



# BOATING *in* OREGON COASTAL WATERS



*Revised June, 2009*







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*Revised June, 2009*



***Come Play on Oregon's Waterways***



## **Acknowledgements**

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## **Credits**

Produced by Gail Wells Communications

Writing by Gail Wells

Photography and design by Richard Warren

Cover photograph by Dennis Frates

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## **Oregon State Marine Board**

PO Box 14145

435 Commercial Street, Suite 400

Salem, OR 97309-5065.



# CONTENTS

## Heading Out 2

*Estuaries* 2

*Fish and shellfish* 3

*Birds* 4

*Marine mammals* 4

*Cultural features* 5

## Navigating Oregon's Coastal Waters 6

*Buoys and range markers* 6

*Charts* 6

*Lateral Navigation System* 7

*Warnings and advisories* 8

*Emergency position-indicating beacon (EPIRB)* 8

*Law enforcement* 9

*Crossing the bar* 10

*Other hazards* 11

*Getting help* 12

## Going Somewhere? Your Float Plan 13

## Oregon's Navigable Coastal Rivers and Bays 14

*Columbia River* 15

*Nehalem Bay* 20

*Tillamook Bay* 24

*Depoe Bay* 28

*Yaquina Bay* 32

*Siuslaw River* 36

*Umpqua River* 40

*Coos Bay* 44

*Coquille River* 48

*Rogue River* 52

*Chetco River* 56

## Oregon's Non-Navigable Coastal Rivers and Bays 60

*Necanicum River* 61

*Netarts Bay* 61

*Cape Kiwanda* 61

*Nestucca Bay* 62

*Salmon River* 62

*Siletz Bay* 62

*Alsea Bay* 63

*Port Orford* 63

*Winchuck River* 63

## Keeping Waterways Clean 64

## Shut the Bad Guys Out 66

## Destructive Waves 66





# HEADING OUT

The Oregon coast is a beautiful, unforgiving environment. To experience its beauty without mishap, boaters must take sensible steps to protect themselves against its dangers. This publication strives to balance information about the coast's attractions with tips for keeping your visit enjoyable and safe.

This small book cannot hope to be comprehensive in either topic. There are hundreds of publications and web sites devoted to things to see and do along the Oregon coast. We mention only a few of them, focusing on activities of particular interest to boaters and sights and activities accessible from a boat.

Similarly, no book can take the place of training, experience, judgment, up-to-date charts, and a seaworthy vessel. We mention the potential hazards of bar crossings not to provide the last word on the subject, but to encourage the boater to get the information and guidance needed to cross safely.

Our most immediate audience is boaters who have the equipment and experience to navigate on the ocean and into and out of the coastal harbors. However, we hope this book will also interest boaters who enjoy the sights and attractions of coastal waterways without crossing the bars.

We encourage you to experience the waters of the Oregon coast with gusto tempered with caution. Enjoy your trip, stay safe, and come back again.



*The Suislaw's green canyon*

## Estuaries

It is in the coastal estuaries that land and sea blend together. Saltwater mingles with fresh, and tides sweep in and out twice a day, providing a rich environment for life at all scales, from microorganisms to shellfishes and vertebrate fishes, to gulls and other shore birds, to migrating waterfowl like Canada geese and tundra swans, to large mammals such as deer and elk.

The diversity of a marine estuary makes it important habitat for all these creatures, but especially for the fish and shellfish species that are so important to Oregon's economy and quality of life. Some of these organisms are particularly sensitive to human impacts—coho salmon and oysters, for two notable examples. Maintaining healthy estuaries is essential for all the creatures that live in them.

For the earth's human inhabitants, salt marshes and backwaters of Oregon's bays are rich in scenic beauty and recreational opportunities. Fishing and crabbing are the major attractions for most boating visitors, but many people come to watch and photograph wildlife, dig for clams, golf, scuba-dive, or sail or paddle through quiet waters. Some like to cruise the shorelines, docking here and there to take in the sights of the towns and villages ringing the waters.



*Heading out from the Cushman dock*



## Fish and shellfish

The coastal estuaries are the point of entry for Oregon's anadromous fishes, the salmon and steelhead species that spawn inland but spend their lives at sea. During the past century these populations have declined sharply, mostly because of overfishing and environmental degradation stemming from modern development—dams, roads, and alteration of inland habitat. During that time, hatchery-raised fish have augmented the native fish populations.



*Two freshly landed Dungeness crabs*

Commercial and sport fisheries both feel the impact of the long-term decline. Even so, sport fishing—highly regulated for conservation's sake—is still a major attraction for coastal visitors. Spring and fall chinook runs and fall-winter steelhead fisheries attract anglers to the ocean waters off the coast and to coastal rivers and estuaries.

Sturgeon inhabit the lower Columbia and Coos estuaries, and warmwater species such as bass and crappie are found in the tidal marshes. In the waters around the coastal bars, anglers fish for rockfishes, surfperch, lingcod, cabezon, and bottom fishes. Surf anglers bring in perch, sole, flounder, and occasionally striped bass. Farther offshore, anglers take to their boats to chase halibut, salmon, albacore, and cod. A spring run of shad offers further opportunities, and herring, anchovies, smelt, and sardines may be taken hook and line or by net. Crabbing for Dungeness and red rock crabs is highly popular in most coastal estuaries, and the surrounding tide flats yield razor clams and bay clams such as cockles, littlenecks, butter clams, gapers, and softshell clams. Remember that you need a license to harvest shellfish.

Fishing regulations are complicated and prone to frequent change, and penalties for violating them can be severe. Anglers should consult the Oregon Department of Fish and Wildlife regulations at <http://www.dfw.state.or.us/resources/fishing/>, or pick up a paper copy at a bait shop or sporting-goods store.



*Cleaning the catch at Winchester*



## Birds

The coast's beaches, bays, and wetlands are the home of many resident and migratory bird species. Gulls, mergansers, loons, cormorants, buffleheads, and grebes are sighted year-round. Canada geese and tundra swans winter in the marshes around the river mouths. Blue and green herons and bald eagles can be spotted among tide flats. In the southernmost estuaries, pelicans plummet into the water like torpedoes and come up with fish in their capacious bills. Great egrets are year-round residents of the southern coast. April through August is the best time to watch birds. Certain species, such as pelicans, common murres, and puffins, are at the coast only during these months.



*A great blue heron*



*A California sea lion*



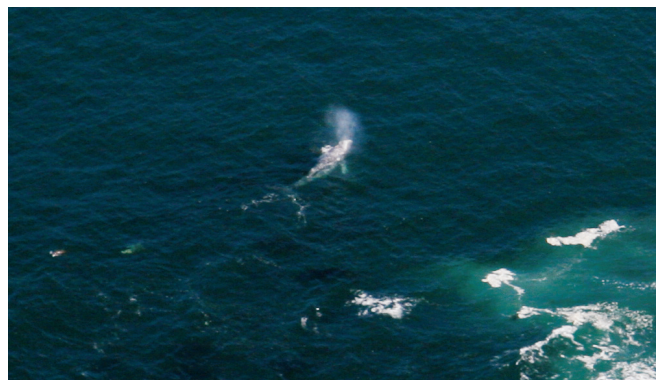
*A cormorant makes a splash*

## Marine mammals

In October, gray whales begin their 5,000-mile migration from summer feeding grounds in the Arctic to the warm waters of Baja California, where the females bear their calves. The southward migration continues through December. The whales start migrating north in February and continue the journey throughout July. They travel in pods, hugging the coast both ways. If you stand on a high headland on a calm sunny morning and scan the ocean with binoculars, you might be rewarded with the sight of a whale spouting brine through its blow-hole, or hoisting its tail flukes before a deep dive.

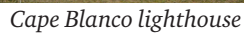
California sea lions like to lounge in large, closely packed clumps on sandy bay shores or docks. They are sometimes confused with the much larger, lighter-colored Steller sea lions, which are not much seen in bays and rivers.

Harbor seals are often spotted on mudflats inshore and on sandy beaches and offshore rocks. Sometimes one will venture several miles upriver in search of a meal, its half-submerged head making a long V in the water behind it.



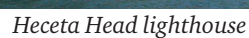
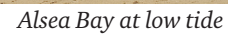
*A gray whale*





A boat at sea offers an unusual perspective on some of the Oregon coast's best-known landmarks. Nine light-houses line the coast from Astoria to Port Orford: they are at Tillamook Rock, Cape Meares, Yaquina Head, Yaquina Bay, Heceta Head, the mouth of the Umpqua, Cape Arago, the mouth of the Coquille, and Cape Blanco.

Historic Siuslaw River bridge





# NAVIGATING OREGON'S COASTAL WATERS

## You may buy NOAA charts from these coastal suppliers:

### **Englund Marine Supply**

95 Hamburg Ave., Astoria, OR 97103

Phone: (503)325-4341

Fax: (503)325-6421

E-Mail: [Astoria@englundmarine.com](mailto:Astoria@englundmarine.com)

Web: <http://www.englundmarine.com>

### **Tillamook Sporting Goods**

2207 Main Ave. N., Suite B, Tillamook, OR 97141

Phone: (503) 842-4334

Fax: (503) 842-4439

### **Englund Marine Supply**

880 SE Bay Boulevard, Newport, OR 97365

Phone: (541) 265-9275

Fax: (503) 265-3515

E-Mail: [dfleck@englundmarine.com](mailto:dfleck@englundmarine.com)

Web: <http://www.englundmarine.com>

### **Schiewe Marine Supply**

103 SE Bay Boulevard, Newport, OR 97365

Phone: (541) 265-7382

Fax: (541) 265-7382

### **Basin Tackle**

63510 Kingfisher Road

PO Box 5508, Charleston, OR 97420

Phone: (541) 888-3811

Fax: (541) 888-6311

### **Englund Marine Supply**

5080 Cape Arago Highway

PO Box 5704, Charleston, OR 97420

Phone: (541) 888-6723

Fax: (541) 888-9332

E-Mail: [charleston@englundmarine.com](mailto:charleston@englundmarine.com)

Web: <http://www.englundmarine.com>

### **Chetco Marine Supply**

16118 Lower Harbor Road, Harbor, OR 97415

Phone: (541) 469-6681

Fax: (541) 469-6281

## **Buoys and range markers**

Keep red buoys to starboard (right) when coming into a port. Keep green buoys to starboard when going out to sea. Be aware that some buoys are seasonal and that even permanent ones sometimes come loose from their moorings. Buoys equipped with sound devices—whistles, bells, or gongs—will sound irregularly depending on movement of seas. It is a federal offense to moor to a buoy.

Range markers (international-orange signs with a black stripe and rectangle) are mounted in widely separated pairs. To stay in the navigable channel, steer a course that keeps the two markers in line.

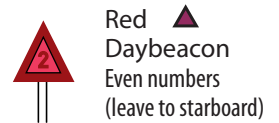
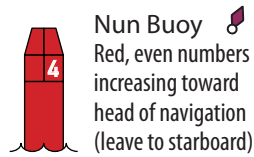
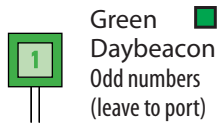
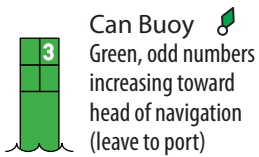
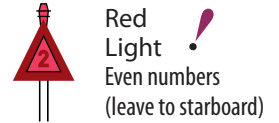
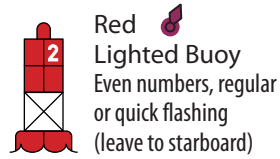
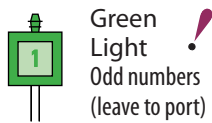
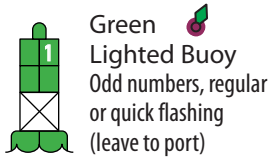
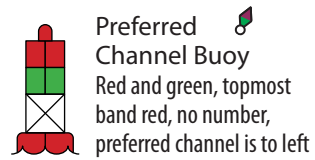
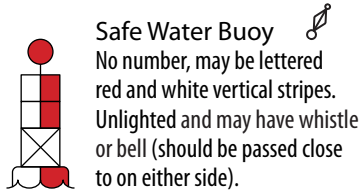
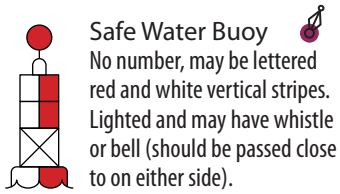


*Buoys off Charleston*

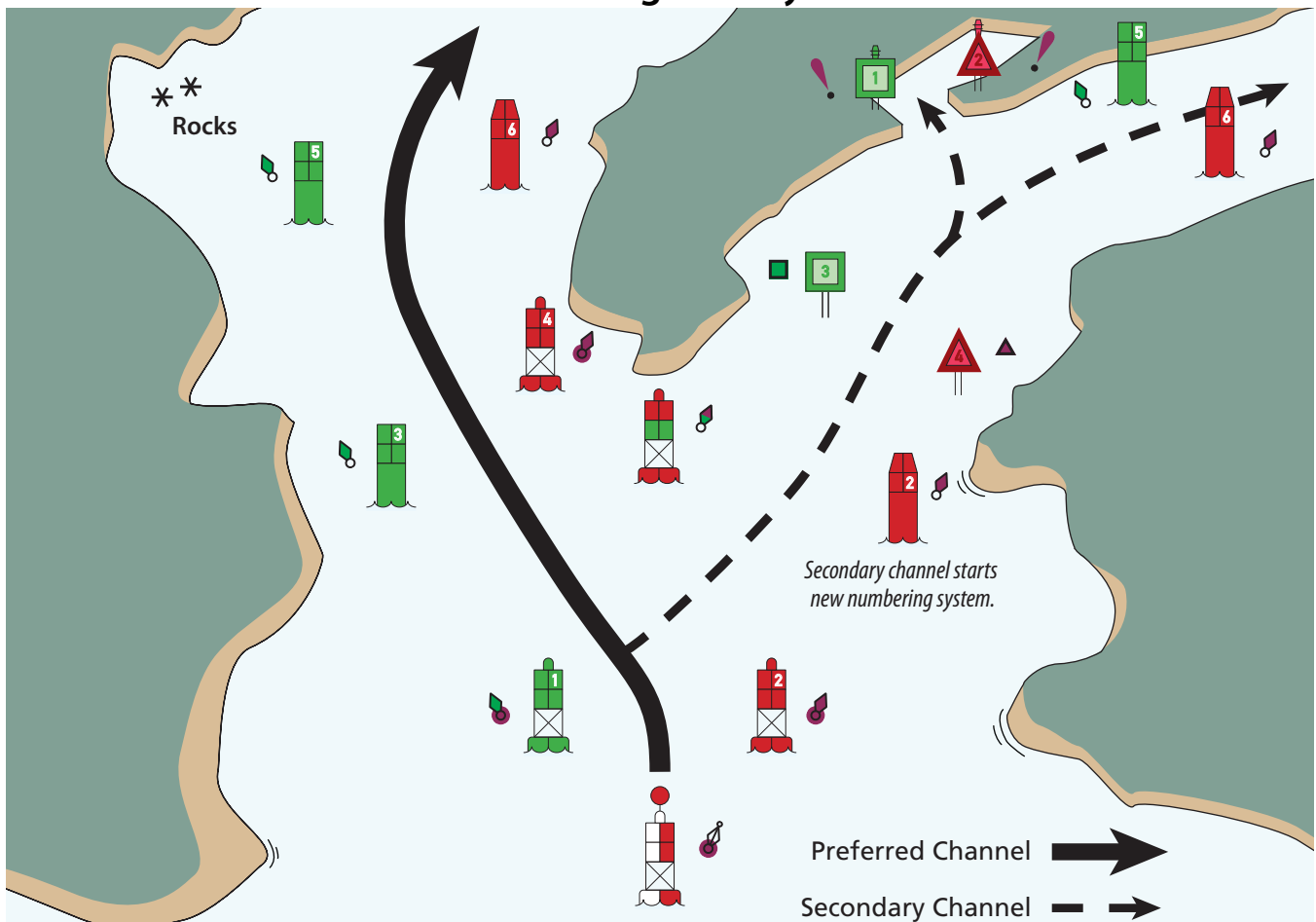
## **Charts**

Charts reproduced in this book are not to be used for navigation. Official, up-to-date nautical charts are available from OceanGrafix LLC, a retail network of NOAA Coast Survey, under the brand name Charts-on-Demand, at <http://nauticalcharts.com/loc-faq.htm>. Charts may also be purchased from NOAA authorized agents worldwide.





## Lateral Navigation System



## U.S. Coast Guard stations along the Oregon coast:

### Cape Disappointment (Ilwaco, WA)

(360) 642-2382

for emergencies only: (360) 642-2381

### Columbia River (Astoria USCG Group Air Station)

(503) 861-6211

### Tillamook Bay (Garibaldi)

(503) 322-3531

for emergencies only: (503) 322-3245

for bar conditions: (503) 322-3234

### Depoe Bay

(541) 765-2124

### Yaquina Bay (Newport)

(541) 265-5381

for bar conditions: (541) 265-5511

### Siuslaw River (Florence)

(541) 997-2486

for bar conditions: (541) 902-7792

### Umpqua River (Winchester Bay)

(541) 271-2138

for emergencies only: (541) 271-2137

### Coos Bay (Charleston)

(541) 888-3267

### Chetco River (Harbor)

(541) 469-3885;

for bar conditions (541) 469-4571

on Earth. An even better choice is a 406 MHz device equipped with an integral GPS receiver, which enables faster and more accurate pinpointing of a distressed vessel's location.

## Warnings and advisories

Storm signals are displayed at U.S. Coast Guard stations, marinas, public piers, and other locations along the coast. When rough-bar signs are actively flashing, it indicates deteriorating bar conditions. Tune in to Coast Guard radio to learn of any vessel restrictions that may have been imposed on the regulated boating area of the harbor. Boaters can get more detailed information on weather conditions and bar conditions from local radio stations, Coast Guard radio at 1610 AM, and the National Weather Service Broadcasts/website.

### Small-craft advisory (33 knots/38 mph)

Daytime  
Signal



Night  
Signal



### Gale (34-47 knots/39-54 mph)



### Storm (48 knots/55 mph)



## Emergency position-indicating radiobeacon (EPIRB)

An emergency position-indicating radiobeacon (EPIRB) is an essential piece of equipment for any oceangoing vessel. If you should get into trouble, your EPIRB sends a signal to alert rescue authorities. The EPIRB facilitates a quick response that could save your life.

The Coast Guard monitors only the 406 MHz EPIRB, which is designed to operate with satellites. The 406 MHz frequency has been internationally designated for distress calls only, and the device's satellite capability enables rapid transmission of a distress signal anywhere





### Law enforcement

County sheriff's departments, the Oregon State Police, and the U.S. Coast Guard share law-enforcement authority in Oregon's coastal waters out to the 3-mile limit of U.S. territorial waters. In general, they enforce county, state, and federal law, respectively, although some of these laws have overlapping intents (for example, both state and federal law require boaters to carry certain safety gear), and in practice these authorities cooperate extensively. In addition, the Coast Guard is responsible for ensuring the safety of navigation within a federally defined area of each navigable U.S. harbor, and has the

authority to restrict or curtail boating during hazardous conditions.

The U.S. Coast Guard Auxiliary is an all-volunteer, nonmilitary organization of experienced boaters that aids the Coast Guard in patrolling coastal waters and educating the boating public. Auxiliary vessels bear a blue-and-white flag or a placard that says, "U.S. Coast Guard Auxiliary." Auxiliary volunteers stay in constant communication with the Coast Guard. They stand ready to help the Coast Guard aid boaters in trouble and to disseminate information about weather, bar conditions, tides, and other important matters. When hailed by a Coast Guard Auxiliary boat, stop and pay attention to the message it brings.

All Oregon boaters must carry a boater education card when operating power boats or personal watercraft 10 horsepower or over. To meet this requirement, you can take a boating safety course from the U.S. Coast Guard Auxiliary, U.S. Power Squadron, marine patrol offices, and approved private education providers. Approved Internet courses are also available through the Marine Board's website. Go to [www.boatoregon.com/OSMB/BoatEd/index.shtml](http://www.boatoregon.com/OSMB/BoatEd/index.shtml).

The National Weather Service broadcasts warnings, watches, forecasts and hazard information 24 hours a day. You will need a special radio receiver or scanner capable of picking up the signal. Broadcasts are found in the VHF public service band at these seven frequencies (MHz):

162.400	162.425	162.450	162.475	162.500	162.52	162.550
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Here are the locations, call letters, and frequencies of coastal National Weather Service broadcast sites:

North coast (Neahkahnie Mountain)	WWF94	162.425 MHz
Tillamook	WWF95	162.475 MHz
Newport	KIH33	162.550 MHz
Florence	WNG674	162.500 MHz
Coos Bay	KIH32	162.400 MHz
Cape Blanco	WNG596	162.425 MHz
Brookings	KIH37	162.550 MHz

More information is available from the NWS web site (<http://www.nws.noaa.gov/>)

## Crossing the bar

The interplay of tidal flux, ocean breakers, offshore winds, and river current makes a bar—the entrance of a river into the ocean—a highly unstable environment. These forces combine in many complicated ways, and stormy seas make them even more unpredictable.

The bars of Oregon's smaller coastal rivers remain in their natural state, shallow and sandy with constantly shifting shoals and spits. They are without jetties or regularly maintained channels. Conditions of these bars change rapidly according to the influences of wind, current, and sea. They are always dangerous. Boaters should not cross them at any time. Shallow water at the river's entrance will ground a boat in the midst of breakers, the worst possible place to be stuck. Even small breakers can swamp a boat.

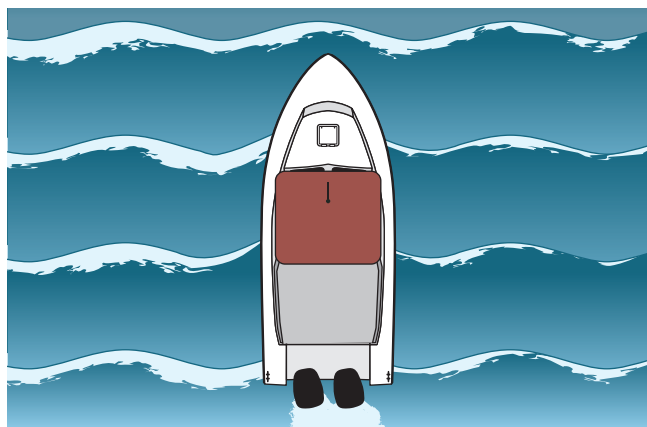
The larger harbors—the Columbia, the Tillamook, Depoe Bay, Yaquina Bay, Siuslaw Bay, the Umpqua River, Coos Bay, and the Coquille, Rogue, and Chetco rivers—have jetties and regularly maintained channels. Always use caution when crossing these bars.

Generally, slack tide is the best time to attempt a bar crossing because the tidal current is at its quietest and the boater has the most maneuverability. High slack is best because it puts more water between the boat and the river bottom. Low slack is second best. Avoid crossing on an ebb tide, when the powerful outward current is reinforced by the river's flow but often opposed by prevailing offshore winds and ocean swells. Together, these make the bar even more dangerous by producing waves that rise and break very quickly. Likewise, a strong flood tide reinforced by the wind can propel a boat forward too fast and make maneuvering very difficult.

The influence of the river is generally less during summer and fall, when flows are at their lowest. Most coastal rivers, being rain-fed, are fullest in the winter. On the snow-fed Columbia the highest waters tend to come in the spring. It is wise to be especially careful during these spring freshets because they come at a time when boaters are getting tired of the winter and are eager to get out on the water again.

## For the safest crossing:

- Observe the bar from a nearby perch before you go out. If it looks dangerous, it probably is.
- Even small breaking waves have a lot of power. If in doubt, don't go out.
- Know your own limitations. A rough bar is the wrong place to put your skills to the test.
- If you decide to go, call the Coast Guard for advice and to let them know of your intentions.
- Be sure your boat is moderately loaded and that the load is stable. Tell your passengers to stay put.
- Make sure everyone on board is wearing a life jacket.
- Stay square before the seas. Keep the swells fore and aft to avoid broaching (veering broadside to the waves).
- Remember that **experience is the key to safe bar crossings**. Gain your experience in favorable conditions and good weather, learn from the experts, and do your homework.



Keep bow into swells

The Coast Guard's standard rough-bar advisory sign is a 6- by 6-foot white diamond-shaped sign with a bright orange border and the words "ROUGH BAR" in black letters. Two amber lights flash when seas exceed 4 feet in height. Seas may be rough even when lights are not flashing.

If you arrive at a harbor in rough weather and are dubious about crossing, contact the Coast Guard on the radio (VHF channel 16) for advice.





*Whistle Buoy on the south jetty at Brookings*

### Other hazards

Fog is very common. If visibility is poor, boats without radar should not go out because of the risk of collision or grounding in hazardous surf. If you find yourself in fog, go slow and stay alert. If you get lost, anchor and wait out the fog. Carry a well-functioning compass and a whistle or horn. Boaters operating in low-visibility conditions must emit a 4- to 6-second blast every 2 minutes. Mount a radar reflector or other metal object as high as possible so that the Coast Guard can find you if they need to.

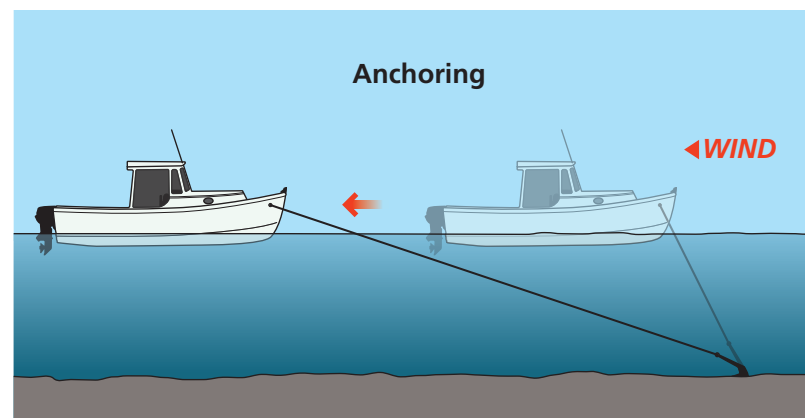


*A freighter heads out to sea from Astoria*

Large ships ply the Columbia estuary, Yaquina Bay, and Coos Bay, and oceangoing tugs and barges go into and out of these and other ports. These commercial vessels are far less maneuverable than smaller boats and, because of their deep draft, must stay in the shipping channel. The Navigational Rules give deep-draft ships the right of way within narrow channels in all circumstances. Give them plenty of room—at least one ship's-length (500-600 feet) away from the bow and at least 100 feet away from the side. Remember that their pilots

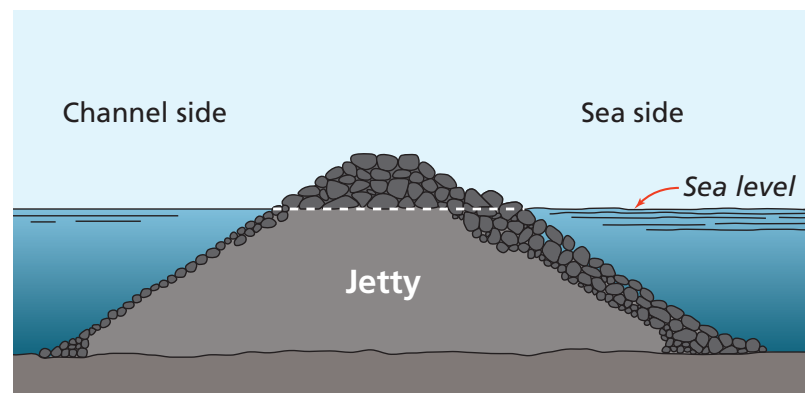
have a blind spot in their line of sight from the bridge to the bow, and remember that it takes these big ships a long time to stop. If a ship is bearing down on you, alter course promptly to signal your intention to get out of the way. Keep your engine in good working order—you may need to rev up and get out of a tight spot fast.

Logs, deadheads, and other floating debris are plentiful in coastal waters. Watch for and avoid them. Dredges operate in harbor channels during summer and early fall. Avoid them and their anchor lines, which are marked by buoys.



Keep anchor at the ready. Use line 7-10 times the water depth. NEVER anchor from the stern. For more information about safe anchoring, visit [www.boatoregon.com/OSMB/safety/anchoring.shtml](http://www.boatoregon.com/OSMB/safety/anchoring.shtml).

Don't get too close to the jetties on your way into or out of a harbor. Many jetties have submerged portions beyond the visible tips. Give them a wide berth before turning north or south.



Be aware that the greater mass of a jetty is beneath the water.

## YOU MUST

- Comply with state and federal laws governing recreational boating
- Stop when hailed by the Coast Guard
- Follow Coast Guard orders to come in when conditions are dangerous
- Carry life jackets and ensure that children 12 and under wear them
- Carry Visual Distress Signals
- Carry the safety equipment required for a vessel of your type and size—see the Boating Regulations Handbook for specific requirements at [www.boat-oregon.com/OSMB/library/docs/BoatersHandbook-Web.pdf](http://www.boat-oregon.com/OSMB/library/docs/BoatersHandbook-Web.pdf).

## YOU SHOULD

- Leave a float plan with a friend onshore.
- Use the right kind of anchor and enough line for your situation. Keep your anchor handy. Install a float on the line. Consider a quick-release cleat. Never anchor off the stern. For more details see the Oregon State Marine Board web page <http://www.boatoregon.com/OSMB/safety/Anchoring.shtml>.
- Wear your life jacket – Type I offshore. Most Type I life jackets have reflectors and a whistle attached to them.
- Carry:
  - ✓ a VHF marine radio,
  - ✓ an Emergency Position Indication Radio Beacon (EPIRB). A 406-mHz is the most reliable type
  - ✓ survival suits for all crew members
  - ✓ extra food and water
  - ✓ flashlight with fresh batteries
  - ✓ first-aid kit, local navigation charts
  - ✓ reliable and accurate compass
  - ✓ toolbox and spare engine parts
  - ✓ bailing bucket

## Getting help

If you are in distress, contact the Coast Guard on VHF channel 16. Transmit the international distress call: “MAYDAY, MAYDAY, MAYDAY. This is (your vessel’s VHF call number and name).” Briefly describe the emergency. Repeat the call three times. Alternatively, use your cell phone to call the nearest Coast Guard station. It would be wise to have the number pre-programmed on your cell phone.

Speaking slowly and clearly, give the dispatcher, these three crucial pieces of information:

- Your position
- Number of people on board
- Nature of your distress

It’s important to give these first in case your signal cuts out.

Then state:

- Your vessel’s VHF call number and name
- Your position, preferably in latitude/longitude coordinates, Loran coordinates, depth of water or true bearing, or distance in nautical miles from a known point
- The seriousness of your situation—whether you are in imminent danger
- What kind of help you need
- Condition of anyone injured on board
- Present seaworthiness of your vessel
- Description of your vessel: length, type, cabin, masts, power, color of hull, superstructure, trim
- Weather conditions

If you are reporting another vessel in trouble, state:

- Your position and the bearing and distance of the vessel in trouble, if possible
- Nature of the difficulty
- Description of the vessel
- Your course, speed, and destination
- Your radio call sign, name of your vessel, listening frequencies, and schedule.



## GOING SOMEWHERE?

Leave a float plan with a friend or relative. If you make changes in it, let that person know before you go. Should disaster strike, a few minutes could mean a lifetime of difference. Here's a simple plan:

Name of boat operator \_\_\_\_\_

Home phone number \_\_\_\_\_ Business phone number \_\_\_\_\_

Boat type \_\_\_\_\_ Color of hull \_\_\_\_\_

Color of trim \_\_\_\_\_ Registration number \_\_\_\_\_

Name \_\_\_\_\_ Make \_\_\_\_\_ Length \_\_\_\_\_ Other \_\_\_\_\_

Engine: Type \_\_\_\_\_ Horsepower \_\_\_\_\_ Normal fuel (gallons) \_\_\_\_\_

Number of persons aboard (including operator) \_\_\_\_\_

Name

Age

Address/Phone number

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Survival Equipment:

Lifejackets (number) \_\_\_\_\_ Flares \_\_\_\_\_ Mirror \_\_\_\_\_ Flashlight \_\_\_\_\_ Food \_\_\_\_\_

Paddles Water \_\_\_\_\_ Cushions \_\_\_\_\_

Radio \_\_\_\_\_ Frequencies \_\_\_\_\_

Itinerary:

Depart \_\_\_\_\_ from \_\_\_\_\_ on \_\_\_\_\_ (time, date)

Going to \_\_\_\_\_ or \_\_\_\_\_

Expect to return by \_\_\_\_\_ (time, date)

and in no event later than \_\_\_\_\_

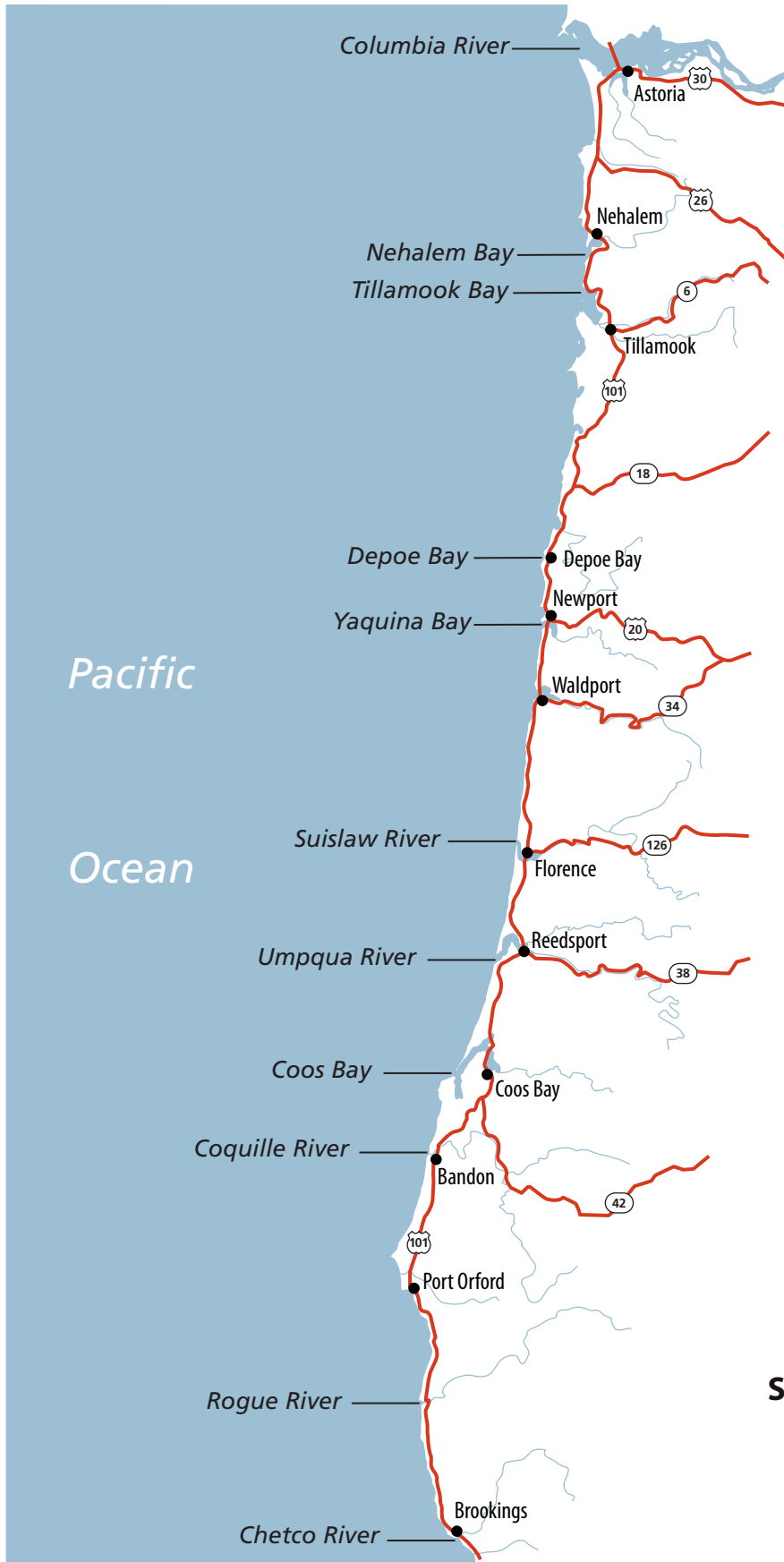
Other information \_\_\_\_\_

Auto license number \_\_\_\_\_ Trailer license number \_\_\_\_\_

If not returned by \_\_\_\_\_ call Coast Guard or local authority at \_\_\_\_\_









- Upon your return notify the person to whom the float plan was given.
- If you were reported to the Coast Guard as overdue, notify them of your arrival.

*This form is available from the State Marine Board.*  
[www.boatoregon.com/OSMB/library/docs/floatplan.pdf](http://www.boatoregon.com/OSMB/library/docs/floatplan.pdf)



# OREGON'S NAVIGABLE COASTAL RIVERS AND BAYS

## Map Symbols Key

-  Fuel
-  Launch
-  Moorage
-  Transient dock
-  Restrooms
-  Floating Restrooms
-  Pumpout station
-  Dump station





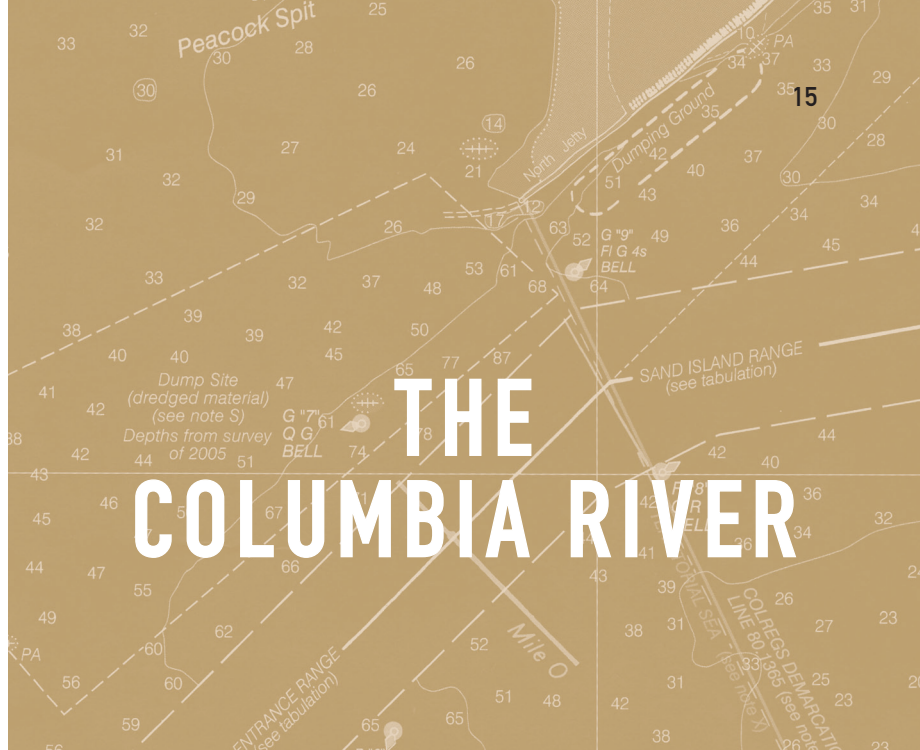
*The Astoria-Megler Bridge*

### About the harbor

The Columbia River, the second-largest in North America, empties into the Pacific Ocean just west of Astoria. Astoria is the site of the first American settlement west of the Rockies, and, until the Oregon Trail was opened in the 1840s, the main jumping-off point for the Oregon Country's interior. Just west of the city is the restored site of Lewis and Clark's winter quarters, which they called Fort Clatsop. It was "Certainly the most eligible Situation for our purposes of any in its neighbourhood," wrote William Clark. Maybe he had second thoughts, for it was here that the Corps of Discovery endured the wet, miserable winter of 1805-6.

Rounding Clatsop Spit to enter the harbor, boaters will pass sprawling Fort Stevens, the only military base in the continental United States to be fired on by a foreign enemy since the War of 1812. (The fort was shelled from a Japanese submarine in June 21, 1942. The shells did no damage, and U.S. soldiers did not return fire.) A little farther inland is the four-plus-mile-long Astoria-Megler bridge, the longest of its type (for the curious, it's a three-span through-truss) in the world.

The Columbia is the water highway between the Pacific Ocean and ports upstream all the way to Lewiston, Idaho. Therefore, Astoria is a busy commercial harbor. Gasoline, bulk minerals, automobiles, grain, logs, wood chips, and frozen fruits and vegetables all cross the Columbia's bar. Container ships, freighters, tankers, tugs and barges, military vessels, charter boats, and cruise ships come into and out of port.



## Hazardous areas

### A. Chinook spur and upper, middle, and lower Sand Island spurs.

These are built on two staggered rows of pilings, and currents through them can be swift, 5 knots or more. If your boat is disabled or if you maneuver in a way that puts you in contact with any of these spurs, you are at high risk. These areas have claimed even large boats. Stay well away from them, and if you are up-current, give them a particularly wide berth.

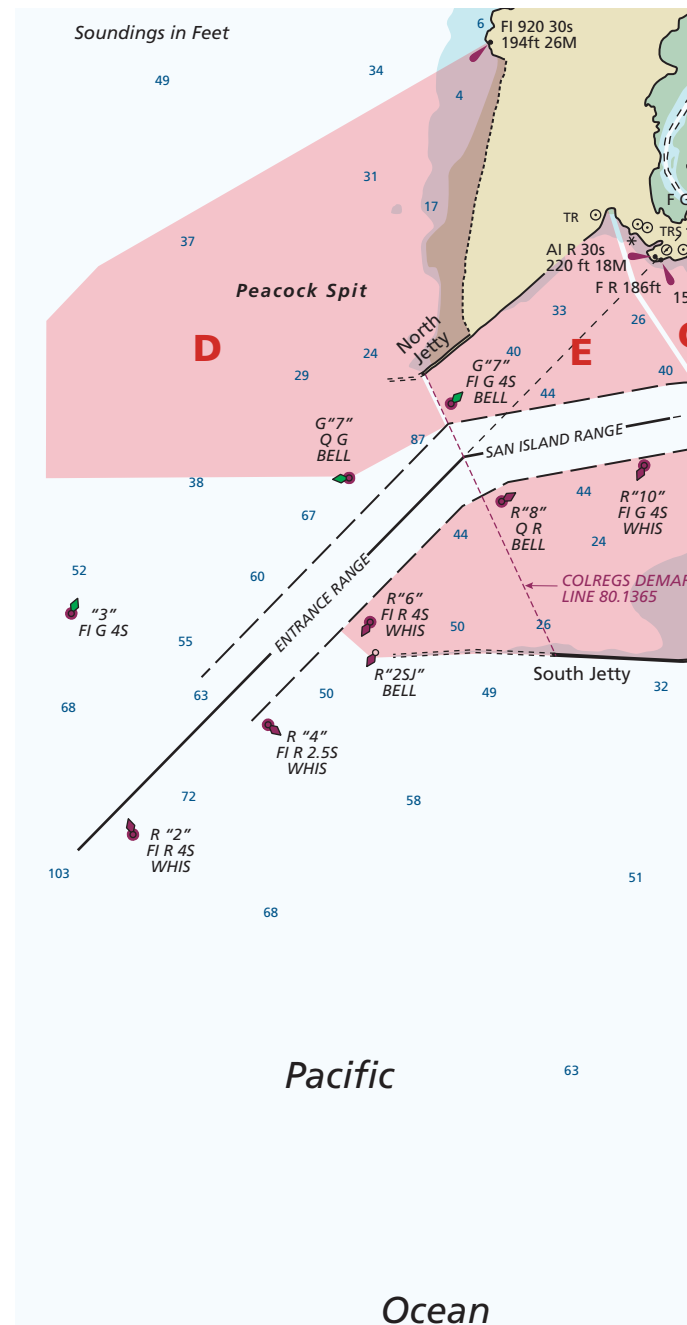
**B. Clatsop Spit.** An unpredictable area. During flood currents and slacks, it may be relatively calm, with only a gentle swell breaking far in on the spit. Yet 5 or 10 minutes later, when the current has started to ebb, conditions can become extremely treacherous, with breakers extending far out toward the channel, past buoy #8. A flood tide can carry a boat onto Clatsop Spit. Stay north of the red buoys and be prepared to anchor.

A section of the outer end of the south jetty has broken away, leaving a barely submerged piece between the visible tip and buoy #2SJ, which marks its western end. The broken piece can produce a dangerous rip current on the flood. Do not cross the submerged jetty. Use extra caution in the area.

**C. Jetty A, southeast of Cape Disappointment.** The ebbing current combined with the deflected river current can reach 8 knots. Boats headed into Baker Bay west channel during an ebb tide make little headway against the swift current and risk being exposed to rough water or surf 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 with daymarks one and two and with green and red lights.

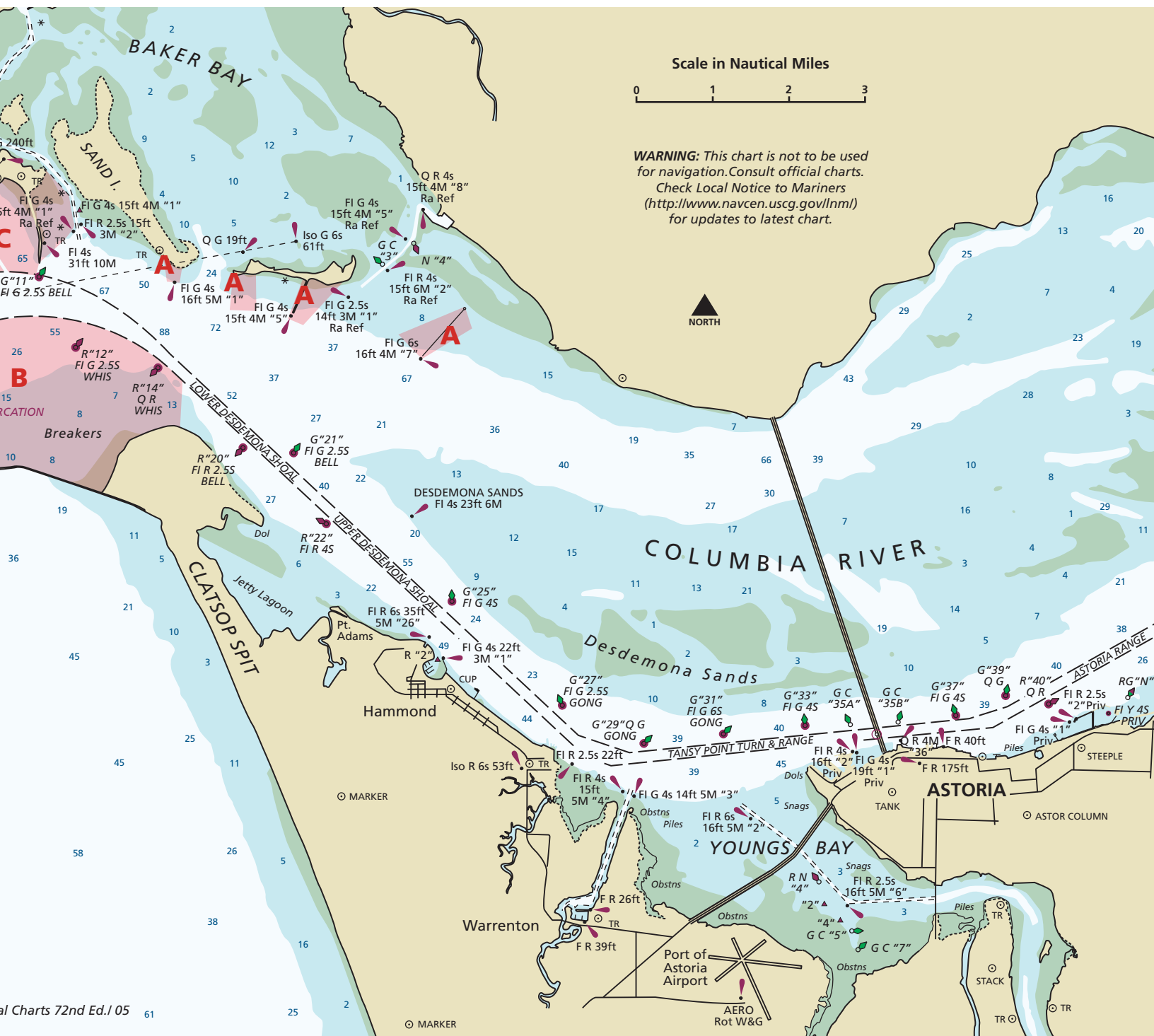
**D. Peacock Spit.** Waves break from three directions and breakers are heavy at any stage of the tide. If you lose power on the bar during an ebb current, you risk being carried onto the spit or capsizing. Stay away from the north side of the green buoys. As you round the spit, give it at least ½ mile of clearance even if the water looks calm. “Sneaker” waves—unusually large swells coming in from the sea—can break ¼ to ½ mile outside the usual breaking point 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 wider and faster here than in other areas. Conditions can change in minutes with the changing tide. Stay in the channel.



Source: Columbia River (Map 18521) U. S. Dept of Commerce Nautical





### Rough-weather advisories and information

- Coast Guard air station at Astoria: (503) 861-6211.
- Coast Guard station at Ilwaco, WA, for bar conditions: (360) 642-3565; for emergencies only: (360) 642-2381.
- Coast Guard radio: KP485 (1610 kHz), reports every 3 hours or as weather conditions change.
- New rough-bar signs have been posted at Warrenton and Hammond marinas.



*Boaters at Hammond*



*Warrenton Marina*



*Tying up at Astoria's East Mooring Basin*

## What to do in Astoria and surroundings

Astoria offers a wealth of scenic attractions, shops, restaurants, and historical sites within walking or shuttle distance of its two mooring basins. A 2.5-mile walking and bicycle path traces the waterfront between the West Mooring Basin, just west of the Astoria-Megler Bridge, and the East Mooring Basin at the foot of Thirty-Sixth Street. Between them is the Seventeenth Street Transient Float, which offers temporary moorage to visitors on a first-come, first-served basis.

Also at the foot of Seventeenth Street is the Columbia River Maritime Museum, a treasure trove of exhibits and artifacts about Pacific Coast shipping, including the early fur trade, fishing, navigation, lighthouses, and shipwrecks. Moored next to the museum is the historic lightship Columbia, open to visitors. Two Coast Guard cutters, the Steadfast and the Alert, are also stationed there.

Astoria is a port of call for cruise liners on their way to and from Alaska, British Columbia, California, and the Panama Canal. When two or three of them come in at once and turn their passengers loose, it almost doubles the town's population for a day.

In the summer months you can catch a shuttle to Fort Clatsop from the transit station at Ninth Street and Marine Drive. Fort Clatsop, one of 12 sites along the southern Washington–northern Oregon coast that make up the Fort Clatsop National Historical Park, was the site of Lewis and Clark's 1805-06 sojourn. A new replica of the fort, built with volunteer labor and dedicated late in 2006, replaces the one that burned down in 2005.

































The Columbia has spring and fall runs of chinook salmon and a winter run of steelhead. Anglers also fish for rockfish, lingcod, perch, and flounder. Sturgeon inhabit the deeper holes upriver. There is a spring run of shad, and catfish, bass, and other warm-water species may be caught in sloughs off the main channel.



## Astoria area attractions

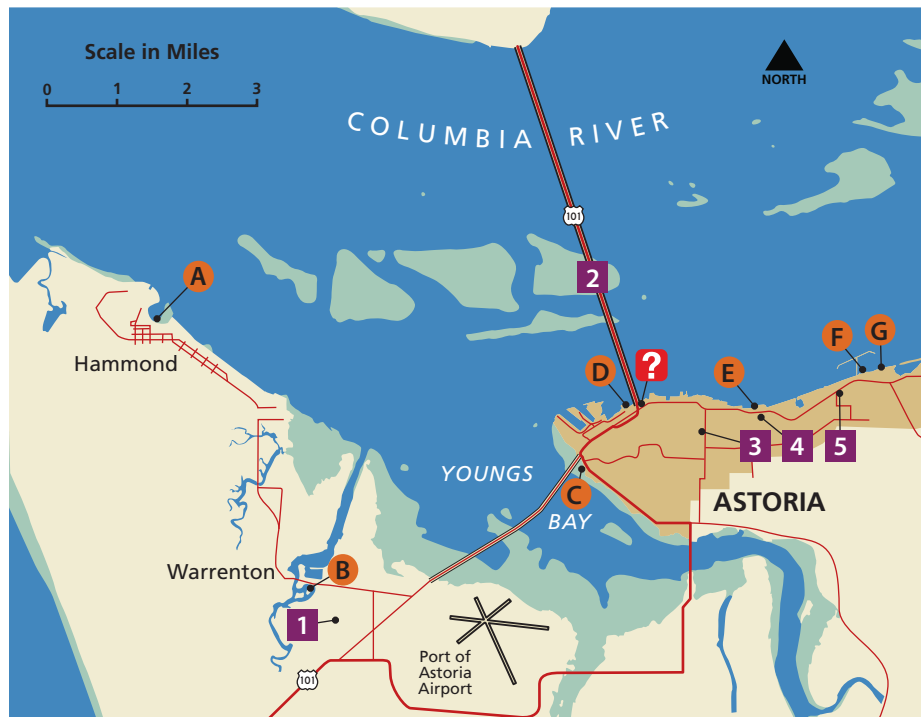
- 1** Fort Stevens State Park, Historical Site & Military Museum
- 2** Astoria-Megler Bridge
- 3** Flavel House
- 4** Maritime Museum & the Lightship Columbia
- 5** Replica of 1852 U. S. Customs house
- ?** Visitor information

## Boating facilities

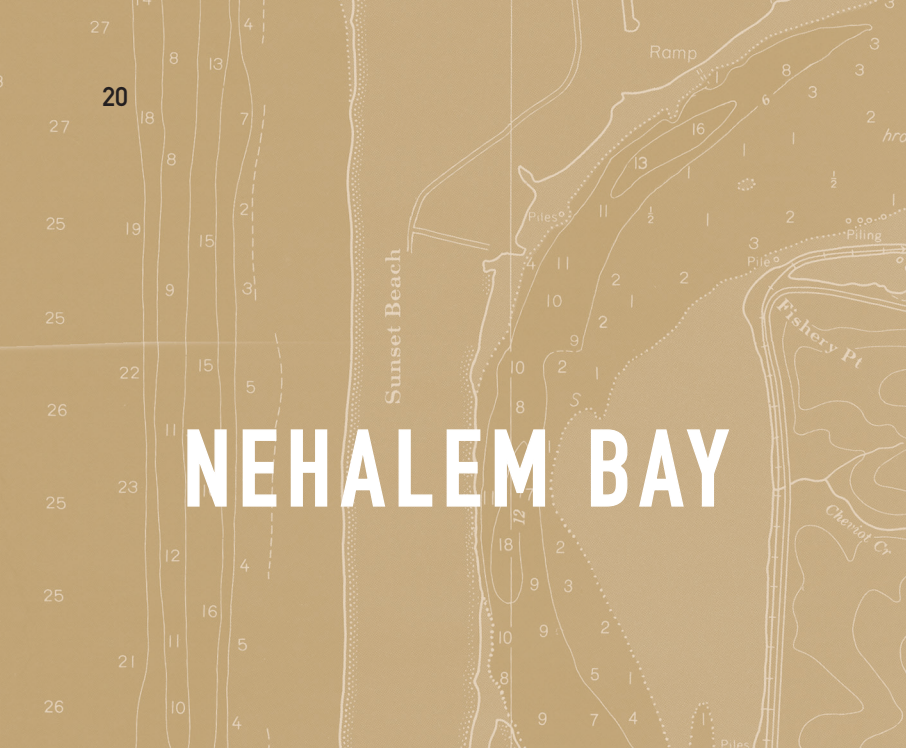
- A** Hammond Marina
  -       
- B** Warrenton Marina (Skipanon River)
  -       
- C** Youngs Bay Park
  -  
- D** West Mooring Basin
  -      
- E** 17th St. Transient Dock
  -   
- F** East Mooring Basin
  -   
- G** Pier 39 (private)
  -    



*Cruising the Columbia estuary*

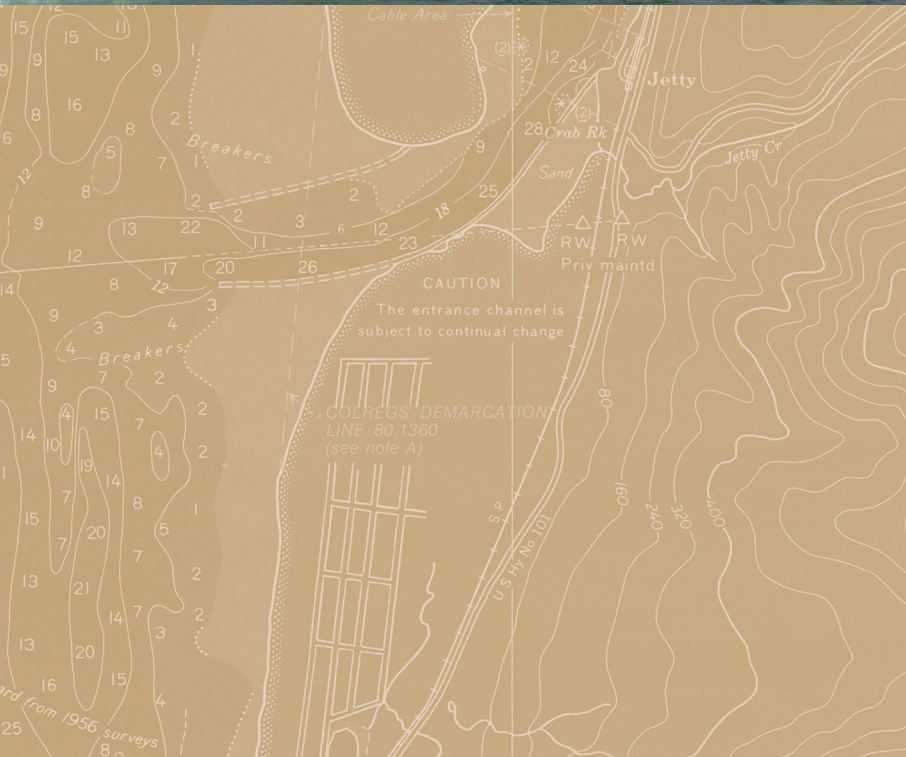






### About the harbor

Nehalem Bay is the outlet for the 100-mile-long Nehalem River, a favored stream for fall-run chinook and coho salmon and one of the only rivers in Oregon that has a summer run of chinook. Three small towns, Nehalem, Wheeler, and Brighton, are situated along Highway 101, which runs along the bay's east and south shores.





## Hazardous areas

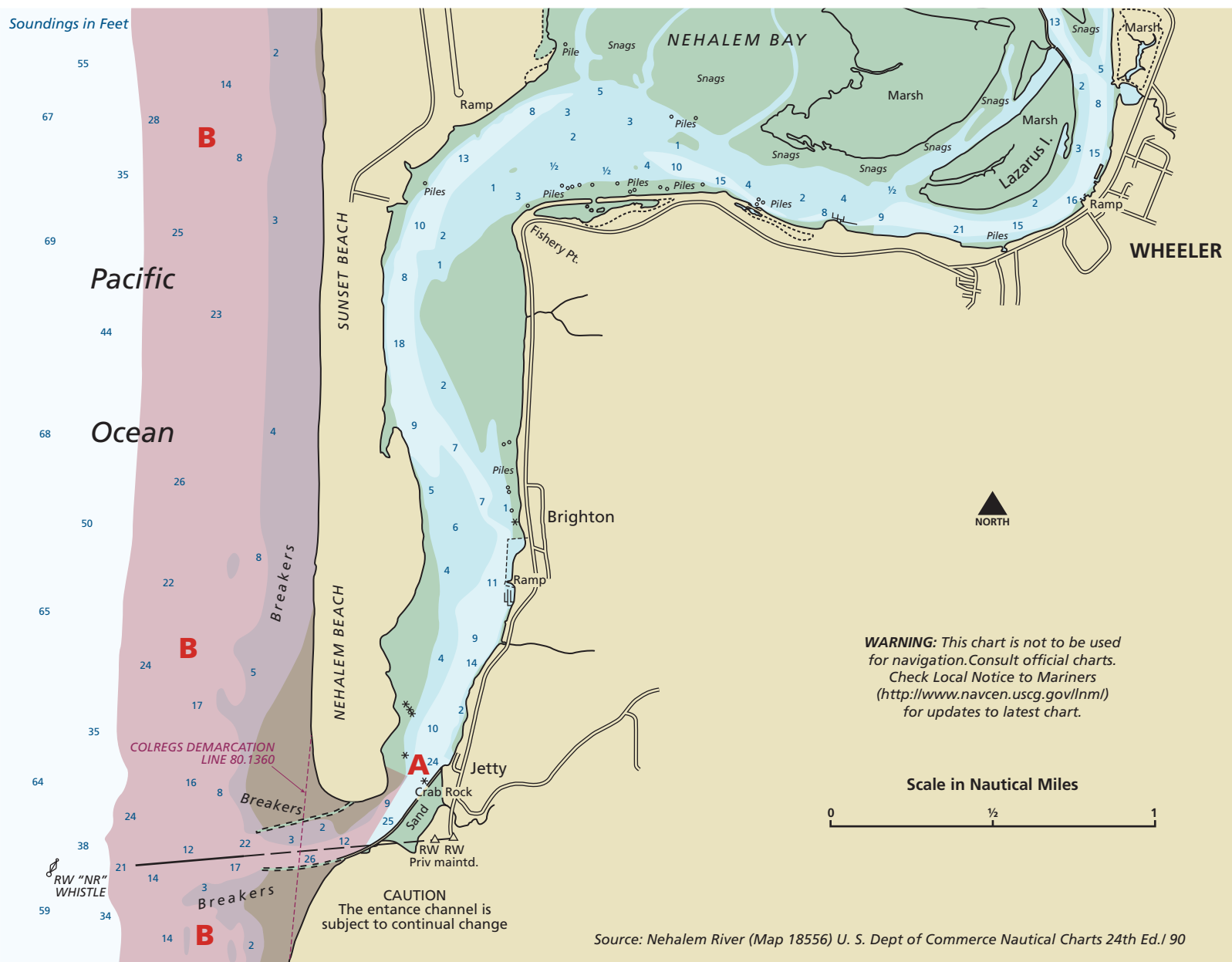
**A. Crab Rock**, at the narrow lower neck of the bay, about 150 yards southeast of Jetty Fisheries Resort. Hazardous to small boats when submerged. The hazard is sometimes marked by a privately maintained red buoy just west of the rock. Stay to the right of the buoy (if present) when outbound and to the left when inbound.

**B. The bar.** The entire area between the beach and the Nehalem River entrance buoy is bar area, and breakers are always present. The safest channel across the bar is subject to frequent change, and the entrance has become shallower in recent years. If you are heading out, stop just inside the entrance and carefully evaluate the bar. If it is breaking, do not cross.

The best water is close to the south jetty. The channel seaward of the jetties is continually shifting, and so range markers do not necessarily show the exact channel. Range markers may also be obscured by trees.

## Rough-weather advisories and information

- Coast Guard broadcasts on VHF channels 16 and 22, only in summer and only when a Coast Guard boat is patrolling the area.





*Full steam ahead*

### What to do in and around Nehalem Bay

The shallow bay is one of Oregon's most scenic, which is saying something. Visitors come to fish for salmon, steelhead, perch, and bottom fish, catch crabs and dig for clams, paddle canoes and kayaks around the peaceful water, and watch and photograph the abundant bird life.

Chinook seasons run from spring to early winter; coho season from late summer to fall. Anglers must release all native coho, but a hatchery on the Nehalem's north fork produces fin-clipped keepers.

Galleries, antique stores, coffee shops, bait and tackle shops, and small restaurants line the main streets of the bay's three villages—the largest is Wheeler, with a population of 391.



*Colorful kayaks*



*A good-sized chinook*



## Nehalem Bay attractions

- 1** Nehalem Bay State Park
- 2** Old Wheeler Hotel
- 3** Wheeler on the Bay Lodge

## Boating facilities

- A** Jetty Fishing Marina (private)
- B** Brighton Marina (private)
- C** Nehalem Bay State Park
- D** Wheeler city boat ramp & transient tie-up
- E** Wheeler Marina (private)
- F** Nehalem County Park
- G** City of Nehalem public docks (Tohls St.)
- H** H Street Dock



*Tossing a crab back in*









## Hazardous areas

**A. The bar area.** In addition to being a heavily traveled corridor, the Tillamook bar is notorious for its deceptively calm appearance. Its channel changes constantly because of continuous natural silting and scouring, and there are submerged hazards. Navigate with extreme caution.

The entire area between the beach and the 20-foot curve is bar area and breaks on the ebbing tide. Outgoing currents are strong, between 4 and 6 knots on the average. Before you head out, get up-to-date information on channel conditions. Stop in the channel east of the seaward end of the breakwater and carefully evaluate the bar. Cross only if you can do it legally and safely.

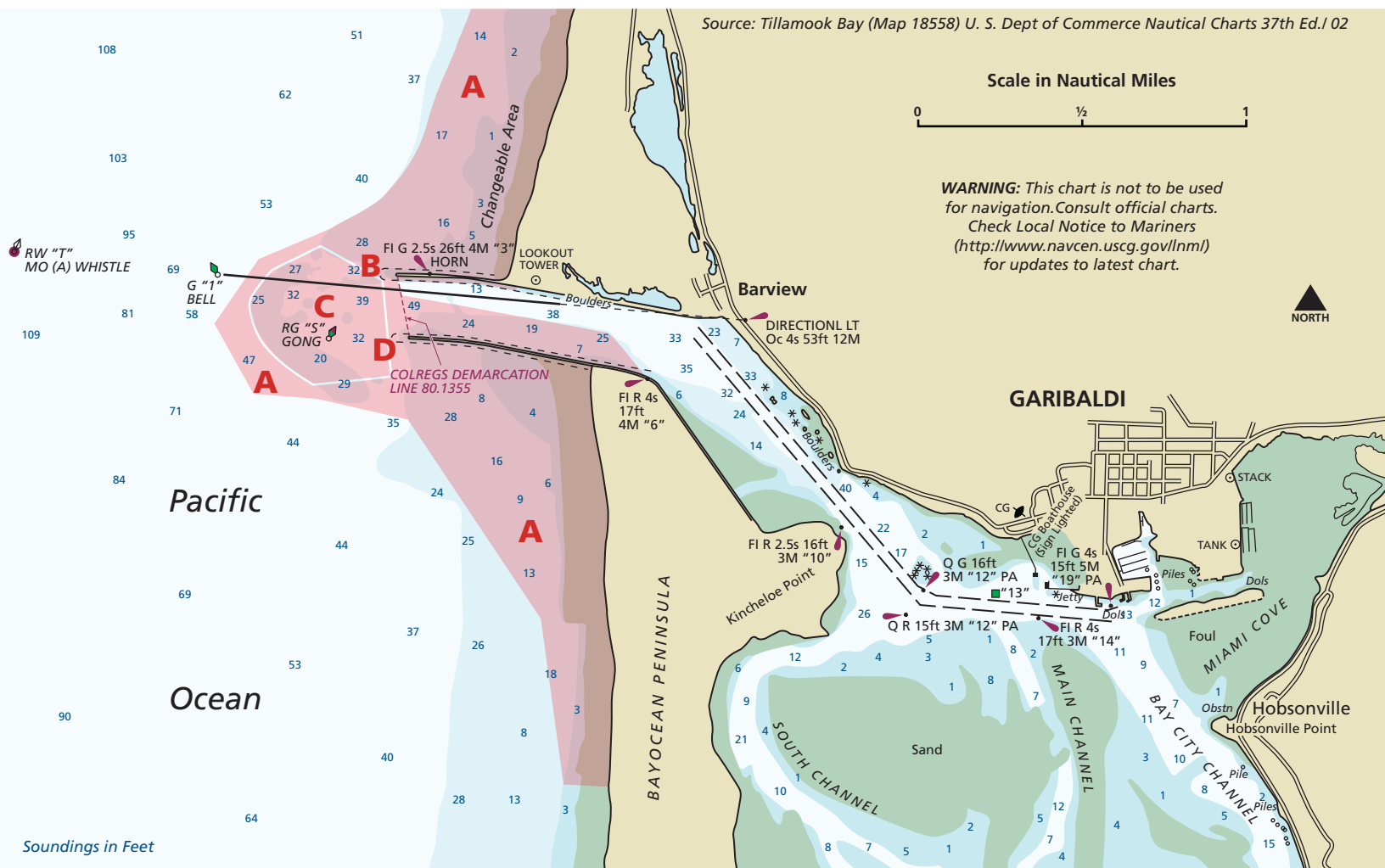
**B. North jetty.** About 100 yards of the outer end of the north jetty is submerged. This area and the part of the channel just south of it are extremely dangerous. Stay well clear of the sunken jetty and use caution in the channel.

**C. Middle ground.** Shoaling makes this area unpredictable and hazardous. Avoid it.

**D. South jetty.** About 100 yards of the outer end of the south jetty is submerged. Use caution and avoid the sunken jetty when entering or exiting.

## Rough-weather advisories and information

- Coast Guard station at Garibaldi: (503) 322-3531; for emergencies only: (503) 322-3245; for bar conditions: (503) 322-3234.
- Coast Guard radio: VHF channels 16 and 22.





*Labeling buoys on the Garibaldi docks*

## What to do in and around Tillamook Bay

While lumbering, agriculture, and commercial fishing remain economically important (although of less relative importance than in the past), water-oriented recreation abounds. Anglers can launch boats from one of half a dozen ramps along the bay or at mouths of tributary rivers. They may catch fish or crabs from the north jetty, from public piers at Garibaldi, and from the shore along Highway 101 from Garibaldi to Bay City. Clams are said to be more abundant in this bay than in any other Oregon estuary.

Whether one is approaching by land or sea, Garibaldi's most prominent landmark, a 207-foot-tall smokestack, is hard to miss. The last relic of an old sawmill now jutting up from the Old Mill Marina and RV Park, it is a testimony to Garibaldi's sturdy blue-collar origins.

Garibaldi is home to commercial and charter fishing and a U.S. Coast Guard station. Just about everything in town can be reached on foot from the Port of Garibaldi ramp, including bait shops, restaurants, a grocery store, a historical marker commemorating Captain Robert Gray, and the office of the Tillamook Bay National Estuary Project (613 Commercial Street), where copies of Boater's Guide to Tillamook Bay are available. The Oregon Coast Scenic Railroad runs a 1910 steam train between Garibaldi and Rockaway Beach during the summer.

About halfway down the eastern bay shore, the community of Bay City sits above tide flats. An oyster-farming operation produces the mounds of shells visible from the bay.

If you're headed south down the coast from Tillamook Bay, look for Cape Meares about a mile south of the Bayocean Peninsula. The cliff face is part of the Cape Meares National Wildlife Refuge, home to common murre, tufted puffins, and pelagic cormorants, which nest on the cliff faces.



*Coming into Memaloose Point*





Rental boats at the Port of Garibaldi



A sunny day on Tillamook Bay

## Tillamook Bay attractions

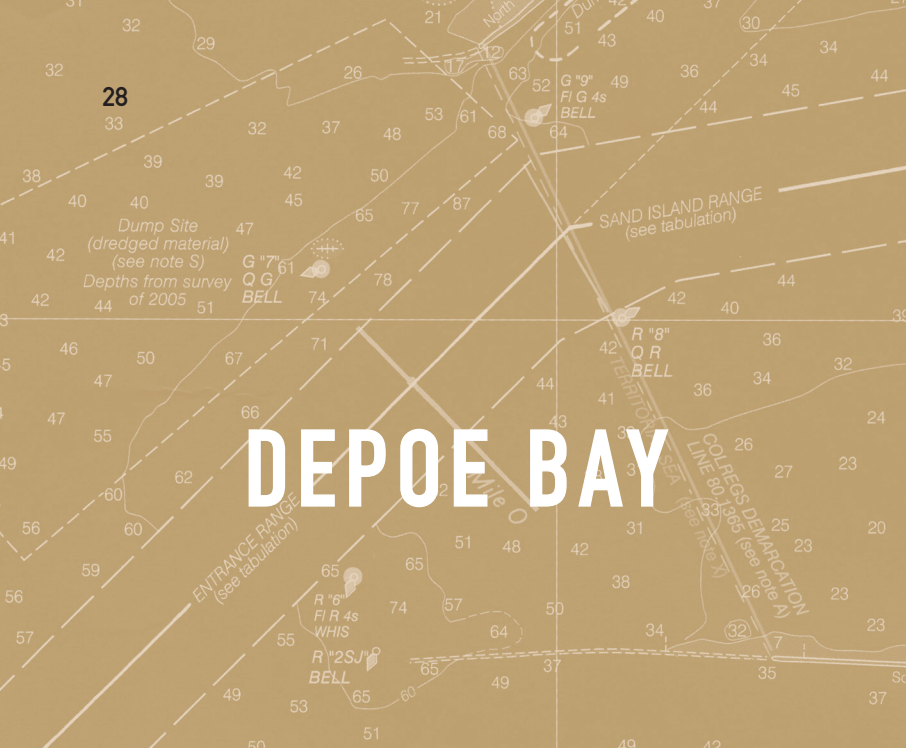
- 1 Captain Gray Historical Marker
- 2 Lumbermen's Memorial Park
- 3 Garibaldi Museum
- 4 Bayocean historic site
- ? Visitor information

## Boating facilities

- A Garibaldi Marina (private)
- B Port of Garibaldi
- C Old Mill Marina (private)
- D Ghost Hole Floating Restroom
- E Crab Harbor Floating Restroom
- F Memaloose Point







*A protected cove*



## About the harbor

Millions of years of the relentless pounding of ocean on rock have made Depoe Bay the world's smallest year-round navigable harbor. Unlike most other harbors in Oregon, the landlocked bay is not a river estuary. Its egress to the ocean is a 50- by 300-foot slit through steep basalt cliffs. Getting a boat through this notch is known locally as "shooting the hole." Even though there is no river current to complicate the tidal flux, boaters should be extremely cautious entering and exiting the harbor.



*Depoe Bay bridge from the harbor side*



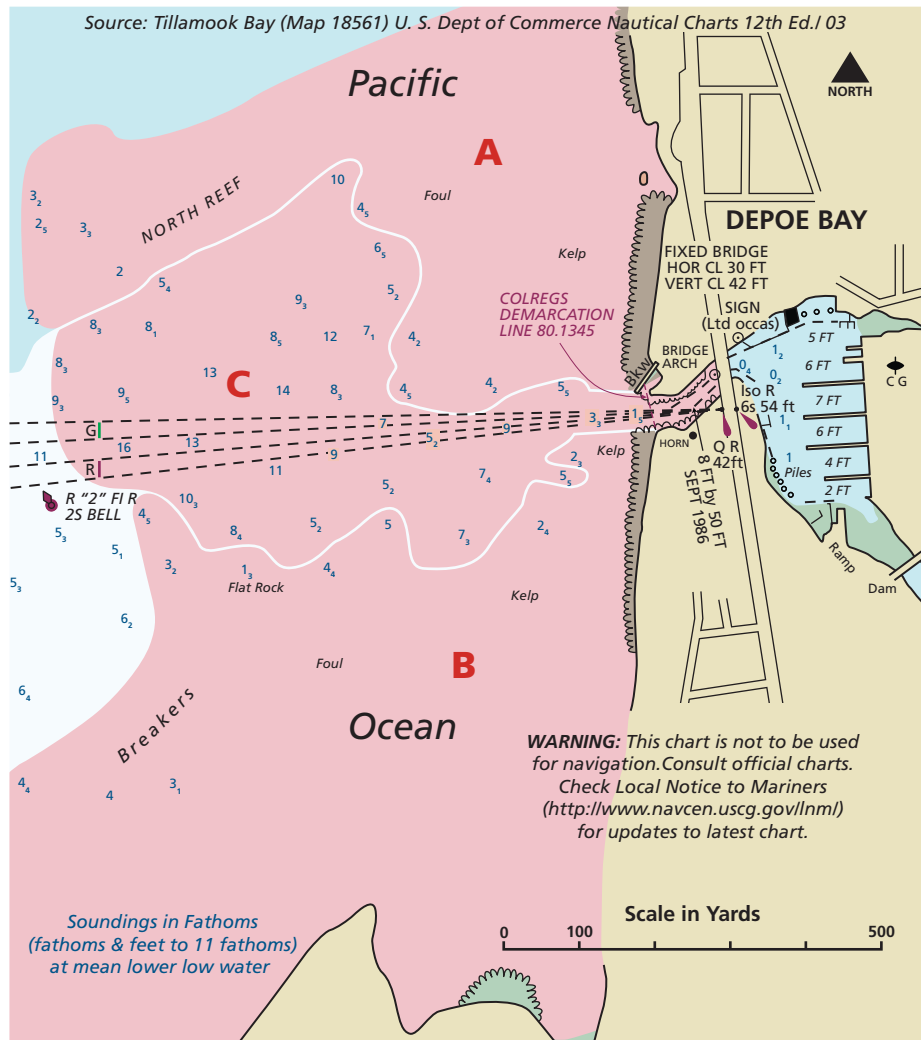
## Hazardous areas

**A. North reef.** Once a boat has cleared the entrance, waters to the north are hazardous up to the red bell buoy. Seas break from the northwest and southwest at the same time. Avoid this area.

**B. South reef (Flat Rock).** Breakers are almost always present. If you are coming in from the south, do not use this area as a shortcut to the channel. Avoid the area at all times.

**C. Red bell buoy to harbor mouth.** The channel is narrow, short, and difficult. Study it before navigating it. Seek advice from more experienced mariners if possible. Do not try to cross at night or in rough weather. Because the north and south reefs are so close to the channel, the area sometimes becomes very hazardous. In bad weather, breakers from the north reef will cross the channel and run into the entrance. In such a case, stand off and wait until conditions improve, unless the Coast Guard can escort you in. Do not fish between the entrance and the red bell buoy.

Vessels longer than 50 feet should not enter without checking with the harbormaster and the Coast Guard. All vessels must sound one 4- to 6-second blast when leaving or entering Depoe Bay. Right of way goes to inbound vessels. Check the local Notice to Mariners ([www.nga.mil/portal/site/maritime](http://www.nga.mil/portal/site/maritime)) for location of #2 marker, which may be off station in the winter.



## Rough-weather advisories and information

- Two flashing yellow lights north of the entrance warn of a rough bar.
- Check with the Coast Guard on VHF channel 16 for crossing restrictions.
- The Coast Guard foghorn is activated when visibility drops below 1 nautical mile.
- Coast Guard station at Depoe Bay: (541) 765-2124.



*Morning reflections*



*Working on the boat at Depoe Bay*

## Things to do in and around Depoe Bay

About 100 boats are moored year-round in this postage-stamp harbor, making it hard to see the water sometimes. As in all Oregon's coastal towns, fishing tops the list of favorite activities. Commercial and recreational catches of chinook and coho from offshore waters are typically as high as anywhere in the state, and bottom fishing for rockfish, greenling, halibut, and other species is popular. Albacore is another favorite quarry of deep-sea anglers. Gray whales pass close to shore on their annual migrations in October and February. Several charter companies offer fishing and whale-watching tours.

Like the harbor, the town of Depoe Bay is compact, and it is stuffed with things for visitors to do and see. Salt-water taffy, cooked crab, microbrewed beer, handmade jewelry, and many other items are available within short walk uphill from the boat basin.

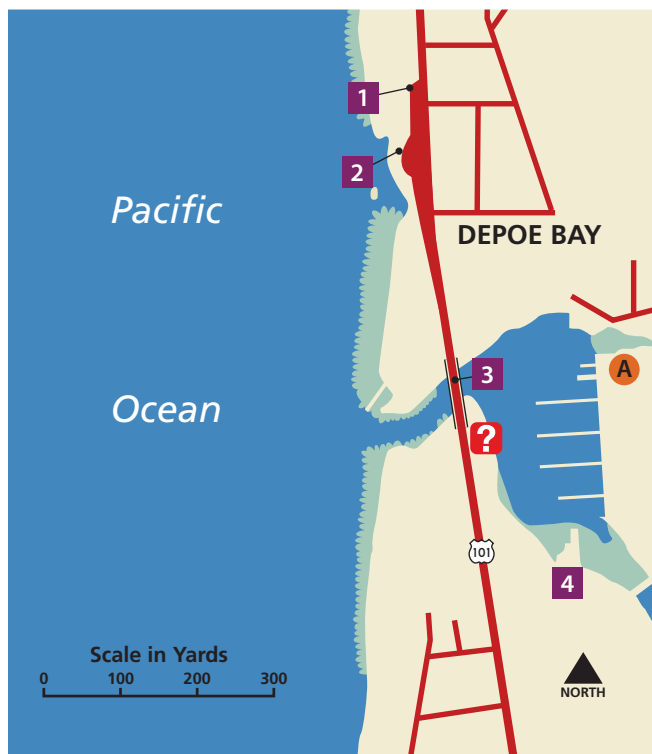
Shops and eateries line the east side of Highway 101. Across the highway is a stone seawall and sidewalk where visitors can watch whales through binoculars and, sometimes, get soaked by geysers of seawater that smack into the cliffs on strong incoming tides.

About a mile and a half north along Highway 101 is Boiler Bay State Scenic Viewpoint. It is named for a boiler from a wrecked ship that washed up in the cove in 1910. Tidepools are exposed at low tide, and the park is a good place to watch whales and seabirds.



*Looking out to sea from the north jetty*





## Depoe Bay attractions

- 1 Depoe Bay Whale Watching Center
- 2 Seawall
- 3 Depoe Bay Bridge
- 4 City Park
- ? Visitor information

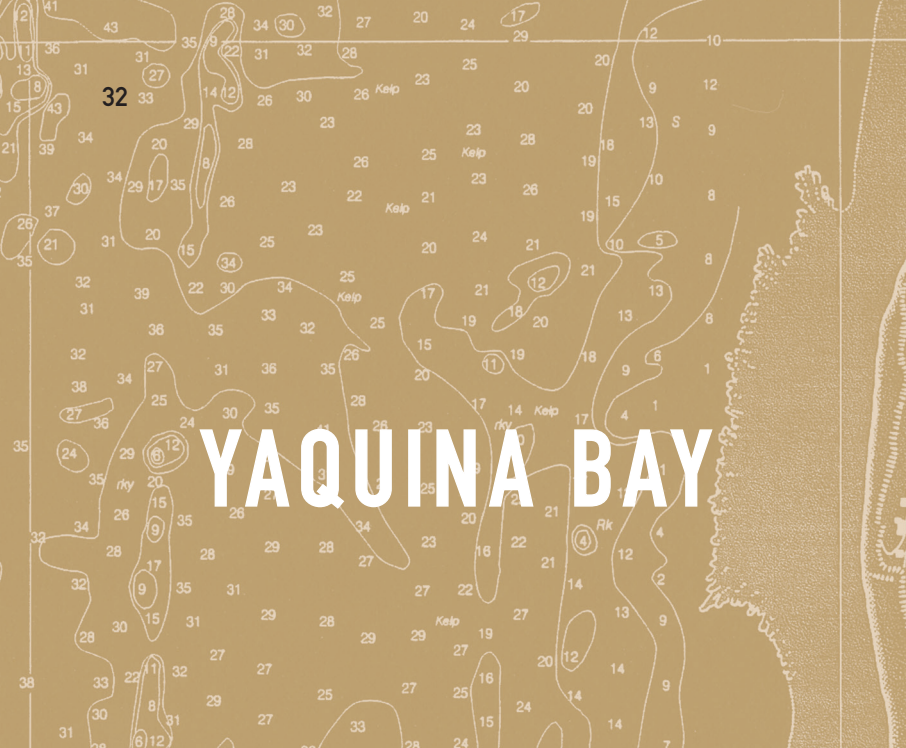
## Boating facilities

- A Port of Depoe Bay
- 



*Gull's-eye view of the diminutive Depoe Bay boat basin*





*Sails furled at South Beach*

## About the harbor

Situated about midway along Oregon's coast, Yaquina Bay is the setting for the city of Newport, a center of commercial shipping and fishing. The Yaquina estuary is also a highly productive ecosystem and a key marine research site. Newport is a major destination for tourists and a favorite site of recreational boaters. Boaters spend nearly 40,000 days on the water each year.

The recreational boating scene is on the South Beach waterfront. The Port of Newport Marina at South Beach has two launch ramps, ample trailer parking, restrooms with showers, a public fishing dock and fish cleaning station, and 600 marina slips. Shuttle-bus service is available to Old Town across the bay and to Nye Beach and downtown Newport. Buses operate every weekend throughout the year and daily from July through September.



*Launching at the new ramp at South Beach*



## Hazardous areas

**A. South jetty.** Watch for submerged rocks along the length of the jetty; do not hug the jetty on either side. Boaters should stay in the channel as they enter or leave, so that if an engine fails, they will have time to anchor before the current or wind sweeps them onto the rocks.

**B. North jetty.** This jetty offers good protection from northerly winds, but keep well clear of the jetty by staying mid-channel. Watch for submerged rocks along the length of the jetty, especially near the tip. Stay well clear up to the end, especially on an ebb tide, to avoid being swept into the breakers at the extreme end. Entering or leaving, stay in the channel until you pass buoy #1.

**C. South reef.** This reef can be considered an extension of Yaquina Reef, and it is equally dangerous because it has the same surf conditions. When going south, continue out the channel to the entrance buoy before turning south.

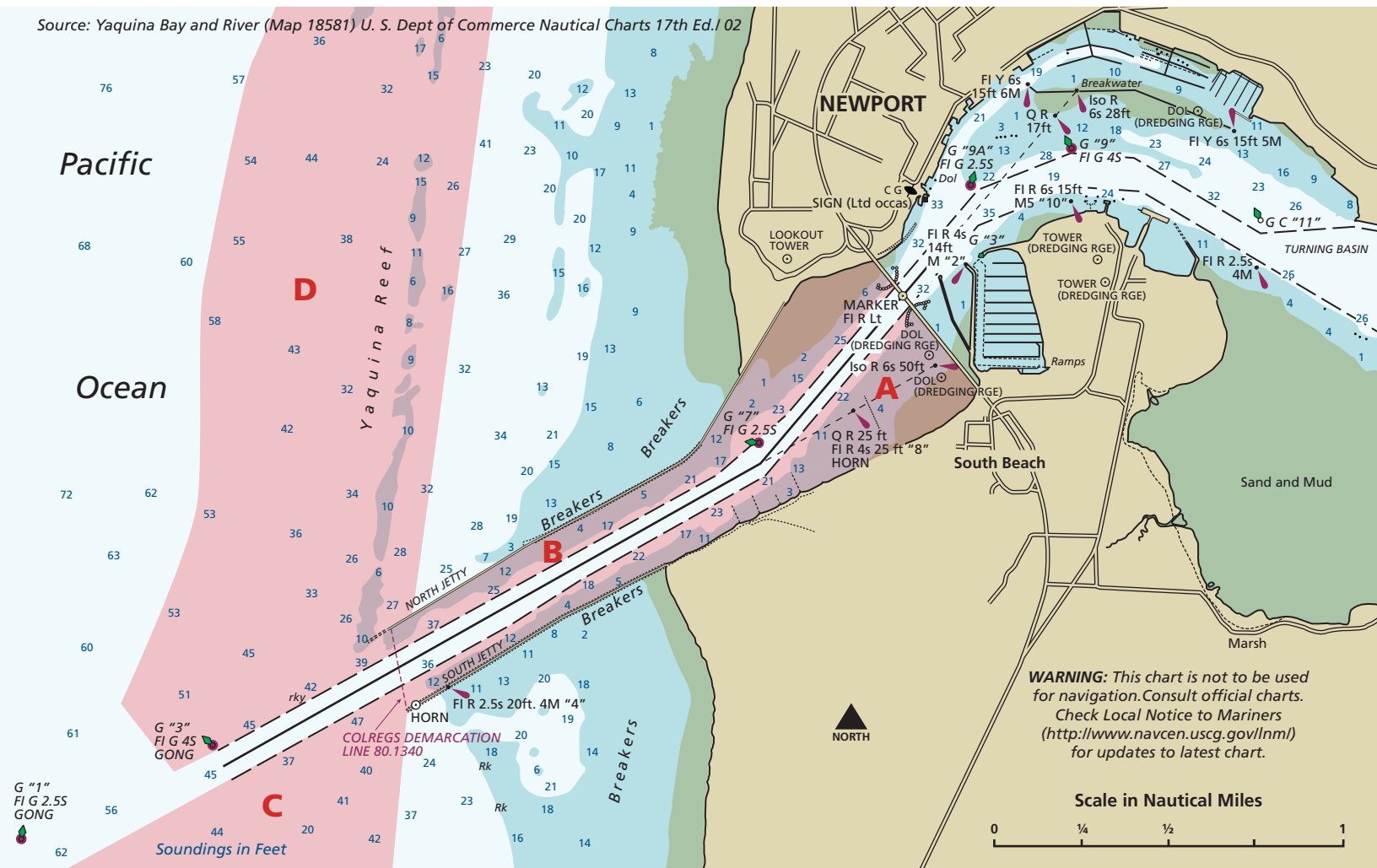
**D. Yaquina Reef.** This reef is extremely dangerous, even when winds are light and few breakers can be seen. A large swell coming from seaward can cause a tremen-

dous breaker on the reef with little or no warning, even when the sea is otherwise calm. Never fish close to the reef. Do not turn north between the end of the north jetty and buoy #1.

## Rough-weather advisories and information

- Coast Guard station at Yaquina Bay: (541) 265-5381; for bar conditions: (541) 265-5511.
- KNPT Newport (AM 1610) for condition reports updated every 3 hours and at Coast Guard request, winter and summer.
- Rough-bar advisory signs are posted at the east end of the Coast Guard pier, at South Beach Marina, at the top of the boat ramp, and on the seawall next to the Embarcadero.
- When the Coast Guard restricts the bar, the restriction applies to the area from the bridge west to the entrance buoy.

Source: Yaquina Bay and River (Map 18581) U. S. Dept of Commerce Nautical Charts 17th Ed. 102





*The Yaquina Bay Bridge looms over South Beach*

## What to do in Newport

Within a short walk from the South Beach boat docks are the Oregon Coast Aquarium, the Hatfield Marine Science Center, The Rogue Ale microbrewery and pub, and assorted shops. The Old Town district, on the north shore of the bay, offers a long street of shops, restaurants, museums, galleries, and other attractions. Lining the shore on the other side of Bay Boulevard are fish-packing plants, charter-boat offices, and public boardwalks where you can watch sea lions sun themselves and shove one another off the dock. The Port of Newport office is at the eastern end of Old Town.

Climb the hill to the west, walking past the restored Yaquina Bay Lighthouse. Under the bridge you'll find the Yaquina Bay State Recreation Site, a good place for a picnic if you don't mind the wind. From there you can climb down the cliff to the north jetty beach. The Nye Beach district and Newport's downtown offers more shops and eateries plus an art museum, a public park, and lodging.

Fishing is a main attraction here. Offshore, salmon, halibut, and albacore are favored species for commercial and sport fishers. Inside the bay and lower river, anglers fish for salmon, perch, rockfish, and bottom species like sole and flounder. Out along the jetties, lingcod and rockfish are favorite species. Crabs may be caught from the public pier or from your boat.



*Cleaning the day's catch*




















*Tackle shop next to South Beach ramp*



## Yaquina Bay attractions

- 1** Yaquina Bay State Recreation Site and Yaquina Bay Lighthouse
- 2** Yaquina Bay Bridge
- 3** Oregon Coast Aquarium/Aquarium Village
- 4** Rogue Brewery
- 5** Hatfield Marine Science Center
- 6** Port of Newport
- 7** Old Town Newport
- 8** Oregon Coast History Center
- 9** Performing Arts Center
- ?** Visitor information

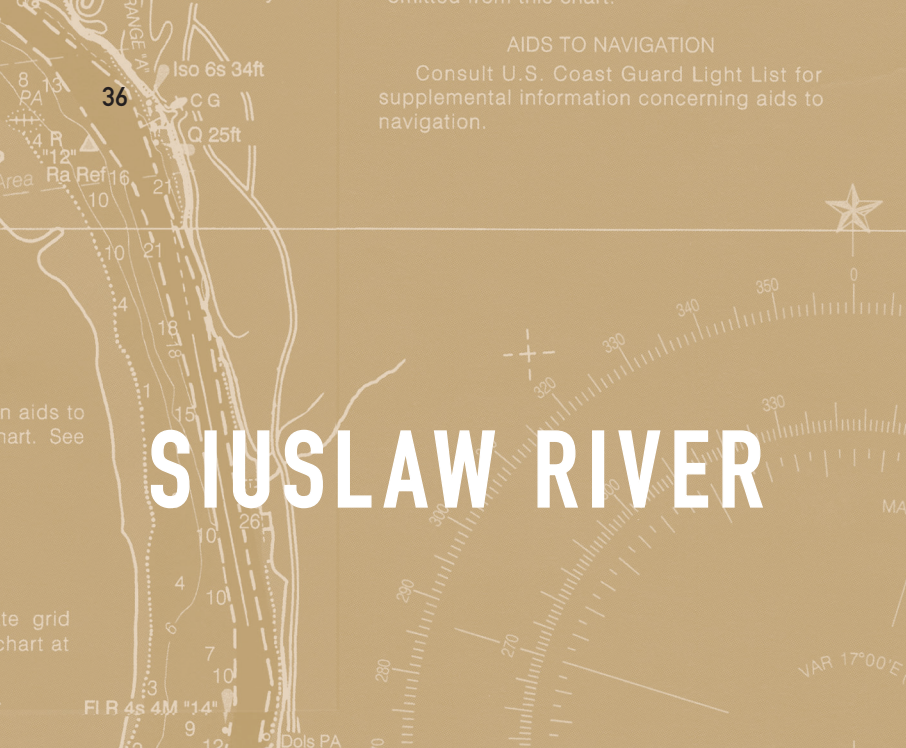
## Boating facilities

- A** Port of Newport Marina & RV Park  







- B** Embarcadero Resort & Marina  





- C** Sawyer's Landing  








*The Yaquina Head Lighthouse*





*A great egret on the Siuslaw estuary*



## About the harbor

The Siuslaw's bar takes the boater into a narrow sand-flanked channel leading to the town of Florence, the northern gateway to the monumental sand dunes stretching between Heceta Head and Cape Arago. The channel passes under another McCulloch bridge—note the Masonic-looking obelisks jutting upward on either side of the suspension arch. This is a particularly beautiful cruise in May and June, when the rhododendrons are in bloom.



*Fishing near Cushman*



## Hazardous areas

**A. Shoal water on the northeast side of the channel** extending from C "7" to G "9". Water is 2 to 3 feet deep at high tide.

**B. Shoal water on the south side of the channel** extending from buoy #6 to buoy #4 and about 200 yards toward the south jetty tips.

**C. Outer end of south jetty.** Breakers are almost always present. When seas are from the southwest or west, breakers may extend to the entrance buoy.

**D. Outer end of north jetty.** Breakers are almost always present. When seas are from the west, breakers may extend to the entrance buoy.

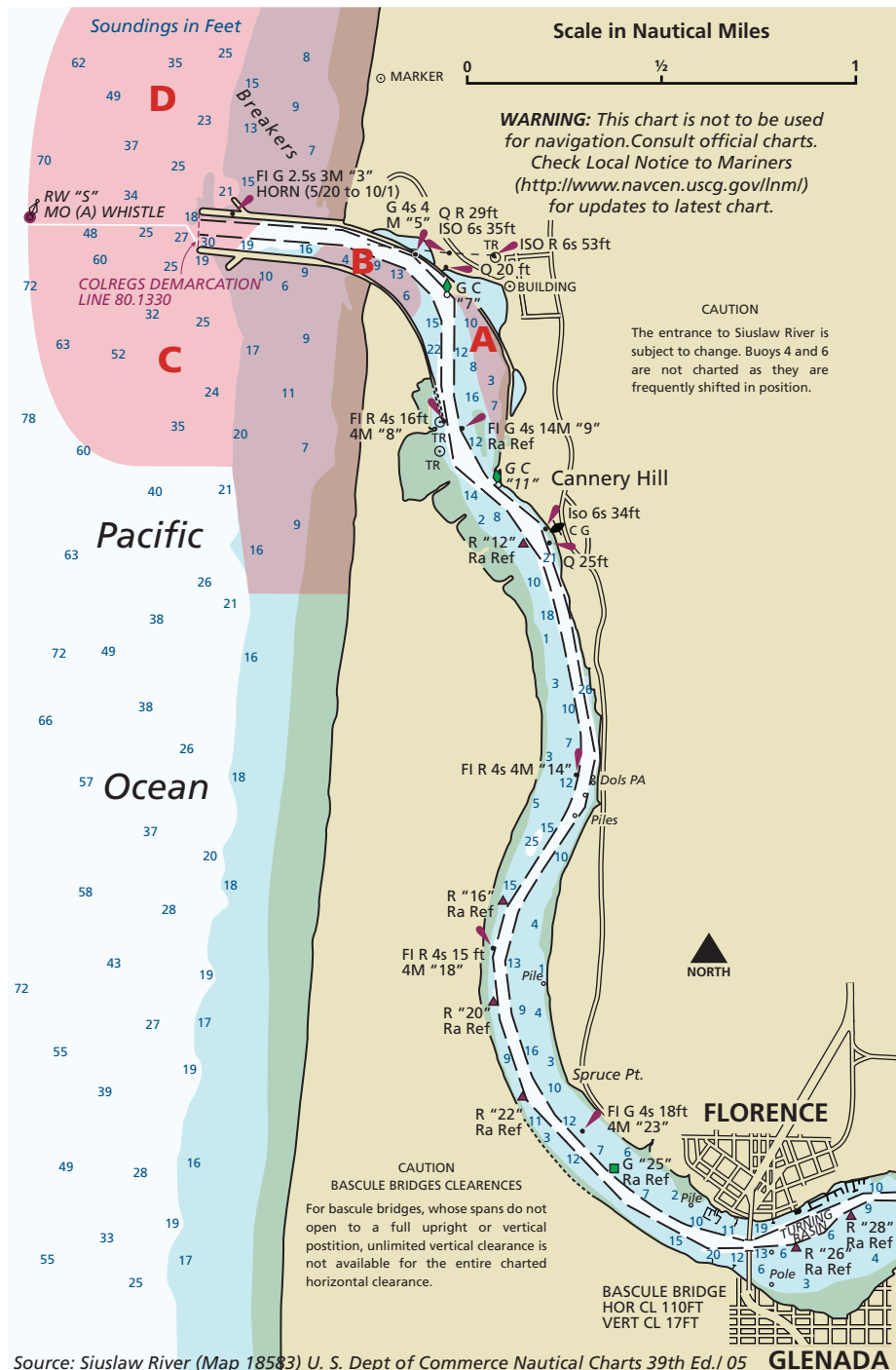
The Siuslaw River bar has a very narrow channel extending out past the jetties. Unlike larger bars along the Oregon coast, the Siuslaw bar may be rendered impassible for small boats by a moderate swell, particularly at ebb tide. Because of shoaling and jetty extensions, bar conditions are unpredictable. In rough conditions, expect continuous breakers 50 to 100 yards off the jetty tips.

The channel lies along the northern half of the river entrance. When swells are running from the northwest, stay in the channel. When swells run from the west or southwest, stay closer to the south jetty until clear of rough water. A charted obstruction, visible only at low tide, sits between Aid 8 and the cove by the crab docks. Use extreme caution at all times.

Clearance beneath the bridge is low. Use caution when crossing under the bridge on a flood tide to avoid damaging superstructure such as antennas and trolling poles.

## Rough-weather advisories and information

- Coast Guard station, Siuslaw River: (541) 997-2486; for bar conditions: (541) 902-7792.
- Coast Guard radio: VHF channel 16 or 22A or CB channel 9.
- The rough-bar advisory sign is positioned on the Coast Guard tower facing 150° true. Regulated boating area from buoy #11 to jetty tips during periods of rough water on the bar.





*Still waters on the Siuslaw*



*Old Town Florence*

### **What to do in and around the Siuslaw estuary**

The compact core of this otherwise sprawling town is Florence's Old Town district. Shops, restaurants, and other attractions are clustered in several blocks along the waterfront, all within easy walking distance of the Port of Siuslaw marina.

Chinook, coho, steelhead, and sea-run cutthroat were once abundant in the lower river, but now the coho and cutthroat fisheries are closed owing to huge declines in fish numbers. However, anglers still fish for chinook and steelhead, and the jetties are good places to catch surfperch, rockfish, lingcod, and sole. Crabbing is popular from early spring through fall, and the tide flats above Old Town are popular clam-digging places.

The Siuslaw estuary is home to an abundance of resident and migrating birds, including Canada geese, ducks, herons, and hawks, as well as mammals such as deer and elk. Harbor seals sometimes swim up the channel in search of dinner.



*Contemplating fishing boats on a sunny day*



*Launching from the public ramp*



## Siuslaw River attractions

- 1 Siuslaw River Bridge
- 2 Westward Ho! Steamwheeler Dock
- 3 Old Town Florence
- 4 Old Town Park
- 5 Fly Fishing Museum
- 6 Siuslaw Pioneer Museum
- ? Visitor information

## Boating facilities

- A Maple Street Landing & Transient Dock



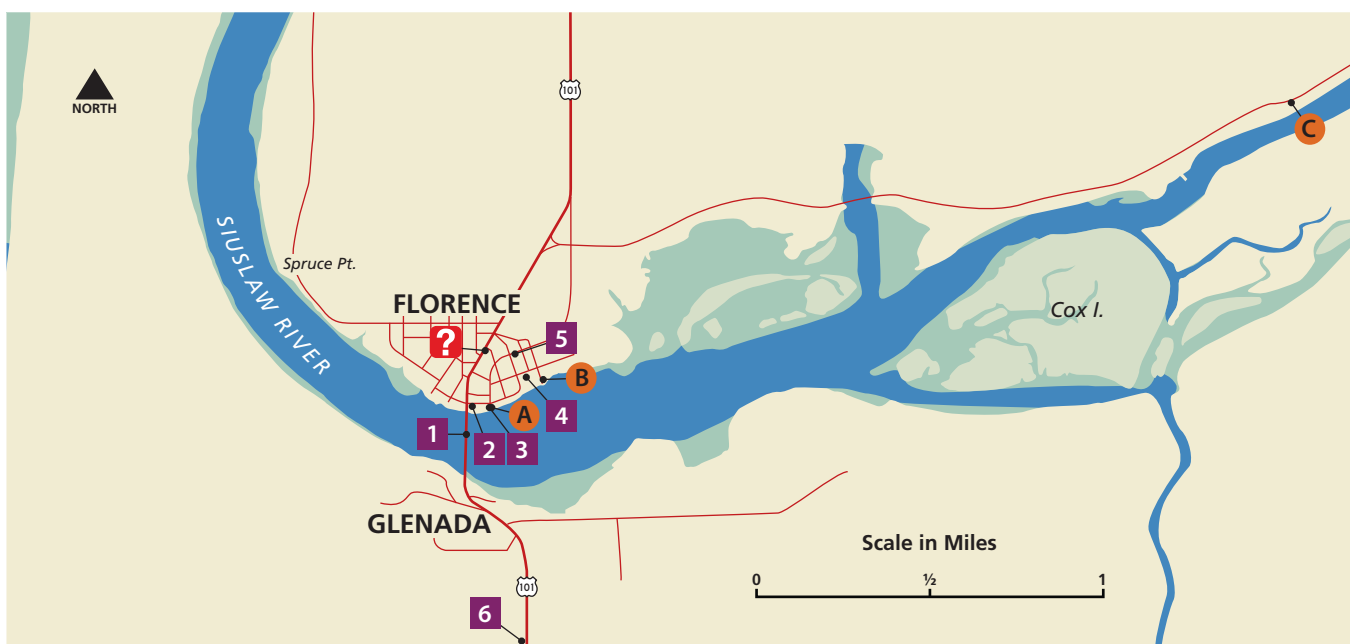
- B Florence Public Marina & Ramp



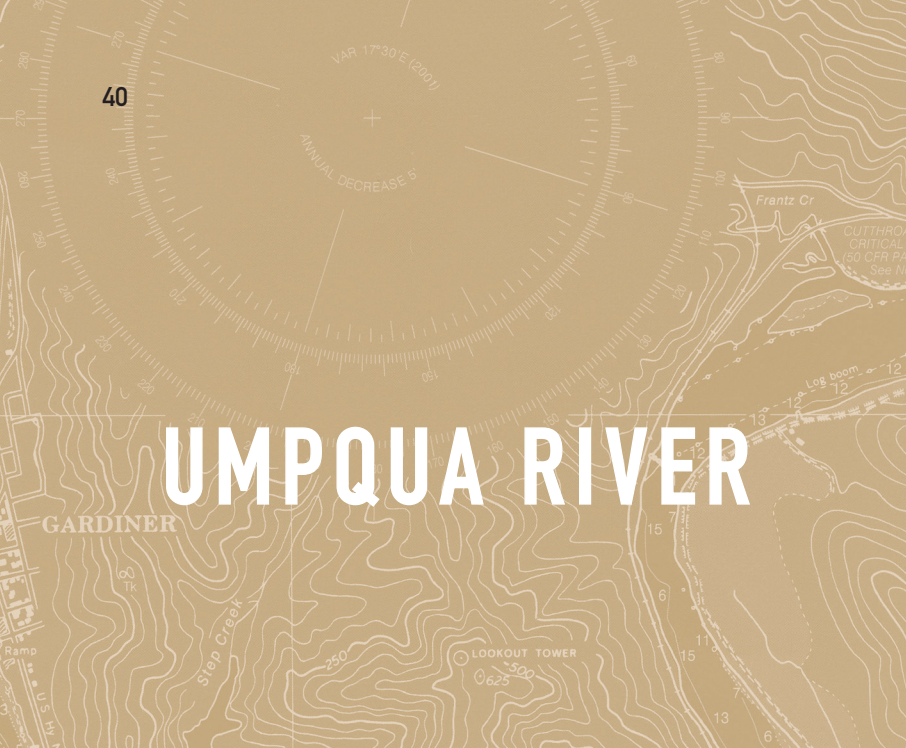
- C Siuslaw Marina



*Tied up on the Siuslaw*







# UMPQUA RIVER



*Cleaning crab at Salmon Harbor*

## About the harbor

The Umpqua rises in the Cascades and crosses a low Coast Range divide, then tumbles into its estuary through one of the coast's prettiest river canyons. The smaller Smith River converges with the Umpqua at Reedsport. A century ago the Umpqua carried steamers, schooners, barges, log rafts, and tugboats from the sea all the way up to Scottsburg and back. Today most river traffic is recreational, with fishing boats dominating the scene.



*Boy in a hurry at Salmon Harbor Dock*



## Hazardous areas

**A. Middle ground and north spit.** The north spit, to the right for outbound vessels, starts from the first rock spar jetty and the long pier on the east side of the channel. Small breakers are present when a swell is running; conditions become rougher toward the north jetty. A very dangerous area because large breakers come into this area from the middle ground. The north spit meets the middle ground at the outer end of the training jetty. The middle ground extends from the north jetty about 1000 yards seaward. This area is dangerous because a little swell can create large breakers that may capsize a vessel. Do not linger near the mouth of the river during ebb tide because an engine failure could put you out to sea before you could anchor or row to safety.

**B. North and south jetty.** The areas north of the north jetty and south of the south jetty can be very dangerous. Avoid the area when breakers are present.

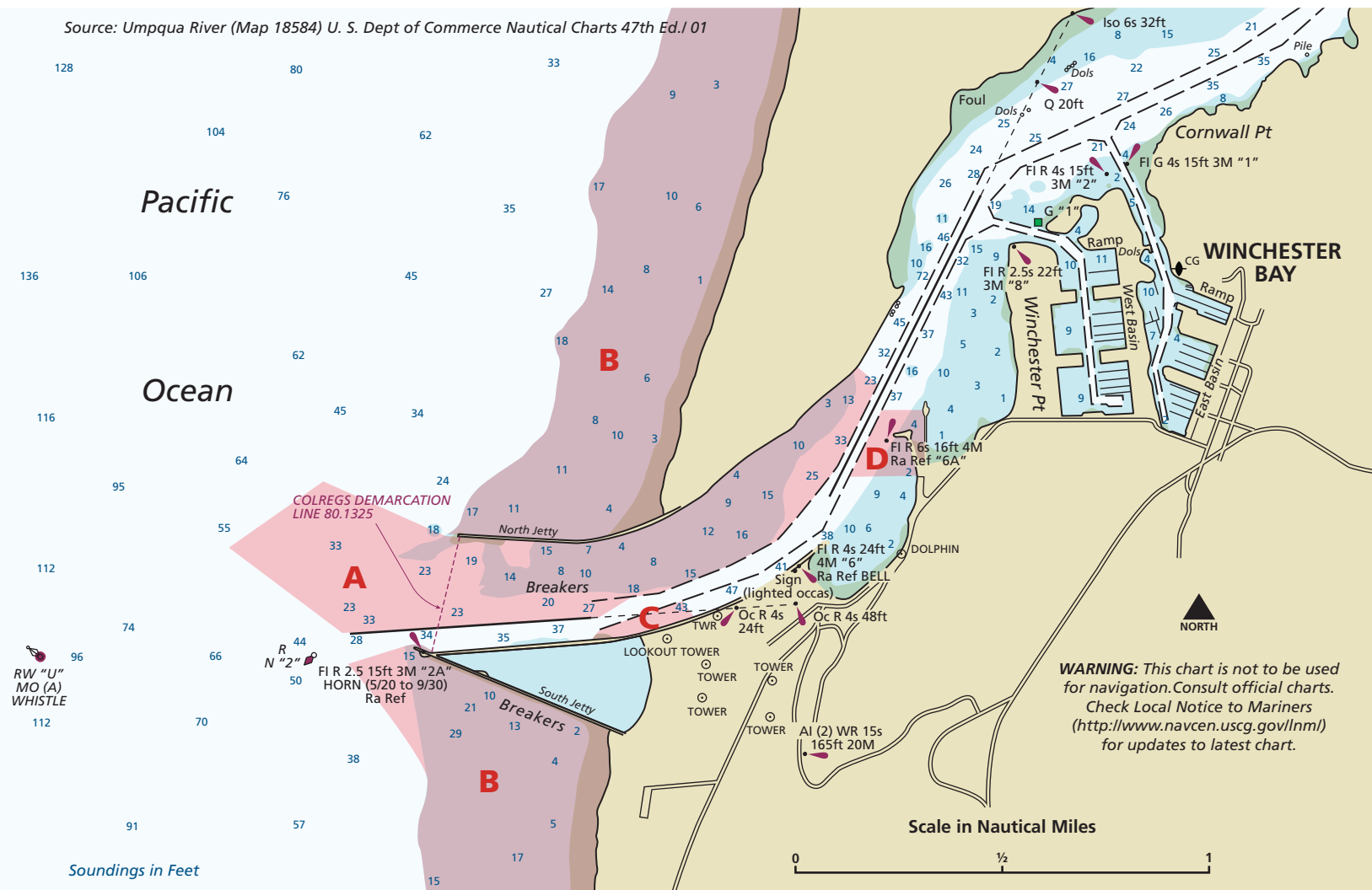
**C. Training jetty.** On the ebb tide, the current will pull boats into the jetty.

**D. Buoy 6A, old Coast Guard docks.** Current on ebb or flood will often set boats into this area.

## Rough-weather advisories and information

- Coast Guard station, Umpqua River: (541) 271-2138; for weather information: (541) 271-8417; for emergencies only: (541) 271-2137.
- Coast Guard radio: VHF channel 1610; hourly bar updates on VHF channel 16 or 22.
- Steer a course that keeps the two range markers in line as you navigate the channel. The range markers are red rectangles with a vertical black stripe.
- The storm warning display is on the lookout tower. A rough-bar advisory sign is located at each boat launching ramp and at Aid "6".

Source: Umpqua River (Map 18584) U. S. Dept of Commerce Nautical Charts 47th Ed./ 01





*Fishing in Salmon Harbor*



*Tying up at Salmon Harbor dock*

## What to do in and around the Umpqua estuary

Winchester Bay's Salmon Harbor is the Umpqua's hub for commercial, charter, and recreational fishing. It has ample facilities and attractions for recreational boaters. Umpqua Lighthouse State Park is a short uphill trek from the boat basin. Besides chinook salmon, the lower river has sturgeon, bottom fish, and striped and smallmouth bass. Anglers ply the jetties at Half Moon Bay and Osprey Point to catch chinook from the ocean. Crabbing is good off the Salmon Harbor docks Salmon Harbor docks, especially the Crab Dock. The beaches of the estuary produce some big gaper, razor, and softshell clams.

Cruising up the bay, visitors can stroll through the historic district of Gardiner, one of the oldest communities in Oregon. A couple of miles upstream is Bolon Island, where the ill-fated Jedediah Smith party camped in 1828 before most of them were killed in an Indian attack.

Across the channel, few steps from Reedsport Landing, is the Umpqua Discovery Center, with exhibits and dioramas about the history of the native peoples and of later settlement times. Reedsport's Old Town, with shops, galleries, restaurants, and gift shops, is a short walk from the boat landing.



*Umpqua Discovery Center in Reedsport's Old Town*



## Umpqua River attractions

- 1 Umpqua Lighthouse State Park
- 2 Crab Dock
- 3 Salmon Harbor
- 4 W. I. Jewett Historical House
- 5 Bolon Island Tideways State Wayside
- 6 Jedediah Smith Trail Historical Marker
- 7 Umpqua River Bridge
- 8 Umpqua Discovery Center
- ? Visitor information



*A friendly greeter*

## Boating facilities

- A Salmon Harbor West Basin  

- B Salmon Harbor East Basin  

- C Reedsport Rainbow Plaza  








*Tying up at Charleston*

## About the harbor

Farming and coal were the earliest enterprises in and around Coos Bay, but by the 1880s ship-building and timber had taken center stage and were turning this deepwater harbor into a major south coast port. Logging and lumbering dominated the economy thereafter for nearly a century, and in the 1950s the city of Coos Bay called itself “Lumber Shipping Capital of the World.” Commercial fishing also made its mark.

Coos Bay is working hard to build a new economy to replace the formerly dominant logging and fishing. Tourism is not so prominent here as it is in coastal towns farther north, even though the area’s natural beauty is quietly stunning.



*Dry dock on Coos Bay waterfront*



## Hazardous areas

**A. Sand spit, South Slough.** The spit extends north from the Charleston boat basin, parallel to the channel, from South Slough buoy #4 about 450 yards to South Slough light #2. The north end is marked by nun buoy #2T. Do not cross this area.

**B. Submerged jetty.** When departing the Charleston boat basin in the South Slough channel, and are directly between South Slough light #4 and can buoy #5, you will see South Slough light #1. It marks the end of the submerged jetty, which is visible only at low water. Stay to the left of light #1 at all times.

**C. Sand spit, north beach.** This area is dangerous because of shoals, submerged jetties, and strong breakers, particularly on an ebb tide. Commercial traffic can get heavy at times. Stay out of the way of the bigger vessels, which cannot stop for smaller ones.

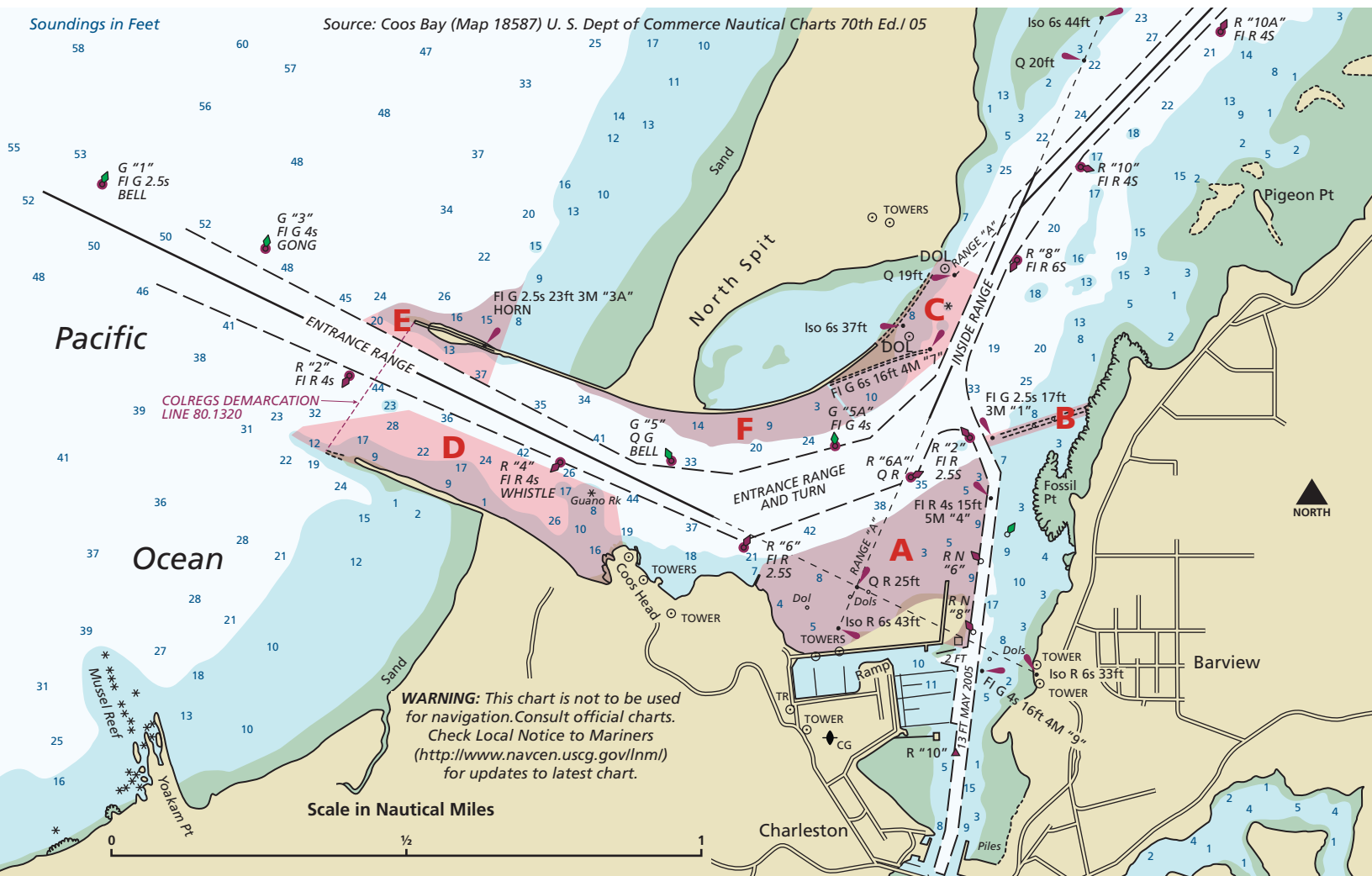
**D. South jetty, Guano Rock area.** Very dangerous because of shoals extending from the south jetty into the channel. Breakers are frequently present from the lighted whistle buoy #4 out to just past the end of the jetty. Be extremely cautious in this area, especially on an ebb tide.

**E. Submerged north jetty.** The north jetty extends about 200 yards to the west. The outward end is submerged from the visible end out to buoy #3. Breakers are nearly always present. Do not cross this area—pass the buoy before turning north.

**F. North of buoy #5.** Very dangerous because large swells or an ebb tide can produce heavy breakers. Freak breakers are common. Avoid the area.

## Rough-weather advisories and information

- Coast Guard station at Charleston: (541) 888-3267.
- Weather and wind warning flags are displayed during office hours at the Port of Coos Bay office at Charleston.
- The rough-bar advisory sign is positioned 8 feet above the water on the jetty just north of the boat basin. The sign faces the basin and also faces South Slough light #2.





*Seafood for sale*



*Warehouse at Charleston*



*The Coos Bay Boardwalk*

## What to do in and around Coos Bay

Charleston, just inside the bar at the head of South Slough, is the headquarters of the Port of Coos Bay and home of the bay's large commercial and charter fishing fleet. Recreational boaters use Charleston's facilities, too: of the port's 600 marina slips, about 200 are used for recreational boats. Charleston's docks contain a cluster of bait and tackle shops, gift shops, and a few restaurants, with a couple more across the South Slough bridge.

North Spit, the slender sandy protuberance sheltering Coos Bay from the ocean, is the southernmost reach of the Oregon Dunes. On the ocean side of the spit, roughly across from the town of Empire, lie the rusted remains of the *New Carissa*, wrecked just north of the bar in February 1999.

The bay takes a bend at Pony Slough to the city of North Bend, where shipbuilder and lumber baron Asa Meade Simpson built his first sawmill. The older part of this sprawly town, the blocks between the bay and Highway 101, can be reached on foot from the California Street boat ramp.

The city of Coos Bay is southeast of North Bend along the upper bay. The city dock on Bayshore Drive provides 624 feet of transient moorage space. The dock leads up to a waterfront park with historical and interpretive displays, including a historic tugboat and a saltwater aquarium. The old Marshfield Sun newspaper office, now a museum, features a history of printing processes and of the community.

A nearby visitor center offers information on local attractions and activities. Coos Bay's compact downtown is a short walk from the dock. One notable stop is the Coos Art Museum, in the old marble post office on Fourth and Anderson. A tour boat company offers cruises of Coos Bay harbor.


Charleston is a favorite place for crabbing, and the South Slough tide flats are good places to dig clams. Anglers fish for fall chinook and fin-clipped coho throughout the bay, from the bar up to Isthmus Slough. Surgeon lurk in holes above the McCulloch Bridge.




## Coos Bay attractions

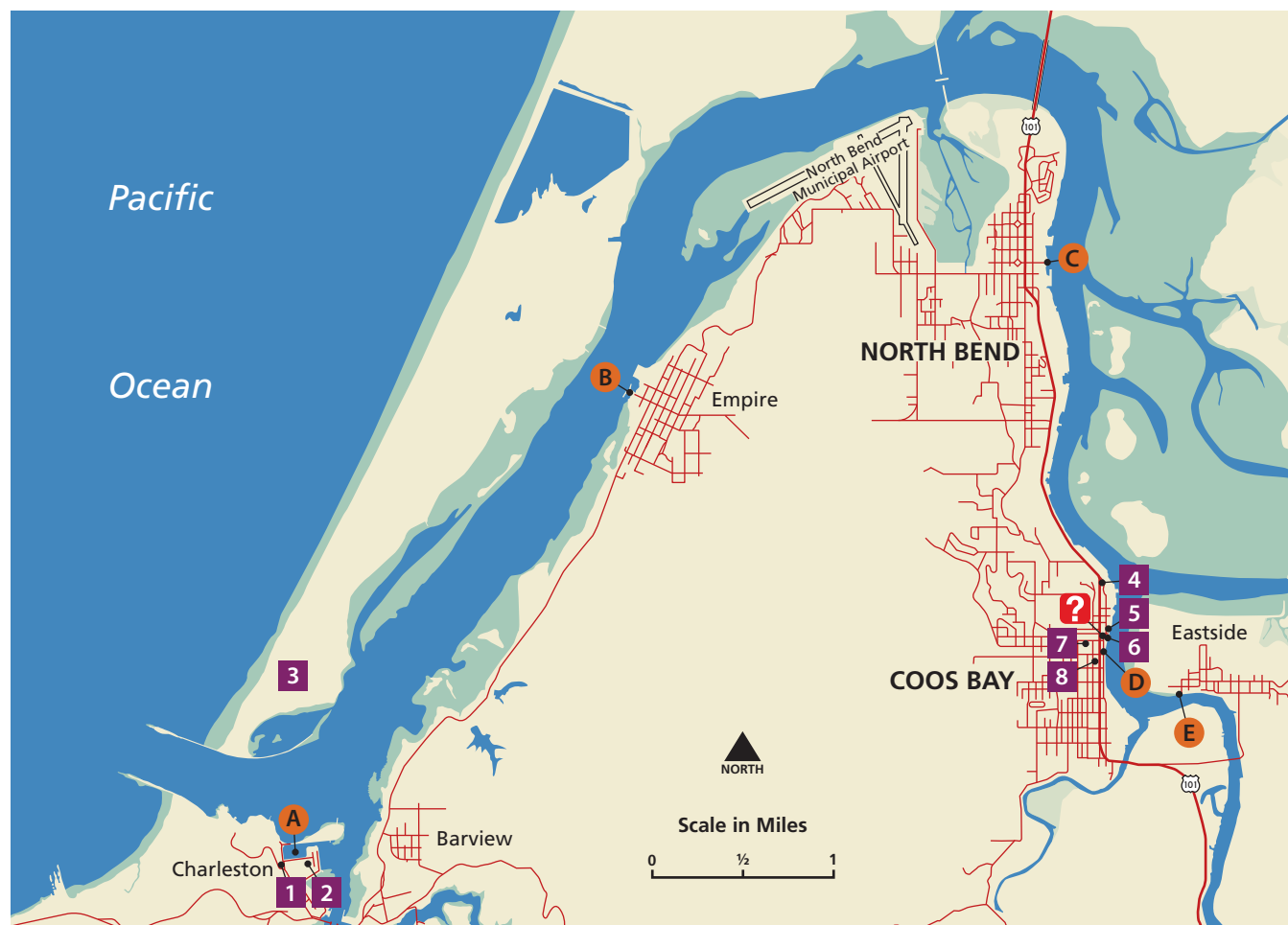
- 1** Oregon Institute of Marine Biology
- 2** Charleston Marina Complex
- 3** North Spit
- 4** Marshfield Sun Printing Museum
- 5** Coos Bay Boardwalk
- 6** Tugboat Museum
- 7** Coos Art Museum
- 8** Egyptian Theater
- ?** Visitor information

## Boating facilities

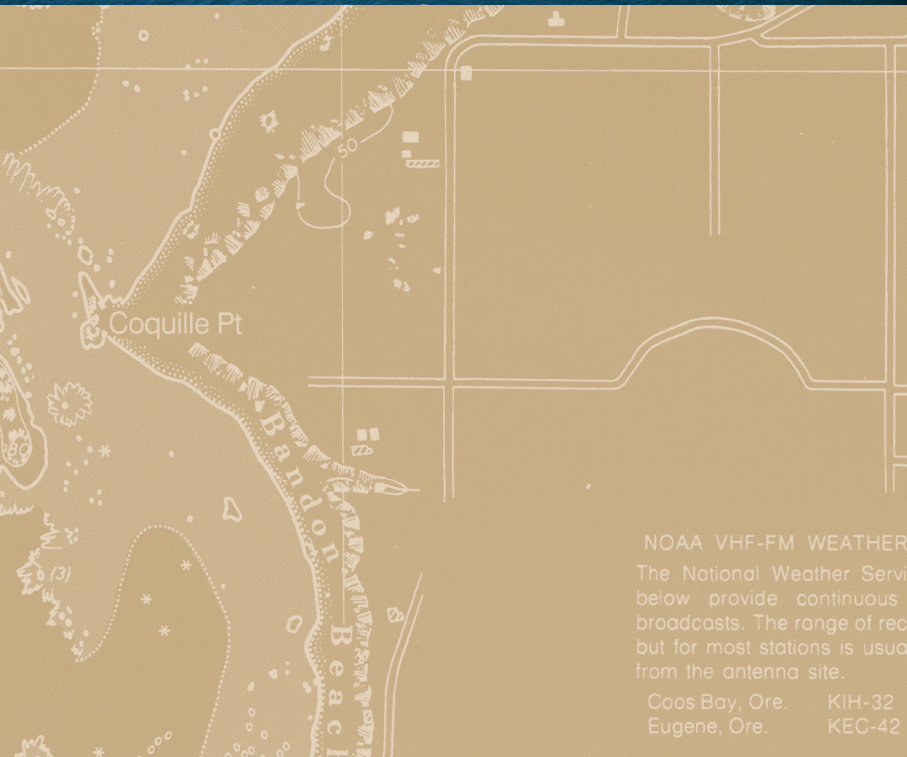
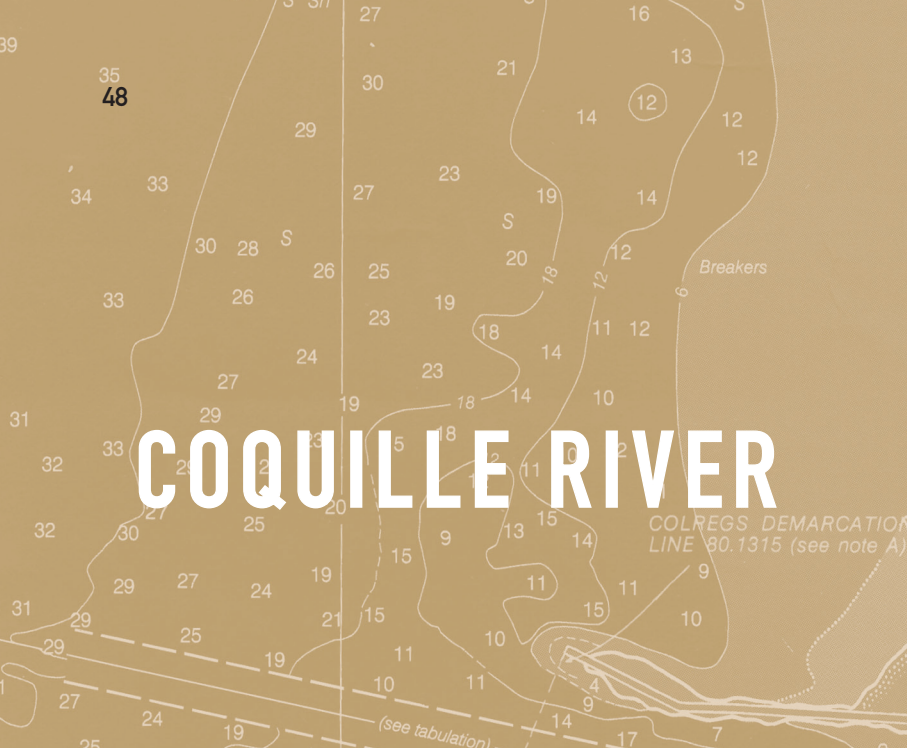
- A** Charleston Marina & Boat Ramp  

- B** Empire  

- C** California Street Boat Ramp  

- D** City Dock  

- E** Eastside  





*The Coquille channel*

## About the harbor

The Coquille River flows into the ocean at the town of Bandon. Bandon was founded in 1874 by an Irish immigrant, George Bennett, who named it after his home town in County Cork. Bennett is also credited, or blamed, for importing a prickly, oily-sapped leguminous shrub known in Ireland as furze and in Oregon as gorse. It spread rapidly along the south coast, and its presence in and around Bandon contributed to the fire that burned the town to the ground in 1936.

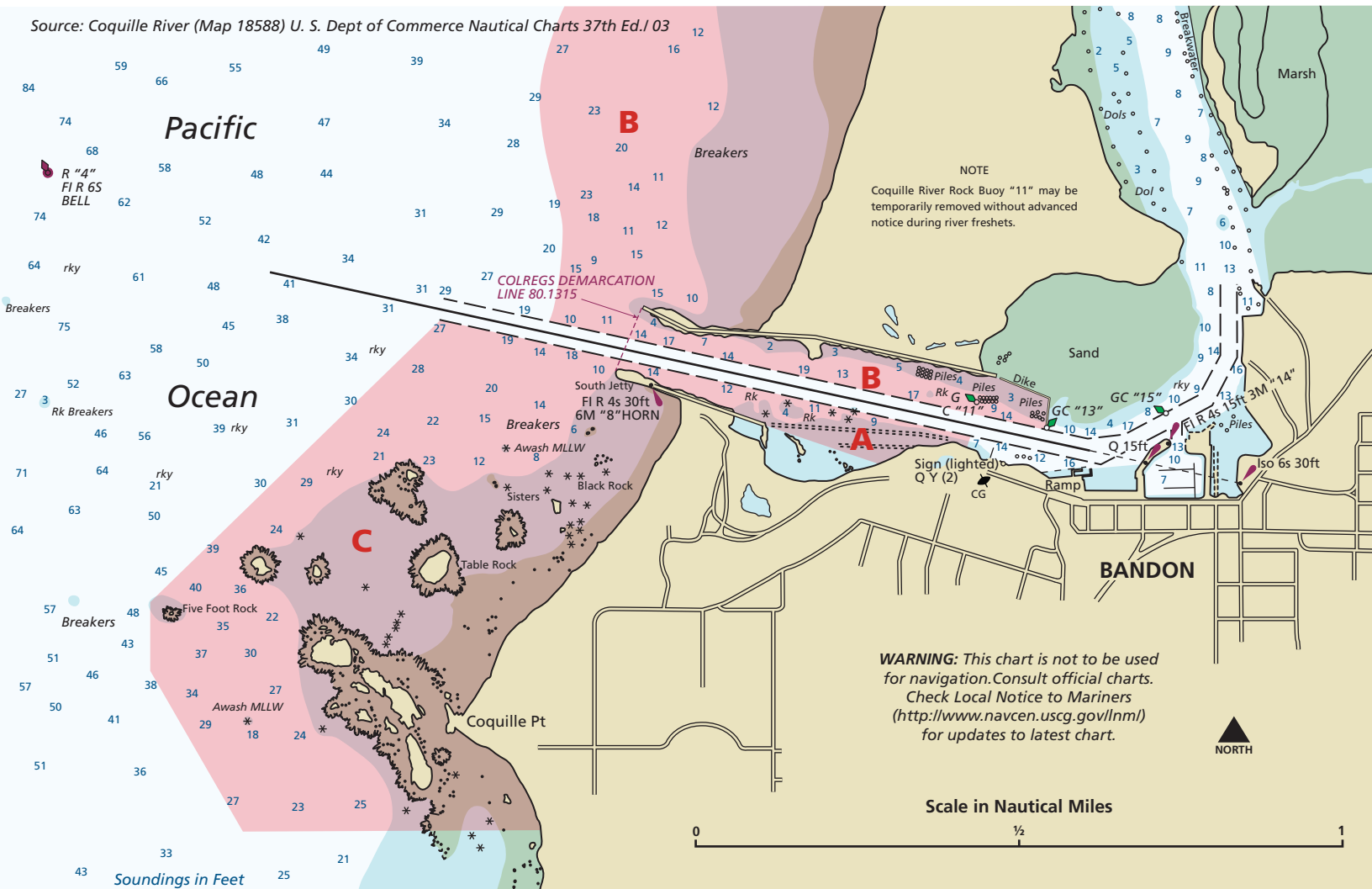
As with all Oregon coastal towns, Bandon's economic roots are in farming, fishing, logging, and lumbering. In the mid-1960s, however, it started calling itself Bandon-by-the-Sea, testifying to the town's blooming tourist industry.



*Pulling a crab pot at Bandon*



Source: Coquille River (Map 18588) U. S. Dept of Commerce Nautical Charts 37th Ed./ 03





*Enjoying lunch out of the wind, sort of*



*Unearthly creatures at Bandon's waterfront park*

## What to do in and around Bandon

The tidy Port of Bandon boat basin, situated in a pleasant waterfront park, caters exclusively to recreational traffic. It is adjacent to one of the most colorful Old Towns along the coast, with restaurants, bars, candy stores, clothing boutiques, and gift shops aplenty.

Cranberries, a renowned local product, are available in many creative and prettily packaged incarnations. There is cranberry sauce, of course, but also cranberry jelly, marmalade, and fruit leather; chocolate-dipped cranberries; white-chocolate cranberry bark; jellied cranberry-nut confections; dried cranberry morsels; cranberry-nut trail mix; and inedibles such as cranberry candles, sachets, and soaps.

The Bandon Historical Society Museum features Indian artifacts, historical photos, and exhibits about the Coast Guard and the great 1936 fire. Spreading upriver from Highway 101 is the 300-acre Bandon Marsh National Wildlife Refuge, a good place to watch shore birds, migratory waterfowl, and raptors.

The Coquille estuary and lower river are popular for fall chinook and winter steelhead fishing and crabbing. Anglers fish for smelt, surfperch, and rockfish from the docks and jetties. South of the boat basin is a nice beach for walking, photographing wildlife, flying kites, or building sand castles. The 1896 Coquille River lighthouse, on the base of the north jetty, is accessible on foot from Bullards Beach

Offshore are several rocky islets that are part of the Oregon Islands Wildlife Refuge. The refuge comprises some 1,400 coastal islands, rocks, and reefs from Tillamook Head south to the California border. It provides breeding grounds for most of Oregon's 1.2 million seabirds.



*Bandon's bronze turtle*





The Coquille River Lighthouse

### Coquille River attractions

- 1 Oregon Islands National Wildlife Refuge
- 2 South Jetty County Park
- 3 Coquille River Lighthouse
- 4 Bullards Beach State Park
- 5 Old Town Bandon
- 6 Bandon Historical Society Museum
- ? Visitor information

### Boating facilities

- A Port of Bandon
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- B Bullards Beach Ramp
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### About the harbor

Gold Beach, at the mouth of the Rogue River, gets its name from a brief frenzy of gold prospecting in the 1850s along the black-sand shoreline near the river. The gold never amounted to much. Rather, it was the salmon-canning industry, headed by the enterprising R.D. Hume, that put the town on the map in the 1870s. Hume built his first cannery across the river at Wedderburn. The heyday of the canneries lasted until the early 20th century, when the enormous runs were mostly depleted.

### Hazardous areas

**A. Shoal water.** Along the south side of the channel are shoals and gravel bars that can cause 6-foot breakers when a swell is running. Beware of strong northwest winds, which can drive boats into this area.

**B. Outer end, north jetty.** Breakers are almost always present because of shoal water. The area is especially dangerous when the sea is running from the west or southwest.

**C. Outer end, south jetty.** Breakers are almost always present. Even when it appears calm, breakers may occur up to 1000 feet off the south jetty. The area is especially dangerous when the sea is running from the west or southwest.

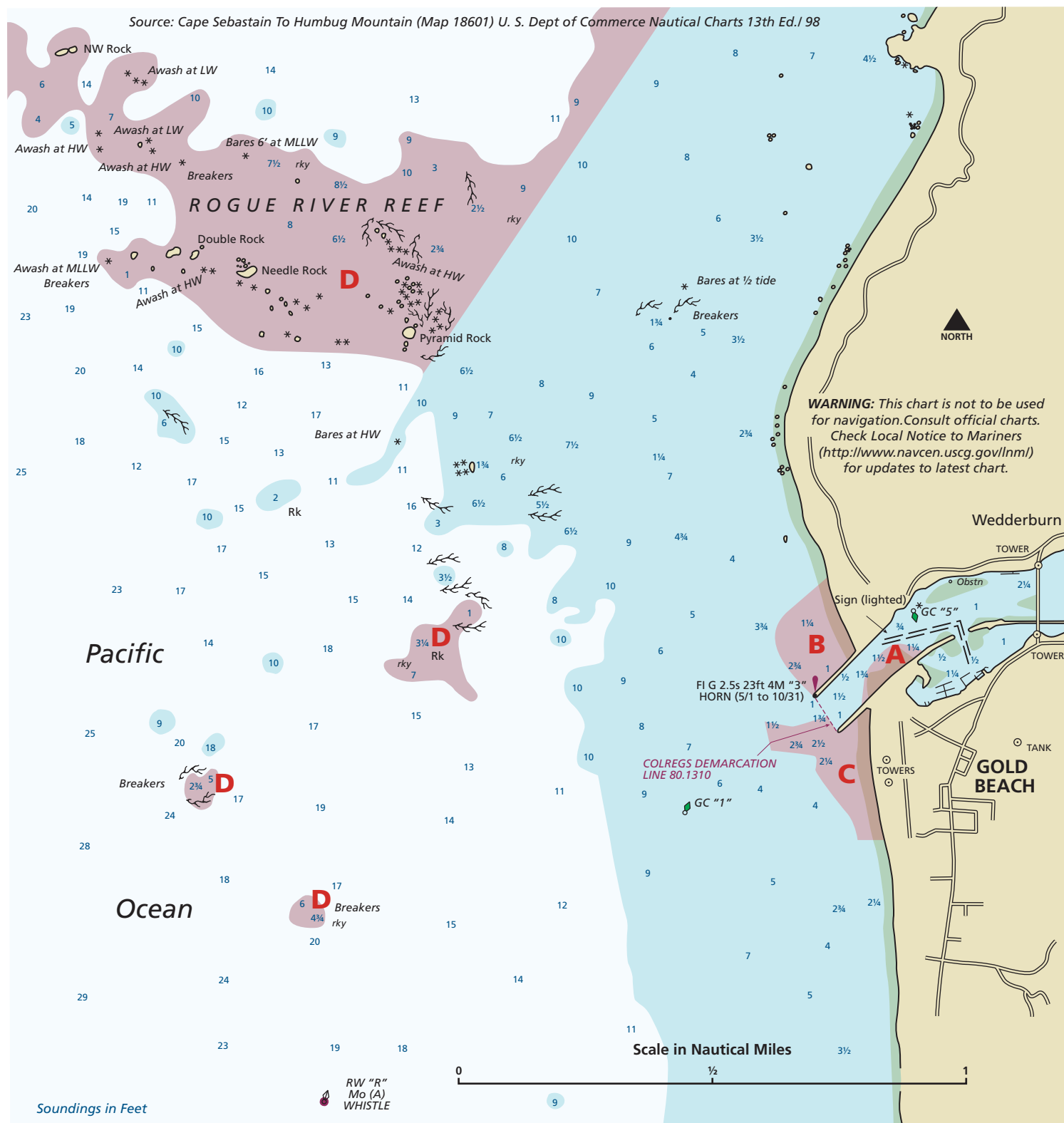
**D. Rogue River Reef** and outcroppings to the south. Dangerous because of rocks. Avoid at all times.

The Rogue River channel, 13 feet deep and 200 feet wide, lies along the north jetty. **The river entrance is subject to frequent shoaling and depth changes. Do not rely on charted depths.** The area just inside the bar often gets crowded with fishing boats, and it is easy to get your propeller fouled on a trolling line. If this happens, anchor immediately to avoid being swept into the shoal area south of the channel or into dangerous breakers outside the river mouth.



- Coast Guard seasonal station on the north jetty, staffed during the summer.
- Coast Guard station at Harbor: (541) 469-3885; for bar conditions: (541) 469-4571.
- Coast Guard radio: VHF channel 16.

- The rough-bar advisory sign is positioned on the north jetty at the Coast Guard station facing the river. When lights are flashing, call (541) 247-7219 for bar restrictions and weather conditions.





*Headed into Gold Beach*



*An old tug at the pier*

## What to do in and around Gold Beach

The Rogue, with its spring and fall chinook runs, summer and winter steelhead runs, and a fall coho season (fin-clipped only), is a favorite destination of salmon anglers. On days when the fish are surging into the harbor, the little boat basin looks like Interstate 5 at rush hour—crammed with boats full of earnest anglers intent on catching a fish and not somebody else's trolling line. Anglers also fish for sturgeon, perch, smelt, and bottom fish. The Rogue is renowned for its upriver angling, too.

The north jetty offers a view of the harbor mouth, the bridge (another McCulloch-designed span), and the town. The hulk of the Mary D. Hume is moored near the entrance to the boat basin. The Mary D. was a cannery tender/tug that the cannery magnate built in 1880 and named after his wife. The ship was in service until 1978 and then came back to Gold Beach to be restored, but unfortunately sank at her moorage first. She was raised but never renovated.

The boat basin, on the south shore of the harbor, has a few onshore attractions, including Jerry's River Museum, displaying historical photos and artifacts. More eating and sightseeing opportunities can be found along Highway 101, the town's commercial strip. The north end of town is within a mile's walk of the basin.

All around the harbor are wildlife to watch: seals slipping through the water, sea lions sunning themselves on sandbars, pelicans plummeting headfirst into the bay. Feral cats slink among the stones of the south jetty, competing with the gulls for people's lunch leftovers.



*A Rogue River excursion boat*





*The Mary D. Hume*

# Rogue River attractions

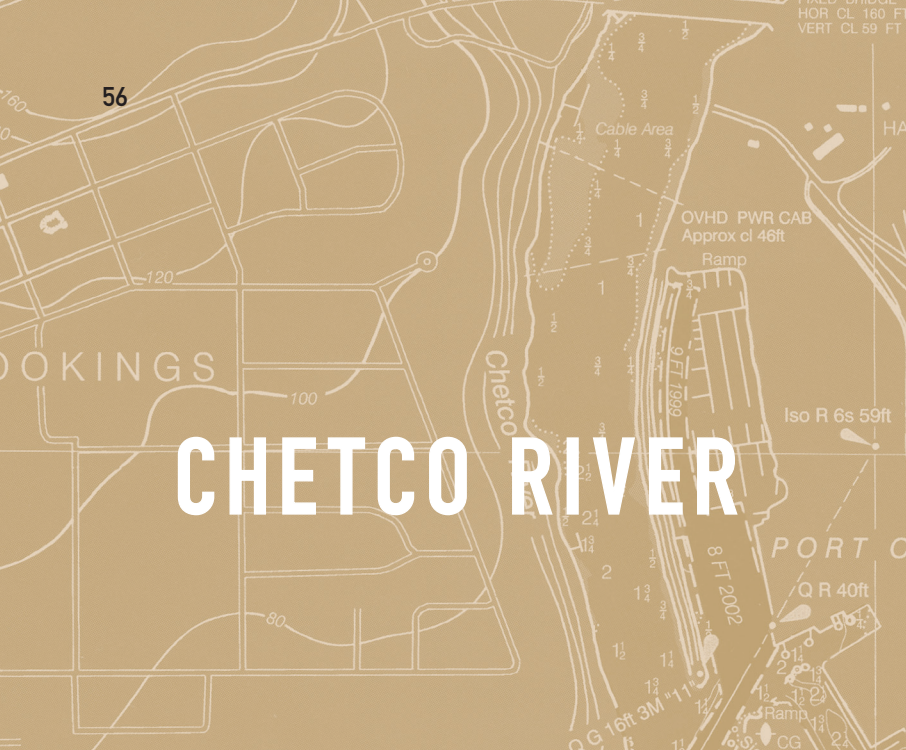
- 1 Rogue River Bridge
- 2 Mary D. Hume
- 3 Jerry's River Museum
- 4 Gold Beach Books and Biscuit Gallery
- 5 Curry Historical Museum
- 6 The Event Center at the Beach
- ? Visitor information

# Boating facilities

- A Port of Gold Beach
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- B Jot's Resort (private)
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## About the harbor

The Chetco River begins in the Kalmiopsis Wilderness and enters the ocean between Brookings and its neighbor, Harbor. Brookings was created in 1913 by the Brookings Timber and Lumber Company, which hired a California architect to plat the town. The architect softened the rectilinear street grid by adding curvy streets. His handiwork gave the community a more artistic flavor than that found in most company towns.

Brookings lies at the south end of the Oregon Coast's banana belt, which stretches from the sheltering promontory of Cape Blanco to the mouth of the Winchuck River. It has that rare combination of warm weather, a spectacular natural setting, ocean frontage, good fishing, and small-town charm. These blessings have brought recent economic prosperity in the form of an influx of retirees and real-estate refugees from southern California and elsewhere.



*A salmon troller plies the Chetco estuary*







*Fishing and conversation*



*The Port of Brookings Harbor boat basin*

## What to do in and around Brookings

The Port of Brookings Harbor has all the essential visitor facilities—food, lodging, restrooms, moorage, fuel, fish-cleaning station, and a visitor center. A larger assortment of shops, galleries, restaurants, and overnight accommodations is available along Highway 101, whose north end is within a mile's walk of the boat basin.

Less than half a mile south of the boat basin and east of the highway is Azalea Park, dedicated as a state park in 1939, but over the years it was neglected and slipped into a disreputable state. The park was acquired by the city of Brookings in 1992, and transformed by dedicated volunteers into a well-kept garden of native and exotic trees, shrubs, and flowers. Visit between late April and early June for the best show. The park also hosts a summer music series, with concerts approximately every other Sunday from the end of May to the middle of September.

The Chetco's fall chinook run attracts anglers for both offshore and in-harbor fishing. There is also a winter steelhead run, and anglers go after surfperch, rockfish, and lingcod from the south jetty and public fishing dock. The port is home to a small charter fleet.



*Coast Guard station at Brookings Harbor*





*A foggy morning in port*



*Looking north to Harris Beach*

## Chetco River attractions

- 1 Fishing Pier
- 2 Chetco Village
- 3 Brookings Harbor Shopping Center
- 4 Azalea Park
- 5 Chetco Valley Museum
- ? Visitor information

## Boating facilities

- A Port of Brookings
  - 
  - 
  - 
  - 
  - 
  - 
  -
- B Social Security Bar
  -





# OREGON'S NON-NAVIGABLE COASTAL RIVERS AND BAYS



## NECANICUM RIVER

The Necanicum enters the ocean at the town of Seaside. While its small estuary offers opportunities for crabbing, fishing, sightseeing, and quiet paddling, **its bar is dangerous. Do not cross at any time**

Haystack Rock, off Cannon Beach just south of Tillamook Head, is a nesting site for tufted puffins, western gulls, pelagic cormorants, and pigeon guillemots. Use binoculars to view the birds from a respectful distance. Green herons and wood ducks can sometimes be spotted on the mainland shore.



## NETARTS BAY

There are rich sport fishing and crabbing opportunities inside this shallow bay, sheltered by a 5-mile-long sand spit stretching north from Cape Lookout. **The bar is dangerous. Do not cross at any time.** If you're navigating inside the bay, beware of the strong ebb current near the mouth, especially if you are rowing or paddling.



## CAPE KIWANDA

Neither a river nor bay, the sheltered beach south of Cape Kiwanda near Pacific City is renowned for its dory fishing fleet. Skippers launch their flat-bottomed boats directly into the surf in the lee of the wind-sculpted sandstone headland. It's a colorful tradition, even more splendid when viewed from the ocean, but boaters should remember that the dories are at the mercy of the surf as they launch and land. Stand off and give them plenty of room.







## NESTUCCA BAY

Pacific City's dory fleet got started in the 1920s partly because of the unpredictability of Nestucca Bay's bar, four miles to the south. The bay's shoals and sandbars are just as shift today. **Do not cross its bar.** If you're out at sea, navigate a mile or two south to Bob Straub State Park, and you might spot a few dozen harbor seals lounging on the sand.



## SALMON RIVER

The Salmon enters the ocean just south of Cascade Head. **Shallow water and breaking waves make it dangerous.** **Do not cross.** Over its lower few miles the river wanders through salt marsh, ideal for exploring in a canoe or kayak. The Salmon enters the ocean just south of Cascade Head. Over its lower few miles the river wanders through salt marsh, ideal for exploring in a canoe or kayak.



## SILETZ BAY

The Siletz enters the ocean south of the town of Taft. **Do not cross the bar.** Ebb currents at the shallow entrance can reach 5 to 7 knots. Boaters inside the bay should be wary navigating near the mouth.



## ALSEA BAY

The Alsea River flows into the ocean at Waldport, passing under a concrete-arch bridge that is almost as graceful as the one it replaced in 1991. The old 1936 bridge, designed by Conde B. McCulloch, is gone, but a few of its decorative elements are preserved in a small park at the northwest end of the new span. **The bar is unstable. Do not cross it.** Boaters are advised not to enter or exit the bay. When navigating inside, beware of strong ebb currents near the mouth.



## PORT ORFORD

Port Orford is a small harbor in the shelter of a south-jutting promontory. There is no river mouth and hence no bar; boats enter and exit directly from the Pacific Ocean. The harbor is protected from summer northwesterly winds but wide-open to winter southerlies. There is one jetty on the north side of the harbor, and Battle Rock (named for an 1851 skirmish that took place there between would-be settlers and Indians) serves as a breakwater to the south. There is no boat ramp, but the Port of Port Orford operates a hoist and offers transient moorage. A visitor center is a short walk from the waterfront.



## WINCHUCK RIVER

The little Winchuck River enters the Pacific just north of the California border. **Its bar is dangerous. Do not cross it.** The river has populations of chinook, steelhead, and trout. Bank fishing is permitted inside the river's mouth, but fishing from a boat is prohibited.





# KEEPING WATERWAYS CLEAN

Oregon's waterways are a treasure for boaters and for all citizens. Here are some things boaters can do to help keep them clean.



## Engines

Smoky, noisy outboard motors are becoming a thing of the past. Tough new EPA standards now require engine makers to replace carbureted two-stroke outboards and personal watercraft engines with engines that are 75% cleaner than previous models.

The Marine Board is working with marine industry leaders to accelerate the phase-in of these new, lower-emission models in Oregon, which will significantly improve air and water quality. Boaters are not required to replace their old engines, but there are many advantages to doing so. Besides being more environmentally friendly, the engines start easier, accelerate faster, have quicker throttle response, are much quieter, and emit fewer fumes. They are more economical to run, potentially saving hundreds of dollars in fuel. And they run on straight gasoline, so boaters are relieved of the chore of mixing fuel.

If you don't plan to replace your engine right away, consider buying a small four-stroke "kicker" to use for trolling or moving short distances. You'll save money on fuel and wear and tear on your larger motor, and you'll enjoy a cleaner environment, too.

## Boat cleaning and maintenance

To keep solvents, cleaners, and debris out of waterways:

- Do hull work inside or under cover where rain can't wash dirt, dust, oil or solvents into the water.
- Clean boat bottoms ashore over hard surfaces or a tarp, where all debris can be contained.
- Use non-toxic, phosphate-free cleaners, and use them sparingly.
- Use cleaning alternatives found in your cupboards at home. Clean heads with baking soda and a scrub brush. A cup of white vinegar in two gallons of warm water makes a good floor cleaner.
- Change oil with a spill-proof oil pump or vacuum tank. Wipe up drips with an absorption pad.
- Recycle used oil and filters, antifreeze, and batteries, and dispose of cleaning products properly—some are classified as hazardous waste. Call your local government or garbage hauler for collection information.



## Fueling

Fill your outboard motor carefully to avoid spillage. Close the fuel vent when the boat is not in use to save fuel from vapor loss. If you have a built-in fuel tank, install a fuel-air separator in the air vent line to prevent spills through the vent. Use a drip pan under your engine. Avoid overfilling your tank; remember, fuel expands as it warms. Periodically inspect fuel lines for leaks or cracks.



## Oil spills

If you experience an oil spill, stop the flow and contain the spill with absorbent pads. Notify the Coast Guard at 1 (800) 424-8802. Then call the Oregon Emergency Response System at 1 (800) OILS-911. DO NOT squirt spill with a detergent or emulsifier. This is both unlawful and bad for the environment.



## Sewage disposal

Don't ever discharge sewage into the water. Use pumpout facilities and dump stations, located on the maps in this publication and in the Oregon Boating Facilities Guide. Keep diapers, sanitary napkins, oils, solvents, and harmful chemicals out of toilets. Use only environmentally friendly tank deodorizers. If you don't have toilets, carry small porta-potties suitable for marine use. See the Marine Board's publication *Guidelines for Sewage Collection and Disposal for Recreational Boats, Commercial Vessels, and Floating Structures*.



## Litter

Carry a waste container on board to collect garbage and keep it from blowing overboard. Enforce a "Nothing Overboard" rule (not even cigarette butts—carry an ashtray for smokers). Pick up trash in the water or along the shore if you can reach it safely.

## Angling

Use fish cleaning stations. Don't toss fish parts overboard—recycle them by composting with peat moss and burying in the garden as fertilizer. Or freeze and re-use them on your next crabbing trip. Don't release bait, either dead or alive—it can introduce invasive species to freshwater lakes.



## Bilge care

Install oil-absorbent pads in the bilge to keep oil from entering the environment. Avoid using detergents or emulsifiers to clean the bilge. Detergents can pollute the water. Emulsifiers will disperse the oil, making the water appear clean even though it may still contain harmful pollutants. It is unlawful to pump any bilge water that appears oily or has a sheen.

## SHUT THE BAD GUYS OUT

**Mitten crab**



**Zebra mussel**



**Hydrilla**



Aquatic nuisance species are a serious threat to Oregon's waterways. Non-native plants and animals can be highly invasive because they lack natural predators in their adopted environment. They proliferate rapidly, displacing native species and damaging the water resource. Three particularly bad actors are the zebra mussel, the mitten crab, and the aquatic weed *Hydrilla verticillata*. These have been extremely troublesome in many parts of the country. So far, they haven't been found in Oregon's waters. We'd like to keep it that way. Here's what you can do to prevent the spread of aquatic nuisance species:

**Inspect** – Inspect your boat and trailer and remove any plants or animals you see before leaving the water.

**Drain** – Drain your motor, live well, and bilge while on land.

**Empty** – Empty your bait bucket on land. Never release live bait or transport aquatic animals from one body of water to another. (Live bait is illegal in most Oregon waters—see the Oregon Fishing Regulations. )

**Rinse** – Rinse your boat, trailer, and equipment to kill harmful species. Use high-pressure hot water if you can. If not, use a garden hose and rinse thoroughly.

**Air-dry** – Air-dry your boat and equipment as long as possible before launching again. Five days is best.

Please be extra-careful if you've been boating outside Oregon or are trailering in from other parts of the country.

## DESTRUCTIVE WAVES

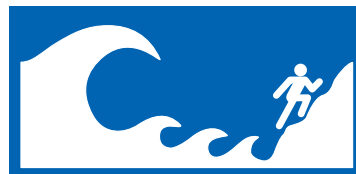
Unusual sudden changes in water level can be caused by tsunamis or violent storms. Tsunamis (seismic sea waves) are caused by sea-bottom earthquakes. Many such seismic disturbances do not produce sea waves, and others produce small sea waves, but the occasional large waves can be very damaging to shore installations and dangerous to ships in harbors. These waves can travel great distances and can cause tremendous damage on coasts far from their source.

The speed of tsunamis varies with the depth of the water. Speed can reach 300 to 500 knots in the deep water of the open ocean. In the open sea they cannot be detected from a ship or from the air because their length is so great, sometimes a hundred miles, as compared to their height, which is usually only a few feet (a meter or two). The waves build to disastrous proportions only when they approach shore.

There is usually a series of waves with crests 10 to 40 minutes apart, and the highest may occur several hours after the first wave. Sometimes the first noticeable part of the wave is the trough, which causes a recession of the water from shore, and people who have gone out to investigate this unusual exposure of the beach have been engulfed by the oncoming crest. Such an unexplained withdrawal of the sea should be considered as nature's warning of an approaching wave.

Improvements have been made in the quick determination and reporting of earthquake epicenters, but no method has yet been perfected for determining whether a sea wave will result from a given earthquake. NOAA's Pacific Tsunami Warning Center in Hawaii has deployed a warning system which has field reporting stations (seismic and tidal) in most countries around the Pacific. When a warning is broadcast, waterfront areas should be vacated for higher ground, and ships in the vicinity of land should head for the deep water of the open sea.

—Adapted from *Coast Pilot 7*, 39th ed. (2007)





# SOURCES FOR FURTHER INFORMATION

## Information about specific harbors

Astoria-Warrenton Chamber of Commerce and Welcome Center (800) 325-6311

Port of Astoria (503) 325-4521

Seaside Chamber of Commerce and Visitors Bureau (503) 738-3097 or (888) 306-2326

Nehalem Bay Area Chamber of Commerce and Visitor Center (503) 368-5100 or (877) 368-5100

Garibaldi Chamber of Commerce (503) 322-0301

Tillamook Chamber of Commerce (503) 842-7525

Port of Tillamook Bay (503) 842-2413

Depoe Bay Chamber of Commerce (541) 765-2889

Greater Newport Chamber of Commerce (541) 265-8801 or (800) 262-7844

Port of Newport (541) 265-7758

Waldport Chamber of Commerce and Visitors Center (541) 563-2133

Port of Alsea (541) 563-3872

Florence Area Chamber of Commerce (541) 997-3128 or (800) 524-4864

Port of Siuslaw (541) 997-3426

Reedsport-Winchester Bay Chamber of Commerce (541) 271-3495

Salmon Harbor Marina (541) 271-3407

Port of Umpqua (541) 271-2232

Charleston Information Center (541) 888-2311

Bay Area Chamber of Commerce (541) 269-0215 or (800) 824-8486

Port of Coos Bay (541) 267-7678

Bandon by the Sea Chamber of Commerce (541) 347-9616

Port of Bandon (541) 347-3206

Gold Beach Chamber of Commerce and Visitors Center (541) 247-7526

Port of Gold Beach (541) 247-6269

Brookings Harbor Chamber of Commerce (541) 469-3181 or (800) 535-9469

Port of Brookings Harbor (541) 469-2163

## Books

*Oregon Coastal Access Guide* (Kenn Oberrecht; Oregon State University Press and Oregon Sea Grant, 2001)

*Oregon Boater's Handbook* (OSMB)

*Oregon Boating Regulations* (OSMB)

*Oregon Sportfishing Regulations* (ODF&W)

*Oregon's Mandatory Boater Education Program* (OSMB)

*Oregon Marina Guide* (OSMB)

*Safe Passage for Boaters* (OSMB)

## Web sites

NOAA Office of Coast Survey. Coast Pilot 7, 39th ed. (2007). <http://nauticalcharts.noaa.gov/nsd/coastpilot7.htm>

Oregon Coastal Atlas: <http://www.coastalatlas.net/>

Oregon State Marine Board: <http://www.boatoregon.com/>

Oregon History Project coastal history: <http://www.ohs.org/education/oregonhistory/narratives/histories.cfm>

U.S. Coast Guard Navigation Center, Notes and Information, [http://www.navcen.uscg.gov/notes\\_and\\_information/notes\\_and\\_information\\_home.htm](http://www.navcen.uscg.gov/notes_and_information/notes_and_information_home.htm)

U.S. Coast Guard, Thirteenth District, Light List Vol. VI, Pacific Coast and Pacific Islands, [http://www.navcen.uscg.gov/pubs/LightLists/V6Complete\(3\).pdf](http://www.navcen.uscg.gov/pubs/LightLists/V6Complete(3).pdf).

U.S. Coast Guard Navigation Center, Thirteenth District: Local Notice to Mariners (LNM): <http://www.navcen.uscg.gov/lnm/d13>



***Come Play on Oregon's Waterways***