

# Interagency Recovery Task Force

*Together...restoring the third largest watershed in the world!*

## How it began:

- Monumental Flooding in the Mississippi River Valley Watershed
- Activation Memo from HQ Signed May 13 , 2011 to establish the Interagency Recovery Task Force (IRTF)
- Invitation letters to join the IRTF signed by MG Walsh and sent May 20, 2011.
- Meetings:  
Teleconference, 27 May  
Memphis, TN, June 22  
Pearl, MS, 23 Aug  
New Orleans, LA, 20 Oct  
St. Louis, MO, 14 Dec  
Memphis, TN, 22 Feb 12
- Next meeting, 3 April 12  
Teleconference

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## Volume I, Issue 5

March 23, 2012

### IRTF, 2012 Flood Season Preparedness and Regional Workshop



**Conversing before the meeting:** (from left ) Arlan Juhl, IL Dept of Natural Resources, COL Vernie L. Reichling, District Engineer-Memphis District, MG John W. Peabody, Commander - MVD,

The 6th IRTF meeting was held in Memphis, TN, on 22 February. MG John Peabody welcomed the team as did Col Vernie Reichling. This time, the key messages emphasized our vulnerable system. The coming season will require extra vigilance and advanced preparedness to ensure the safety and well-being of our citizens, infrastructure, and industry. With the \$1.724 billion nationwide D9isaster Relief Appropriations Act funds, the Corps can begin to aggressively repair and restore hundreds of damaged flood control and navigation system components. Each District has established their FY12 workplans that reflect their implementation and acquisition strategy for repair projects. The list of projects under construction in FY12 will be shared with the IRTF.

All team members were interested in being a part and having input to the MR&T Post Flood Report. This collaborative effort from our partners is the strength of this team. The next IRTF meeting will discuss those coordination efforts.

This time the meeting was held in conjunction with a Regional Flood Risk Management Workshop in order for team members to weigh-in on the decision-making process prior to the spring floods. The regional flood preparedness team completed risk information templates for those sites with greater vulnerabilities. With the known risk at each site, appropriate management measures will be taken to address the weakness in the form of possible interim construction measures, flood fight efforts and monitoring. Trigger points will be

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Scott Whitney going over "Old Business"

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determined for reservoirs and floodways in the event temporary changes in operation are required. Strategies are being developed that will maximize flood storage while effectively routing floodwaters. This information will help the Corps, partners, and the public better prepare for the upcoming flood season and beyond as construction begins.

In addition to the risk information, select high-risk areas within the Mississippi River Valley were modeled with a hypothetical major flood using historical data and the National Weather Service spring forecast and mapped to show potential inundation (e.g., inundation timing and depth). This regionally standardized inundation information is extremely helpful for interagency collaboration designed to enhance or improve preparation, mitigation and response to flooding emergencies. Preliminary risk assessment information papers, and sub-system papers gave a true picture of the weakened areas, allowing for better planning decisions in order to buy down risk.

Risk communication processes and tools have been improved to better inform and prepare the public. From recent events, websites have been created to share up-to-date information to include regional risk maps, press releases, and communication pamphlets. Connect to CorpsMap and the Regional Flood Risk Management web pages by using the Mississippi Valley Division (MVD) homepage at [www.mvd.usace.army.mil](http://www.mvd.usace.army.mil).

In the future, the Corps hopes to continue to update the public using the new map application, web sites, and social networking. There is even a possibility of an alert system to our emergency management partners. Transparent communication and public safety is our goal as together we make repairs to the 3<sup>rd</sup> largest watershed in the world.



Brian Hopkins, MO DNR, Robert Latham, MS Emergency Management, and Beth Freeman, FEMA enjoy the dialogue.

## National Weather Service Spring Flood Outlook—Issued Mar 15, 2012

An above normal risk for spring flooding exists over the Lower Ohio Valley and parts of the Central Gulf Coast in Southern Louisiana and Mississippi. Above-normal precipitation this winter in parts of the Ohio River Valley has caused high soil moisture and above-normal river levels. The forecast through April calls for above-normal precipitation in the Ohio River Valley which could lead to flooding. For the first time in 4 years, the Northern Plains are not expecting major to record snowmelt flooding. Most of the Upper Mississippi and Middle to Upper Missouri River Basins have a below normal risk of flooding. The nation's farthest northern basins of North Dakota and Montana including the Red River of the North, Souris River and the Missouri headwater have a normal risk of flooding, and will not be significantly impacted by snowpack this year.

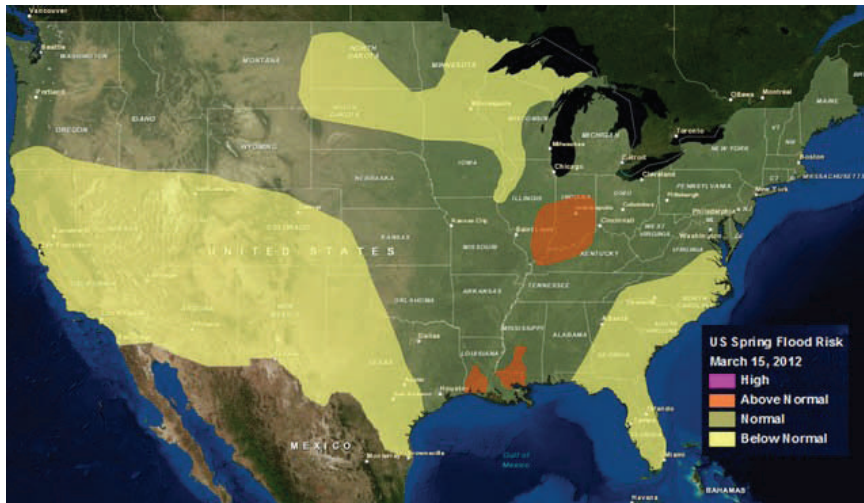
All other areas in this map have a normal risk of spring flooding. In this category areas prone to spring flooding are expected to experience that normal level of flooding. For example, the lower Missouri valley commonly experience minor flooding each spring with little impacts. Heavy rainfall at any time can lead to river and/or flash flooding, even in areas where overall risk is considered normal to below normal.

Uncertainty associated with this flood outlook for the continental U.S. is greater than in previous years given the primary driver for this outlook is rainfall rather than snowmelt.



MG Peabody, Col Reichling, Joseph Klinger, Ben Weiger, and CDT Wendt focused on the discussion.





### Heavy Rainfall and Flooding

The information presented in this report focuses on spring flood potential, using evaluation methods analyzed on the scale of weeks to months, not days. Heavy rainfall at any time can lead to flooding, even in areas where overall risk is considered normal to below normal. Rainfall intensity and location cannot be accurately forecasted beyond a few days in the future, therefore flood risk in these areas can change rapidly.

Stay current with flood risk in your area with the **latest official watches and warnings at [weather.gov](http://weather.gov)**. For detailed hydrologic conditions and forecasts, go to [water.weather.gov](http://water.weather.gov).

### Above Normal Flood Risk Areas

#### Lower Ohio Valley

Soil moisture is above normal through the Lower Ohio Valley in response to above normal precipitation ([125-200%](#)) over the last six months. [April forecasts](#) call for above average precipitation over the Ohio Valley to continue into the spring.

#### Central Gulf Coast

Based on current conditions and extended range precipitation forecasts, an above normal flood potential exists along the Central Gulf Coast in Southern Louisiana and Mississippi. Streamflows in those areas are above normal in response to a series of heavy rain events over the last 30 to 45 days.

**Citizens are encouraged to remain up-to-date on flood conditions by monitoring the latest [forecasts](#) from your local National Weather Service office.**

### Normal Flood Risk

#### Red River of the North, Souris, and Central Plains

The Red River of the North, the Souris River Basin, and most of the Missouri River Basin (Northeast North Dakota, Northwest Minnesota, Montana, Wyoming, Northeast Colorado, Southern South Dakota, Nebraska, Northern Kansas, Iowa and Missouri) have a normal risk of flooding.

The spring flood risk in these areas is largely driven by snowmelt flooding. With the below to near-normal [winter snowfall](#) this is the first time in 4 years these areas are not preparing for major to record snowmelt flooding. The Northern Rockies of the Missouri Basin contain near the historical normal amount of snow water content for this point in winter. The Souris and Red River basins contain

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Tim Eagan gives a demonstration on CorpsMap!



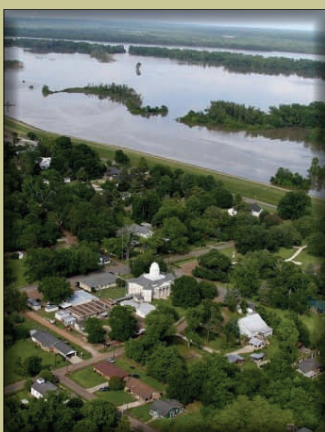
Everyone listening intently while Ben Weiger, NWS, presents on the potential forecast.



Jeff Stamper explains what's included in Risk!



“Speed to  
Momentum”



Mississippi Valley Division  
1400 Walnut Street  
Vicksburg, Mississippi 39183



US Army Corps of Engineers  
BUILDING STRONG®

about one-third the amount of water in the snow as last year, ranking this season in the lower half of the last 60 years.

### Below Normal Flood Risk

The following regions are outlined with a low risk of long range spring flood risk, and many are experiencing drought. It is important to remember that intense precipitation at any location, regardless of past conditions, can rapidly change risk, often on the scale of hours. Deadly localized flooding during severe weather outbreaks is possible, and common, regardless of long term risk. Always stay current with any Watches and Warnings from your local NWS Forecast Office, and follow the advice of your local emergency management officials should flash flooding effect your area. Please visit [drought.gov](http://drought.gov) for detailed outlooks, impacts and information related to your area.

### Upper Mississippi and Upper Missouri Valleys

In stark contrast to water year 2011, [precipitation](#) this water year (since Oct 1, 2011) has been less than 50% of the normal across the Upper Mississippi and Upper Missouri Valleys. [Snowpack](#) in these regions is well below levels needed to warrant large scale flooding, and will not play a role in this year's spring flooding across the northern US. The High Plains of the Missouri Basin contain little to no snow, in stark contrast to last year when the high plains were blanketed with a wet snowpack at this time.

### Spring Flood Outlook and Gulf Coast Ecology

Draining over 40% of the contiguous United States, precipitation patterns in the Mississippi River Basin have a impact on the delivery of nutrients to the Gulf of Mexico. High levels of these nutrients cause a large area of low-oxygen in the Gulf, known as the dead zone, to form each summer. The Upper Mississippi and Ohio Valleys supply the majority of the nutrients to the Gulf, so examining spring flood risk in these basins can provide a useful indicator of the possible size of the summer dead zone. The predicted above-normal flood risk in the lower Ohio Valley would serve to increase the severity of the dead zone. However, this increase may be countered by below-normal flood risk in the Upper Mississippi Valley. It is the net result of these forces that may determine whether the dead zone is above or below normal this summer. In early June, NOAA will be releasing its annual dead zone forecast based on observed river discharge rates and nutrient concentrations provided by the USGS.

### About this Product

The National Hydrologic Assessment is a report issued each spring by the NWS that provides an outlook on U.S. Spring flood potential, river ice jam flood potential, and water supply. In general flood risk is assessed as high, above normal, normal or below normal. These risks are defined as:

- **High:** 90-day Ensemble Streamflow Prediction simulated flows significantly above normal and a greater than 50% chance of major flooding
- **Above Normal:** 90-day Ensemble Streamflow Prediction simulated flows above normal and greater than 50% chance of minor or moderate flooding
- **Normal:** 90-day Ensemble Streamflow Prediction simulated flows near normal; flood prone areas still at risk (e.g., Red River of the North, Missouri)
- **Below Normal:** 90-day Ensemble Streamflow Prediction simulated flows below normal; flooding not likely

Analysis of flood risk integrates late summer and fall precipitation, frost depth, soil saturation levels, stream flow levels, snowpack, temperatures and rate of snow melt. A network of 122 weather forecast offices and 13 river forecast centers nationwide assess this risk, summarized here at the national scale. The National Hydrologic Assessment depicts flood risk on the scale of weeks to months over large areas, and is not intended to be used for any specific location. Moreover, this assessment displays river and overland flood threat on the scale of weeks or months. Flash flooding, which accounts for the majority of flood deaths, is a different phenomenon associated with weather patterns that are only predictable a few days in advance. To stay current on flood risk in your area, go to <http://water.weather.gov> for the latest local forecasts, warnings, and weather information 24 hours a day.