

**Monkey Island Carbon Storage Project  
(MICSP)  
GRANT 13943226, Contract No.  
FE0032438**

**Michael L. Godec – Principal Investigator  
Mollie K. Kish – Project Manager**

**Advanced Resources International**

**DOE-FECM Contractors Meeting**

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## Disclaimer

***All objectives, locations, participants, approach, scope, community benefits, etc., in this presentation are merely proposed and are still being negotiated with DOE.***

# Presentation Outline

- I. Project Overview**
- II. Project Scope**
- III. Community Benefits Planning**
- IV. Key Next Steps**

Section I

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# Project Overview

# Project Highlights

- Monkey Island Carbon Storage Project (MICSP) is a CarbonSAFE Phase III project.
- **The commercial project has recently been renamed to GeoDura.**
- The commercial partner is OnStreamCO<sub>2</sub>, a collaboration between Louisiana operator Castex and Carbonvert.
- Plan is to transport and store up to 9 million metric tons of CO<sub>2</sub> each year in a storage site in offshore Louisiana state waters.
- New-build dense-phase pipelines are planned to connect GeoDura to Lake Charles and Port Arthur industrial corridors.
- Building on previous efforts, work continues to progress because of commercial imperatives, pending CarbonSAFE project contract start.

# Project Participants



**Advanced Resources International**

<b>PI:</b> Mike Godec <a href="mailto:MGodec@adv-res.com">MGodec@adv-res.com</a> <b>PM:</b> Mollie Kish <a href="mailto:mkish@adv-res.com">mkish@adv-res.com</a>	<b>Task 3 Lead:</b> Shawna Cyphers <a href="mailto:scyphers@adv-res.com">scyphers@adv-res.com</a> <b>Task 4 Lead:</b> Valerie Smith <a href="mailto:vsmith@adv-res.com">vsmith@adv-res.com</a> <b>Task 9 Lead:</b> Denise Hills <a href="mailto:dhills@adv-res.com">dhills@adv-res.com</a>	Zach Cotter <a href="mailto:zcotter@adv-res.com">zcotter@adv-res.com</a> Hannah Teffeteller <a href="mailto:hteffeteller@adv-res.com">hteffeteller@adv-res.com</a>	<b>Advisor:</b> Andrew Duguid <a href="mailto:aduguid@adv-res.com">aduguid@adv-res.com</a> <b>Advisor:</b> Manoj Valluri <a href="mailto:mvalluri@adv-res.com">mvalluri@adv-res.com</a>
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**Carbonvert**

Mackenzie Scharenberg  
[mackenzie@carbonvert.com](mailto:mackenzie@carbonvert.com)  
 Jackie Gerst  
[jackie@carbonvert.com](mailto:jackie@carbonvert.com)  
 Brent Kelsall  
[brent@carbonvert.com](mailto:brent@carbonvert.com)  
 Olmaide Dada  
[dada@carbonvert.com](mailto:dada@carbonvert.com)  
**Advisor:** Jan Sherman  
[jan@carbonvert.com](mailto:jan@carbonvert.com)

**Castex**

Bryan Saunders  
[bsaunders@castexenergy.com](mailto:bsaunders@castexenergy.com)  
 Will O'Neal  
[woneal@castexenergy.com](mailto:woneal@castexenergy.com)  
 Debra James  
[djames@castexenergy.com](mailto:djames@castexenergy.com)  
 David Law  
[dlaw@castexenergy.com](mailto:dlaw@castexenergy.com)  
 Loren Long  
[llong@CastexEnergy.com](mailto:llong@CastexEnergy.com)  
 Aaron Killian  
[akillian@castexenergy.com](mailto:akillian@castexenergy.com)  
 Nick Waligura  
[nwaligura@castexenergy.com](mailto:nwaligura@castexenergy.com)

**LSU**

Mehdi Zeidouni  
[zeidouni@lsu.edu](mailto:zeidouni@lsu.edu)  
 Ipsita Gupta  
[igupta@lsu.edu](mailto:igupta@lsu.edu)  
 Femi Olorode  
[folorode@lsu.edu](mailto:folorode@lsu.edu)

**SSEB**

Benjamin Wernette  
[wernette@sseb.org](mailto:wernette@sseb.org)  
 Kim Gray  
[gray@sseb.org](mailto:gray@sseb.org)

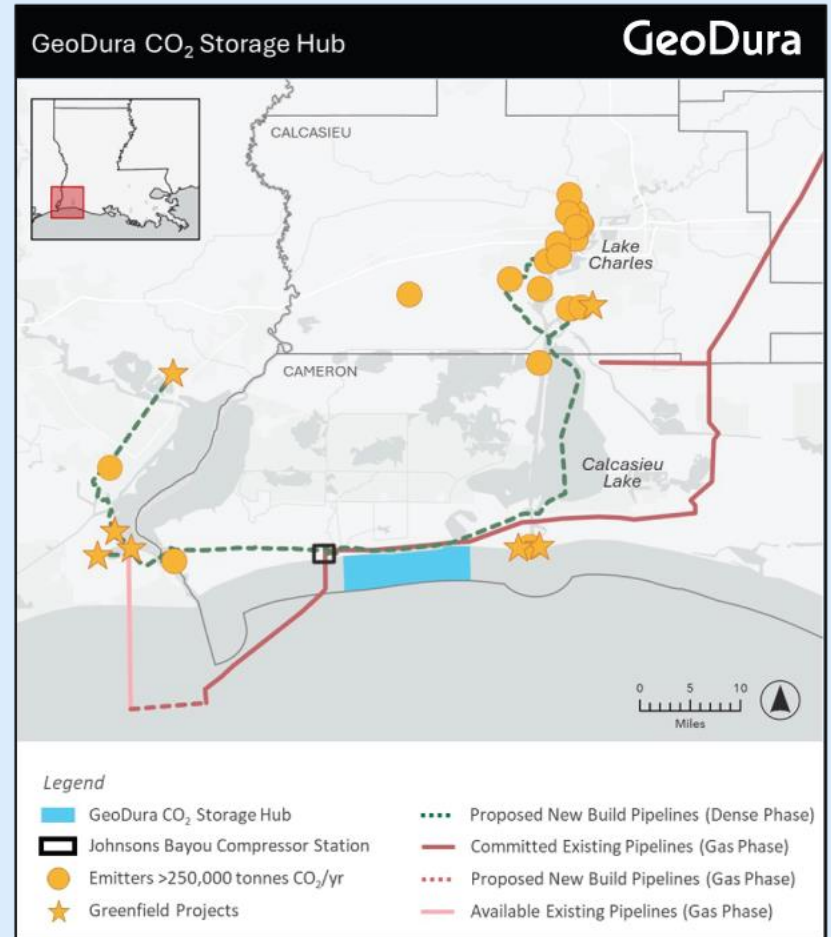
**TX BEG**

Susan Hovorka  
[susan.hovorka@beg.utexas.edu](mailto:susan.hovorka@beg.utexas.edu)  
 Sahar Bahkshian  
[sahar.bakhshian@beg.utexas.edu](mailto:sahar.bakhshian@beg.utexas.edu)  
 Hailun Ni  
[hailun.ni@beg.utexas.edu](mailto:hailun.ni@beg.utexas.edu)



# Project Objectives

- **Objective 1:** Develop GeoDura into a commercial scale CO<sub>2</sub> storage project with continuous community engagement and partnership.
- **Objective 2:** Pioneer a CO<sub>2</sub> storage site in offshore state waters in the Gulf of Mexico and develop an understanding of the regulatory processes, economic feasibility, and de-risking implementation.
- **Objective 3:** Provide an opportunity to bring together stakeholders including DOE, state regulators, commercial entities, and local communities, for unifying conversations.
- **Objective 4:** Accelerate GeoDura timeline to final investment decision (FID) with CarbonSAFE Phase III funding.



# Located Offshore of Louisiana's Cameron Parish

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- GeoDura is perfectly located to service the region's existing industrial emitters and anticipated low-carbon projects.
- The tract of state waters is 24,000 acres in size and has an estimated storage capacity of 250 million metric tons of CO<sub>2</sub>.





Section II

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# Project Scope

# Technical Approach/Project Scope

**Task 1.0 – Project Management and Planning**

**Task 2.0 – National Environmental Protection Act (NEPA)**

**Task 3.0 – UIC Class VI “Authorization to Construct”**

**Task 4.0 – Detailed Site Characterization of a  
Commercial-Scale CO<sub>2</sub> Storage Site**

**Task 5.0 – Storage Field Development Plan**

**Task 6.0 – CO<sub>2</sub> Source(s) Feasibility Study**

**Task 7.0 – Pipeline Front-End Engineering Design (FEED) Study**

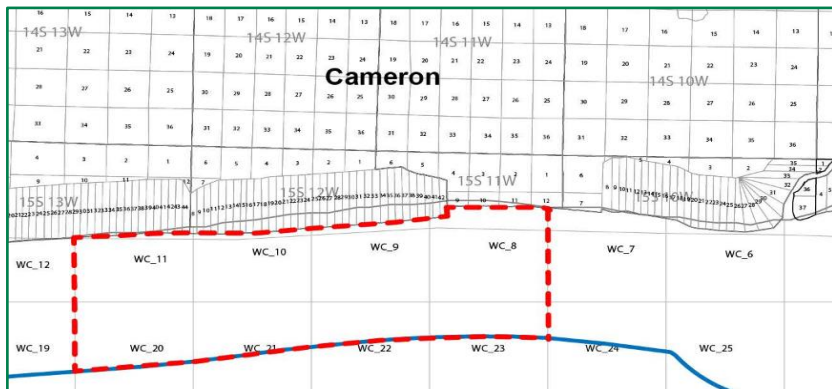
**Task 8.0 – Business and Financial Plans and Arrangements**

**Task 9.0 – Community Benefits**

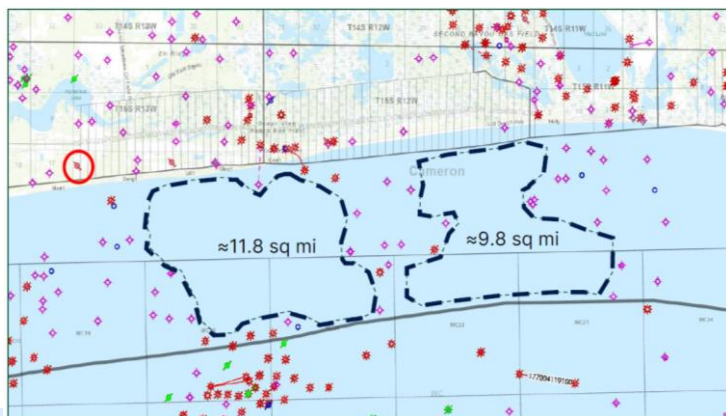
# Cameron Parish Land and Geology

GeoDura offers a high-capacity storage site with minimal existing well intervention, while also allowing for multiple potential injection sites.

## Lease Area: ~24K Acres Offshore Cameron



## Contemplated Injection Sites



## Optimal Offshore Storage Formation

- Storage zones of the Middle and Lower Miocene formations have ideal high porosity with a high volume of storage potential.
- Depth of storage zones allows for safe and permanent storage of CO<sub>2</sub> in a superior high-density supercritical state.
- Thick caprock (Amph B) overlies the storage zones, ensuring safe and permanent storage.



## Project Timeline

- The ongoing 10+ month negotiation process between the CarbonSAFE Phase III award announcement and actual award date has caused the timelines for the DOE-funded project (MICSP) and the commercial project (GeoDura) to be out of synch.
- Upon CarbonSAFE project award, a revised Project Management Plan (PMP) will be developed that synchronizes the two.
- The Plan is to permit and drill an onshore stratigraphic test well this fall.
- And to submit a Class VI permit application by December 2024.

# Project Risks (Financial/Cost/Schedule)

Perceived Risk	Risk Rating			Mitigation/Response Strategy
	Probability	Impact	Overall	
<b>Financial Risks</b>				
Cost share not harmonized with government spend	Low	Medium	Medium	MICSP partners providing cost share are committed to the project with history of financial investment in early work; tasks that include cost share occur early in the project
Cessation of government funding	Low	Medium	Medium	The CarbonSAFE program fulfills primary goals of the administration to mitigate climate change; program funding is historically reliable
Perceived Risk	Risk Rating			Mitigation/Response Strategy
	Probability	Impact	Overall	
<b>Cost/Schedule Risks</b>				
Well material costs	Medium	Medium	Medium	Well drilling occurs early in the project, adjustments to budget and/or well design can be made as needed
Well material availability	Medium	Medium	Medium	Well drilling occurs early in the project, adjustments to schedule and/or well design can be made as needed
Field service delays	Medium	Medium	Medium	Field activities occur early in the project, adjustments to the schedule can be made as needed
Permitting delays	Medium	Medium	Medium	Permitting occurs early in the project, adjustments to the schedule can be made as needed. The team is experienced in permitting and strives to submit applications devoid of errors and in a timely manner to optimize the permitting process.
Offshore Drill Rig Schedule/Type	Medium	Medium	Medium	Define offshore bathymetry early to identify rig type needed (based on water depth). Early discussions and scheduling with rig operators.

# Project Risks (Technical/Scope/Other)

Perceived Risk	Risk Rating			Mitigation/Response Strategy
	Probability	Impact	Overall	
<b>Technical/Scope Risks</b>				
Characterization well drilling/testing issues	Low	Medium	Medium	Utilize team's depth of experience to optimize well program and plan for challenges
Unfavorable geology	Low	Low	Low	Existing data and characterization efforts indicate high likelihood of favorable geology at and around the site
Incorrect Offshore Bathymetry	Medium	Medium	Medium	Identify water depth. If depth is close to rig depth capability, then identify age of bathymetry and weather events that have occurred in region since. Obtain new bathymetry survey if hurricane or flooding event has occurred.

Perceived Risk	Risk Rating			Mitigation/Response Strategy
	Probability	Impact	Overall	
<b>Management/Planning, and Oversight Risks</b>				
Timeliness of deliverables	Low	Low	Low	Extensive experience of project management team and team members ensures timeliness of deliverables Participants have confirmed availability (see Current and Pending Support documents) and are experienced at balancing workloads
Staff availability/workload	Low	Low	Low	
<b>ES&amp;H Risks</b>				
Field site accident	Low	High	Medium	Rigorous ES&H planning and strict adherence to safety protocols
Laboratory accident	Low	High	Medium	Ensure ES&H protocols are in place and followed
<b>External Factor Risks</b>				
Data acquisition delays due to weather	Low	Medium	Medium	Data acquisition occurs early in the project, adjustments to the schedule can be made as needed
Stakeholder opposition	Medium	Medium	Medium	Team is experienced in facilitating positive stakeholder engagement

Section III

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# **Community Benefits Planning**

# CBP Commitments and SMART Milestones

- **Community and Labor Engagement**
  - Community engagement reporting.
    - Updates quarterly, with a Community Benefits Evaluation Report (CBER) at the end of BP1 and end of project performance period.
  - Maintain community, labor, and other stakeholders contact list.
    - Initial list created.
  - Establish Stakeholder Advisory Committee (SAC) that meets regularly throughout the project.
    - Initial SAC meeting held on 31 July 2024 in Cameron Parish, LA.
    - SAC will meet at least quarterly.
  - Community and stakeholder engagement event(s).
    - Planning underway for first community event (tentatively planned for early-mid September).



# CBP Commitments and SMART Milestones

- **Investing in Job Quality/Skilled Workforce**

- Coordinate with university partners to discuss career opportunities in CCS industry.
  - Hold at least one event in BP1.
- Identify and engage interns as appropriate .
  - Throughout the project performance period.
- Engage with existing apprenticeship and workforce development programs.
  - Initial contact/evaluation within 12 months of project award.
- Engage with relevant local, state, and federal regulatory agencies.
  - Throughout the project period, with at least one engagement prior to stratigraphic well drilling.

# CBP Commitments and SMART Milestones

- **DEIA**

- Create list of MBEs, MOBs, WOBs, and VOBs to facilitate partnerships as applicable for contractor support needs.
  - Initial list generated within 90 days of project award, updated and maintained as needed throughout award period.
- Identify and establish relationships with existing pre-apprenticeship and workforce development programs.
  - Initial engagement within 12 months of project award.
- Engage with local MSIs and other educational institutions.
  - Identify POCs and hold initial introductory meetings within 12 months of project award; contact has been established with Southern University.
  - Host, organize, and/or participate in at least one career event at a Louisiana MSI prior to end of project performance period.
- DEIA-specific trainings offered to project personnel.
  - At least one representative from each project partner will participate in DEIA training.

# CBP Commitments and SMART Milestones

- **Justice40**

- Conduct and update Energy and Environmental Justice Assessments to better define potential project benefits, disbenefits, and metrics to measure the same.
  - Initial updated EEJA in BP1, with final updated EEJA in BP2.
  - Potential metrics include:
    - Estimate reduction in SO<sub>x</sub>, NO<sub>x</sub>, PM<sub>2.5</sub> from regional emitters (primarily realized in future project phases).
    - Increased quality job creation and training opportunities.

Section IV

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# Key Next Steps

## Key Next Steps

- Successfully complete and sign CarbonSAFE contract, execute subcontracts with partners.
- Synchronize CarbonSAFE project with GeoDura priorities and timing.
- Update PMP, SOPO, and other documents, to account for 10+ month negotiation process between award announcement and final award.
- Advance and finalize project management, planning, NEPA, community benefits and community engagement documents.

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