

**The 2011 Floods in the
Mississippi, Missouri, Souris,
and Red River of the North
River Basins:**

**A Retrospective Analysis of
USGS Flood-Response Activities**



USGS 2011 Flood Retrospective

Presentation Outline:

- **Scope of the retrospective effort and critical questions**
- **HQ practices to continue and suggested improvements**
- **Equipment and other resource inventory improvements**
- **Interagency cooperation improvement suggestions**

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The scope included:

- 1) **Water data-collection activities (principally streamgaging and water-quality sampling)**
- 2) **Scientific analysis activities**
- 3) **Information and data sharing with partner agencies and the public**

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To meet its objective,

the team worked towards answering these questions:

- **Did the USGS respond appropriately and adequately?**
- **Were USGS technical standards met or exceeded?**
- **Did the USGS deliver data appropriately and adequately?**
- **Did the USGS meet the needs of our customers?**

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Data and information were collected using:

- **Internal surveys, polls, and interviews**
- **Surveys of external partners**
- **Automated internal data retrievals and reports**

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Results: HQ Practices to Continue

- **Strong involvement of USGS Headquarters and National Flood Hazard Coordinator**
- **Water Mission Area and OSW's infrastructure investments**
- **OSW's emphasis on technical training and developing flood-response experience**

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Results: Suggested Improvements at HQ level

- **To supplement existing WSC Flood Plans and reach a wider audience:**
 - **Develop and distribute a National Flood Response Operational Plan**
 - **Develop and distribute a National Flood Science and Environmental Study Plan**

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Suggested Inventory Improvements

Prior to every Flood Season:

- **Enhance the stock supply of hydroacoustic and water-quality equipment available for flood response**
- **Provide a review of available technical assistance and flood-response expectations**
- **Conduct an inventory of available USGS resources**

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Suggested Improvements for Interagency Cooperation

- **In the future, following each large regional flood:**
 - **Perform a limited retrospective analysis of USGS activities and response**
 - **Report out to partners on retrospective findings**
 - **Incorporate findings with other agency reviews**
 - **Attempt improvement on every flood cycle**

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Suggested Improvements for Interagency Cooperation

- **Promote data interoperability by developing:**
 - a unified method to share data
 - a process to deliver critical data more quickly

Questions?