

# COLUMBIA RIVER BAR HAZARDS

## BAR AND WEATHER CONDITIONS

**Listen to the local broadcast on 1610 AM**

### CROSSING THE BAR

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

Most accidents and deaths that occur on coastal bars are from capsizing.

Coastal bars may be closed to recreational boats when conditions on the bar are hazardous. Failure to comply with the closure may result in voyage termination, and civil and/or criminal penalties. The regulations are enforced by Coast Guard boarding teams.

Improper loading and/or overloading are major causes of capsizing. Improper/overloaded boats have less stability and less freeboard, which can allow seas to break into the vessel, causing the boat to become even less stable.

Boats are more likely to capsize when crossing the bar from the ocean because the seas are on the stern and the boater may have less control over the vessel.

Boaters must make sure the bar is safe prior to crossing. Check with other boaters or the Coast Guard to find out the condition of the bar.

If you are caught on a rough bar running in...

- 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.

### TIDES

Tides are the vertical rise and fall of the water and tidal current is the horizontal flow of the water. There are roughly four tides each day in the Pacific Northwest. Tidal movement toward the shore or upstream is the flood current. Movement away from the shore or downstream is the ebb current. The period between the two is known as slack water. Tidal currents may gain tremendous velocity, particularly when the ebb current is augmented by river runoff.

- It is extremely dangerous to get caught on the bar during strong ebb current. Even on days that are relatively calm, fast moving ebb can create bar conditions that are too rough for small craft.
- Always know the stage of the tide!

- Avoid getting caught on the bar during an ebb tide.

It is normally best to cross the bar during slack water or on a flood tide, when the seas are normally calmest.

### REGULATED NAVIGATION AREA

The Coast Guard has established a Regulated Navigation Area. If the yellow lights on this sign are flashing, indicating a restriction has been placed on recreational and uninspected passenger vessels crossing the bar. In accordance with 33 CFR 165.1325, the U.S. 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 \$25,000.00.

### WARNING SIGN LOCATIONS

Warning signs are located at the boat ramp areas at the Port of Hammond, Warrenton, Chinook, Ilwaco and Fort Canby. These signs are blue in color and have amber flashing lights that read: 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 and listen to the restriction information.

### BAR AND WEATHER CONDITIONS

Observed weather and bar conditions are updated every four hours or more frequently if there is a significant change in weather. Marine Information Broadcasts on Channel 16 VHF FM are conducted by the Coast Guard when hazardous bar conditions and restrictions are put into place or are lifted. Mariners are strongly encouraged to monitor channel 16 VHF/FM for all notices and weather updates.

The AM radio broadcast is audible within an 8-mile radius from the Coast Guard Station in Ilwaco. It provides a continual broadcast on radio station 1610 AM containing bar conditions, bar restrictions, and local weather.

You can also access current bar conditions and restrictions on your smart phone or hand held device by going to, [www.wrh.noaa.gov/pqr/marine/BarObs.php](http://www.wrh.noaa.gov/pqr/marine/BarObs.php).



## EMERGENCIES

VHF-FM Radio: Channel 16

If in distress (threatened by grave and imminent danger):

- Make sure radio is on
- Select Channel 16
- Press/hold the transmit button
- Speak slowly, and clearly say: MAYDAY, MAYDAY, MAYDAY
- Give the following information:
  - Vessel Name and/or Description
  - Nature of Emergency
  - Position and/or Location
  - Number of People Aboard
- Release the Transmit Button
- Wait for 10 seconds – If no response, repeat “Mayday” call. If not in immediate danger, switch to CH 22 and follow the same steps as above, except do not use the word “MAYDAY.”

**Make Sure Everyone is Wearing a Life Jacket!**

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

### Coast Guard Stations:

Cape Disappointment  
Ilwaco, WA  
(360) 642-2382

Group Air Station  
Sector Columbia River  
(503) 861-6211

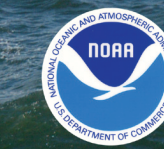


## BOATING SAFETY TIPS

- Check Weather, Tide, and Bar Conditions – The latest information can be heard on 1610 AM
- File a Float Plan With Friends/Relatives
- Don't Overload Your Boat
- Wear Your Life Jacket
- Carry Flares and a VHF-FM Radio
- Stay Well Clear of Commercial Vessels
- Have Anchor With Adequate Line
- Boat Sober

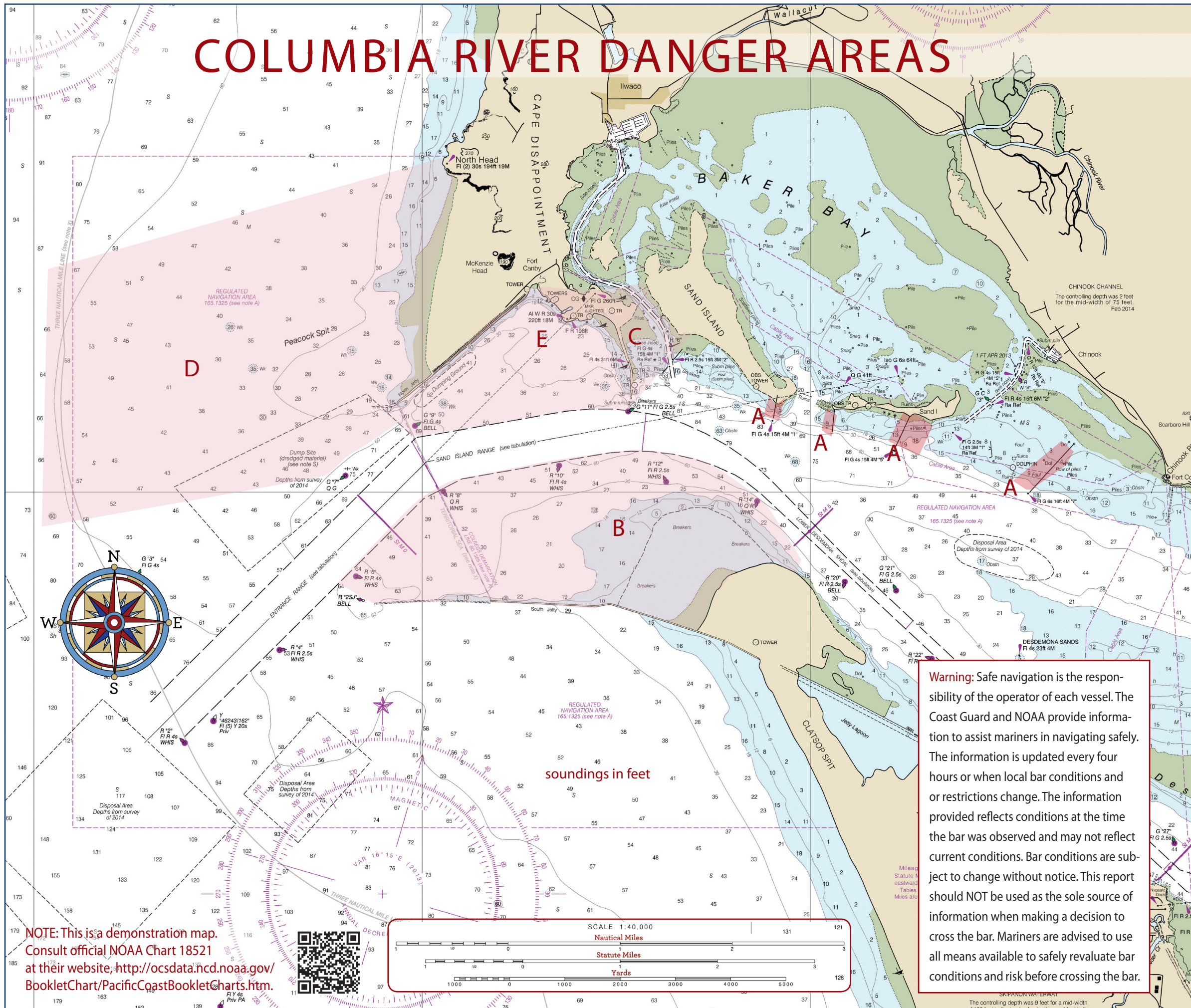


# CROSSING THE COLUMBIA BAR



More Boating Safety Information: [www.uscgboating.org](http://www.uscgboating.org) and [www.boatoregon.com](http://www.boatoregon.com)  
Boating Class and Vessel Safety Check Information: [www.uscgaux.org/~130/](http://www.uscgaux.org/~130/),  
[www.usps.org](http://www.usps.org) or 1-800-336-BOAT (2628) (class information only)

# COLUMBIA RIVER DANGER AREAS



**A. Chinook spur and upper, lower, and middle Sand Island spurs** are built on two rows of staggered pilings. Currents flowing through these pilings attain a velocity of five knots or more. A boat that becomes disabled or is maneuvered in such a way that it comes in contact with any of these spurs is almost sure to suffer damage. Even large boats have capsized in these areas. Give these spurs a wide berth and never get close to them on the up-current side.

**B. Clatsop spit is an unpredictable area of the river entrance.** During flood currents and slacks, it may be relatively calm, with only a gentle swell breaking far in on the spit. Yet 5 or 10 minutes later, when the current has started to ebb, it can become extremely treacherous, with breakers extending far out toward the channel. Boaters should remain north of the red buoys in this area, particularly just before or during the ebb. Breakers extend out past buoy #8. On a flood tide, you can be carried into Clatsop Spit. Be prepared to anchor. The south jetty has a section broken away on the outer end. The broken section is under water, close to the surface. If you are relatively close and your engine fails, the flood or ebb current will take you across the submerged jetty. Boaters should use extra caution in the area from the visible tip of the jetty to buoy #2SJ, which marks the western end of the submerged portion of the south jetty. On the flood, a dangerous rip can occur over the sunken jetty. Do not cross the submerged jetty.

**C. Jetty A, which is southeast of Cape Disappointment, presents a particularly strong danger when the current is ebbing.** Water flowing out of the river is deflected by the jetty, and frequently the current reaches eight knots. Boats proceeding into Baker Bay west channel make very little speed against the swift current and are exposed to the rough water (or surf on rough days) for long periods of time. Small craft should avoid the shallow, sandy area when heavy seas are running because of the surf that breaks on the beach. Look for the entrance marked by daymarks one and two and with green and red lights, respectively.

**D. Peacock spit.** Waves in Peacock Spit break from three different directions. If you lose power on the bar during an ebb current, your vessel will be carried into Peacock Spit and is in danger of capsizing. Breakers may be heavy in any type of current. Sport craft leaving the river should never be on the north side of the green buoys. When rounding Peacock Spit, even on a calm summer day, give the breakers at least a ½-mile clearance. On these same summer days, "sneakers" – unusually large swells coming in from the sea – can suddenly begin breaking ¼ to ½-mile outside the usual break on the end of the north jetty.

**E. Middle ground.** This is a shallower area between the north jetty and the main ship channel that is subject to breaking seas when swells as small as four feet are present. Breakers are much wider and have more velocity than in other areas. Conditions can change in minus with tide current changes.

**Warning:** Safe navigation is the responsibility of the operator of each vessel. The Coast Guard and NOAA provide information to assist mariners in navigating safely. The information is updated every four hours or when local bar conditions and or restrictions change. The information provided reflects conditions at the time the bar was observed and may not reflect current conditions. Bar conditions are subject to change without notice. This report 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 reevaluate bar conditions and risk before crossing the bar.

