

**NATIONAL WEATHER SERVICE SOUTHERN REGION SUPPLEMENT 01-2005
APPLICABLE TO NWSI 10-901**

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Operations and Services

Hydrologic Services Program, NWSPD 10-9

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Authorization for Changes to Hydrologic Services

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SUMMARY OF REVISIONS:

1. Section 2: Updated to reflect SR Divisional structure.
2. Section 4: Creation of a new section “**EXCLUSIONS.**” Provides guidance on gauge locations that are not official forecast points and do not need SRH formal approval and customer notification of changes to flood category levels.
3. Section 5: Creation of a new section “**DISCONTINUANCE OF RFP AND LRFP SERVICES.**” Provides guidance for stream gage discontinuances and how it impacts services at official forecast points.
4. Section 6-e: Provides clarification on any needed technical evaluation to establish a new forecast point.
5. Section 6k: Includes verbiage to update hydrologic database.

(signed)

January 20, 2009

BILL PROENZA

Date

DIRECTOR, SOUTHERN REGION

AUTHORIZATION FOR CHANGES TO HYDROLOGIC SERVICES

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1. PURPOSE

The purpose of this Supplement is to provide procedures for requesting new or expanded hydrologic services, or 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 a flood stage in a Hydrologic Service Area (HSA), or a transfer of hydrologic services between two WFO HSAs. Examples of service change requests are contained in the Appendix.

2. BACKGROUND

Requests for new hydrologic services and changes to existing hydrologic services will be submitted 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 telemetered), the RFC provides an official forecast for that point, a flood stage has been established for that point, an E-19 has been completed, 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 telemetered), an established flood stage, and a completed E-19. The hydrologic service request for the point was also approved by the Hydrologic Services Branch. WFO Site Specific Model forecast points are LRFPs.

4. EXCLUSIONS

The following data points are not considered RFPs and LRFPs and are not subject to the formal approval process for changes. However, offices are encouraged to develop and maintain E-19 information for these 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. The 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 to provide 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 followed for 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. 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. They should include the type of hydrologic service required and coordination with the RFCs, emergency management officials, and other appropriate partners and customers. WFOs should include information about site surveys (e.g. flood stage changes, including minor, moderate and major flood stages, new river forecast services), as appropriate. Changes in any of the flood categories need to be coordinated in advance due to impacts internally to the RFCs in respect to Southern Region River Verification program, and externally for partners that have developed plans and software with triggers based on these categorical levels. In addition, multiple service changes may be included in a single request.

Hydrologic services requested can include, but are not limited to:

1. Transfer of hydrologic services between two WFO HSAs
 2. New river forecast services
 3. New WFO Site Specific Model forecast services
 4. Changes to existing RFP services
 5. Changes to existing LRFP services
- d. The MIC will provide 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 to the appropriate WFO a **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 telemetered) and the proposed site be rated.

- g. SR HSB will issue a 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 E-19 (new forecast point) or updating an existing E-19 (change in existing services) prior to service implementation. A hard copy of this information will be shared with the servicing RFC, the Hydrologic Information Center, SR HSB, and primary and secondary backup WFOs.
- 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 and other flood categories. This notification should be disseminated on AWIPS, NOAA Weather Radio All Hazards (NWR), the NOAA Weather Wire System (NWS), 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

Example 1

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

Example 2

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

Example 3

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 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

Example 4

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 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

**Example 5
(Sample Press Release)**

Contacts:

David Reed

RELEASE

(985) 643-0541

Alan Gerard or Marty Pope

(601) 936-2189

FOR IMMEDIATE

March 19, 2004

**NATIONAL WEATHER SERVICE PROVIDES
NEW RIVER FORECAST SERVICES NEAR LENA**

The National Weather Service (NWS) Weather Forecast Office (WFO) in Jackson, MS, and the Lower Mississippi River Forecast Center (LMRFC) in Slidell, La., now provides three day river stage forecasts for the Pearl River near Lena, Miss. With the addition of the new forecast point at Lena, the LMRFC creates river stage forecasts for 212 locations throughout its service area. The forecasts are then forwarded to WFOs such as Jackson for dissemination to the public. "This new forecast service at Lena is an invaluable tool for forecasting flows into Ross Barnett Reservoir," said David Reed, Hydrologist In Charge of the LMRFC. "Also, the river stage forecasts help us meet the National Weather Service mission of protecting life and property for the citizens in the Pearl River basin".

The flood stage on the Pearl River at Lena has been set at 24 feet (elevation 324 ft MSL). The river gauge site is owned and operated by the United States Geological Survey in Jackson and is funded by the Pearl River Valley Water Supply District. Other river forecast services in the Pearl River drainage supported by WFO Jackson and the LMRFC include river stage forecasts for Philadelphia, Edinburg, Carthage, Ofahoma, Ratliffe Ferry, Jackson, Rockport and Monticello; and, inflow forecasts for Ross Barnett Reservoir.

The LMRFC prepares river stage forecasts for the major rivers in the south-central part of the US. Covering approximately 200,000 square miles, the forecast center's area of responsibility includes most of Mississippi, Louisiana, Arkansas and Tennessee and portions of neighboring states.

WFO Jackson provides all the weather services for 58 counties/parishes in central Mississippi, northeastern Louisiana and southeastern Arkansas. The WFO collects meteorological data, prepares and disseminates weather forecasts, river and flood forecasts and warnings; and, issues severe weather watches and warnings to the public. Additional information is available at <http://www.srh.noaa.gov/jan> or <http://www.srh.noaa.gov/lmrfc/>.