



# **Federal Interagency Floodplain Management Task Force**

**May 10<sup>th</sup> -11<sup>th</sup>, 2010 Listening Session**

## **SUMMARY REPORT**



Table of Contents

**A. BACKGROUND AND INTRODUCTION.....2**

**B. SUMMARY OF DAY-1 BREAKOUT SESSION DISCUSSIONS .....3**

*Topic 1: A Unified Approach to Floodplain Management.....3*

*Topic 2: Identifying Successes and Conflicts in Floodplain Management .....6*

*Topic 3: Balancing Environmental, Economic, Social and Public Safety Aspects of the Floodplain Management Vision .....8*

*Topic 4: Fostering Partnerships .....11*

*Topic 5: Adapting to Climate Change.....14*

**C. SUMMARY OF DAY-2 SCENARIO EXERCISE AND PLENARY SESSION DISCUSSIONS ... 17**

**D. APPENDIX ..... 19**

*Topics of Additional Post-Listening Session Web Comments .....19*

*Day-1 Topic 1 Breakout Session Notes: A Unified Approach to Floodplain Management.....19*

*Day-1 Topic 2 Breakout Session Notes: Identifying Successes and Conflicts in Floodplain Management .....21*

*Day-1 Topic 3 Breakout Session Notes: Balancing Environmental, Economic, Social and Public Safety Aspects of the Floodplain Management Vision .....24*

*Day-1 Topic 4 Breakout Session Notes: Fostering Partnerships .....26*

*Day-1 Topic 5 Breakout Session Notes: Adapting to Climate Change.....27*

*Participants .....31*

# May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

## A. Background and Introduction

The Federal Interagency Floodplain Management Task Force (FIFM-TF) was established in 1975 to enhance communication and coordination among the Federal agencies in their efforts to reduce the loss of life and property caused by floods and to protect and restore the natural resources and functions of floodplains. The mandate of the FIFM-TF is to carry out the responsibility of the President to prepare reports for the Congress on further proposals necessary for a Unified National Program for Floodplain Management. A “Unified National Program” provides a focus for the Federal government with regard to improving floodplain management efforts in the United States.

The current Administration’s emphasis on consistency and collaboration, as well as the need to respond to new economic and environmental challenges, has inspired a renewed effort for unifying the Federal Government’s approach to floodplain management. As an important step in this process, the FIFM-TF has been reestablished to identify and address critical issues associated with floodplain management. To ensure that this work is well informed by a wide range of stakeholders’ perspectives, the FIFM-TF hosted a listening session on May 10-11, 2010 in Arlington, VA to:

- Solicit input on specific topics of interest to inform the content and sequencing of the work of the Task Force
- Provide an overview of key concepts and themes associated with a unified vision for floodplain management, as well as related laws, regulations and current initiatives to promote a common frame of reference among participants
- Explore the most significant benefits associated with fully realizing this vision, and identify the challenges to achieving this vision
- Obtain the perspectives of stakeholders on how these challenges can be addressed to more effectively protect resources and reduce hazards to people and property

On Day -1 of the listening session there were 70 attendees (36 stakeholders and 34 Federal attendees, conveners and guest speakers); participants selected three (out of a possible five) breakout session topics to attend. The discussion was captured on flip charts by facilitators with the assistance of co-conveners. Participants were also provided a two-sided worksheet to provide additional input on the given topic. A summary of this input can be found in Section B of this report. The summaries were drafted by the co-conveners using the following target areas:

1. Any major themes or ideas that were heard during the discussions around the topic
2. Any critical challenges that were heard during the discussions around the topic
3. Any potential solutions to these challenges or visions for the future around the topic

In addition, participants were asked via the worksheet to provide three brief ideas or recommendations for the Task Force related to the breakout topic area. These 173 responses can be found verbatim in the tables in Section B of this report following the summary of input on each of the five topics. The information is sorted by the contributing participant’s stakeholder group (Note: The contributions made by the Federal attendees are in gray rows and have been moved to the bottom of each table).

On Day-2 of the listening session there were 50 attendees (29 stakeholders and 21 Federal attendees, conveners and guest speakers); attendees were divided into two breakout groups where they worked together in a role playing scenario. In the scenario, participants played the role of an advisory committee to a Mayor of a fictitious town in the United States who was dealing with floodplain related development issues. A summary of this input from this exercise can be found in Section C of this report. The summary was drafted by the facilitators of the breakout session.

Following the listening session, a comment period began that allowed for additional ideas to be submitted via the Federal Interagency Floodplain Management Task Force website (hosted by FEMA). Where appropriate, the web

# May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

comments and written comments received were incorporated into the summary sections B and C of this report. Additional comments received beyond the topics highlighted in Sections B and C of this report can be found in the Appendix along with the facilitators' flip-chart notes from the Day-1 Breakout Sessions.

## B. Summary of Day-1 Breakout Session Discussions

### Topic 1: A Unified Approach to Floodplain Management

#### Topic 1 – Background:

The *Unified National Program for Floodplain Management* provides a philosophical background and guidance for implementing Federal policy within the floodplain. As an interagency document, it is a mechanism to assist Federal agency coordination and describing the various roles of Federal, state, and local entities. The UNP was last updated in 1994 and since that time many concepts have either evolved or been created concerning the floodplain. Some of these topics include risk assessment, ecosystem services, ecosystem restoration, integrated water resources management, climate change adaptation, and climate change mitigation. In addition to discussing whether an updated to the UNP is warranted, there has been debate in the FPM community whether a unified approach is valuable and what it should entail.

#### Topic 1 – Summary:

**All attendees of the Session A *Unified Approach to Floodplain Management* agreed that as a nation, we need a framework, vision, or national program that sets out goals for floodplain management for the nation.**

Generally participants agreed that the status quo is not working. Risk to people, property and the environment is increasing. There was concern by some that the existing Unified National Program (UNP) is neither unified, national, or a program – while it provides guidance and direction as a nation, it may not be the perfect solution. Suggestions for what a new UNP should do included: Federal government should set the example with its actions and facilities; Federal framework should incentivize, enable and empower local government (not mandate actions); the *Federal government should not subsidize increased risk*. There was also discussion that outside of the Federal agency stakeholders, there was not a lot of awareness of a Unified National Program and that more needed to be done to bring awareness to and promote a national vision. In short a unified national approach should:

- Clearly articulate priorities recognizing that you cannot always have everything you would like;
- Focus on changes in the floodplain, but look outside the floodplain for solutions (e.g. impervious surface, stormwater management, regional approaches);
- Have measurable, outcome-oriented goals with adequate monitoring;
- Include flexibility/tailoring to account for local/regional/watershed conditions;
- Focus on the ends (reduced flood risk and improved natural functions), not the means (e.g., structural v. non-structural solutions: and
- Align Federal government actions and incentives including the Principles and Guidelines, currently under revision.

**Any unified national approach should as a foundation understand and communicate the drivers and demographic, economic, social and environmental interactions now and into the future.** In order to have a successful unified national approach to floodplain management, the participants voiced the need to better understand and communicate the status of floodplain management in the U.S. Examples included an estimated increased 100 million more people living in the U.S. in the next 50 years, increased trend of catastrophic losses, impacts of sea level risk and climate change, Federal programs that incentivize risky behavior, etc. There is a need to improve awareness at the local, elected official level in order that communities can better understand tradeoffs they are making. There was also expressed a need to improve awareness for the need for emergency preparedness and evacuation in riverine and coastal hazard areas using current social science findings.

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

### Focus on incentives to promote a sustainable approach was generally favored by the participants.

The general feeling was that incentives are preferable to disincentives and that an outright Federal mandate was unlikely to be successful. While incentives were favored, it was also recognized that there should be a balance so that risky behavior was not promoted (e.g. if you build in a risky area, the NFIP will not make you whole again). At the same time it was cautioned that calling people who live in the floodplain “bad” was also counterproductive. It was also recommended that we look at other programs to understand why they have been successfully adopted (i.e. LEED Certification), other countries’ experience, etc. Examples of incentives included:

- Removing NFIP grandfathering rates that don’t reflect risk;
- Piggyback on “sustainable communities” effort;
- Use Federal disaster assistance as leverage for good behavior;
- RiskMAP program is well on its way to helping us understand the national flood risk; and
- Federal government could give communities bigger incentives to get individuals to purchase flood insurance.

**Challenges identified for implementing a unified national approach to floodplain management.** There were several different types of challenges listed, see below:

- Difficult to understand tradeoffs between environment, economic and social factors, particularly for non-economic factors;
- We have existing Federal programs that promote development in the floodplain, but do not have a great handle on the nature of these programs and how they relate to each other;
- Lack of understanding why communities and individuals resist purchasing flood insurance but not other types of insurance;
- Strong sense of “home” for many who live in floodplains (e.g. historical and cultural assets);
- We have a legacy of structures (e.g. levees and floodwalls) upon which communities currently depend;
- Money currently goes to address greatest risk/biggest problems and not necessarily those showing the best floodplain management behavior; and
- Executive Order 11988 is difficult to understand (Federal agencies not in compliance now).

### Topic 1 – Three Ideas Responses:

Ideas/Comments/Recommendations
<b>Non-Profit Organization or Association</b>
Use other Federal programs as incentives in partnership with FEMA and NFIP programs
Improve coordination among all Federal agencies and coastal states of coastal zone management, floodplain management and emergency management
Integrate agricultural programs with flood loss reduction and floodplain management/risk reduction programs
Increase funding for popular and effective agricultural conservation programs that buy permanent easements to protect floodprone lands and resources
Do not use beach nourishment in any federally-funded projects, unless Federal interest can truly be shown
Appoint a Presidential or Congressional commission to assess major shifts needed in national flood risk management, including a possible shift to a national model that delegates floodplain management authority and responsibility to states with incentives and disincentives
Create a vision that can last over the course of Administrations
Spread risk amongst a large population <b>or</b> have those at risk pay for living at risk (conflicting philosophy)
Take into account all uses of waterways
Try to quantify environmental benefits of industries in proximity to waterways
Develop cooperative relationships with industry
Develop complete inventory of structures, streams, rivers, wetlands, cultural resources
Do not support incurring future risk. Conduct study for Congress to identify incentives to put people at risk and destroy natural resources in the floodplain to identify when to make changes in programs and incorporate that into the Unified Program.
Reduce or eliminate new development in high risk floodplain and coastal hazard areas

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

Ideas/Comments/Recommendations
Protect and restore floodplain and coastal areas so as to provide natural flood and storm protection to communities and to protect and restore important natural areas and the many ecosystem services these areas provide
Work toward the wise use of floodplains per UNP
Initiate national study on environmental degradation that results from water resources development and the impact of that degradation on the economy
Collect and build database of floodplain resources and functions to serve as a baseline for measurement of future losses and impacts of loss
Develop a national floodplain protection and restoration plan in close coordination with states – a blueprint for holistic, system-wide and watershed-based flood and natural resource management – multiple benefits of reducing nitrogen loadings, improve fisheries and drinking water supplies
Establish a National Floodplain Management Policy
Reinvigorate E.O. 11988 and evaluate compliance to 500 year protection for critical facilities, continuity of operations during a 500-year flood, avoiding floodplains and avoiding adverse impacts and use future conditions in decision making, stronger mechanisms for enforcement and accountability
Build all structural measures to the 500 year protection if any Federal investment and for insurance regardless of benefit/cost
Incentives and disincentives to encourage states to issue strong executive orders on floodplain management and penalties if state programs are not subject to the E.O.
Revise Principles and Guidelines to include public safety and sustainability, promote non-structural approaches, account for all benefits, require protection and restoring the functions of natural systems and chance NED concept to national economic sustainability
Clearly communicate flood risk on maps including uncertainty of forecasts and improve terminology
Provide incentives and funding for public outreach on flood risk and insurance, especially in areas with levees and other residual risk areas
Encourage market-driven, private-sector incentives for mitigation and funding for infrastructure
Deny subsidized assistance for public infrastructure that would encourage development in floodprone areas
Develop national standards for infrastructure (roads, bridges, etc) and award increased Public Assistance to communities that meet national standards for infrastructure
Eliminate benefit/cost requirement of repetitive loss structures
Ensure that all infrastructure supported with any Federal funding is sustainable in accordance with Federal Executive Orders
Define critical facilities and require that they be located outside the 500 year floodplain or, if impractical, protected to and accessible and operable during the 500 year event
Provide funding for collection of basic data needed to manage risk (e.g. streamgages, loss/insurance data, etc.) – NOAA Digital Coast data and website are a good example
Place all data collected post-disaster (including NFIP claims, PA&IA information, etc.) into public domain and accessible to states, localities and stakeholders in real time
Private Company
Incentives: Provide cost share credits post-disaster for mitigation actions take pre-disaster
Incentivize state/local to implement mitigation approach
Blank
Not Unified Program, Yes Federal framework - Goals/Objectives/and Strategies see more accountability
Protect Riparian Corridors
Recognize and incentivize institution who exhibit good behavior - i.e. exceed Federal minimum standards
Federal Government
Who is assessing interrelationships of all Federal Agency authorities and programs?

# May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

## Topic 2: Identifying Successes and Conflicts in Floodplain Management

### Topic 2 – Background:

While each discussion headed in a slightly different direction, all discussions coalesced around an overarching need for an improvement in horizontal coordination among Federal agencies and vertical coordination between Federal, state, and local interests. This coordination had several forms to include avoiding regulatory conflicts, challenges of bureaucracy, legislated differences in missions, simple lack of communication, and other forms of coordination that individually and cumulatively led to less than optimal use of limited resources. Also of note, was a clear request for Federal agencies to undertake leadership roles in developing methods, policy, and resources (e.g., funding) to move water resources efforts forward. This leadership role was clearly caveated as not being directive in nature, but supporting of local and State preferences concerning the development and maintenance of their floodplains and water resources.

### The Key Themes expressed during these discussions include the following.

- There is an urgent need to establish a nationwide vision and priorities of action for activities occurring within floodplains and affecting floodplains
- There is a need for improvement in Federal interagency and Federal-state-local-NGO communication, coordination, collaboration
- The existing fragmentation of floodplain responsibilities and requirements is a major obstacle in moving forward with better and more effective floodplain management
- Because of resource challenges and individual and community preferences there is a need for individuals to understand the risks associated with their activities in a floodplain and accept the need for risk reduction strategies

### To address the Key Themes, the groups identified the following critical challenges in this effort.

- The Federal government needs to streamline and improve programs and processes to both increase efficiency within the Federal government and assist State and local groups as they attempt to cope with complicated, sometimes voluminous Federal requirements
- Through engagement in watershed level planning and decision making, it seemed clear that the most effective and resource efficient decisions could be made, but it is undecided who should or would have the lead in watershed level investigations and who should or could fund these efforts.
- Changing the public and government views that risk is only the government’s responsibility by altering the enabling paradigm facilitated by current programs that relieve individuals of personal risk from flooding (stop underselling risk).
- Existing NFIP minimum standards are often not followed or enforced.

### The discussion groups identified a number of solutions and visions, but the following are the main themes that emerged.

- All activities, Federal, state, local, and private, should be considered within a watershed approach
- The Executive Order on floodplain management should be revised to contain clear and obtainable language to avoid differing interpretations
- The agencies of the Federal government must work together to find a means of providing national leadership that includes varying implementation strategies
- Require a consideration of full life-cycle costs for projects in the floodplain and supporting watersheds

### Topic 2 – Three Ideas Responses:

Ideas/Comments/Recommendations
States
Develop a sliding cost share for disaster assistance based on planning, zoning, permitting, development. Could use as a benchmark for all hazards. Non-structural measures should always get a larger Federal share since there is no future O&M obligation.

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

Ideas/Comments/Recommendations
<b>Non-Profit Organization or Association</b>
Increase inter-departmental cooperation at the local level to ensure consideration of floodplain management across all areas of local government. Strengthening local programs will strengthen cooperation with the state and Federal governments
Perform analysis of all agencies programs and policies that inadvertently encourage or contribute to increased flood losses/flood risk
Create a stronger linkage between storm water management, floodplain management, and hazard mitigation planning
Work to increase state level technical capacity for floodplain management to assist local level
Mesh budgets and related outputs to minimize duplication and simplify information for local officials
Collaboration on risk messaging and identification of messages that counter inadvertently
Better information training for local and state offices
Depict failure zones associates with dams, levees, diversions, and reservoirs on flood maps and display other special hazards
Better information sharing from state to state on completed study results
Approach river systems, wetland areas as natural treasures
Integrate hazard mitigation in local planning
Identify and disseminate best practices in future build-out scenarios
Promote life cycle cost of hazard mitigation in new development
Experiment with better coordination within watersheds of various scales
Target Clean Water Act wetland mitigation activities to the high value areas within watersheds to restore natural functions
Focus Natural Resource Conservation Service and Farm Services Agency conservation programs in areas that would result in multiple benefits
Prioritize existing wetland and land protection funding (e.g. NOAA, USFS, USFWS) to align with floodplain protection and restoration plan that would include update to 1989 National Wetlands Priority Conservation Plan.
Make Disaster Assistance contingent upon NFIP participation and compliance and maintenance of flood insurance for private and public facilities
Expand the Emergency Management Assistance Compact to cover the mitigation and recovery phases, including substantial damage and permit actions
Establish a comprehensive set of emergency rules for funding, cost-sharing and priorities so Federal programs after a disaster are consistent –ensure that emergency action plans do not cause adverse flood impacts on other properties or communities
Base receipt and amount of disaster assistance to individuals on the extent to which they mitigated and/or insured their flood risk
Review Public Assistance and Individual Assistance for consistency with E.O. 11988
Discontinue practice of waiving flood insurance requirements after issuance of LOMRs – apply risk-based rates instead
Require private homeowners insurance to cover all natural hazards – end Federal flood insurance
Require flood insurance in 100 and 500 year floodplains, storm surge zones and residual risk zones associates with structural projects (preferred risk rates for residual risk)
Discontinue the use of maps for flood insurance purposes – use instead for planning and management of floodrisk
<b>Private Company</b>
Focus on future conditions for FPM and risk assessment
Celebrate/ promote communities that are successful in FPM
Focus on watersheds
<b>Blank</b>
Flood model interagency collaboration
Upgrade Executive Order to emphasize integrated water management

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

Ideas/Comments/Recommendations
Enable and recognize institutions that exhibit effective flood management programs
Develop a temporary program to share the costs of technical examination for the nation's levees for NFIP purposes
Amend the Stafford Act to withhold Public Assistance from communities who are not in compliance with NFIP and E.O. 11988
Amend 44 CFR to require all local floodplain administrators to be trained and certified (similar to code officers)
Amend NFIP to require those at risk to pay for risk and accept responsibility for risk
Develop watershed-based actuarial flood insurance rates to reward good communities
Make it mandatory that all Federal agencies and state agencies using Federal funds follow 44 CFR 59-74
Ensure that a community that is using grant money to conduct a buyout in the floodplain is not simultaneously building somewhere else in the floodplain
Educate state DOT agencies on CLOMRS and LOMRS so that they may incorporate into projects from the start – make mandatory for federally funded bridges
Permanent agricultural easements to avoid damaging practices in the floodplain
Change rates for repeated claims in Zone X
Incentives for correcting the size of culverts
Keep structures out of fluvial erosion zones as well as Special Flood Hazard Areas
New mechanisms to purchase repetitive loss properties that are not tied to mortgages
Avoid duplicative services (e.g. modeling, data collection)
Federal Government
Better alignment of coastal zone and floodplain management policy
Eliminate/ reduce duplication of effort
Create Federal policy re: funding of global structural mitigation
Identify/ communicate risk effectively
Focusing Federal effort among various agencies
Spending effectively to produce desired/ measureable result
Re-evaluate previous commitments and use them to move forward those that are still valid
Identify those responsible for addressing floodplain management direction and keep it a viable management tool
Local level - planners have no clue how to process floodplain maps, laws, etc - nor does the public - education is needed
Water is a simple idea to understand - (i.e. spilled liquid) - what complicated it is the (wording, terminology, maps, etc - simplify the process visually
Use the other info as layers to explain processes, repercussions of action/ inaction, etc
Lack of a vision for floodplain management
Lack of integration across Federal agencies that individually only have authority for certain solutions - limits the range and success of programs

### Topic 3: Balancing Environmental, Economic, Social and Public Safety Aspects of the Floodplain Management Vision

#### Topic 3 – Background:

More sustainable approaches to floodplain management incorporate environmental, economic, social and public safety elements. However, given the uncertainty and complexity associated with each of these elements, it can be difficult to strike a balance between them. In addition, because of the different values and competing interests that individuals and organizations have on each element, defining the “right” balance for everyone can be impossible. As a result, it is imperative that decision-makers are clear about how decisions are being made, who’s involved in these decisions, and what “balance” they are trying to strike.

# May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

## Topic 3 – Summary:

**Most attendees thought that there was not balance between environmental, economic, social, and public safety and the Federal government is contributing to the imbalance.**

When a Federal agency either allows a development to occur in a floodplain before a disaster or offers assistance to repair floodplain structures after the disaster, the Federal government is legitimizing the poor planning and choices. Some thought the question itself will have a subjective answer as to what balance is and is therefore impossible to achieve. This also led to a discussion of tradeoffs and externalities. Some disagreed with the tradeoff suggestion, because all of the factors are satisfied through avoidance of floodplain and wetland development if economic costs are viewed in the long-term. Most agreed that the Federal government generally covers the financial aspect of disasters, but this leads some communities to not consider the full risk and not think of themselves as negligent.

**The attendees stated that the current framework enables risks to build up over time and Federal policy only slows the growth of flood risk.**

To address this, attendees thought the risks need to be avoided or reduced on the front end during non-disaster situations as well as during disasters. By not enabling poor choices and by addressing risks following disasters, area can achieve the best possible outcomes over time. The Federal government adds to the imbalance by subsidizing risky development. The Federal government was also said to do this through infrastructure in unsafe areas. Federally assisted development often spurs private development in nearby areas. Attendees also stated that public safety should control decision making.

**Attendees also seemed to agree that individually communities, states, and agencies think they are succeeding, but collectively the system of floodplain development is not working.**

A primary reason for this was thought to be divergent missions and philosophies that do not mesh well. The ability to plan is also impacted by different levels of awareness of risk and unknowns, such as population, future development patterns, and climate change. Private landowner rights and tourism dollars are also an issue that keeps communities from making necessary changes, but an attendee commented that land speculation is not a guarantee. Communities must also maintain consistency in decision making to avoid legal issues. The group thought there are small watersheds where floodplain management works well. These communities are thought to have a community-based strategy or policy, enlightened and consistent leadership, adaptive management, a culture of risk adversity, interest in the environment, and a community willing to absorb upfront cost for long-term gain. Orange County and Oakland, CA were mentioned as success stories. These communities used relocation, stormwater taxes, and designated recreation areas to address floodplain concerns.

**Attendees did not want Federal involvement to override locally driven decision making. Instead, participants advocated Federal involvement to provide technical assistance, risk information and incentives to encourage risk informed decision-making at the local level of government and by private landowners.** Specific suggestions of assistance needed from Federal agencies included: providing access to flood risk information, providing guidance, tools and technical support to local communities to assist them in their own planning, and examining the drivers of flood risk to provide better information about what the contributors are to flood risk.

**Attendees recommended that the Task Force identifies incentive policies for communities to perform mitigation.** Outreach should also be performed to make the communities aware of the return on investment from responsible floodplain management. Attendees also commented that land use is a local matter, but the Federal government should not enable risky development in inappropriate places. In short, the Federal government needs to work on assisting locals in good decision making rather than merely subsidizing risk. Some solutions mentioned were tax credits and incentives, incentivized grants, greater guidance, and changing the nomenclature and behaviors concerning the issue. Some thought there should be more focus on risk in general rather than just the 100-year flood. Silver Jackets were mentioned as a good example of guidance from Federal agencies and Federal, state, and local interaction.

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

### Topic 3 – Three Ideas Responses:

Ideas/Comments/Recommendations
<b>Local Government</b>
Examine feasibility of risk-based approach to FPM in which tradeoffs require decision-makers to accept both the benefits as well as the costs of decisions
Determine why flood losses continue to rise even though Federal, state and local floodplain management programs are generally regarded as effective. Take a realistic look at how effective existing programs can be expected to be.
Look at FPM in terms of outcomes as opposed to programs, policies and processes - what will it take to actually affect the curve of flood losses? Is the current rate of losses the best we can do?
Federal guidance for cost benefit analysis considering all stakeholder points of view
<b>Non-Profit Organization or Association</b>
Understanding and managing organizational structure within the states in terms of floodplain management and emergency management. State organizational structures differ and there any be a disconnect as to their "formal" relationships- should they be more closely linked? Should ach state have a similar structure?
Lexicon issues - i.e. mitigation v. adaptation (mean different things to many people) - social and cultural divide
Question of "who pays" is important. Maintaining affordability of communities in/ near floodplains
Habitat for Humanity chairs a "Children of Disasters" coalition and can be used as a resource
Curios on how national flood insurance program reform fits into task force work plan
Much of current floodplain-related policy incentivizes high-risk behavior by emphasizing the externalization of risk from individuals and local govts to the Federal government. We must change policy and programs to support risk avoidance, stronger floodplain standards to reward wise behavior, and punish high-risk behavior.
Balance must put much greater weight and consequence on protecting and restoring environmental health and quality
Nation should adopt a policy of actually reducing flood-related risk and cost, rather than simply slightly reducing the rate of growth of flood risks
Develop a scorecard or rating system that measures "balance"
Need emphasis on public safety above all else
Provide incentive for communities to avoid high-risk FP areas
Eliminate incentives for development in high-risk FP areas
Create nation-wide FP map of priorities for protection and restoration
Recognize that the reward for poor use of water resources and floodplains go to one set of folks (develops local taxes/ jobs) the costs are pushed on the Federal taxpayer, the disaster victims, and the depletion of the environment
The solution to the imbalance will be achieved through economic incentives for change at the end level of developers, engineers, architects, builders, local govt, state govt, private non-profits, regional users, and Federal
We need to recognize economics in driving the current set of problems; economics will help us change behavior
Look at programs like ASFPN's NAI, NEMA, Hazard Mitigation that work
Governments role is to protect us from harming each other. Public safety must remain paramount.
Make a distinction between existing vs. new development
Biggest issue - need to treat new development and new projects differently than existing infrastructure and communities
Quantify what is intended as "balance" i.e. between Federal agencies; between/among Federal level and local/states
Ensure that analyses are done according to sound analytical methods
Evaluation/ discussion should not pit structural against non-structural. All objectives should be considered.
Investigate incentivizing good behavior for communities who are "good actors" in terms of flood insurance
Focus on ecological economic valuation research and efforts
Define improving environmental conditions broadly enough to account for advantageous transportation forms

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

Ideas/Comments/Recommendations
Allow public input
Transparency in decision making
Federal Government
Publish case studies - good/bad/balanced - people learn more from this
Create consult entity to help local governments with tough decisions
Incentivize good decisions - create a new tax incentive for removing floodplains from development - forever (e.g. funds for floodplains)
Need to have consistent review of requirements? (adoptive)
Need cohesiveness with these above aspects (talk to each other)
Some general messages should reach all communities
Integrate across programs and efforts so that if one agency/ govt level doesn't have authority or capability to address a challenge, another may
Provide transparency in decisions so the political pressure can be recognized where it occurs
Federal govt should stop "digging the hole deeper" by reviewing all of its programs that subsidize real estate development and revising the ones that don't take account of flood risks
Focus on long-term sustainability and include incentives, disincentives, and regulation to ensure future posterity and environmental protection
Challenges from local political issues. Provide mechanism to move forward watershed/ national interest while protecting individuals.
Communicate value of competing interests
Establish priorities (no true balance)
Examine new incentives/ disincentives for state and local government
Develop a consensus as to the meaning of balance. Stakeholders seem to disagree on the "end state"
A hard line will have to be taken to pursue the agreed upon "end state"
Educate the public - libraries, schools, etc
Provides incentives to local governments to participate in educational programs for their communities

### Topic 4: Fostering Partnerships

#### Topic 4 – Background:

The floodplain management process involves a range of government agencies and initiatives as well as private-sector and non-governmental decision makers. Figuring out how who is responsible for what aspect of the floodplain management process can be confusing because of competing interests and geographic or jurisdictional boundaries. In addition, taking a watershed approach to floodplain management expands the dialogue around floodplain management approaches to involve upstream stakeholders and interests than may not be at the table in a more traditional or limited floodplain management approach. To understand the appropriate role organizations play in the floodplain management process, it is important to understand what roles they are currently playing and the resources, interests, authorities and capabilities of each.

#### Topic 4 – Summary:

**Many of the attendees believed that more guidance from the Federal government would help local government make better floodplain decisions.**

There was a belief that many at the local level lack the knowledge, and resources to obtain the knowledge, to assist them in deciding on many courses of action in areas that have high probability of flooding. The attendees believed that the guidance from the Federal Government should have long term interests considered. The belief was that those at the local level do not have the time or ability to study and evaluate the long term affects of activities in the floodplain, and that is the kind of vision and guidance they would like from the Federal level of the government. Some attendees expressed concerns over a lack of knowledge as to where to go to obtain the answers that they feel would help them make better decisions. Much of this guidance would come in the form of

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

data. Specific forms of data that were articulated were data analysis, modeling capabilities and forecasting for the future. This data should come in a form that depicts real consequences, positive and negative, for floodplain management. There were suggestions for the formulation of a risk evaluation process that communities could walk through to better understand the risks and rewards trade-offs in decision making.

### **A national vision for the floodplain and its management should be created, where national includes local, state, Federal, tribal and private sector input.**

The idea of a national vision of the floodplain seemed to evolve from the presence of a partnering atmosphere. Some of the attendees believed that while there are examples of the government partnering amongst itself in attempts to better manage floodplains, there is not enough outreach to partner with entities at the most local levels, including the private sector. There was a belief that there is not enough of a local vision considered when the higher levels of government are determining the focus of vision for floodplain management. There are trade-offs when considering the perspective of local entities versus that of the Federal government in respect to floodplain management, and there is a belief that the local interests are not equally weighted in the decision making process. Many stated that all interests need to be equally weighted, including ecosystem health as well as human benefits.

### **A reoccurring theme that came up during the session was the topic of incentives.**

The idea of incentives was two-fold. The attendees believed that there are not enough incentives present to encourage people, businesses, and local government to make better decisions when managing the floodplain, and at the same time there are too many incentives to make poor decisions in the area of the floodplain. The belief was that the kind of incentives that are needed to help inspire better floodplain management can only come from the Federal level. It was stated that there are overwhelming incentives at the local level to externalize the risks involved in making poor decisions in floodplain management, in attempts to internalize the short term benefits of that externalization.

### **The attendees believed that there is a need for communication and education concerning the various aspects of managing a floodplain.**

There was a consensus that there is a need for improvement in the communication of the risks that are involved in decisions related to managing a floodplain. This communication needs to be directed at local residents, as well as local businesses and governments. There needs to be a “normal” understanding at all levels of citizenship. There was a belief that there is a lack of public awareness on the subject of floodplain management which leads to frustration about limitations and decisions made regarding the floodplain. This idea of communication also touched on the idea of warning systems and data dissemination. It sounded like this idea has concerns in the pre-disaster states, during a time of disaster, as well as post-disaster response efforts. The messages in these communications should be consistent and delivered through channels that optimize outreach and understanding.

### **Topic 4 – Three Ideas Responses:**

Ideas/Comments/Recommendations
<b>Local Government</b>
Consider the unintended consequences of limiting development/redevelopment (i.e. limiting Federal money) in dense urban watershed and floodplains - e.g. potential for additional sprawl and its implications for transportation, infrastructure, etc.
Include the Bureau of Reclamation on the task force to address canal issues in the arid southwest
<b>Non-Profit Organization or Association</b>
Collaborate with HUD for means testing
Lessons learned from Clean Water Act?
Importance of messaging from many different actors - states, Federal, community level
Focus technical guidance for a stronger and more unified message
Develop a message to help change the cultural view of floodplain management
Get the various Federal Agencies to use their own consistent groups to get out risk and risk reduction message

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

Ideas/Comments/Recommendations
Explore through partnerships what are incentives and disincentives at local level to making decisions to promote risk reduction
Promotion if education among partner organizations
Training/incentives to get insurance agents to encourage the purchase of flood insurance
The Federal role is to empower locals via resources, training, capacity building, etc.
Partnerships beyond the government sectors. Public - Private models, non-profits, etc.
Recognize economic fundamentals reward very poor landuse building decisions and do not very well reward good land use building
We need to do a much better job of monitoring change and land use at the local level on both pre and post disaster situations
We need to promulgate much better information about all natural disasters to serve as a good foundation for good land use. Flood mapping needs to better reflect risk much better than now - not SFHA/Non-SFHA - but what is real risk - verify levee risk/liability
Maintain active FIFM-TF
Involve major NGOs in consensus building
More outreach is needed to rural local governments to help clarify floodplain management criteria to help with lack of capacity at local level
More input from locals should be incentivized, bring more people together would create better partnerships
More input from industries that use the waterways
Take into account the environmental impact of different transportation systems and factor that into decision-making
More transparency in Federal Government decision-making process
Consistency of criteria to state and local governments - short-term and long-term
Risk analysis tools that quantify and prioritize all government requirements for decision makers
Remove requirements and incentives that are at cross purposes to good floodplain management
Amend Disaster Relief Act to apportion costs, responsibilities and roles among Federal, state and local governments and the public commensurate with risk – adjust cost share to benefit those who do more to prevent and reduce at risk development.
Develop, fund and implement technical and financial support and other incentives for localities to conduct their own management and mitigation programs and encourage communities to integrate floodplain management with land use, watershed and conservation plans
Require No Adverse Impact approaches in state and local mitigation plans and CRS, produce guidance and incentives to encourage incorporation into state/local planning requirements
Train Public Assistance and Individual Assistance field staff to promote mitigation in all post-disaster federally supported actions and incorporate these opportunities into all-hazards mitigation plans
Other
Institutional/Governance Models that leverage Federal, state, local entities to solve problems
Create a "Watershed Map" that allows stakeholders to institutionalize wise floodplain management
Develop a Federal tool box that facilitates partnerships and wise stewardship
Risk communication/identification
Supporting local decision making
Established measurable criteria consistent across country
Help locals prioritize flood issues compared to competing priorities
Solve problem and externalities in Federal programs (Ed Thomas' comments) i.e. Fix the law
Establish or re-establish regional watershed/river basin commissions
Develop a funding program for local sponsors to rehabilitate levees and floodwalls
Fund updates of and complete National Weather Service regional rainfall frequency curves
Private Company
Partnerships need to recognize not all partners are the same, need flexibility
Partners are OFAs, state, locals, associations and private sector
Develop interagency relationships at the regional/district level

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

Ideas/Comments/Recommendations
<b>Federal Government</b>
Examine existing Federal-state partnership models
Consider establishing Federal clearinghouse/single source resource for all Federal floodplain programs to support states
Support partnerships among groups with floodplain responsibilities
Motivate the private sector to partner more strongly on floodplain management - tax incentives/disincentives
Develop public education campaign to encourage understanding and desire to participate in good floodplain management
Integrate water resources planning and drought, flood, erosion, water pollution - in this Task Force to produce guidance and regulation for whole-systems approach that filters to state and local governments
Facilitate watershed planning in areas where (there) are multiple political entities
Direct funding to avoid externalizing losses from flood hazard. Direct funding to smarter development.

### Topic 5: Adapting to Climate Change

#### Topic 5 – Background:

Climate change will have an impact on ecosystems and flood damage risk within floodplains. There must be a common framework for how the Federal community, with its partners, approaches climate change adaptation measures within the floodplain and contributing watersheds to ensure that these approaches and associated guidance are complementary and do not compete with each other. As all levels of government, non-governmental organizations, and the private sector begin to take steps to adapt to climate change, this is an opportune time to develop coordinated approaches that identify appropriate roles and responsibilities and make efficient use of available resources.

#### Topic 5 – Summary:

**Participants generally felt that the Federal government needs to take more of a leadership role in the area of climate change adaptation.** This leadership will help prevent states and local governments from going off in different directions, which could lead to inconsistent standards and approaches as well as wasted resources. Participants frequently mentioned the need for leadership in the area of data and standards related to climate change impacts – gathering new data on climate change impacts (shifting habitat, changing hazard events, rising groundwater, etc.) as well as taking action in the light of uncertainty. There are currently no consistent guidance, criteria, or assumptions about future conditions that will help guide current decisions. There was general agreement that the government needs to take an adaptive management approach, particularly in the absence of all the data. A few participants suggested that if there is disagreement or political tensions about the data/research behind climate change, there are other reasons that could serve as a prompts for Federal action (e.g., subsidence, poor land use, existing hazards).

**Most participants felt that responsibility for climate change adaptation efforts need to be shared across the public, private, and non-profit sectors, as well as among individuals.** Participants framed responsibility in two ways: responsibility for different aspects of implementation as well as responsibility for costs. In terms of implementation, participants suggested that the Federal government should set standards and criteria, NGOs should educate and inform, and the private sector should be responsible for working with their clients (local governments, developers, and individuals) to implement these standards. In terms of costs, participants emphasized that those who reap the benefits of their actions should pay – whether that is the developer, the local government, or the individual. These potential costs should be evident to decision makers so that they can make more informed decisions. This viewpoint is not limited to actions related to climate change; most participants agreed that this approach needs to be adopted for floodplain and flood risk management actions broadly.

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

**Nearly all participants suggested that Federal programs should be better aligned to promote climate change adaptation goals.** Participants provided several examples of how this could happen:

- Ensuring that government resources are only allocated to projects that take climate change into consideration (e.g., adding climate change risk to hazard mitigation planning and projects [including efforts undertaken through FEMA-sponsored programs/grants]; updating urban stormwater design standards for future storm events; prioritizing solutions that will help adapt to climate change under FEMA’s planning and grant programs, including post-disaster recovery activities)
- Assessing incentives and disincentives in government programs so that the government is encouraging good decisions and preventing bad ones.
- Encouraging decision makers to take longer-term views when making decisions (e.g., using lifecycle cost analysis, balancing long-term economic benefits with short-term gains, longer-term planning horizons).
- Encouraging links between programs and projects that improve water quality and projects that reduce flood risk.
- Focusing on key processes as a key to maintaining functioning floodplains and coastal areas – not continue the dependence on structural solutions such as floodwalls, dams, levees and channels. Ecosystems that support biodiversity and provide people with water, food and other natural resources and services could continue to function despite changing climate conditions.

**Participants observed in a variety of ways that the key challenge for this topic is figuring out how to bring together science, public understanding, political processes, and economics, especially at the local level.** Despite the clear scientific consensus, there continues to be debate about whether or not climate change is happening and whether human activity has had an impact. In the states/communities where this debate is occurring, achieving consensus or making decisions that involve climate information becomes very difficult. The public is bombarded with new studies daily, so someone needs to help them make sense of this information and figure out how to apply it to their decisions. It’s often not in the political or economic interest of local officials to “agree” with climate change, because there is a cash advantage for them and for local developers to build. We can’t deal with climate change risks appropriately unless we understand all of these tradeoffs.

**In addition to encouraging more Federal leadership and better alignment of federal programs as noted above, participants also suggested that the Task Force could assist with communication and coordination on this topic.** For example, participants suggested that the Task Force could promote more effective regional and metropolitan partnerships for joint action. They also suggested that they could develop a simple pamphlet or brochure that helps to clarify issues associated with climate change and floodplain management. This could be used to help educate the interested public and decision makers, as well as promote common understanding.

### Topic 5 – Three Ideas Responses:

Ideas/Comments/Recommendations
<b>Local Government</b>
Evaluate grant and cost-sharing programs to eliminate incentives to continue to put people in harm's way
(Federal) Directives to state and local governments to assist in developing political will
Translate climate change impacts to local level (i.e. airport inundated)
<b>Non-Profit Organization or Association</b>
Define how it matters at the local level
Build effective regional/metropolitan partnerships for joint of common action
Help provide consistent knowledge and guidance
Provide technical leadership on climate change impacts
Climate change strategies should be part of floodplain management by providing real-time data to help adaptation decisions as things happen
Need accurate maps of water resources for GIS maps at the local and state level 1)Floodplain 2)Wetlands 3)Rivers and Streams 4)Coastal Areas
Local and state governments need incentives to make decisions to adapt communities climate change

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

Ideas/Comments/Recommendations
Condition eligibility for Federal funding on state and local adoption and enforcement of plans, standards and regulation that build resilience
Call for national flood risk management policy, program and goals that include climate adaptation
Federal agencies should work to measure and account for changes to the key physical and ecological processes such as hydrologic, sediment and nutrient regimes as well as floodplain and coastal connectivity
Facilitate the development of markets for floodplain ecosystem services
Study and develop recommendations on ways states and local governments can integrate climate adaptation into plans, standards and regulations in ways that are legally defensible
Evaluate vulnerability of U.S. population centers to climate change with regional climate studies
Support/participate in data collection and analysis on impacts of climate change with regional research data – include this data in all-hazard mitigation plans and flood maps
Ensure consideration of climate change impacts in agency compliance with executive orders
Incorporate future conditions hydrology (include development and changing storm patterns) and cumulative impacts into flood risk determinations under the NFIP and other agency programs
Blank
Regardless of climate change, uncertainties in flood benefits, subsidies, poor land use decisions involving levees, sea-level rise, increased density in hazardous areas, we as a society are making things worse
Poor land use practices in the watershed are making flood heights and velocities worse
We need to change the entire idea of in or out with respect to the special flood hazard area. Recognize uncertainties in flood mapping. Everyone is in the floodplain.
Linking floodplain management and climate change objectives will be mutually beneficial
Climate change impacts may eclipse floodplain management as a driver of land use regulation in the future
Risk based management of floodplains is superior to the binary approval currently used
Provide learned and consistent criteria for climate change impacts so that designs can include them long-term
Balance climate change and development consideration to avoid direct conflicts
Look for regionally optimized solutions to aid local decision makers
Need to get NFIP house in order first. Why would general public believe that climate change will hurt them when they feel completely safe from the 100 year flood?
Need to decentralize building in at-risk areas, e.g. eliminate deductions for flood losses.
Need to make floods/hazards/risks leadership the NASA and Peace Corps of the 1960s.
Establish strong effective leadership at Federal level, with proper incentives <u>and</u> disincentives
All Federal Departments/Agencies must incorporate climate change into their programs
Risk communication is key for understanding by individuals and <u>private sector!</u>
Federal Government
Integrate the authorities and programs of the Federal Agencies (some of which are conflicting)
Look at permitting development and cumulative effects in wetlands
Seek to establish a Congressional Caucus to champion the significance and impact of global climate change
The whole idea of global change has been politicized. A scientifically agreed upon very simple pamphlet would help to clarify the issues, educate the masses and leave no room for debate.
Along this themes of simplicity - and floodplain in particular - a simple you tube-like video - which takes a simple community <u>EXAMPLE</u> - and shows THE EFFECTS OF GLOBAL CLIMATE CHANGE LOCALLY.

# May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

## C. Summary of Day-2 Scenario Exercise and Plenary Session Discussions

The Day 2 activity included a role playing scenario where participants played the role of an advisory committee to a Mayor of a fictitious town in the United States who was dealing with floodplain related development issues.

### Advice to the Task Force

- Conduct research to understand and be able to communicate the root causes/stressors of water management issues (e.g. sediment). Work to elucidate connections between economics (community, jobs), loss prevention (safety, insurance, drinking water) and protection of functioning floodplains. Use these root causes to guide activities and priorities of the Task Force.
- Work with states and local governments to articulate appropriate roles and responsibilities of all levels of government. The Task Force should strive for a “national” approach, not just a “Federal approach”, however it is understood that understanding the alignment of Federal programs may be a necessary first step.
- Main roles of government should be to:
  - Develop and communicate a full explication of the level and nature of risk for communities (e.g. risk to economics, natural resource protection, and water resources). This should include understanding of uncertainty and residual risk;
  - Develop and maintain a system of warning and evacuation planning; and
  - Maintain a system of indemnification (look at Price Anderson approach to Nuclear Regulatory Commission).
- Ensure that the Task Force maintains an attitude of “supporting good local land use decisions and Federal infrastructure investment” and that it does not get perceived as a Federal takeover, Federal edict or mandate (funded or otherwise).
- Provide a program guide that explains Federal programs, their relationship with floodplain management/water resources management and what they can provide to local communities.
  - As a second step work to articulate possible state/regional programs as well.
- Invest in programs such as Silver Jackets that provide problem-solving approaches and facilitation of interagency collaboration at the state, community and regional levels.
- Explore the utility of public/private partnerships at the local, state and regional levels to help articulate and develop solutions, leverage resources and negotiate agreements on land use, elucidate connections between safety/economics/natural resource protection, etc.).
- Review Federal programs to understand where they are aligned and not aligned to promote public safety and protection/sustainability of natural functions. Look at Goldstein Report (Wetlands) as a model.
  - Understand how Federal programs incentivize good floodplain management/flood risk reduction. This should include economic development incentives and the Tax Code.
  - Understand how Federal programs inadvertently incentivize harmful floodplain management/flood risk reduction.
  - Understand how Federal programs can encourage accountability at the appropriate level of decision making (e.g., local governments should be held accountable for local decisions).
  - Understand how Federal programs do or do not encourage communities to base their decisions on long-term visioning and planning and/or future conditions. Communities are making decisions about buildings and infrastructure that will be around for 50-100 years, and they should base these decisions on the best information available on what these future conditions might look like – storm patterns, flood levels, development trends, etc. (e.g., FEMA maps do not show future development, only existing.)
  - Understand whether the incentives we have are working? Are the incentives the right ones and large enough to make a difference?
- Hold regional ½ day meetings to collect perspectives and input from local elected officials and other on-the-ground decision makers. Hold these in areas where people have experienced issues (e.g. Nashville, Rhode Island, etc.). Could use these to get feedback on a draft Task Force work plan.
- Educate communities/elected officials about risk, especially the false sense of security that people hold based on structural solutions (e.g., levees). Role of the Task Force in this is unclear. Ideas included local focus

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

groups, using mapping/visualization scenarios, sitting down with vocal opposition, FEMA to explain Preferred Risk Policy.

### Principles, Values and Overarching Policies and Guidelines

- Task Force should consider adopting a policy of “if you make (or protect) room for the river, you will:
  - Reduce losses to public/critical infrastructure;
  - Reduce economic losses to communities and individuals;
  - Reduce losses to human life; and
  - Protect the natural and beneficial uses of the floodplain.”
- “No regrets” “anti-backsliding” policies that vow not to make things worse or increase risk.
- Policy to protect/restore historic hydrology and functions of the floodplain.
- Policy of not externalizing costs (e.g. to future generations, to other communities/people).
- Those who benefit from at risk development should pay long term cost of flood damages, not the Federal taxpayer.
- Allow for regional and local flexibility and tailoring (cookie cutter approaches will not work).
- It is the role of government to focus on safety. Safety has many components, not flooding and structural reliability. It could include crime, drinking water, pollution, etc.
- Incorporate future conditions into guidance and efforts.
- Engage community members in ways that help them understand the tradeoffs and articulate their priorities.
- Communicate that post-disaster communities may look different and that different can be good. The purpose of this is to resist the human drive to “restore” things to the way they were pre-disaster, thereby not addressing as much risk as possible.
- Change emphasis to pre-disaster planning, not post-disaster recovery.
- Take a broad perspective on floodplain management – longer-term planning horizons, future conditions, activities and opportunities outside the floodplain (e.g. upstream stormwater management), structural and non-structural solutions.
- Think about water resources, not just floodplain management.
- Objective that Federal actions and Federal projects should result in no net loss of the physical and ecological processes necessary to sustain floodplains, coastal systems and supporting wetlands.

### Ideas for Financing Needed Pre-Disaster Activities

- Tax on item such as plastic bags.
- Stormwater Management Utility (this gets at everyone in community, not just those living and working in the floodplain)
- Establish special tax district
- Have a 1% sales tax to fund capital projects (e.g., Slosh fund)
- Issue bonds
- Encourage public-private partnerships that provide beneficial programs in addition to development

### Federal Programs That Were Mentioned As Sources of Help

- **Silver Jackets** – loved concept of liaison and problem-solving with Federal family. Could also include (where appropriate) business interests, environmental interests.
- **NRCS** – Soil and Water Conservation Districts, Floodplain Easement Program, Farm and Ranchland Protection Program
- **EPA** – Smart Growth Grants and 319 Grants funding, the Total Maximum Daily Load (TMDL) model for taking more regional approaches, water quality programs for potential synergies for encouraging good floodplain management
- **NOAA** – Special Area Management Plans as means to get additional \$ for place-based studies, Sectoral Applications Research Program
- **FEMA** – All Hazards Mitigation Planning, Community Rating System (should be expanded so that communities can get benefits under other government programs for achieving higher ratings)
- **EDA** – Economic Development Administration’s economic development fund
- **USDA** – wetlands and agricultural programs provide opportunities to encourage flood storage

# May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

## D. Appendix

### Topics of Additional Post-Listening Session Web Comments

- The need for Multi-objective River Corridor Planning
- Levee certification
- State Community Assistance Programs
- Updating risk identification information including Flood Insurance Rate Maps and additional flood hazards
- Establish the Federal Interagency Floodplain Management Task Force as a permanent task force
- Update the 1992 National Assessment of Floodplain management in the United States
- Provide a comprehensive look at all costs of flooding impacts
- Addressing the natural and beneficial functions of floodplains
- Perform analysis of all agencies programs and policies that inadvertently encourage or contribute to increased flood losses and/or flood risk
- Ensure that those who build and live at risk of flooding pay their fair share of the costs of that risk
- Evaluate the effects of Federal spending and its promotion of increased development in the floodplain
- Non-levee embankments
- 2-dimensional modeling
- Vulnerability outside of identified floodplains
- Riverine erosion
- Flood insurance
- Floodways and flood hazard
- Elevation Certificate
- Sea level rise

### Day-1 Topic 1 Breakout Session Notes: A Unified Approach to Floodplain Management

#### Vision-1

- Status quo not working risk increasing
- Like measurable “end points”
- Federal framework and enable/power to local regional planning
- Should Federal facilities be higher or consistent? Protect Federal Investment
- Federal Government should set example
- Politics should not incentivize putting people in harm’s way
- Framework to set goals, but allow for flexibility
- Look at future conditions – need to look at what losses will look like if we don’t change (at local level)
- Locally \_\_\_\_\_ -> Think outside political boundaries, up-and-down accountability
- Qualify all co-benefits at regional/system level instead of project level.

#### Vision-2

- Conduct research into \_\_\_\_\_ and impacts of current programs on costs, who pays, environmental effects, long-term consequence of current and \_\_\_\_\_ of alternatives
- Look at other countries
- 100M more people in 30-days
- P & G need to match up with other agencies/constituencies (permitting, regulations, grants, planning and public infrastructure)
- Costs of catastrophic losses going up exponentially
- National Flood Protection Program (NFPP)
- NFPP implies we should protect people, could adjust people’s relation to floods.
- Yes, many agencies work in floodplain, will still have defacto programmatic impact, just won’t be coordinated
- Resource public has an interest in “special and limited” resource (national impact)

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

- Benefit to look at intersects and help people make good decisions
  - Tax payer cost increasing (don't)
  - Them in harm's way (don't)

### Vision-3

- Articulate priorities, not shotgun
- What is driving flood losses?
- Floodplain management may be to narrow, take up watershed, storm water and impervious surface
- Solutions can be outside floodplain (use as catalyst/leverage) (LID green infrastructure) etc.
- Facilitates X agency incentives (has to be a package)
- Whatever Federal agency is in the business is driving development
- "Sustainable communities" piggyback" of course
- What degree is achievable? What would it cost? What can we afford? How would we achieve it?
- Not sure vision is focused need to be clear
- ID risk, communicate risk so local have appropriate, relevant info to make tough decisions (relate to other costs/investments)
- People shouldn't die from floods
- Clear, realistic outcomes.

### Incentives-1

- Incentives recognize bottoms up. Particularly those higher than Federal standards (e.g. NFIP)
- Balance with disincentives (F)
- Look at different incentives as well – assess what is , is not working

### Incentives-2

- If you choose to build in a high-hazard area, won't be made whole

### Incentives-3

- Government gave communities incentives to get individual to purchase insurance (under CRS), especially lower risk (e.g. link to CDBG grants)

### Goals-1

- More quantifiable objectives with accountability (agency lead/owner especially #2)
- Negative reaction to Federal control (mandate) over local authorities

### Goals-2

- Preference for non-structural approaches, particularly for how risk (attract development behind) and catastrophic results can occur
- Get clear understanding of risk and plan to lower (Risk MAP)

### Goals-3

- Restoring resilience to natural ecological cycles (aquifer recharge, base flow in streams)
- #3 bullet facilitates bad decisions don't spend money to rebuild
- Makes goals outcome oriented (e.g. no net gain of (risk) population living in floodplain)
  - What to do to get there?
  - How do you monitor?
- National policies help give back up

### Challenges-1

- View of Federal supremacy not "unified Federal approach" all levels
- Opportunity: The natural and beneficial functions, recreation and other benefits to local communities
- (fix a problem) Sometimes not a choice between structural or non-structural (both)

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

- Who/how do you empower, manage, and regulate influence implementation?
- Problem: Money goes to problems, not good behavior
- Planning part of Risk MAP to assist local government to assess risk
- \_\_\_\_\_ corridor protection may be a big bang for \_\_\_\_\_ in future

### Challenges-2

- Minimum standards turns into maximum standards
- How to quantify non-economic benefits and costs
- Structural solutions last forever
- Programs offer bad incentives IRS – “write off damages”
- Existing programs/Federal agencies not following regulations
- Challenge previously – not high enough level
- Economic incentives
  - \*Look at Federal programs and incentives that exist
- People attached to “home” – understand the dynamics (economic, social and historic)
- Older homes grandfathered at low NFIP rates (rates don’t reflect risk)
- View that people living in floodplain are “bad”
- Are storm waters contributing to increased flooding?

### Challenges-3

- Decisions that result in an increase in risk made at state and local level – need to think about how to \_\_\_\_\_ (“as subsidized by Federal Government” -> wide variety of Federal programs
- SRF priority
- Disaster assistance as leverage
- 11988 difficult to understand
- NFIP is not self supporting???
- LEEDs certification? Why is it so popular?
- Outreach to insurance agencies to promote purchase
- Definition of “smart growth” v. floodplain management
- Why do people maintain fire/not flood insurance? What is role of banks?
- Risk based approach to flood insurance similar to fire?
- Flood level picture/part of historical record

## Day-1 Topic 2 Breakout Session Notes: Identifying Successes and Conflicts in Floodplain Management

### Round-1/Question-1 – Well

- Program well known
- Stakeholders have respect for program
- Awareness of need to build within floodplain guidelines
- Messaging getting through
- Suggest: having regional level FEMA answer local level questions
- Suggest: storm water working with Floodplain Management
- Suggest: think at budget integration

### Round-1/Question-1 – Not Well

- US Army Corps of Engineers works on a reverse pyramid decision making structure
- Fragmentation of floodplain responsibilities at all levels
- Legislation not coordinated
- Local roles not necessarily talking to each other
- Lack of conformity
- Stormwater studies being used to make insurance decisions.

# May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

## Round-1/Question-2 – Solutions

- Incentivize at the state level to fully take on responsibilities
- Eliminate duplication of effort
- Integrate budgets – at least plain in a way to enhance each other's work
- OMB – needs to be linked here too
- Feds" build capacity at state and local level
- Cut back participation at state level related to answering flood insurance questions
- Local access to existing programs is limited by states
- The US Geological Survey needs to follow the definition of floods that congress defined which includes mudslides

## Round-1/Question-2 – Broken

- Fragmentation
- No nationwide vision or priorities
- Communication to the public at floodplain management and value

## Round-2/Question-1 – Well

- Partnership (since 1986) with US Geological Survey, National Weather Service and the Army
  - Amount of data collected and disseminated
  - Technologically advanced
  - Funding to support
  - Value recognized
  - Keys: personal relationships, understand each other's interests
  - Led by a committee, meets annually
    - Governance scheme that focuses on planning
- Partnership to build flood model
  - USGS, NWS, Army
  - Put together suite of models
  - Regulatory power – full gaps but don't duplicate current regulations
- Funded!
- Mitigation Planning – local state collaboration
- Federal level coordination of mitigation planning
- Coordinated Federal response to floods
  - Interagency level task force after 2008 floods NRCS, FEMA and USACE

## Round-2/Question-2 – Broken

- Frustration with FEMA
  - Getting an answer is difficult
  - Lack of consistent direction /message
  - Risk Map concept is good, but we don't know what it looks like (SRBC has a good example of what a risk map looks like)
- Core goals of TF are not being met
  - Need metrics to ensure we are
- NFIP not working – need a different platform /minimum
- Non watershed approach – adds complexity in communication

## Round-2 – Gaps

- More resources to protect \_\_\_\_\_ corridors
- People can game the FEMA regulations when it comes to floodways
- Issues outside of flood zone that are not addressed by the regulations
- No incentives to expand floodplains
- Status of UNP recommendations

# May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

## Round-2 – Solutions

- Integrated watershed management
- Rethinking Federal Government role in floodplain management
  - True floodplain management at local level
  - Federal role: ☹ disaster recovery
  - Identify/communicate risk
  - Structural protection and non-structural
  - More stringent set of standards for building in high risk areas
  - Potentially enabling bad decisions with the Federal recovery after disasters
  - CEQ Principles/standards

## Round-3/Question-1 – Well

- FEMA's CTP Program
  - Formalized working relationship between FEMA and local governments "at of letting go."
- FEMA's CRS Program
  - Incentivizes good behavior
- USACE and FEMA work on levee issues – continual conversation/dialogue
- Flaw from Federal <-> state <-> local
  - Flexibility given varying levels of authority
  - Consistency
    - ASFPM
    - IFRMC

## Round-3/Question-2 – Broken

- Federal min. = local max
- Decisions in floodplain management driven by flood insurance because insurance is an option in or out discussion vs. risk disc.
- Repeating the wrong language to the public
  - Consider thinking about it in terms of 30yr mortgage vs. 100yr/1% - undersells risk
- Lack of integration across all levels
- Principles/stands still focuses on cost benefit analysis
  - Need to think about full lifecycle of project and watershed scale
- Exception of a full-ride based on emotional reaction
  - Setting ourselves up to lose more the next time

## Round-3/Question-2 – Solutions

- Need a regional solution
  - Linkage within watershed
- Scale watershed can vary
- Acceptance at a human level that we impact each other (New Zealand example)
- USACE in Cedar Rapids
  - Ex. where watershed approach would be perfect
- Better cooperation needed
  - Ex. Co-invested in Map Modernization and DOT has not released new maps
- Tighten working in Executive Order to avoid variance in interpretation
- Philosophical buy-in on risk reduction as a whole
- No national policy to discourage development
  - Incentives exists (CRS) but no disincentives (disaster assistance)
  - Unified policy was to reduce flood losses
- Needed leadership
- Can have national vision but varying implementation strategies
- View floodplains as a national treasure, rivers \_\_\_\_\_ areas

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

- Look at future conditions not existing –
- Study areas that have done this right (e.g. Roosevelt, CA and Charlotte, NC)

### Day-1 Topic 3 Breakout Session Notes: Balancing Environmental, Economic, Social and Public Safety Aspects of the Floodplain Management Vision

#### Round-1/Question-1 – Does the nation have balance between...? / R3/Q2 – What are the key challenges in achieving balance?

- NO!
- \*Let's look at this over time -> long-term outcomes
  - Building up risk over time (thru decisions) which leads to the outcomes we see today
  - Our policy only slows the growth of flood risk -> need to reduce risk
- \*Individually we think we are succeeding -> collectively it's not working
  - Not sure we understand what's causing the risk
    - Population
    - Climate Change
  - Need to understand this first
- Is balance the right question?
  - The question should really be about trade-offs -> the answer is still NO!
- Who catches the externality costs?
  - Federal Government usually catches it
  - Should be risk-based development in the floodplain
  - There are small watersheds where it works well
    - Community-based
    - Enlightened and sustained leadership
    - Culture of risk adversity
    - Interest in the environment
    - Communities absorb cost
- Needs to be a return on investment to get communities to do mitigation
  - Incentives -> TF should identify possible incentive policies
- Is there an acceptable level of risk?
  - Standards
    - Decentralized
    - Residential buildings last a long time -> costs are externalized over many generations
  - Disconnect between local decisions and Federal role "make you whole"
    - Locals are on the front line and it works its way up
    - In some communities it works!
- Adaptive management
  - What worked 10 years ago may not work now

#### Round-2/Question-1 – Does the nation have balance between...?

- Balance at the Federal level – out of balance overall
- Balance means floodplains are being used in a way that takes into account all of the aspects
- Balance is hard to measure
- No!
  - We try
  - Need to break down \_\_\_\_ at Federal level
  - Vertical integration at various levels of government
  - These things aren't always at odds
    - Sometimes compatible
  - Need incentives to change pattern over time

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

### Round-2/Question-2 – What should the role of Federal, state and local governments be in providing balance?

- Federal vs. local role
  - Land use is decided at the local level
  - “who pays for it” -> gets to decide
    - Locals should decide
    - Feds should assist good decision making buy not subsidize risk
  - Federal role
    - Federal subsidies for poor land-use decisions equal imbalance
    - Economic incentives can turn this around – tax incentives/credits
      - Nomenclature change
      - Behavioral change
    - Guidance
- Example: State of Maryland – Chesapeake Hyatt Cambridge
  - Tourism money
  - Outsourced cost of risk to Federal Government -> fuels the imbalance
  - Balance means paying for your risk
- Existing development vs. new projects
  - Pre-NFIP/NFIP to now/future
- Public safety rules!

### Round-3/Question-1 – Is there a balance?

- Who is responsible for the diminished value of the land?
  - What about the impact to someone else’s land?
- Where is the line? How far does the planning process go?
  - Who compensates for diminished value to private property?
  - “Land speculation is never a guarantee”
- Where infrastructure is supported impacts where decisions are made
  - When you add infrastructure somewhere you support development in that area
    - Federal Grants
    - State
    - Local Services
- Opportunities: Role at all levels of government
  - Federal -> information
- Incentive: ex. tying permit to meeting flood standards
- Critical infrastructure -> out of the floodplain
- There are examples where it works:
  - Orange County
  - Oakland
    - Moved people out of the floodplain
    - Stormwater tax
    - Recreation areas
  - Characteristics
    - Advocates
    - Adaptable to other areas -> “not a postage stamp”
    - Tax provided financing
  - Local decision-making -> make the trade-offs
- Need guidance and technical assistance on assessing balance from the Federal Government
  - CBA
  - Coordinate stakeholders/experts to figure some of this out
- Legal defensibility -> can drive up costs
  - Treat everyone the same way
    - Consistency

# May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

- Federal role: access to information/resources
  - Roadmap for how levels of government can work effectively
- Increases in cost are always met with resistance

## Day-1 Topic 4 Breakout Session Notes: Fostering Partnerships

### Big Take-Aways From Partnership Sessions

1. Focus on long-term national vision of floodplain management AND get a Local Vision for present day!
2. Looking to Federal Government for data and guidance to make decisions
3. Public awareness was a critical topic
  - a. "Normal" understanding at all levels of citizenship
4. Planning decisions are influenced by Federal monies -> Are they incentivizing the right decisions?
5. Internalize benefits and externalize risks
6. Base decisions of future, longer-term perspectives/trade-offs

### Round-1/Question-1 – Federal Role in floodplain management > minimize loss of life and property

- Data collection
- Data analysis/modeling/forecast
- Risk comms/warning/data dissemination
- Criteria (data driven) to evaluate decision – short and long-term (20 – 50 years)
- Facilitation and coordination roles -> Framework
- Response – during/after hazard
- Accurate direction (signals) for local planning -> Real consequences (positive and negative) for floodplain management (externalization)
- Redirect NFIP to risk-based
- Liabilities need real accountability
  - Negligence is punished!

### Round-1/Question-3

- Considerably improve the comms of risk so that it is understandable and accurate
- Stop rewarding/allowing poor behavior
- A risk evaluation process that communities can walk through for better decisions can be made with externalities included to understand Risk/Reward trade-off
- Make reason to prioritize floodplain management issues "real" to them at the local level
- Don't allow for perverse incentives
- Centralized answer/consistent answers across regulations and Federal Agencies
- Integrate water resource planning across Feds. -> focus opportunities here in Federal Inter-Agency for a "whole systems" approach
- Facilitate guidance, more integrated guidance

### Round-2

- Examine (conduct a study) strengths and weaknesses at each level of government to see where to leverage strengths and minimize weaknesses
- Understand the disincentives to doing the "right things" ->, to meet the goals of floodplain management
  - Provide incentives at the Federal level (e.g. cost shares)
- Elevate the long-term benefits to increase awareness for both state, local and tribal decision making
- Federal role is to assist at the state and local level to make better decisions within floodplain management
- Use partnerships to Comm/ increase understanding of risk exposure and risk management
  - What partners can help deliver the message?
  - Make ubiquitous
  - Associations, stakeholders, businesses, etc.
- Examine successes of Clean Water Act and partnerships and how they apply to floodplain management

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

- Turn the concern around from “how do I get out of buying flood insurance “to” how do I decrease (as it relates to NFIP reform and the Floodplain Management Task Force goals) my premium”

### Round-3

- Critical to engage the Private sector in the partnering approach
- Start with Federal Agencies strengthening their partnering at floodplain management
- Review best practices governance models for partnering in floodplain management (DRBC)
- Need clear, strong, technical guidance from Feds. to communicate at local meetings, etc.
- Answer the question on “where do you go to get answers?”
  - Who should I partner with?
    - Silver Jackets model?
      - How would that apply at a higher level?
      - Look at Coastal Zone Management Act
- Review USDA Coop Agents – “Land Grant – Sea Grant” Model
- CTP Program
- Ensure message and message channels are optimized in delivering floodplain management
- At the Federal level, appropriate levels of staff to implement floodplain management programs and partnering efforts
- Consolidation of technical tools and models would benefit better partnerships and better floodplain management
- How can a cultural shift be created through education of risks, trade-offs (BCA) floodplain management (e.g. disincentives)?
- Integrate eco and human benefits/trade-offs in decision-making, education, etc. using a more whole systems approach
- Tools (“watershed map”)
  - Evaluation tools for Eco System Services
  - Inventory of floodplain
- Model to review – “Strategic Plan” (framework with aligned priorities) for J.S.O.S.T. under O.S.T.P. and began working their budgets toward it
- See vision of Sub-C for disaster reduction
  - Federal Working Group Review

### Day-1 Topic 5 Breakout Session Notes: Adapting to Climate Change

#### Session 1: What are the most significant challenges in implementing climate change adaptation within projects and programs that affect floodplains?

- There is a lack of Federal leadership on climate change issues – no coordinated approach and no direction to states, which results in states and locals going off in their own direction and a lot of wasted energy.
- The 100-year flood in 2050 will not be the 100-year flood we are designing to now. We need to agree on what the future “factors” should be and what standards we should be designing to. We need to address future losses.
  - Take reasonable steps to avoid future damages.
  - We need to move in the right direction, not necessarily get the right answer.
- Issue is how to deal with the lack of data and level of uncertainty when developing local plans, actions, maps and standards. If we wait for truly reliable and vetted data, it may be too late.
  - We need to have a new way to manage land use with information that is legally defensible.
- Events aren’t going to be labeled as “climate change,” but there will be larger hazard events. We need to move people out of harm’s way.
- We also need to be looking into impacts that we haven’t thought of yet – e.g., groundwater level rise.
- There will be competition for land use in the floodplain in the future - energy production, wetlands for species preservation and carbon sequestration.

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

- We need to take an adaptive management approach to managing these changes to accommodate what we don't know and take into account new data.
- There are conflicting Federal authorities. We need to integrate across agencies and with non-Federal interests. Specific conflicts within the floodplain included: **HUD CDBG, DOT funding, EPA State Revolving Fund, IRS (writing off losses is an incentive to build)**. These programs lay the groundwork for development and fail to consider climate impacts. We are often investing in putting people and infrastructure in harms way.
- You need to move from structural solutions to land-use solutions over time.
- Need to deal with public safety while looking at cultural and natural resources.

### **Session 2: What are the most significant challenges in implementing climate change adaptation within projects and programs that affect floodplains?**

- How do we adapt (make decisions) without any information on what expected impacts will be.
- There is no consistent guidance, criteria, assumptions on which to base decisions. These can evolve over time, but we need something consistent to use in design decisions.
- There is a need for data (e.g., regression curves for runoff are outdated).
- How can we make decisions about the future when we can't use past data as a direction for future hazards?
- Need models (e.g., **map modernization**) that adjust to new information as it becomes available.
- The political implications of data.
- We don't know what building codes will look like in 20 years – how will construction practices change? (e.g., Will there be parcel-specific performance standards or same old processes?)
  - Codes should be written so that they are appropriate for the specific areas where people are building.

### **Session 3: What are the most significant challenges in implementing climate change adaptation within projects and programs that affect floodplains?**

- The non-coastal impacts of climate change are not being reflected in flood studies except to the extent that historical data incorporate climate signals. Even in these cases, studies do not capture any acceleration in climate processes.
- Even if the data were available to consider all relevant climate impacts in studies, FEMA will be perceived as making this up to expand floodplains and get more insurance money.
- We are arguing about the wrong thing. We have ample reasons to adapt even without the uncertainty of climate change – existing hazards, poor land use, subsidence, etc.
- We are backward looking in evaluating risk.
- There are still people that deny climate change is happening. To get people to take action, we need to advocate for increased safety and other benefits that will get us to the same place.
- There are great uncertainties in flood information – data and impacts.
- It will not be long before states and locals will be ahead of the Federal government because they have been driven by flood events (e.g., Nashville).
- We can't consistently say if a flood is a 100-year, 500-year or other event. The yardstick is always moving because of climate and other factors that influence events.
- The public is bombarded by studies and can't keep up with the data.
- The Task Force's challenge is that there is a disconnect between science and public understanding.
- This issue brings together science, public understanding, political processes and economics
- The size of flood flows has increased, but the source is not clear.
- Climate change impacts also include shifting habitats and invasive species. To enhance survivability of species, we need to manage floodplains so they permit migration of species and other goals could be met as well (e.g., recreation opportunities).

### **Session 1: Who should be responsible for implementing and funding climate change adaptation for water resources issues?**

- The owners should pay - there should be personal liability (state, individual, etc.) for decisions.

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

- The Federal government should provide technical information and assistance, but adaptation should be funded by states, “owners.”
- We all pay through disaster relief.
- If Federal government is going to provide new resources, we should make sure that there are conditions to access those new resources.
- There should be shared responsibility with states and locals. Everyone needs to take steps to permanently reduce risk and stop adding to risk through poor investments.
- Information about the potential impacts of climate change and potential costs need to be made public so that people can make informed decisions. Need disclosure at property transactions and at other times. Ultimately, this affects who pays.

### **Session 2: Who should be responsible for implementing and funding climate change adaptation for water resources issues?**

- Responsibility should be divided – feds set standards, guidelines & criteria; private sector is responsible for applying these at the local level (working with clients), and there should be structural and non-structural solutions.
- How do we get private sector to prioritize non-structural solutions?
  - Private sector doesn’t make decisions, they respond to the needs of their clients (e.g., local governments, developers).
  - Feds need to provide incentives.
- Land use decision makers should be responsible for costs, so you need to inject expertise and information into the right points in the decision making process.
- Whoever reaps benefits should bear costs (e.g., developer, local government, state, etc.).
- Maybe the focus should not be on increased costs but rather making sure current expenditures promote adaptation – take advantage of initiatives in one area that can benefit another.
  - Adding climate to hazard planning projects.
  - Urban stormwater design currently has to meet hazard criteria for peak flows, but these flows are changing, getting more severe. The cost of consideration in design is nominal.
  - Prioritize solutions that will help adapt to climate change under FEMA’s Hazard Mitigation planning and grant programs.
- Look at lifecycle costs of floodplains/mitigation (borrow practice from energy sector).
- We need to be considering the new conditions that building/structures will experience in the future – building to current standards is misleading.
- Look at cumulative impacts (costs and benefits) of structural and non-structural approaches, including upstream impacts.

### **Session 3: Who should be responsible for implementing and funding climate change adaptation for water resources issues?**

- People should be responsible for paying – local governments, builders, state governments – they are the ones that reap the benefits.
- Under the existing system, Federal government is paying, so others want to keep the status quo.
- Feds should pay for good behavior, not bad. They should have a particular focus on water resource projects.
- There are cross-generational costs – we’re pushing costs on to subsequent generations by making decisions that are not sustainable.

### **Session 1: What are the Federal, state and local government areas of conflict and mutual support concerning the implementation of climate change adaptation?**

- There is a need for Federal leadership.
- Some programs in place can help – **FEMA Planning Grants** could require consideration of climate change and already do require cost sharing.
- The challenge for local governments is that there is a lot of valuable property in the coastal areas and floodplains, which generates high tax revenues. Moving people out results in a loss of tax revenue.

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

- There is no political will to move people –no one will elect you if you recommend moving people out of their homes and communities.
- We need to look at long-term economic benefits around these tough decisions. It helps get around short-term gains – perceptions that drive locals to make poor investment decisions.
- We need to get incentives and disincentives aligned so that governments are encouraging good decisions and preventing bad ones.
- We need a long-term planning horizon – 50+ years, not the election cycle.
  - SUGGESTION – look at community in England as an example.

### **Session 2: What are the Federal, state, and local government areas of conflict and mutual support concerning the implementation of climate change adaptation?**

- Water quality initiatives being undertaken by NRCS in the Upper Mississippi River basin yield multiple benefits (e.g., enhanced flood storage, etc.). We need to encourage links like this among programs.
- Still a question for some at local level as to whether climate change is taking place, which distracts efforts to make progress in this area. Need to focus people on understanding what's happening and take action.
- There can be conflicting goals and parochial viewpoints at the state and local levels, so they need help from the Federal government to encourage local/regional approaches.
- Federal government needs to stop giving grants for development and then try to manage risks after the fact.
- Under the current model/application of cost/benefit ratios (as proposed for all agencies in the **draft Principles & Standards**), small restoration projects will have problems getting approved or rated highly.

### **Session 3: What are the Federal, state, and local government areas of conflict and mutual support concerning the implementation of climate change adaptation?**

- It is not to a local government's advantage to "agree" with climate change because there is a cash advantage to them and to local developers to build. We can't deal with climate risks appropriately unless we understand the economic tradeoffs.
- A recent study by J.G. Titus et. al. ("State and local governments plan for development of most land vulnerable to rising sea level along the US Atlantic coast\*", Environmental Research Letters, 4 (2009) 044008 (7pp): [http://www.iopscience.iop.org/1748-9326/4/4/044008/pdf/1748-9326\\_4\\_4\\_044008.pdf](http://www.iopscience.iop.org/1748-9326/4/4/044008/pdf/1748-9326_4_4_044008.pdf)) at EPA indicates that 60% of the land between 0-3 feet along the Atlantic coast is slated for development. There are no programs to discourage this. These areas will be inundated by sea level rise. They are only indirectly discouraged by FEMA via insurance premiums and more restrictive minimum building requirements.
- There should be a lot of emphasis on economic incentives.
- A good example of targeted outreach is the Denver Urban Drainage project. The flier is aimed at developers and promotes win-win scenarios.
- We need stronger regulatory standards on where we live in relation to water.
- There should be more incentives to get proper insurance and risk ratings.

### **Session 1: What are the roles for NGOs and the Private Sector within climate change adaptation?**

- They should get involved in critical debates to help people understand the tradeoffs – help present economic arguments.
- They have the ability to reach out to constituents and an audience that is willing to listen.
- We need to get beyond professional organizations since they have a vested interest and reach out to local organizations (e.g. Lions Club, clergy, etc.).
- They should educate.
- They should help share information across communities.
- They should help identify what people can do.
- Help influence public policy decisions – getting public engaged.
- NGOs need to ban together to be more effective. They can often fall into a single-focus mentality.
- Sue to get the government to do the right thing.

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

### Session 2: What are the roles for NGOs and the Private Sector within climate change adaptation?

- It is problematic when NGOs act beyond their knowledge base (e.g., actually designing and implementing projects instead of just educating and informing people on a topic).

### Session 3: What are the roles for NGOs and the Private Sector within climate change adaptation?

- The private sector needs to be incentivized to do the right thing.
- NGOs can help educate and encourage development of standards.
- NGOs can also whine and moan to draw attention to an issue.

## Participants

American Council of Engineering Companies  
American Planning Association  
American Public Works Association  
American Rivers  
American Shore and Beach Preservation Association  
American Society of Civil Engineers  
Association of State Floodplain Managers  
Association of State Wetland Managers  
Congressional Budget Office  
Delaware River Basin Commission  
Executive Office of the President, Council on Environmental Quality  
Habitat for Humanity International  
Martin Becker and Associates  
Michael Baker, Jr., Inc.  
National Association of Conservation Districts  
National Association of Development Organizations  
National Association of Flood & Stormwater Management Agencies  
National Association of Homebuilders  
National Association of Insurance Commissioners  
National Council of La Raza  
National Emergency Management Association  
National Fire Protection Association  
National Hazard Mitigation Association  
National Waterways Conference  
National Wildlife Federation  
Public Entity Risk Institute  
RenRe  
Susquehanna River Basin Commission  
The American Waterways Operators  
The Nature Conservancy  
U.S. Army Corps of Engineers

## May 10<sup>th</sup> -11<sup>th</sup>, 2010 FIFM-TF Listening Session: Summary Report

U.S. Department of Agriculture/Natural Resources Conservation Services  
U.S. Department of Commerce/National Oceanic and Atmospheric Administration  
U.S. Department of Defense  
U.S. Department of Homeland Security-Federal Emergency Management Agency  
U.S. Department of Housing and Urban Development  
U.S. Department of Transportation  
U.S. Environmental Protection Agency  
U.S. Fish and Wildlife/Department of the Interior  
U.S. Senate  
United States Conference of Mayor  
University of Maryland  
Water Environment Federation