

WATER SUPPLY PLANNING AND PERMITTING



FNI is experienced in developing overviews of water resources issues and opportunities for a variety of clients. We focus on sustainability of current supplies and potential provision of additional water supplies to meet future demands. Our professionals offer cost-effective, practical solutions to complex water supply issues, from initial planning and selection all the way through implementation.

FREESE AND NICHOLS, INC. (FNI) HAS A LONG HISTORY of water supply planning and development. We excel at the special requirements involved in water rights analysis and permitting. We can assist clients with the preparation of applications; conduct and oversee investigations required by state agencies; prepare appropriate reports; and present testimony at water rights hearings. We are also experienced in helping clients obtain the federal permits required to implement water supply projects.

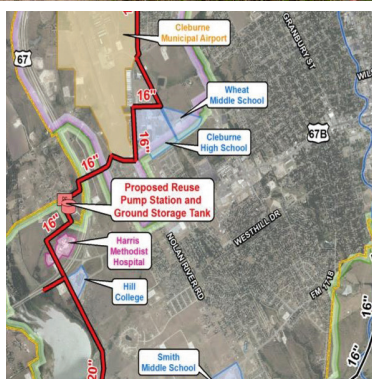
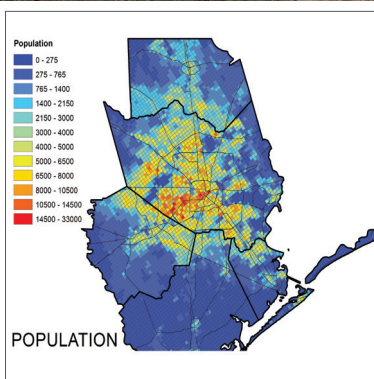
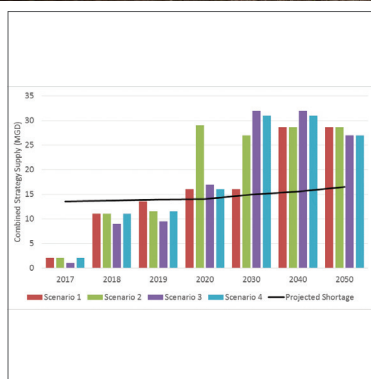
FNI also works with water providers to efficiently use existing sources and identify nontraditional water sources in a supply-limited environment. These concepts are reinforced in FNI Water™, an FNI initiative supporting stewardship of client assets and public resources. The goals of FNI Water™ are to maximize the quantity and quality of water, protect ecosystem functions, minimize energy use and minimize costs in our projects.



REGIONAL GROUNDWATER UPDATE PROJECT PARTNERSHIP OF THREE CONSERVATION DISTRICTS

This project provided sound scientific data to support appropriate regulatory decisions and developed more accurate population projections and new groundwater modeling methods that are being adopted and applied in the water planning process.

Pictured: A tree grows in what was once an in-ground swimming pool in Baytown. The neighborhood was abandoned after the land subsided more than 10 feet.



Two key tenets of the FNI philosophy are resource sustainability and stewardship, and we consider them in any endeavor we undertake for our clients. Our successful history in water projects has allowed us the opportunity to develop and update numerous state regional water plans. We have played a key role in the development, conservation and reclamation of water supplies since our founding in 1894.

SERVICES AND CAPABILITIES

LONG-RANGE WATER SUPPLY PLANS

- Regional water plans for water districts, river authorities, municipalities and industries

PERMITTING

- Water rights permitting
- Expert witness services
- Section 404 permit support
- Reuse
- Reservoir and system accounting plans

HYDROLOGIC STUDIES

- Reservoir operations
- System operations
- Streamflow
- Runoff

- Evaporation
- Instream flows

MODELING

- Water Availability Models (WAMs)
- Water Rights Analysis Package (WRAP)
- RiverWare
- Water quality modeling
- Reservoir operations
- Decision support tools

CONSERVATION AND DROUGHT

- State-required water conservation and drought plans
- Conservation studies

- Individual conservation programs

SUSTAINABILITY

- Water/energy nexus
- Carbon footprint analysis

ECONOMIC STUDIES

- Rate studies
- Impact fee studies
- Water rights valuation
- Life cycle costs
- Planning level cost estimates

OTHER

- Geographic Information Systems (GIS) analysis
- Environmental studies support



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.

