

Dams in North Carolina

There are approximately 260 dams in the Tar-Pamlico river basin. Of these, less than 10 are considered high hazard. Statewide, North Carolina has approximately 5,600 dams. These dams impound water to provide water storage, cooling water for nuclear power plants, flood reduction, hydroelectric power, waste water storage and treatment, habitat for flora and fauna, as well as recreation for the citizens of North Carolina.

Of these approximately 5,600 dams, approximately 1,300 are considered high hazard dams. The high hazard designation denotes that should the dam fail the damage could include a loss of human life. North Carolina ranks number two in the United States in number of high hazard dams. All high hazard dams in North Carolina are inspected every 2 years and all low hazard dams are inspected every 5 years. In general, dams do not fail often. The last major failure in North Carolina came in 2003, when an earthen dam near Hope Mills burst after eight inches of rain. Nobody was hurt, but the resulting flooding emptied the lake, displaced 1,600 people, and caused \$2.1 million in damage. A \$14 million concrete dam built to replace it failed in 2010, just 18 months after it was finished. The town is currently suing the contractors.

The vast majority of the dams in North Carolina are owned by private citizens, with a relative few owned by Federal, State and municipal governments and utilities.

Like all man-made structures, dams deteriorate. Deferred maintenance accelerates deterioration and causes dams to be more susceptible to failure. As with other critical infrastructure, significant investment is essential for maintaining benefits and ensuring safety. The design life of a dam is 50 years. The average age of dams in North Carolina is 50 years.