KLEBERG CCS

OVERVIEW

OXY

1POINTFIVE

MAKE A DIFFERENCE.

CARBON MANAGEMENT EXPERTISE

Monitoring, Reporting & Verification Leadership

- 1PointFive's parent company, Occidental (Oxy), developed the first two Monitoring, Reporting & Verification (MRV) Plans approved by the U.S. EPA.
- Received first issued Class VI Permit to sequester CO_2 for a DAC project (STRATOS).

50+ Year Track Record in Safely Storing CO_2

- Safely and securely stores injected CO_2.
- Committed to global leadership in carbon storage and sequestration .

Proven Commercial-Scale Project Experience

- Extensive experience in commercial-scale facility development.
- Strong project management expertise and infrastructure.
- Commitment to quality community engagement, health, safety, and the environment.

World's Largest Manager of CO_2 for Enhanced Oil Recovery

- Currently storing up to 20 million metric tons of CO_2 annually in the Permian.
- Operating over 1 million acres of land in the Permian.

OXY ZERO IN™ 1POINTFIVE

MAKE A DIFFERENCE.

ORDER OF OPERATIONS

1. Site Selection and Screening
2. Detailed Site Characterization
3. Design and Development
4. Class VI Permit
5. Operations and Monitoring
6. Closure and Post Closure

OUR OBJECTIVE:
The safe and long-term effective storage of CO_2 in subsurface geologic formations.

HOW WE SELECT A PROJECT LOCATION



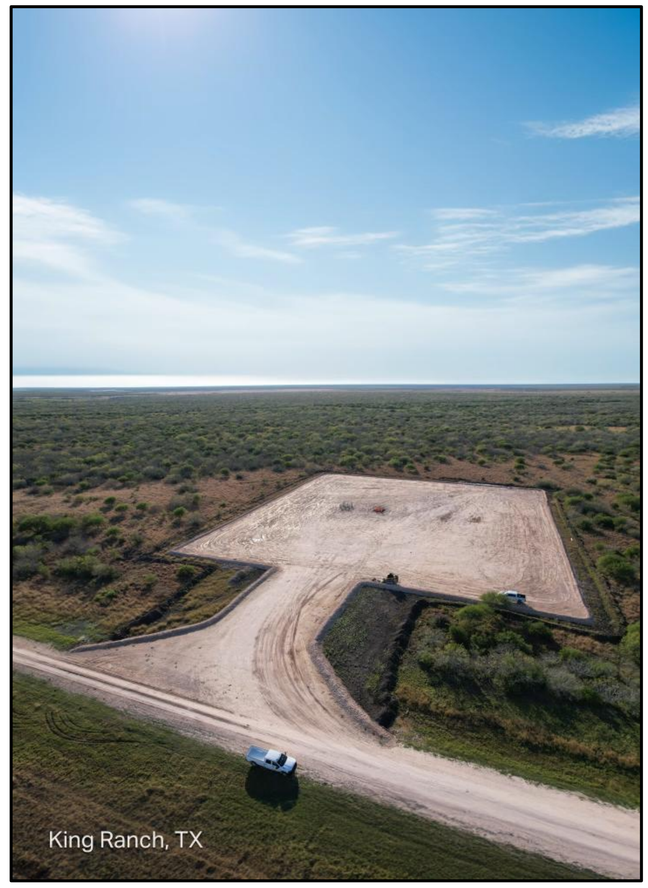
MAKE A DIFFERENCE.

CARBON CAPTURE AND STORAGE (CCS)

Carbon Capture and Storage (CCS), aka Geologic Sequestration, is a proven method of underground carbon dioxide (CO_2) storage. CO_2 is injected into deep rock formations for long-term storage.

By capturing CO_2 and storing it in rock thousands of feet below the earth's surface, 1PointFive is working to offer solutions that address emissions and enable the development of low-carbon products.

Geologic sequestration has been in use for decades. The history of intense study and real-world application by leading experts in geology, seismology, fluid characterization, well engineering, and reservoir modeling means that today, we have a proven tool to store CO_2.



MAKE A DIFFERENCE.

THE SEQUESTRATION PROCESS

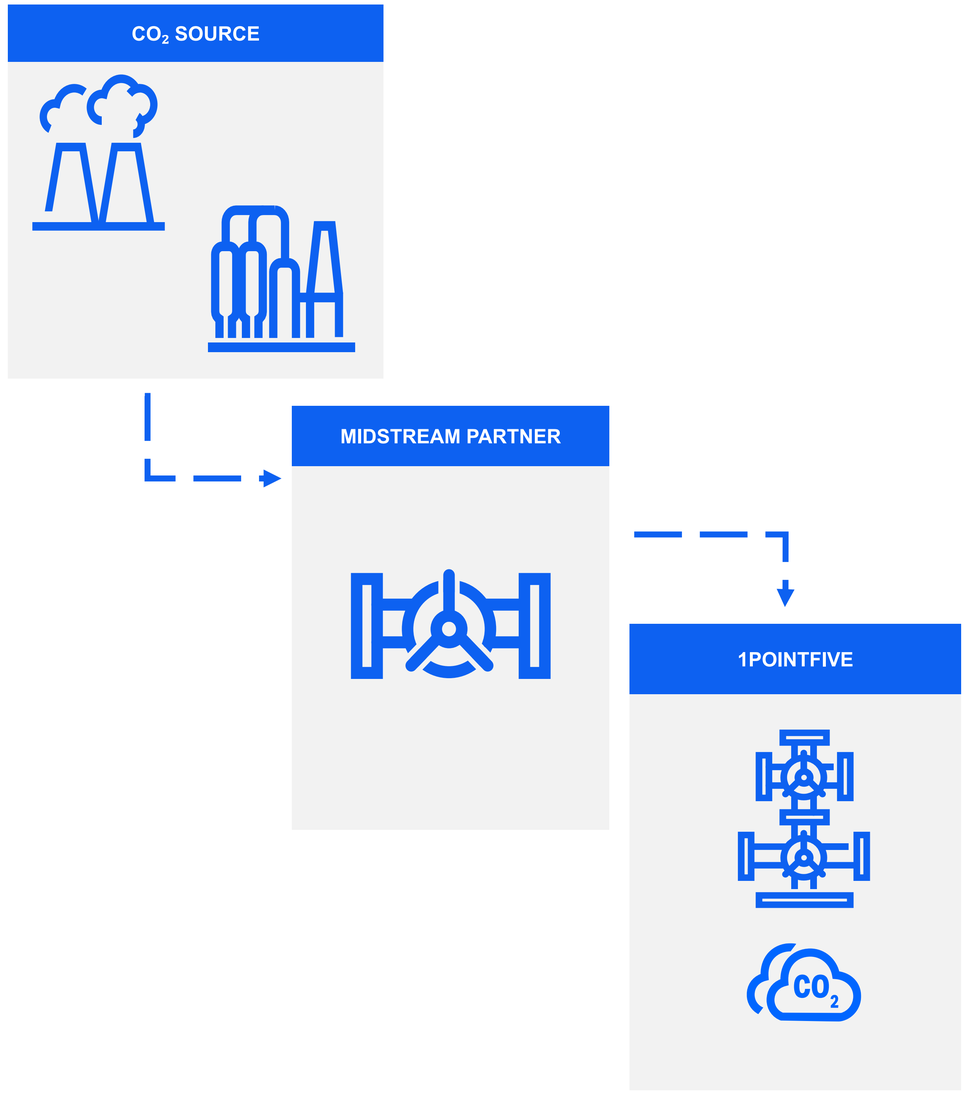
1. Capture & Transportation
CO_2 is acquired, compressed, and transported across a pipeline network to a sequestration hub.

2. Compression
At the sequestration site, the CO_2 is further compressed to increase the density of the CO_2 so it can maximize available storage space by fitting into tiny pores in the reservoir rock.

3. Injection
An injection well pumps the compressed CO_2 more than a mile below the surface of the earth, below layers of impenetrable caprock.

4. Trapping
The CO_2 is trapped within the reservoir either mechanically, chemically, or by binding with minerals that are already present.

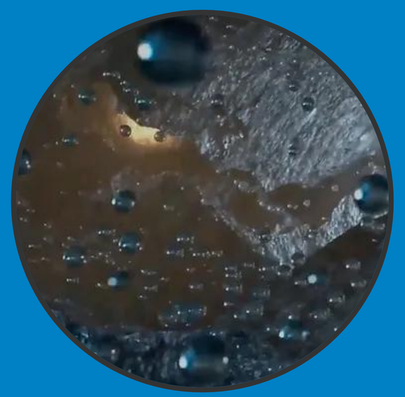
5. Monitoring
A number of wells surrounding the storage reservoir continuously monitor for safe operations and provide data for each facility.



MAKE A DIFFERENCE.

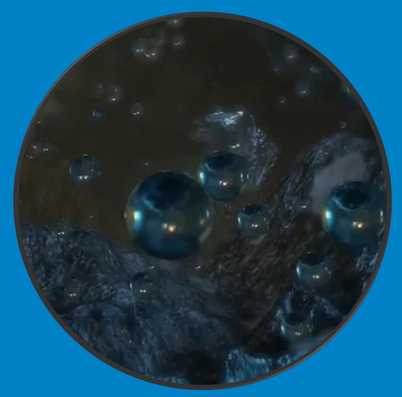
SAFE, SECURE CO_2 STORAGE

NATURALLY OCCURRING TRAPPING MECHANISMS:



STRATIGRAPHIC

Impermeable caprock isolates the CO_2



RESIDUAL

CO_2 is immobilized and contained in tiny pores



SOLUBILITY

CO_2 dissolves into naturally occurring salty brines



MINERAL

CO_2 becomes part of the rock

Scan the QR code to watch a video about Carbon Storage

CO_2 STORAGE SAFETY

50+
YEARS OF EXPERIENCE

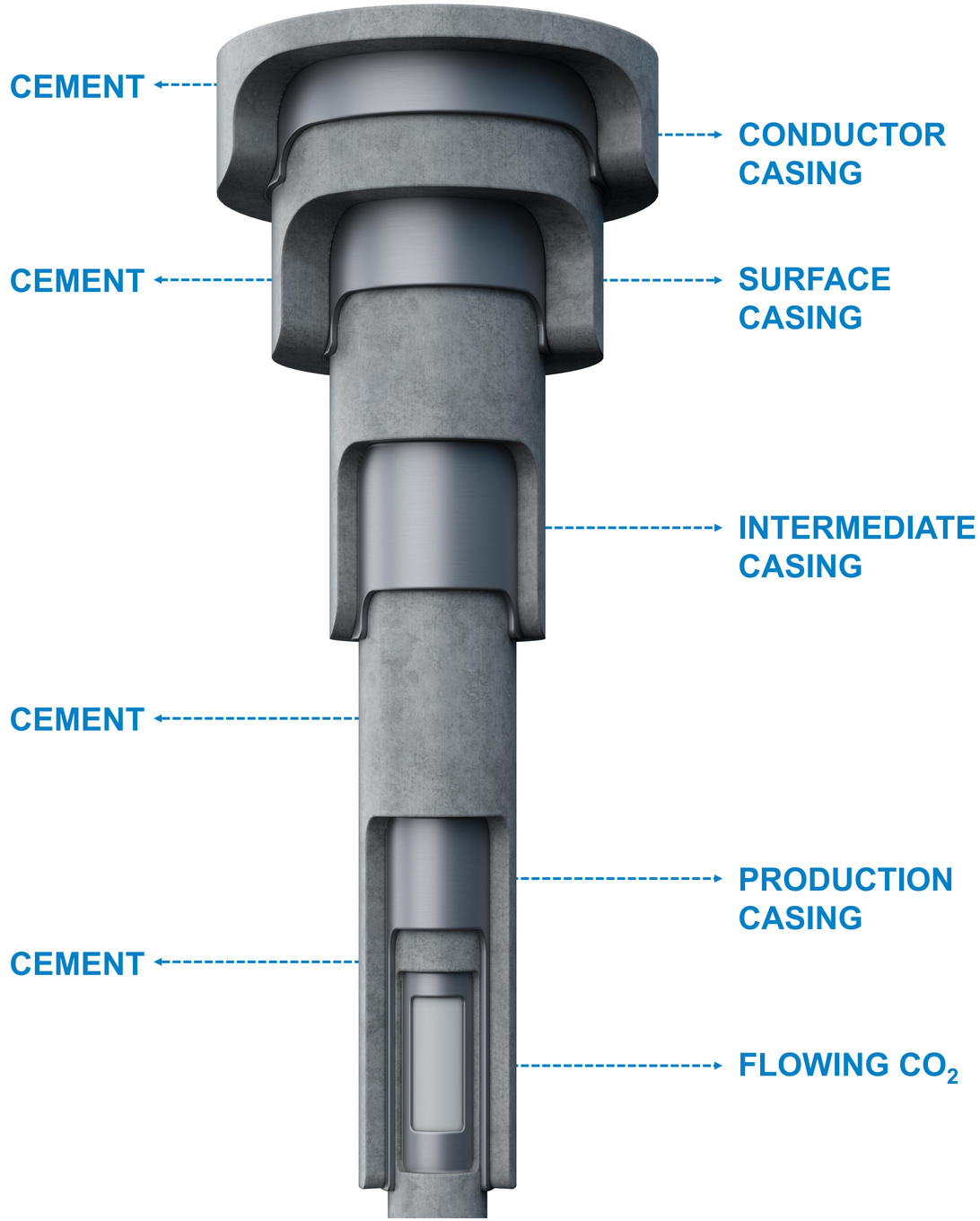
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CO_2 RELATED SAFETY INCIDENTS

UP TO 20M
METRIC TONS OF CO_2 SAFELY STORED ANNUALLY

2,500
MILES OF CO_2 PIPELINES

- Redundant Systems are developed with failsafe controls and continuous monitoring.
- We have robust emergency plans that include temporary or permanent suspension of CO_2 injection.
- Injection wells are engineered to protect underground sources of drinking water and to provide safe long-term storage.

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MAKE A DIFFERENCE.

EMERGENCY RESPONSE & PUBLIC AWARENESS

Public Awareness

Public notice and comment are integral in the Class VI permitting process, engaging landowners, officials, and stakeholders.

Response Planning

Emergency response planning includes notification, investigation, corrective actions, and monitoring to protect underground sources of drinking water.

Local Coordination

Coordination with local emergency responders and agencies ensures effective response and public safety during incidents.

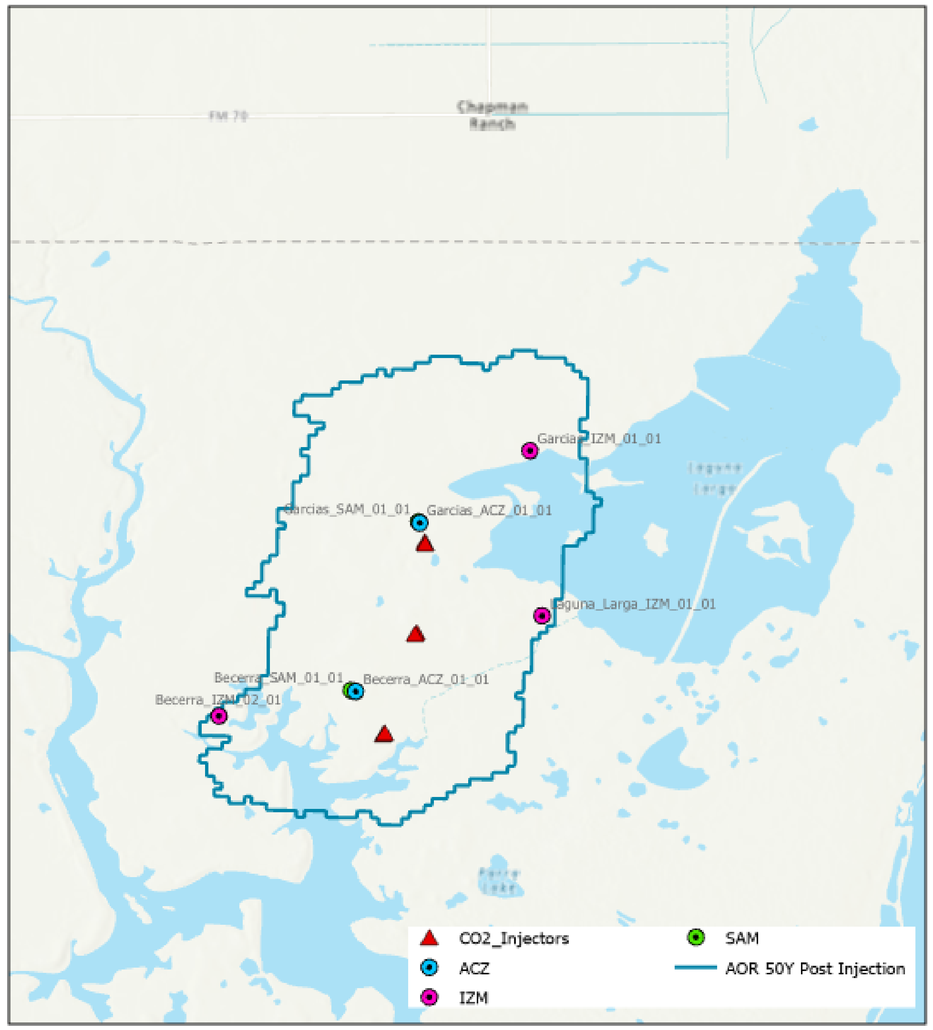
Response Framework

The framework of Detect, Notify, Investigate, Protect, Correct, Monitor, and Communicate guides the response process.

MAKE A DIFFERENCE.

PROJECT LOCATION AND OVERVIEW

- The project will be located in a remote portion of the King Ranch in Kleberg County.
- Currently plan to conduct injection operations for 20+ years followed by post-injection site care.
- 6 CO_2 Injection Wells will be drilled 6,000’ - 10,000’ below the earth’s surface.
- 5 Monitoring Wells will be installed above and within the storage area.
- 2 Underground Sources of Drinking Water (USDW) monitoring wells.



This poster contains forward-looking statements based on Oxy’s current expectations, beliefs, plans and forecasts. All statements other than statements of historical fact are forward-looking statements. These statements are not guarantees of future performance as they involve assumptions that may prove to be incorrect and involve risks and uncertainties. Factors that may affect Oxy’s business can be found in Oxy’s filings with the U.S. Securities and Exchange Commission (SEC), which may be accessed at the SEC’s website, www.sec.gov.

MAKE A DIFFERENCE.

GROUNDWATER MONITORING

Monitoring of Shallow Aquifers

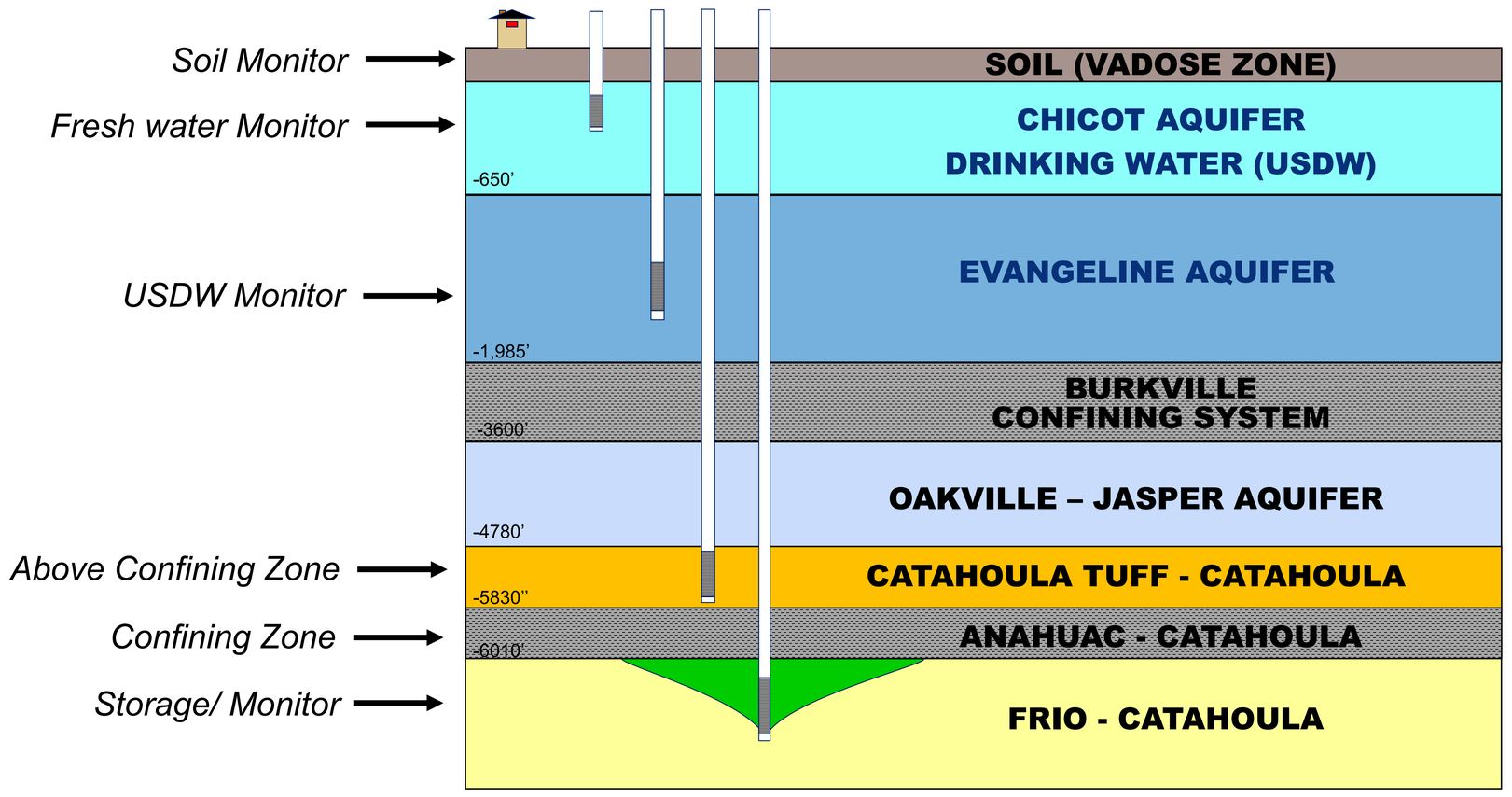
- Soil (vadose zone):
  - drill and sample soil gas wells
  - gas analysis

- USDW aquifers (Chicot, Evangeline)
  - drilling, sampling freshwater wells
  - sampling landowner freshwater wells
  - water and gas analysis



In-Zone Monitoring Well: Illustrating the size and footprint of a well head.

MONITORING STRATEGY



** Not to scale*

MAKE A DIFFERENCE.

MONITORING FOR SAFE OPERATIONS

- Continuous observation of injection pressure and temperature data
- Monitoring wells
- Geophysical surveys
- Fluid sampling
- Soil and soil gas sampling
- Seismic studies and passive seismicity monitoring and recording



Stratigraphic Test Well



Magnetic and Electromagnetic Survey Acquisition



Soil Gas Probes Installation



3D Seismic Acquisition



Seismometers

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PERMIT APPLICATIONS

Community members will have opportunities throughout the permitting process to provide feedback and learn about the project. The draft permit will also be posted to the RRC website for public viewing.

- CO_2 injection for sequestration is regulated by the Railroad Commission of Texas (RRC)

- Information required for a permit application is extensive and includes:
  - Site characterization of injection and confining zones
  - Well casing and cementing program
  - Corrosion monitoring and prevention plan
  - Well integrity testing plan
  - Geophysical monitoring and fluid testing plan
  - Emergency and remedial response plan
  - Seismicity monitoring plan
  - Post-injection site care and closure plan
  - Financial responsibility

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COMMUNITY PARTNERSHIPS

In addition to the direct benefits and increased economic activity, we are committed to creating mutually beneficial partnerships









CHARITABLE PARTNERSHIPS

- Barbara Bush Houston literacy Foundation (Kingsville ISD, Kleberg Library, Ricardo ISD, Riviera ISD, Robstown Library, Santa Gertrudis ISD, and Corpus Christi Library System)
- Boys & Girls Club of Kingsville
- Coastal Bend Bays & Estuaries Program
- Coastal Bend Food Bank
- Corpus Christi Hooks
- Douglass Youth Center
- Gulf of America Alliance
- Wish for Wheels



LOCAL EVENTS & PARTNERSHIPS

- Flavors of South Texas
- Harte Research Institute – TAMUCC
- Javelina Skilled Trades Academy
- Kingsville Chamber of Commerce
- Kingsville ISD Education Foundation
- Kingsville State of the City
- Kleberg - Kenedy Jr. Livestock Show
- Kleberg State of the County
- One Water Summit – Corpus Christi
- Ranch Hand Weekend
- Riviera ISD Education Foundation
- Santa Gertrudis ISD Education Foundation
- TAMUK Downtown Kingsville 5K & 1K
- City of Kingsville Parks and Recreation Healthy Family Partnership

MAKE A DIFFERENCE.

COMMUNITY ENGAGEMENT

1PointFive is dedicated to furthering continuous meaningful engagement

Engagements Include:

- Stakeholder Relations Response Line Email, Website, and Phone
- Community Meetings, informational events, and presentations
- Outreach phone calls & emails
- Mailings
- All information provided in both English and Spanish





Notable Outreach & Engagements:

- Six Community Meetings
- Baffin Bay Stakeholder Group
- TAMUK Community Breakfast
- Community Roundtable
- Informational Booths at Community Events
- Monthly Meetings at the Kingsville Chamber of Commerce
- Douglass Youth Center STEM EVENT
- Presentation to Society of Hispanic Professional Engineering at TAMUK
- Coastal Paddle Cleanup

MAKE A DIFFERENCE.

STAKEHOLDER RELATIONS TEAM

Dedicated to communities since 2014

- Your feedback is important to us
- We engage with surrounding communities to share, listen and work with our internal teams to tailor operations to your community
- We are committed to transparency and sharing information proactively
- Our highest priority is to conduct our operations in a manner that protects human health, safety, and welfare as well as the environment and wildlife resources

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