

Augusta Regional Stakeholder Meeting Recommendations for a National Levee Safety Program

December 9, 2010



Agenda

- About Our Nation's Levees
- The National Committee on Levee Safety
- Recommendations for a National Levee Safety Program
- Wrap-up and Q&A



About Our Nation's Levees

California's State Engineer, William Hammond Hall, reportedly stated:

"...There are two kinds of levees, those that have failed and those that will fail."



Levees: A Long History



1600s – 1920s



Large Federal Projects: 1920s – 1960s

1928 Flood Control Act

- Established federal interest in flood control structures
- Authorized flood control projects on Mississippi River Drainage Basin and Sacramento River
- Other Flood Control Acts and projects to follow

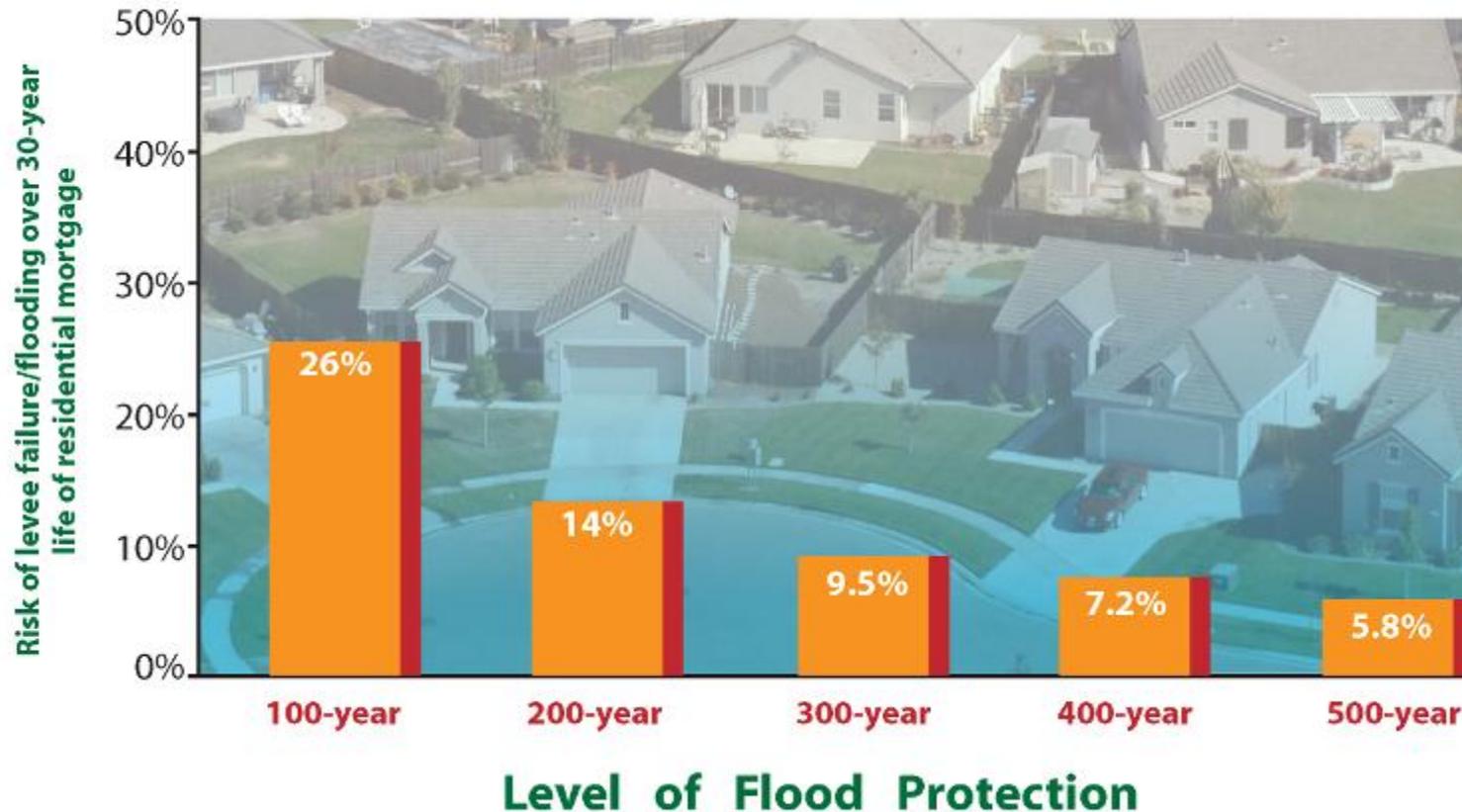
Mississippi River Drainage Basin



Unintended Consequences: 1960s – Present

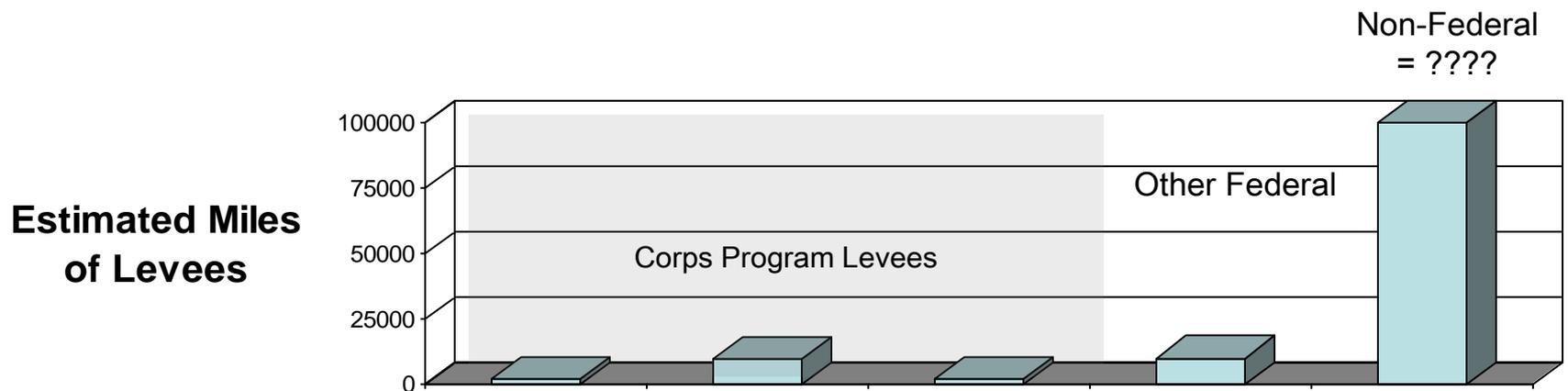
- 1968 Establishment of FEMA National Flood Insurance Program and selection of 100-year flood protection for preferred insurance rates and development limits
- 1986 Water Resources Development Act establishing non-federal cost sharing for federal flood control projects
- Lack of understanding about flood risks
 - Led Communities and Public Agencies to Only Seek Up to 100-year Flood Protection*

The 100-year standard is not a safety standard

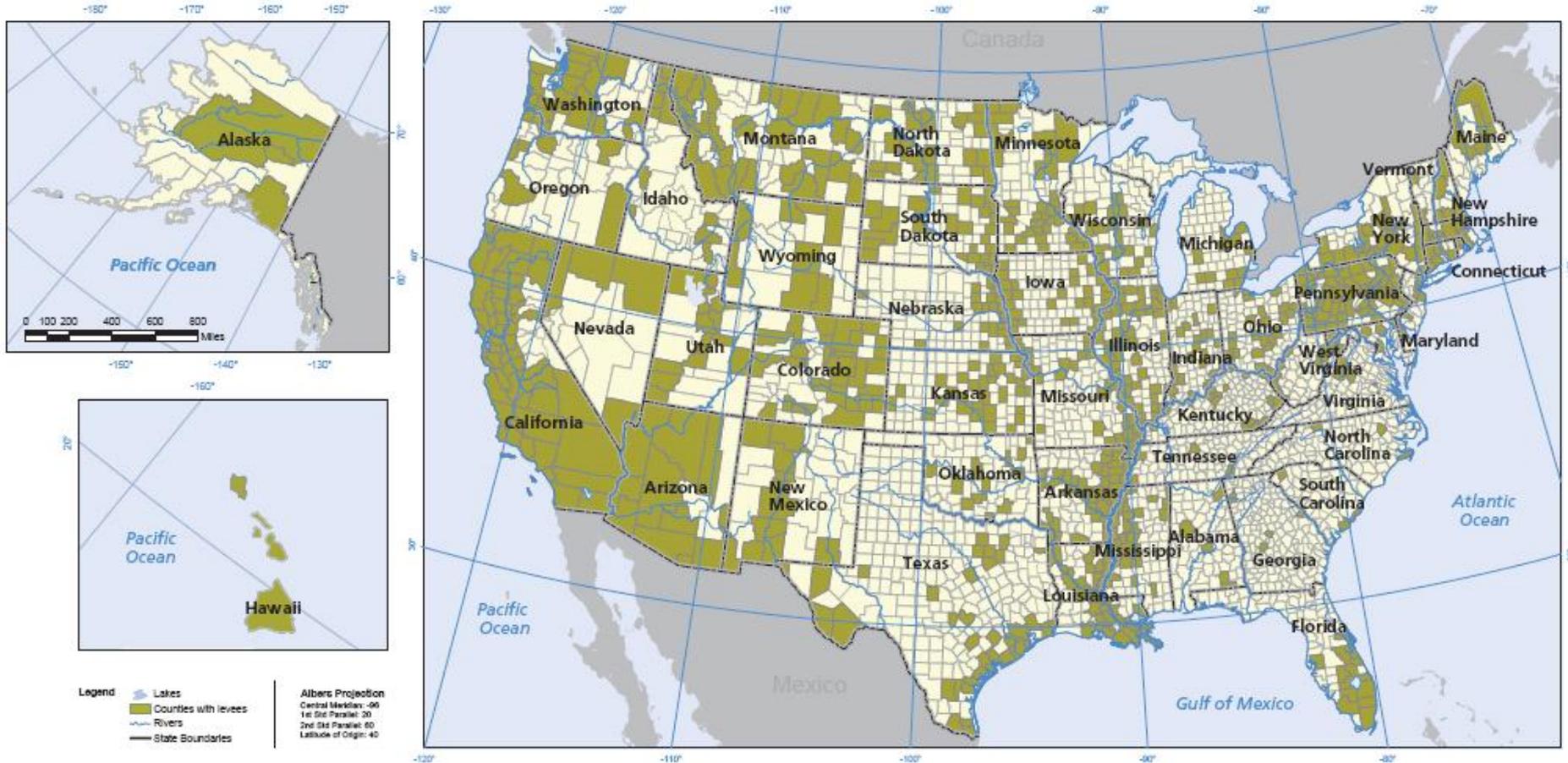


Levees Are Abundant and Integral to Communities

- Levees are critical for the protection of people, property and other critical infrastructure.
- We do not know how many miles of levees there are, their location or their condition



Counties Where Levees Are Found



No National Levee Safety Standards

- Many levees were designed for one purpose now serving another
- There are no national levee construction, maintenance, or inspection standards
- Levees are an integral part of a flood risk reduction system – but most have not been built that way

Levees are Part of a System



Unknown Risk and Consequences

- Levees reduce flood risk – they don't eliminate it
- We do not have an accurate picture of residual flood risk
 - Total Risk Impacts are changing and unknown: Climate Change, Infrastructure Degradation, Increasing Population Growth

Unheeded Wake Up Calls

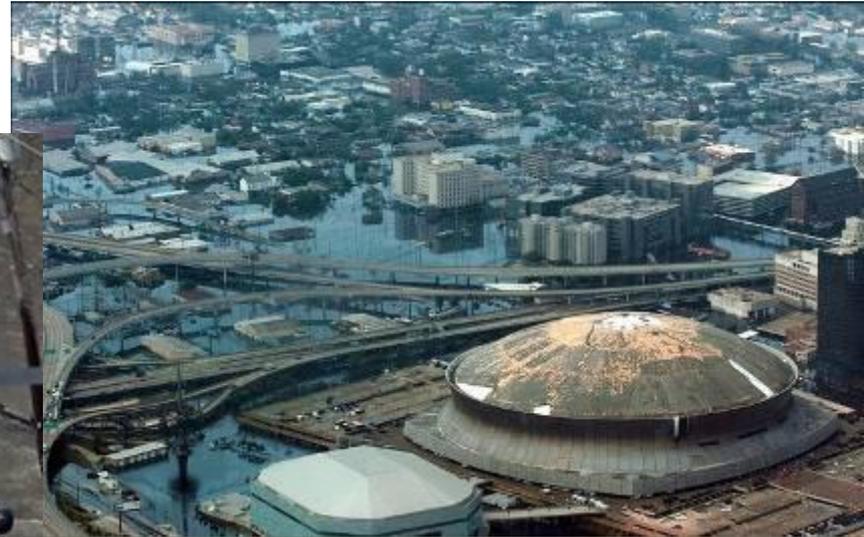
1993 Midwest Floods

1997 California
Central Valley



Missouri River, 1993

Wake-Up Call We Couldn't Ignore - Katrina

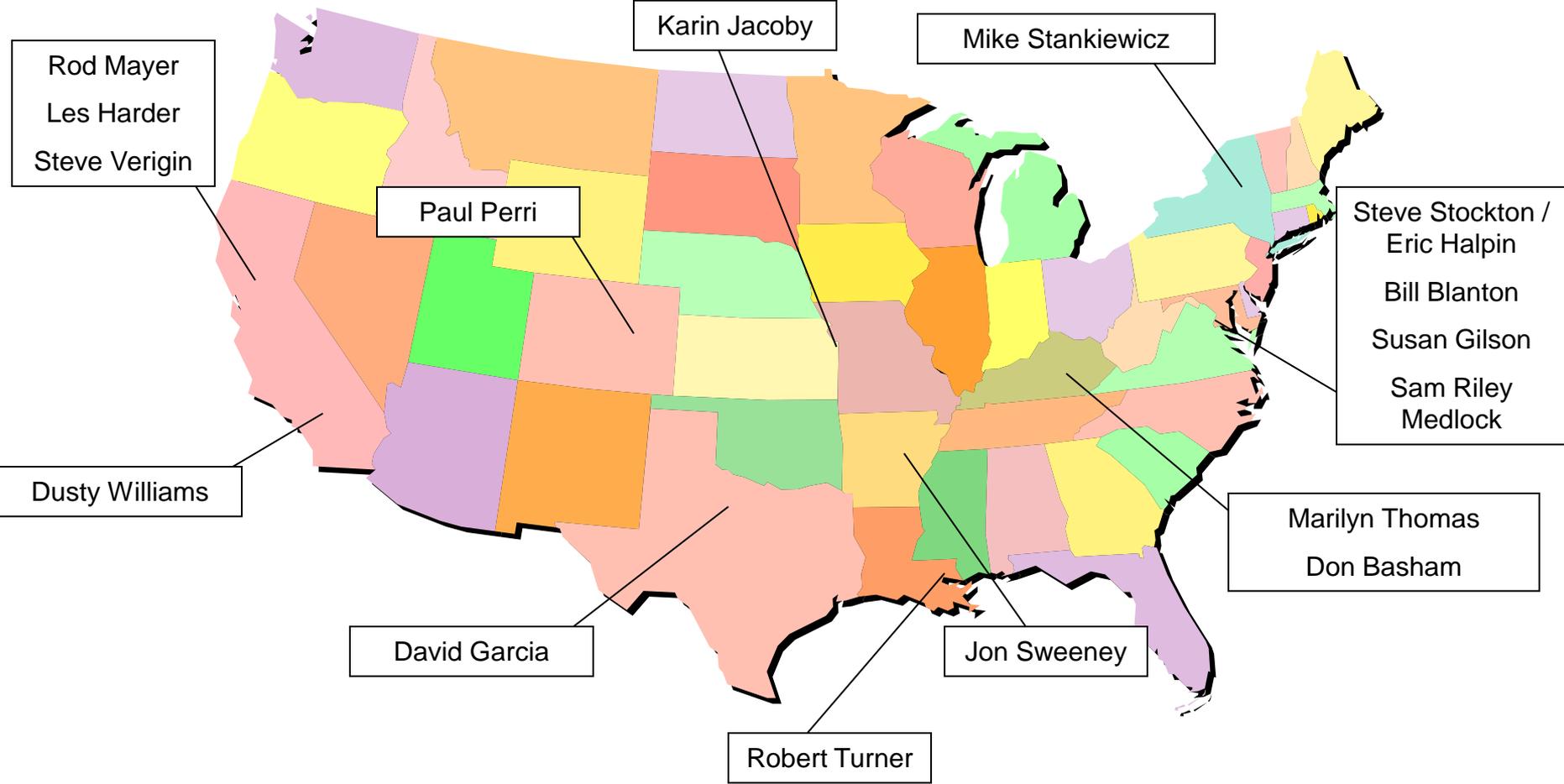


National Committee on Levee Safety

“The committee shall develop recommendations for a National Levee Safety Program, including a strategic plan for implementation of the program.”

- Multidisciplinary: Engineering, Law, Public Administration, Business, etc.
 - Diversity of Interests: Primarily non-federal composition, supported by USACE and FEMA
 - Reaching Beyond the Committee: External review of recommendations and stakeholder engagement with regional workshops
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Representatives from Across the Country



Vision for Levee Safety in the U.S.

An involved public and reliable levee systems working as part of an integrated approach to protect people and property from floods.

Recommendations for a National Levee Safety Program



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graph TD; A[National Levee Safety Program] --- B[Strong Levee Safety Programs in all States]; A --- C[Comprehensive and Consistent National Leadership]; A --- D[Aligned Federal Programs]
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**National
Levee Safety
Program**

**Strong Levee
Safety Programs
in all States**

**Comprehensive
and
Consistent
National
Leadership**

**Aligned
Federal
Programs**

Exploring Key Recommendations for a National Levee Safety Program



Exploring Key Recommendations

20 recommendations for National Levee Safety Program – breakouts will focus on four areas:

1. National Levee Safety Program governance and State levee safety programs
2. Environmental Protection & Levee Safety
3. The National Levee Rehabilitation, Improvement, and Flood Mitigation Fund
4. Shared Risk / Shared Responsibility: Requiring risk-based flood insurance and Addressing liability concerns

Establish the National Levee Safety Program

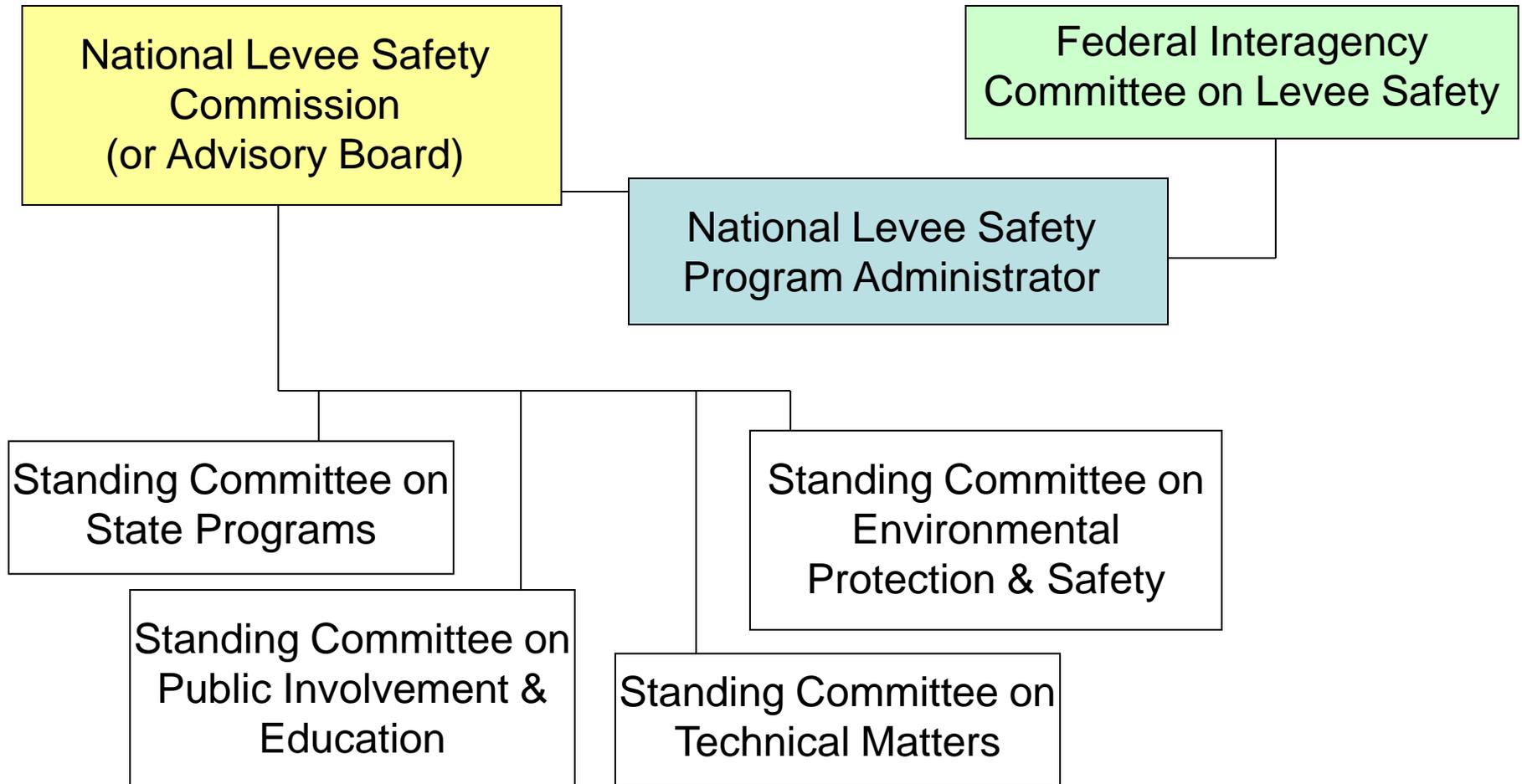
Committee considered principles for effective governance of the National Levee Safety Program

1. Ability to act independently from any single agency
2. Provide national leadership
3. Include expertise in organization, engineering, environment, grant making, communications
4. Mechanism to align federal programs

Organizational Structure – two approaches considered

1. New federal agency
2. Embedded within an existing agency such as FEMA or USACE

Recommended National Levee Safety Program Structure



National Levee Safety Program Governance Discussion Questions

- How can key principles of independence, national leadership, and meaningful engagement outside the federal family be met in a NLSP embedded in an agency?
 - What is the best role for an advisory board or commission for the National Levee Safety Program?
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Encourage Strong State Level Safety Programs

- State levee safety programs are the cornerstone of the National Levee Safety Program
- Expected to adopt national levee safety standards akin to a National Building Code
- Recognize importance of federal support (\$\$) and addressing liability concerns
- NLSP will set criteria for state programs re: eligibility for the National Levee Rehabilitation, Improvement, and Flood Mitigation Fund
- Considering synergy between state levee and state dam safety programs

State Levee Safety Program Discussion Questions

- What incentive(s) will encourage states to establish state levee safety programs?
- What are the minimum requirements for effective state levee safety programs? Is that applicable nationwide?
- Is there synergy between dam safety and levee safety at the state level? At the federal level?

Harmonize Environmental & Safety Concerns

- Establish an interdisciplinary Standing Advisory Committee that would collaborate and coordinate:
 - Research and Development efforts in relation to compatibility of operations & maintenance practices with environment
 - National solutions to environmental and public safety challenges and decisions
- NCLS recommends state levee safety programs provide liaison and coordination between levee safety and environmental protection

Environmental Protection & Safety

Discussion Questions

- What are the key environmental issues and concerns related to existing levees and levee safety?
 - What are arguments for greater inclusion of environmental and natural resource issues into levee safety?
 - How do we accomplish environmental and natural resource goals without compromising levee safety?
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National Levee Rehabilitation, Improvement, & Flood Mitigation Fund

To aid states and local communities in rehabilitation, improvement, or removal of deficient levees:

- Limited resources initially focused on areas of highest risk and highest consequence
- Fund includes structural and non-structural solutions based upon maximizing overall risk reduction to public safety
- Requirements for eligibility:
 - NLD participation
 - Demonstrate financial means
 - Participate in NFIP
 - Risk communication and emergency response plan

National Levee Rehab (etc) Fund Discussion Questions

- What would be a compelling case for this Fund, when compared against other critical infrastructure needs and the current political and financial environment?
- Should communities have access to this funding if there is not a NLSP recognized state levee safety program? If so, what is the incentive for states to have a state levee safety program?

Shared Risk / Shared Responsibility

- All levels of government have a role in ensuring levee safety
 - So do individuals living in leveed areas
- Shared responsibility carries through many of the recommendations. Two we will focus on today:
 - Requiring risk-based flood insurance in leveed areas
 - Swiftly addressing liability concerns

Requirements for Risk-Based Flood Insurance

- NCLS recommended risk-based flood insurance be required in leveed areas because we believe it will:
- Reduce financial damages for individuals and communities
 - Increase understanding through accurate mapping of flood risks
 - Reverse the unintended consequences of the NFIP and building to the “100-year” standard
- If implemented via the NFIP, it would probably require legislation
 - Many steps between here and there:
 - Better data
 - Understanding and communicating “risk”
 - Address concerns related to affordability, equity

Required Risk-Based Flood Insurance Discussion Questions

- How could we address the affordability of flood insurance costs for low income individuals/communities and maintain the education and communication of risk?
- If you don't think that requiring flood insurance is an appropriate tool to reducing the impact of flooding and increasing awareness, what tools / approaches would you suggest?

Understand and Address Liability Concerns Related to Levees

- Liability concerns may impede development of strong state levee safety programs, levee system evaluation for the NFIP, levee rehabilitation and improvement services
- Legal situation is unclear
- Asked Congress to direct the Congressional Research Service to research current state of law:
 - Damages due to levee failure or overtopping
 - Liability concerns related to data certification for NFIP
 - Changing engineering, legal insurance practices
- Public policy implications

Addressing Liability

Discussion Questions

- Where might the NCLS find additional data to articulate the scope/scale of liability concerns? For states and local governments? Levee owners? Private sector? Tribes?
- Would concerns over liability hinder development of state levee safety programs? How can those concerns be addressed / overcome?

After Lunch

Members of the NCLS will lead discussions on the Recommendations and activities of the NCLS – we want to hear your thoughts and feedback.

- 4 small group discussions
 - 3 rotations
 - “Vote with your feet”
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Exploring Key Recommendations

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What Comes Next: Looking to the Future of a National Levee Safety Program



National Committee Activities

Engage in Dialogue and Advance Activities For a National Levee Safety Program

- 8 regional workshops scheduled (this is #7)
- Open dialogue with Congress and others interested in moving forward the National Levee Safety Program
- Develop and update communication materials
 - NCLS Web Site – www.leveesafety.org
 - Continue to create and share issue papers
- Develop partnerships to coordinate messages and further recommendations

Planned Stakeholder Meetings

- Binghamton, NY (18 May 2010)
- Kansas City, MO (29 July 2010)
- Ohio Valley: KY, OH, IN (11 August 2010)
- Dallas, TX (6 October 2010)
- Sacramento, CA (27 October 2010)
- Portland, OR (9 November 2010)
- Augusta, GA (9 December 2010)
- Northern Great Plains States (TBD)

National Committee Activities

- Consider and share stakeholder feedback
 - Further define costs and benefits of the National Levee Safety Program
 - Further define the recommendations, laying the best groundwork possible for NLSP implementation
 - Explore common levee safety activities with USACE and FEMA
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The Future of the National Levee Safety Program?

- Legislation is needed to move recommendations forward – many need new authorization; all need appropriations
- NCLS developed draft legislative framework based on its recommendations in the Report to Congress
 - Shared with Congress as they consider a new Water Resources Development Act
- NCLS focus is education and awareness on levee safety issues and need for NLSP

Thank You

For more information & to sign
up for the NCLS email list:
www.leveesafety.org
