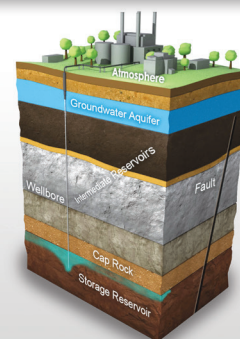


## About NRAP...

The National Risk Assessment Partnership (NRAP) is conducting research to advance the state of science and engineering for quantitative assessment and management of potential risks associated with geologic storage of CO<sub>2</sub>, to help understand and address critical barriers related to potential liabilities, and to enable large-scale implementation of this technology.



## Program Objectives

NRAP is addressing key stakeholder questions about managing long-term geologic carbon storage risks by developing tools and protocols to:

- ✓ Characterize, detect, and manage potential leakage
- ✓ Rapidly predict storage reservoir behavior and long-term stability
- ✓ Design efficient and effective monitoring networks
- ✓ Forecast and manage potential induced seismicity

## Awards



The NRAP Toolset received the R&D 100 Award in 2017



The NRAP Initiative has been recognized by the Carbon Sequestration Leadership Forum

## Value of Research



### Reducing uncertainty in risk/liability:

Understanding system performance and constraining uncertainty helps to decrease project (financial) risk



### Decreasing cost for operators:

Risk-based design can realize significant efficiencies in monitoring, and support a justification for early site closure



### Expediting risk-performance evaluation:

Building tools and workflows to streamline risk assessment and risk management decision making throughout the GCS life cycle

## National Lab Collaborations



Pacific Northwest  
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