



# River Parish Sequestration – A Critical Carbon Storage Hub for the Louisiana Chemical Corridor (FE0032443)

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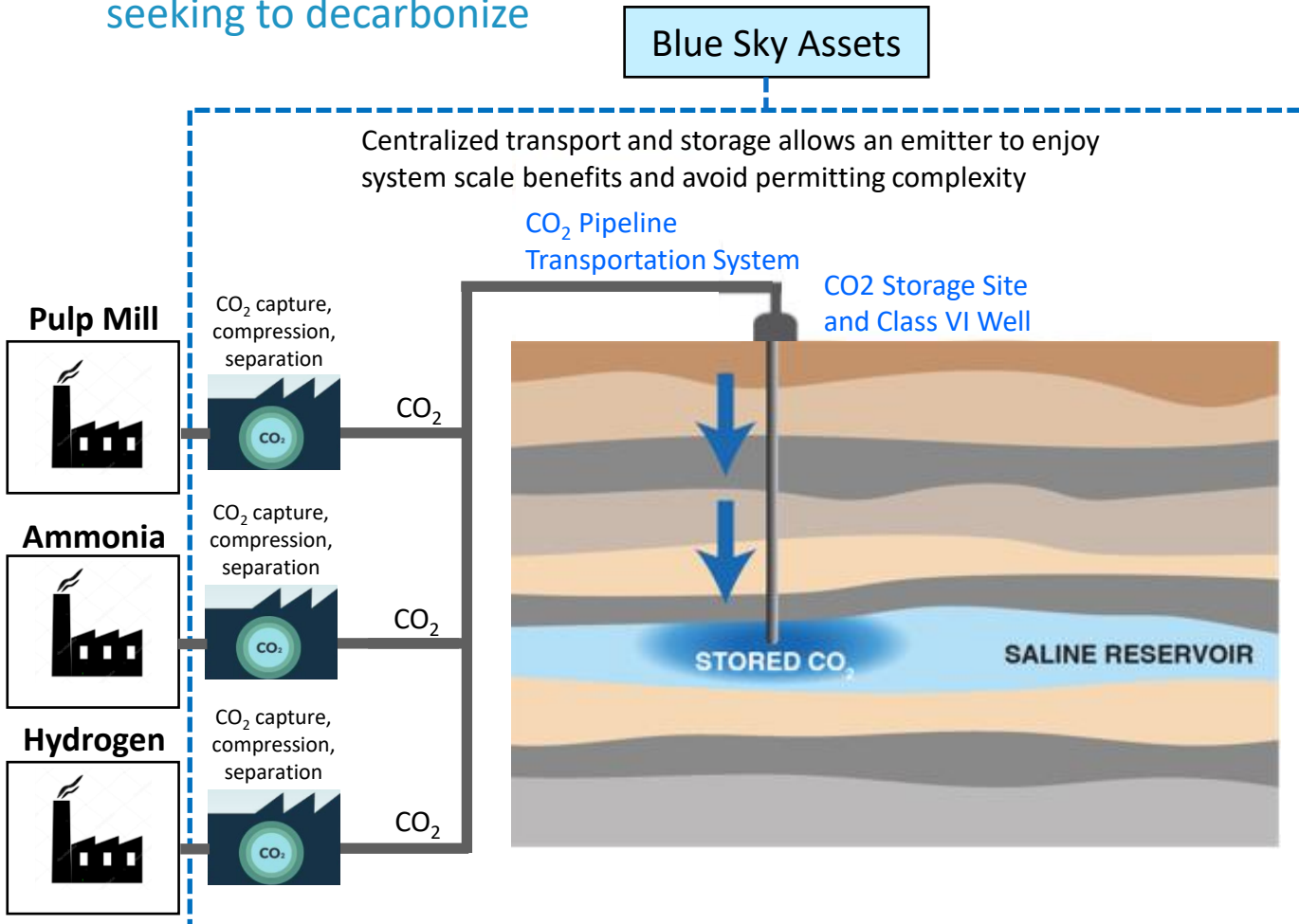
River Parish Sequestration, LLC

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2024 FECM/NETL Carbon Management Research Project Review Meeting  
August 5 – 9, 2024

# Blue Sky Infrastructure (“Blue Sky”) Overview – CCS Service Provider

Blue Sky is a Houston-based company established to develop CO<sub>2</sub> capture, pipeline and underground injection infrastructure in the US that will provide permanent disposal and storage solutions to large industrial emitters of CO<sub>2</sub> seeking to decarbonize



## Business Model

- Full Service: capture, transportation, and storage depending on emitter needs
- Geographic Focus: Louisiana and Alabama
- Commercial Structure: Fixed-fee, long-term contract (12 years)

## Ownership & Funding

- Blue Sky is a Blackstone portfolio company
- Blackstone is largest alternative asset manager in the world

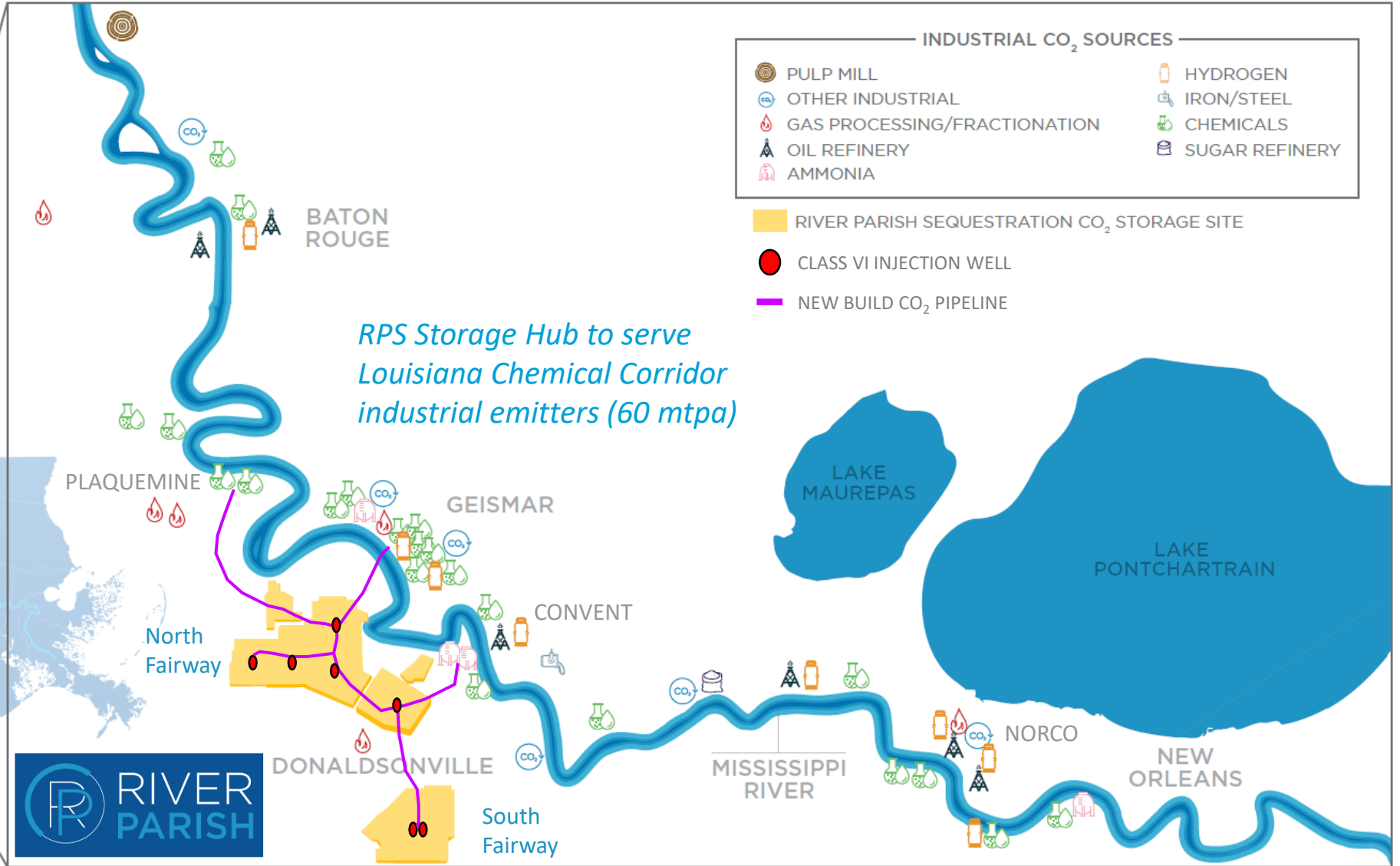
**Blackstone**

# Blue Sky's River Parish Sequestration (RPS) Storage Hub Project

- 32k acres under lease (private landowners)
- 7 injection wells – 14 mtpa total capacity

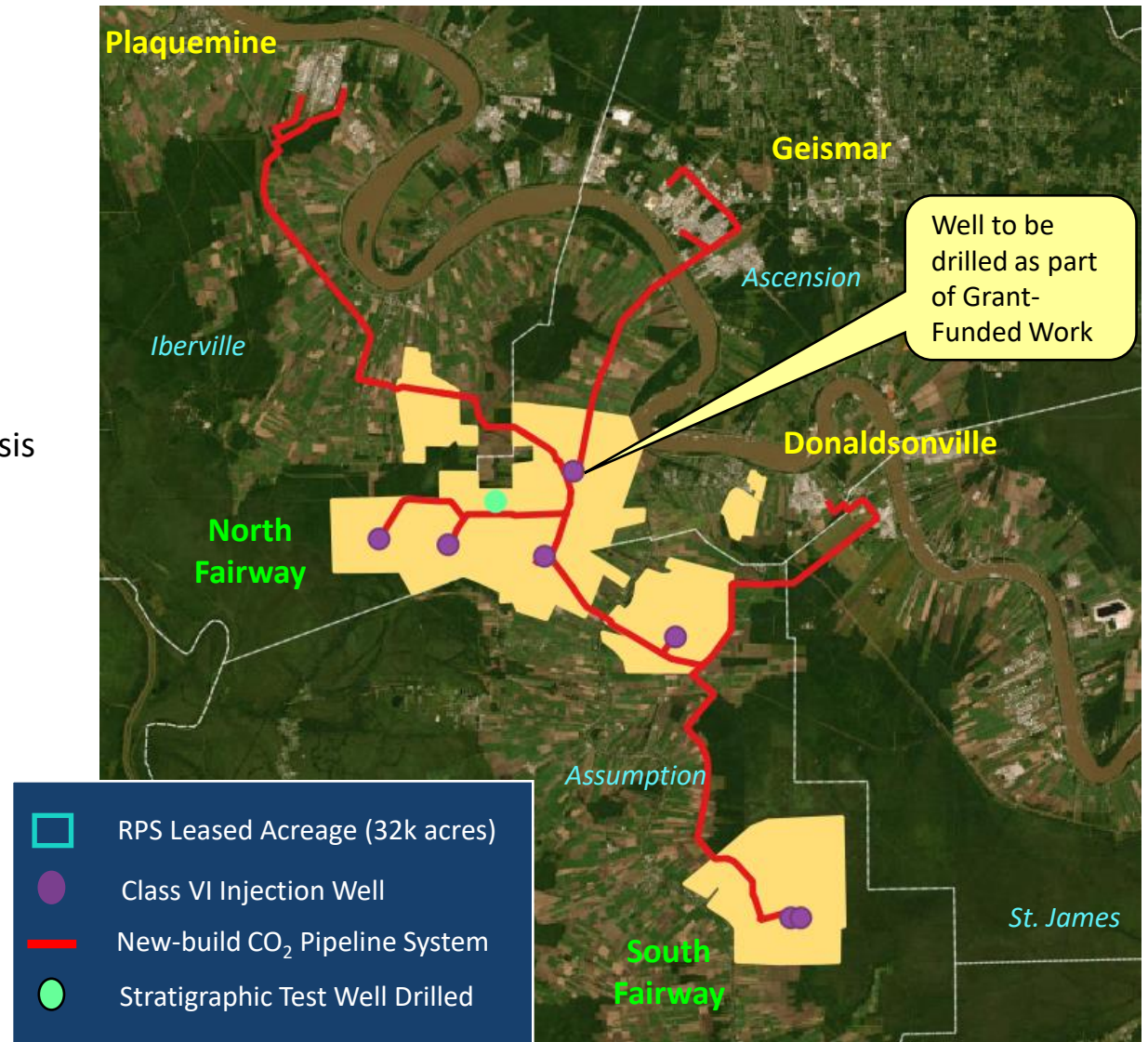


- Class VI permitting in progress
- 2026/2027 operations could begin



# River Parish Sequestration Project High-Level Overview and Key Advantages

- Storage site proximate to Donaldsonville, Geismar, and Plaquemine CO<sub>2</sub> emitters (~10-20 miles away)
- Seven injection wells provide redundancy to enhance operational availability and reliability (2 mtpa injection capacity / well)
- Project development to date:
  - Seven Class VI wells submitted to EPA and LDENR, technical review in progress
  - Initial Test well drilled (June 2023) and core data analysis indicates geology well suited for CO<sub>2</sub> sequestration
  - Expect USACE permit for Geismar pipeline Mississippi River crossing in Q3 2024
  - \$32 mm CarbonSAFE Phase III grant selected in November 2023
- Storage site features result in lower execution risk and a lower cost build-out relative to others
  - ✓ *Nearly no existing wells*
  - ✓ *Access to grid power*
  - ✓ *Low population*
  - ✓ *Local land ownership*
  - ✓ *Surface dry and accessible*
  - ✓ *Minimal wetland impacts*
  - ✓ *No subsurface faulting*
  - ✓ *Local support*



Each Class VI injection well is designed for 2 million metric tons of CO<sub>2</sub> per year for approximately 30 years.

# River Parish Sequestration Project Phase III CarbonSAFE Grant Work Overview

- Key project participants



- Project objective

- Complete site characterization and permitting necessary to achieve large-scale commercialization so the RPS project can commence CO<sub>2</sub> transportation and storage service for the Louisiana Chemical Corridor starting in 2027.

- Project performance dates

- Two budget periods (13 months and 15 months)

- Phase III CarbonSAFE funding

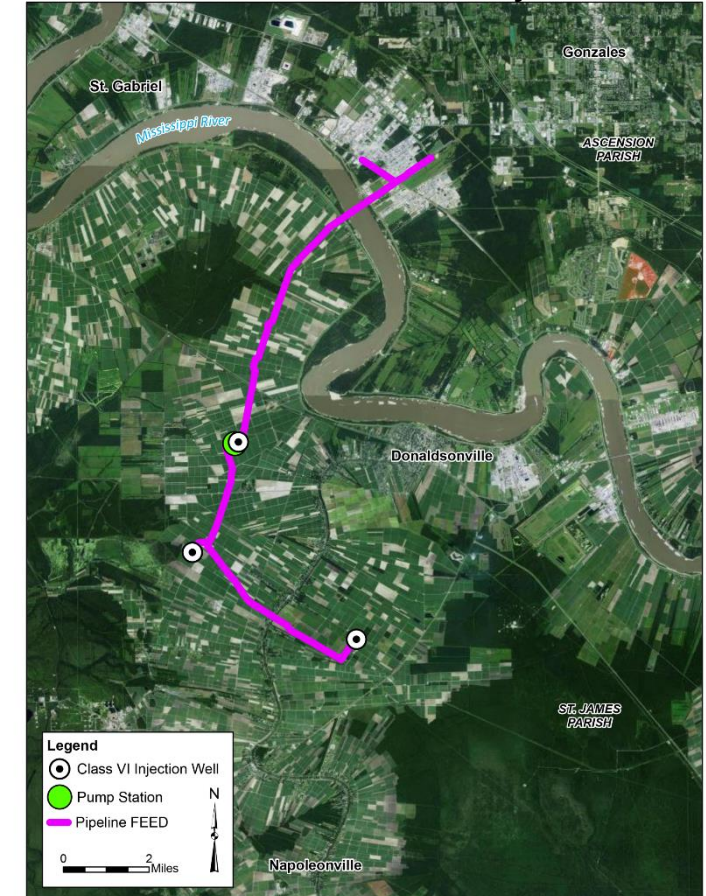
\$32.2 million (DOE)

\$8.1 million (RPS)

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\$40.3 million (Total)

## Grant Funded Project

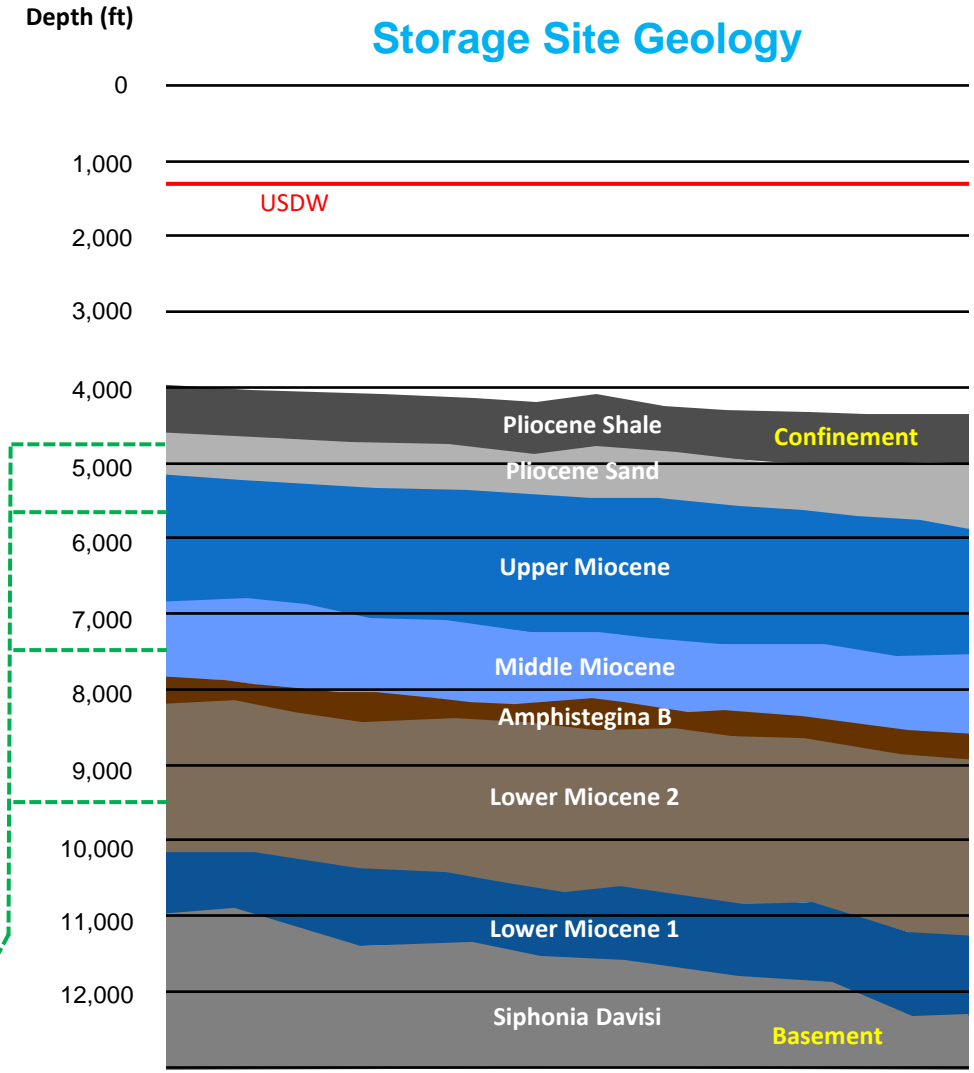


- Characterization around three wells
- Eight miles of in-field pipeline and pump station
- Nine miles of pipeline to Geismar

# Storage Reservoir High-Level Overview

- Miocene Formation (saline) and the Pliocene Shale provide excellent storage and containment.
- CO<sub>2</sub> injected into porous and permeable Miocene sands between 5,000 and 11,000 feet beneath the surface.
- Net injectable sands averages 3,100 feet in vertical thickness.
- Pliocene Shale provides several hundred feet of primary upper confinement
- Lowest USDW shallower than 1,200 feet beneath the surface.
- Injection will start in the deepest sands and move up over time as sands are filled.

Injection Zones



## River Parish Sequestration Project Phase III Grant Work Objectives

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- National Environmental Policy Act (NEPA) Compliance
- Detailed site characterization of a commercial-scale CO<sub>2</sub> storage site
  - Drill a stratigraphic test well, collect core and log, and perform an injectivity test
  - Conduct aerial magnetic survey
  - Conduct 3D seismic survey
  - Integrate the collected data with the existing subsurface model
- UIC Class VI Authorization to Construct
- Storage Field Development Plan
- CO<sub>2</sub> Source(s) Feasibility Study
- Pipeline FEED Study
- Community Benefits Plan
- Business and Financial Plans and Arrangements

## Community Benefits Plan Detail

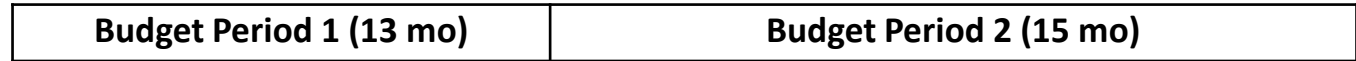
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- The grant funded project will be in Ascension and Assumption Parishes in Louisiana, in an area comprised mainly of sugar cane fields on the west side of the Mississippi River between Baton Rouge and New Orleans.
- The project is in portions of three census tracts, two of which are considered disadvantaged communities (DACs).
- RPS believes that implementing a robust Community Benefits Plan is crucial to the project's success. As part of the Community Benefits Plan, RPS will:
  - Engage the local communities to gather feedback on the proposed project and identify the needs of the communities.
  - Create a Community Benefits Fund to provide direct project benefits to local communities, particularly DACs, once the project commences operations. The Agreement will establish an advisory board and develop a charter and goals.
  - Partner with River Parishes Community College (RPCC) to provide curriculum development and guest lectures to enhance student learning and preparation for job opportunities in energy transition careers.



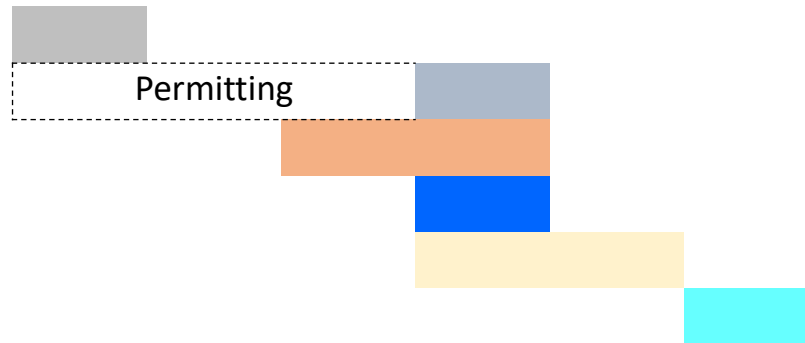
# River Parish Project Phase III Grant Schedule

Phase III Grant Budget Periods



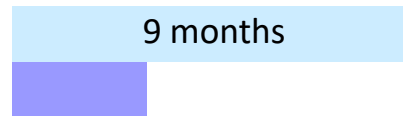
Sequestration

- Place Long Lead Orders for Strat Well
- 3D Seismic Survey
- Stratigraphic Test Well (INJ Well)
- Aerial Magnetic Survey
- Core Analysis
- Class VI Permit Approval



Pipeline

- Pipeline FEED
- USACE Permit



Other

- NEPA EIV Filing
- EA / FONSI Issued



Thank You