



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, environment and professional services firms. Recognized on [Fast Company's Brands that Matter List for 2022](#) as a top Community-Minded Business, WSP USA brings together engineers, planners, technical experts, strategic advisors and construction management professionals who are dedicated to collaborate in the best interests of serving local communities. WSP USA designs lasting solutions in the buildings, transportation, energy, water and environment markets. With more than 15,500 employees in 300 offices across the U.S., WSP partners with its clients to help communities prosper.

CONTACT US

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

Matthew Chan, PhD
Hydropower Market Lead, Energy

matthew.chan@wsp.com
+1 971-346-5726



wsp.com