

***NATIONAL WEATHER SERVICE SOUTHERN REGION SUPPLEMENT 01-2005
APPLICABLE TO NWSI 10-901
June 27, 2011***

***Operations and Services
Hydrologic Services Program, NWSPD 10-9
River Forecast Center Operations, NWSI 10-911
Weather Forecast Office Operations, NWSI 10-921***

Authorization for Changes to Hydrologic Services

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

OPR: W/SR12x1 (Tracy Howieson)

Certified by: (Judson Ladd)

Type of Issuance: Routine

SUMMARY OF REVISIONS:

1. Entire Supplement: Numerous formatting changes.
2. Section 2: Updated to reflect electronic submittal of memorandum.
3. Section 3: Updated RFP/LRFP definition to include display of location on AHPS webpage.
4. Section 6-d: Updated to reflect electronic submittal of memorandum.
5. Section 6-e: Updated to reflect electronic submittal of memorandum.
6. Section 6-g: Updated to reflect electronic submittal of letter of authorization.
7. Appendices: Provided a title for each example given with the appendices. Also, added press release templates to reflect current format. The press release templates provide examples to use for the establishment of new forecast services and changes to flood category levels.

/Signed/

Bill Proenza
Regional Director

June 13, 2011

Date

AUTHORIZATION FOR CHANGES TO HYDROLOGIC SERVICES

<u>Table of Contents</u>	Page
1. Purpose.....	3
2. Background.....	3
3. Definitions	3
4. Exclusions.....	3
5. Discontinuance of RFP and LRFP Services.....	4
6. Procedure.....	4
7. Appendices	6
Appendix A – Example - WFO Request for Flood Category Change	6
Appendix B – Example - WFO Request for Change in Hydrologic Service Area	7
Appendix C – Example - WFO Request for Establishment of River Forecast Point (RFP)	8
Appendix D – Example - WFO Request for Establishment of a Local River Forecast Point (LRFP)	9
Appendix E – Sample Press Release Template for New River Forecast Service	10
Appendix F – Sample Press Release Template for Flood Category Changes	11

1. PURPOSE

The purpose of this Supplement is to provide procedures for requesting new or expanded hydrologic services, or to make changes to existing hydrologic services. Examples of hydrologic service changes include, but are not limited to; the addition or deletion of an RFC river forecast point or a WFO Site-Specific Model forecast point; any change to flood category levels (e.g., minor, moderate, or major flood stage) in a Hydrologic Service Area (HSA); and/or transfer of hydrologic services between two WFO HSAs. A variety of service change request examples are contained in the Appendix.

2. BACKGROUND

Requests for new or changes to existing hydrologic services, including the discontinuation of services, will be submitted electronically in a signed, written memorandum to Southern Region Headquarters (SRH). The request will be approved by the Operational Services Division – Hydrologic Services Branch (OSD – HSB) Branch Chief prior to committing any NWS resources and/or implementing changes to hydrologic models by the River Forecast Centers (RFCs).

3. DEFINITIONS

The following definitions will be used to define hydrologic service points:

- a. **River Forecast Point (RFP):** A hydrologic service point is a RFP if it has a river gauge (preferably with telemetry); the RFC provides an official forecast for that point; flood category levels have been established; a NWS Form E-19 report has been completed; location is available on the AHPS webpage; and the point has been approved by the Hydrologic Services Branch.
- b. **Local River Forecast Point (LRFP):** A hydrologic service point is a LRFP when the RFC does not provide river forecast guidance for that point, but instead the WFO has a local procedure or model to provide forecasts for that point. A LRFP should have a river gauge (preferably with telemetry); established flood criteria levels; a completed NWS Form E-19 report; location is available on the AHPS webpage; and the point has been approved by the Hydrologic Services Branch. An example of a LRFP is WFO Site Specific Model forecast points.

4. EXCLUSIONS

Data points are not considered RFPs and LRFPs and are not subject to the formal approval process for changes. Offices are encouraged to develop and maintain NWS Form E-19 information for data points, where possible. In addition, HPMs may assign flood category levels, if appropriate, even though deterministic point-specific forecasts will not be provided for these data locations. Data points may include:

- a. Informational points encompassing gauged locations that are used for monitoring the body of water, but no official forecasts or point specific flow/stage warnings are provided for this location. This may include hydrologic features such as mainstem rivers, creeks, streams, sloughs, bays (coastal and inland), swamps, and estuaries.

- b. Reservoirs, which could include Tailwater and Pool elevations
- c. Tidal Gauges
- d. Other locations monitored by stream gauge equipment.

5. DISCONTINUANCE OF RFP AND LRFP SERVICES

At times, forecast services will no longer be needed or viable at RFPs or LRFPs. A specific case in point would be if support for the stream gauge observations and measurements are discontinued. For procedures of how to respond to this type of situation, reference Section 4 and 5 of Southern Region Supplement 03-2005 entitled “The Impact of Stream Gauge Closures/Outages on Hydrologic Forecast Services”.

6. PROCEDURE

The following procedure will be utilized for the request and approval of hydrologic forecast services changes:

- a. All requests from outside the NWS for new hydrologic services should be submitted as a signed memorandum, addressed to the meteorologist-in-charge (MIC) at the appropriate Weather Forecast Office (WFO). The office should work with both the requester and the servicing RFC to define requirements. External requests received by the servicing RFC should be forwarded to the appropriate WFO.
- b. Requests from any NWS employee should be coordinated through the MIC of the requesting office.
- c. All requests should be as specific as possible. Requests should include the following information:
 - 1. Type of hydrologic service required,
 - i. Hydrologic services requested can include, but are not limited to:
 - Transfer of hydrologic services between two WFO HSAs
 - New river forecast services
 - New WFO Site Specific Model forecast services
 - Changes to existing RFP services
 - Changes to existing LRFP services
 - 2. Details regarding the coordination performed with the RFCs, emergency management officials, and other appropriate partners and customers, and
 - 3. Site survey information (e.g. flood category levels)
 - i. Requested changes to any of the flood categories will need to be coordinated in advance due to impacts to the Southern Region RFC Categorical Flood Forecast Verification program, and externally for partners that have developed plans and/or software with triggers based on these categorical levels.

In addition, multiple service change requests may be included in a single request memorandum.

- d. The MIC will provide electronically a **signed written** request to the Southern Region (SR) OSD with comments as to their assessment of the need for the service. Requests from other Regions should be sent to SR OSD through their Regional Hydrologic

- Service Division (HSD). The letter will indicate that prior coordination has been completed with officials in the affected area and the servicing RFC.
- e. SR HSB will coordinate an evaluation of the request with the offices involved (WFO, RFC, national headquarters, other regional headquarters, etc.). The RFC will provide the appropriate WFO an electronically **signed, written** technical evaluation of the validity of the request, and the resources and time needed to implement the request (e.g., evaluate if calibration work is needed, whether or not a current rating curve is available, etc).
 - f. For requests involving site-specific stage forecasts for both RFPs and LRFPs, it is recommended that real-time stage readings be obtained (preferably with telemetry) and the proposed site be rated.
 - g. SR HSB will issue an electronic letter of authorization to both the requesting WFO and servicing RFC listing the approved services (those requested or alternative services based on available data and forecast procedures).
 - h. Upon approval, the WFO will be responsible for either issuing a new NWS Form E-19 (new forecast point) or updating an existing NWS Form E-19 (change in existing services) prior to service implementation.
 - i. Upon approval, the WFO, in collaboration with the servicing RFC, will notify their partners and customers about the service change prior to implementation. WFOs will issue a Public Information Statement with ample lead time based on the information contained in Table 1 of NWS Instruction 10-1805 and Section 3.2.3 of NWS Instruction 10-940 for changes to flood stage or other flood categories. This notification should be disseminated on AWIPS, NOAA Weather Radio All Hazards (NWR), the NOAA Weather Wire System (NWWS), the office's internet page, and the office's WFO Advanced Hydrologic Prediction Services (AHPS) page. Written notification also should be sent to all impacted users (emergency managers, COE, USGS, etc.).
 - j. The WFO, in collaboration with the servicing RFC and the Regional Public Affairs Officer, should disseminate a press release about the service change.
 - k. The WFOs and RFCs will update their hydrology web pages and databases (e.g., the WFO AHPS web page) to reflect the service changes.

7. APPENDIX A

Example - WFO Request for Flood Category Change

January 3, 2003

MEMORANDUM FOR: Judson Ladd
Chief, Operational Services Division

FROM: Paul S. Trotter
Meteorologist in Charge, WFO New Orleans/Baton Rouge

SUBJECT: Request to lower the flood stage for the Escatawpa River
Above Orange Grove (ORAM6)

After reviewing the effect of tropical system intense rainfall runoff and storm surge occurrences of the past two Tropical Weather Seasons it was found that the flood stage of ten (10) feet currently in use for the subject gauging site is too high. During the three storms that affected the Mississippi Gulf Coast in 2002 property along US highway 90 from Orange Grove to Moss Point was inundated and structures threatened at a stage of eight (8) feet. This was determined not only by storm surveys conducted by National Weather Service and Emergency Management Officials, but by correspondence with residents in the area.

We therefore request that you authorize the flood stage change at the ORAM6 gauging site from the current ten-foot stage to one of eight feet.

cc: David Reed, HIC
LMRFC

Mickey Plunkett, District Chief
USGS, Pearl, Mississippi

Todd Adams, Director
Emergency Operations Center
Pascagoula, Mississippi

Earl Etheridge, Fire Marshall
City of Moss Point, Mississippi

APPENDIX B

Example - WFO Request for Change in Hydrologic Service Area

December 23, 2003

MEMORANDUM FOR: Judson Ladd
Chief, Operational Services Division

FROM: Joe Arellano
MIC, WFO Austin/San Antonio

SUBJECT: Change in Hydrologic Service Area

We are requesting a transfer of hydrologic services for the Lavaca Navidad River Basin from WFO Austin/San Antonio (EWX) to WFO Houston/Galveston (HGX). This change has been coordinated with WFOs EWX and HGX, and the West Gulf River Forecast Center (WGRFC). The aforementioned basin is a candidate for service transfer for the following reasons:

- I. The Lavaca Navidad River Authority (LNRA), Lavaca, Jackson, and Wharton county judges, and Lavaca, Jackson, and Wharton county emergency management personnel request the change.
- II. Data from the Lavaca Navidad River Authority river gauge and precipitation network is transmitted to the NWS through WFO Houston.
- III. The majority of river warnings and statements in this basin are for the points in Jackson County, which is a part of the WFO Houston/Galveston County Warning Area of responsibility.
- IV. The Houston office has an existing relationship with the LNRA and Jackson County officials.

From a meteorological, hydrological, and dissemination standpoint, this transfer will better serve NWS customers in Lavaca and Jackson Counties.

We would like to begin the process to transfer these counties with an established target date of no later than September 2, 2003.

cc: Tom Graziano, HSD

Joe Arellano, WFO Austin/San Antonio

Bill Reed, WFO Houston/Galveston

Jerry Nunn, WGRFC

APPENDIX C

Example - WFO Request for Establishment of River Forecast Point (RFP)

April 18, 2002

MEMORANDUM FOR: Judson Ladd
Chief, Operational Services Division

FROM: James W. Duke
MIC, WFO Memphis

SUBJECT: Request to establish River Forecast Points

The Mississippi Emergency Management Agency and the Desoto County Emergency Manager have expressed a need for additional river forecast points on the Coldwater River. To accommodate this requirement, we request the establishment of two new daily river forecast points on the Coldwater River in Northwest Mississippi. One is near Olive Branch (OLVM6) in Desoto County and the other is located at Marks (MKSM6) in Quitman County.

Initial coordination has been completed with the LMRFC, the USGS, the USACE, and the Mississippi Emergency Management Agency. The NWS Form E-19 data has been compiled for both locations with the flood stages as listed below:

Coldwater River near Olive Branch, MS (OLVM6) 11.0 Feet
Coldwater River at Marks, MS (MKSM6) 39.0 Feet

cc: Dave Reed, LMRFC

APPENDIX D

Example - WFO Request for Establishment of a Local River Forecast Point (LRFP)

May 14, 2004

MEMORANDUM FOR: Judson Ladd
Chief, Operational Services Division

FROM: Lans Rothfusz
MIC, WFO Atlanta/Peachtree City

SUBJECT: Request to establish a WFO Site Specific Model forecast
point

The National Weather Service Office in Peachtree City would like to make Arcade (ACDG1) on the Etowah River an official WFO Site Specific model forecast point. A signed letter of understanding with officials from Jackson County will be sent via hard copy.

WFO Atlanta/Peachtree City has provided provisional information upon request for this location to our customers. We have coordinated with county officials, emergency managers, and the SERFC, and establishing this point as a site specific forecast point would best serve the citizens in this area.

Upon approval, a new NWS Form E-19 will be provided to all necessary parties. Our preliminary stages are listed below.

	New
Forecast type	Flood Only
Flood Stage	16'
Action Stage	15'
Minor flood	16'

cc: John Feldt, SERFC

APPENDIX E

Sample Press Release Template for New River Forecast Service



Contacts: (MIC) or (Senior Hydrologist)
 RELEASE (XXX) XXX-XXXX
 (HIC)
 XXXD-XXX-XXXX

FOR IMMEDIATE
 Month Day, Year

**National Weather Service to Provide
 New River Forecast Services at Anytown, State**

The National Weather Service forecast office in (City, State), and the (RFC Name) in (City,State) will now provide five day river stage forecasts for the XXXX River near (Anytown, State).

Beginning (Month/Date), the new service will help protect the lives and property of people living along the river near (City). Flood stage at this location is set at XX feet. The new river gage site is owned and operated by _____.

“The addition of Anytown to our river forecast responsibilities will provide enhanced flood warning services for residents along the XXXX River,” said (MIC Name), meteorologist-in-charge of the (WFO) office.

The (City) forecast office provides all weather services for XX counties in (its warning area). The office collects meteorological data; prepares and disseminates weather forecasts, river and flood forecasts and warnings; and issues severe weather watches and warnings to the public.

The (RFC Name) prepares river stage forecasts for more than (XXX) locations along major rivers in the (XXXX-XXXX) portion of the United States. Covering approximately (XXX,XXX) square miles, the center’s area of responsibility includes (Geographic area). These forecasts are then forwarded to National Weather Service forecast offices throughout its service area for dissemination to the public.

“This new forecast service at Anytown is an invaluable tool,” said (HIC Name), hydrologist-in-charge of the (RFC Name). “The river stage forecasts help us meet the National Weather Service mission of protecting life and property for the citizens in the XXXX area.”

The National Weather Service is the primary source of weather data, forecasts and warnings for the United States and its territories. It operates the most advanced weather and flood warning and forecast system in the world, helping to protect lives and property and enhance the national economy. Visit us online at weather.gov and on Facebook: <http://www.facebook.com/US.National.Weather.Service.gov>.

NOAA’s mission is to understand and predict changes in the Earth's environment, from the depths of the ocean to the surface of the sun, and to conserve and manage our coastal and marine resources. Visit us on Facebook: <http://www.facebook.com/usnoaagov>.

###

APPENDIX F

Sample Press Release Template for Flood Category Changes



NOAA

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
UNITED STATES DEPARTMENT OF COMMERCE



Contacts: (MIC) or (Senior Hydrologist)
RELEASE (XXX) XXX-XXXX
(HIC)
(XXX) XXX-XXXX

FOR IMMEDIATE
Month Day, Year

National Weather Service Updates
Flood Stages at Anytown, State

The National Weather Service forecast office in (City, State), _____ County Emergency Management Officials and the Tennessee Valley Authority have updated the flood stages for the Mississippi River near (Anytown, State).

Effective (Month/Date), the new Flood Stage will be raised from 28 feet to 32 feet. At this gage height, the rise in water surface level begins to impact lives, property and commerce. The new Moderate Flood Stage will increase from 31 to 35 feet. At this stage, inundation of roads and structures occurs along with evacuation to higher elevations. The Major Flood Stage will change from 35 to 39 feet. This stage is characterized by extensive inundation of roads and structures and significant evacuations to higher elevations.

Population and construction has increased in the area recently and the new stage levels will allow more time for evacuation following a flood warning.

“The river stage forecasts help us meet the National Weather Service mission of protecting life and property for the citizens in the XXXX area,” said (HIC Name), hydrologist-in-charge of the (RFC Name).

The (WFO) forecast office provides all weather services for XX counties in (Geographic area). The office collects meteorological data; prepares and disseminates weather forecasts, river and flood forecasts and warnings; and issues severe weather watches and warnings to the public.

The (RFC Name) prepares river stage forecasts for more than XXX locations along major rivers in the (XXXX-XXXXX) portion of the United States. Covering approximately (XXX,XXX) square miles, the center’s area of responsibility includes (Geographic area). These forecasts are then forwarded to National Weather Service forecast offices throughout its service area for dissemination to the public.

The National Weather Service is the primary source of weather data, forecasts and warnings for the United States and its territories. It operates the most advanced weather and flood warning and forecast system in the world, helping to protect lives and property and enhance the national economy. Visit us online at weather.gov and on Facebook: <http://www.facebook.com/US.National.Weather.Service.gov>.

NOAA’s mission is to understand and predict changes in the Earth’s environment, from the depths of the ocean to the surface of the sun, and to conserve and manage our coastal and marine resources. Visit us on Facebook: <http://www.facebook.com/usnoaagov>.

###