

NATIONAL WEATHER SERVICE CENTRAL REGION SUPPLEMENT 08-2004

APPLICABLE TO NWSI 10-921

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Operations and Services

Hydrologic Service Programs, NWSPD 10-9

Hydrologic Service Program Management, NWSI 10-901

River Forecast Center Operations, NWSI 10-911

Weather Forecast Office Hydrologic Operations, NWSI 10-921

AUTHORIZATION FOR NEW AND/OR EXPANDED HYDROLOGIC SERVICES

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

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SUMMARY OF REVISIONS: This supplement supersedes Central Region Supplement 08-2004 applicable to NWSI 10-921 dated October 9, 2008. The following noteworthy revisions were made to this supplement:

1. Section 3 - Added “Minor, Moderate, and Major flood categories will be defined.”, to the definitions of Forecast Point (FP) and Local Forecast Point (LFP). Added “change to flood stage categories (or flow level equivalents), change to forecast issuance stage,” to 3b. Changed Hydrologic Service definition
2. Section 4.1 – Added Coordinating section to Procedure section
3. Section 4.2.1 – Updated link for MOU Process
4. Section 4.5 – Updated link for NWSI 10-924
5. Section 4.7 – Added Copy of Public Information Statement to CRH
6. Section 4.7.1 – Added Service Change Notice Examples, now in mixed case
7. Removed Appendix C

(Signed by)
Christopher S. Strager
Director, Central Region

October 28, 2019
Date

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1. Purpose: The purpose of this supplement is to clarify procedures for requesting new hydrologic services, changing existing hydrologic services, and discontinuation of hydrologic services at Weather Forecast Offices (WFOs) and River Forecast Centers (RFCs). This supplement also provides examples of public notification and an e-mail method of request and approval for timely implementation.

2. Background: The Service Hydrologist or Hydrology Focal Point (herein collectively referred to as the Hydrology Program Manager, or HPM), in coordination with the RFC and partners such as Emergency Managers and other officials, provides requests for new or changed hydrologic services to the MIC. The MIC then determines the need for these new or changed hydrologic services in the WFOs Hydrologic Service Area (HSA). Where RFCs determine a need for a forecast service change involving numerous WFOs, the Hydrologist in Charge (HIC) may designate one of his or her staff to coordinate the change.

Central Region Headquarters (CRH) Integrated Services Division (ISD) approves requests for new hydrologic services and changes to existing hydrologic services.

Instructions regarding U.S. Geological Survey (USGS) gauge closures, flood stage changes and gauge zero changes can be found in NWSI 10-940. Instructions for new or significantly altered internet products and services are in NWSI 10-102.

3. Definitions: The following definitions apply to this supplement:

Forecast Point (FP): A FP has an established flood stage (Minor, Moderate, and Major flood categories will be defined), an E-19, E-19a and a river gauge (preferably automated) for which the RFC provides a forecast. It should have a rating table.

Local Forecast Point (LFP): A LFP is a point for which either the RFC provides headwater guidance or site specific guidance instead of a regularly modeled forecast, or the WFO has a local procedure or model to provide forecasts for that point. A LFP should have a river gage (preferably automated), an established flood stage (Minor, Moderate, and Major flood categories should be defined) and an E-19a. It is strongly recommend it have a rating table. Although requesting forecast services at ungauged locations is discouraged, exceptions may be allowed. Such requests will be reviewed by CRH/ISD on a case-by-case basis and should follow the same procedure described in this supplement.

Hydrologic Services: Hydrologic service changes include:

a. Establishment of a new FP or LFP for which operational information will be provided (e.g., stage, flow, volume, probability of exceedance, probability of non- exceedance). For development of a new or experimental hydrologic product, refer to NWSI 10-102.

b. Changed hydrologic services including: a) relocation or closure of a FP or LFP for which operational products or other information have been provided; b) expansion of current services (e.g., add probabilistic forecasts); c) change of flood stage categories (or flow level equivalents); d) change to forecast issuance stage; e) change flood only to daily forecasts; and f) change 5-day forecasts to 7-day forecasts, etc.

c. ISD approval is now required for changes to minor, moderate, or major flood categories, and the following actions should be taken before seeking ISD approval or making changes to AHPS webpages or E-19s.:

1. Verify either on site or with EM/City Official that the impact change is accurate.
2. Collaborate with the RFC to determine the hydrologic / hydraulic impacts of the change to ensure changes are accurate.

4. Procedure: The following procedure will be followed for request and approval of new hydrologic services or changes to existing hydrologic services.

4.1 Coordination: The HPM will coordinate with local emergency management and other affected officials, servicing RFCs, and other impacted government agencies (USGS,USACE, etc.) to determine the requirements for the change in service, i.e. reason/need for a river forecast point, change in Low Water Thresholds, Action stage, Forecast Issuance stage, Minor, Moderate, or Major flood stage (or flow equivalent thresholds), rating curve development time, etc. HPMs are also encouraged to include the Observation Program Leader (OPL)/ Data Acquisition Program Manager (DAPM) and Warning Coordination Meteorologist (WCM) in these efforts.

4.2 Requests: Upon approval of the Meteorologist or Hydrologist in Charge, the HPM or RFC designee will request a change for new or existing NWS hydrologic services by submitting the request via e-mail to cr.crhhydro@noaa.gov. The submitter should expect a response within five business days. The e-mail request should contain information specific to the change, including but not limited to:

- FP/LFP affected river or stream and gauge location name
- Current services: type and frequency of delivery
- Proposed change (e.g., new, expanded, reduced, discontinued; datum, flood category level stages/flows)
- Reason for change
- Parties affected and coordination completed
- Any associated costs (would result in additional requirements process)
- Affected products
- Proposed effective date

Note: The proposed effective date must be agreed upon by both WFO and RFC, and take into account PNS guidelines for 30-day lead time notification. If the request does not contain the coordinated proposed effective date, CRH will not approve the request.

4.2.1 Requests involving Flood Warning Systems: Requests involving the establishment or expansion of flood warning systems which involve a cooperative effort between the community and the NWS require a signed agreement (Memorandum of Understanding (MOU)) between the cooperator and the NWS. More information on the MOU process and obtaining environmental data from external parties is available from the Office of the Chief Information Officer at: https://sites.google.com/a/noaa.gov/nws-best-practices/nws-hq/cio/data_agreements, and through the Office of the General Counsel at: <https://ogc.commerce.gov/page/agreements-process>.

4.3 Review: ISD will designate a point of contact (POC) to coordinate an evaluation of the request with the offices involved (WFOs, RFCs, CRH divisions, national headquarters, other regional headquarters, etc.) and process the request. If needed, the RFC will provide a technical evaluation of the validity of the request and the resources and time needed to implement it (e.g., new calibration, rating table availability).

4.4 Approval: ISD will notify the requesting HPM or RFC of the approved services (those requested or alternative services based on available data and forecast procedures).

4.5 Implementation: The HPM or RFC will coordinate the new service or change in service with affected hydrologic partners and customers (e.g., emergency managers, other hydrologic agencies, media), update local databases, update AHPS web pages, and issue new or updated forms E-19 and E-19a as required in NWSI 10-924 (within 60 days for a new FP/LFP and within 30 days for other significant changes such as discontinuance of a FP/LFP). The WFO should keep a file of request, contact, and process information. Appendix A of this supplement, "Hydrologic Service Change Request Implementation Check List" is provided as a change management tool.

4.6 Public Notification: The public will be notified of the new service or change in service in a Public Information Statement (PNS) following guidelines in Table 1, Section 5 and Section 2.1 of NWSI 10-1805. If the type of service change is not specified in Table 1 of NWSI 10-1805, field offices should consult with a broad cross section of appropriate partner and customer groups to determine the impacts of the change and set an advance lead time which accommodates those impacts. If not specified in Table 1, notification lead time is typically 30 days, but can be more or less depending on customer needs. Field offices will post the PNS to their homepage according to the appropriate national/regional procedures, and may also wish to issue a news release or send letters as appropriate. Additionally, the service change can be added as a statement in a river product template for a period of time. This statement would be positioned within the products in compliance with NWSI 10-922.

4.7 Copy of PNS to CRH: The HPM will send an electronic copy of the PNS to cr.crhhydro@noaa.gov for regional tracking purposes.

4.7.1 Public Information Statement (PNS) Examples

1. New Forecast Point PNS Example:

NOUS43 KARX 182000
PNSARX

Service Change Notice
National Weather Service La Crosse WI
1115 AM CST MON MAY 23 2016

To: Family of Services/FOS/ Subscribers...NOAA Weather Wire
Service /NWS/ Subscribers...Emergency Managers Weather
Information Network /EMWIN/ Subscribers...NOAAPORT
Subscribers...National Weather Service /NWS/ Partners
And Other Users...and NWS Employees

From: Mike Welvaert
Service Hydrologist
NWS La Crosse WI

Subject: New Forecast Service For:
Upper Iowa River near Bluffton in Winneshiek County in
Northeast Iowa

Beginning at noon on Wednesday, June 29, 2016, NOAA's National Weather Service /NWS/ Office in La Crosse, WI will commence the provision of new River Forecast Service for one location in its service area:

The Upper Iowa River near Bluffton, Iowa

The new service at this location is a direct result of active coordination over the past several years with County and Local officials in Decorah and Winneshiek County. The new forecast service will not only provide flooding forecasts for areas from Bluffton downstream to near Decorah, but it will also assist recreational interests in that area.

At noon on June 29th, NWS La Crosse will begin to issue hydrologic products as necessary that may include specific river forecasts. The hydrologic products are listed in the following table:

PRODUCT TYPE	WMO HEADER	PRODUCT IDENTIFIER
HYDROLOGIC OUTLOOK	FGUS73 KARX	MKEESFARX
FLOOD WATCH	WGUS63 KARX	MKEFFAARX
FLOOD WARNING	WGUS43 KARX	MKEFLWARX
FLOOD STATEMENT	WGUS83 KARX	MKEFLSARX
HYDROLOGIC STATEMENT	FGUS83 KARX	MKERSARX
RIVER SUMMARY	SRUS43 KARX	MKERSAARX

An explicit list of affected products and sample products are posted at: products.weather.gov/viewlist.php

The NWS defines Flood Stage as the river level at which impacts to life and/or property begin.

At Bluffton, the Flood Stage will be 14 feet. The Moderate flood level has been set at 16 feet, with Major flooding beginning at 18 feet. Forecasts will be issued when water levels are expected to exceed 11 feet, and Flood Warnings will be issued when water levels are expected to reach or exceed the Flood Stage level of 14 feet.

Since the automated equipment was installed in October of 1999, the highest water level seen has been 15.49 feet on June 9th, 2008. However, historic records indicate a higher crest of 18.3 feet during the spring flooding of March 27, 1961.

The NWS Location Identifier /NWSLI/ for this location is BLFI4.

In addition to the text information detailed above, graphical depictions of river levels and forecasts are also available on our website. This can be found under the "Rivers and Lakes" option on the main NWS La Crosse web page at: www.weather.gov/lacrosse

If you have any questions or comments on this new service, please contact:

Mike Welvaert, Service Hydrologist
National Weather Service Forecast Office
N2788 County Road FA
La Crosse, WI 54601
Phone: 608-784-8275 Ext. 493
E-Mail: Mike.Welvaert@noaa.gov

This and other NWS Service Change Notices are available online at:
<http://www.weather.gov/om/notif.htm>

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Welvaert

2. Change in Flood Stage PNS Example

SERVICE CHANGE NOTICE
NATIONAL WEATHER SERVICE GREEN BAY WI
700 AM CDT MON FEB 8 2016

TO: Family of Services /FOS/Subscribers...NOAA Weather Wire
Service/NWWS/Subscribers...Emergency Managers Weather
Information Network/EMWIN/Subscribers...NOAAPORT
Subscribers...Other National Weather Service/NWS/
Customers and Partner...NWS Employees.

FROM: Matt Lorentson, NWS Green Bay Meteorologist-in-Charge
Tom Helman, NWS Green Bay Hydrology Program Manager

SUBJECT: Change to Minor Flood Stage for Shiocton, SHIW3, on the Wolf River.
Flood Advisories for the Recreational Season.

Recent flood surveys and coordination with local emergency management have concluded raising the flood stage from 11.0 feet to 12.0 feet will better represent the level when flooding begins to impact structures in the vicinity of Shiocton, WI. This change will be effective March 8, 2016. River observations and forecasts for Shiocton (SHIW3) on the Wolf River can be found on the NWS Green Bay AHPS web site.

In addition, starting this year and primarily for the recreational boating season, River Flood Advisories will be issued during times of high flow, but below flood stage levels, for the main stem rivers of northeast and central Wisconsin.

If you have any questions or comments, please contact:

Tom Helman
National Weather Service Green Bay, WI
2485 South Point Road

NWS CRS 08-2004 November 11, 2019

Green Bay, WI 54313
tom.helman@noaa.gov

or

Jane Doe, Hydrologist
National Weather Service Milwaukee/Sullivan, WI
brian.hahn@noaa.gov

This and other NWS Service Change Notices are available online at:
<http://www.weather.gov/om/notif.htm>

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- Appendix A - Hydrologic Service Change Checklist

COORDINATION	CONTACT NAME	CONTACT DATE	COMMENTS
DAPM/OPL			
RFC			
CRH			
Partners (list)			
Primary Backup			
Secondary Backup			
Customers (PNS)	n/a		
Internet Notice (PNS)	n/a		
Other			

SOFTWARE CHANGES	LOCATION	DATE	COMMENTS
WHFS			
AHPS PAGE			
OTHER (LIST)			

DOCUMENTATION	DATE ISSUED	COMMENTS
E-19		
E-19a		
Primary Backup Information		
Secondary Backup Information		

Appendix B – E- 19 Change Checklist

E-19 Change Checklist

Station Location/ID: _____

Date: _____

The following changes were made to the attached E-19

- | | |
|--------------------------------------|---|
| New Forecast Point _____ | Discontinued Forecast Point _____ |
| Change in Datum _____ | Change in Flood Stage/Categories _____ |
| Change in Action Stage _____ | Change in Bankfull Stage _____ |
| Change in Flood Category _____ | Change in Lat/Lon _____ |
| Change in Phone Number _____ | Change in Observer _____ |
| Change in Type of Gage _____ | Change in Contact.... _____ |
| Change in Area Code _____ | Change in Equipment _____ |
| Change in Observer _____ | Change in Observation Type _____ |
| Updated Point of Contacts _____ | Change in Station Name _____ |
| Changed Station ID/SHEF ID _____ | Updated Map _____ |
| Changed Telemetry _____ | Change in Benchmarks _____ |
| Change affecting flow _____ | Updated USGS Station Description _____ |
| New Flood of Record Stage/Date _____ | Updated Crest Stages _____ |
| Updated Impact Statements _____ | Change in Forecast Issuance Stage _____ |
| Change in Forecast Service _____ | Other _____ |

Additional Notes:
