



SOUTHWEST RESEARCH INSTITUTE

Center for Nuclear Waste Regulatory Analyses Commercial Contracting

CNWRA was chartered in 1987 by the Nuclear Regulatory Commission (NRC) as a federally funded research and development center (FFRDC) to assist NRC in meeting its responsibilities under the Nuclear Waste Policy Act and related statutes. As a private non-profit organization, CNWRA provides unbiased evaluations, recommendations, and solutions for international, state, and local governments and commercial entities throughout the world.

CNWRA operates as a department of the Chemistry and Chemical Engineering Division of Southwest Research Institute® (SwRI®). Our unique position within a world-class research organization facilitates access to multidisciplinary expertise in a wide range of science and engineering technology areas.

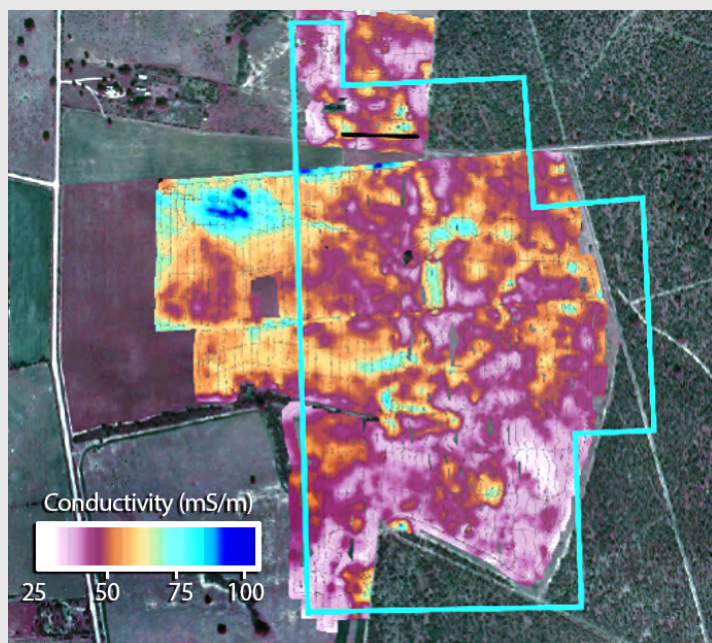
CNWRA scientists and engineers have in-depth experience in numerical modeling, risk assessment, and laboratory and field investigations. Our team is known for its innovative and resourceful approaches to solving complex engineering, energy, and environmental problems for sites and facilities where natural and human-induced hazards are significant factors in safety concerns, risk analyses, and environmental impacts.

Organizations can gain access to CNWRA expertise through normal contracting processes. The client provides a request for proposal or scope of work, and we prepare a technical proposal and cost estimate that become the basis for a contract. We offer a variety of contractual options through single-client or multi-client programs, task orders, and basic ordering agreements.

CNWRA can function as a prime contractor, subcontractor, or team member, and can also support various agencies through grants and cooperative agreements. We can effectively become your company's off-site research and development department.

Specialized Expertise

- Corrosion monitoring, prevention, and mitigation
- Environmental sciences and engineering
- Fire protection engineering, modeling, and testing
- Geology and geochemistry
- Geotechnical engineering
- Hazard assessment
- Hydrology and hydraulics
- Mechanical engineering and structural evaluation
- Nuclear engineering
- Risk and reliability assessment



Catchment Area

Recharge Area

Reservoir Area

Water Table

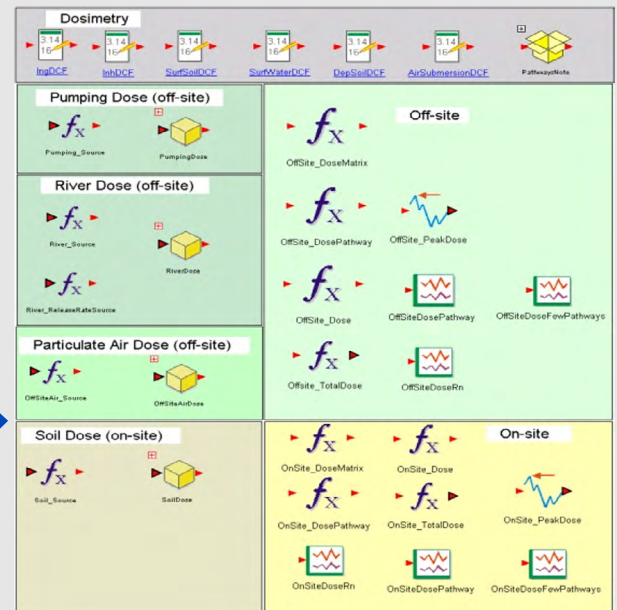
Balcones
Fault Zone

*Environmental evaluation is a precursor to
implementation of energy projects.*

Applications

- Alternative and renewable energy systems
- Energy storage, including compressed air energy and closed-loop pumped storage hydropower, to support integration of renewables into the grid
- Environmental assessments and impact analyses
- External hazards analyses
- Regulatory analysis and compliance assessment
- Seismic site and facility response analysis
- Site characterization
- Small modular nuclear reactors
- Stability and design of underground facilities
- Structural fragility analysis
- Stakeholder outreach and engagement support

Failure modes and risk assessments support nuclear fuel cycle evaluations.



Benefits

- Independent operation that assures support without conflict of interest
- Comprehensive engineering and science expertise
- State-of-the-art laboratories, computational resources, and field instrumentation
- Quality assurance and cybersecurity programs meeting strict U.S. government requirements
- Vigorous internal research and development program that keeps SwRI staff at the forefront of new and emerging technologies



CNWRA evaluates at-reactor and away-from-reactor storage modes, including effects of aging, deposition of salt in coastal environments, and other factors. evaluates

We welcome your inquiries. For more information, please contact:

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Center for Nuclear Waste Regulatory Analyses
Chemistry and Chemical Engineering Division

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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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