

GRAYS HARBOR BAR HAZARDS

CROSSING THE GRAYS HARBOR BAR

The bar is the area where the deep waters of the Pacific Ocean meet with the shallower waters near the mouth of the harbor.

Crossing the bar can be dangerous, and boaters must make sure the bar is safe prior to crossing. This pamphlet provides you with some common-sense knowledge about crossing the bar, as well as resources you should check before you go.

Keep in mind, most accidents and deaths that occur on coastal bars are from capsizing, due mainly to improper loading and / or overloading a boat. When improperly loaded, boats are less stable and sit lower in the water, which can allow seas to break over and into the vessel.

Boats are more likely to capsize when crossing the bar from seaward because the following seas approaching from the stern of the vessel greatly reduce maneuverability, which can cause the vessel to broach sideways.

If you are caught on a rough bar running in from the ocean:

- Make sure everyone aboard is wearing a personal flotation device.
- Keep the boat square before the seas.
- Keep the boat on the back of the swell. Ride the swell, and stay clear of the following wave.
- Avoid sudden weight shifts from passengers or gear moving around in the boat. If possible, have passengers lie down as near the centerline of the boat as possible.
- Do not allow the waves to catch your boat on the side (beam). This condition is called broaching and can easily result in capsizing.

The U.S. Coast Guard may close coastal bars to recreational boats when conditions are hazardous. Failure to comply with the closure may result in voyage termination and civil and/or criminal penalties. Regulations are enforced by U.S. Coast Guard boarding teams.

TIDES & CURRENTS

Tides are the vertical rise and fall of the water, and tidal current is the horizontal flow of the water. Tidal changes occur roughly four times each day in the Pacific Northwest. Tidal movement toward the shore or upstream is known as the flood period of the tide. Movement away from the shore or downstream is the ebb. The period between the two, where there is no vertical or horizontal movement, is known as slack water. Tidal currents may gain tremendous velocity—particularly on the ebb. This outward flow of current can be intensified by river runoff during periods of heavy rain.

The best time to cross the bar is during slack water or on a flood tide, when the seas are normally the calmest. Avoid getting caught on the bar during an ebb tide—it is extremely dangerous. Even on days that are relatively calm, a fast moving

ebb can create bar conditions that are too rough for small craft. Always know the stage of the tide before you cross the bar.

REGULATED NAVIGATION AREA

The Coast Guard has established a regulated navigation area in the area surrounding and on the Grays Harbor bar. When the amber lights on this sign are flashing, the Coast Guard has placed a restriction on recreational and uninspected passenger vessels crossing the bar. The Coast Guard has the authority to restrict all recreational and uninspected passenger vessels from crossing the bar when hazardous conditions exist. Failing to comply with posted bar restrictions may result in a maximum civil penalty of \$25,000. (Per 33 Code of Federal Regulations [CFR] 165.1325)



BAR WARNING SIGN LOCATIONS

- A white diamond shaped sign with an orange border indicating “rough bar” and amber flashing lights are located on the north side of Westhaven Cove, approximately 20 feet above the water and visible from the channel looking seaward.
- Located at the entrance to the Westport boat ramp is a bar restriction warning sign, blue in color with amber flashing lights, that states: **“Warning, When Flashing, Bar Restrictions in Effect, Tune to 1610 AM.”**

When the amber lights are flashing on any of the warning signs, hazardous conditions are present, and a bar restriction is in place. Mariners should tune in to listen to the restriction information.

BAR CONDITION AND OBSERVATION REPORTS

Observed weather and bar conditions are updated every three hours or more frequently if there is a significant change in weather. For conditions, check one or more of the following:

- A continual radio broadcast on 1610 AM is audible within a 6-mile radius from the Coast Guard station in Westport. The broadcast includes bar conditions, bar restrictions and local weather.
- The Coast Guard station in Grays Harbor broadcasts bar information on Channel 16 and 22A VHF when hazardous bar conditions and restrictions are put into place or are lifted. Monitor channel 16 VHF for all notices and weather updates.

Bar condition reports for Grays Harbor are available by calling (360) 268-0622.

• Local bar observations are also available online at: www.wrh.noaa.gov/pqr/marine/BarObs.php



Crossing the Grays Harbor Bar



More boating safety information: www.uscgboating.org and www.boatprepared.com
Boating class and vessel safety check information:
www.usps.org or (800) 336-BOAT (2628) (class information only)

Boat Smart. Know before you go and be prepared...It can be a lifesaver!

CALLING FOR HELP - if in distress (threatened by grave and imminent danger), call for help right away. **Make sure everyone is wearing a life jacket!**

VHF-FM radio (MAYDAY call)

1. Make sure radio is on
2. Select channel 16
3. Press and hold the transmit button
4. Speak slowly, and clearly say “MAYDAY, MAYDAY, MAYDAY”
5. Give the following information
 - Vessel name and/or description
 - Nature of emergency
 - Position and/or location
 - Number of people on board
6. Release transmit button and wait for 10 seconds
7. If no response, repeat “MAYDAY” call



Phone 911. Tell the operator you have a marine emergency. Be ready to provide the same information required in item number 5 of the mayday call.

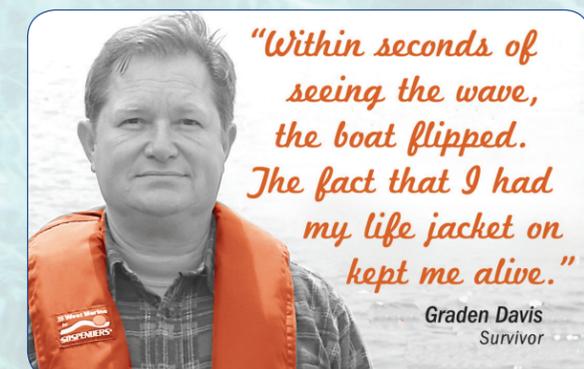
If not in immediate danger, but you need assistance, switch the VHF radio to channel 22, and follow the same steps as above, except don't use the word MAYDAY.



Coast Guard Station
• Grays Harbor in Westport, WA - (360) 268-0121

BOATING TIPS

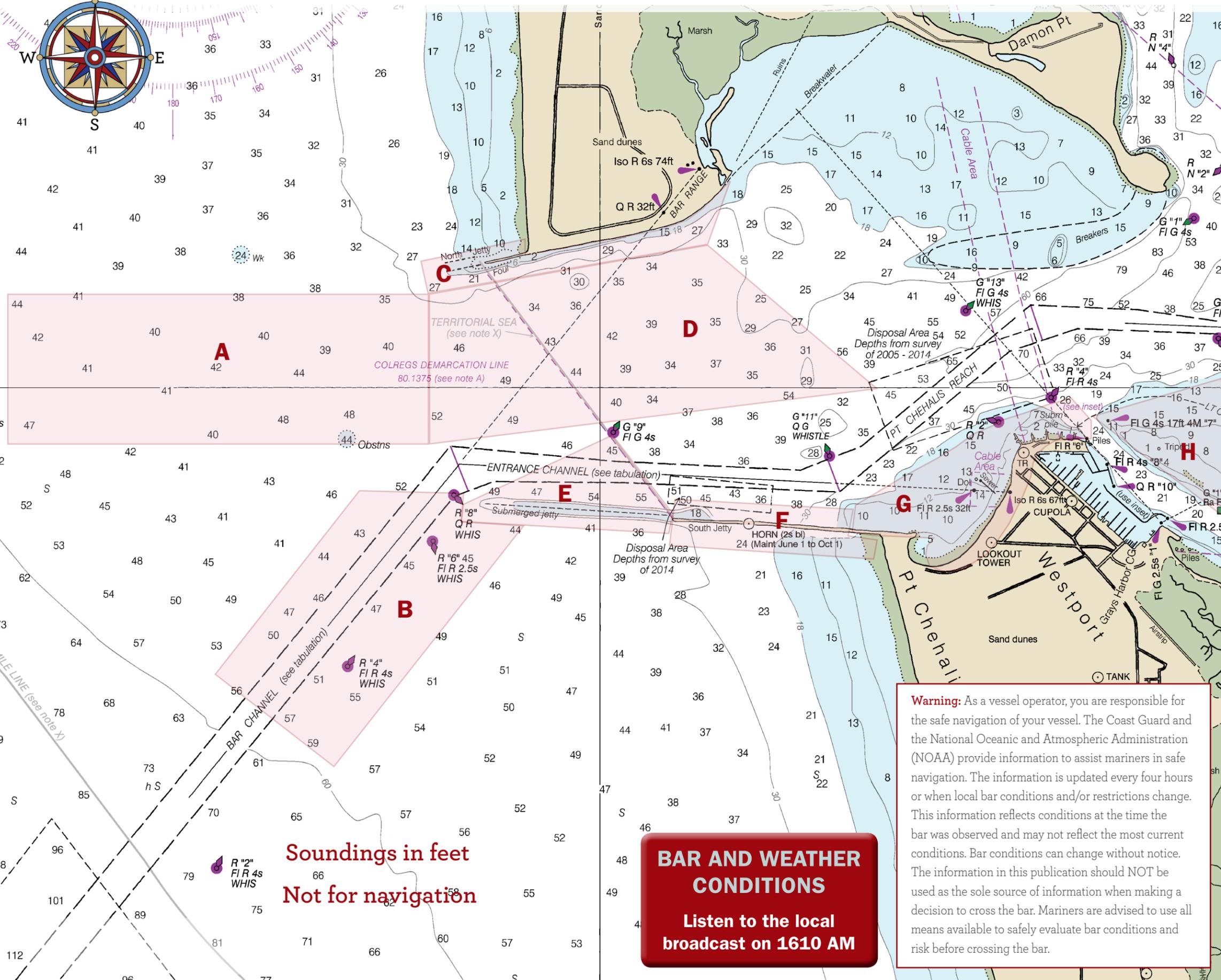
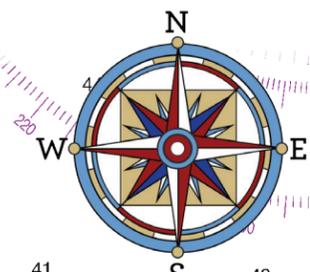
- Check weather, tide and bar conditions on 1610 AM
- Know your limits
- Double check you have essential gear on board
- File a float plan with friends/relatives
- Don't overload your boat
- Always wear your life jacket
- Carry two forms of communication that will work when wet (flares, VHF radio, cellphone in a waterproof bag or distress locator beacon)
- Stay clear of commercial vessels
- Have an anchor with adequate line
- Boat sober



“Within seconds of seeing the wave, the boat flipped. The fact that I had my life jacket on kept me alive.”

Graden Davis
Survivor

GRAYS HARBOR DANGER AREAS



**Soundings in feet
Not for navigation**

**BAR AND WEATHER
CONDITIONS**
**Listen to the local
broadcast on 1610 AM**

Warning: As a vessel operator, you are responsible for the safe navigation of your vessel. The Coast Guard and the National Oceanic and Atmospheric Administration (NOAA) provide information to assist mariners in safe navigation. The information is updated every four hours or when local bar conditions and/or restrictions change. This information reflects conditions at the time the bar was observed and may not reflect the most current conditions. Bar conditions can change without notice. The information in this publication should NOT be used as the sole source of information when making a decision to cross the bar. Mariners are advised to use all means available to safely evaluate bar conditions and risk before crossing the bar.

A. Green line: The area extends west from buoy #5 to buoy #3. Swell direction and period affect this area. Due to the depth, it requires a larger swell and period to become dangerous. During ebb currents the wave height significantly increases due to the opposing energy of the current as it encounters the energy of the incoming swells. Use caution while transiting this area.

B. Red line: The area of the Grays Harbor entrance channel is from Buoy #8 SW to Buoy #2. Swell direction and period will dictate how dangerous this area can be. It's common to see a bigger wave right on the buoy line as the swells slow down and hit the shallower waters, causing them to stand up higher than the surrounding waves. Use extreme caution while transiting this area.

C. North jetty: Beyond the visible tip of the north jetty is a submerged jetty that extends seaward. This area is extremely dangerous due to the drastic depth change that makes breaking waves possible—even during calm sea conditions. Avoid this area.

D. Middle ground: The area includes Buoy #11 west to Buoy #5 north and along the north jetty to Point Brown south to Buoy #11. Depending on the state of the tide and the prevailing weather conditions, this area can appear safe. However, depending on swell patterns and sudden shoaling in the area, the middle ground can suddenly develop breaking waves in a matter of minutes. Use caution while transiting in the vicinity of Buoy #9 and at the southeastern section of this area because larger waves will quickly form into breaking waves without warning.

E. Slop hole: The area extends from the tip of the south jetty northwest to Buoy #9 southwest to Buoy #8. At any given time there can be different currents and different wave directions. The submerged tip of the south jetty can take waves and bend or refract them in different directions. In addition, these waves can reflect off of each other causing a washing-machine-like effect. During ebb currents and strong winds, this area can get extremely choppy. Use extreme caution while transiting this area.

F. South jetty: The area along the north and south sides of the south jetty can be treacherous. Sticking out past the visible tip is a submerged jetty that runs out to Buoy #8. This area can be extremely dangerous at any time due to the extreme drop in depth, causing breaking waves even at the smallest of wave conditions. Avoid this area.

G. Half Moon Bay/Groins: Depending on wave direction, period and current, waves will start to break just inside Buoy #11 and continue across the marked channel into Half Moon Bay. Alongside the eastern most part of the south jetty is a small shoaling area where standing waves will break along the jetty all the way into the bay. The Groins are little rock jetties that stick out from shore along the bay side of Westhaven Marina. A popular surf spot, boaters should be aware of shallow depths and breaking waves in this area. Use caution while transiting this area.

H. Whitcomb Flats: Located just outside the two entrances to the Westhaven Marina, this area is very deceptive. At high tide, the area is covered with what appears to be deep water but is still very shallow and will produce small choppy breakers that can capsize smaller vessels. Avoid crossing this area.

