



Dam Safety Program

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River Operations and Renewables

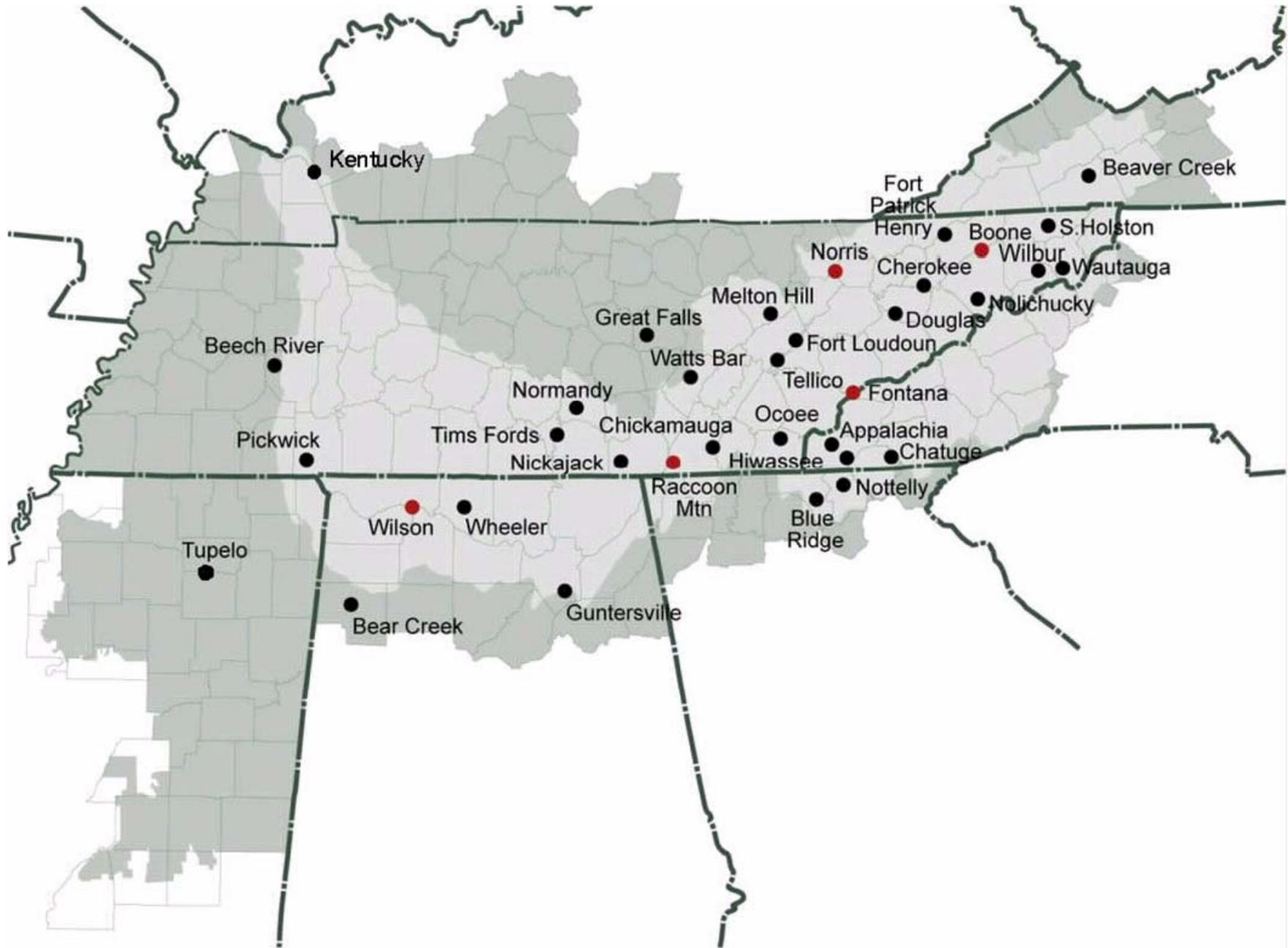
TVA River Operations Dam Safety Program

Purposes:

- ◆ Keep the dams and the communities safe
- ◆ Ensure operational and structural integrity of water barriers
- ◆ Ensure compliance with Federal Guidelines for Dam Safety



TVA The Tennessee Valley

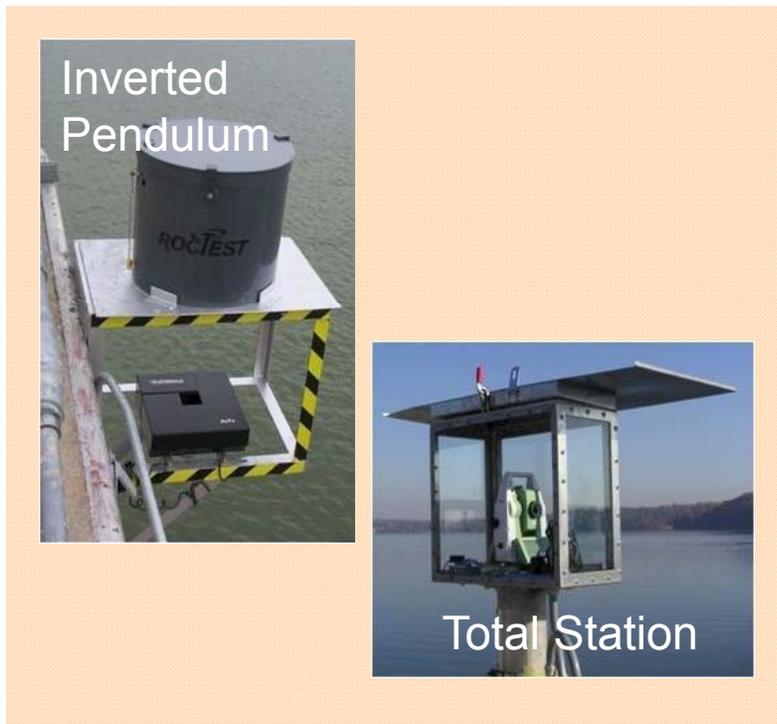


TVA Dams are Safe

- ◆ Monitor our dams routinely
- ◆ Perform maintenance and repair of aging structures
- ◆ Updating dam safety program to meet current industry standards

TVA Dam Safety Instrumentation Program

- ◆ Instrumentation looks at long term performance of the dams



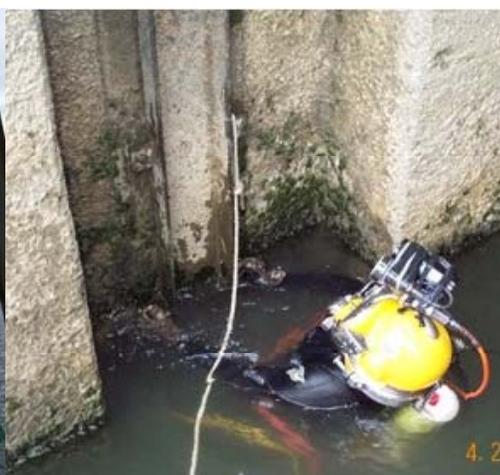
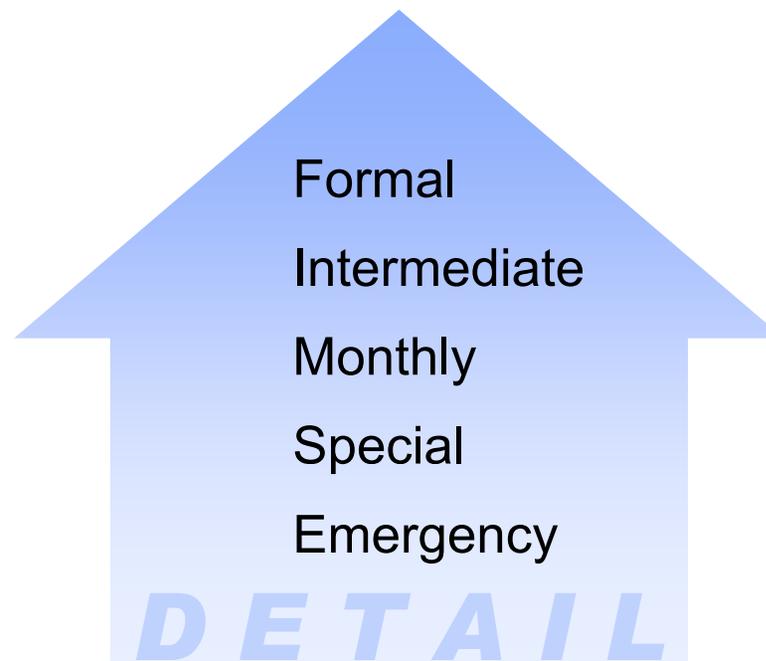
Automated Instruments



Manual Instruments

TVA Dam Safety Inspection Program

- ◆ Routine inspections are performed to ensure operational and structural integrity of water barriers
- ◆ Conduct special inspections after earthquakes, heavy rain, flooding, etc.



TVA Dam Safety Maintenance Program

- ◆ Preventative maintenance
- ◆ Corrective maintenance
- ◆ Dedicated roving maintenance crews



Gate Chains at Boone Dam



Nickajack Dam Trash Rack Damage



Placing riprap at Pickwick Dam

TVA Updating Dam Safety Program

- ◆ Re-analyzing extreme events
- ◆ Re-analyzing stability of dams
- ◆ Sometimes required to perform a major modification



Temporary Sand Baskets at Watts Bar Dam

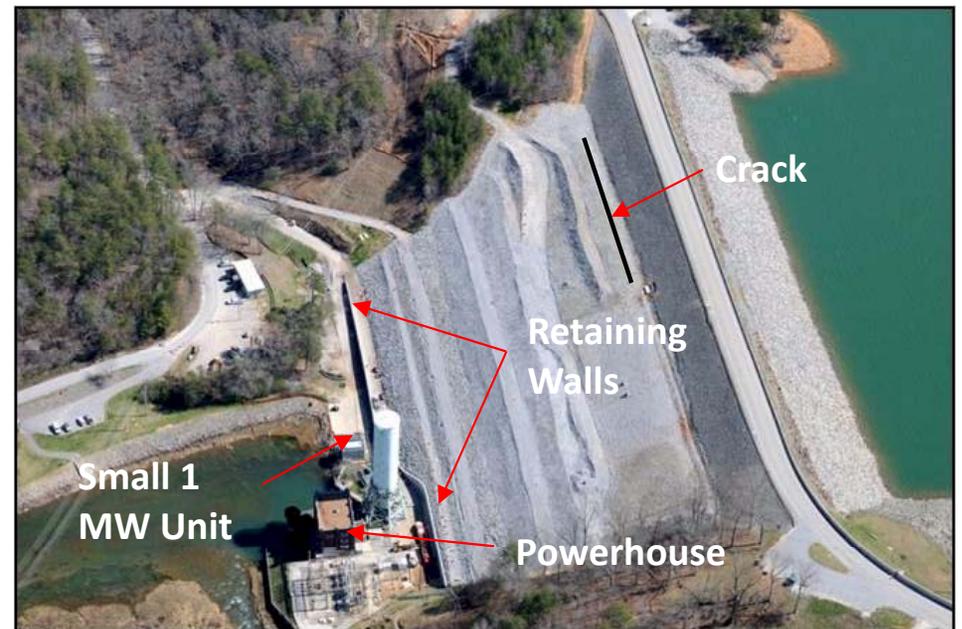


Foundation Treatment at Bear Creek Dam

TVA Blue Ridge Dam Rehabilitation



Aerial of Blue Ridge Dam Pre-Construction



Aerial of Blue Ridge Dam During Construction

- ◆ Built in 1931
- ◆ Purchased by TVA in 1939
- ◆ Poor construction techniques
- ◆ Does not meet current seismic stability requirements

- ◆ Various repairs began in 1998
- ◆ Rock placed on dam in 2011 to repair seismic deficiency

- ◆ Keeping the dams and the communities safe is TVA's number 1 priority
- ◆ All this work, mostly behind the scenes, keeps the dams safe

TVA Questions?



damsafety