

# Federal Energy Regulatory Commission Dam Safety Conference

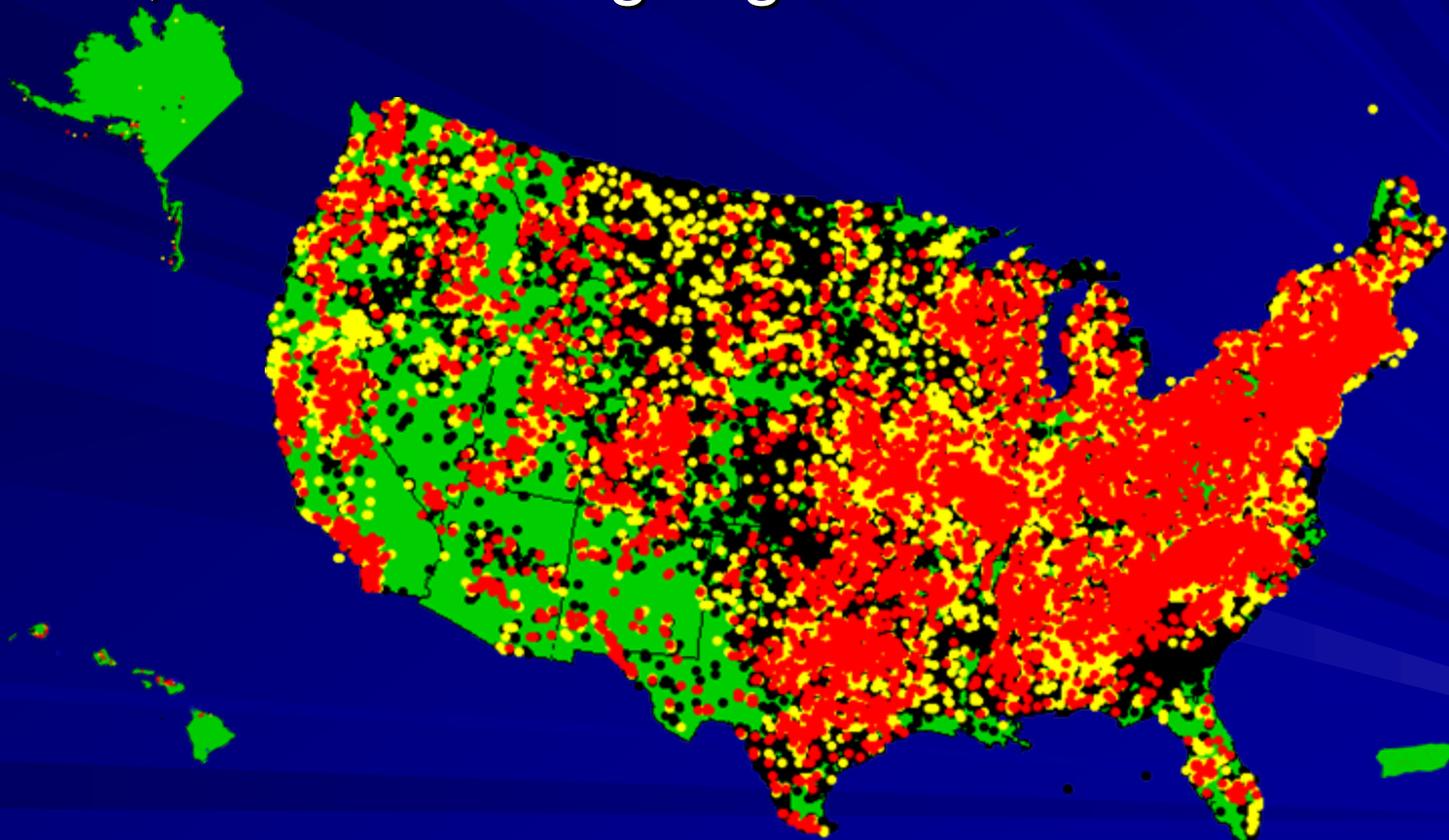
December 5, 2008

## Association of State Dam Safety Officials

Robert Martinez, President ASDSO  
Nevada Division of Water Resources

# Dams in the United States

(Approximately 88,546 State Regulated Dams  
9,849 State-Reg High Hazard in the NID )



Numbers taken from the 2007 National Inventory of Dams

# ASDSO (partial list of objectives)

- Training & Education
  - National conference
  - Technical training guides and seminars for state officials
  - Training for dam owners
- Information Clearinghouse/Guidelines
  - State Model Program (underwritten by FEMA)
  - Library and Database on Dam Safety
  - Technical journal and news service
  - Performance measuring and statistical analyses
- Peer Review Program
- Legislative Advocacy
- Coordination with the National Dam Safety Program at FEMA
- Dam Security initiatives with DHS, Infrastructure Protection

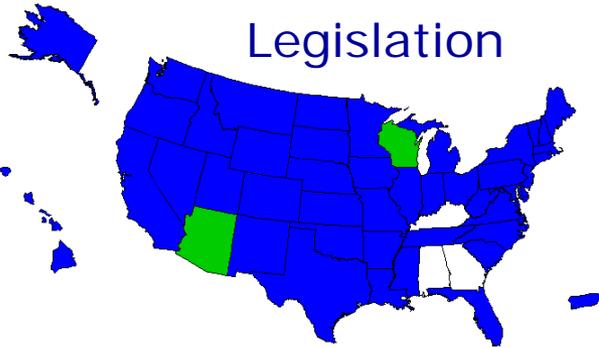
# Components of a Model Program

- Legislation and regulations
- Permitting and approval of plans & specifications
- Experienced and professional staff
- Inspections – construction and annual
- Enforcement
- Emergency response
- Emergency action plans

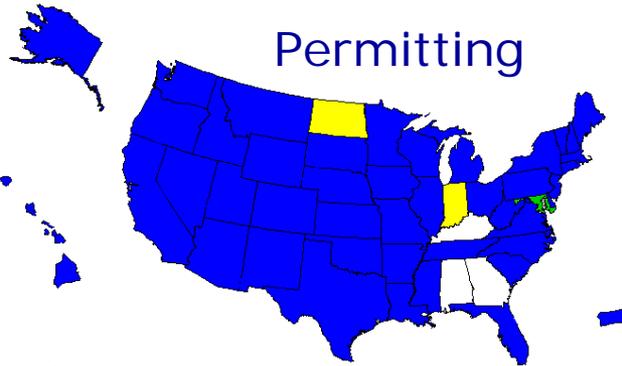


# Summary of ASDSO Results for 2007 Reporting Year

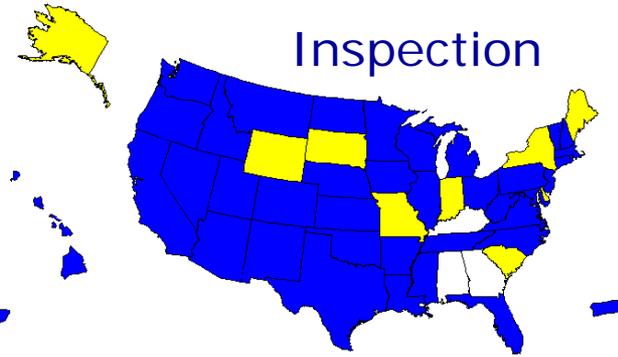
Legislation



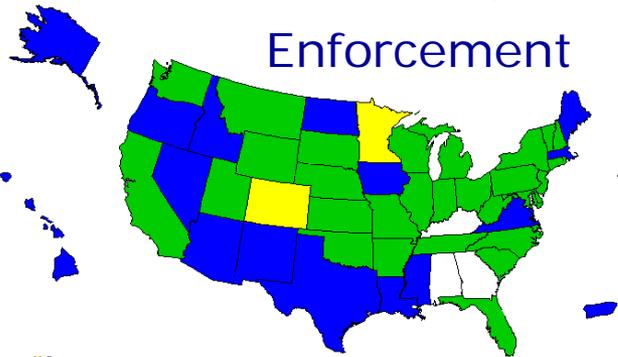
Permitting



Inspection



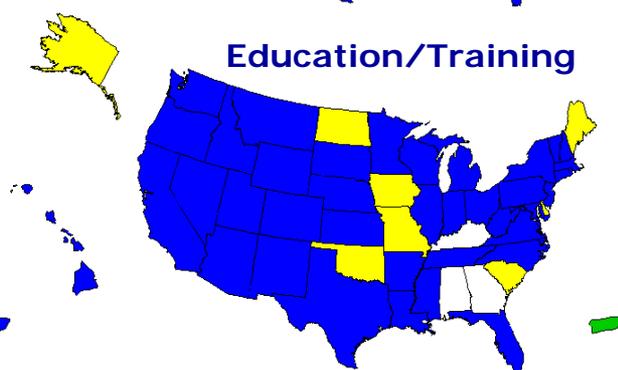
Enforcement



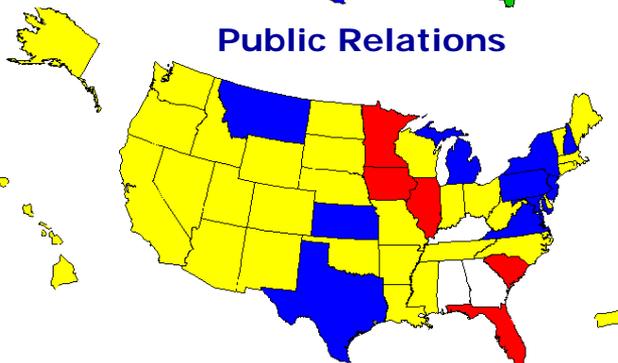
EAP & Response



Education/Training



Public Relations



- Green - State has all characteristics of the ASDSO model State dam safety program
- Blue - Most characteristics
- Yellow - Some characteristics
- Red - No characteristics

# Difference in State Programs

- Maturity of program
- Funding and staffing (FTE)
- Strength of regulations and statutes
- Experience of staff

# State Dam Safety Programs

## ■ Budget

- Range: 0 to \$10 million
- Average: \$1,100,000

## ■ Staffing

- Range: 0 to 59
- Average: 9 (approximately one FTE per 379 dams)

# State Dam Safety Programs

## ■ Inspections

- High hazard dams are inspected on average every 1½ years
- Approximately 60% of all high hazard dams inspected in 2007

## ■ Emergency Action Plans

- Approximately half of the 10,000 state regulated high hazard dams have EAP's



# Observations



- The greatest degree of compliance with the ASDSO model State dam safety program continues to be enforcement and the least degree in public relations.
- The number of inspections is constant with 2006, and the percentage continues to show that high hazard dams are being inspected at approximately 1 ½ year intervals.
- The number of high hazard dams with EAP's continues to gradually increase with over 50% of the dams currently having EAP's.
- The collective dam safety budget is increasing while staffing remains approximately stable.
- The number of State-regulated dams continues to increase and currently is approximately 90,000.

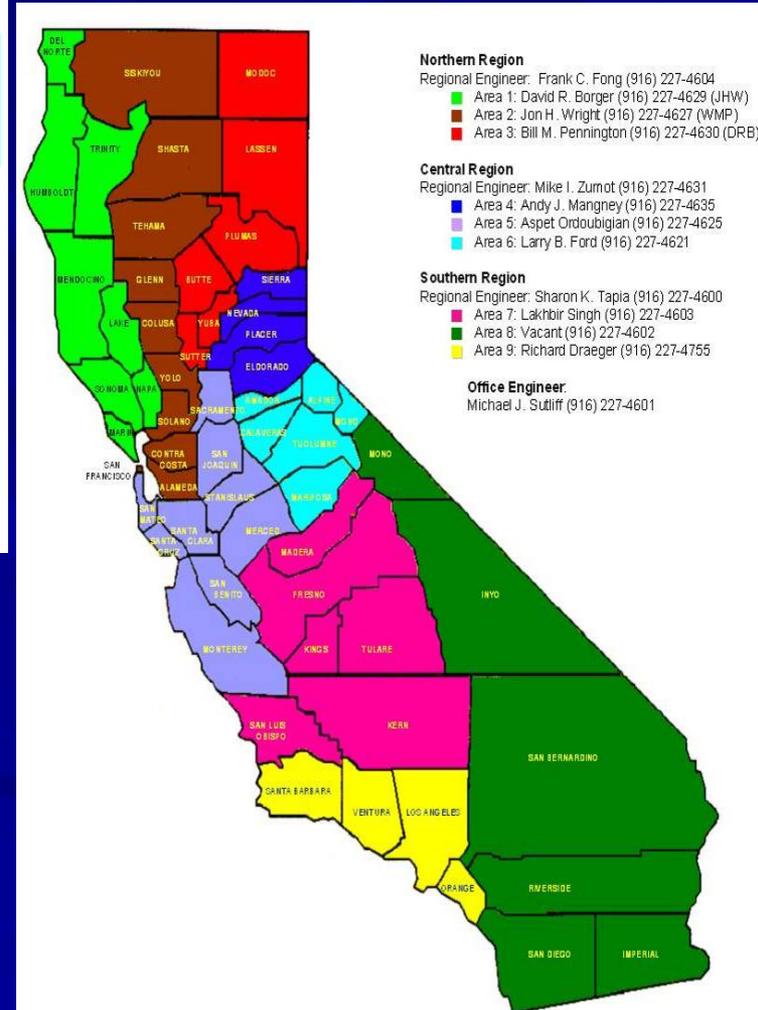
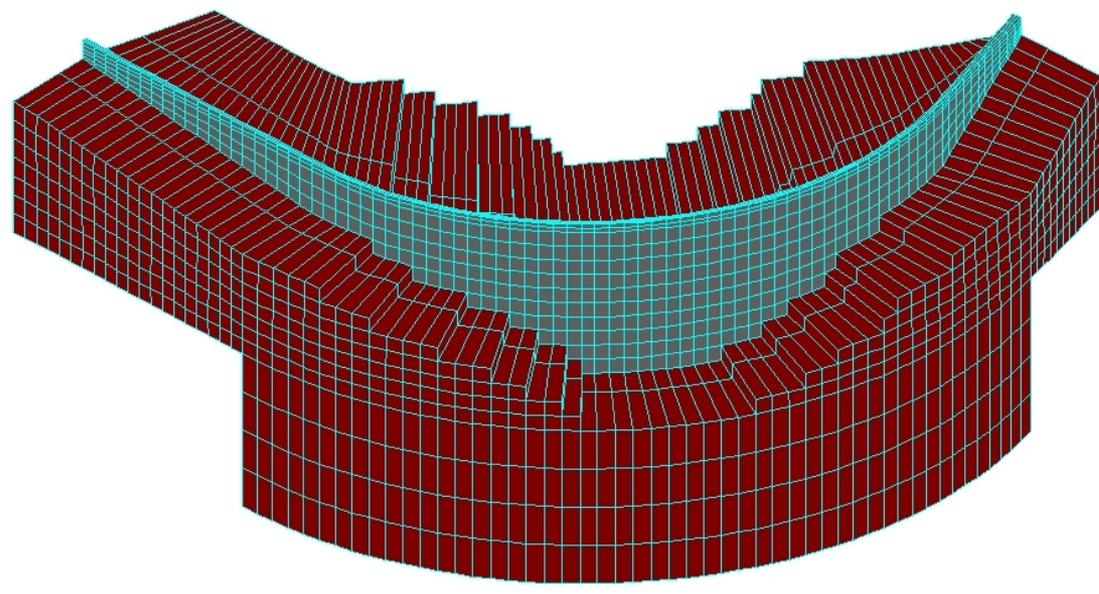


# Challenges



- The funding for enhancement of State dam safety programs has changed minimally and their significance continues to increase noticeably.
- Limitation for the rehabilitation and repair of public and private dams. This is due to minimal or no funding for this need.
- The number of high hazard dams continues to increase due to downstream development. This requires development of new EAP's that can be expensive.
- The development and updating of inundation maps. Distribution of maps to the public sometimes conflicts with security concerns.
- The identified and unidentified dams not currently under State regulation continues to increase.

# Evaluations, Design Reviews and Inspections



# CA DSOD – FERC Cooperation

- PFMA's
- Coordination with dam owners
- Development of national guidelines
- Dam owner workshops – Western Forum/ASDSO conference workshop
- EAP's
- Dam security