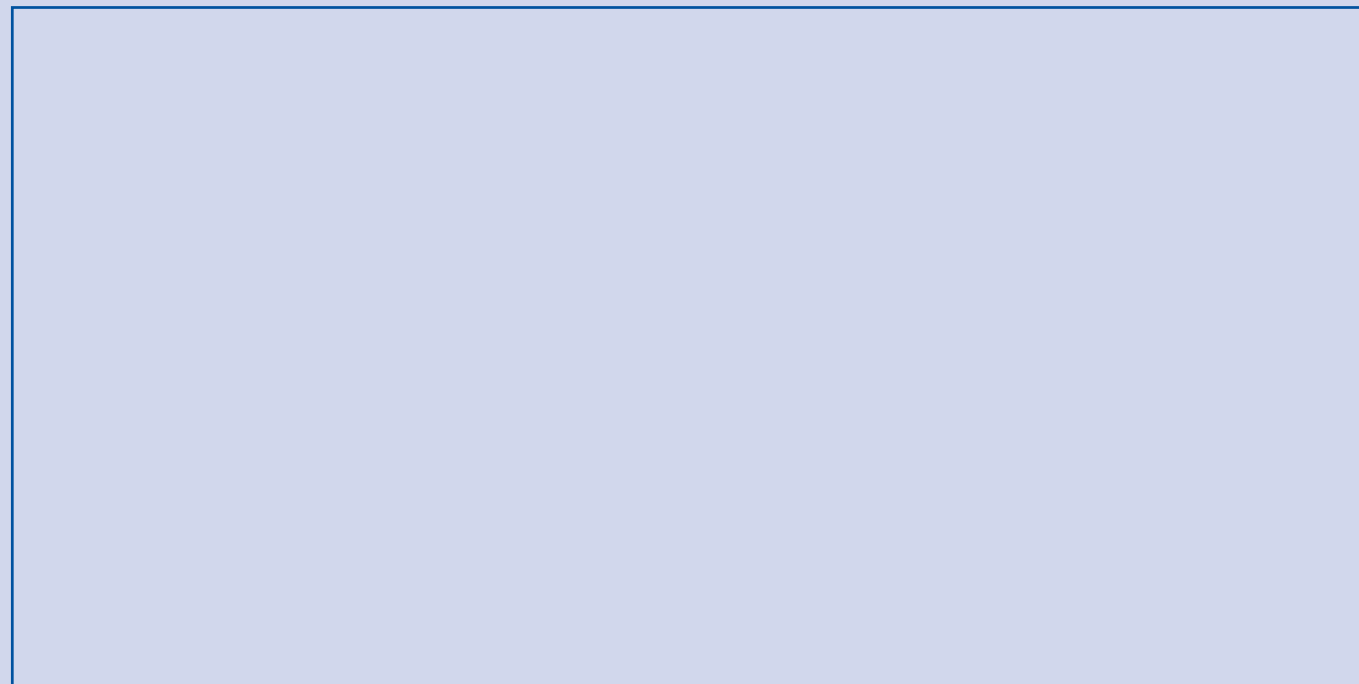
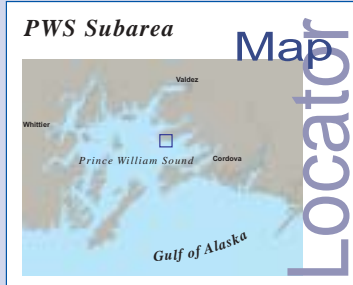


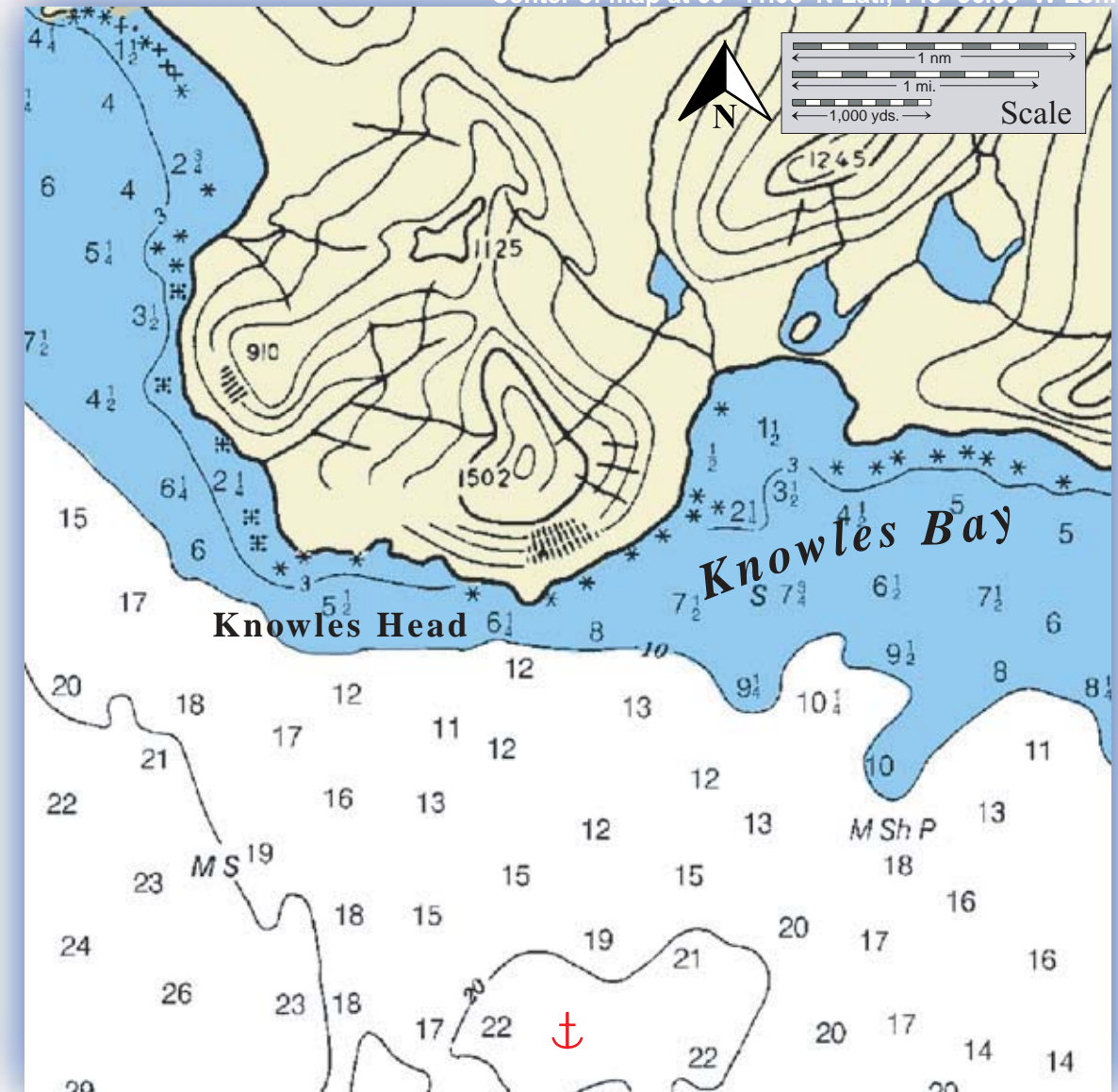
Places of Refuge



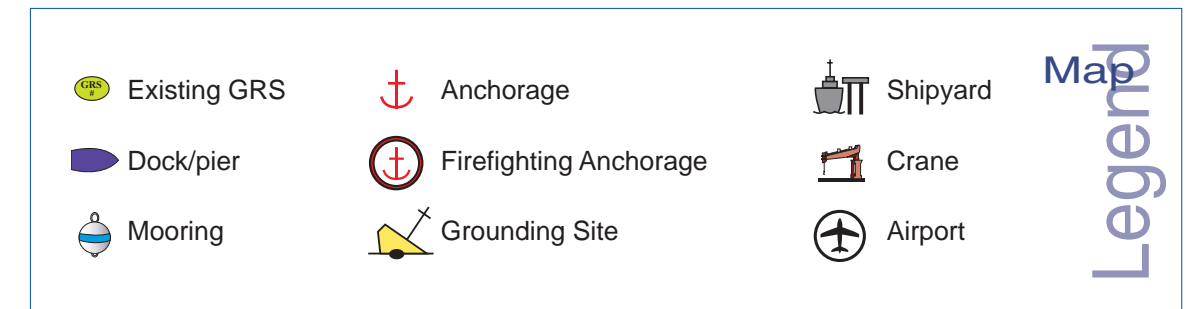
Knowles Head looking toward

Knowles Head

Center of map at 60° 41.05' N Lat., 146° 36.99' W Lon.



This is not intended for navigational use.



Places of Refuge for Prince William Sound Subarea

Knowles Head Safety of Life				
	Contact	Location	Radio	Telephone
Search and Rescue	State Troopers	Tatitlek/Valdez		907-835-4359
		Cordova		907-424-7331
	Village Public Safety Office	Tatitlek		907-325-2248
	Volunteer Fire Dept	Tatitlek/Valdez		907-835-4560
	Cordova Police/Fire	Cordova		907-424-6100
Medical/Hospital	Tatitlek Health Clinic	Tatitlek		907-325-2235
	Cordova Community Hospital	Cordova		907-424-8000
	Valdez Community Hospital	Valdez		907-835-2249
Evacuation	USCG	Valdez-MSO	VHF Ch 16, 22a	907-835-7210
Law Enforcement	State Troopers	Tatitlek/Valdez		907-835-4359
		Cordova		907-424-7331
	Cordova Police/Fire	Cordova		907-424-6100
Dangerous Cargo	Port Authority	Valdez		907-835-4981
	Port Authority	Cordova		907-424-6400
Public Notification	KCHU radio	Valdez		907-835-4665
	KVAK radio	Valdez		907-835-5825
	Anchorage Daily News	Anchorage		907-257-4200
	Cordova Times	Cordova		907-424-7181

Knowles Head Services and Contacts	
	Description
Response	
Oil Spill Response Organizations	Alyeska/SERVS: 907-835-6620; Alaska Chadux Corp.: Anchorage, 278-3365
Tugs/Tow Boats	Alyeska Service Co. (SERVS): Valdez, 835-6620; Wel-Aska Corp.: Valdez, 835-2424
Salvors	Crowley: 835-8807; Titan (Florida): 954-929-5200
Firefighting	Valdez Fire Dept.: 911 available, 835-4500
Lightering/Fulid Transfers	USN SUPSALV: Anchorage, 384-2968; Alyeska/SERVS: 907-835-6620
Command Posts	Initially the SERVS facility: Valdez, 835-6620. Auxiliary posts to be determined depending on spill size. Potential posts include Valdez Civic Center, MSO Valdez, ADEC Office and Warehouse, Schools, Community College
Logistical	
Docks/Piers	Valdez Container Terminal, Valdez City Dock, Valdez Small Boat Harbor; Cordova docks
Shipyards	Seward dry dock
Cranes	Valdez Small Boat Harbor, Valdez Container Dock; Cordova Ferry Dock
Airports	Valdez Airport: 6,500 ft. asphalt; Cordova Airport: 7,500 ft. asphalt
Aircraft/Helicopter Charter	Alyeska (SERVS): Valdez, 835-6620; ERA Aviation: Valdez, 835-2595; Alaska Airlines: Anchorage, 243-3322; Civil Air Patrol: Valdez, 835-5007
Crew/Freight Boats	Stan Stephens Tours; <i>need to determine others</i>
Reception Facilities for Harmful and Dangerous Cargoes	Alyeska Pipeline Terminal
Divers	R&R Diving Services: Valdez, 835-4375;
Welders	?
Staging Areas	Airport, AKNG Armory, ADEC Warehouse, Harbor, Schools
Communications	Marine VHF, single side band radio, cellular phone (?), satellite radio.
Lodging/Shelter	None on shore. Many commercial lodging facilities are available in Valdez, but in summer may be booked to capacity. Alyeska maintains two man-camps, but alternatives such as RVs, school gyms, Alaska National Guard Armories, etc. may be needed.
Food	Food will have to be sent to the scene by marine vessel.
Other	
Marine Pilots	Southwest Pilots Assn.: Valdez, 835-2134
US Coast Guard MSO	Valdez: 835-7205

Knowles Head Particulars	
	Description
Navigational Approach	Approach open from the S., E., W. utilizing the Valdez Vessel Traffic System.
Minimum Water Depths	13 Fathoms
Maximum Water Depths	36 Fathoms
Maximum Vessel Draft	84 ft.
Maneuvering/Swing Room	Minimum 1.5 nm
Docks/Piers	None at Knowles Head. Nearest-Tatitlik Ferry Dock-15nm.
Moorings	None at Knowles Head. Nearest SERVS Buoy Port Etches-27nm. Seasonally available.
Anchorage	Identified anchorage area around 60 38.80N 146 35.32W
Firefighting Anchorages	Knowles Head, Sheep Bay
Grounding Sites	None at Knowles Head. Nearest Red Head- 5nm
Bottom Type	Mud
Prevailing Winds	NE (Oct-April), SW (May-Sept.)
Currents	Not a factor
Tides	Mean High Water- 11.0, Mean Low Tide- 1.5
Sea Conditions	Storms can produce large seas > 15 ft swells.
Shelter from Severe Storms	No
Fog	???
Ice	Not a factor

Knowles Head Site Considerations	
	Description
Human Factors	
Communities – distances/population	No communities exist in the immediate vicinity of Knowles Head. Valdez is located to the north 33 miles by air and 43 miles by sea. Tatitlek, also to the north, is 12 miles away by air and 14 miles away by sea. Cordova, located to the southeast is 33 miles away by air and 43 miles away by sea.
Cultural Resources	<i>Needs to be determined.</i>
Historic Property	<i>Needs to be determined.</i>
Environmental Factors	
Wildlife	Harbor seal, sea otter, waterfowl, salmon
Threatened & Endangered Species	None
Environmentally Sensitive Areas/GRS	Knowles Creek, Knowles Bay, Gull Island
Economic Factors	
Fisheries	No commercial fishing occurs around Knowles Head.
Mariculture	No hatcheries or aquaculture facilities operate on Knowles Head.
Tourism/Recreation	None
Public Facilities/Parks	None
Private Facilities	None
Response Factors	
Ability to Boom Vessel	It may be difficult to boom a vessel at Knowles Head due to sea state.
Geographic Response Strategies	Hell's Hole PWS-NE-09 and Olsen Bay PWS-NE-10
Closest Alternative Places of Refuge	Two Moon Bay, Jack Bay, Port Valdez