



SOUTHWEST RESEARCH INSTITUTE



# Radiological Environmental Services

Nuclear and radiological environmental issues can be polarizing and technically complex. Scientific analysis plays a vital role in evaluating current and future risks when industry, regulators, and citizens find it hard to agree on solutions to environmental challenges.

Southwest Research Institute® (SwRI®) is an independent, nonprofit organization with decades of experience in regulatory compliance and unbiased, independent research for stakeholders affected by radiological and nuclear power applications.

## Solving Radiological and Nuclear Challenges

The United States remains the world's largest producer of nuclear power but the country is preparing for a record number of reactor closures while continuing to rely heavily on oil and gas development and coal-fired power plants.

SwRI helps government, community, and industry stakeholders manage these energy trends effectively through environmental reviews under the National Environmental Policy Act and other federal and state regulations.

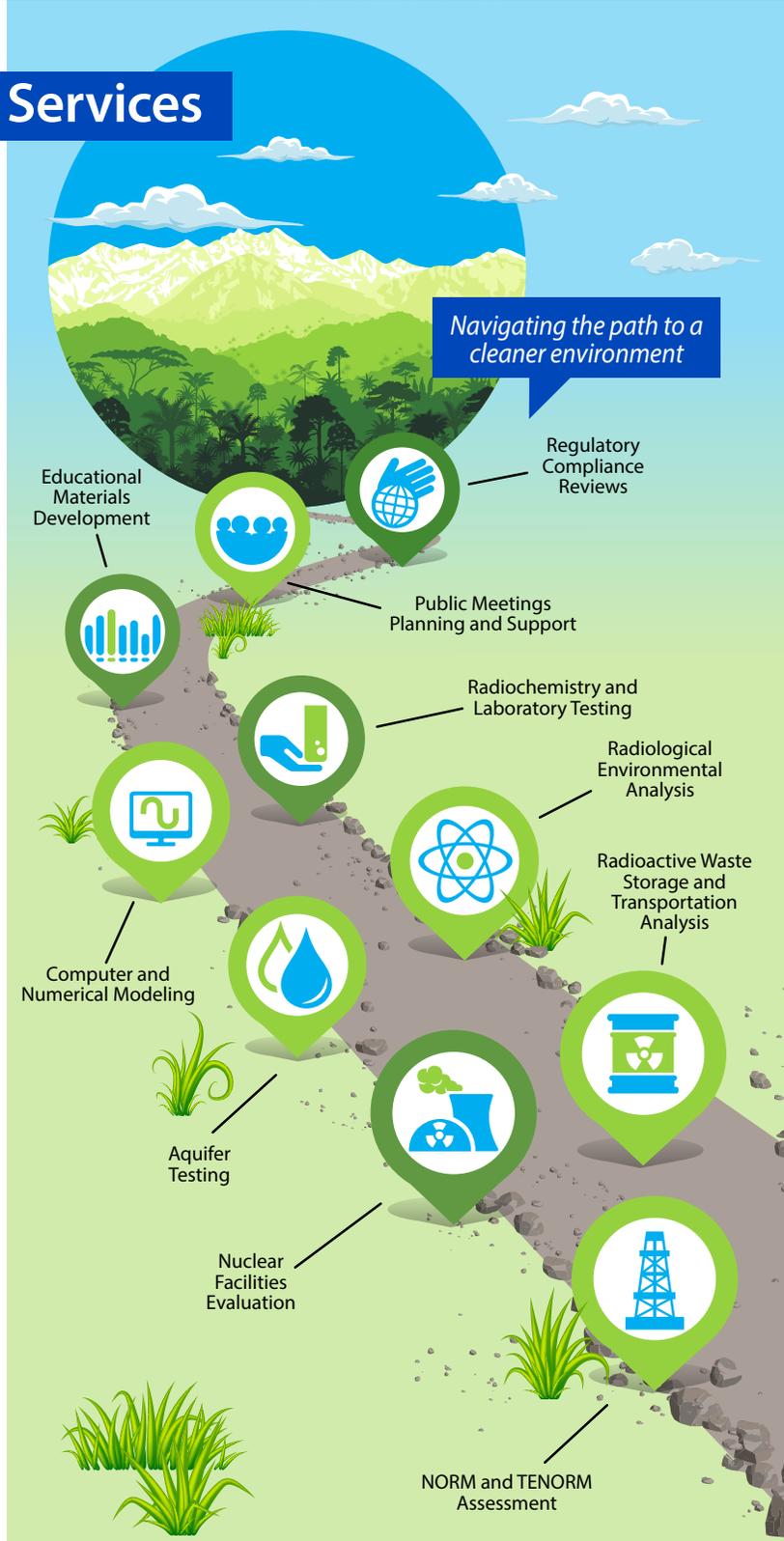
Related environmental challenges include:

- Decommissioning of nuclear facilities
- Transportation, storage, and disposal of radioactive waste
- Exposure to naturally occurring and technologically enhanced radioactive materials (NORM/TENORM)

## Quantifying Radioactive Risks and Impacts

SwRI's ISO 17025-certified laboratories provide analyses of radionuclides in water, soil, air, and biota samples to quantify the levels of radiological contamination from potential sources such as:

- Nuclear power plants
- Legacy nuclear weapons production
- Mining operations
- Facilities producing radioisotopes for medical and industrial processes



SwRI's multidisciplinary approach helps clients accurately characterize and assess radiological environmental challenges.

## Studying Radionuclides in the Environment

SwRI's earth scientists help clients understand how water and geological resources are impacted by radiological materials using surveys and computer models, including:

- Collection and synthesis of geochemical and hydrochemical data to characterize the nature of water flow through an impacted area
- Conceptual models of watersheds, aquifers, and other hydrologic systems
- Numerical models of the complex links among geology, surface water and groundwater flow, and transport of contaminants in hydrologic systems
- Geophysical surveys using methods such as electrical resistivity, ground-penetrating radar, and gravity, among others
- Aquifer tests

Radiochemistry, inorganic, and organic assays



Environmental, safety, and risk assessments

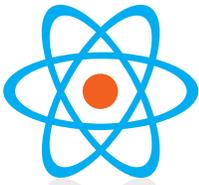
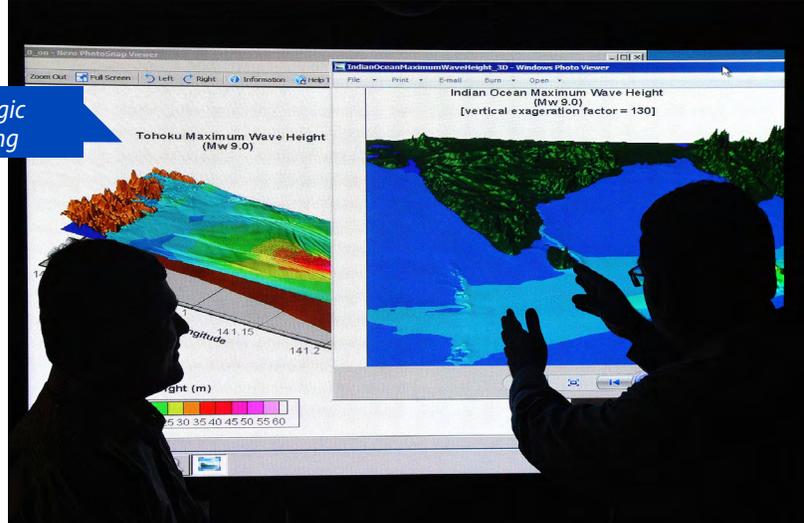


## Communicating Environmental Issues

The SwRI team is well-versed in scientific communications to help clients engage effectively with stakeholders through comprehensive support that includes:

- Developing communications plans
- Providing support for small and large public meetings
- Handling and responding to public comments
- Developing educational materials
- Conducting focused technical workshops and expert panels

Hydrologic modeling



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

**Lane D. Howard**

Staff Engineer

Geosciences and Engineering Department

210.522.4881

[lane.howard@swri.org](mailto:lane.howard@swri.org)

[radiological.swri.org](http://radiological.swri.org)  
[ged.swri.org](http://ged.swri.org)

## SOUTHWEST RESEARCH INSTITUTE

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210.522.2122

[ask@swri.org](mailto:ask@swri.org)



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