What We Do

The North Atlantic Division Regional Center of Expertise (RCX) for Groundwater Modeling provides fullservice solutions for groundwater related issues. Although the RCX was officially recognized in 2009, the team has been solving groundwater problems since 1994.

Projects have included:

• Everglades restoration densitydependent models to evaluate aquifer storage and recovery

• Massachusetts Military Reservation (MMR) flow and transport models of munitions constituents in the saturated and unsaturated zones

• Herbert Hoover Dike cut-off walls at Lake Okeechobee (a Dam Safety Action Classification or DSAC 1 impoundment)

- Afghan base water supply evaluation
- Groundwater supply study for Delaware

 Extensive HTRW modeling for both active and inactive DoD installations, the Formerly Utilized Sites Remediation Program (FUSRAP), and Superfund and RCRA sites in EPA Regions I, II, and III
Wetland permit issues associated with mining and groundwater extraction

• Navigation studies related to dredging and dredge disposal



Professional Reputation:

In addition to technical expertise, the groundwater modeling team has earned a reputation for responsiveness and customer service that rivals the best of the private sector.

Embracing a "One-Stop Shopping" philosophy, whether within USACE or for other federal, state and municipal agencies, professional organizations, or universities, we are committed to providing our customers the information and services they need, when and where they need it.





Contact

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Upper Confining Unit Upper Patapsco Deep Aquifer

Who We Are

The Regional Center of Expertise (RCX) for Groundwater Modeling is a multidisciplinary group of modelers, hydrogeologists, geologists, chemists, risk assessors, GIS experts, and engineers.

Specific Expertise Includes

- Groundwater Flow Conceptualization and 3-D Visualization
- Contaminant Fate and Transport
- Remediation Selection and Design
- Pumping Effects on Contaminant
- Plume Migration, Remediation
- Systems, Public Water Supply Wells, and Wetlands
- Capture Zone Analysis and
- Optimization
- Pumping Test Analysis
- Long-Term Monitoring Optimization
- Groundwater-Surface Water Interaction
- Unsaturated Zone Contaminant Fate and Transport (Leaching and Vapor Intrusion)
- Mine Tailings and Landfill Leachate
- Dam Safety Seepage Analysis
- Wetlands Impact Evaluations
- Navigation Project Impacts
- Environmental Restorations
- Saltwater Intrusion
- Water Supply and Wellhead Protection

Mission areas supported include:

- Civil Works
- Military
- Interagency and International Services (IIS)

Example products and services include:

- Preparation and review of scopes, schedules and government cost estimates
- Independent Technical Reviews
- Groundwater investigations ranging from simple data visualizations to complex regional models in various geologic settings
- Close association with the USACE Engineering Research and Development Center and U.S. Geological Survey

- Extensive experience in developing virtual teams
- Multi-disciplinary teams to help scope project needs
- Working knowledge and practical application of commercially available and USACE developed software and tools
- Full knowledge of USACE, EPA, and
- ASTM guidance for groundwater modeling
- Access to High Performance DoD Super Computers
- Training and outreach

