

***NATIONAL WEATHER SERVICE EASTERN REGION SUPPLEMENT 01-2007***

***APPLICABLE TO NWSI 10-310***

***NWSI 10-312***

***NWSI 10-315***

***NWSI 10-320***

***July 11, 2011***

***Operations and Services***

***Marine and Coastal Weather Services, NWSPD 10-3***

***Coastal Marine Forecast Services, NWSI 10-310***

***Great Lakes Marine Services, NWSI 10-312***

***Marine Weather Message, NWSI 10-315***

***Coastal/Lakeshore Hazard Services, NWSI 10-320***

***EASTERN REGION COASTAL AND GREAT LAKES MARINE SERVICES***

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**NOTICE:** This publication is available at: <http://www.nws.noaa.gov/directives/>.

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***SUMMARY OF REVISIONS:*** This supplement replaces ERS 01-2007, “Eastern Region Coastal and Great Lakes Marine Services”, dated October 31, 2008, issued with NWSI 10-310, NWSI 10-312, and NWSI 10-315. This supplement is also now applicable to NWSI 10-320, and contains the following revisions:

1. Expanded and clarified guidance in section 3.1 on marine outlook products.
2. Expanded guidance in section 3.1.1 on headlines.
3. Added allowance of more than 2 routine CWF issuances per day based on local customer needs and agreements.
4. Added section 3.3.c on offices that issue Surf Zone Forecasts.
5. Restructured 3.3.1 to clarify Eastern Region rip current products and services.
6. Added Appendix A to advertise Eastern Region small craft advisory criteria.

<signed>

June 27, 2011

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Acting Director, NWS Eastern Region

Date

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1. **Purpose.** This supplement provides additional guidance for NWSI 10-315, Marine Weather Message, NWSI 10-310, Coastal Marine Services, NWSI 10-312, Great Lakes Marine Services, and NWSI 10-320, Coastal/Lakeshore Hazard Services. As no policy can address all circumstances, situational awareness and forecaster judgment are essential to providing optimal forecast services to our customers and partners.
2. **Products.** This supplement applies to the issuance of the following products: the Marine Weather Message (MWW), the Coastal Waters Forecast (CWF), the Great Lakes Nearshore Forecast (NSH), the Great Lakes Open Lake Forecast (GLF), the Surf Zone Forecast (SRF), and the Coastal Hazard Message (CFW).
3. **Procedures.** Eastern Region (ER) coastal weather forecast offices (WFO) will refer to NWSI 10-315, NWSI 10-310, NWSI 10-312, and NWSI 10-320 for details on appropriate issuance procedures, VTEC encoding and examples.
- 3.1 **Outlook.** The Hazardous Weather Outlook (HWO) may be used to highlight hazardous marine weather conditions which have the potential to threaten life or property throughout any portion of the official marine forecast period. Marine hazards will only be placed in the HWO when there is a 30% chance or greater of meeting/exceeding warning criteria. In addition, for hazards that do not have warning products (such as high surf, rip currents, and other wave events), the HWO may be used when there is at least a 30% chance of that event meeting local criteria. Small craft advisories may be placed in the HWO based upon local customer needs as noted in [NWS ERS 02-2007](#). Additional guidance on the HWO is provided in [NWSI 10-517](#).

A Marine Weather Statement (MWS) may also be issued to highlight marine hazards during the official marine forecast period as noted in [NWSI 10-314](#). The forecaster shall also highlight potential marine hazards in the marine section of the Area Forecast Discussion (AFD). Guidelines for the AFD are outlined in [NWSI 10-503](#) and [NWS ERS 10-2004](#).

- 3.1.1 **Headlines.** All watches, warnings and advisories will be initially issued, extended, upgraded, downgraded and cancelled via the Marine Weather Message (MWW). Headlines for the CWF, NSH, GLF, and MWW will be derived from the marine hazard grids generated in the Graphical Forecast Editor (GFE) software. Thus, the MWW must be issued at a similar time as the CWF, NSH and/or GLF to ensure headlines are consistent among these products.
  - a. Watch headlines should be issued for the second, third and occasionally fourth forecast period when there is a 50% or greater chance of meeting/exceeding warning criteria. The ending time for watch headlines is when the hazardous marine event is expected to end, as noted in [NWSI 10-315](#). The following watch headlines will be issued when conditions warrant in the first 12 to 48 hours: Gale, Storm, Hurricane Force Wind, and Heavy Freezing Spray.
  - b. Warning headlines will be issued for the first three periods when there is an 80% or greater chance of meeting/exceeding warning criteria. The ending time for warning

headlines is when the hazardous marine weather event is expected to end, as noted in [NWSI 10-315](#). However, the event ending time should generally not exceed 36 hours from the time of issuance. The following warnings will be issued when conditions are imminent, occurring or expected in the next 36 hours: Gale, Storm, Hurricane Force Wind, and Heavy Freezing Spray.

- c. Advisory headlines will be issued for the first, second, or occasionally third forecast periods when there is an 80% or greater chance of a hazardous marine weather event meeting or exceeding local advisory criteria (as noted in Appendix A). The ending time for advisory headlines is when the hazardous marine weather event is expected to end, as noted in [NWSI 10-315](#). The event ending time should generally not exceed 36 hours from the time of issuance. WFOs will issue the appropriate advisories described in [NWSI 10-315](#) that are expected in the next 36 hours.

1. Small Craft Advisories (SCA): The SCA for combined winds and seas is a mandatory headline when wind, seas or both are expected to meet or exceed small craft advisory criteria as defined in Appendix A. There are several other small craft advisory headlines: Small Craft Advisory for Winds (SCAW), Small Craft Advisory for Hazardous Seas (SCAHS), Small Craft Advisory for Rough Bar (SCARB) and Small Craft Advisory for combined wind and seas (SCA). The appropriate SCAW, SCAHS or SCARB headline may be used if, in the forecaster's judgment, there is an 80% or greater that only one of the hazards such as hazardous seas, winds or rough bar will be present.

- i. Only one SCA headline will be in effect during a forecast. If two separate SCA events are expected within the first three periods, the forecaster has discretion to either a) extend the initial SCA headline through the next event or b) wait until the first event ends to issue the next SCA headline. In either case, the transition of events should be clearly communicated in the text of the MWW and other products such as the AFD. If in doubt as to whether conditions warrant the issuance of an SCAHS or SCAWS, use the generic SCA headline.
- ii. Coastal offices should use the lower wind and/or wave criteria (20-25 kts, 5-7 foot waves) for determining when to issue a small craft related advisory for any marine area with a high concentration of recreational and/or commercial small vessel traffic.
- iii. A Small Craft Exercise Caution (SCEC) headline may be used to alert mariners of wave or wind conditions that are below SCA, SCAW or SCAHS criteria which may impact operators of small vessels. Criteria for SCEC headlines are defined locally at the WFO.
- iv. WFOs may use the headline "SMALL CRAFT SHOULD REMAIN IN PORT" when a tropical cyclone watch is in effect and wind/wave conditions are indicative of Small Craft Advisory conditions or greater. Further guidance on marine headlines during tropical watch/warnings is provided in table 3 of [NWSI 10-601](#).

- d. Other Headline Information

1. Hazardous Seas Watch/Warnings (as described in [NWSI 10-315](#)) are not issued in Eastern Region.
2. Headlines will not “ramp down” from a warning to an advisory or watch unless the advisory hazard is the terminating headline and forecaster confidence is high the warning hazard will end in the period preceding the advisory hazard.

- a. Headlines will not “ramp down” from a “higher” order warning hazard to a “lower” order warning hazard unless forecaster confidence is high the higher order hazard will end in the period preceding the lower order hazard. For example:

(1<sup>st</sup> period)

...STORM WARNING IN EFFECT...

(2<sup>nd</sup> period)

...GALE WARNING IN EFFECT...

- b. A “Watch” may be upgraded to a warning or advisory as appropriate, or cancelled. An upgrade or cancellation should not occur within the same forecast period as the initial watch was issued.

3. Forecasters may use more than one headline to indicate multiple hazards or worsening conditions. For example:

...SMALL CRAFT ADVISORY IN EFFECT UNTIL 9 AM EST THIS MORNING...

...GALE WATCH IN EFFECT FROM THURSDAY AFTERNOON THROUGH FRIDAY AFTERNOON...

- a. An update to the CWF, NSH, and/or GLF will be issued whenever a Severe Thunderstorm Watch or Tornado Watch is issued, canceled, or expires for the coastal or Great Lakes waters. The official VTEC product for convective watches and warnings over land and marine zones is the Watch County Notification (WCN) message. Thus, the CWF, NSH, and/or GLF should be issued as soon as possible after the WCN is issued to ensure a consistent message is conveyed.

4. Headlines should not “ramp up” or “ramp down” within a single forecast period. “Higher” order hazards take precedence over “lower” order hazards within a single forecast period. For example, if a Gale Warning is

expected to end at the same time and forecast period that an SCA is expected to begin, the Gale Warning will be the only headline used.

5. Headline issuance and event duration will be collaborated with surrounding WFOs and OPC as appropriate.

### **3.2 Issuance Times**

- a. Details on the routine issuance criteria of the CWF and the NSH/GLF products are provided in [NWSI 10-310](#) and [NWSI 10-312](#), respectively.
- b. Forecasters should update the CWF, NSH and/or GLF to ensure optimal forecasting and warning services are provided to our customers and partners.

### **3.3 Surf Zone Forecasts**

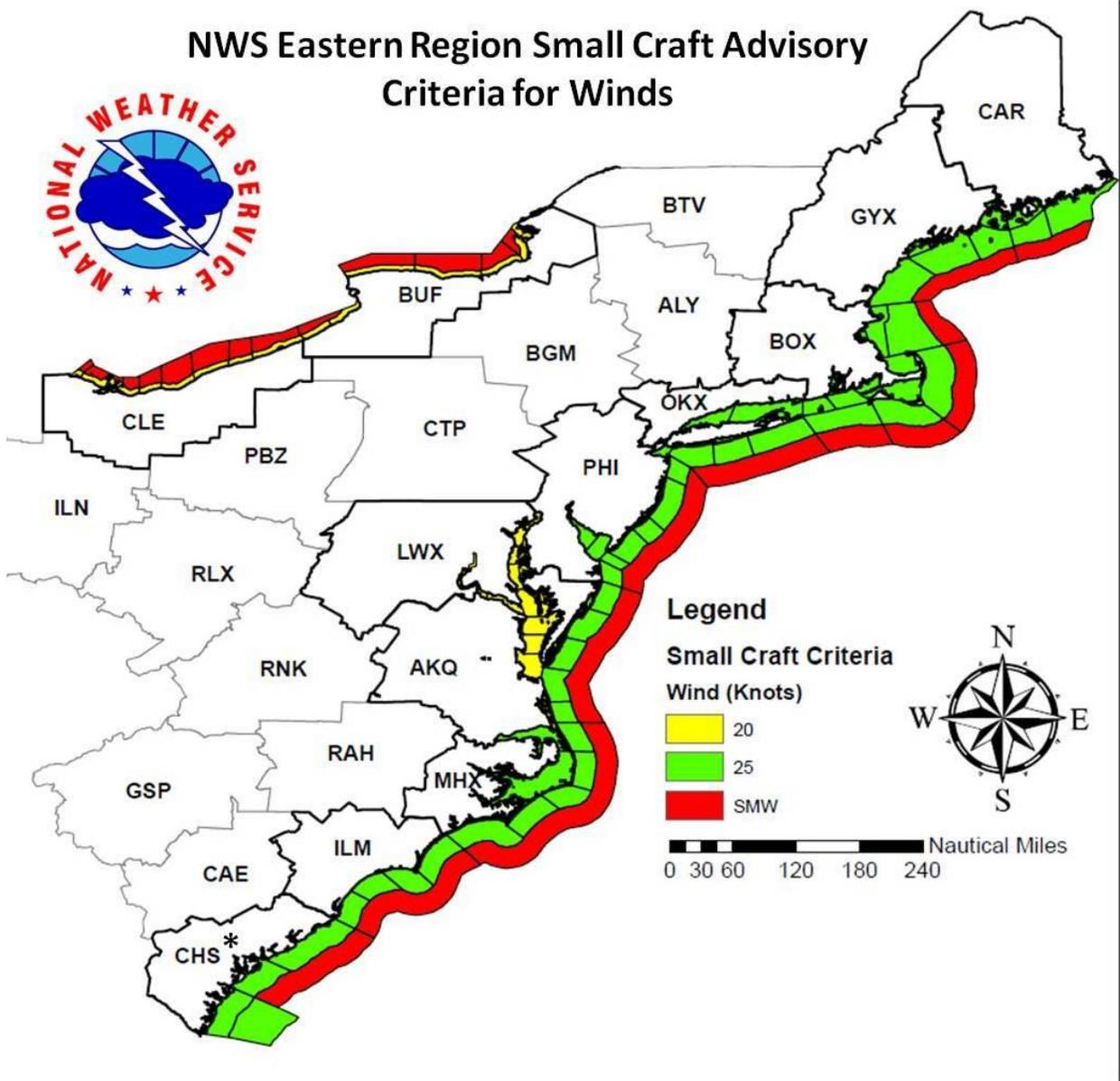
- a. The Surf Zone Forecast (SRF) product is issued to provide information on hazards that will impact users on the surf zone and beachfronts. Users may include the general public, beachfront safety services (i.e., lifeguards, beach patrols) and local government agencies and officials.
- b. The issuance of the SRF should be based upon collaboration with beachfront and shoreline customers and partners.
- c. The ER offices that currently issue surf zone forecasts include Boston, MA, Upton (NYC), NY, Philadelphia/Mount Holly, NJ, Wakefield, VA, Morehead City/Newport, NC, Wilmington, NC, and Charleston, SC – as described on <http://www.ripcurrents.noaa.gov/forecasts.shtml>.

#### **3.3.1 Rip Currents**

- a. The SRF is the primary product for routine rip current information for the East Coast ER offices listed in 3.3c. Given the nature of rip currents on Lake Erie, WFO Cleveland does not issue a routine SRF product but does highlight a moderate and high risk of rip currents in the HWO and NSH.
- b. Additional guidance on the NWS rip current program, including issuing rip current headlines and statements (via the CFW), can be found in [NWS 10-310](#).

**APPENDIX A – Small Craft Advisory Criteria**

NOTE: Routine marine forecasts from Eastern Region are not issued for the red shaded zones in the below criteria maps. However, Special Marine Warnings (labeled SMW in the legends) are issued in these areas.



\*NOTE: WFO Charleston (labeled CHS in above image) has 25 knot criteria for all Atlantic Ocean marine zones. However, WFO CHS has 20 knot criteria for Charleston Harbor (AMZ330) which is not shown above.

