

Gilbert F. White 2010 Flood Policy Forum  
State Symposia on Flood Risk Management  
Appendix to the Full Report

**Introduction**

The March 2010 Gilbert F. White National Flood Policy Forum was conducted at George Washington University, with the topic “Managing Flood Risks and Floodplain Resources”. The Forum Action Agenda that arose from this Forum reflected the participants’ recommendation that there is a need to capture flood risk indicators at the state, regional, and local levels of government to complement the national level indicators developed at the Forum.

**Finding of Forum:**

There is a need to develop “local” (local, regional, state) flood risk management indicators that complement those developed as “national” indicators at the Forum. The “local” and national indicators should be aligned, but need not overlap since perspectives will (and should) be different when one considers a national program or a local watershed.

In response, the ASFPM Foundation, in cooperation with ASFPM, solicited proposals from the 30 State Chapters to co-sponsor this event with the Foundation. Four Chapters responded to a detailed request for proposals. Following review it was determined that two ASFPM chapters were best suited to host these inaugural symposia: the Colorado Association of Stormwater & Floodplain Managers and the Indiana Association for Floodplain and Stormwater Management.

Following the national forum model, the selected chapters prepared an invitational list of about 80 individuals from a variety of disciplines including floodplain and stormwater managers, transportation and development planners, elected officials, natural resource specialists, researchers, social science and/or public engagement specialists, and professionals from the insurance, real estate and other industries. Invitees were both from public and private sectors, NGOs, academia, “in-state” state and local officials, and federal officials with state or regional responsibilities.

The Symposia were held in Indianapolis, Indiana on April 12 and Boulder, Colorado on April 14 of 2011.

Each symposium included approximately 85 participants that met in plenary and then in 3 pre-assigned breakout groups. For each symposium the following itinerary was followed:

- Welcome by local host and local issues presentation
- Summary of findings from National Forum
- Video replay of risk communication by Dr. Dennis Mileti from Forum
- Setting the Stage on Risk Management, including Natural and Beneficial Functions
- Group discussion on topics of interest in flood risk management

- Break out Session One: Identify flood risk indicators and dash boards
  - Group Report out
- Break out Session Two: Management strategies to move flood risk indicators
  - Group Report out
- Summary Close

**Observations and Discussion**

The symposia focused heavily on indicators or data needs necessary to influence flood risk at the local and state levels. As expected, there were commonalities in the indicators proposed at the symposia with the national forum, although the emphasis and priority was certainly different. At the end of this document is a summary table that captures the key topics of each symposia, followed by which breakout groups engaged on this topic. This format is an attempt to capture the main issues, the commonality of concerns between breakout groups, and key or unique concepts that emerged.

An overarching observation independent of the design for this exercise was the general mood of the attendees. Indiana has gone through a number of legislative and policy setbacks which essentially unraveled many key components of their state floodplain management program. In general people were initially a bit cautious, but through the course of the symposium one could sense the energy levels increasing within the Chapter leadership and others in the room to begin to address and tackle some of the recent slippages.

In contrast, Colorado just recently enacted some policy advancements and the general mood was upbeat. However during the day, recognition emerged that the group needed to remain vigilant to protect recent gains and that more policy work was needed to ultimately achieve a comprehensive flood risk management policy.

***Observation : Watershed vs. Floodplain***

Perhaps the most significant overarching observations contrasting the National Forum to the State Symposia related to the differing focus between a national look and a local or state look at flood risk. In both States, there was general consensus that flood risk was increasing. In both States, flood risk outside the mapped floodplain (special flood hazard area) was a key concern in terms of flood risk management. There is a sense within these States that where there is a mapped floodplain, the hazard has been somewhat identified and there are rules in place that might help mitigate the risk, hence there is less concern about flood risk. This notable difference in focus between a national view and the State and local view is noteworthy, and suggests the following outcomes.

***What this observation suggests and amplifies is the essential disconnect that has evolved at the federal level related to floodplain programs and watershed programs***

- Floodplain mapping, floodplain regulation, and floodplain mitigation opportunities seemingly are foundational to managing local risk - at least for flooding up to and including the 1% annual chance flood. There is a general sense that the risk in the mapped floodplains

is known and generally managed within current mainstream regulatory frameworks, which has reduced damages but not eliminated them.

- In contrast, there is more flood risk concern on other areas of the watershed. This may in part be due to lack of hazard identification, rules, and incentives or drivers for mitigation.

It should be noted that neither State has a large population subject to catastrophic risk from a major flooding source such as that faced by some coastal communities, or communities primarily protected by levees or dams (e.g. New Orleans, Charleston, Sacramento).

What this observation suggests and amplifies is the essential disconnect that has evolved at the federal level related to floodplain programs and watershed programs that essentially evolved in stovepipes, but these differences essentially are meaningless for the state or local implementer. Actions of the EPA to be more inclusive of flood risk in their programs the past 2-3 years is a definite step towards aligning the Federal role with local realities.

### ***Observation 2: Risk Communication***

At each Symposium, Dr. Dennis Mileti's presentation on flood risk communication from the Forum was shown on video. Both groups were taken by the message and there was strong recognition that messaging for behavioral change vs. education is essential. There was discussion in Colorado that there is some basic messaging in place that needs to be branded state-wide. In both symposia however (and similar to the Forum), groups quickly retreated to an education based approach in their risk communication and outreach vs. a behavior modification approach as proposed by Mileti. Ironically, this observation proves Mileti's point and demonstrates that to shift risk communication approaches requires more than education - people need to be shown how it can be done. It also demonstrates just how quickly this approach can be derailed, because of the natural inclination of scientists and engineers to "lead with logic" vs. embracing a more marketing based approach. There is a clear need to assemble a working group to frame approaches and produce products that go beyond any single agency in order to move this approach forward. Perhaps this should become an elevated focus of the ASFPM via a broad working group. It is essential that the leadership of this group maintain a high degree of focus discerning the differences between education and behavior change based approaches.

### ***Observation 3: Essential Data***

The most common similarity between the Forum and Symposia was the call for basic data and metrics to support management decisions and to track change. At the two Symposia, each of the 6 breakout groups commented extensively on this need.

Historically the nation has tracked factors such as flood damage, flood insurance claims, and other outcome based metrics. Unfortunately these types of data do little to define and manage a problem. The challenge addressed at both the Forum and Symposia was *managing flood risk*. They recognized the need for essential forward-looking data to project trends and support management decisions was universally described.

Examples of data needs included:

- Structures in floodplains
- Structure at risk outside of mapped floodplains
- Land use change
- Inventory and tracking of floodplain natural and beneficial functions

- Agronomic impacts including soil loss
- Other

Efforts of FEMA via Risk MAP, including experimentation with new ways to portray risk and the inclusion of vulnerability assessments, are important steps towards addressing some of these data needs. Efforts of the USACE Flood Risk Management Program likewise are establishing a framework for managing risk, but this program as well would benefit from essential inventories.

In the preparatory workshops prior to the 2010 Forum, a participant commenting on the similarities between floodplain natural and beneficial functions policy today and wetland policy of 30-years ago noted that both require essential inventories to gain policy traction, and that the wetlands inventory of the 80's proved to be foundational to framing the problem the nation faced with wetlands. What this comment demonstrates is that policy and management decisions often rely on sound data, and until we invest in these essential data we will not have a true management strategy.

***Observation 4: Natural and Beneficial functions***

Natural and beneficial functions of floodplains are recognized as being essential to a comprehensive floodplain management and flood risk management framework. There is strong support and appreciation for the need for these functions *at a personal level*. Unfortunately there were few participants at either symposia that expressed that managing these functions was a priority of their job, with the exception of NGO or policy advocates that have a mission of promoting these functions. This observation admittedly was framed by omission and is worth further examination, but it essentially suggests that, on the ground, state and local managers predominantly view their role as being oriented towards public safety and not necessarily inclusive of natural floodplain functions.

This suggests in part that if natural and beneficial functions are not explicit in the programs being delivered, that very little consideration of natural and beneficial floodplain functions will actually occur.

***Observation 5: state and local policy leadership***

The policy symposia format provides an opportunity for the leaders of ASFPM State Chapters to tackle and engage their members on the policy issues of today. At each Symposia, both in session and in summations, State Chapter follow up and engagement was mentioned on several occasions. ASFPM is grappling with how to best support chapters to provide both member education and policy leadership. The Chapter's have naturally gravitated towards member education, and policy leadership is inconsistent between chapters and fleeting within chapters.

**Conclusion**

ASFPM and participating Chapter leaders agreed that the initiative to bring the National Forum policy dialogues to state and local audiences succeeded in its objectives to: 1) engage Chapter members, 2) explore differences in scope and focus, and 3) discuss issues state and local levels of implementation. In many respects, the Symposia exceeded expectations by additionally providing a much-needed venue for spontaneous and organic networking, relationship-building, and exploration of new approaches among participants.

Other State Chapters are interested in hosting additional Symposia to focus the dialogue, issues, and actions at the state, regional, and local levels. ASFPM Foundation leaders share this interest and are seeking funding to continue the State Flood Risk Symposia initiative.