

Stormwater and Floodplain Management Services

The Hydrology and Hydraulics Team is led by Dr. David Thompson, whose expertise is in solving surface- and ground-water hydrologic problems through the application of numerical and statistical models and the collection and analysis of field data.



Cottonwood Slough Relocation & Wetland Enhancement Project

Analysis and Design for Sensitive Environments

Our team of scientists and engineers are sought after to analyze complex hydraulic conditions of riverine floodplains, to evaluate the hydrology of both large and small watersheds for the purpose of estimating peak discharges and designing regional drainage mitigation works, and to evaluate and design diversion works and stream bank stabilization measures to protect adjacent lands. Our computer modeling capabilities include the proficient use of HEC-RAS, HEC-HMS, DAMBREAK, PRMS/MMS, HEC-1, HEC-2, and Bentley's suite of hydraulic software, including PondPak and StormCAD. When warranted, we also perform two-dimensional modeling of complex floodplains using the FLO-2D, RMA2, or FESWMS codes. In addition, we routinely prepare all supporting materials for review by the U.S. Army Corps of Engineers and by the Federal Emergency Management Agency (FEMA) for floodplain modifications, including Conditional Letter of Map Revisions, Letter of Map Revisions, and Letter of Map Amendments.

Services Include:

- Hydrologic and Hydraulic modeling
- Stormwater Infrastructure Design
- Best Management Practices
- Watershed Management
- Restoration of Riverine Environments
- Flood Insurance Rate Studies
- Wetland Restoration
- Sediment Transport Analysis
- Geomorphic Characterization
- Alluvial Fan Analysis
- Flood Control Management
- Federal Permitting
- Letters of Map Revision
- Floodplain Mapping

To find out how R.O. Anderson can assist you with your project, please call Dr. David Thompson at 775.215.5013 or email him at dthompson@roanderson.com

