The FutureGen 2.0 project intended to demonstrate, at the commercial scale, the technical feasibility of an integrated, near-zero emissions coal technology through carbon capture, transport, and storage. The storage component, located in Morgan County, IL, was designed to utilize the Mount Simon Sandstone, a deep saline formation. Over approximately 3 years, the storage site was fully characterized, including the collection of seismic data, and the drilling and characterization of a stratigraphic borehole. The characterization data provided critical input for developing a site-specific conceptual model and conducting subsequent numerical modeling to predict plume and pressure evolution in the system in response to the planned injection operation. Collectively, all these data were used by the FutureGen Alliance to develop the required documentation to support the applications for four underground injection control (UIC) permits (one for each proposed well).

Although federal support for the project has ended, all the storage site characterization and modeling efforts provided a comprehensive set of site-specific information that could be used by the NRAP community. The purpose of this webinar is to give an overview of some of the characterization data and modeling information (i.e., reservoir and early-leak detection simulations) that could be used during the second phase of NRAP.