

# DAMS AND HYDRAULIC STRUCTURES



## LAKE BRAZOS LABYRINTH WEIR CITY OF WACO

Freese and Nichols provided innovative solutions for this award-winning dam rehabilitation project. The team combined reuse of the existing dam site with an unconventional spillway configuration, substantially reducing completion time and cutting construction costs in half. The project has received multiple national and state awards.

**FREESE AND NICHOLS, INC.** is the region's most experienced engineering consultant for water supply projects, designing more than 150 major dams and reservoirs during our decades-spanning history. As one of the nation's leading water resources firms, we are familiar with all aspects of dam maintenance and operations, as well as inspection, monitoring, evaluation and rehabilitation of dams. Our experience with dams and reservoirs includes both new and rehabilitation projects.

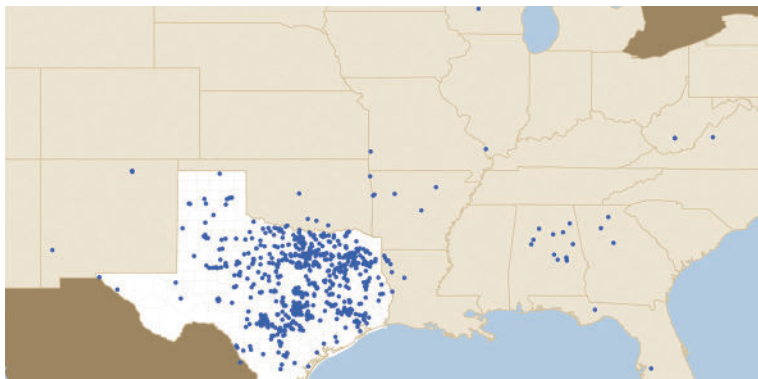
In addition, our professionals provide full-service capabilities for your water resources projects. We provide solutions from beginning to end for all dam and hydraulic structure needs, including permitting and planning, hydrologic and hydraulic analysis, geotechnical and structural design, construction document preparation and construction management.





Freese and Nichols has a rich history of planning, designing, rehabilitating, inspecting, monitoring and evaluating dams, spillways and hydraulic structures. We offer comprehensive engineering and consulting services for dams and reservoirs in the following areas:

- Planning and permitting
- Studies and analyses
- Design and rehabilitation
- Instrumentation and monitoring
- Construction management and support
- Facility reviews and evaluation



Our dam and hydraulic structure experience includes:

- 600+ dam evaluations
- 12 Federal Energy Regulatory Commission Part 12 inspections
- 150+ major dam and reservoir designs
- 110+ Probable Maximum Flood studies
- 200+ breach analyses
- 100+ emergency action plans

## AWARD-WINNING PROJECTS

Here is a sampling of our recognized dam projects. Read more at [www.freese.com/awards](http://www.freese.com/awards).

### Bechtel Summit Dams and Lakes *(pictured at top)*

- National Recognition Award, American Council of Engineering Companies

### Lake Brazos Labyrinth Weir

- Award of Excellence in the Constructed Project, United States Society on Dams
- Engineering Excellence Honor Award, American Council of Engineering Companies

### Upper Brushy Creek Dam Modernization Program

- Award of Merit, Association of State Dam Safety Officials

### Wesley Seale Dam

- National Rehabilitation Project of the Year, Association of State Dam Safety Officials
- National Finalist, American Council of Engineering Companies

### Lake Delton Dam Repair

- Engineering Excellence Honor Award, American Council of Engineering Companies

### Hydrologic and Hydraulic Guidelines for Dams in Texas

- Eminent Conceptor Top Engineering Project, Texas Council of Engineering Companies



Freese and Nichols, Inc. is a professional consulting firm serving clients across the Southwest and Southeast United States. With sustainability in mind, Freese and Nichols plans, designs and manages infrastructure projects. It is the first engineering/architecture firm to receive the Malcolm Baldrige National Quality Award.

