Fishing Vessel/Tramper Offload Activities.

Prince William Sound Alaska

POTENTIAL PLACES OF REFUGE and RISK FACTORS

RISK SYMBOLS





 Potential Places of Refuge
 Anchorage Dock Mooring Grounding





 Response Equipment Depot

 Response Barge

 Seasonal Response Barge

 Tanker Route

 Secondary Tanker Route

 Cruise and AMHS Ship Traffic

 Small Cruise Ship Traffic

 Secondary Ferry Route

 Cruise and AMHS Ship Ports of Call

BULK FUEL STORAGE SITES

-  - .5k-10,000 bbl.
-  - 10k-39,999 bbl.
-  - 40k-99,999 bbl.
-  - 100k-299,999 bbl.
-  - 300K-500,000 bbl.
-  - more than 500,000 bbl.

PWS SUBAREA SPILLS >999 gallons 1989-2004

- = Persistent ● = Non-Persistent
-   - 1K-2,999 gal.
 -   - 3K-5,999 gal.
 -   - 6K-8,999 gal.
 -   - 9K-11,999 gal.
 -   - 12K-14,999 gal.
 -   - 15K-17,999 gal.
 -   - 18K+ gal.

▼ Lingerin Oil from 1989 Exxon Valdez Oil Spill

 Frequent Fishing Vessel/Tramper Offload Activities

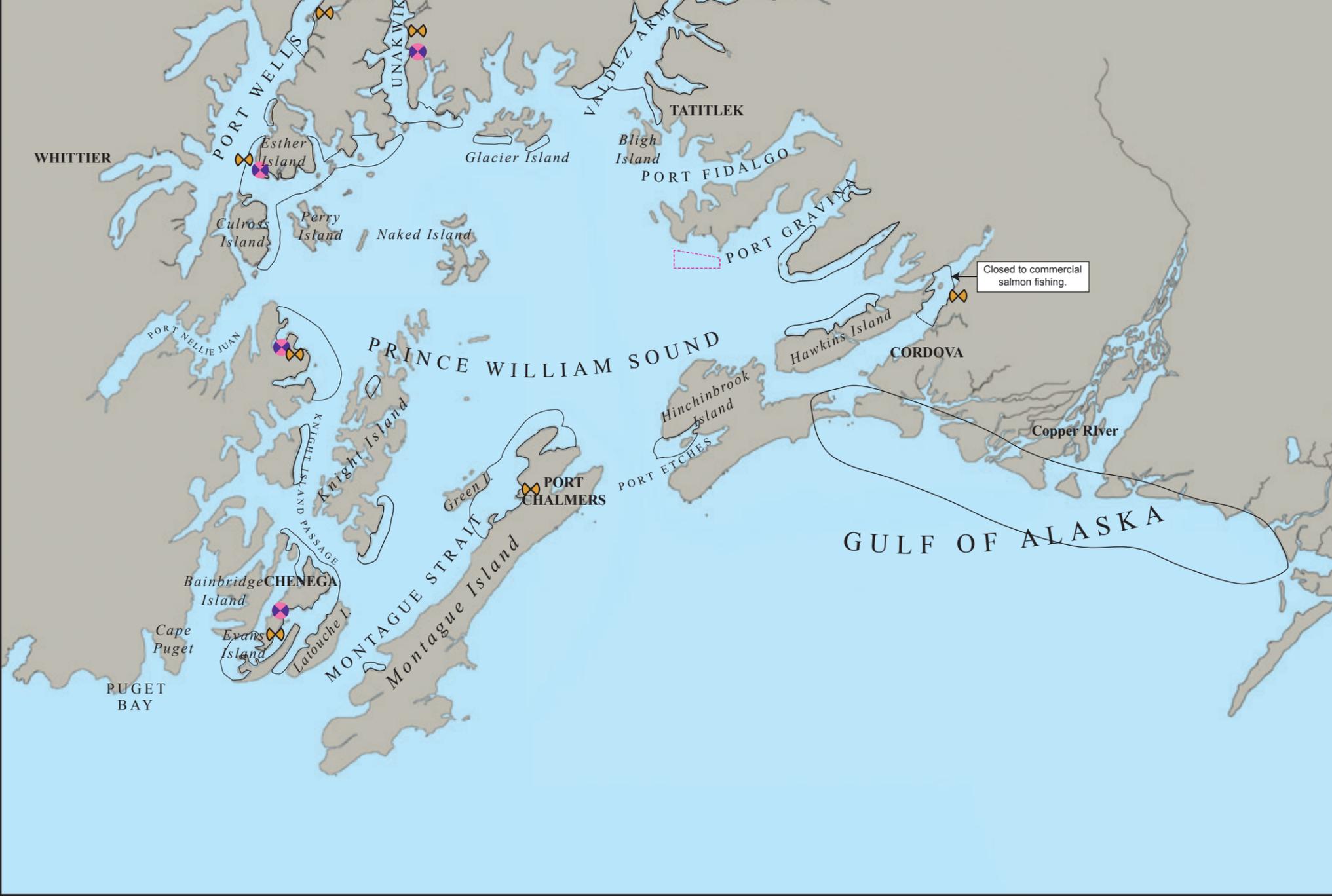
 Key Nearshore Fishing Grounds

 Hatchery

 Remote Release Site

Locations of Key Nearshore Fishing Grounds, Hatcheries, and Remote Release Sites

Resources: Mark Fink/ADF&G



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Figure E-14. Locations of Key Nearshore Fishing Grounds, Hatcheries, and Remote Release Sites.

Prince William Sound Alaska

POTENTIAL PLACES OF REFUGE and RISK FACTORS

RISK SYMBOLS

Anchorage
 Dock
 Mooring
 Grounding
 Potential Places of Refuge

SERVIS
 Chadler
 USCG
 VDEP
 Response Equipment Depot

Response Barge

Seasonal Response Barge

Tanker Route

Secondary Tanker Route

Cruise and AMHS Ship Traffic

Small Cruise Ship Traffic

Secondary Ferry Route

Cruise and AMHS Ship Ports of Call

BULK FUEL STORAGE SITES

- .5k-10,000 bbl.
- 10k-39,999 bbl.
- 40k-99,999 bbl.
- 100k-299,999 bbl.
- 300K-500,000 bbl.
- more than 500,000 bbl.

PWS SUBAREA SPILLS >999 gallons 1989-2004

= Persistent = Non-Persistent

- 1K-2,999 gal.
- 3K-5,999 gal.
- 6K-8,999 gal.
- 9K-11,999 gal.
- 12K-14,999 gal.
- 15K-17,999 gal.
- 18K+ gal.

Lingerin Oil from 1989 Exxon Valdez Oil Spill

Frequent Fishing Vessel/Tramper Offload Activities

Key Nearshore Fishing Grounds

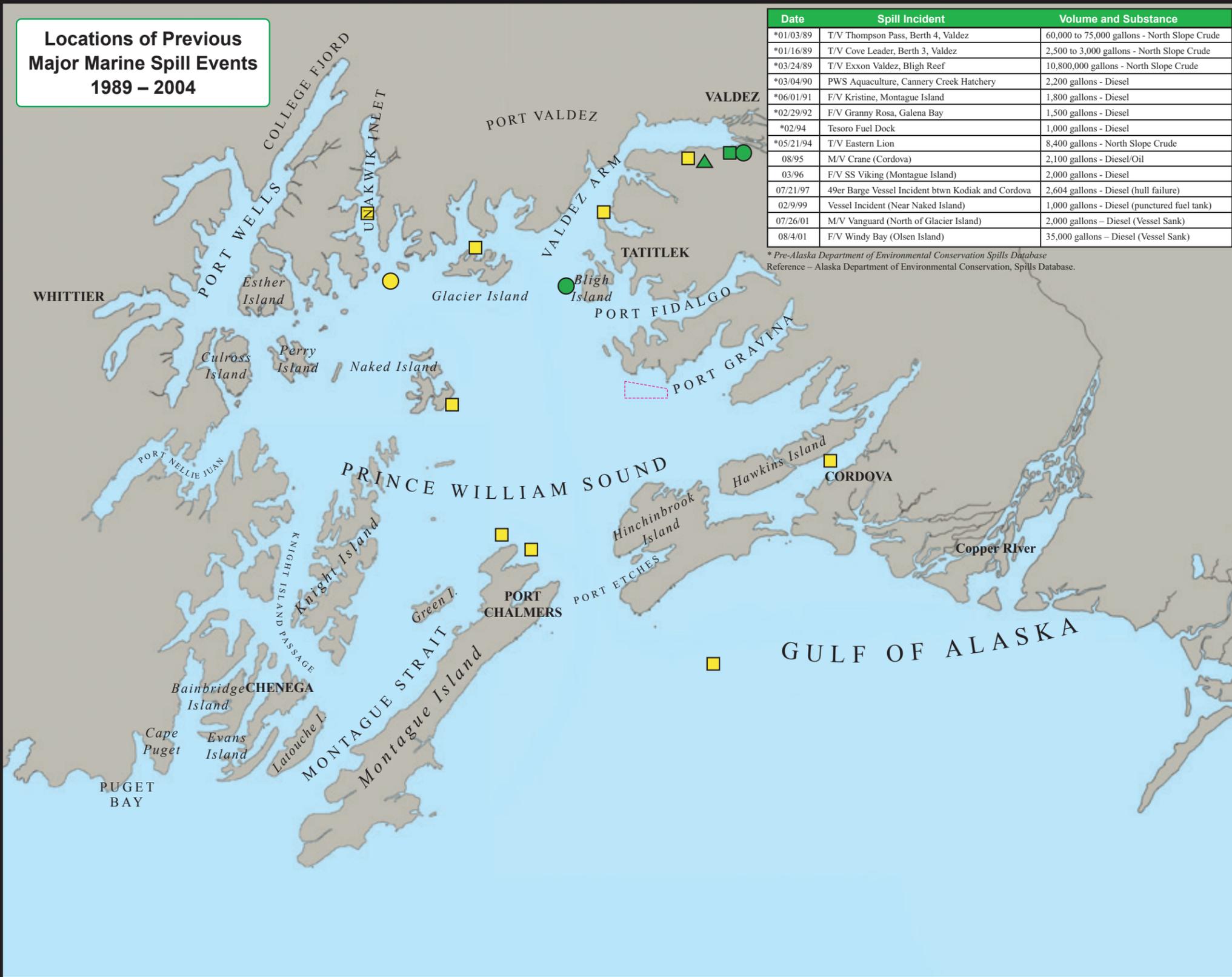
Hatchery

Remote Release Site

Date	Spill Incident	Volume and Substance
*01/03/89	T/V Thompson Pass, Berth 4, Valdez	60,000 to 75,000 gallons - North Slope Crude
*01/16/89	T/V Cove Leader, Berth 3, Valdez	2,500 to 3,000 gallons - North Slope Crude
*03/24/89	T/V Exxon Valdez, Bligh Reef	10,800,000 gallons - North Slope Crude
*03/04/90	PWS Aquaculture, Cannery Creek Hatchery	2,200 gallons - Diesel
*06/01/91	F/V Kristine, Montague Island	1,800 gallons - Diesel
*02/29/92	F/V Granny Rosa, Galena Bay	1,500 gallons - Diesel
*02/94	Tesoro Fuel Dock	1,000 gallons - Diesel
*05/21/94	T/V Eastern Lion	8,400 gallons - North Slope Crude
08/95	M/V Crane (Cordova)	2,100 gallons - Diesel/Oil
03/96	F/V SS Viking (Montague Island)	2,000 gallons - Diesel
07/21/97	49er Barge Vessel Incident btwn Kodiak and Cordova	2,604 gallons - Diesel (hull failure)
02/9/99	Vessel Incident (Near Naked Island)	1,000 gallons - Diesel (punctured fuel tank)
07/26/01	M/V Vanguard (North of Glacier Island)	2,000 gallons - Diesel (Vessel Sank)
08/4/01	F/V Windy Bay (Olsen Island)	35,000 gallons - Diesel (Vessel Sank)

* Pre-Alaska Department of Environmental Conservation Spills Database
Reference - Alaska Department of Environmental Conservation, Spills Database.

Locations of Previous Major Marine Spill Events 1989 - 2004



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Figure E-15. Locations of Previous Major Marine Spill Events.

Locations of Lingering Oil from the Exxon Valdez Oil Spill of 1989

Prince William Sound Alaska

POTENTIAL PLACES OF REFUGE and RISK FACTORS

RISK SYMBOLS

Potential Places of Refuge

- Anchorage
- Dock
- Mooring
- Grounding

Response Equipment Depot

- USCG
- AD&C

Response Barge

- Response Barge
- Seasonal Response Barge

Tanker Route

- Tanker Route
- Secondary Tanker Route

Cruise and AMHS Ship Traffic

- Cruise and AMHS Ship Traffic
- Small Cruise Ship Traffic
- Secondary Ferry Route

Cruise and AMHS Ship Ports of Call

BULK FUEL STORAGE SITES

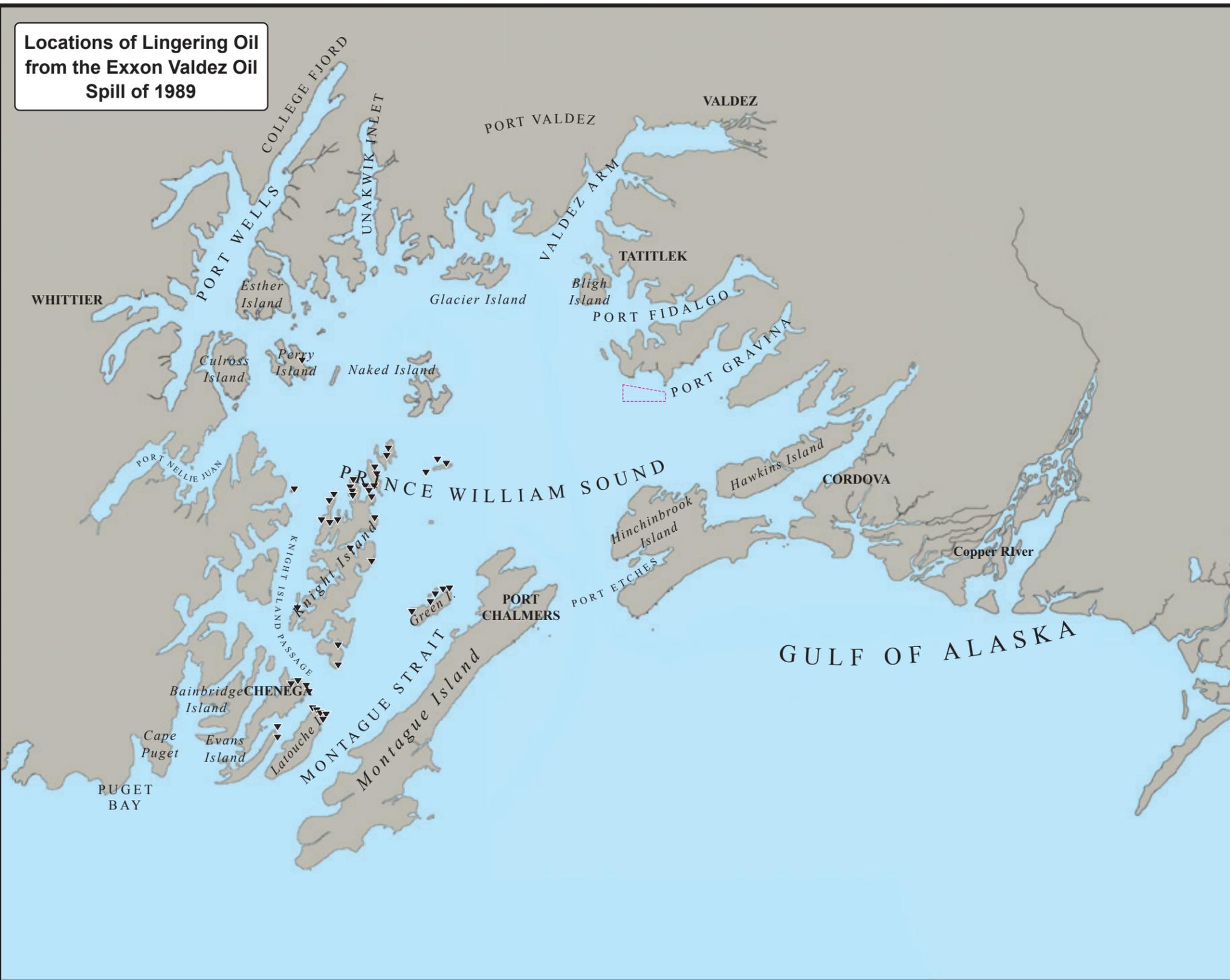
- .5k-10,000 bbl.
- 10k-39,999 bbl.
- 40k-99,999 bbl.
- 100k-299,999 bbl.
- 300K-500,000 bbl.
- more than 500,000 bbl.

PWS SUBAREA SPILLS >999 gallons 1989-2004

- Persistent
- Non-Persistent
- 1K-2,999 gal.
- 3K-5,999 gal.
- 6K-8,999 gal.
- 9K-11,999 gal.
- 12K-14,999 gal.
- 15K-17,999 gal.
- 18K+ gal.

Lingering Oil from 1989 Exxon Valdez Oil Spill

- Frequent Fishing Vessel/Tramper Offload Activities
- Key Nearshore Fishing Grounds
- Hatchery
- Remote Release Site



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Figure E-16. Locations of lingering oil from the Exxon Valdez Oil Spill of 1989.

Prince William Sound Alaska

POTENTIAL PLACES OF REFUGE and RISK FACTORS

RISK SYMBOLS

POTENTIAL PLACES OF REFUGE

- Anchorage
- Dock
- Mooring
- Grounding

Response Equipment Depot

- SERVS
- Chadux
- USCG
- DEC

Response Barge

- Response Barge
- Seasonal Response Barge

Tanker Route

- Tanker Route
- Secondary Tanker Route

Cruise and AMHS Ship Traffic

- Cruise and AMHS Ship Traffic
- Small Cruise Ship Traffic
- Secondary Ferry Route

Cruise and AMHS Ship Ports of Call

BULK FUEL STORAGE SITES

- .5k-10,000 bbl.
- 10k-39,999 bbl.
- 40k-99,999 bbl.
- 100k-299,999 bbl.
- 300K-500,000 bbl.
- more than 500,000 bbl.

PWS SUBAREA SPILLS >999 gallons 1989-2004

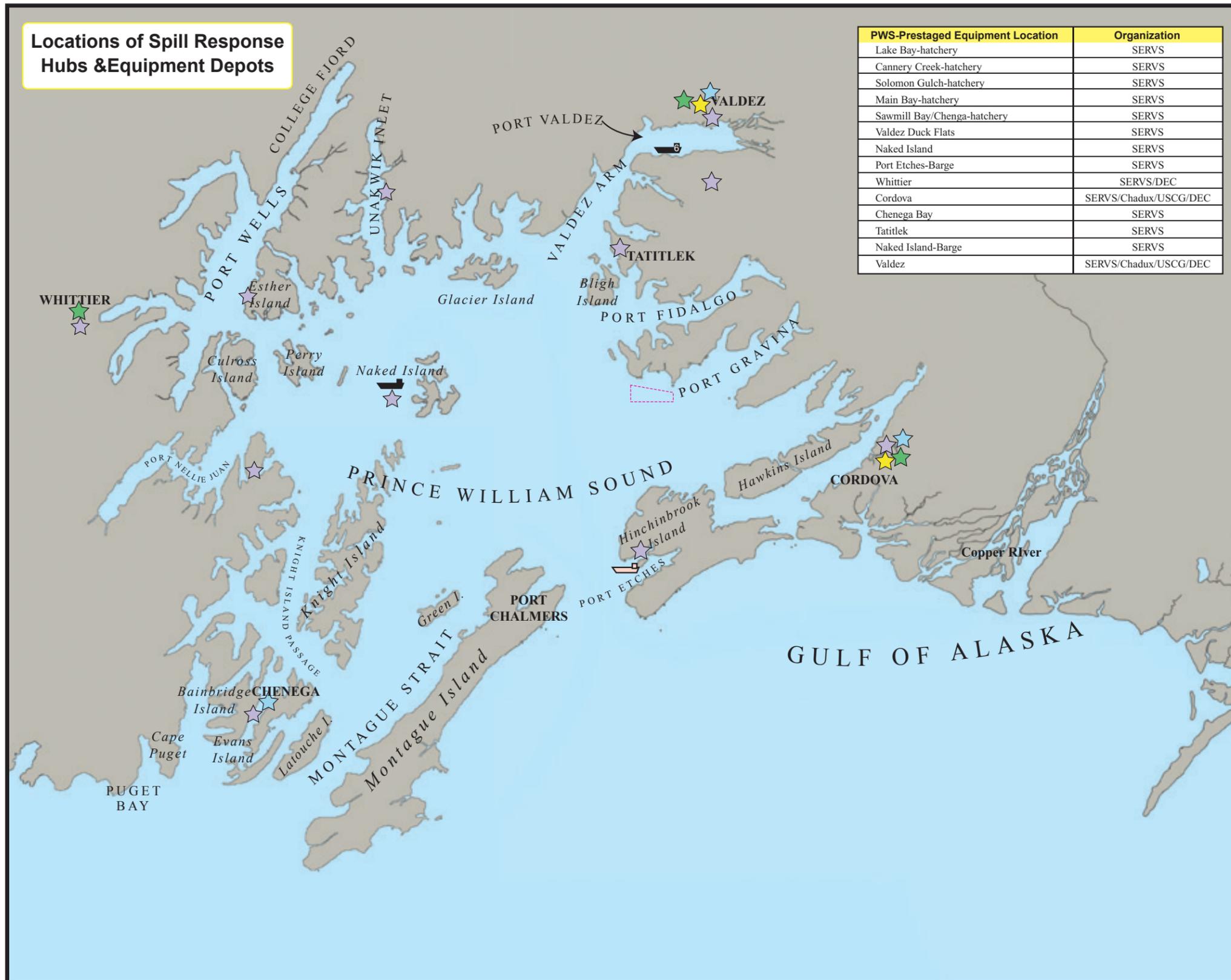
- Persistent
- Non-Persistent
- 1K-2,999 gal.
- 3K-5,999 gal.
- 6K-8,999 gal.
- 9K-11,999 gal.
- 12K-14,999 gal.
- 15K-17,999 gal.
- 18K+ gal.

Lingering Oil from 1989 Exxon Valdez Oil Spill

- Frequent Fishing Vessel/Tramper Offload Activities
- Key Nearshore Fishing Grounds
- Hatchery
- Remote Release Site

PWS-Prestaged Equipment Location	Organization
Lake Bay-hatchery	SERVS
Cannery Creek-hatchery	SERVS
Solomon Gulch-hatchery	SERVS
Main Bay-hatchery	SERVS
Sawmill Bay/Chenga-hatchery	SERVS
Valdez Duck Flats	SERVS
Naked Island	SERVS
Port Etches-Barge	SERVS
Whittier	SERVS/DEC
Cordova	SERVS/Chadux/USCG/DEC
Chenega Bay	SERVS
Tatitlek	SERVS
Naked Island-Barge	SERVS
Valdez	SERVS/Chadux/USCG/DEC

Locations of Spill Response Hubs & Equipment Depots



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Figure E-17. Locations of Spill Response Hubs and Equipment Depots.

Prince William Sound Alaska

POTENTIAL PLACES OF REFUGE and RISK FACTORS

RISK SYMBOLS





 Potential Places of Refuge





 Response Equipment Depot

 Response Barge

 Seasonal Response Barge

 Tanker Route

 Secondary Tanker Route

 Cruise and AMHS Ship Traffic

 Small Cruise Ship Traffic

 Secondary Ferry Route

 Cruise and AMHS Ship Ports of Call

BULK FUEL STORAGE SITES

-  - .5k-10,000 bbl.
-  - 10k-39,999 bbl.
-  - 40k-99,999 bbl.
-  - 100k-299,999 bbl.
-  - 300K-500,000 bbl.
-  - more than 500,000 bbl.

PWS SUBAREA SPILLS >999 gallons 1989-2004

-  = Persistent
-  = Non-Persistent
-   - 1K-2,999 gal.
-   - 3K-5,999 gal.
-   - 6K-8,999 gal.
-   - 9K-11,999 gal.
-   - 12K-14,999 gal.
-   - 15K-17,999 gal.
-   - 18K+ gal.

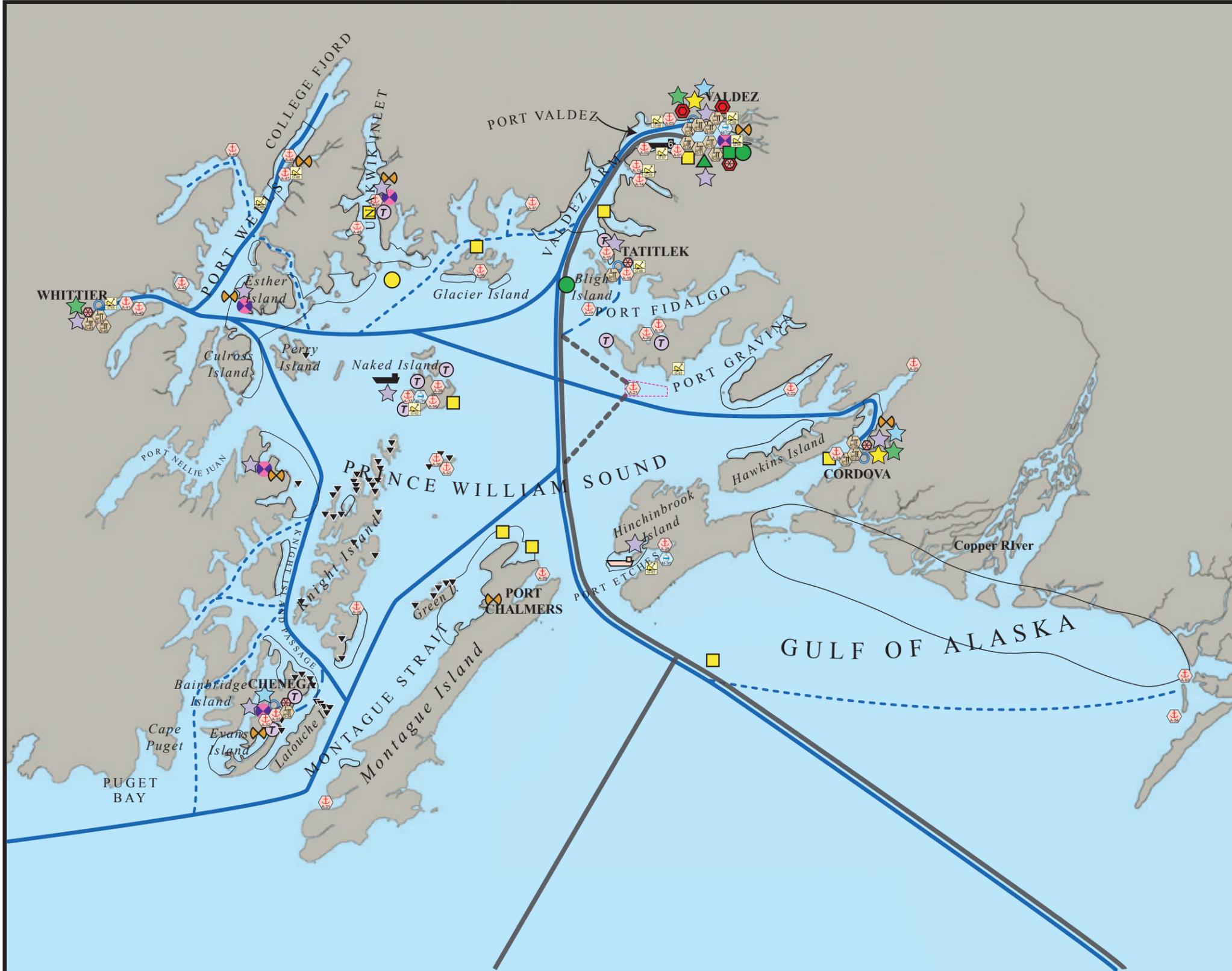
 Lingering Oil from 1989 Exxon Valdez Oil Spill

 Frequent Fishing Vessel/Tramper Offload Activities

 Key Nearshore Fishing Grounds

 Hatchery

 Remote Release Site



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Figure E-18. Potential Places of Refuge and all Risk Factors Combined.

BACKGROUND: PART FOUR – ABBREVIATIONS AND ACRONYMS

ACP	Area Contingency Plan
ACS	Alaska Clean Seas (North Slope industry cooperative)
ADEC	Alaska Department of Environmental Conservation
ADF&G	Alaska Department of Fish and Game, also as ADFG
ADNR	Alaska Department of Natural Resources
ADOT&PF	Alaska Department of Transportation and Public Facilities; also as ADOTPF
AFB	Air Force Base
ANS or ANSC	Alaska North Slope crude oil
APSC	Alyeska Pipeline Service Company
ARRT	Alaska Regional Response Team; also as AKRRT
BBLs	Barrels
BLM	US Bureau of Land Management
BOA	Basic Ordering Agreement (for federal contractors)
CART	Central Alaska Response Team (ADEC)
CCGD 17	Commander, Coast Guard District 17
CISPRI	Cook Inlet Spill Prevention and Response Inc. (industry cooperative)
COTP	Captain of the Port (USCG)
CTAG	Cultural Technical Advisory Group
DOA	US Department of Agriculture
DOC	US Department of Commerce
DOD	US Department of Defense
DOI	US Department of the Interior
DRAT	District Response Advisory Team (USCG)
DRG	District Response Group (USCG)
EPA	Environmental Protection Agency; also as USEPA
ESI	(Alaskan) Environmental Sensitivity Index
F/V	Fishing Vessel
FAA	Federal Aviation Administration
FOSC	Federal On-Scene Coordinator
GIS	Geographic Information System
GRS	Geographic Response Strategies
GSA	General Services Administration
HAZMAT	Hazardous Materials; also as hazmat
HAZWOPER	Hazardous Waste Operations and Emergency Response
ICS	Incident Command System
IDLH	Immediate Danger to Life and Health
INMARSAT	International Maritime Satellite Organization
JPO	Joint Pipeline Office (gov't agencies involved with managing/regulating TAPS)
LEPC	Local Emergency Planning Committee
LEPD	Local Emergency Planning District
LNG	Liquefied Natural Gas
M/V	Motor Vessel
MLT	Municipal Lands Trustee Program
MOA	Memoranda of Agreement, or Municipality of Anchorage
MOU	Memoranda of Understanding
MSO	Marine Safety Office (USCG)
MSRC	Marine Spill Response Corp. (national industry cooperative)
M/V	Motor Vessel

NART	Northern Alaska Response Team (ADEC)
NCP	National Contingency Plan
NIMS	National Incident Management System
NIST	National Institute of Standards and Technology
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOTAMS	Notice to All Mariners; also, Notice to Airmen
NPDES	National Pollution Discharge Elimination System
NPFC	National Pollution Fund Center
NRC	National Response Center
NRP	National Response Plan
NRT	National Response Team
NRDA	(Federal/State) Natural Resource Damage Assessment
NSF	National Strike Force
NSFCC	National Strike Force Coordinating Center
NWR	NOAA Weather Radio
OHMSETT	Oil and Hazardous Material Simulated Environment Test Tank
OPA 90	Oil Pollution Act of 1990
OPCEN	Operations Center
OSC	On-Scene Coordinator
OSRO	Oil Spill Response Office
PIAT	Public Information Assist Team
PIO	Public Information Officer
POLREP	Pollution Report (USCG)
PPOR	Potential Places of Refuge
PWS	Prince William Sound
RCAC	Regional Citizens Advisory Council
RCRA	Resource Conservation and Recovery Act of 1978
RP	Responsible Party
RRT	Regional Response Team
RSC	Regional Stakeholder Committee
RV	Recreational Vehicle
SART	Southeast Alaska Response Team (ADEC)
SCBA	Self-Contained Breathing Apparatus
SCP	Subarea Contingency Plan
SERVS	Ship Escort Response Vessel Service (for Alyeska terminal in Valdez)
SHPO	State Historic Preservation Officer (ADNR)
SITREP	Situation Report (ADEC)
SONS	Spill of National Significance
SOSC	State-On Scene Coordinator
SSC	Scientific Support Coordinator (NOAA)
SUPSALV	U.S. Navy Supervisor of Salvage, also as NAVSUPSALV
TAPS	Trans Alaska Pipeline System
T/V	Tank Vessel
USCG	United States Coast Guard
VIRS	Visual Information Response System
VMT	Valdez Marine Terminal (APSC)
VTs	Vessel Traffic Separation System/Scheme