SOURCE WATER PROTECTION

To ensure a reliable water supply in the future, understanding watershed conditions and protecting water at the source are critical. Upstream watershed conditions directly impact downstream water quality, water availability, economies, recreational activities, and biological habitats.

At the RTI Center for Water Resources, our source water protection services are grounded in a watershed-based approach, recognizing the value of "green infrastructure" and the significant impact that the landscape has on water supply.

Identifying and mitigating impacts of land use and human activity on water quality and quantity

We support all levels of government agencies, private organizations, and environmentally focused nonprofits in their missions to protect the land and water within a watershed for human and ecological health. We have a long track record of developing and implementing science-based solutions and can help you make the best use of your watershed and source water protection investments.

RTI INTERNATIONAL | Center for Water Resources

FEATURED PROJECT

Quantifying the Potential Benefits of Land Conservation on Water Supply for the Catawba-Wateree Watershed

Client: Water Research Foundation
Country: United States
Sector: Water Supply
Related Services: Risk Assessment, Climate Resilience, Hydro-economics, Ecological Assessment

Through this study, RTI developed a framework to assess the relative impacts of climate and land use change on water supply resiliency at multiple scales across a watershed and determine the extent to which future impacts on water supply can be mitigated through land conservation efforts focusing on geographic "hot spots." The framework combines the hot spot identification with an economic cost-benefit analysis to provide guidance on where land conservation investments may provide the greatest monetary benefit as well as protection of water supply and quality resiliency under future projected conditions.

ADDITIONAL SOURCE WATER PROTECTION SERVICES

Comprehensive watershed modeling

Land-use change impact analyses

Conservation planning for water resources

Green infrastructure planning and assessment

Data system design and visualization to communicate results

Cost and/or benefit analysis of watershed management alternatives