

# Dam Safety

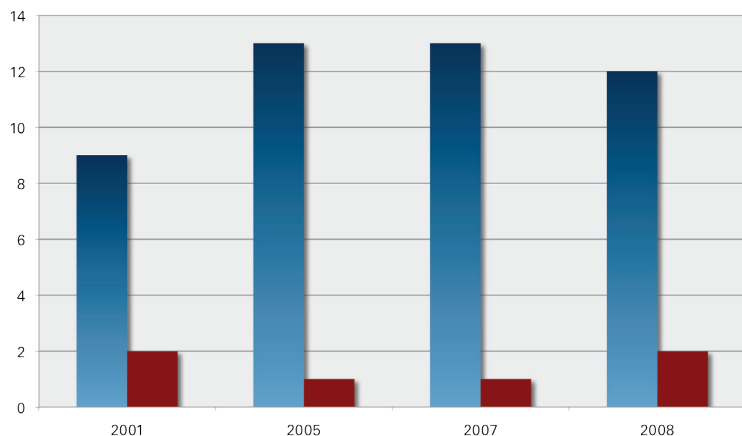
Performance Report for the State of Maine



Dams are a critical part of the nation's infrastructure, providing vital benefits such as flood protection, water supply, hydropower, irrigation and recreation. Yet thousands of US dams have the potential to fail with tragic consequences. Our nation's dams are aging and deteriorating while downstream populations are increasing; this situation demands greater attention to and investment in measures that reduce risks to public safety and economic assets.

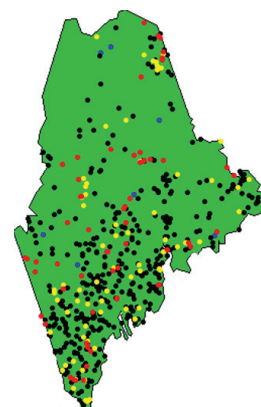
## State Statistics

State Regulated Dams Identified in Need of Remediation (blue bar) and Remediated (red bar)



Total NID Dams	647
Total NID High Hazard Dams	77
Total State Regulated Dams	154
Total State Regulated High Hazard Dams	66

State dam safety programs regulate 80% of the 84,000 dams listed in the National Inventory of Dams (NID). State dam safety programs inspect existing dams, oversee remediation of deficient dams, and work with local officials and dam owners on emergency preparedness. Many state programs lack adequate budgets, staff and authority to ensure public safety.

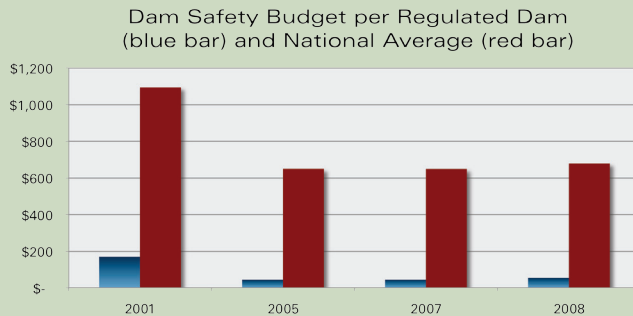
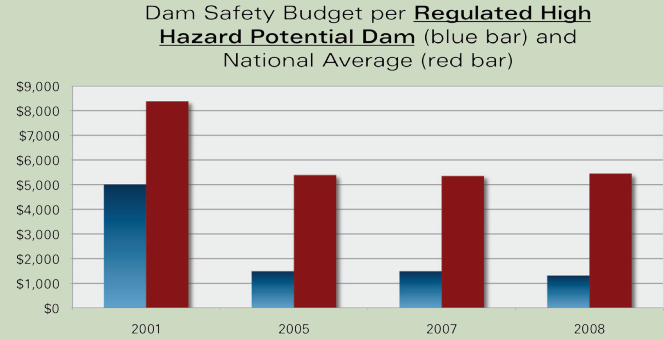
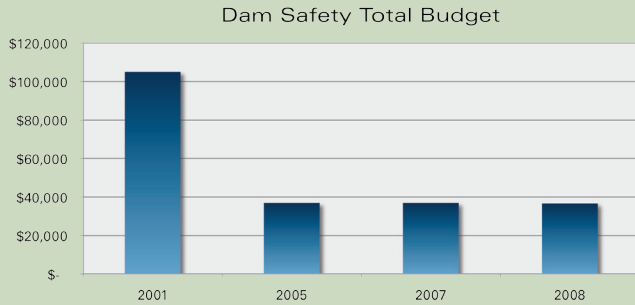


**Red Dots – “High-hazard potential dam”** is typically defined as a dam whose failure or mis-operation will cause loss of human life and significant property destruction.

**Yellow Dots – “Significant-hazard potential dam”** is typically defined as a dam whose failure or mis-operation will cause significant property destruction.

**Black Dots – “Low-hazard potential dam”** is typically defined as a dam whose failure or mis-operation will cause minimal property destruction.

## State Budgeting for Dam Safety



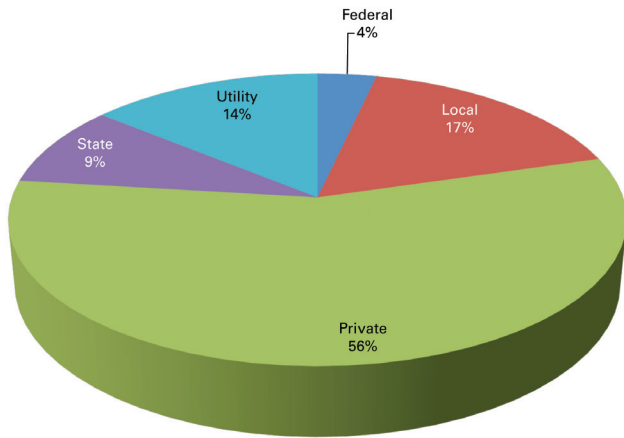
## Does Maine Have Adequate Laws to Keep Dams Safe?

The National Dam Safety Program, in cooperation with the Association of State Dam Safety Officials (ASDSO), developed the Model State Dam Safety Program to assist state officials in initiating or improving their state programs. The model outlines the key components of an effective dam safety program and provides guidance on the development of more effective and sustainable state programs to minimize risks created by unsafe dams. It contains chapters on Legislative Authorities, Permitting, Inspection, Enforcement, Emergency Action Planning and Response, Education and Training, and Public Relations.

The following table presents Maine's responses over time to a series of yes/no questions on the authorities for each chapter and national averages for 2008. The areas are listed and weighted by importance (weights indicated in parentheses). Higher percentages in the state columns indicated greater alignment of the state program with the model; lower percentages may indicate a need for improved authority. Areas of particular concern are highlighted.

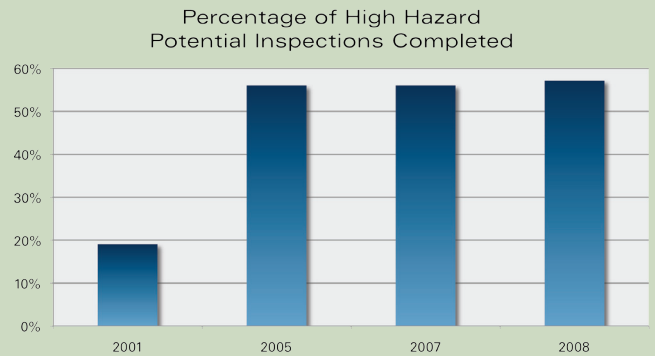
State Authorities	State Compliance with the Model Program			2008 National Average
	1989	1998	2008	
Legislation (5)	55.3%	65.7%	57.6%	84%
Inspection (4)	30.8%	50.0%	16.7%	73%
Enforcement (4)	75.0%	77.8%	100.0%	89%
EAP and Response (4)	0.0%	76.9%	100.0%	69%
Permitting (3)	32.4%	63.8%	7.7%	73%
Education and Training (3)		85.7%	50.0%	72%
Public Relations (1)		0.0%	16.7%	29%
Overall Weighted Percentage	39.8%	66.5%	56.0%	75%

## Dam Ownership



Unlike most components of US infrastructure, the majority of dams listed in the National Inventory of Dams are privately owned. (Dam Ownership percentages are based on the 2009 NID dataset for total NID-sized dams.)

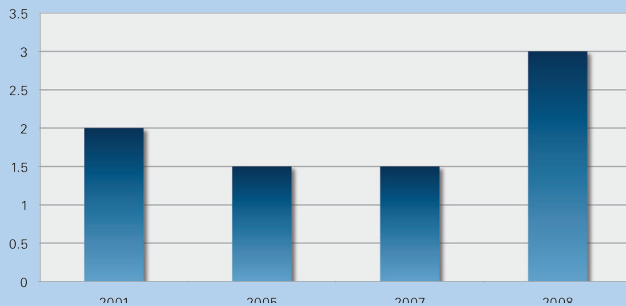
## Inspections of High Hazard Potential State Regulated Dams\*



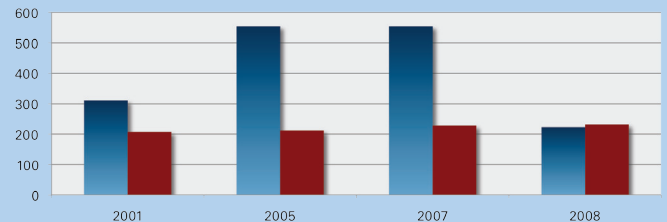
\*Inspection percentages may vary above and below 100% for any given year based on a state's inspection frequency and scheduling.

## State Staffing for Dam Safety

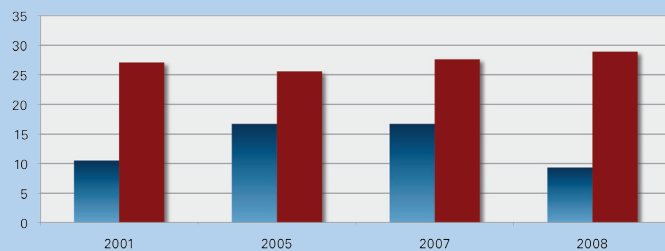
Total Staff (Full Time Equivalent (FTE))



State Regulated Dams per FTE (blue bar) and National Average (red bar)



State Regulated High Hazard Potential Dams per FTE (blue bar) and National Average (red bar)

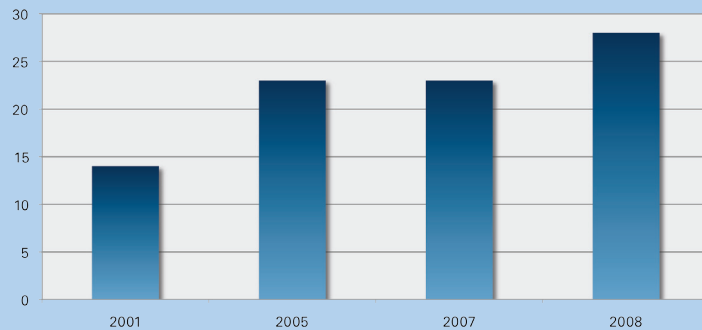


Adequate staffing is important to program performance. State numbers significantly above the Regulated Dams per FTE and Regulated High Hazard Dams per FTE national averages can be indicators of the need for additional staff resources.

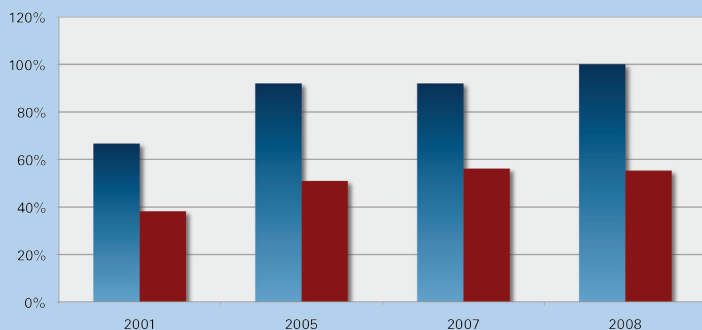
## Emergency Action Planning

An Emergency Action Plan (EAP) identifies potential emergency conditions at a dam and specifies preplanned actions to be followed to help prevent loss of life and minimize property damage. The EAP specifies actions the dam owner should take to moderate or alleviate the problems at the dam. It contains procedures and information such as failure inundation maps to assist emergency management officials with early-warning notification and evacuation plans.

Number of High Hazard Potential Dams with an EAP



Percentage of High Hazard Potential Dams with an EAP (blue bar) and National Average (red bar)



## Dams by Congressional District

Maine-01 – 163

Maine-02 – 422

## Improving Security

The Dams Sector-Specific Plan supports the National Infrastructure Protection Plan (NIPP) by establishing a coordinated approach to national priorities, goals, and requirements for critical infrastructure protection.

ASDSO works with the Department of Homeland Security and each state to collect data that will show state-specific and national progress toward reducing security risks within the dam sector. With DHS Dams Sector leadership and support, states are receiving tools and guidelines to improve their ability to reduce risks from man-made, intentional assaults on dams.

State Performance Metrics Highlights:

- Maine does not coordinate with the State Homeland Security Office, DHS Protective Security Advisors or the DHS Dams Sector in support of the National Infrastructure Prioritization program to identify dams of national significance.
- Maine does not participate in the Homeland Security Information System, a secure resource center and communication system administered by DHS.

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