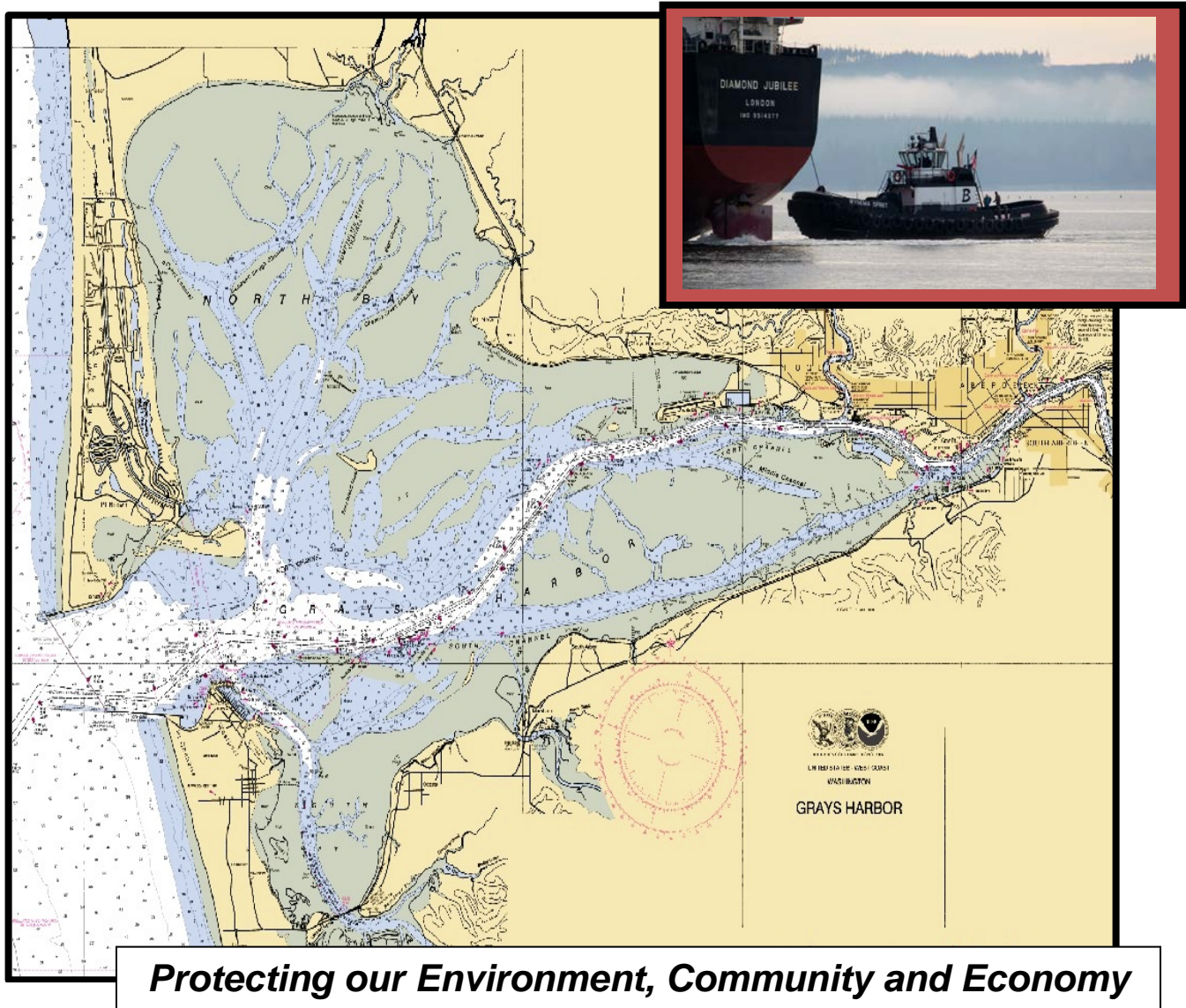


Harbor Safety Plan for Grays Harbor



Grays Harbor Safety Committee
June 2014
Grays Harbor Safety Plan

Approved: June 2014
Revised: October 2016

Letter of Promulgation

Welcome to the Grays Harbor Safety Plan. The goal of the Grays Harbor Safety plan is to enhance marine safety and environmental stewardship. The plan provides local marine information as well as guidelines and Standards of Care for vessel transits and related marine operations in Grays Harbor.

This plan has been developed through the collaboration of maritime stakeholders represented on the Grays Harbor Safety Committee, and others in the local community, who shared their time and expertise to help develop this plan.

Coast Guard Captain of the Port and Department of Ecology: The Coast Guard and the Washington State Department of Ecology are advisors, active participants and major contributors to the Harbor Safety Committee and this Plan.

This Plan is strongly endorsed by the Captain of the Port and the State Department of Ecology.

The first section of the plan is administrative, and introduces the reader to the Grays Harbor Safety Committee and its work. The second section is primarily informative in nature, and provides important information for professional mariners transiting Grays Harbor and for industry operations that serve the maritime traffic.

The third section includes Standards of Care developed by the Harbor Safety Committee that formalize and document certain “good marine practices” that are of significant importance to maritime related operations in the Grays Harbor.

The Grays Harbor Safety Committee is committed to enhancing marine safety and environmental stewardship. We will maintain and update this plan as new information and changing technologies warrant.

The Grays Harbor Safety Committee has a web site at: www.portofgraysharbor.com/harbor-safety/index.php where further details regarding the activities of our Committee can be found.

Comments and suggestions regarding the plan may be forwarded to the Committee through the web site.

Sincerely,

John Doucette
Chair, Grays Harbor Safety Committee

April 30th, 2014

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GRAYS HARBOR INFORMATION PLACARD

For vessels preparing to transit Grays Harbor

PLACARD USE: This placard is a quick reference guide for key information to aid your vessel in preparing to transit Grays Harbor. It is advised that you read the entire document to obtain all necessary information and understand the standards of care in place for Grays Harbor.

Charts for Grays Harbor is NOAA Chart 18502 and NOAA Chart 18500.

Maximum Draft and Length - Limitations: Maximum draft for vessels west of Chehalis River Bridge in Aberdeen is 40 feet and 35 feet if transiting east of the bridge. Vessels passing through the bridge are restricted to a length of 600 feet.

Pilot Contact Numbers and Boarding Area: (360) 581-0447 or (360) 581-4355. Pilots board vessels 1 mile northwest of Grays Harbor buoy at position (46°-52.6N, 124°-15.48W.) **Pilots require 24 hour advanced notification.**

Pilot Boats: Pilot boats when manned monitor VHF channels 16, 13, & 12. If contact is made on 16 promptly switch to 12.

Terminal Depths: For current terminal depths check with Port of Grays Harbor, facility tenant or the facility owner. **For additional information on the Public/Port Facilities you may visit <http://www.portofgraysharbor.com/>**

Anchorage: The primary and best anchorage is just North of Westport and Southeast of Damon Point in 30 to 60 feet of water. Contact a Pilot to arrange for anchorage.

Vessel Condition: All vessels arriving/departing Grays Harbor must have all hatches covered. Deck loads must be secured. A safe walkway must be provided to pilot boarding area.

Report all Oil Spills and Vessel Incidents to:

- National Response Center (800) 424-8802 or via VHF Channel 16
- Washington Emergency Management Division at (800) 258-5990 (This is the primary contact number for the Washington State Department of Ecology.

Communication Channel Summary		
Entity	VHF Channel	Telephone Number
United States Coast Guard	16	(503) 240-9333 (Columbia River) (360) 268-0121 (Westport)
United States Coast Guard Bar Conditions and Weather	16	(360) 268-0622
Grays Harbor Pilots	16, 13 and 12.	360) 581-0447 or (360) 581-4355
Port of Grays Harbor	N/A	(360) 533-9528
Security, Port Marine Terminals	N/A	(360) 310-0198
Brusco Tug and Barge, Vessel assists and escorts.	12	(360) 532-3352 or (360) 431-5142

Chehalis River Bridge - DOT	13 &16	(360) 533-9360 - Bridge requires 90 minute advanced notification.
Marine Exchange of Puget Sound		206-443-3830

Section 1 - Introduction

1.1 Purpose of the Grays Harbor Safety Plan

The Grays Harbor Safety Plan (HSP) is intended to complement existing regulations by advising the mariner of unique conditions and requirements that may be encountered in the region by providing standards of care (SOC) and protocols developed by local experts. The HSP is not intended to replace the good judgment of a ship's master in the safe operation of his/her vessel.

This document will be updated periodically with current versions posted on our web page at: www.portofgraysharbor.com/harbor-safety/index.php.

1.2 Captain of the Port (COTP) Zone – Sector Columbia River – Federal Agency

The United States Coast Guard (USCG) is the federal agency responsible for all commercial vessel and waterways management marine safety, port security and environmental issues in Grays Harbor, COTP Sector Columbia River (located at Astoria, Oregon) is the primary Coast Guard authority. The legal boundaries for the Captain of the Port are set forth in 33 Code of Federal Regulations 3.65-10. The Captain of the Port has varying levels of jurisdiction extending to the outer limit (200 nautical miles) of the EEZ for foreign and domestic vessels. The USCG is responsible for Search and Rescue, Vessel Port State Control Inspections, Aids to Navigation, Harbor Security, and Pollution Prevention and Response.

1.3 Washington Department of Ecology (DOE) – State Agency

The Washington State Department of Ecology is responsible for all commercial vessel and waterways management, marine safety, port safety and environmental protection and spill preparedness and response issues in Washington state waters, including Grays Harbor. The DOE Spills Prevention, Preparedness, and Response Program is the primary state authority responsible for dealing with vessel and facility incidents that impact or could potentially impact state marine resources. The state's jurisdiction extends to activities occurring in the coastal waters within the U.S. territorial seas, and state interests may even extend beyond those limits to the extent the event would likely impact state waters and resources.

Similar to the U.S. Coast Guard, DOE conducts vessel examinations utilizing accepted industry standards for non-tank vessels, as well as conducting fuel and cargo oil transfer monitoring inspections for operations in Washington waters. In addition, the agency responds to and investigates marine incidents and accidents involving covered vessels (tank vessels and other commercial vessels of 300 gross tons or more). Ecology is also responsible for ensuring vessels and oil transfer facilities have a state approved oil spill contingency plan that outlines what is necessary to ensure a rapid, aggressive and well-coordinated response to an oil spill if one were to occur.

This Harbor Safety Plan is strongly endorsed by the Captain of the Port, Sector Columbia River and the Washington State Department of Ecology and members of the Grays Harbor Safety Committee.

1.4 Grays Harbor Safety Committee

The purpose of the Grays Harbor Safety Committee (GHSC) is to provide an open forum of public and private stakeholders with vital interest in assuring safe navigation to protect personnel, property and environment on the waterways of Grays Harbor. The GHSC was created in 2013 by stakeholders with an interest in promoting safety and the protection of Grays Harbor by providing:

A Forum for Issues: Provide a proactive forum for identifying, assessing, planning, communicating and implementing operational and environmental measures that promote safe and efficient use of Grays Harbor.

Education and Resources: Act as an education and resource network through which ideas, materials and procedures can be provided to persons interested in marine safety and operations.

Standards and Guidelines: Develop and implement standards and guidelines that promote improved operational and environmental safety for Grays Harbor.

Resource for Government, Industry and Community: Act as a partnership resource for Industry representatives, government agencies, Port of Grays Harbor, Community organizations, and state legislators regarding issues related to marine operations and environmental safety in Grays Harbor.

Marine and Environmental Safety: Promote and sustain the goals of marine and environmental safety programs.

Harbor Security: Ensure that marine safety and environmental measures are coordinated with security initiatives.

1.5 Grays Harbor Safety Committee Membership

The Grays Harbor Safety Committee is a stakeholder organization. A broad based association representing the interests of each stakeholder group is invited to nominate a representative and an alternate. The Grays Harbor Safety Committee includes the following:

Voting Members

Port of Grays Harbor	Jones Stevedoring	General Steamship
REG Grays Harbor	Contanda Terminals, LLC	City of Hoquiam
PASHA	Brusco Tug and Barge	Transmarine Navigation Corp

In addition to the stakeholder groups listed above, there are a number of governmental agencies that may serve in a non-voting advisory capacity. These include:

Advisors (Non-Voting)

U.S. Coast Guard
U.S. Army Corps of Engineers
National Oceanic and Atmospheric Admin.

WA Dept. of Ecology

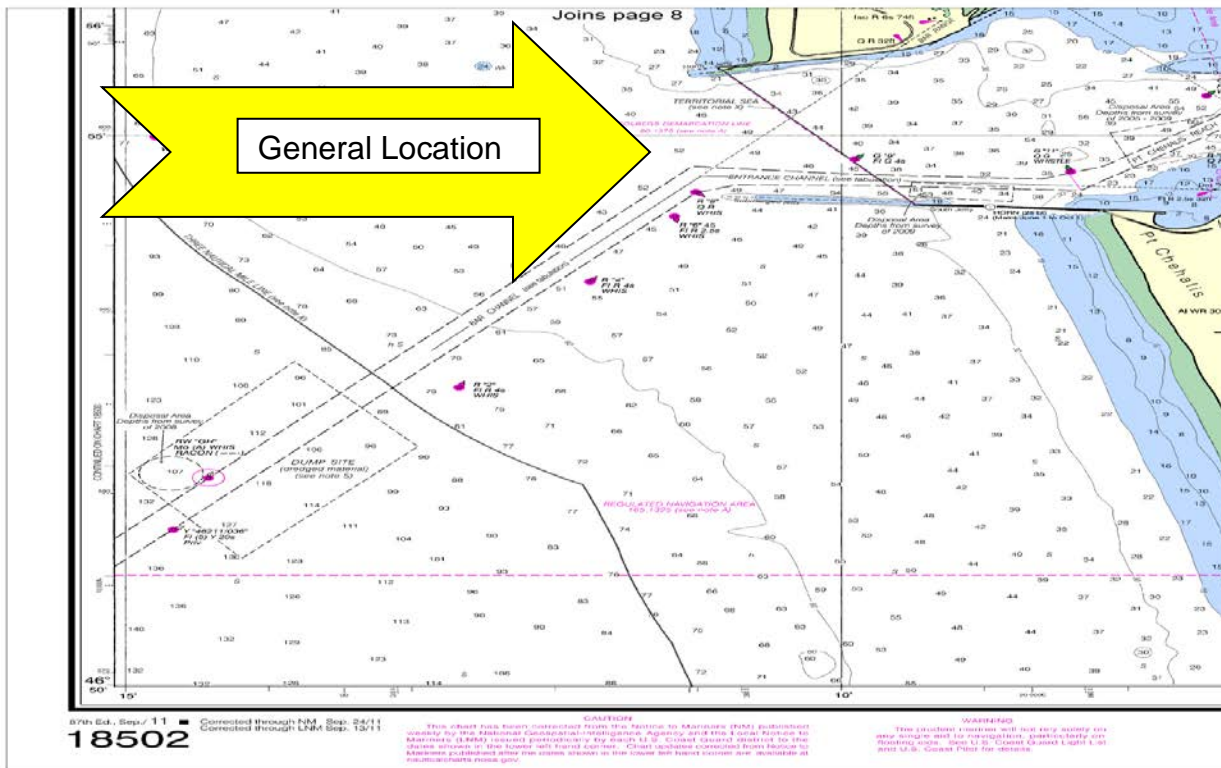
The committee meets at least two times a year. You can view the Committee's charter at <http://www.portofgraysharbor.com/harbor-safety/document-archive.php>.

Section 2 - Grays Harbor General Information

2.1 Grays Harbor Bar

Along the Oregon and Washington coast, bars build up at the mouths of the many rivers and streams that empty into the Pacific Ocean. The tidal currents at these entrances can obtain considerable velocity, especially when the ebb tide is reinforced by the river runoff. The most dangerous condition prevails when a swift, ebb current meets the swells rolling in from the Pacific at the harbor entrance. The water piles up and breaks and creates a rough sea condition. On these bar areas, sea conditions can change rapidly and without warning. **Cross the bar with caution.**

The Grays Harbor bar channel is subject to change. The true bar is considered to be from midway between buoy's 2 and 4 to the northeast at buoy 8. Deep-draft vessels should not enter without knowledge of conditions at the time of entering. Average current velocity is about 1.9 knots on the flood and 2.8 knots on the ebb, but velocities can reach 5 knots. Currents in the vicinity of the bar are reportedly very erratic.



The deepest water is not always on the range. Information concerning conditions on the bar can be obtained from the Grays Harbor Pilots or from the Coast Guard on VHF-FM channel 16. The bar channel and harbor should not be attempted in severe or low visibility weather. The Coast Guard

also maintains a website with bar information @ www.wrh.noaa.gov/pqr/marine/bars_mover.php. This site contains up to date information on the local weather, bar status and local sea conditions.

2.2 Charts, Channel Information and Channel Depths

Chart for Grays Harbor is **USA NOAA Nautical Chart 18502**. **USA NOAA Nautical Chart 18500** may also be used as a resource to locate Grays Harbor. These charts must be on board for transiting Grays Harbor.

Grays Harbor entrance is about 40 miles N of Cape Disappointment and 93 miles S of Cape Flattery.

The bay at the entrance is about 1 mile wide, but shoals extending S from Damon Point and N from Westport reduce the navigable channel to a width of 0.6 mile. The entrance to Grays Harbor, between two jetties, is marked by two lighted ranges and buoys. Inside the bay, a Federal project channel provides depths of 46 feet across the bar, thence 42 to 40 feet in the entrance, thence 36 feet inside the bay to Cow Point, thence 32 feet to Cosmopolis, about 9 miles above the bay entrance. The channel inside the bay to Cosmopolis is well marked. There is no deep-draft navigation above Cosmopolis. (See Notices to Mariners and latest editions of the charts for controlling depths for the dredged channel.)

The jettied entrance has a tendency to shoal at the curve on the Point Chehalis (South jetty) side. Submerged sections of the North and South jetties extend seaward about 0.2 and 0.9 mile, respectively, from the visible sections. Both North and South jetties should be given a wide berth during periods of heavy weather due to hazardous breakers. Lighted whistle, bell, and gong buoys mark the approach and entrance to the bay. A seasonal sound signal is about mid-length of the visible section of the South jetty. Please be advised that this is only general information and conditions may change at any time due to sea conditions, currents, shoaling and river silting.

IMPORTANT NOTE: As of June 1, 2014 a channel realignment has been approved and is currently in the process of being implemented. Buoys and range markers may not be in the places noted. Please consult your local notice to mariners for the most current information regarding this channel re-alignment.

2.3 Anchorage

The primary and best anchorage is just North of Westport and Southeast of Damon Point in 30 to 60 feet of water. Specific location is Latitude 46-55.4N and Longitude 124-06.9. The holding ground is good, and there is more swinging room here than elsewhere in the harbor. There is room up to 4 covered vessels to anchor, pilots monitor the anchorage area.

This is not a formally designated or regulated anchorage area. Anchorage capacity is determined based on a variety of conditions and is ultimately managed by the Grays Harbor Pilots. Those vessels requiring pilots will be anchored at the Pilots discretion.

NOTE: Shoaling may occur as a result of strong currents and river silt in this area. Vessels are advised to use caution and monitor depths at all times when anchoring.

“CAUTION: The practice of anchoring a large vessel (greater than 1600 Gross Tons) in offshore waters should only be considered in an emergency. Vessel masters should always consider

standing offshore at least 25 NM as preferable to the worst-case option of anchoring offshore. Due to the inherent dangers of anchoring on a lee shore, the adverse effects of weather/current/tide, and lack of adequate maneuvering (sea) room, the following will apply:

- Any vessel requiring an offshore anchorage must immediately notify Coast Guard Sector Columbia River, the Grays Harbor Pilots, and their ship's Agent.
- The vessel's master shall be prepared to give the nature of the vessel's distress, desired anchor location, depth of water, type of bottom, and number of anchors and shots of chain to be used.
- The vessel will be required to maintain a full Bridge Navigation Watch, with engines ready for immediate maneuvering.
- The vessel will be placed on a communications schedule with the Coast Guard and will be required to get underway as soon as safely possible."

2.4 Terminal Information

The Port of Grays Harbor operates four marine terminals. In addition to the port-operated facilities listed in the table, there are several private deep-draft piers and wharves in the Hoquiam, Aberdeen, and Cosmopolis area. Only the major deep-draft terminals are listed.

Name	Location	Dock Length (feet) (Meters)	Deck Height (Feet) (Meters)	Mechanical Handling Facilities and Storage	Purpose	Owned/ Operated by:
Public Facilities						
Port of Grays Harbor Terminal 1	46°57'59"N., 123°51'19"W.	450 ft 137.16 m	18 ft 5.48 m	Bulk Liquid Terminal	Bulk Liquid	Port of Grays Harbor (360-533-6588)
Port of Grays Harbor Terminal 2	46°57'53"N., 123°51'08"W.	600 ft 274.32 m	18 ft 5.48 m	Open storage (51 acres). 50,000 square foot storage building.	Receipt and shipment of bulk agricultural commodities	Port of Grays Harbor (360-533-9513)
Port of Grays Harbor Terminal 3	Get Lat Lon	600 ft 182.88 m	18 ft 5.48 m	Open dock with Conveyor for wood chips.	Load logs, break bulk and wood chips	Port of Grays Harbor (360-533-9513)
Port of Grays Harbor Terminal 4	46°57'39"N., 123°50'19"W.	1400 ft 426.72 m	18 ft 5.48 m	Open storage (100 acres).	Receipt and shipment of logs, lumber, and conventional general cargo	Port of Grays Harbor (360-533-9513)
Private Facilities						
Sierra Pacific Industries, Junction City Wharf	46°58'20"N., 123°46'39"W.	600 ft 251.46 m	19.5 ft 5.94 m	Open storage (45 acres)	Shipment of wood chips; receipt and shipment of logs	Sierra Pacific Industries (360-532-2323)
Weyerhaeuser Co., Bay City Log Export, Berths 1 and 2	46°58'01"N., 123°46'43"W.	1,200 ft 220.98 m	16 ft 4.87 m	• Open storage (27 acres)	Shipment of logs and occasional shipment of lumber	Weyerhaeuser Co. (360-537-8216)

***For current terminal depths and berth lengths contact the facility tenant.**

For additional information on the Public/Port Facilities you may visit

<http://www.portofgraysharbor.com/>

2.5 Vessel Traffic Management

There is no formalized Vessel Traffic Service (VTS) in Grays Harbor. Vessel Traffic is managed in cooperation between the Port of Grays Harbor, Grays Harbor Pilots, Vessel Agents, and the terminal tenants that ships call on. Brusco Tug and Barge assists in the coordination of tug and barge traffic and escorts for laden tank vessels carrying oil.

This partnership facilitates the safe, secure and efficient transit of vessel traffic to prevent collisions or groundings that could cost lives, property damage, or subject the waters of Grays Harbor Sea to environmental damage.

Activity	Responsibility	Description
Incoming and outgoing traffic coordination	Grays Harbor Pilots	Pilots coordinate with vessel master and agents on arrivals and departures.
Berthing Reservations	Agents and Port of Grays Harbor	http://www.portofgraysharbor.com/downloads/PGH_TerminalReservation.pdf
Vessel Monitoring	Grays Harbor Pilots, Agents, Marine Exchange of Puget Sound	http://marexps.com/
Monitor vessel traffic and movements via AIS	USCG and Ecology	USCG and Ecology may monitor vessel traffic and movements via AIS/
Anchorage and Anchoring	Grays Harbor Pilots	Pilots coordinate with vessel master and agents to ensure safe anchorage.
Tug Escorts for Laden Petroleum tank vessels	Pilots, Agents, Industry representative and Brusco Tug and Barge	Tankers laden with oil are to be escorted while transiting Grays Harbor.
Dredge Operators	Pilots and Dredge Operators	Vessels and dredges need to coordinate for safe passage by dredges to ensure dredge is safely positioned or anchored for impact of vessels wake.

2.6 Communications

Foreign and domestic commercial vessels should refer to the following table to communicate with appropriate agencies regarding various emergencies and/or unusual situations while transiting Grays Harbor. These communications are not intended to suggest a departure from existing procedures set forth by the ITU, IMO and FCC for the handling of Distress or Urgency communications.

The region is served by a number of Rescue and Vessel Traffic centers as well as the Captain of the Port command center in Astoria, Oregon.

All commercial vessels should familiarize themselves with the areas of responsibility and appropriate working frequencies for the Grays Harbor area as follows:

Entity	VHF Channel	Telephone Number
United States Coast Guard (Sector Columbia River)	16	(503) 240-9333 (Columbia River) (360) 268-0121 (Westport)
United States Coast Guard - Westport Bar Conditions and Weather Information	16	(360) 268-0622
Grays Harbor Pilots	Primary is channel 12. 16, 13 & 9 may also be used. <i>Vessels expecting a pilot boarding via Helicopter should remain 5NM WNW of the Grays Harbor Entrance (GH) Buoy and monitor VHF-09 for communications.</i>	360) 581-0447 or (360) 581-4355
Port of Grays Harbor	N/A	(360) 533-9528
Security, Port Marine Terminals	N/A	(360) 310-0198
Marine Exchange Puget Sound	20	(206) 443-3830
Brusco Tug and Barge, vessel assists and escorts.	12	(360) 532-3352 or (360) 431-5142
Chehalis River Bridge - DOT	13 & 16	(360) 533-9360 Bridge requires 90 minute advanced notification.

NOTE: For Reporting Vessel Incidents, Oil Spills and/or Hazardous Substance Releases in Grays Harbor please refer to the following page for required notifications.

Reporting Vessel Incidents, Oil Spills and/or Hazardous Substance Releases in Grays Harbor

Report all Oil Spills and Hazardous Substances to:

- National Response Center (800) 424-8802 or via VHF Channel 16
- Washington Emergency Management Division at (800) 258-5990 (This is the primary contact number for the Washington State Department of Ecology).

Report all Vessel Incidents including loss of or serious degradation of propulsion, steering, means of navigation, primary electrical power, collisions, allisions, and groundings to:

- USCG Station Grays Harbor via VHF Channel 16
- USCG Capt. of the Port Columbia River (503) 240-9311 or VHF channel 16
- Washington Emergency Management Division at (800) 258-5990

Federal

All spills of oil or hazardous substance into navigable waters as defined by the Clean Water Act (CWA) and all spills of a reportable quantity of hazardous substances (40 CFR Part 302) must be immediately reported by the spiller to the National Response Center (NRC). The NRC will contact appropriate local US Coast Guard (USCG) or Environmental Protection Agency (EPA) offices. Notifying state offices does not relieve the spiller from federal requirements to notify the NRC nor vice versa.

Washington State

All spills of oil into Washington State waters must be immediately reported to the Washington State Emergency Management Division.

Any vessel incident that results in a discharge of oil or poses a substantial threat of discharging oil to state waters must notify the Washington State Emergency Management Division within one hour of the onset of that incident per RCW 88.46.100. Refer to your Oil Spill Contingency Plan information and the Washington state vessel emergency reporting requirements in this chapter.

Local Jurisdictions

Local Fire and Emergency Medical Teams may be the first responders to oil and hazardous substance spills and releases, fires and medical emergencies. They may activate their local Emergency Operations Center to support on-scene operations, make notifications, and respond to requests for resources and other assistance. Ensure local 911 are notified in these situations.

2.7 Pilotage

Pilotage is required for all foreign vessels, and U.S. vessels under enrollment and registered in foreign trade. Under Washington law, RCW 88.16 and RCW 53.08.390 and Washington rules Chapter 363-116 WAC most ships transiting Grays Harbor are required to have a Grays Harbor Pilot on board. Working with the captain on the ship's navigating bridge, the pilot directs vessels into and out of Grays Harbors utilizing specialized knowledge of local weather, tides and currents as well as the handling characteristics of the wide variety of ships that call here. Grays Harbor Bar Pilots serve Grays Harbor, Chehalis River, and Willapa Bay.

ORDERING A PILOT: Pilot orders are taken by phone. The vessel master or the vessels agent may place the Pilot order. Please give advanced notice of at least 24 hours. The Grays Harbor Pilot boat does not cruise on station therefore advanced notice is necessary.

Pilot Contact Numbers: Telephone (360) 581-0447 or (360) 581-4355

PILOT BOAT: The pilot boat, CHEHALIS, is 65 feet long and has an orange and green hull. The word 'PILOT' is displayed on both sides of the boat, and the standard day and night signals are used when vessels are approaching from seaward.

BOARDING AREA: Pilots board vessels 1 mile northwest of Grays Harbor buoy at position (46°-52.6N, 124°-15.48W.) Vessel should not proceed North or East of this position until directed to do so by a pilot.

BOARDING BY HELICOPTER: Pilots may board/disembark the vessel via helicopter service. This can be arranged by contacting the Pilots. Helicopter service is typically provided out of Astoria therefore advanced notification is required to arrange this service and minimize vessel transit distances. Vessels expecting a pilot boarding via Helicopter should remain 5NM WNW of the Grays Harbor Entrance (GH) Buoy and monitor VHF-09 for communications.

COMMUNICATIONS: The Pilot Boat when manned, monitors VHF channels 16, 13, &12. If contact is made on channel 16 promptly switch to channel 12.

PILOT LADDER: A pilot ladder only (NO MAN ROPES) shall be placed amidships, 2 meters above the water line and maintained to the leeward side. Pilot ladders of all ships must comply with SOLAS regulations. To assist pilots in boarding the ship is requested to maintain a speed of 6 knots.

WALK THROUGH FOR LOG CARGOS: For maximum stowage of log cargos and to meet SOLAS requirements, the following is recommended for departures. The provision on the Port Side and main deck of the vessel for a walk through tunnel is to be about 3 feet wide and 6 feet high, solidly bridged over and well lit from a deck house area extending athwart ships to pilots ladder access area. **Rig pilot ladder from top of deck cargo and down the side of vessel.**

Grays Harbor Pilot Boarding Checklist:

- Pilot has been notified 24 hours in advance of arrival at boarding station.
- Arrangements are made for meeting Pilot Boat and Pilot Boarding.
- Vessel or vessel Agent has reaffirmed the estimated time of arrival with the Pilot when the vessel is four (4) hours and one (1) hour away from the Pilot boarding point.
- Vessel master has identified applicable communication channels for Grays Harbor.
- A pilot ladder is to be rigged amidships in compliance with SOLAS regulations on the leeward side about one (2) meters above the water.
- Upon approach to Grays Harbor boarding area, vessels is monitoring VHF channel 12. *Vessels expecting a **pilot boarding via Helicopter** should remain 5NM WNW of the Grays Harbor Entrance (GH) Buoy and monitor VHF-09 for communications.*
- Vessel is maintaining a steady course and speed of around 6 knots when the pilot boat comes alongside, unless otherwise directed by the pilot.
- Safe walkway is established for the pilot.
- Tug escorts have been arranged if required. All laden oil tank vessels may require a tug escort when transiting Grays Harbor. Coordinate with Grays Harbor Pilot and Brusco Tug and Barge.
- Vessel has been made ready for transiting Grays Harbor. All Hatches are covered. Deck loads are properly stowed and secured.

Section 3 - Standards of Care

Standards of Care are the procedures and practices, beyond regulatory requirements, that experienced and prudent maritime professionals follow to ensure safe, secure, efficient and environmentally responsible maritime operations.

Formalized Standards of Care are “good marine practices” that are developed and published to provide a guide for maritime professionals to consider and incorporate into their decision making process. For Grays Harbor, these SOC are focused on vessel transits or operations that are necessary for or enhance the safety of vessels, personnel, dockside facilities and marine resources

Standards of Care are not regulations and thus not enforceable. However, Mariners should be mindful that if they are involved in a maritime incident when not following relevant “Standards of Care” it could be used as a determining factor for fault and/or negligence.

These SOC are clearly not all inclusive. They complement the laws and regulations and should they seem to conflict with law or regulation, the law or regulation is always superior. This SOC Section is designed as a reference guide for safe and environmentally sound vessel movements and operations in and around the port area.

The SOC that are covered in this section include:

- **Aids to Navigation**
- **Anchorage and Anchoring**
- **Crossing the Grays Harbor Bar**
- **Tug Escorts for Laden Tank Vessels Carrying Oil**
- **Operating in Restricted Visibility**
- **Operating in Severe Weather**
- **Required Charts and Publications**
- **Monitoring Mooring Lines**
- **Dredge Operations**

3.1 Aids to Navigation Standard of Care

The entrance and channels of Grays Harbor are marked to assist navigation using the U.S. Aids to Navigation System. This system encompasses buoys and beacons conforming to the International Association of Lighthouse Authorities. The U.S. Aids to Navigation (ATON) System is intended for use with nautical charts. The exact meaning of a particular aid to navigation may not be clear to an individual unless the appropriate nautical chart is consulted. Additional important information supplementing that shown on charts is contained in the *Light List*, *Coast Pilot* and *Sailing Directions*.

Information can be found at the websites below:

Light List: <http://www.navcen.uscg.gov/pubs/lightlists/lightlists.htm>
Coast Pilot: <http://www.nauticalcharts.noaa.gov/>
Sailing Directions: <http://www.nga.mil/>

ATONs in Grays Harbor are regularly reviewed. These reviews are conducted by the U.S. Coast Guard with input from pilots and other waterway users.

3.1.1 Cautions using Aids to Navigation

The aids to navigation depicted on charts comprise a system of fixed and floating aids that have varying degrees of reliability. Mariners should not rely solely on any single ATON, particularly a floating aid. With respect to buoys, the buoy symbol is used to indicate the approximate position of the buoy body and sinker, which secures the buoy to the seabed. These limitations include inherent imprecision in position fixing methods, prevailing atmospheric and river conditions, the slope and the material making up the riverbed, the fact that the buoys are moored to sinkers by varying lengths of chain, and the fact that the buoy body and/or sinker positions are not under continuous surveillance but are normally checked only during periodic maintenance visits. Due to the forces of nature, the position of the buoy body can be expected to shift inside and outside the charting symbol.

Buoys may be carried away, shifted, capsized, sunk, etc. Lighted buoys may be extinguished or sound signals may not function as the result of natural causes, collisions, or other accidents. Mariners should not rely solely upon the position or operation of floating ATON, but also use bearings from fixed objects and aids to navigation on shore. Further, a vessel attempting to pass close aboard always risks collision with a yawing buoy or with the obstruction the buoy may be marking.

3.1.2 Actions if Discrepancies to Aids to Navigation Are Identified

If you see an ATON discrepancy, (buoy off station, light extinguished, etc.) contact the Coast Guard. Your timely report could prevent an accident. If underway, contact the Coast Guard Sector Columbia River by VHF or cell phone at 503-861-6211 or (866) 284-6958.

If not underway, or if merely commenting on ATON, contact Commander, Thirteenth Coast Guard District (dpw) either by mail (Henry M. Jackson Federal Building, 915 2nd Ave, Seattle, WA 98174-1067) or by phone at 206-220-7270.

Vessel operators are required to notify the Coast Guard of any damage or destruction of aids to navigation by 46 Code of Federal Regulations (CFR) 4.05-20, and there is a penalty for noncompliance. Occasionally, aids to navigation are struck, causing damage and displacement or complete loss, without the knowledge of the Coast Guard. The result is diminished protection for marine traffic due to the failure of vessel operators to furnish notice of these collisions to the nearest local Coast Guard unit as required by law and regulation. All vessel operators who witness another vessel or individual damage or destroy an aid to navigation, or believe an aid is not watching properly or is off station in accordance with the Coast Guard *Light List*, should report the incident to the nearest Coast Guard unit.

3.2 Anchorage and Anchoring Standard of Care

The Grays Harbor Anchorage Standards of Care are intended to raise awareness of and mitigate hazards common to anchoring in Grays Harbor. There is one anchorage area inside Grays Harbor located just north of Westport and East of Damon Point. Common hazards include (but are not limited to):

- Vessel Traffic,
- Local Weather Patterns,

- Changing River Volumes,
- Tides,
- Currents,
- Shallow areas adjacent to anchorage area, and
- Recreational and Commercial Fishing Activity,

Sea and river conditions constantly change. Masters and Pilots must take all current and impending circumstances into account a) when anchoring vessels and b) while vessels are at anchor in order to avoid swinging into the channel, collisions, allisions and groundings. Local tug service (Brusco Tug and Barge) is available for standby and assists during weather events and times of low tides and strong currents.

The U. S. Coast Guard is authorized under the Ports and Waterways Safety Act (33 CFR § 109.07) to direct the anchoring of vessels. Individual Masters and Pilots will anchor vessels in a safe position for their size, draft and duration at anchor. Pilots are available on short notice to reposition ships that may have worked out of position. Vessel Masters shall immediately contact a Pilot for repositioning their vessel when required.

Anchorage and Anchoring Standard of Care:

NOTE: See Section 2.3 for discussion of offshore anchorage.

3.2.1 Deviations from Guidelines

The Master or Pilot (in consultation with the Captain of the Port) may deviate from these guidelines when an alternate approach will provide an equivalent or higher level of safety. Vessel Masters shall inform the ***U.S. Coast Guard Sector Columbia River 503-240-9311*** and the appropriate Pilot organization (Grays Harbor Pilots @ (360) 581-0447 or (360) 581-4355, when such deviations are anticipated or have occurred.

3.2.2 Length of Vessel Stay

In accordance with 33 CFR 110.228(b) (3) no vessel may occupy a designated anchorage for more than 30 consecutive days without permission from the Captain of the Port (COTP). Vessels remaining at a designated anchorage for more than seven days may be contacted by the US Coast Guard to obtain an update on the vessels' operational status.

3.2.3 Anchoring

The vessel Master and crew shall:

Prior to Anchoring:

- Review the General and Specific Guidelines in this document and the Coast Pilot concerning your anchorage.
- Confer with your Pilot to ascertain expected condition changes while at anchor.
- Establish a Point of Contact to order tug assistance from the local tug service.
- Establish and document the lead time for tug arrival with the Point of Contact.
- Have a gangway rigged and ready for use.

- Clear **anchors** for letting go. All classed foreign and domestic vessels subject to Title 33 Code of Federal Regulation (CFR), Part 164 transiting the Grays Harbor, shall have the required number of operational anchors as designated for that class of vessel.

The Master's Orders are to include orders to:

- Keep Engines on Standby during:
 - Storm events that include high winds and rough seas.
 - Large tidal changes and strong ebb and flood currents; and
 - Any other potential deemed appropriate by the Master or Pilot.
- Call the Master and Duty Engineer immediately should the anchor start to drag.

While at Anchor:

Maintain a proper Deck Watch at all times. Deck Watch personnel shall:

- Check the condition of the anchors and anchor gear while making periodic rounds of the vessel.
- Continuously monitor the vessels position as well as other vessels, paying particular attention to potential of dragging anchor or swinging toward a hazard.
- Monitor VHF channels 16 and 13 at all times.
- Confirm vessel's position and under keel clearance at a minimum of once per hour, more frequently if weather conditions deteriorate.
- Monitor weather forecasts on a regular basis.
- Call the Master and Duty Engineer immediately if the anchor is dragging.
- Maintain a proper Engine Room Watch at all times. Engine Watch personnel shall remain ready to answer all bells in the event of dragging or losing an anchor.

While at anchor During Periods of Restricted Visibility

- Maintain all orders and activities listed above under "While at Anchor".
- Maintain Bridge Watch with Licensed Deck Officer.
- Maintain Traffic Watch on Radar.

While at anchor when Gale Warnings are in Effect (Sustained Winds of 28 – 47 Knots)

- Maintain all orders and activities listed above under "While at Anchor".
- The Bridge Watch must be maintained by a Licensed Deck Officer.
- Engines on Standby, ready to provide immediate propulsion.

While at anchor when Storm Warnings are in Effect (Sustained Winds exceed 48 knots)

- Maintain all orders and activities listed above under “While at Anchor”.
- Consider increasing the scope of anchor chain.
- Determine the availability and locations of potential stand by tugs (with appropriate size and horsepower), which could assist the vessel in holding position.
- Assess the need to have tugs alongside.
- Assess the need for a Pilot and get one onboard if necessary.

During Low Water as a Result of Tides and Low River Flows

Low water conditions due to tides and low river flows can be expected to occur between the months of June and November. During this period adequate consideration shall be given to:

- Under keel clearance to avoid the increased possibility of grounding.
- Currents could be stronger on the flood tides.
- Vessels may be more likely to swing at anchor.
- If vessels drag anchor, they may ground, block the channel, or collide with other objects.

When anchoring during periods of Low Water, Pilots and Masters should evaluate the following factors:

- The size of the vessel compared to the characteristics of the anchorage.
- Reduction of the scope of the anchor to the minimum necessary to safely hold the vessel.
- The anticipated length of stay in anchorage with regard to tide cycles.
- Anticipated operations while at anchor and their impact on the ability of the vessel to get underway.
- The amount of anchor chain that the vessel carries.
- The size of other vessels in the anchorage (and in particular, large vessels).
- Proximity of other vessels within the anchorage.
- Anticipated under keel clearance.
- Potential for grounding or dragging anchor.

During High Water due to High River Flows

High Water due to higher river flows can be expected to occur between the months of October and June.

During periods of high water adequate consideration shall be given to:

- The higher potential of dragging anchor because of high water flows.
- The current in the anchorage may exceed 5 knots or more.
- Large woody debris floating in and around the vessel and anchor chain.

3.3 Crossing the Grays Harbor Bar Standard of Care

The Grays Harbor bar channel is subject to change based on sea, weather, tide and river flow conditions. Deep-draft vessels should not enter without knowledge of conditions at the time of

entering and must have a pilot on board. Average current velocity is about 1.9 knots on the flood and 2.8 knots on the ebb, but velocities may reach 5 knots. Currents in the vicinity of the bar are reportedly very erratic. During large swells and strong ebb tides vessels have been known to experience cavitation on or near the bar and lose propulsion. Heavy swell can be expected to Buoy 15.

Vessels generally enter and depart the harbor on a flood tide.

The channel on the bar is narrow and has a sharp turn to port and then to starboard for inbound and outbound vessels as they near Westport. This is difficult maneuver that should be executed with extreme caution. The channel is narrow with deepest water is not always on the range.

Information concerning conditions on the bar can be obtained from the Grays Harbor Pilots or from the Coast Guard on VHF-FM channel 16. The bar channel and harbor should not be attempted in severe or low visibility weather. The Coast Guard also maintains a website with bar information @ www.wrh.noaa.gov/pqr/marine/bars_mover.php. This site contains up to date information on the local weather, bar status and local sea conditions.

3.3.1 Standard of Care

Vessels may cross the Grays Harbor bar and transit Grays Harbor safely provided the vessel's Master and Pilot (if employed) have weighed all foreseeable risk factors. In some cases, it may be safer to wait offshore until conditions improve for passage.

Risk factors a vessel Master or Pilot should consider include, but are not limited to:

- Sea conditions, tides, current and river outflow conditions.
- Difficulty in executing the turn near Westport.
- The maneuvering characteristics of the vessel.
- Quality and calibration of the vessel's radar and navigational system.
- The vessel's size and draft in relation to the area to be transited.
- Quality of the vessel's bridge team.
- Vessel traffic and congestion in the area to be transited.
- Anticipated visibility along the route, and special circumstances to be encountered.

Vessels shall typically enter and exit the harbor on an incoming (flood) tide in order to ensure proper under keel clearance and take advantage of sea conditions.

3.4 Tug Escorts for Laden Tank Vessels Carrying Oil Standard of Care

Grays Harbors is a highly sensitive environment with numerous natural and cultural resources. Its narrow channel and treacherous bar present challenges for ships and barges entering and leaving the harbor, especially laden tank vessels carrying oil. As a means to reduce the likelihood of an incident that could lead to an oil spill, tug escorts for laden tank vessels carrying oil (Oil - as defined under Washington state laws and rules) should be provided. It is a critical prevention measure that reduces the risk of an oil spill as these laden tank vessels transit the harbor.

3.4.1 Standard of Care

Tug escorts should be provided for all laden tank vessels, ships and barges, carrying oil. At least one escort tug should meet an arriving laden tank vessel or barge carrying oil at the Grays Harbor entrance and escort it to the Hoquiam River where two tugs (escort and assist) assist the vessel during mooring procedures. At least one escort tug will accompany a departing laden tank vessel carrying oil from the terminal to the entrance of Grays Harbor.

Tugs escorting tank vessels must remain in close proximity to the escorted vessel for timely and effective response taking into consideration:

- Ambient sea and weather conditions;
- Escort configuration;
- Maneuvering characteristics of the escorted vessel;
- Emergency connection procedures;
- Surrounding vessel traffic and other factors that may affect response capability.

TUG AVAILABILITY: Currently, there is one tug Company (Brusco Tug and Barge) providing escort services in Grays Harbor. **Brusco Tug and Barge Company can be reached at (360) 580-1388 or (360) 431-5142** or by VHF radio channel 12. Brusco Tug and Barge has 2 newer Tractor Tugs and 1 conventional tug in Grays Harbor.

3.5 Operating in Restricted Visibility Standard of Care

Close to shore in Willapa Bay and Grays Harbor, wind and fog conditions are often local and different from conditions offshore. Radiation fog often blankets these bodies of water, as well as rivers and shore points. Fog is especially prevalent in August, September and October. Fog can and may form any time during year especially when nights are clear and calm.

Summer is the true fog season along these shores. In general, advection fog reduces visibilities to below 0.5 mile (0.9 km) on 3 to 10 days per month; up to 16 days per month at Tatoosh Island. Sound signals blow 15 to 30 percent of the time. Conditions are worst in Grays Harbor and near the entrance to the Strait of Juan de Fuca. Temperatures are often in the sixties (16.1° to 20.6°C) during the day and around 50°F (10°C) at night. Winds are from a W to NW direction and usually less than 17 knots; calms occur up to 12 percent of the time. It rains on about 5 to 10 days per month. Fog remains a problem in autumn, although it is less frequent. As autumn progresses temperatures drop slowly with daytime readings often in the low to mid-sixties (16.1° to 19.4°C), dropping to the upper forties (8.9° to 9.4°C) at night. Rain falls becomes more frequent peaking in November and December. Winds become stronger and return to an E and SE direction.

Approaching the entrance to Grays Harbor from any direction in severe weather is hazardous and great caution is essential. The currents are variable and uncertain. Because of the possibility of a strong onshore set, especially in SW weather, vessels should not shoal the depths to less than 20 fathoms unless sure of the position.

3.5.1 Standard of Care

Under conditions of restricted visibility, a vessel Master and Pilot (if employed) are expected to observe extra caution as set forth in Rule 19 of the International Rules of the Road.

Vessels may cross the Grays Harbor bar and transit Grays Harbor safely in reduced visibility provided the vessel's Master and Pilot (if employed) have weighed all foreseeable risk factors. In some cases, it may be safer to wait offshore until visibility improves.

Risk factors the vessel Master or Pilot should consider include, but is not limited to:

- The maneuvering characteristics of the vessel.
- Quality and calibration of the vessel's radar and navigational system.
- The vessel's size and draft in relation to the area to be transited.
- Quality of the vessel's bridge team.
- Vessel traffic and congestion in the area to be transited.
- Anticipated visibility along the route, and special circumstances to be encountered.

In periods of restricted visibility, the Master and Pilot (if employed) of a non-tank vessel should not enter the Grays Harbor Channel when another tank or non-tank vessel is outbound through the channel unless the Master or Pilot has determined there is plenty of time and room to take evasive action to avoid a collision should that become necessary.

Vessels at dock or anchored in a safe anchorage should not commence movement if visibility is less than 0.5 miles unless the Master and Pilot (if employed) assess all variables and determine that the vessel can proceed safely.

3.6 Operations in Severe Weather Standard of Care

Storms that move along this coast or a distance out to sea bring cloudy days with highs in the mid-forties (6.1° to 8.3°C) and lows in the middle to upper thirties (3.3° to 3.9°C). In winter, they cause rain on about 15 to 25 days per month and significant snow on 2 or 3 days. Storms are responsible for predominantly E to SE winds from October through March; these winds reach gale force (32+ mph)+ 3 to 6 percent of the time. In the intermittent periods of settled weather, sound becomes an early morning hazard over rivers and protected bays. Visibilities drop below 0.5 mile (0.9 km) on 3 to 4 days per month, from October to February. Sound signals in waters like Grays Harbor operate up to 35 percent of the time.

With the coming of spring, conditions improve. Storms become less frequent. Winds diminish and blow more from a W direction. Temperatures often rise into the low to middle fifties (11° to 13°C) during the day and fall to the low forties (5.0° to 5.6°C) at night. Visibilities are usually good, and rain falls on just 8 to 15 days per month.

The national weather service defines *severe weather* as any aspect of the weather which can pose a threat to life and property. These weather patterns can negatively impact operations.

Examples include: high winds, storms, extreme heat, flooding, extreme high and low water levels, or natural disasters such as tsunamis, volcanic eruptions or earthquakes.

3.6.1 Monitoring Weather Conditions

The National Weather Service (NWS) provides weather updates, forecasts and advisories. This information is available at www.weather.gov. The latest bar observations and Coast Guard restrictions are available at www.wrh.noaa.gov/pqr/marine/bars_mover.php.

Weather forecasts are broadcast on VHF Channel 22A (Frequency 157.1 MHz) for Grays Harbor, VHF Channel 2W (Frequency 162.40 MHz) for Astoria and VHF Channel 1W (Frequency 162.55 MHz) for Portland. Call (360) 268-0622 for current bar condition updates. Weather conditions are updated every 3 hours during daily light conditions (from sunrise to sunset).

Severe weather advisories are divided into different categories and provide a general guide of the anticipated severity of an event. The USCG will announce this information on VHF Channel 16 and then broadcast updates on Channel 22A. The USCG may also provide information through the Local Notice to Mariners.

In general, the different categories mean:

- Alert = Event is possible
- Watch = Increased threat
- Warning = Threat imminent or is occurring

3.6.2 Specific Grays Harbor Considerations

Due to the nature of the river system, localized areas may be impacted to various degrees by the different types of severe weather and each should be considered separately along with any operational demands.

The anchorage north of Westport and east of Damon Point may have weather and current condition limits where tugs would be required.

3.6.3 Vessels in Severe Weather

In all cases, the vessel Master and Pilot shall evaluate the current forecasted weather and the impact on vessel movement, and if necessary, delay movement, call for additional tugs, or take other appropriate measures to ensure safe operations.

Masters and pilots shall consult the Coast Pilot and other sources of local knowledge when transiting high risk areas, and be prepared for strong tides, currents, and weather conditions.

Severe weather may cause a temporary closure of the Grays Harbor bar. The USCG Captain of the Port (COTP) may restrict passage or close the bar based on weather conditions under 33 CFR 165.1325. Weather conditions may also result in restrictions on commercial vessel passage by pilots.

3.6.4 Tug and Tows in Severe Weather

Tug masters must be especially aware of severe weather risks. The areas to be transited, observed and forecasted weather, and tidal/current conditions should be considered when deciding tow

configurations, cargo, and size and type of barges to be used. Tugs and tows should be particularly aware of bar conditions and high wind conditions throughout the river.

During periods of severe weather, tug masters should consider:

- Closing all watertight openings on the tug and tow.
- How river flows and current can impact the tow.
- Reducing speed when necessary.
- Posting a lookout to monitor the tow in addition to the forward lookout.
- Checking gear, including bridle, pendant, chafe gear, drum and brake to ensure compliance with 33 CFR 164.74.

3.6.5 Facility and Cargo Operations in Severe Weather

Each facility has its own unique operating concerns which are affected by the complexity of the operation and weather conditions. Facilities should consider incorporating severe weather contingencies in their operations manual.

As appropriate to the facility, the severe weather plan should address the following:

- Standards and responsibilities for monitoring weather and taking appropriate actions, including after hours, and reporting as appropriate to the Coast Guard.
- Monitoring mooring arrangements.
- Shore crane securing and tie-down requirements.
- Appropriate locations and heights of cargo based on the predicted event.
- Relocating or securing hazardous materials.
- Securing general operating equipment.
- Minimum number, size, and positioning of lines for expected weather conditions.
- Standards for making rounds of the facility, and ensuring the satisfactory material condition of mooring facilities, cleats, bollards, piers, etc.
- Plans and criteria for moving vessels to alternate locations if needed.
- Any unique aspects of the terminal or pier that could affect safe mooring.
- Maximum number of barges/vessels permitted to raft together for expected weather conditions.
- Standards for securing rafted vessels to each other and to the pier.
- Adequate staffing to conduct operations in severe weather conditions.

Port, pier, terminal and dock authorities, operators, and owners are encouraged to conduct annual reviews of internal severe weather procedures specific to cargo operations at their facilities. Procedures should be updated and distributed to key personnel to ensure the safety of employees, cargo, equipment, the public and the environment during periods of severe weather.

3.6.6 Transit through the Aberdeen Bridges in Severe Weather

There is one Bridge in Grays Harbor that may be passed. General bridge operations are managed by the Washington State Department of Transportation. The vessel and/or pilot should contact Bridge Operations at (360) 533-9360 at least 90 minutes in advance of needed passage.

3.6.7 Dredging Operations in Severe Weather

Companies should develop written guidance for operations supervisors to take into account current and forecasted weather. The guidance should clearly identify weather conditions that would halt operations or require moving to a safe anchorage or mooring. Operations supervisors should be especially aware of how their operations impact navigable waterways and should consider the following issues:

- Modifying/securing operations under certain weather conditions.
- Identifying a safe anchorage/moorage for each job.
- Proactively consider the activity's impact on safe navigation in all weather conditions.

3.6.8 Oil Transfer Operations in Severe Weather

Facilities should follow the severe weather procedures in their facility operations manual. For facilities and vessels transferring to or from a vessel of 250 bbls capacity or more, regulations are located in 33 CFR 156.

Washington State oil transfer rules are located in Washington Administrative Code (WAC) 173-180 and WAC 173-184. Oil deliverers are required under state regulations to include weather criteria in making determinations for safe and effective transfer operations and pre-booming. WAC 317-40 addresses requirements for bunkering operations of vessels 300 gross tons or more. Companies are strongly urged to incorporate weather criteria into their oil transfer procedures.

3.6.9 Potential Captain of the Port (COTP) Actions

If individuals or vessels are not taking actions to mitigate the risks posed by severe weather, the COTP is authorized under various federal laws to take or direct certain actions, including:

- Require stand-by tugs or tugs in attendance.
- Direct vessel movements to seek shelter, alter or hold position to protect the port, environment, and mariners.
- Direct hazardous materials and explosives loading or unloading to cease.
- Direct changes in mooring configuration or location for vessels at terminals.
- Direct bunkering and lightering operations to cease. Currently there no bunkering operations in Grays Harbor.

3.6.10 Reporting Problems to the Coast Guard

Everyone should take ownership in making the waterways safe during severe weather. Mariners should report any actual or potential problems on or near the water to the Coast Guard at (503) 861-6211 or via VHF on channel 16. The Coast Guard may issue directions to responsible parties to compel action or may take action to mitigate unsafe situations.

3.7 Required Charts and Publications Standard of Care

These guidelines provide information on charts and publications required for commercial vessels operating in Grays Harbor. No person may operate or cause the operation of a vessel unless the vessel has the required marine charts and publications of the area prior to entering U.S. waters or

departing a U.S. port. Commercial vessel requirements are contained in 33 CFR 164 and all vessels should have appropriate charts and publications for the areas they are operating in.

The information for the charts and publications should be currently corrected for the areas to be transited. "Currently corrected" means the charts are corrected with changes contained in all Notices to Mariners published by the National Imagery and Mapping Agency, or equivalent foreign government publication.

3.7.1 Standard of Care

- All vessels shall have on board the following charts:
 - **Chart 18500**
 - **Chart 18502**
- Marine charts of the areas to be transited should be published by NOAA's National Ocean Service (NOS) and satisfy the requirements below. Charts must be of a large enough scale and have enough detail to make safe navigation of the areas possible.
- Charts must be corrected through the most recent Notice to Mariners.

3.7.2 Guidelines for Vessels Missing Charts

The vessel master must report directly or through their agent to the Captain of the Port (COTP) if the vessel is missing any of the required or current navigational charts. The master will be required to obtain the proper charts prior to entering U.S. waters. Note that some foreign flagged vessels may report they are missing U.S. charts; however, if they have the appropriate updated foreign charts for their transit those charts may be accepted instead. Vessel masters or agents may contact the COTP to verify if the charts the vessel has on board are sufficient for their transit.

Required charts must be acquired before entering Grays Harbor. The vessel may be required by the COTP to have the appropriate charts delivered prior to entering Grays Harbor, or be escorted in.

3.8 Mooring Line Management and Monitoring Standard of Care

As large vessels pass other vessels in the harbor that are moored, the water surge ahead of the passing vessel will cause a water flow at the pier/dock in the direction of the passing vessel. As the vessel passes, water flow at the berth will shift direction, drawing the moored vessel in the opposite direction. A third force comes into play as the stern of the vessel passes. This force follows the passing vessel and is diametrically opposed to the previous force. In a short period, the **moored vessel** will be pushed in different directions three times. Similar forces can also be generated during periods of strong river currents and strong ebb tides.

3.8.1 Standard of Care

Because these forces can cause severe damages, it is particularly important to properly manage and monitor dockside mooring lines. Slack lines may permit enough movement of where the moored vessel will be subjected to a substantial amount of energy that will surge loads and part overloaded mooring lines. To prevent damage to mooring lines the following standards of care should be implemented:

- Pilots or Masters for vessels underway should make contact with moored vessels in Grays Harbor to coordinate safe passage.
- Ships duty officer and vessel crews should keep watch at all times and tend lines regularly to make sure loads are equally distributed prior to passage of vessels underway, during times of strong currents and strong ebb tides and during loading and off-loading of cargos.
- Lines should be tensioned such that no movement is allowed at the dock.
- Lines should be checked after the passage of vessels underway to ensure no damage and loads remain equally distributed.

Section 4 - Plan Implementation and Maintenance

4.1 Plan Implementation

The Grays Harbor Safety Plan (HSP) is intended to complement existing regulations by advising the mariner of unique conditions and requirements that may be encountered in the region by providing standards of care (SOC) and protocols developed by local experts. The GHSP will be implemented through consensus agreement and cooperation from industry members, state and federal agencies, pilots and the Port of Grays Harbor to follow the plan to the fullest extent possible barring any unforeseen circumstance that may warrant a change. The GHSP is not intended to replace the good judgment of a ship's master in the safe operation of his/her vessel.

4.2 Plan Maintenance

The Grays Harbor Safety Committee will review the Grays Harbor Safety Plan on an annual basis to ensure all information is up to date. Recommendations may be made to incorporate new information or additional standards of care at any regular meeting of the GHSC.

Appendix 1: Glossary

Glossary of Terms	
Term	Definition
Bunkering	The transfer of fuel.
Captain of the Port (COTP)	The Coast Guard officer designated by the Commandant to command a Captain of the Port Zone as described in Part 3 of Title 33 Code of Federal Regulations.
Captain of the Port (COTP) Zone	A zone specified in Title 33 Code of Federal Regulations, Part 3 and, for coastal ports, the seaward extension of that zone to the outer boundary of the EEZ.
Cooperative Vessel Traffic Service (CVTS)	The system of vessel traffic management established and jointly operated by the United States and Canada within adjoining waters. In addition, CVTS facilitates traffic movement and anchorages, avoids jurisdictional disputes, and renders assistance in emergencies occurring in adjoining United States and Canadian waters.
Exclusive Economic Zone (EEZ)	The zone contiguous to the territorial seas of the United States, extending to a distance up to 200 nautical miles from the baseline from which the breadth of the territorial seas is measured.
Oil (<i>Washington State Definition</i>)	Means and kind of liquid at atmospheric temperature and pressure and any fraction thereof, including but not limited to, crude oil petroleum, gasoline, fuel oil, diesel oil, oil sludge, oil refuse, biological oils, and blends, and oil mixed with wastes other than dredged spoil.
Stakeholder	Those individuals or groups who can have an effect on, or be affected by, maritime operations and other events with the coastal marine environment.
Standard of Care (SOC)	Standards of Care are the procedures and practices that experienced and prudent maritime professionals follow to ensure safe, secure, efficient and environmentally responsible maritime operations. Standards of Care are “good marine practices” that are developed and published to provide a guide for maritime professionals to consider and incorporate into their decision making process. Standards of Care complement the laws and regulations and should they seem to conflict with law or regulation, the law or regulation always takes precedence.
Under Keel Clearance (UKC)	The vertical clearance under the keel of a ship to the channel bottom.
Vessel Traffic Service	The service implemented by the United States Coast Guard designed to improve the safety and efficiency of vessel traffic and to protect the environment. The VTS has the capability to interact with marine traffic and respond to traffic situations developing in the VTS area. In the Pacific Northwest, we have a Cooperative Vessel Traffic Service (CVTS).
Vessel Response Plan (VRP)	The oil spill response plan, to which the vessel is subject, as required by Federal and/or State regulations.

Appendix 2: Acronyms

Acronyms

AC	Area Committee
ACOE	(United States) Army Corps of Engineers
AIS	Automatic Identification System
ANT	Advance Notice of Transfer
ATB	Articulated Tug Barge
ATON	Aids to Navigation
AWO	American Waterways Operators
BTM	Bridge Team Management
CFR	Code of Federal Regulations
COLREGS	Int'l Regulations for Avoiding Collisions at Sea (Rules of the Road)
COTP	Captain of the Port
DOE	(Washington State) Department of Ecology
DWT	Deadweight Tons
ECDIS	Electronic Chart Display and Information Systems
eNOAD	Electronic Notice of Arrival/Departure System
ETA	Estimated Time of Arrival
ETD	Estimated Time of Departure
GRP	Geographic Response Plan
GT	Gross Tons
HSC	Harbor Safety Committee
HSP	Harbor Safety Plan
IMO	International Maritime Organization
LNM	Local Notice to Mariners
LOA	Length Over All
MARPOL	International Convention for the Prevention of Pollution From Ships
MLLW	Mean Lower Low Water
MMSI	Maritime Mobile Service Identity
NOA	Notice of Arrival (i.e., U.S. 96 hour Notice of Arrival)
NOD	Notice of Departure
NOAA	National Oceanic And Atmospheric Administration
NRC	National Response Center
NTVRP	Non Tank Vessel Response Plan
OCIMF	Oil Companies International Marine Forum Guidelines
OPA	Oil Pollution Act of 1990
OSRO	Oil Spill Removal Organization
PIC	Person in Charge
POGH	Port of Grays Harbor
RCW	Revised Code of Washington (State)
RM	River Mile
RRT	Regional Response Team
SLNM	Special Local Notice to Mariners
SOC	Standard of Care
SOLAS	Safety of Life at Sea

STCW	Standards for Training, Certification, and Watchkeeping for Seafarers
TSS	Traffic Separation Scheme
UKC	Under Keel Clearance
USCG	United States Coast Guard
VRP	Vessel Response Plan
WAC	(State of) Washington Administrative Code
WDFW	Washington State Department of Fish and Wildlife
WDNR	Washington Department of Natural Resources
WX	Weather