

# **Regional Stakeholder Workshop Summary**

## **Recommendations for a National Levee Safety Program Hosted by the National Committee on Levee Safety Dallas, Texas**

**6 October 2010**

### **I. Purpose of Workshop**

The National Committee on Levee Safety (NCLS) held a one-day workshop to share information about its recommendations to Congress for a proposed National Levee Safety Program (NLSP). The workshop comprised a variety of stakeholders including local and state agencies and elected officials who are engaged in levee safety issues. In addition, the workshop invited levee owners and operators, planners, emergency managers, local and regional business interests, environmental interests, economic development interests, public health and safety interests. The objectives of the NCLS workshop were to:

- Learn more about the NCLS and their recommendations for a NLSP;
- Discuss the implications of adopting the NCLS recommendations for local and state governments and other stakeholders; and
- Provide feedback to the NCLS on the recommendations.

Congress created the NCLS to develop recommendations for a NLSP, including a strategic plan for implementation of the program. The NCLS adopted the vision of an involved public and reliable levee systems working as part of an integrated approach to protect people and property from floods, and has been working toward this goal since October 2008. The NCLS recommendations for a NLSP are based on three central concepts:

1. Leadership via a National Levee Safety Commission that provides for state programs, national technical standards, risk communication, and coordination of environmental and safety concerns;
2. Strong levee safety programs within all states that, in turn, provides oversight and critical levee safety processes; and
3. A foundation of well-aligned federal agency programs and processes.

### **II. Welcome – Ms. Jill Jordan, Assistant City Manager, City of Dallas**

Ms. Jordan welcomed the members of the NCLS to Dallas and thanked workshop participants for their engagement. Ms. Jordan outlined some of the significant challenges faced by the City of Dallas in working with the United States Army Corps of Engineers (USACE) and the Federal Emergency Management Agency (FEMA) to address deficiencies in the levees along the Trinity River and update FEMA's flood maps.

Ms. Jordan encouraged the Committee to find ways that the USACE, FEMA, and other federal agencies could work with each other and with communities to improve levee safety. She also cautioned that the

Committee's recommendation for required flood insurance in leveed areas would be difficult to implement, logistically and politically.

### **III. Introduction and Update on NCLS Activities – David Garcia, Les Harder, and Bob Williams, NCLS Members**

Members of the NCLS welcomed participants to the workshop and thanked everyone for their interest and participation. Members of NCLS described and discussed key recommendations for a NLSP. Mr. Les Harder reviewed a PowerPoint presentation which discussed the history of levees and events that lead to the need for a NLSP. Mr. Dusty Williams discussed the charge of the NCLS, including the NCLS members and the mission statement provided by Congress to the NCLS. Mr. Williams discussed the importance of educating the public about levee and levee safety. The vision statement of the NCLS aims to create an involved public and reliable levee systems working as part of an integrated approach to protect people and property from floods.

Mr. Eric Halpin provided a general overview of the recommendations. Mr. Halpin reviewed the governance structure proposed for the NLSP and emphasized the need to have independence and national leadership. Mr. Halpin stated that the desired Commission is a challenge in the current environment and that the NCLS recognizes the challenge in this recommendation. Mr. Halpin also indicated the need to spend federal dollars more wisely, not necessarily spend more funding.

Mr. Halpin also discussed the idea of improving our understanding of flood risk and how the 100-year flood is not a safety standard.

### **IV. Comments, Questions and Suggestions Related to the Recommendations for a National Levee Safety Program**

Workshop participants were invited to choose three topic areas and “vote with their feet,” spending approximately 45 minutes at each of the topic tables. NCLS members at each of the six break-out tables provided a brief introduction to the recommendations / elements of a NLSP and moderated an open-ended conversation with workshop participants, answering questions, soliciting feedback, providing additional information. Following the conversations, members of the NCLS shared some of the major themes discussed at the tables.

- A. Shared Risk / Shared Responsibility: Requirements for risk-based flood insurance and addressing concerns about liability
- B. Federally Fund a National Levee Inventory
- C. Harmonize Environmental Protection and Levee Safety
- D. Create a National Levee Rehabilitation, Improvement, and Flood Mitigation Fund

**Comment:** There are no non-profit organizations represented on the NCLS. Some non-profit organizations have expertise in community relations and expertise in alternative approaches such as using riparian buffers and green infrastructure.

**NCLS Response:** The NCLS includes representation from two organizations representing professionals working in floodplain management and flooding, the Association of State Floodplain Managers (ASFPM) and the National Association of Flood and Stormwater Management Agencies (NAFSMA). In addition, some members of the Committee were nominated by the Association of State Dam Safety Officers (ASDSO) and other non-profit organizations. The comment about a need for broader and more diverse

input to the NCLS is very valid. There is a need to hear from the environmental organizations and receive input about the recommendations. The stakeholder workshops are designed to help receive additional input from organizations. Additionally, the Review Team has 40 organizations represented and includes NGOs such as the National Wildlife Foundation and Nature Conservancy.

**Comment:** In the report, it is recognized that over time, we gave people a false sense of security over time with the insurance program. This program and our actions made people think they are safe. We need to be careful about how we push this forward with levees and communicating safety. Perhaps we should not be using the words “safe” or “safety” in our communications.

**NCLS Response:** The NCLS had considerable discussion about the terminology of safe. If you talk to people about risk, they understand risk in all elements of life. We need to be able to talk about risk. Response: NCLS members agree with the concern for the term “safe”. “Safety” and “safe” are two different words, and the NCLS is more comfortable with the word safety. The final NCLS vision statement purposefully does not include the word “safe.” (“An involved public and reliable levee systems working as part of an integrated approach to protect people and property from floods.”)

**Comment:** Support voiced for the report and the proposed concepts on how to roll the program out nationally. Another helpful component would be a model state law, which would help states provide additional details to internal management and highlight changes needed. This document would assist with the education of management and help quantify staffing needs, financial resources, and program needs. Appreciation expressed for the recognition that the states will have a challenge securing funds for this program. Any additional concepts about how to fund the program without a general fund request would be helpful.

**Comment:** If I could go back and restart the dam safety program, what would I do? There is a suggested model law, but my existing state law was created before that model and misses many pieces from that model and the chance of changing my law is nearly impossible. A model law now, before states start adopting / creating their own from scratch, would be helpful.

**NCLS Response:** NCLS did lay out what their suggested minimal requirements for a state program. One area not addressed is ensuring that states are not taking on an inappropriate burden of liability. State requirements for the dam safety program were a good model for levee safety – authorities, regulations and procedures.

**Comment:** If a national levee safety standard is developed, how do states which are already partnered with the federal government play into the development process.

**NCLS Response:** Standards would be modeled similarly to national building codes, which are nationally recognized and most states would adopt, amend, and modify to be specific to needs. Just like most building codes, if you have a new levee, you know where you need to go. For existing levees, there is an additional level of detail that needs to be discussed about how to handle compliance with the new codes/grandfathering. There likely will be a certain amount of time to get all structures up to code and would be structured around a schedule or in line with other changes required. There is a desire to streamline the processes, but not get rid of current requirements (environmental). It is also hoped that the money can be streamlined to the community for them to take more ownership and responsibility, but you will need to justify the use of the funding in your community. NCLS hopes to have more emphasis and a balanced view on safety, protection of property, people, and life, and not be as skewed to economic benefits alone. NCLS efforts were mandated by Congress; with a significant focus in the Act

on non-federal levees. Many recommendations are oriented to have a better management program for levee safety and to address Congress's intent for states to develop levee safety programs.

**Comment:** The recommendations and proposed legislation should clearly state that funding is only available for existing levees. There is need to control development behind levees so as the risk does not increase.

**NCLS Response:** NCLS agrees that communities need to recognize and control consequences in the leveed area. We hope that the criteria for recommended for eligibility on the recommended Levee Rehabilitation, Improvement, and Flood Mitigation Fund will have some specific conditions on state and local government eligibility and the control consequence of the risk equation. This will require a lot of support from stakeholders, as well as a lot of political will and support. There may be non-structural solutions for improving levee safety that have higher value and return on investment. There is a need to look for a combination of those solutions. Developing tolerable risk guidelines is important because it will help address the question of how much investment do you invest to prove the safety to protect. This will be important when a community comes in and presents an array of solutions; you would look at where you bring the risk down the most. This fund would fund both options.

- States would benefit from having a model state law, staffing figures, costs for establishing the state program, and recommendations on how states could fund their share.
- There are some potential benefits of linking state levee safety programs to dam safety programs, including the application of matching funds dedicated to dam safety for levee safety.
- Research the 23 states which have a levee safety program and develop an understanding among existing programs in order to develop best practices.
- Include flexibility within the consistent requirements and standards.
- Commission/Agency should be overall lead for levee safety and absorb responsibilities of other federal agencies in order to streamline the process; however, carry forward organizations institutional knowledge.
- Funding alternatives for state levee safety programs were discussed, including user fees (those who benefit from safer levees pay) or funding from general appropriations (everybody pays).

#### **A. Shared Risk / Shared Responsibility: Risk-based flood insurance and liability concerns**

Feedback from stakeholders indicated general support, but concerns about how to implement. Concerns were expressed regarding how this one recommendation hangs with the rest – is this a critical component that must be supported, or a lightning rod?

Insurance should be broader than flooding alone – a national disaster insurance program is needed.

- Risk-based insurance behind levees could expose deficiencies about how FEMA does insurance now.
- Affordability of insurance remains a concern, especially for those who feel like they cannot choose to live in a non-leveed area.
- Risk communication will be important if the program is focused on driving change.

Related to concerns about liability:

- Discussed California lawsuit, public agency liability, engineering firms not doing certification.
- How to fund the growing potential for liability and liability protection was a concern.
- Some activity at the state level could help states get good statutes in place to fund programs.

- Concern about State levee safety programs and the effect on potential liability.

#### **B. A National Inventory of Levees**

- Could use a NLSP and inventory to build capacity and interest at the state level.
- People want the data, although there are concerns on how the data is used and shared, depending on data type.
- Encourage stakeholders to go out and find data in their area as well.
- Inspection reports by owners any time the levee is impacted by a flood (and include photos) should be required and incorporated into the database.

#### **C. Environmental Protection and Levee Safety**

- NCLS needs to be clear that the focus of the committee and the concern about environmental issues are focused maintenance and rehab of existing levees, not siting or building new levees.
- Not all levee impacts on the environment are negative – levee maintenance can be positive for the environment when they prevent spills or flooding of infrastructure like wastewater treatment plants.
- A one-stop, nationally recognized, permit would be helpful.
- Careful that outcome of the recommendation streamlines and does not increase hurdles.

#### **D. The Proposed National Levee Rehabilitation, Improvement, and Flood Mitigation Fund**

- People are concerned that levees are deteriorating and interested in the timeframe for implementing the Fund.
- Need to be able to rehab other levee structures, for example pump stations or appurtenant works, and use funds for buy outs or levee removals.
- Federal agencies that design projects that are deficient should pay for rehab themselves and not require a cost share.
- Eligibility will be very important – who will qualify for grants and how do you apply.
- Award of the Fund should reward good levee management.
- Small communities, low income might not be able to afford 35% match.
- Consider a loan program or a higher federal cost share (e.g., some FEMA programs have a 75% - 25% split).
- Consider providing funding for technical assistance and training funds to improve levee maintenance.

#### **V. Wrap-up**

Mr. Halpin thanked participants for their sharing of knowledge and expertise and for engaging on the issues raised during the workshop. Mr. Halpin explained that the feedback received from workshop participants will be assessed by the NCLS and will help inform whether changes are needed moving forward. Dialogue with stakeholders and partners will continue through 2010 and into 2011, with eight public workshops scheduled around the country, similar to the one held in Dallas, Texas.

NCLS members explained that there are 12 recommendations that require new authorities and that all 20 recommendations need new appropriations. NCLS non-federal members have crafted a legislative

framework supportive of these 12 recommendations and delivered it to Congressional staff. The initial critical activities for improving levee safety nationwide include: (1) Establishing the NLSP; (2) Completing an inventory of all the nation's levees; and, (3) ensuring Congress fully understands and addresses liability concerns.

Where possible, NCLS is working on common levee safety activities under existing authorities within FEMA and USACE.

NCLS members also are working to define the costs and benefits of a NLSP, considering refinements of the recommendations, and building smart implementation steps around the recommendations.

For more information please refer to [www.leveesafety.org](http://www.leveesafety.org).

## Appendix A: Dallas Texas Regional Stakeholder Workshop Attendees

Greg Ajemian, City of Dallas  
Steve Altman, Dewberry  
Humberto (Beto) Arenas, International  
Boundary and Water Commission  
Bruce Bailey, Fugro Consultants, Inc.  
Jessica Baker, Halff Associates  
Jaime Beard, Jones & Carter, Inc  
Curtis Beitel, HDR Inc  
Jerry Berry, Coastal Water Authority  
Nancy Beward, HNTB Corporaton  
Gavin Brady, Oklahoma Water Resources Board  
Ernest Burford, USACE, Assistant Division  
Counsel  
BOB CARLE, NOAA  
Kim Carroll, Carroll & Blackman, Inc  
Martie Cenkci, USACE, Public Affairs Office  
Terry Colgan, Sutron Corporation  
J. Leon Curtis, Texas Water Development Board  
Ray De Los Santos, City of Alice  
Dan Delich, Levee Issues Alliance  
Jo Ann Duman, USACE Planning  
Paris Embree, USACE Flood Risk Management,  
Southwestern Division  
Debra Emmert, Remedial Construction Services,  
L.P. (RECON)  
Bob Fabian, Oklahoma Water Resources Board  
Elizabeth Fernandez, City of Dallas  
Steve Fitzgerald, Harris County Flood Control  
District  
Scott Forbes, HNTB Corporaton  
Greg Frank, Fort Bend County, TX Levee  
Improvement District (LID) # 2 / Costello  
Engineering  
Zue Garcia,  
Brenda Gasperich, AECOM  
Brian Giacomozzi, USACE, Chief of Engineering  
& Construction, Fort Worth District  
David Gray, Texas Conservation Alliance  
Kelly Greenwood, Yazoo-Mississippi Delta Levee  
District  
Dennis Haar, Grand Prairie Metropolitan Utility  
and Reclamation District (GPMURD)  
Tim Hart, LJA Engineering & Surveying  
Chuck Hewell, Fort Bend County, TX Levee  
Improvement District (LID) # 2  
Kelly High, City of Dallas  
Dale Hoelting, DEH Consulting, LTD  
Christopher Johnson, Michael Baker Jr., Inc.  
Jill Jordan, City of Dallas  
Bob Joseph, U.S.Geological Survey Texas Water  
Science Center  
Hugh Kelly, Parson Brinckerhoff  
Mike Klingner, Klingner Associates  
Dave Lawrence, Fort Bend County, TX Levee  
Improvement District (LID) # 17  
Lynn Lovell, Halff Associates  
Guy Lowes, FEMA Region 6  
Angie Lutz, Allen Boone Humphries Robinson  
LLP  
Stan Lynch, Freese and Nichols, Inc.  
Jim Martell, USACE, Levee Safety Program  
Manager, Tulsa District  
David Maurstad, PBS&J  
Andre McDonald, Fort Bend Flood Management  
Association  
Mel McKey, Velasco Drainage District  
Brent McNeme, Fugro Consultants, Inc.  
Reddy Mudumalagurthy, Dewberry  
Biswajit Mukhopadhyay, HDR Inc  
Terri Nolen, USACE Levee Safety  
Dhruv Pandya, City of Dallas  
David Patterson, Michael Baker Jr., Inc.  
Bob Patton, Fugro Consultants, Inc.  
Rebecca Rasor, City of Dallas  
Adam Ray, Jones & Carter, Inc  
Larry Redden, Parson Brinckerhoff  
Ray Russo, USACE Chief, Civil Works Integration  
Division, Southwestern Division  
John Rutlidge, Freese and Nichols, Inc.  
Warren Samuelson, TCEQ, Manager, Dam  
Safety Program  
Elizabeth Savage, URS Corporation  
Bill Sheppard, Yazoo-Mississippi Delta Levee  
District  
Richard Sherrill, First Colony Levee  
Improvement District

Mike Shiflett, Freese and Nichols, Inc.  
Walter Skipwith, Halff Associates  
Elena Sossenkina, HDR Inc  
Sarah Standifer, City of Dallas  
Erin Stiggins, Dannenbaum, Inc.  
Mary Suhm, City of Dallas  
Ann Terranova, URS Corporation  
Mike Thelen, Southwest Water Company  
Jack Tidwell, North Central Texas Council of  
Governments

Joe Trammel, Tarrant County  
Monty Winter, City of Alice  
John Wise, Kellogg Brown & Root  
John Wolfhope, Freese and Nichols, Inc.  
Andy Yung, Dodson & Associates  
Jerome Zeringue, Louisiana Office of Coastal  
Protection and Resoration  
Gary Zimmerer, FEMA Region 6

### **Members of the National Committee on Levee Safety**

Eric Halpin, NCLS Vice Chair, USACE  
Don Basham, Private Sector Representative  
Kathleen Evans, US Army Corps of Engineers  
Susan Gilson, Private Sector Representative  
Les Harder, Private Sector Representative  
Karin Jacoby, Local/Regional Representative  
Rod Mayer, State Agency Representative  
Paul Peri, State Agency Representative

Sam Riley-Medlock, Private Sector  
Representative  
Mike Stankiewicz, State Representative  
Bob Turner, State Representative  
Dusty Williams, Local/Regional Representative  
Terry Zien, NCLS (support)  
Linda Manning, Council Oak (support)  
Liz Rettenmaier, Council Oak (support)  
Patrick Tallarico, Council Oak (support)

## Appendix B: Breakout Group Discussion Summaries

The discussions held at the breakout tables answered participants' questions, clarified recommendations for a NLSP, and solicited feedback from participants on the recommendations. These ideas, and others received during other regional stakeholder workshops and interactions across the country will be used to inform the NCLS as they shape their implementation strategy for establishing a NLSP.

### **Shared Risk / Shared Responsibility: Risk-based flood insurance and liability concerns**

One of the common themes is that the responsibility for ensuring safety is a shared responsibility; each of us have a part to play – federal, state, local governments, and even the individual.

#### Requirements for risk-based flood insurance

- In our community, the levee protected homes and infrastructures for many years. Flood insurance is not purchased by about half of residents.
- Biggest challenge to this policy is the resistance from many that don't have insurance now.
- In Fort Bend, residents paid an additional tax to fund construction of a perimeter levee. Being required to have insurance on top of that would not be met well.
- It's a choice – pay \$500 taxes for levee for protection or pay for insurance at \$1200 and don't get that protection of the infrastructure. I'd prefer to spend the money for the protection rather than the insurance.
- As long as insurance provided by public agency, it will be oversimplified. If you brought in private insurance firms, you would get better risk based insurance.
- It's out of balance because FEMA insurance is subsidized. Levee districts lack incentives to fix levees.
- Buying flood insurance is taking responsibility for risk. Should the homeowner bear that responsibility?
- Most insurance claims are outside the floodplain, unmapped (25% of paid claims are outside of special flood hazard areas).
- Must be truly risk based with probability and consequences.
- Competitive private market may take care of definition and rate issue.
- Need insurance – it's a matter of when: anything could happen: pump, trash, major storm.
- Government should get out of NFIP. Privatized insurance wanted, because better able to identify risk and quantify and so can do it risk-based. Would get more detailed information.
- Important to address and need to address affordability. Caution on the phasing in- because we always think things are going to be better.
- Stipend program needed to help defer the costs. Don't phase in. By deferring you are telling people you don't have a problem today, which is the wrong message.
- Risk based policy – too many factors. Doubt whether it can be fairly implemented.
- Penalties and mandatory purchase requirements will affect property values.
- Experience: Attention on levees brought through requirement for flood insurance – now getting attention in Dallas. Really need a larger floodplain management plan rather than just levee safety.
- Risk of interior drainage remains a problem, perhaps larger than levee failure / overtopping

- No mandatory flood insurance unless it is mandatory for everybody, regardless of location relative to levees / floodplain. Most flooding is outside of Zone X. We are going to maintain, improve, and overbuild our levee, but our residents can't stand paying for both insurance and maintenance on levees. This provides a disincentive for O&M.
- This would be a massive transfer of money out of communities, plus requirement to maintain levees is still there. Money leaves community – family can't spend it, sales taxed reduced and we will need to raise property taxes.
- Insurance will reduce exposure, not risk.
- People are going to get really angry, taking money out of their hand. Going to have a lot of dissatisfied people.
- Are we doing all of this to satisfy FEMA's debt? We will build huge fund and Congress will raid it and then when you need it won't be there.
- Majority of FEMA claims aren't even in special zones. Why should those people get the special rate?
- Should privatize flood insurance.
- Why isn't there mandatory earthquake insurance?
- City of Dallas residents making decisions on food, electricity, medicine vs. insurance – how do we handle this?
- The words “federal” “government” and “mandatory” don't sit well.
- Agree with the need, but hard to regulate people not being stupid.
- People don't get it that they live behind a levee.
- We're not against insurance, we're against mandatory.
- People have calculated risk. It's OK to make them sign that they don't get help from the feds
- You are punishing people who play by the rules. This could take \$100 million out of our community.
- It's a fact of life that our government will step in in case of disaster – there is no incentive for insurance. The taxes that we pay already are the final backstop. We provide for national defense and we provide for national disasters.
- Government is already requiring flood insurance for mortgages.
- The political reality is this won't fly. “Mandatory insurance is a wooden stake through the heart of the program.”
- There may be a different model to look at rather than individual purchase of insurance – maybe let county buy for all zones. There are 881 counties in the US; bookkeeping would be easier than millions of individual policy holders.
- Insurance will reduce property values, thus reduce taxes collected, thus require raising property taxes.

Liability:

- Exclusions in evaluations would help liability issues. “Compliant” with standards rather than guarantee of performance.
- No standard of care – isn't one, so assumed high. Need effort to identify standard of care.
- “Who has control” leads to litigation – result of human action. There are ways to quantify and identify responsible party, and so litigation happens. Was it designed properly? Government took over “flood control” and rightly so. But you are behind a man-made structure, and it can fail.
- No one would come to our community and build a new levee because of liability.
- Need liability protection for government who provides service.

- When a city certifies a levee, are they liable? The concern is out there. When a city hires an engineering firm, they can go back to the firm.
- Sometimes the fight to defend themselves would cost more than the work – liability is there and needs to be addressed.

### **A National Inventory of Levees**

- Getting locals to provide information now is difficult. No one wants bad news to become widely known. With non-federal levees it will be more difficult.
- Liability issues are a concern.
- Can the Program provide incentives such as no penalty action up front for deficiencies or resources to fix?
- USACE switch from RI to PI has caused distrust.
- Priority to fix should be based on potential consequences (ag vs. urban) / risk.
- Visual inspections only not very helpful.
- Need to consider big city vs. small town.
- Operators need to have standards that are consistent across all federal agencies.
- Viewing levees as systems is critical. Need over-arching authority, maybe at state level, to enforce O&M, other standards.
- Concerns with providing levee data – security – What level of access would be granted to whom? Who will determine? Criteria?
- Need to do public outreach on results of data gathering, such as public meeting run by local community to add credibility. Program may provide guidelines on content, but locals determine best method.
- Citizens need to understand risk, info needs to be readily available.
- Use incentives for participation in NLD – e.g., eligibility for funding to maintain / rehab levees.
- If you want recognition for FEMA mapping, the levee information must be provided anyway. Can the Program get the information it is looking for in a national database from FEMA?
- How will homeowners get access? Value in viewing your own property relative to floodplain. People need to understand their risk.
- NLD needs to show (accurately) impact areas behind levees.
- Levee districts don't even know what they have.
- Use executive summaries; can't release FOUO info.
- How do you decide what is a levee? Would structures along water supply canals be included?
- Combine NLD and national dam inventory.
- Have state collect the information, then supply the data to USACE periodically. Locals, states may need funding to gather the data on physical attributes.
- Must assess what is out there before you can have a program.
- The inventory, if done objectively, will give Congress the answer to the level of effort required to deal with the levee issue.
- Some other benefits of the national inventory: Locations where flood fighting is needed; Tie local levee to river gages for relevance.
- Capture data that exists:
  - NRCS inventories and reports
  - Stormwater permit program (urban)

- Non-digital data
- FEMA levee data
- Ownership issue is vital. 6 criteria to determine ownership on the Texas CEQ Dam safety program website (*Note: No obvious link regarding ownership criteria on the site, [http://www.tceq.texas.gov/compliance/field\\_ops/dam\\_safety/damsafetyprog.html](http://www.tceq.texas.gov/compliance/field_ops/dam_safety/damsafetyprog.html)*)
- Need to ensure information provided is not used as a punitive measure – need to communicate the purpose.
- How will the NLD be used? Who will be using it? Decentralized database may be easier for locals / states to trust.
- Security issues – some elements / categories of data should not be subject to FOIA. Helps incentivize owners to provide sensitive data.
- Make USACE Levee Inspection System (LIS) units available through USACE districts to states and locals to augment data gathering – and provide training.

### **Environmental Protection and Levee Safety**

- The message is important. Don't portray protecting the environment as the opposite of public safety. Differentiate between O&M (public safety) vs new projects.
- Public safety should be the top priority.
- US Fish and Wildlife Service should be involved in solutions – and funding them.
- It is a concern if stormwater quality collected in ditches or levee is going to be considered a point source – and therefore need treatment.
- Don't have environment be part of NLSP as a mission.
- We have a responsibility to take care of existing infrastructure. We do not need any more hurdles, permits, etc.
- There should be a process for addressing issues of public safety in NEPA.
- National levee standards procedures should be vetted with natural resource agencies. Regional variances will be important -- can't be one size fits all.
- Delays are real cost factors and increase significant failure risk.
- Longer term permits could help provide predictability for levee maintenance.
- National Levee Safety Program recommendations commitment to O&M is impressive. This should be reflected in competition for funds (negative incentive), incentives to keep data sets up to date, and even disincentives (e.g., poor O&M leads to higher insurance rates)
- R&D needs include:
  - Demonstrate benefit of the levee vs removal in some cases. Costs of keeping it to the environment
  - Grade stabilization structures program, NRCS 60s-70s
- Advisory Committee considerations:
  - No one size fits all (governments differ, issues differ)
  - No new permits
  - Not more oversight
  - Help get permits through (understand)
  - Provide ideas for mitigation
  - Early in process – not regulatory discussion, interaction with customer base
  - Raise awareness of permittees
  - Geographic specific research (impact analysis). E.g., Vegetation types, infiltration, seepage

- Could learn a lot from defunct levees (forensics)
- Factor in ability to attenuate, minimize storm surge – what role?
- Purpose of levee is to protect people – not reasonable to go back to pre-settlement conditions.
- Removing vegetation can be costly (root removal).
- Environmental regulations and USACE regulations are not in sync.
- Arborists / USACE tell levee owners different things.
- High risk levees / situations need quicker way of resolving environmental permit.
- Could model after Katrina, e.g., coastal protection and restoration authority – minimizes bureaucracy, high level cabinet position.

### **Create a National Levee Rehabilitation, Improvement, and Flood Mitigation Fund**

Clarification: The recommended Fund would address existing levees with a focus on rehabilitation/improvement/mitigation and looking at non-structural alternatives; fund is not intended to be used for new construction.

- *Concern:* having funds go to the state – e.g., some states have anti-levee positions or practices, so it would be better to send the funding to the most local-level possible and keep red tape to a minimum.
- There is a need to avoid the one size fits all approach, county presence is important and states operate differently so there will be a need to have variations in the way that funds are applied.
- EPA/DOT/HUD have signed interagency agreements for funding sustainability grant programs which might serve as a good model for the short-term.
- How do you make up the 35% if you don't have it? There should be some options provided – e.g. in-kind services or other options for cash-strapped communities.
- FEMA is more plugged into the states than the USACE is so if there is no independent Commission, should the program be administered by FEMA? From a grants program perspective it might make more sense.
- One example that may be good to replicate is the National Earthquake Hazard Reduction Program <http://www.nehrp.gov>
- There should be some criteria that reward those who are talking upstream and downstream and already working with a collaborative approach.
- The loss of business, navigation, etc., are economic costs that are spread nationally and should be considered when identifying need.
- “The State is too local” – i.e. there are programs that are taking a watershed/basin approach and if funds are routed only through states there may be some adverse impacts.
- There needs to be clearer identification/definition of the differences between levees and levee-like structures.
- There is concern that the ‘fund’ may not get funded annually as an appropriation.
- There needs to be authority or money in order for it to work.
- The disincentives also need to exist.
- There is a need to convince everyone that doing nothing costs a lot, and that as infrastructure ages, we are getting further and further behind the curve.
- There will be too much red tape if it is pushed through federal agencies. Legislation should enhance and incentivize levee districts to define zones and allow levee districts to directly

tax as a means to raise funds – that is how it is done in some places. A lot districts don't have taxing authority.

- What about low interest loans instead of a grant?
- Should it be at the federal level? If it goes from the feds then it will have to go through the state.
- There is a significant need to calculate the 'do nothing' costs to be used as a comparison.
- Can regulatory relief be used as an incentive? e.g., tied to verifiable actions, localities can receive relief from mandatory insurance, or the start date of a new map may be post-dated. Are there non-dollar alternative incentives? If you provide the 'relief' option there is incentive for owners/operators to address the issues quickly. Reference the H.R. 3415 approach.
- The FEMA PAL program should be looked into.
- On NFIP: Should the federal government be in the insurance business? Probably not – why don't we let private insurers take it over and see what happens? Flood insurance is subsidized which promotes bad behavior.
- There is a need to move towards an 'all-peril' approach to insurance.
- The inter-state question will need to be dealt with – what is the federal interest?
- Even if the program is housed within FEMA or USACE there still needs to be a Commission made up of a variety of stakeholders.
- Anyone who has applied for Public Assistance knows how complicated this type of process can be. Some cities choose not to go after the money because it is too time consuming – an effort like this would have to be streamlined.
- The ability to maintain a project will be an important criterion – we need to make good investments with federal dollars.
- The Commission will have to define the fund criteria.
- The fund needs to be administered at the national level.
- Should states have some of their taxes held for a fund? States will likely fight over watershed areas and responsibility.
- How do you distribute? Base allocation plus additional funds depending on what your state has (that is how the Dam Safety dollars are distributed)? How the funds are distributed and the criteria involved are extremely important.
- Hazard rating should be included in criteria.
- The inventory should collect the data in order to allow a hazard rating to be determined.
- Should prioritization be pushed to the states? e.g., EPA's solid waste planning requirements.
- States should have incentive to collaborate on inter-state levee needs.
- Is it possible to have funds appropriated and allow them to sit/mature while the other funding is collected? If cost-share restrictions are timeframe based then often we end up with band aid solutions.
- Should the fund be restricted to cross-jurisdictional levees? Cross-jurisdictional cooperation as a criterion for funding may be a good inclusion.
- There is talk of the National Infrastructure Bank – is there a way to incorporate this within it?
- It may be easier to combine it with an existing effort rather than trying to establish a brand new fund.