



SOUTHWEST RESEARCH INSTITUTE

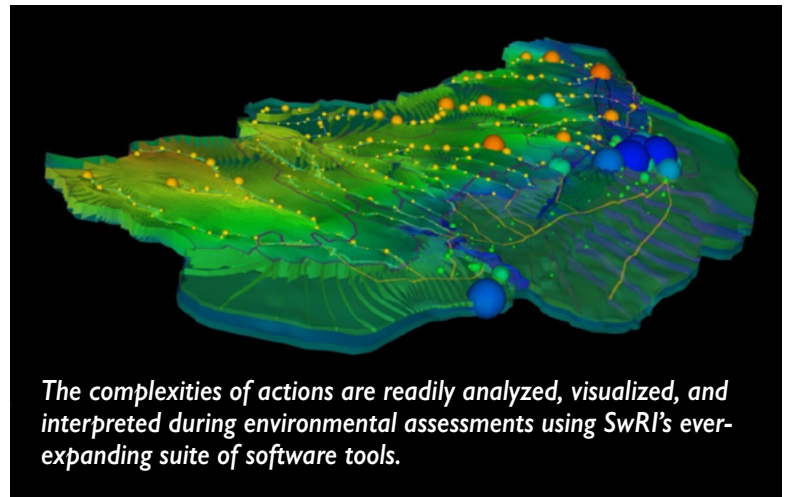


## Environmental Services

The Environmental Services team at Southwest Research Institute® (SwRI®) provides proven and innovative environmental engineering and assessment capabilities to government and industry clients. SwRI applies an integrated, multidisciplinary approach to solving complex environmental problems. Working with state-of-the-art field and laboratory instrumentation, test facilities, and computer codes, SwRI engineers and scientists are able to implement comprehensive and cost-effective approaches to solve environmental problems, assist in addressing regulatory issues, and identify the need for regulations and aid in their development.

### Services Offered

- Environmental assessment and site characterization
- Environmental sampling and monitoring, including air, water, soil, permafrost, and waste streams
- Radiological surveys and modeling
- Geological, geochemical, and hydrological analysis and modeling
- Near-surface geophysical surveys
- Airborne and satellite remote sensing data acquisition and analysis
- Geospatial data mapping and management
- Pollution prevention and control
- Treatment and remediation technology
- Public communications and stakeholder outreach



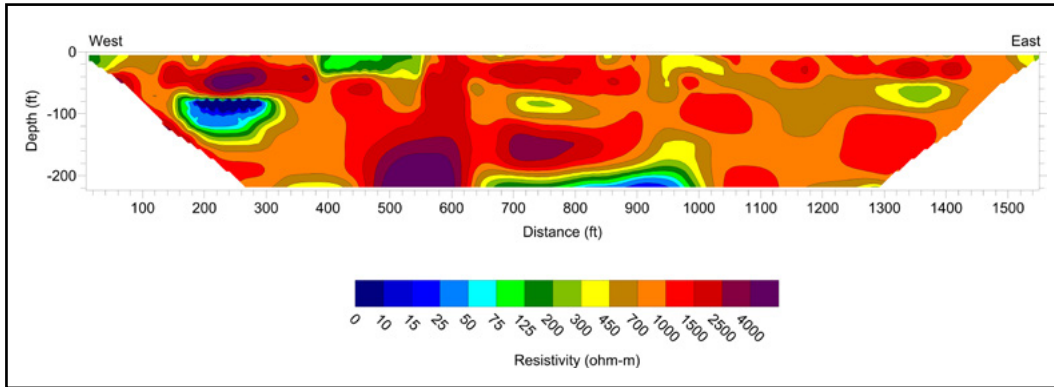
*The complexities of actions are readily analyzed, visualized, and interpreted during environmental assessments using SwRI's ever-expanding suite of software tools.*

### Applications

- Regulatory compliance, including support for permitting and National Environmental Policy Act (NEPA) assessments
- Emissions characterization, inventories, and compliance assessments
- Climate-change impact assessments
- Health-based assessments such as worker exposure evaluations
- Deterministic and probabilistic hazard, risk, and performance assessments
- Evaluation of geological, geochemical, and hydrological site conditions
- Investigation of surface water-groundwater interactions
- Evaluation of fate and transport of gas- and liquid-phase contaminants
- Remote identification of buried manmade objects, including cultural resources, pipes, rebar, and unexploded ordnance, and natural features such as karst caves and conduits or aggregate deposits
- Slope, erosion, and sediment stability analysis
- Pollution control technology assessment, including source reduction, recycling, and reuse
- Remote sensing for detection and monitoring of environmentally important processes and conditions
- Stakeholder engagement support and public meeting facilitation
- Technology development and implementation related to hazardous waste treatment and remediation of sites contaminated by toxic materials

## Benefits

- Proven approach to management and implementation of field and laboratory operations
- Comprehensive environmental analyses of air, soil, water, biota, wastes, and other substances
- Ready access to highly qualified biologists, engineers, environmental scientists, geochemists, geologists, geophysicists, health physicists, hydrologists, petrophysicists, remote-sensing scientists, seismologists, and coupled-process numerical modelers
- Experienced staff, free from conflict of interest, with proven ability to develop and implement innovative solutions to environmental science and engineering problems
- State-of-the-art field and laboratory instrumentation deployment capabilities for measuring and monitoring chemical, geological, geophysical, and hydrological parameters
- Expert staff skilled in plain-language scientific outreach to members of the public, improving communication between our clients and their stakeholders



*Electrical resistivity profiling and three-dimensional surveying are used to map subsurface conditions to aid construction decision-makers or to identify the subsurface distribution of resources (e.g., aggregate).*

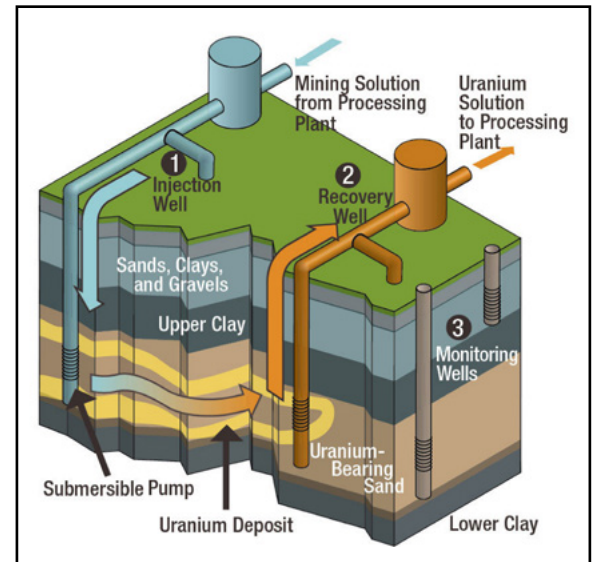
## We welcome your inquiries.

For additional information, please contact:

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*Environmental analyses and environmental impact statements examine, for example, potential impacts from complex mineral extraction and remediation processes.*

## SOUTHWEST RESEARCH INSTITUTE

Southwest Research Institute® is a premier independent, nonprofit research and development organization. With eleven technical divisions, we offer multidisciplinary services leveraging advanced science and applied technologies. Since 1947, we have provided solutions for some of the world's most challenging scientific and engineering problems.

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