

Southeast Offshore Storage Resource Assessment

Award Number: DE-FE0026086

Project Summary:

The Southern States Energy Board assessed prospective geologic storage resources for carbon dioxide (CO₂) in the State and Federal waters of the Mid-Atlantic, South Atlantic, and the eastern Gulf of Mexico (EGOM). The project developed a high-level approximation of the amount of CO₂ that might be stored utilizing key geologic and environmental factors that influence the storage potential.

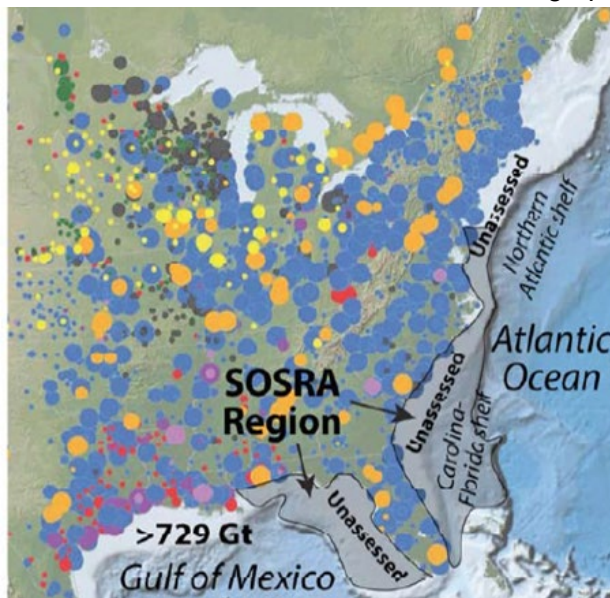


Figure 1: Regional map showing the proposed Southeast Offshore Storage Resource Assessment (SOSRA) study area.

Project Outcomes:

Storage estimates made in the SOSRA mid-Atlantic study focused on the region encompassing the Carolina Platform and Carolina Trough. Using data from onshore wells located on the coastal plain of North Carolina, a potential storage complex comprised of upper and lower Cretaceous-age formations was identified. The aggregate P50 storage resource estimate for the upper and lower Cretaceous strata within the assessed area was 9.65 billion metric tons.

The SOSRA South Atlantic study focused on the Southeast Georgia Embayment. Two potential storage zones were identified in upper Cretaceous aged strata—one being mostly limestone and one consisting of sands, silts, and some coal. Shale seals were above each storage zone. The P50 storage capacity of the Southeast Georgia Embayment was found to be 8.8 billion metric tons.

Existing geologic and geophysical data, such as seismic reflection surveys, geophysical well logs, and supporting reservoir data (i.e., pressure, temperature, etc.), were used to define the size and geology of the prospective storage resources, including areal extent, thickness, and physical properties like porosity and permeability. The total storage resource in the EGOM region is estimated to be 1,027 billion metric tons.

Presentations, Papers, and Publications

Final Report: [Southeast Offshore Storage Resource Assessment \(SOSRA\)](#) (December 2019) – Kimberly Gray, Gerald Hill, Patricia Barry, Nino Ripepi, Jack Pashin, James Knapp, Denise Hill, David Riestenberg

Prime Performer:

Southern States Energy Board (SSEB)

Key Performers:

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Principal Investigator:

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Project Duration:

10/1/2015 – 9/30/2019