

# HAZARDS

## 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 a 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 create a hazardous condition. 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 capsizings. Improperly/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 everybody aboard is wearing a properly fitting 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.

## Homeland Security

All commercial and recreational vessels must remain at least 100 yards from any Navy vessel and must operate at minimum speed while within 500 yards, proceeding only at the direction of the Commanding Officer or the official operating in the area. The requirement applies to all Navy vessels that are underway, moored or anchored.

Violations are punishable by up to six years in prison and/or up to \$250,000 in fines.

Boaters should also stay away from cruise ships, tankers, LNG ships and other commercial vessels.

## BAR AND WEATHER CONDITIONS

Updated every three hours or as bar and weather conditions change. WQEL 572

## Tides

Tides are the vertical rise and fall of the water and tidal current is the horizontal flow of the water.

There are roughly two tides each day in the Pacific Northwest.

Tidal movement toward the shore or upstream is the flood current. Movement away from shore or downstream is the ebb current. The period between 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 a strong ebb current. 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!**
- **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.

## Dangers Near Large Vessels

Many large commercial ships, and tugs and their tows, frequently transit the ports along the Pacific Northwest coast. Due to their draft and/or limited maneuverability, they must navigate within the dredged shipping channels. Common sense, courtesy, and the law (rules of the road) require that small boats give these vessels a wide berth.

Large ships, and tugs pushing barges ahead, have a very large "blind spot" ahead of the vessel. Boaters must bear this in mind and err on the side of safety and get out of the way as soon as it is clear that the larger vessel is coming your way. Doing so lets the pilot and captain aboard the ship know a boater's intentions in a timely manner, creating a much safer situation for all concerned.

## Rough Bar Warning Signs

Be aware of the location and status of rough bar advisory signs. Two alternating amber lights on the signs are activated when observed seas on the bar exceed four feet in height and are considered dangerous.

To see if this restriction affects your vessel, please contact the Coast Guard station Group Astoria on VHF-FM Channel 16 or call 503-861-6211. Failure to comply may result in voyage termination and/or criminal penalties.

## EMERGENCIES

### VHF-FM Radio: Channel 16

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

1. Make sure radio is on
2. Select Channel 16
3. Press/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 Aboard
6. Release the Transmit Button
7. 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 Everybody is Wearing a Life Jacket!**

**Telephone: 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	Group/Air Station
Ilwaco, WA (360) 642-2382	Astoria, OR (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

## Mouth of the Columbia Buoy Guide

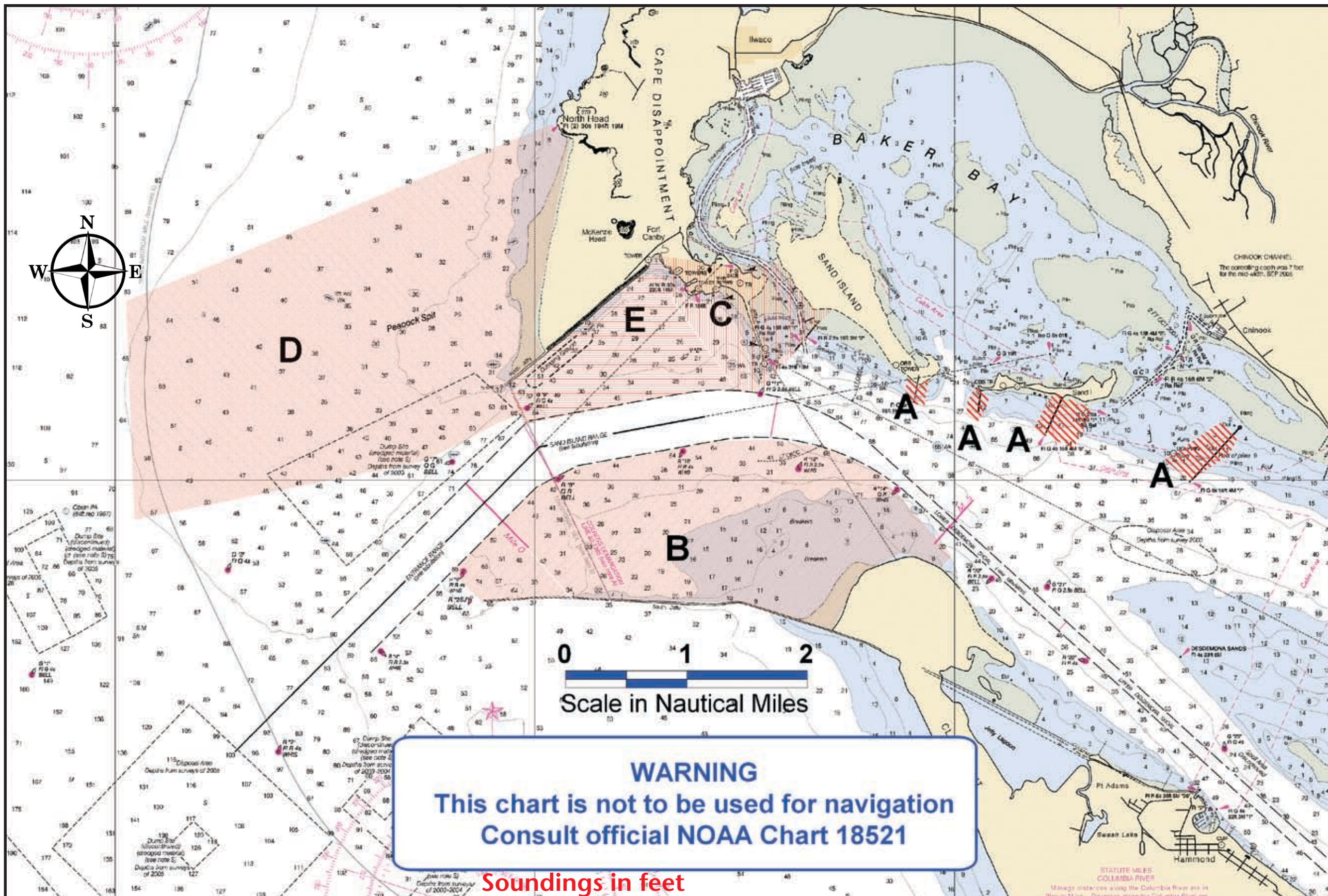


# CROSSING THE COLUMBIA BAR



For Additional Boating Safety Information [www.uscgboating.org](http://www.uscgboating.org) [www.boatoregon.com](http://www.boatoregon.com)  
For Boating Class and Vessel Safety Check Information: [www.uscgaux.org/~130/](http://www.uscgaux.org/~130/) [www.usps.org](http://www.usps.org)  
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 upcurrent 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. Sports 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 half-mile clearance. On these same summer days, "sneakers"—unusually large swells coming in from the sea—can suddenly begin breaking 1/4 to 1/2 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 minutes with tide current changes.