

Authorization for New or Changes to Hydrologic Services

<u>Table of Contents</u>	<u>Page</u>
1. Purpose.....	3
2. Background.....	3
3. Request Procedure.....	3
4. Implementation.....	4
5. Notification.....	4

Appendices

A – An Example of a Request for New Forecast Services	A-1
B – An Example of a Request for Change to Flood Stage	B-1

1. **Purpose.** The purpose of this Supplement is to clarify the field procedures for requesting new or changes to hydrologic services.
2. **Background.** The ER field offices, in conjunction with their local user communities, determine the need for new and/or changes in hydrologic services in their areas of responsibility. Documentation of the expansion and/or changes to hydrologic services will be submitted to Eastern Region (ER) Hydrologic Services Division (HSD) for evaluation and approval prior to implementation.

Changes that will require ER HSD evaluation are:

- Establishment of new forecast points (RFC-supported),
- Establishment of new forecast points (WFO-supported using the Site Specific Hydrologic Predictor or other local model),
- River gage relocation,
- Gage datum changes,
- Changes to flood stage (minor),
- Change of forecast service from categorical* to time series,
- Change of forecast service from time series to categorical*, and
- Cancellation of forecast services.

*Categorical forecast services - this refers to the issuance of flood forecast guidance/warnings for a point location where the guidance/warnings will only specify minor, moderate or major impacts – versus a specific crest value or time series of forecast stages.

Service changes that involve modifications to action, moderate and/or major flood category thresholds do not require ER HSD approval. Any other service change that the WFO considers “significant” should be discussed with HSD.

3. **Request Procedure.** The following procedure will be used to request new or changes to hydrologic forecast services:

- a. All requests from outside the NWS for new hydrologic services or changes to existing hydrologic services should be made in **writing** to the meteorologist-in-charge (MIC) or hydrologist-in-charge (HIC) at the appropriate WFO or RFC. Requests received by RFC should be forwarded to the appropriate WFO and the WFO should work with the requester to define user requirements and decision support needs. Requests from within the NWS should be coordinated through the MIC/HIC of the requesting office.

- b. After WFO assessment and preliminary coordination with the servicing RFC, the MIC will provide a written request (**in MS Word format**) to the ER HSD with information regarding the need for the service change. The written request will be emailed to nws.er.hsd@noaa.gov for timely evaluation. Supporting information regarding the request should be retained at the WFO.

c. The requests for service change should be as specific as possible. The requests should include the following types of information:

- Location name (river, city, state) and NWSLI
- Reason/justification for change of service (e.g., new forecast point, need for modification to flood stage, gage relocation, vertical datum update, termination of forecast services, etc.)
- RFC and/or WFO forecast services (time series or categorical) development needs and status
- Internal and external parties in coordination
- River stage data type and its temporal frequency
- Current flood stage and/or proposed flood stage
- Forecast frequency (daily, high water only)
- Period of record.

An example of a request for new hydrologic service can be found in Appendix A.

An example of a request for a change of service can be found in Appendix B.

4. Implementation. ER HSD will evaluate the request with the offices involved (WFO, RFC). Approval of the request will be based on strong justification initiated by external parties, technical feasibility, and user coordination (e.g., emergency managers, public works officials). ER HSD will either approve or disapprove the request and will notify, in writing, the offices involved in this decision.

The implementation dates selected by the WFO (in coordination with the servicing RFC) should take into account that there are numerous NWS system/documentation changes needed when implementing new or changes to existing hydrologic services. The WFO/RFC, and backup field offices as appropriate, should ensure that updates/changes/coordination activities are thorough and completed prior to the selected implementation date. These may include updates to:

- Hydrology section of the WFO/RFC station duty manual
- WHFS templates/database
- Office scripts and/or checklists for shift duties
- AHPS page content
- AWIPS hydrology database and other configuration files at the RFC and WFO
- E-19, E-19a files
- AWIPS database tables at primary and secondary backup WFOs
- Web page content,
- Station maps, shapefiles, etc.

5. Notification. Public notification of service changes is important to allow NWS partners and users time to implement the new/modified information in their computer systems and agency documentation/action plans.

For any new service or change in service, the WFO will follow the notification guidelines provided in [NWSI 10-1805 *National Service Change and Technical Implementation Notices*](#). . If not specified in NWSI 10-1805, most hydrologic services changes will require at least 30 days advanced notification to the public as directed in [NWSI 10-940 *Hydrologic Data Network Services*](#). Public notification should be accomplished using a Public Information Statement (PNS) as required by policy. Offices may also make use of web headlines, news releases, letters and memorandum, etc. as appropriate for the circumstance. Sample service change notifications involving flood stage changes and datum changes are provided in NWSI 10-940, Appendix C.

Appendix A. Example of a Request for New Forecast Services

MEMORANDUM TO: <name>, Chief, ER HSD

FROM: MIC, WFO <city, state, id >

SUBJECT: Request for New Forecast Services

We would like to formally request authorization to establish river forecast points at two river gage locations in the < name > River basin; 1) < name > River at <location, state> (NWSLI), and 2) < name > River at <location, state> (NWSLI). The forecast services have been requested by County Somewhere and also by emergency response officials in Cityville and Townville, <state >. They collectively support the establishment of the forecast points due to the need for forecast services to assist emergency management decisions and help reduce property damages due to flooding. The forecast points we would like to establish are both USGS gages with 30 years+ periods of record and are funded through the National Streamflow Information Program (http://water.usgs.gov/nsip/nsipmaps/nc/nc_nsip2.html).

The <name RFC> currently utilizes both gages in their river forecast models. The <name RFC> has been coordinated with and is willing to produce daily time series forecast services for both points. The <name RFC> development efforts will be complete in two weeks.

The proposed flood stage for <NWSLI> is 10 feet and the proposed flood stage for <NWSLI> is 8 feet. The < name > River Keeper, the local USGS and USACE, as well as County Somewhere, Cityville, and Townville officials have concurred with the proposed flood stages and fully endorse this request.

Thank you for your consideration of this request.

Appendix B. Example of a Request for Change to Flood Stage

MEMORANDUM FOR: <name>, Chief, ERH HSD
THROUGH: MIC, WFO < city, state, id >
FROM: SSH, WFO < city, state, id >
SUBJECT: Lowering of flood stage at <location, state> on the <name> River

The National Weather Service is in the process of creating new inundation maps for the river forecast point <NWSLI> on the <name> River near <location, state>. This site is on the Advanced Hydrologic prediction Service (AHPS) website;
<http://water.weather.gov/ahps2/hydrograph.php?wfo=gsp&gage=<NWSLI>&view=1,1,1,1,1,1,1,1>
1

Recent FEMA grant funding has allowed the state of <name> to do LIDAR flood plain mapping across the state. This has resulted in new FEMA and local floodplain maps for most counties in <state>. After reviewing the updated maps and receiving feedback from local floodplain managers, emergency management and public input, it was been determined that the current flood stage of 12.0 ft is set too high and should be lowered to 10.0 ft.

Local officials have noted that at a level of 10.0 ft. several homes along the river in the <name> Street area and further downstream in the <name> road area will begin to flood.

This flood stage change has been reviewed and approved by the <RFC name>, local floodplain managers and emergency management officials.

With the above approvals, we request the flood stage at (location, state > on the <name> River be lower from the height of the current flood stage (12.0 ft.) to 10.0 feet.

We would like to make this flood stage change effective on < Month/Day/Year >.