



Hydropower services – structural engineering

Harnessing the power of water

WSP USA has 30+ years of experience addressing challenges on dam, hydropower and major water resource projects, ranging in size and scope from simple studies and assessments to complex, multimillion-dollar, multidisciplinary efforts.

OUR SERVICES

- Finite element/modeling (2D and 3D)
- Stress analyses
- Static analyses
- Seismic analyses (pseudostatic and dynamic)
- AAR evaluations, slot cutting
- Pre-feasibility and feasibility studies
- Preliminary and detailed designs
- Inspections and condition assessments
- Support for underwater ROV and sonar inspections
- Cost estimating
- Instrumentation and monitoring
- Field engineering and site supervision
- Project and construction management
- Performance specifications and construction drawings
- Detailed gate inspections and analyses

EXPERTISE

- Gravity and arch dams
- Gates (Tainter, slide, roller, fixed-wheel, Stoney and crest)
- Penstocks, tunnels and waterways
- Spillways
- Intakes and outlets
- AAR-impacted structures
- Bulkheads (floating and fixed)
- Cofferdams
- Powerhouses
- Specialty gates (hinged-crest and mini)
- Fish passages

ABOUT WSP

WSP USA is the U.S. operating company of WSP, one of the world's leading engineering and professional services firms. Dedicated to serving local communities, we are engineers, planners, technical experts, strategic advisors and construction management professionals. WSP USA designs lasting solutions in the buildings, transportation, energy, water and environment markets. With more than 12,000 employees in over 200 offices across the U.S., we partner with our clients to help communities prosper.

CONTACT US

For more information about how we can help you deliver your next project, contact:

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