

NATIONAL WEATHER SERVICE INSTRUCTION 10-305

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Operations and Services

Marine And Coastal Weather Services, NWSPD 10-3

MARINE ZONE CHANGE PROCESS

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

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SUMMARY OF REVISIONS: This directive supersedes NWSI 10-305, Marine Zone Change Process dated September 9, 2010. The following changes were made to this instruction:

1. Although NWSI 10-1805 now mandates a minimum notice of only 75 days for marine zone changes, users need to make significant hardware and software changes to their systems whenever zone names or UGCs will be changed. Therefore the required minimum 120 day lead time remains unchanged in this instruction.
2. Added requirement in Tables 1 and 3 for WFOs and national centers, respectively, to successfully test the new shapefiles and notify OST before the SCN can be released.
3. Enhanced Item #6 in Table 2 to add impact of zone changes on tropical cyclone breakpoint associations.
4. Replaced TPC with NHC.
5. Moved Tables 1-4 into appendices: one for WFO and regional actions and one for national center actions.
6. Clarified early notification process in section 3.1.
7. Added a third date change to allow zone changes to be effective at the end of the hurricane season. The 3 date changes are April 1, October 1, and December 1.
8. Added a section for emergency marine zone changes.

signed

October 4, 2012

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Director, Office of Climate,
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Date

**Marine Zone Change Process
Table of Contents**

	<u>Page</u>
1. Introduction.....	3
2. Types of Zone Map and Zone Listing Changes	3
2.1 Corrections for Errors on Zone Maps and in Listings.....	3
2.2 Changes to Marine Zone Boundaries	3
2.3 Changes to Marine Zone Names and Codes	3
3. Change Request Procedures and levels of Approval.....	3
3.1 Weather Forecast Office (WFO) Responsibility	3
3.2 NWS Regional Headquarters Responsibility	4
3.3 NWS National Center Responsibility	4
4. NWS Headquarters Roles and Responsibilities	4
4.1 Office of Climate, Water, and Weather Services (OCCWS)	5
4.2 Office of Science and Technology (OST).....	5
4.3 Office of Operational Systems	5
4.3.1 OOS Zone Listing Change Procedure	6
4.3.2 OOS Zone Map Change Procedure	6
4.4 Management and Organization Division of the Chief Financial Officer/Chief Administrative Officer (CFO3)	6
5. Emergency Marine Zone Changes	6
Appendices	
A. Tables 1-2.....	A-1
B. Tables 3-4.	B-1

1. Introduction. This procedural instruction describes the process for requesting, coordinating and implementing changes to marine zone maps and marine zone listings filed in the National Weather Service (NWS) Directives System (NDS).
2. Types of Marine Zone Map and Marine Zone Listing Changes. Three different types of marine zone map and marine zone listing changes are described below.
 - 2.1 Corrections for Errors on Marine Zone Maps and in Marine Zone Listings. These changes are necessary to correct errors, or any errors of omission, found on marine zone maps and in marine zone listings in *NWSI 10-302, Marine and Coastal Services Areas of Responsibility*.
 - 2.2 Changes to Marine Zone Boundaries. Changes to marine zone boundaries involve the movement of current marine zone boundaries, the creation of new marine zones, or the deletion of existing marine zones.
 - 2.3 Changes to Marine Zone Names and Codes. Changes to marine zone names and codes result from the correction of errors or other justifiable needs to modify a marine zone name or code.
3. Change Request Procedures and Levels of Approval.
 - 3.1 Weather Forecast Office (WFO) Responsibility. To encourage early collaboration, WFOs should send an early notification of change request by email to their regional marine program managers 15-30 days prior to submitting the formal change request. The region marine program manager or division chief should then notify the Marine and Coastal Weather Services Branch Chief in Office of Climate, Water, and Weather Services (OCWWS) at NWS Headquarters as soon as possible. See Table 1 for a summary of the marine zone change process.

Each WFO is responsible to initiate the change request for all coastal or Great Lakes marine zones in its area of responsibility. In addition, a WFO also issuing offshore and/or high seas forecasts is responsible to initiate the change request for all offshore and/or high seas marine zones in its area of responsibility. Submit the change request via e-mail to the responsible regional division in accordance with the following guidance. The division chief, or their designate, will submit the request to the Branch Chief, Marine and Coastal Weather Services (OS21).

The change request will contain as appropriate:

- a. Any errors found on marine zone maps and in marine zone listings, and proposed corrections.
- b. A written justification for any change to marine zone boundaries. If necessary for clarification, include a clearly labeled map depicting the changes to marine zone boundaries.

c. A written justification for any change to marine zone names and code. If necessary for clarification, include a clearly labeled map depicting the names and codes. Assign a unique zone number to all newly created zones. Also include a list of WFO actions in response to all the possible impacts of the proposed marine zone changes. See Table 2.

d. Include a draft service or technical change message conforming to format and instructions in NWSI 10-1805. A National Weather Service Change Notice, approved and issued by the Chief, Marine and Coastal Weather Services Branch, is required for changes to marine zone boundaries or marine zone names and codes. These changes require at least 120 days of public notification prior to the effective date. Changes to marine zones will be considered for approval three times per year with effective dates of April 1, October 1, or December 1. Therefore all coordinating and processing begins at least seven months prior to April 1, October 1, or December 1 and are completed at least five months prior to April 1, October 1, or December 1 to allow OS21 a minimum of 30 days to complete the clearance process prior to the notice of 120 days. See Table 1 for the minimum required timeline for meeting these implementation dates.

3.2 NWS Regional Headquarters Responsibility. NWS regional headquarters are the points of contact for all change requests received from their respective coastal and Great Lakes WFOs, and WFOs with offshore and high seas responsibilities. The division chief is responsible for reviewing requests (e.g., ensuring sound reasoning and adequate justification) and verifying any errors. The division chief forwards the requests to the Marine and Coastal Weather Services Branch Chief in Office of Climate, Water, and Weather Services (OCWWS) at NWS Headquarters.

3.3 NWS National Center for Environmental Prediction (NCEP) Center Responsibility. To encourage early collaboration, the National Center Branch Chief should send an early notification of changes by email to the OCWWS Branch Chief 15-30 days prior to submitting the formal change request. See Table 3 for a summary of the marine zone change process and the minimum required deadlines for meeting these implementation dates. Each NCEP (national) center issuing offshore and high seas forecasts (Ocean Prediction Center or Tropical Prediction Center) is responsible to initiate the change request for all offshore and high seas marine zones in its area of responsibility. The National Center Branch Chief submits the change request via e-mail to the Marine and Coastal Weather Services Branch Chief in OCWWS at NWS Headquarters. See the content in section 3.1 and Table 4 for what the change request will contain. In the change request, include a list of National Center actions in response to all the possible impacts of proposed marine zone changes.

4. NWS Headquarters Roles and Responsibilities. The NWS Headquarters offices that are involved with the marine zone change process include: the Office of Climate, Water, and Weather Services (OCWWS), the Office of Science and Technology (OST), the Office of Operational Systems (OOS), and the Chief Financial Officer/Chief Administrative Officer (CFO).

4.1 Office of Climate, Water and Weather Services (OCWWS). OCWWS has the responsibility to ensure maps and zone listings are updated as necessary, and OCWWS is the final approving authority for all marine zone related changes and effective dates and subsequent updates to *NWSI 10-302, Marine and Coastal Services Area of Responsibility*. Approval is granted in coordination with the Marine and Coastal Weather Services Branch Chief. OCWWS should acknowledge marine zone change requests from regional headquarters and national centers within 15 business days of receipt. The Marine and Coastal Weather Services Branch Chief, or designate, is the NWS Headquarters focal point for the overall marine zone change process. The Marine and Coastal Weather Services Branch Chief, or designate, coordinates with appropriate offices within NWS Headquarters, regional headquarters, National Centers for Environmental Prediction (NCEP) centers (includes OPC and NHC), the Tsunami Warning Centers (TWC), and depending upon the required changes, may correspond with involved WFOs. Specifically, the Marine and Coastal Weather Services Branch Chief, or designate, is responsible for the following:

- a. Coordinating the details of all marine zone related changes with other NWS Headquarters elements;
- b. Ensuring that any changes made by other NWS Headquarters elements are timely, accurately, and correctly formatted;
- c. Maintaining accurate records for all marine zone maps and listing changes;
- d. Approving and processing the PNS Service Change Notice submitted by the appropriate regional headquarters or national centers and making sure these issuances are distributed to NWS users, including the TWCs, within the specified time frame;
- e. Ensuring that all updates to *NWSI 10-302, Marine and Coastal Services Areas of Responsibility* are posted, and as up-to-date as feasible; and
- f. Coordinating with other entities such as the U.S. Coast Guard.

4.2 Office of Science and Technology (OST). OST has the responsibility to modify the Geographic Information System (GIS) map shapefile. The revised shapefile is posted to the AWIPS Map Database Catalog for public access, placed on the NOAA1 secure server, and converted to a border point file. OST transmits a notice via AWIPSINFO indicating that the revised marine zone map has been posted to the AWIPS Map Database Catalog, and transmits a “notification of change” e-mail to OOS and the Marine and Coastal Weather Services Branch Chief in OCWWS.

4.3 Office of Operational Systems (OOS). OOS is responsible for tasking individuals with specific assignments to make the required marine zone map and/or zone listing changes.

4.3.1 OOS Zone Listing Change Procedure. OOS modifies the zone listing files using standard NWS word processing software. The revised files are attached to an e-mail and sent to the Marine and Coastal Weather Services Branch Chief, or designate, in OCWWS for review. Once approved, OOS posts the modified marine zone listing files to the appointed server in (.PDF) format.

4.3.2 OOS Zone Map Change Procedure. OOS uses GIS compatible software to make the marine zone map revisions. Once approved, OOS posts the updated maps to the appointed server in (.JPG) and (.PDF) formats for viewing and printing. All zone maps are clearly labeled with the date of the most recent revision. A “notification of map posting” e-mail is then sent to the Marine and Coastal Weather Services Branch Chief, or designate, in OCWWS, and the Chief Financial Officer/Chief Administrative Officer (CFO) focal point.

4.4 Management and Organization Division of the Chief Financial Officer/Chief Administrative Officer (CFO3). The CFO focal point is responsible for updating ***NWSI 10-302, Marine and Coastal Services Areas of Responsibility*** on the NDS website. The CFO focal point should contact the Marine and Coastal Weather Services Branch Chief, or designate, in OCWWS when the website update is complete.

5. Emergency Marine Zone Changes. Emergency needs for marine zone changes will be considered on a case by case basis. An example of an emergency need is a major technology change where the zone change has to occur with the technology change and there is a moving target date. Requests for emergency marine zone changes will be forwarded to the OCWWS Marine and Coastal Weather Services Branch Chief. Coordination among the affected WFOs, centers, regions, and the Marine and Coastal Weather Services Branch should begin as early as possible. The affected WFO’s, centers, regions, and the Marine and Coastal Weather Services Branch will approve or disapprove the request.

Appendix A - Tables 1-2 (WFO and Regional Actions)

Table 1 - Time line of Marine Zone Changes initiated by WFO (continued on next page)

Marine Zone Change Process	Deadlines for April 1 Implementation	Deadlines for October 1 Implementation	Deadlines for December 1 Implementation
Requesting WFO sends preliminary notification to Region and to OS21 Branch Chief and Marine Program Manager.	September 1	March 1	May 1
Requesting WFO obtains approval/disapproval from regional Division Chief.	September 15	March 15	May 15
Regional marine program manager forwards request/justification and draft Service Change Notice (SCN) from requesting WFO to OS21 Branch Chief and OS21 Program Manager. Requesting WFO should refer to NWSI 10-1805 for draft SCN preparation.	September 25	March 25	May 25
OS21 Branch Chief notifies Division Chief of approval or disapproval.	October 15	April 15	June 15
Regional Focal Point submits Request for Change (RC) if product and/or communication identifiers are part of the change. See NWSI 10-101.	October 31	April 30	June 30
OS21 works with OST to create new shapefiles for the zone change.	October 31	April 30	June 30
OS21 and Region work together to finalize draft SCN following the procedures in NWSI 10-1805.	October 31	April 30	June 30

Marine Zone Change Process	Deadlines for April 1 Implementation	Deadlines for October 1 Implementation	Deadlines for December 1 Implementation
<p>OS21 completes the OCWWS clearance process which results in a final SCN. Note: OS21 needs a minimum of 30 days to complete the OCWWS clearance process. Meanwhile WFO successfully tests the new shapefiles and notifies OST when shapefiles successfully tested. SCN cannot be released until this is accomplished.</p>	<p>November 30</p>	<p>May 31</p>	<p>July 31</p>
<p>SCN goes out NLT:</p>	<p>December 1 to meet the required minimum 120 day notice but preferably as early as possible in the preceding 30 days.</p>	<p>June 1 to meet the required minimum 120 day notice but preferably as early as possible in the preceding 30 days.</p>	<p>August 1 to meet the required minimum 120 day notice but preferable as early as possibly in the preceding 30 days.</p>

Table 2 - Marine Zone Change Impacts and Associated Actions (WFOs and Regions)
 (Continued on next page)

Impact of proposed marine zone change	Minimum Required Actions (other impacts should be identified in the WFO's request for change)
1. NOAA Weather Radio Broadcast.	WFO addresses the change expected in length of the broadcast cycle or possible impact to change of transmitter.
2. US Coast Guard (USCG) broadcast of NWS marine forecasts over USCG radio frequencies.	WFO presents summary of notification provided to the USCG sector in the WFO Area of Responsibility, and feedback received, on how this change effects USCG broadcast of weather and safety information.
3. Mariners at large.	WFO presents summary of notification provided to the recreational and commercial mariners in the WFO Area of Responsibility, and collects their feedback on how this change affects their activities and operations.
4. Will the proposed change remove portion of inland waters from the marine zones?	If so, WFO takes action to include those affected areas into other marine zones or land zones.
5. Storm Prediction Center (SPC). The SPC marine zone database is synchronous with the WFO marine zone databases to ensure consistency between SPC and WFO products.	Region coordinates with marine zone focal point at SPC to ensure SPC has made the change(s) to their marine zone database immediately following the implementation date.

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Impact of proposed marine zone change	Minimum Required Actions (other impacts should be identified in the WFO's request for change)
6. NHC and OPC. Which of their Offshore Marine Zones line up against the changed WFO Coastal Marine Zones? Are NHC breakpoint associations impacted?	WFO/Region coordinates with NHC and OPC to ensure they made any necessary changes to their marine zone databases. Also notify NHC so changes can be made to WFOs breakpoint associations if applicable.
7. EAS/SAME. Commercial broadcasters have to program their EAS boxes for any marine zone/UGC changes. Owners of SAME equipped NWR receivers have to program the marine zones by the pseudo FIPS codes which are based on the UGCs.	WFO/Region includes a draft service or technical change message conforming to format and instructions in NWSI 10-1805 for OS21 approval.
8. Web sites containing marine zones show the changed zones by the effective date.	WFO/Region coordinates with NOAA webmasters. OCWWS releases SCN to notify impacted non-NOAA web masters. WFO/Region opens ticket with TOC so NWS web page point and click map can be updated.
9. User preparation for zone change(s); need for advance notification.	WFO/Region includes a draft service or technical change message conforming to format and instructions in NWSI 10-1805 for OS21 approval.
10. Neighboring WFOs that provide service backup will have the new maps in their AWIPS databases.	WFO/Region coordinates changes with backup WFOs to ensure they have the new maps in their AWIPS databases.

<p>Impact of proposed marine zone change</p>	<p>Minimum Required Actions (other impacts should be identified in the WFO's request for change)</p>
<p>11. Tsunami Warning Centers (TWC). The TWCs marine zone databases are synchronous with the WFO marine zone databases to ensure TWC products contain the correct marine zones.</p>	<p>Region coordinates with appropriate TWC to ensure TWC has made the change(s) to their marine zone</p>

Appendix B - Tables 3-4 (National Center Actions)

Table 3 - Time Line of Marine Zone Changes Initiated by National Centers
(Continued on next page)

Marine Zone Change Process	Deadlines for April 1 Implementation	Deadlines for October 1 Implementation	Deadlines for December 1 Implementation
Requesting national center sends preliminary notification to OS21 Branch Chief and Marine Program Manager.	September 1	March 1	May 1
National Center Branch Chief submits request/justification and draft Service Change Notice (SCN) to OS21 Branch Chief and OS21 Program Manager. Refer to NWSI 10-1805 for draft SCN preparation.	September 25	March 25	May 25
OS21 Branch Chief notifies National Center Branch Chief of approval or disapproval.	October 15	April 15	June 15
Focal Point submits Request for Change (RC) if product and/or communication identifiers are part of the change. See NWSI 10-101.	October 31	April 30	June 30
OS21 works with OST to create new shapefiles for the zone change.	October 31	April 30	June 30

Marine Zone Change Process	Deadlines for April 1 Implementation	Deadlines for October 1 Implementation	Deadlines for December 1 Implementation
OS21 and National Center work together to finalize the draft SCN following the procedures in NWSI 10-1805.	October 31	April 30	June 30
OS21 completes the OCWWS clearance process which results in a final SCN. Note: OS21 needs a minimum of 30 days to complete the OCWWS clearance process. Meanwhile national center successfully tests the new shapefiles and notifies OST when shapefiles successfully tested. SCN cannot be released until this is accomplished.	November 30	May 31	July 31
SCN goes out NLT:	December 1 to meet the required minimum 120 day notice but preferably as early as possible in the preceding 30 days.	June 1 to meet the required minimum 120 day notice but preferably as early as possible in the preceding 30 days.	August 1 to meet the required minimum 120 day notice preferably as early as possible in the preceding 30 days.

Table 4 - Marine Zone Change Impacts and Minimum Required Actions for National Centers

Impact of proposed marine zone change	National Center Actions (other impacts issues should be identified in the national center's request for change)
1. US Coast Guard (USCG) broadcast of NWS marine forecasts over USCG radio frequencies.	Present summary of notification provided to the USCG sector in the National Center Area of Responsibility, and feedback received, on how this change effects USCG broadcast of weather and safety information.
2. Mariners at large.	Present summary of notification provided to the recreational and commercial mariners in the National Center Area of Responsibility, and feedback received, on how this change affects their activities and operations.
3. Web sites containing marine zones show the changed zones by the effective date.	National Center coordinates with NOAA webmasters. OCWWS releases SCN to notify impacted non-NOAA web masters.
4. User preparation for zone change(s); need for advance notification.	National Center includes a draft service or technical change message conforming to format and instructions in NWSI 10-1805 for OS21 approval.
5. Coastal WFOs. Which of their Coastal Marine Zones line up against the changed Offshore Marine Zones?	Coordinates with impacted coastal WFOs to ensure they made any necessary changes to their marine zone databases immediately following the implementation date.