

# Gate and Valve Design

SERVICES / STRUCTURES AND FACILITIES



Canton Dam Gate Replacement



Rio Grande

DAM AND LEVEE  
GEOPROFESSIONAL  
STRUCTURES AND FACILITIES  
TUNNEL AND UNDERGROUND  
WATER SUPPLY, CONVEYANCE,  
AND DISTRIBUTION  
CONSTRUCTION PHASE SERVICES  
ENVIRONMENTAL  
INFRASTRUCTURE MONITORING  
SERVICES (IMS)  
RISK

Schnabel Engineering DC, Inc. is an affiliate of Schnabel Engineering, Inc.

Engineering services in the following states are performed by Schnabel's respective affiliated entity: Michigan: Schnabel Engineering of Michigan, Inc.; New York/Connecticut: Schnabel Engineering of New York; North Carolina: Schnabel Engineering South, P.C.

Schnabel has developed considerable expertise with hydraulic steel structures of all types and sizes. Our services include structural analysis, gate inspections, fitness for service evaluations, design of repairs, and gate replacements. In addition to our spillway gate analysis, design, and inspection experience, we've designed numerous bulkhead and dewatering systems that complement our gate experience.

Maintenance and inspection of gates are ideally performed in a dewatered condition and often scheduled during planned drawdowns or seasonally low reservoir levels. For operators of hydroelectric dams and water supply impoundments, drawdowns can significantly impact operations and revenues. As aging gates deteriorate and more inspections are required, project owners are increasingly seeking methods to dewater gates while maintaining operational pool levels.

We've evaluated and designed numerous gate dewatering bulkheads. As a part of these projects, we have extensive experience working collaboratively with underwater contractors and understand the unique requirements of working in the wet, at depths ranging from 10 feet to several hundred feet. We're here to help and do our best to support the owner during all phases of the project.