# Hazards at the "Bar"

The Columbia River Bar, where the Pacific Ocean ▲ and Columbia River meet, can be a navigational nightmare. Since 1792, approximately 2,000 ships have sunk in this area, earning it the nickname "Graveyard of the Pacific."

Water, weather, and geography work together at times to make the bar treacherous. The Columbia River flows into the Pacific through a narrow channel. As the river water surges toward the ocean, it slows down, dropping sand and silt. That sand and silt form a fan-shaped sandbar that extends more than six miles into the ocean.

Sometimes, strong river discharges collide with heavy Pacific waves, making passage extremely dangerous for all vessels. The bar's weather and waves are notoriously violent and quick to change.

Before jetties and dredging, 23 feet was the maximum draft for ships crossing the bar. To provide

greater safety, engineers have deepened the limit to 40 feet. This "safe" limit is still affected by wind and wave conditions on the bar.

**JETTY:** A man-made structure that extends into the ocean to influence the current.

**DREDGING:** Removing bottom sediments from under water and disposing of them at a different place, usually to keep waterways navigable.



is the distance

of the keel.

from the waterline -

to the deepest point





oregonstateparks.org











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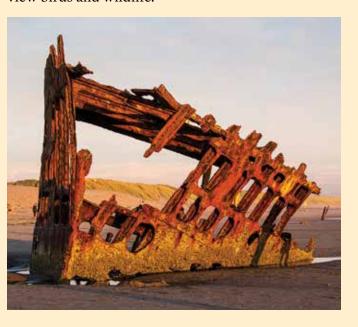




# **1** Fort Stevens State Park

Off U.S. Hwy. 101, 10 miles west of Astoria 100 Peter Iredale Road, Hammond OR 97121 Info: 800-551-6949 or **oregonstateparks.org** Park: 503-861-1671

Fort Stevens is home to the remains of the centuryold shipwreck *Peter Iredale*. The South Jetty viewing platform is an excellent spot to watch ships as they enter and exit the Columbia River. The military institution Fort Stevens guarded the mouth of the river from the Civil War through World War II. Today, this 4,200-acre park has one of the largest public campgrounds in the United States, a freshwater lake, miles of trails, and is a great place to view birds and wildlife.



# **O** Cape Disappointment State Park

244 Robert Gray Drive, Ilwaco WA 98624 Park: 360-642-3029 or parks.wa.gov



The Lewis and Clark Interpretive Center focuses on the famous expedition. It also displays maritime exhibits and artifacts, including a First Order Fresnel lens, a Coast Guard surfboat, and shipwreck name boards. Visitors can hike to the Cape

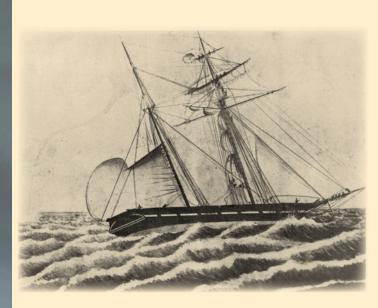
Disappointment Lighthouse, overlooking the Columbia River Bar. The North Head Lighthouse is often open for tours. Visitors can climb its spiral staircase to the lantern room and take in the Pacific Ocean view.

### **3** Columbia River **Maritime Museum**

1792 Marine Drive, Astoria OR 97103 503-325-2323 or **crmm.org** 

Explore marine transportation from the days of dugout canoes, through the age of sail, to the present. Watch a short film about the dramatic history of life and commerce on the Columbia River, including the dangerous work of the pilots who navigated the Columbia River Bar. Walk the bridge of a World War II warship. and marvel at the 44-foot motor lifeboat plowing through a wave in a rescue mission. Participate in four interactive, hands-on exhibits, including taking the helm in a tugboat wheelhouse. You can board the Lightship Columbia, a National Historic Landmark, that once guided ships to safety at the mouth of the river.





### 1846: Shark

After completing its mission in the Oregon Country, the *U.S.S. Shark* attempted to leave the Columbia River on September 10, 1846, but ran afoul of the treacherous bar. Although the ship broke up, no one died. Debris spread over 70 miles, some coming to rest on the beach south of the river mouth. Three small cannons, called carronades, and a capstan from the ship were discovered and lent their name to the area known as Cannon Beach. Two restored carronades are on display at the Columbia River Maritime Museum.



### 1929: Laurel

Gale force winds drove the heavily laden *S.S. Laurel* off course and onto Peacock Spit in June. The storm intensified and giant waves severed the forward third of the ship. Lumber, ship fragments and fuel littered the ocean. Fearing for their lives, the crew jumped into the frigid water and swam toward awaiting Coast Guard surf boats. Amazingly, only one man died.



### 2005: Millicoma

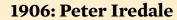
A tug was towing the 350-foot barge *Millicoma* across the bar in a heavy storm when the steel tow cable connecting them broke, leaving the barge to float off into the night. The next morning the barge was found hard aground in a rocky cove by the North Head Lighthouse. It was salvaged four days later with little damage to the vessel or the environment.





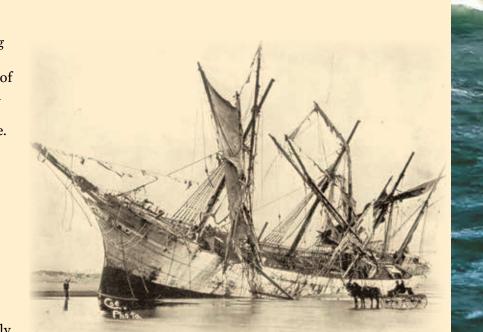
### 1879: Great Republic

Few of *Great Republic's* 900 passengers were aware it had run aground on Sand Island. The bar pilot miscalculated the strong outgoing tide, and that, along with the ship's slow speed, contributed to the Republic's demise. Water surged into the damaged hull and bilge pumps failed to pump it out. All passengers survived, but the last lifeboat heading for shore capsized, and 11 of the 14 crew drowned. A raging gale thwarted hopes of re-floating the ship.



On October 25, 1906, the British sailing ship *Peter Iredale* was en route to the Columbia River to pick up a shipment of wheat. Around 2 a.m. the crew spotted the Tillamook Rock Lighthouse, just south of the Columbia River's entrance. The ship's captain, H. Lawrence, wanted to wait until daylight to cross the dangerous bar. Dense fog made navigation difficult, and he mistakenly thought that the ship was 50 miles offshore.

By the time Lawrence realized that he was dangerously close to shore, it was too late. The *Iredale* ran aground on a sandbar off Clatsop Beach, where it stuck. No one died. The wreck instantly became a local attraction and landmark.



# TEAMER ADMIRAL BENSON STRANDED PEACOCK SPIT

### 1930: Admiral Benson

The steamship *Admiral Benson* struck Peacock Spit, several hundred yards west of the tip of the North Jetty. Some people say the watch officers mistook the remains of the *Laurel* as a navigational aid and steered toward the shipwreck. The *Benson's* bow remained visible for decades. The beach between the jetty and North Head is now Benson Beach.



### 1976: Bettie M

The *Bettie M* is still visible at low tide near the junction of Jetty A and Cape Disappointment. The fishing boat, loaded with 900 tons of tuna, went aground directly beneath the Cape Disappointment Lighthouse. Storms battered the wrecked boat, broke tow lines, and stymied many salvage efforts. Local people still recall the stench from the vessel for months after the wreck.