

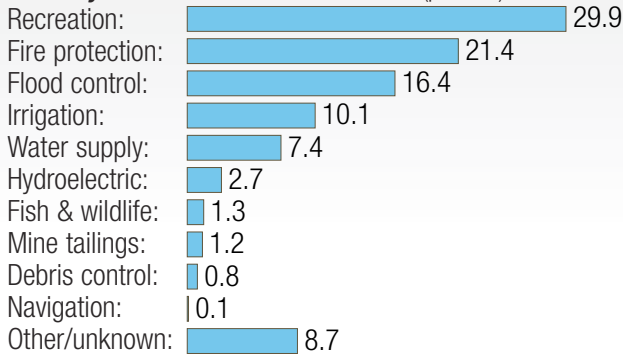
HydroFacts

Dams

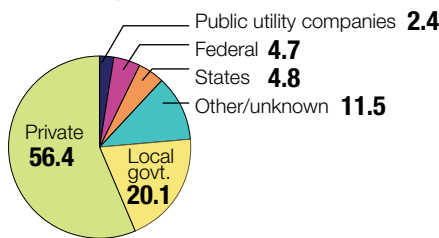
Numbers

Number of dams in United States: **79,777**
 Percent for which federal government is responsible for maintenance and safety: **5**
 Percent for which states and localities are responsible: **95**

Primary Reason for Construction (percent)



Ownership (percent)



Aging Wastewater Systems

Estimated cost to repair: **\$22 billion/year for 20 years**
 Current spending on repairs: **\$10 billion/year**

Source: Association of Metropolitan Water Agencies testimony to U.S. House on aging water supply infrastructure, April 28, 2004

Pipes

Total miles of water mains in the U.S.: **900,000**
 Estimated number of water main breaks each year: **238,000**
 Percent system water losses due to deteriorating lines: **about 10**

Source: 2002 survey by the Association of Metropolitan Water Agencies

Safety

Catastrophic dam failures reported by states, 1999-2004: **125**
 Dams with deficiencies leaving them susceptible to failure: **3,243**

No. 1 factor for dam failure: **seismic or weather events**
 No. 2 factor: **age**

Typical design life of most dams: **50 years**
 Percent of U.S. dams at least 50 years old: **30**

Ideal number of dams per state regulator: **25**
 National average, dams per regulator: **395**

State budgets for dam safety programs: **\$32.6 million**
 Budget per regulated dam: **\$389**

No. of states with loan or grant programs to repair unsafe dams: **9**
 Western states with such programs: **Arizona, Utah**

Source: Congressional Research Service, The Library of Congress Aging Infrastructure: Dam Safety, September 29, 2005

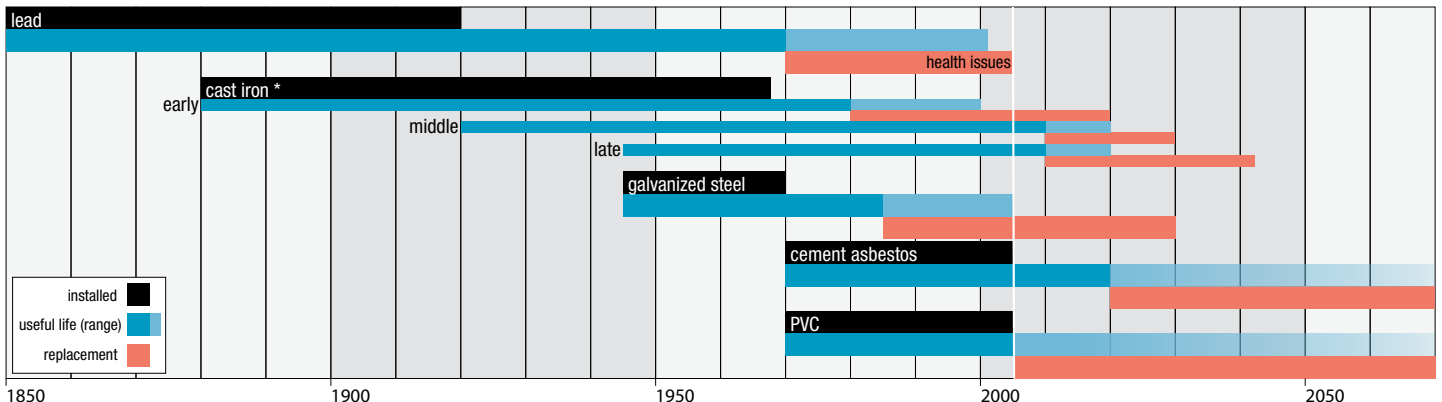
Estimated Repair and Rehab Costs

For nonfederal dams: **\$36.2 billion**
 For the most critical dams: **\$10.1 billion over 12 years**

Source: CRS Report for Congress, quoting State Dam Safety Association 2002 estimates

Drinking Water/Wastewater

Combined water/wastewater spending needs for selected cities:
 Denver, CO: **\$363 million**
 Austin, TX: **\$568 million**
 Phoenix, AZ: **\$1.28 billion**



*The oldest cast iron pipes, dating to the late 1800s, have an average life expectancy of 100 to 120 years. Because of changing materials and manufacturing techniques, pipes laid in the 1920s have an average life expectancy of nearly 100 years, while those laid in the post-World War II era are expected to last only about 75 years.

Source: Gary Woodard, SAHRA