At the RTI Center for Water Resources, our data management services encompass all aspects of planning, collection, quality control, and management of environmental data needed for sound decision-making. We give you the right information at the right time by delivering specialized global science solutions that involve the full data lifecycle—from collection, review, and management to analysis and visualization.

These customized solutions improve the management of environmental interactions—reducing capital expenditures, minimizing risk, and improving operational efficiency—and help make the world’s water resources more safe, secure, and sustainable. By implementing next-generation systems that provide uninterrupted flow of environmental data, we translate data into actionable insights that help our clients to make informed decisions.
FEATURED PROJECT
Severe Weather Data Inventory (SWDI) Climate Change Decision Support System

Client: National Oceanic and Atmospheric Administration (NOAA)
Country: United States
Sector: Floods
Related Services: Risk Assessment, Climate Resilience, Planning and Allocation

RTI, in partnership with the University of North Carolina, designed and developed Application Programming Interface (API) services to dynamically discover, access, and present various components of NOAA’s National Centers for Environmental Information (NCEI) severe weather database. We created an online application that links the current severe weather database products to social and demographic databases to allow users to assess populations and infrastructure at risk from many hazards including severe weather, floods, and drought. This is a “connecting technology solution” that bridges the gap between the rich databases at NCEI and the required application that end users need to assess climate-related risks, visualize the impacts and potential adaptation measures, and communicate real-time information at a neighborhood scale.

ADDITIONAL DATA MANAGEMENT SERVICES

- Custom and off-the-shelf data management systems
- Water quality monitoring networks
- Decision support systems
- Data storage systems
- Geographic information systems
- Data dashboard visualization
- System integration
- Web applications development
- Hydrometeorological monitoring networks
- Graphical user interface development
- Web mapping applications

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Center for Water Resources