



# NOAA's National Weather Service Marine Forecasts



Marine Forecasts  
Home

News

Organization

Search

Landlubber's forecast:  
"City, St" or zip code  
(Pan/Zoom for Marine)  
City, St  Go

NWS Home  
Parent Office  
Marine, Tropical, and  
Tsunami Services  
Branch

Items of Interest  
Marine Forecasts  
Text, Graphic

Observations  
Portals  
Dissemination  
Publications  
Links  
FAQ  
Contacts  
Feedback

Vote  
Great, Good, Poor

Be Prepared!  
Weather Safety  
Cold Water  
Hazards and Safety  
406 EPIRB's

## National Weather Service Marine Forecasts

### COASTAL WARNING DISPLAY PROGRAM



Marine Forecast Offices & Centers provide links to their products as well as additional regionally focused information. Click on map for links.

Beware of hypothermia during these cooler months. Did you know your body can cool 25 times faster in water than in air? That water does not need to be very cold to endanger you?

What is a "Marine Zone Forecast"?  
What is a "Marine Point Forecast"?

How can I get a marine forecast via zip, city, or lat/lon?

Did you know that the height of some individual waves may be twice the height of the forecast seas? And may present an even greater danger near shore or any shallow waters?

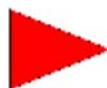
### COASTAL WARNING DISPLAY PROGRAM

Some coastal stations may display flags, pennants and colored lights to warn mariners of hazardous conditions. Here is what the signals mean. Below the signals are definitions of watches, warnings and advisories.

## Coastal Warning Display Signals

### DAYTIME SIGNALS

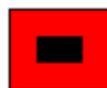
SMALL CRAFT ADVISORY



GALE WARNING



STORM WARNING



HURRICANE WARNING



### NIGHT (LIGHT) SIGNALS

SMALL CRAFT ADVISORY



GALE WARNING



STORM WARNING



HURRICANE WARNING



## Explanation of Warnings

**Small Craft Advisory (SCA):** An advisory issued by coastal and Great Lakes Weather Forecast Offices (WFO) for areas included in the Coastal Waters Forecast or Nearshore Marine Forecast (NSH) products. Thresholds governing the issuance of small craft advisories are specific to geographic areas. A Small Craft Advisory may also be issued when sea or lake ice exists that could be hazardous to small boats. There is no precise definition of a small craft. Any vessel that may be adversely affected by Small Craft Advisory criteria should be considered a small craft. Other considerations include the experience of the vessel operator, and the type, overall size, and seaworthiness of the vessel.

Eastern (ME..SC, Lake Erie, Lake Ontario) - Sustained winds or frequent gusts ranging between 25 and 33 knots (except 20 to 25 knots, lower threshold area dependent, to 33 knots for harbors, bays, etc.) and/or seas or waves 5 to 7 feet and greater, area dependent.

Central (MN..OH) - Sustained winds or frequent gusts (on the Great Lakes) between 22 and 33 knots inclusive, and/or seas or waves greater than 4 feet.

Southern (GA..TX and Caribbean) - Sustained winds of 20 to 33 knots, and/or forecast seas 7 feet or greater that are expected for more than 2 hours.

Western (WA..CA) - Sustained winds of 21 to 33 knots, and/or wave heights exceeding 10 feet (or wave steepness values exceeding local thresholds).

Alaska (AK) - Sustained winds or frequent gusts of 23 to 33 knots. A small craft advisory for rough seas may be issued for sea/wave conditions deemed locally significant, based on user needs, and should be no lower than 8 feet.

Pacific (HI, Guam, etc) - Sustained winds 25 knots or greater and seas 10 feet or greater; except in Guam and the northern Mariana Islands where it is sustained winds 22 to 33 knots and/or combined seas of 10 feet or greater.

"Frequent gusts"are typically long duration conditions (greater than 2 hours).

For a list of NWS Weather Offices by Region, refer to the following website: <http://www.nws.noaa.gov/organization.php>

**Small Craft Advisory for Hazardous Seas (SCAHS):** An advisory for wind speeds lower than small craft advisory criteria, yet waves or seas are potentially hazardous due to wave height, wave period, steepness, or swell direction. Thresholds governing the issuance of Small Craft Advisories for Hazardous Seas are specific to geographic areas.

Eastern (ME..SC, Lake Erie, Lake Ontario) - Seas or waves 5 to 7 feet and greater, area dependent.

Central (WI..OH) - Seas or waves greater than 4 feet.

Southern (GA..TX and Caribbean) - Seas 7 feet or greater that are expected for more than 2 hours.

Western (WA..CA) - Criteria for wave heights and/or wave steepness are locally defined; refer to Western Region Supplement 12-2003, Marine Weather Services.

Alaska (AK) - Seas or wave conditions deemed locally significant, based on user needs, and should be no lower than 8 feet.

Pacific (HI, Guam, etc) - Seas 10 feet or greater.

**Small Craft Advisory for Rough Bar (SCARB):** An advisory for specialized areas near harbor or river entrances known as bars. Waves in or near such bars may be especially hazardous to mariners due to the interaction of swell, tidal and/or river currents in relatively shallow water. Thresholds governing the issuance of Small Craft Advisories for Rough Bar are specific to local geographic areas, and are based upon parameters such as wave steepness, wind speed and direction, and local bathymetry.

**Small Craft Advisory for Winds (SCAW):** An advisory for wave heights lower than small craft advisory criteria, yet wind speeds are potentially hazardous. Thresholds governing the issuance of small craft advisories are specific to geographic areas.

Eastern (ME..SC, Lake Erie, Lake Ontario) - Sustained winds ranging between 25 and 33 knots

(except 20 to 25 knots, lower threshold area dependent, to 33 knots for harbors, bays, etc.)

Central (WI..OH) - Sustained winds or frequent gusts (on the Great Lakes) between 22 and 33 knots inclusive.

Southern (GA..TX and Caribbean) - Sustained winds of 20 to 33 knots that are expected for more than 2 hours.

Western (WA..CA) - Sustained winds of 21 to 33 knots.

Alaska (AK) - Sustained winds or frequent gusts of 23 to 33 knots.

Pacific (HI, Guam, etc) - Sustained winds 25 knots or greater; except in Guam where it is sustained winds of 22 to 33 knots.

**BRISK WIND ADVISORY:** A Small Craft Advisory issued for ice-covered waters.

**GALE WARNING:** A warning of sustained surface winds, or frequent gusts, in the range of 34 knots (39 mph) to 47 knots (54 mph) inclusive, either predicted or occurring, and not directly associated with a tropical cyclone.

**STORM WARNING:** A warning of sustained surface winds, or frequent gusts, in the range of 48 knots (55 mph) to 63 knots (73 mph) inclusive, either predicted or occurring, and not directly associated with a tropical cyclone.

**TROPICAL STORM WARNING:** An announcement that tropical storm conditions (sustained winds of 39 to 73 mph) are expected somewhere within the specified coastal area within 36 hours.

**HURRICANE FORCE WIND WARNING:** A warning for sustained winds, or frequent gusts, of 64 knots (74 mph) or greater, either predicted or occurring, and not directly associated with a tropical cyclone.

**HURRICANE WARNING:** An announcement that hurricane conditions (sustained winds of 74 mph or higher) are expected somewhere within the specified coastal area. Because hurricane preparedness activities become difficult once winds reach tropical storm force, the hurricane warning is issued 36 hours in advance of the anticipated onset of tropical-storm-force winds.

#### **Other Advisories, Watches and Warnings for Marine Areas:**

**Ashfall Advisory:** An advisory issued for conditions associated with airborne ash plume resulting in ongoing deposition at the surface. Ashfall may originate directly from a volcanic eruption, or indirectly by wind suspending the ash.

**Coastal/Lakeshore Flood Advisory:** Flooding is possible (i.e, over and above normal high tide levels). Coastal/Lakeshore Flood Advisories are issued using the Coastal and Lakeshore Hazard Message (CFW) product.

**Coastal/Lakeshore Flood Watch:** Flooding with significant impacts is possible. Coastal/Lakeshore Flood Watches are issued using the Coastal and Lakeshore Hazard Message (CFW) product.

**Coastal/Lakeshore Flood Warning:** Flooding that will pose a serious threat to life and property is occurring, imminent or highly likely. Coastal/Lakeshore Flood Warnings are issued using the Coastal and Lakeshore Hazard Message (CFW) product.

**Dense Fog Advisory:** An advisory for widespread or localized fog reducing visibilities to regionally or locally defined limitations not to exceed 1 nautical mile.

**Dense Smoke Advisory:** A marine advisory for widespread or localized smoke reducing visibilities to regionally or locally defined limitations not to exceed 1 nautical mile.

**Freezing Spray Advisory:** An advisory for an accumulation of freezing water droplets on a vessel at a rate of less than 2 centimeters (cm) per hour caused by some appropriate combination of cold water, wind, cold air temperature, and vessel movement.

**Gale Watch:** A watch for an increased risk of a gale force wind event for sustained surface winds, or frequent gusts, of 34 knots (39 mph) to 47 knots (54 mph), but its occurrence, location, and/or timing is still uncertain.

**Hazardous Seas Warning:** A warning for wave heights and/or wave steepness values meeting or exceeding locally defined warning criteria.

**Hazardous Seas Watch:** A watch for an increased risk of a hazardous seas warning event to meet Hazardous Seas Warning criteria but its occurrence, location, and/or timing is still uncertain.

**Heavy Freezing Spray Warning:** A warning for an accumulation of freezing water droplets on a vessel at a rate of 2 cm per hour or greater caused by some appropriate combination of cold water, wind, cold air temperature, and vessel movement.

**Heavy Freezing Spray Watch:** A watch for an increased risk of a heavy freezing spray event to meet Heavy Freezing Spray Warning criteria but its occurrence, location, and/or timing is still uncertain.

**High Surf Advisory:** A High Surf Advisory is issued when breaking wave action poses a threat to life and property within the surf zone. High surf criteria varies by region. High Surf Advisories are issued using the Coastal Hazard Message (CFW) product.

**High Surf Warning:** A High Surf Warning is issued when breaking wave action results in an especially heightened threat to life and property within the surf zone. High surf criteria varies by region. High Surf Warnings are issued using the Coastal and Lakeshore Hazard Message (CFW) product.

**Hurricane Force Wind Watch:** A watch for an increased risk of a hurricane force wind event for sustained surface winds, or frequent gusts, of 34 knots 64 knots (74 mph) or greater, but its occurrence, location, and/or timing is still uncertain.

**Hurricane Watch:** An announcement that hurricane conditions (sustained winds of 74 mph or higher) are possible within the specified coastal area. Because hurricane preparedness activities become difficult once winds reach tropical storm force, the hurricane watch is issued 48 hours in advance of the anticipated onset of tropical-storm-force winds.

**Low Water Advisory:** An advisory to describe water levels which are significantly below average levels over the Great Lakes, coastal marine zones, and any tidal marine area, waterway, or river inlet within or adjacent to a marine zone that would potentially be impacted by low water conditions creating a hazard to navigation.

**Severe Thunderstorm Watch:** A watch issued when conditions become favorable for severe thunderstorms to develop and headlined in the Coastal Waters Forecast, the Great Lakes Open Lakes Forecast, and the Nearshore Marine Forecast. Reference NWSI 10-512 for severe thunderstorm watch criteria.

**Special Marine Warning (SMW):** A warning product issued for potentially hazardous weather conditions usually of short duration (up to 2 hours) producing sustained marine thunderstorm winds or associated gusts of 34 knots or greater; and/or hail 3/4 inch or more in diameter; and/or waterspouts affecting areas included in a Coastal Waters Forecast, a Nearshore Marine Forecast, or an Great Lakes Open Lakes Forecast that is not adequately covered by existing marine warnings. Also used for short duration mesoscale events such as a strong cold front, gravity wave, squall line, etc., lasting less than 2 hours and producing winds or gusts of 34 knots or greater.

**Storm Watch:** A watch for an increased risk of a storm force wind event for sustained surface winds, or frequent gusts, of 48 knots (55 mph) to 63 knots (73 mph), but its occurrence, location, and/or timing is still uncertain

**Tornado Watch:** A watch issued when conditions become favorable for tornadoes to develop and headlined in the Coastal Waters Forecast, the Great Lakes Open Lakes Forecast, and the Nearshore Marine Forecast . Reference NWSI 10-512 for tornado watch criteria.

**Tropical Storm Watch:** An announcement that tropical storm conditions (sustained winds of 39 to 73 mph) are possible within the specified coastal area within 48 hours.

---

[Home](#), [Parent Office](#), [Marine](#), [Tropical](#), and [Tsunami Services Branch](#),  
[Items of Interest](#), [Forecasts](#), [Observations](#), [Portals](#), [Dissemination](#),  
[Publications](#), [Links](#), [FAQ](#), [Contacts](#), [Feedback](#)

---

[National Weather Service](#)  
[Analyze, Forecast, and Support Office](#)  
[Marine, Tropical, and Tsunami Services Branch \(W/AFS26\)](#)  
Last modified: June 06, 2019  
[Questions, Comments?](#)

[Disclaimer](#)  
[Credits](#)  
[Glossary](#)

[Privacy Policy](#)  
[About Us](#)  
[Career Opportunities](#)