



TETRA TECH

complex world | CLEAR SOLUTIONS™

Hydropower, Dams, and Levees Services

Engineering, environmental, and construction services for utilities,
independent power producers, and government agencies

WATER

NATURAL RESOURCES

ENVIRONMENT

INFRASTRUCTURE

ENERGY



Hydropower, Dams, and Levees Services



Tetra Tech’s hydropower, dams, and levees program combines two of our strongest areas of expertise—water and energy. We provide services for projects ranging from micro-hydro to utility-scale hydroelectric plants and transmission infrastructure for utilities, independent power producers, and government agencies throughout the United States and Canada.

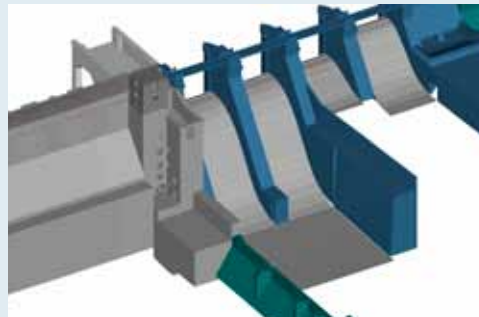
Tetra Tech specializes in developing cost-effective, reliable, sustainable designs that optimize the full potential of each project while minimizing adverse environmental impacts.

Experience Sectors



INVESTIGATION

- Geological/geomorphological studies
- Levee and storm protection structure evaluation
- Dam break and flood analyses
- Dam operation and safety studies
- Hydrographic studies



ENGINEERING

- Feasibility studies
- Conceptual and detailed design
- Civil and geotechnical engineering
- Electrical, switchgear, instrumentation, and controls



MECHANICAL AND STRUCTURAL

- Pumping stations and flood control gates
- Outlet works
- Dam and powerhouse structures
- Fish bypass facilities

Tetra Tech's comprehensive experience, vast technical resources, and financial strength have been proven through four decades of service on all aspects of hydropower, dam, and levee projects. Our work spans embankments, spillways, outlet works, canals, and levees for projects in the North America and abroad.

48,000

Number of large dams operating worldwide, providing drinking water, flood protection, and clean sources of renewable energy.

16.1%

Percent of total global electricity that is generated from hydropower sources each year. Globally, hydropower is the largest renewable energy resource.

HYDROPOWER

Tetra Tech provides a full suite of services to the hydropower industry, from concept through construction support. The firm's broad engineering experience facilitates economically sustainable solutions that include permitting, financial feasibility assessments, FERC relicensing support, environmental studies, socioeconomic analyses, renewable energy credits, and detailed technical design.

DAM REHABILITATION AND REMOVAL

A public agency or private property owner challenged by a deteriorating dam structure needs a diverse team of professionals that can provide evaluation of alternatives and impacts, assess habitats and ecosystems, identify and mitigate safety issues, provide upgrades to gates and valves, and prepare flood inundation mapping and emergency action plans.

LEVEES

Tetra Tech has inspected, inventoried, and repaired hundreds of levees in California, Colorado, Washington, Arizona, Idaho, and Montana for accreditation under FEMA's nationwide remapping effort, which includes inspection and certification, FEMA accreditation, GIS-based levee databases, and rehabilitation planning and design.



ENVIRONMENTAL

- Environmental review and permitting
- Fisheries, aquatic habitats, wetlands, and cultural surveys
- Watershed resources, hydrology, and water quality
- Decommissioning



CONSTRUCTION

- Construction plans and permitting
- Construction management and quality assurance
- Startup/commissioning/operator training
- Engineering, procurement, and construction



LICENSING AND RELICENSING

- U.S. and Canadian license and application amendments
- Study plan development and execution
- Environmental studies
- Consultation with agencies, organizations, and public interest groups

TETRA TECH is a leading provider of consulting, engineering, program management, construction, and technical services addressing the resource management and infrastructure markets. The Company supports government and commercial clients by providing innovative solutions focused on water, the environment, and energy. With approximately 12,000 employees worldwide, Tetra Tech's capabilities span the entire project life cycle.

GLOBAL PRESENCE

North America:

Canada, United States

Asia:

Afghanistan, China, India, Japan, Kazakhstan, Philippines, South Korea, Thailand

Pacific:

Australia, Guam

Europe:

France, Germany, United Kingdom

Latin America:

Chile

Middle East:

Qatar, United Arab Emirates

Clients and Projects

HYDROPOWER

Engineering and Environmental Services Master Services Agreements, Manitoba, Canada (Manitoba Hydro)

Upper Mattagami River Dam Rehabilitations, Ontario, Canada (Ontario Power Generation)

Boundary Dam Relicensing Studies, Pend Oreille County, WA, USA (Seattle City Light)

Eastmain-1 Hydropower Plant, Quebec, Canada (Hydro-Quebec)

Umbata Falls Hydroelectric Development, White River, Ontario, Canada (Innergex)

Roanoke Rapids and Gaston Hydropower FERC Relicensing, Roanoke River, NC, USA (Dominion)

DAMS

Bonneville Lock and Dam, Portland, OR, USA (USACE, Portland and Louisville Districts)

Howard Hanson Dam Fish Passage Facility, Eagle Gorge, WA, USA (USACE, Seattle District)

Chicago Underflow Plan for McCook Reservoir, Chicago, IL, USA (USACE, Chicago District)

Tieton Dam Hydroelectric Facility, Goldendale, WA, USA (Tieton Hydropower, LLC)

Upper and Lower Baker Dams Evaluation, Skagit River, WA (Puget Sound Energy)

Seismic Evaluation for Cochiti Dam, Sandoval County, NM, USA (USACE, Albuquerque District)

LEVEES

Inner Harbor Navigation Canal Hurricane Protection Barrier, New Orleans, LA, USA (USACE, New Orleans District)

FEMA Levee Certifications, San Bernardino County, CA (San Bernardino County)

Flood Control Inspection and Database Development Program, WA, ID, and MT, USA (USACE, Seattle District)

Potomac Park FEMA Levee Certification, Washington, DC, USA (District of Columbia)

Mesilla Levee Construction Management, Doña Ana County, NM, USA (U.S. International Boundary and Water Commission)

Missouri River R-613 and R-616 Levee Accreditation, Omaha, NE (Papio-Missouri River Natural Resources District)

CORPORATE HEADQUARTERS

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- Annual revenue: \$2.2 billion (FY2010)
- NASDAQ Symbol: TTEK
- Geographic reach: 330 offices worldwide



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www.tetrattech.com