



# HYDRAULIC AND HYDROLOGIC SERVICES

RJH Consultants, Inc. (RJH) is a geotechnical and water resources firm specializing in evaluation, civil design, and construction management for raw water supply systems, dams, reservoirs, and water conveyance infrastructure. Our projects range from small hydraulic structure designs to large dam design and construction projects with outlet works, spillway, and appurtenant facilities components. We manage projects with overall costs ranging from several thousands dollars to in excess of \$200 million.



RJH performs a variety of hydraulic and hydrologic (H&H) services for the evaluation of existing and design of new facilities. RJH provides a wide range of services that includes:



***Traditional and Complex Spillways  
Outlet Works and Terminal Facilities Design  
Civil/Utility and Drainage Structure Design***



***Floodplain and Drainage Engineering  
River Hydraulic, Surface Water Hydrology, and Groundwater Modeling  
General Civil Engineering Services***



The majority of our H&H staff have advanced degrees and all have experience in technical H&H aspects required to design and construct dams and reservoirs. RJH has the technical resources necessary to provide an Owner with planning, evaluation, modeling, design, and construction management services. Specialty areas include designing labyrinth and other highly efficient spillway types; high-head outlet works evaluations for flow turbulence, cavitation, and air venting; advanced river channel modeling; etc.



Other hydraulic and hydrologic services offered by RJH include:



- *Historical Storm Evaluations (100-year, PMP, etc.)*
- *Reservoir Routing Analyses*
- *Dam and Reservoir Hydrology Studies*
- *Spillway and Outlet Works Design*
- *Pipelines and Pump Stations*
- *Hydromechanical Services*
- *Dam Break Analyses*
- *Dam Hazard Classification*
- *Reservoir Site Planning and Feasibility Evaluations*
- *Dam Emergency Action Plans*
- *Civil/Utility/Diversion Hydraulic Structures*
- *Flow Measurement and Instrumentation*
- *Floodplain Management and Drainage Studies*
- *Master Planning*
- *FEMA FIS and Flood Map Revisions*
- *Geographic Information Systems (GIS)*



*Project Experience Locations*

*Professional Engineering Registration*