

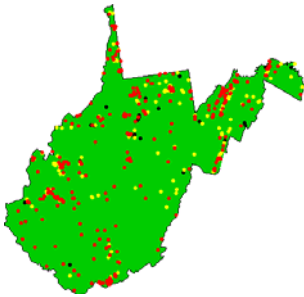


Dam Safety in

West Virginia

Dams are a critical part of the nation's infrastructure and provide vital benefits such as flood protection, water supply, hydropower, irrigation and recreation. Yet these dams have the potential for failure and tragic consequences. As downstream development of dams increases and dams continue to age and deteriorate, they demand greater attention and investment to assure their safety.

Dam Stats in West Virginia



Number of Dams In Inventory: 558

Number of State Regulated Dams: 354

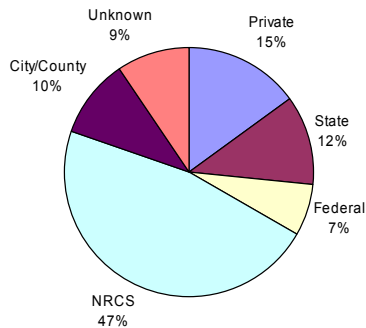
Number of Regulated High Hazard Potential Dams: 244

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.

Breakdown of Non-Coal Dam Ownership in West Virginia



Number of Dams per Congressional District

Alan Mollohan – 40.72%

Shelley Moore Capito – 33.90%

Nick Joe Rahall – 25.38%

The National Dam Safety Program (PL 109-460)

The NDSPA provides training, technical assistance, research and support to states through incentive grant awards that encourage states to improve their programs. It is administered through the Mitigation Directorate at DHS, FEMA.

1. \$3.25 million over five years in training assistance to state engineers
2. \$9 million over five years in research funds to identify more effective techniques to assess, construct and monitor dams,
3. \$38.7 million over five years split among the states, based on the relative number of dams in each state, to make improvements in programs moving toward satisfying all of the 13 basic statutory authorities and programmatic functions identified in the NDSPA,
4. \$3.75 million over five years for the National Inventory of Dams.

*This small but vital program has **never been fully funded**. If full funding **were** provided many more states could create jobs for dam inspectors allowing for the identification of safety deficiencies (currently limited allotments per state are just shy of an average salary amount needed to hire a new inspector).*

The National Dam Rehabilitation and Repair Act

The National Dam Rehabilitation and Repair Act has been introduced into the 110th Congress as HR 1098. This program would provide \$200 million over 4 years in federal grant funds to be cost-shared at 65 percent federal to 35 percent state/local for non-federal publicly owned dams.

West Virginia		
Number of Deficient Public Dams (2007)	Est. Repair Costs for Public Dams	Proposed Funding from HR 1098
22	\$15,400,000	\$6,496,228.74*

* based on HR 1098 formula and 2003 NID data

In the near decade since its start, how has the National Dam Safety Program improved dam safety in West Virginia?

State Dam Safety Performance	Then (1998)	Now (2005)
West Virginia meets basic legislative/regulatory Criteria found in the National Dam Safety Act.	24 out of 32 elements met	27 out of 32 elements met
The National Dam Safety Program supports the remediation ¹ of deficient ² dams. While increasing numbers of deficient dams is bad, the identification of deficient dams and subsequent remediation is needed and important.	49 reported deficient dams 3 remediations performed	38 deficient dams 8 remediations performed since 1998
Inspections of dams decreasing due to personnel retention issues unrelated to NDSPA. NDSPA funds used to improve the quality of inspections and technical reviews.	Performed 117 inspections of 310 state-regulated dams (37%) <i>(Breakdown based on hazard classification not reported)</i>	Performed 107 of 354 state-regulated dams (30%) <i>Performed 71 inspections of 244 High-hazard dams (30%)</i>
Reducing the risk to the public by increasing the number of current emergency action plans (EAPs) on high-hazard potential dams.	High hazard dams with current EAPs: 46 of 238 (19%)	High hazard dams with current EAPs: 57 of 244 (23%)

How is Dam Safety in West Virginia supported by the National Dam Safety Program Assistance Grants?

What kinds of projects are supported by state dam safety assistance grants?	West Virginia has applied state assistance funds for training, office equipment, and field equipment that provides the capability to reduce or drain reservoirs in emergency situations.
Total State grant received FY03-FY05	\$101,439
FY03-05 grant lost due to lack of appropriations	-\$70,881

How does West Virginia stack up to other states?

State Staffing (FTE = full time equivalent)			
Recommended FTEs per Model State Dam Safety Program	Existing Total FTEs	Existing State-Reg Dams per FTE	Rank in U.S. for FTEs Devoted to Dam Safety
18	6	60	6
State Budgeting			
Annual Budget for Dam Safety	Budget Per Dam	Budget Per High-Hazard Dam	Rank in U.S. for State Dollars Going toward Dam Safety Regulation (using High-Hazard Dam Totals Only)
\$470,432	\$1,310.40	\$1,761.92	33

¹ "Remediation" is defined as a solution to remove the dam safety problem. This can include solutions such as the addition of a larger spillway, repair of the structure, or removal of the dam.

² "Deficient" is defined as a dam that is not capable of performing safely under all required design pool and loading conditions. **Note:** Each state may have different definitions and standards.