



FEMA

National Earthquake Conference

Large, Vulnerable and Critical Infrastructure Plenary

April 12th, 2012

National Dam Safety Program

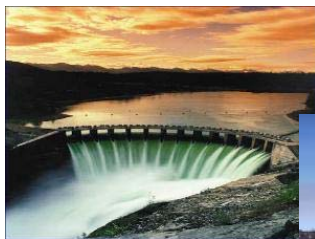
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Federal Insurance and Mitigation Administration

NDSP

National Dam Safety Program



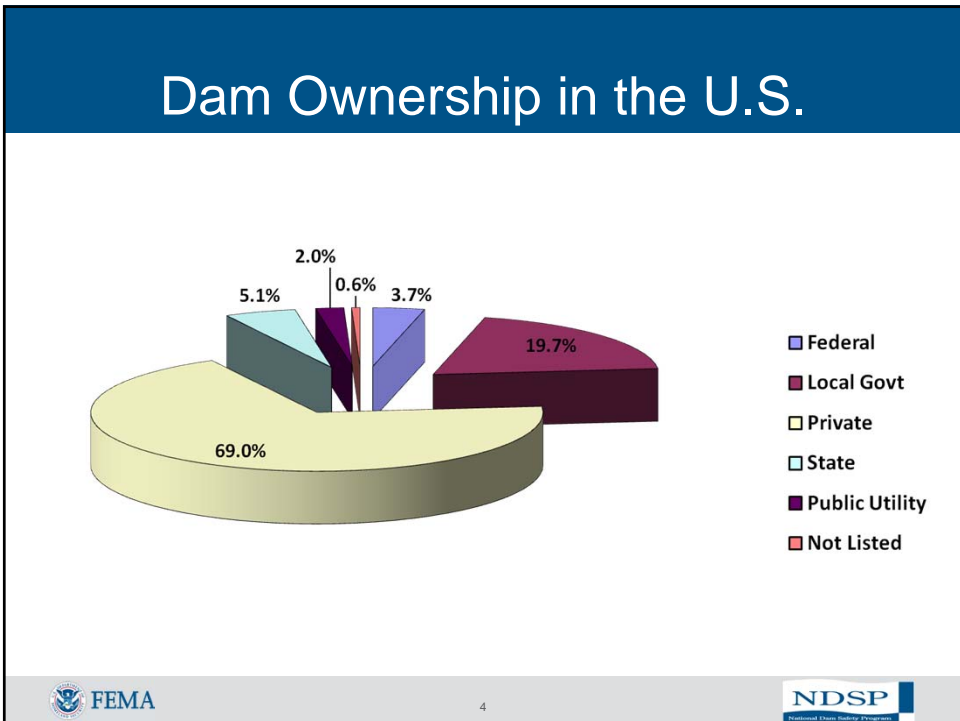
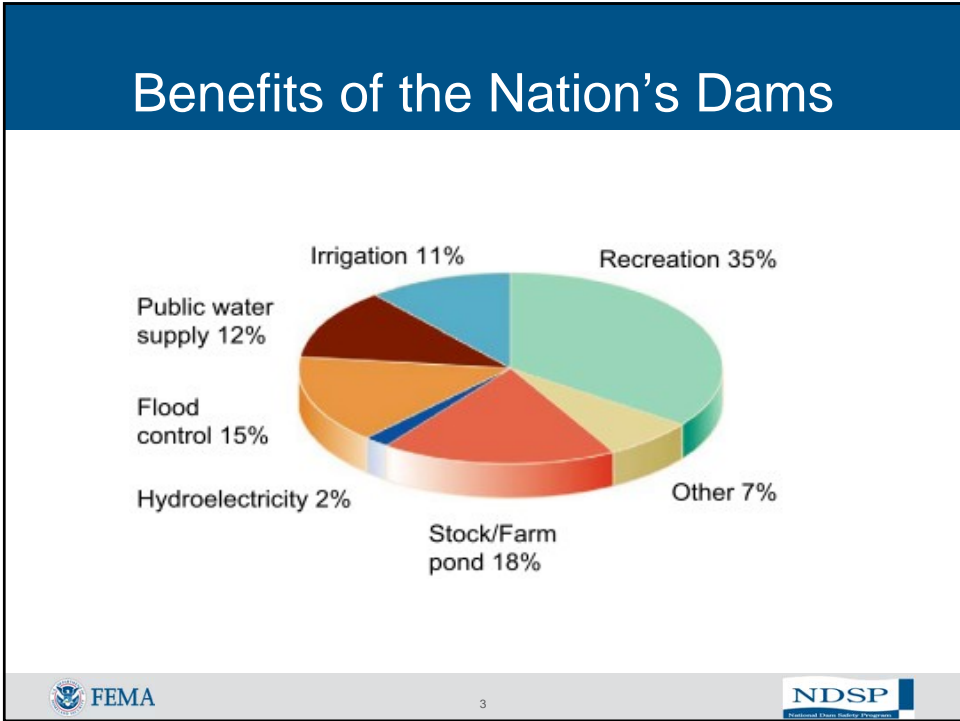
Benefits of the Nation's Dams



FEMA

NDSP

National Dam Safety Program



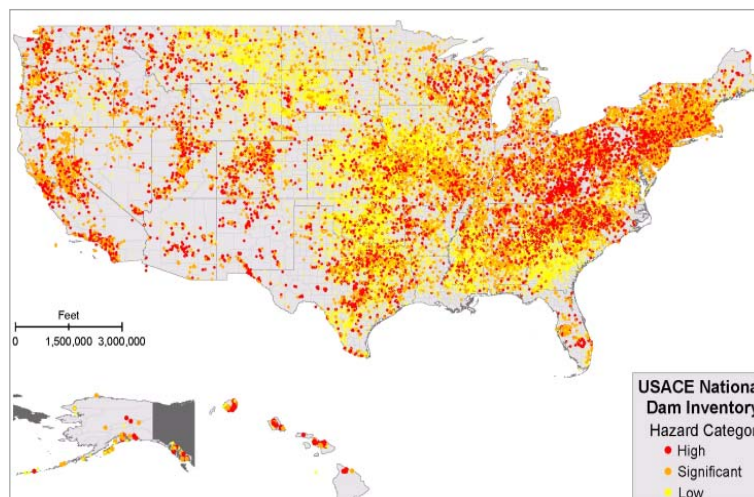
Potential Risk Posed by Dams



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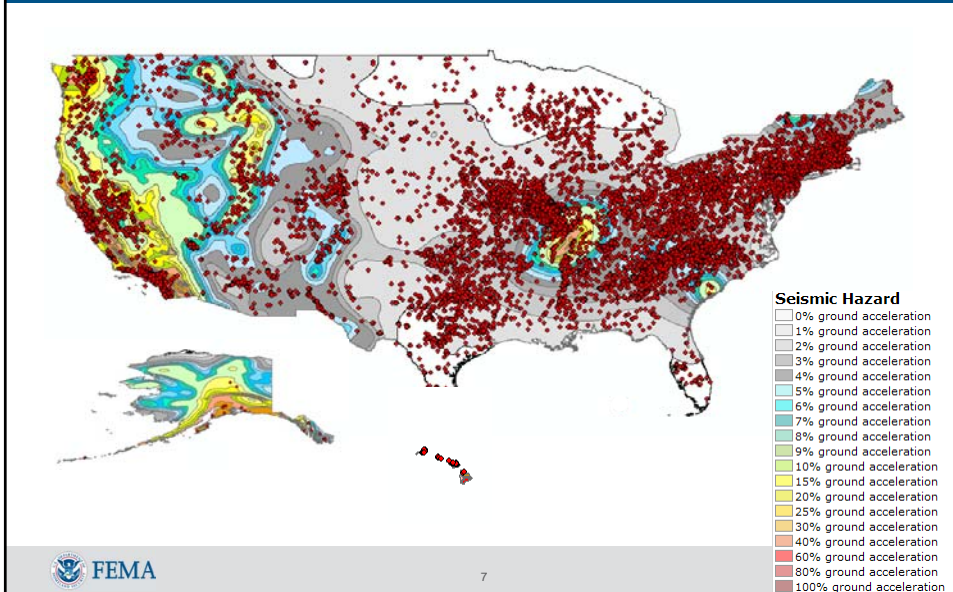
National Inventory of Dams



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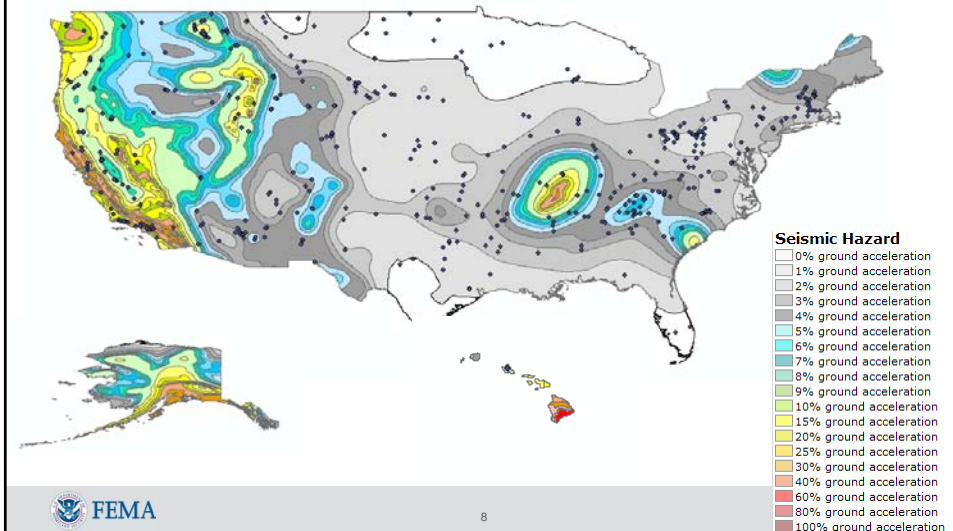


13,991 High Hazard Potential Dams in National Inventory of Dams



Federally-Owned High Hazard Potential Dams More Than 50 Years Old

736 Federal Dams More than 50 years old in NID



Aging dam infrastructure

- Average design life of dams is 50 years
- The average age of dams in the NID is 52.3 years
- Approximately 39% of High Hazard Potential dams are over 50 years old
- In the 2009 American Society of Civil Engineers (ASCE) Infrastructure Report Card Summary, United States Dams receive a "D" grade.
- The estimated cost to repair the nation's dam infrastructure is \$50



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Components of the National Dam Safety Program



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Risk-Informed approach is needed to prioritize activities

- The current Hazard Potential Classification System used for dams is not risk informed
- All High Hazard Dams are not equal in terms of risk
- A large dam that threatens a major community receives the same hazard classification as small dam that threatens a single occupied structure.



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The public is largely unaware of their dam risks

- Most people living downstream of a dam are unaware of the potential hazards associated with dam failure.
- Dam safety information, such as, dam condition assessment, hazard potential classification and inundation maps are not easily accessible to the population at risk.
- Approximately only 50% of the nation's high hazard potential dams have emergency action plans

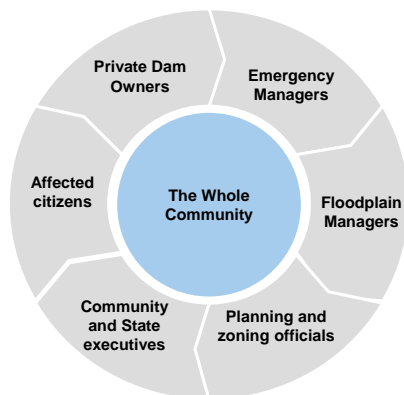


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Engaging key stakeholders

- Traditionally, the NDSP focused on the engineering and technical aspects of dam safety
- We need to encourage State and local governments to address dam risks in their hazard mitigation strategies and emergency operations planning
- Building resilient communities depends on strong partnerships, and effective coordination with other government agencies



Private dam owners require adequate support

- Federally allocated funds are largely geared toward inspections and repairs of government-owned/managed dams
- Small and non-commercial private dam owners may not have the expertise or resources to adequately address the risks posed by their dams
- Many of those dams were built before there were communities downstream which, in most cases, caused the hazard rating to change from “low” to “high” or “significant”



Path Forward

- The National Dam Safety Program Strategic Plan
- New National Dam Safety Program Products
- Risk MAP

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Dams + Earthquake = Bad

