

BOARD ON EARTH SCIENCES AND RESOURCES

Derisking the Future: Continental Drilling for Resource Exploration and Management

BESR Spring 2026 Meeting

June 15, 2026



MEETING OBJECTIVE

Enabling and advancing critical and emerging technologies is a top research and development budget priority of the United States. However, current resource limitations on minerals, energy, and water can hinder domestic development, growth, and commercialization of emerging technologies. The critical minerals needed for advanced technologies, the energy to power advanced manufacturing, and the groundwater resources to support AI and advanced computing all lie in the subsurface.

A new generation of pre-competitive, high-fidelity subsurface information is needed to quantify domestic resource potential and determine how best to economically and responsibly extract these resources. While technologies do exist to broadly image the distribution of materials below the surface of the Earth, the gold standard for exploration of the subsurface is to drill wells and obtain cores to directly study these subsurface materials. Drilling core samples and collecting associated downhole data carries technical risk, requires significant capital investment, and produces a large volume of rock samples that must be properly collected, described, analyzed, curated, and maintained over the long term.

EASTERN TIME

1:00 pm

WELCOME

Michael Manga, *BESR Chair*

1:05 pm

Keynote Address

Moderator: Douglas Hollett, *BESR Member*
Anders Noren, *University of Minnesota*

1:30 pm

Continental Scientific Drilling Landscape

Moderator: Jolante W. van Wijk, *BESR Member*

Presentations:

- **Richard Esposito**, *Southern Company Services, Inc.*
“From Risk to Resource: The Evolving Role of Technology with Continental Drilling”
- **Jean Self-Trail**, *U.S. Geological Survey*
“Coring the Atlantic and Gulf Coastal Plains”
- **Chris Keane**, *American Geosciences Institute*
“Supply Chain Issues Everywhere – Workforce Challenges and Opportunities for Subsurface Work”

2:35 pm

BREAK

2:45 pm

Groundwater and Climate

Moderator: **Bradley D. Cramer**, *BESR Member*

Presentations:

- **Jessica Meyer**, *University of Iowa*
“The critical role of cores in groundwater studies”
- **Ken Miller**, *Rutgers University*
“Recovering Earth’s History: Continuous Coring, Logging, and Core Archiving of Sea-Level and Climate Change Onshore and Offshore New Jersey”
- **Greg Guthrie**, *Geological Survey of Alabama*
“Geological Survey Core Repositories: Resources for Assessing the Earth’s Geologic History”

3:50 pm

Research and Development

Moderator: **Jessica Moore**, *BESR Member*

Presentations:

- **Brad Sageman**, *Northwestern University*
- **Paul Olsen**, *Columbia University*
“Every Scientific Drilling and Geotechnical Borehole is a Characterization Project”
- **Jessica Moore**, *West Virginia Geological and Economic Survey*

4:55 pm

Synthesis Remarks

Michael Manga, *BESR Chair*

5:00

Adjourn