



# CCS/CCUS in Wyoming

Insights on Class VI Wells, Wyoming Pipeline  
Corridor Initiative and CCS/CCUS Advancements

## NASEO 2024 Annual Meeting

New York, New York

September 29 – October 2, 2024



Enhanced Oil  
Recovery Institute

Lon Whitman – Director  
Casper, Wyoming



Enhanced Oil  
Recovery Institute

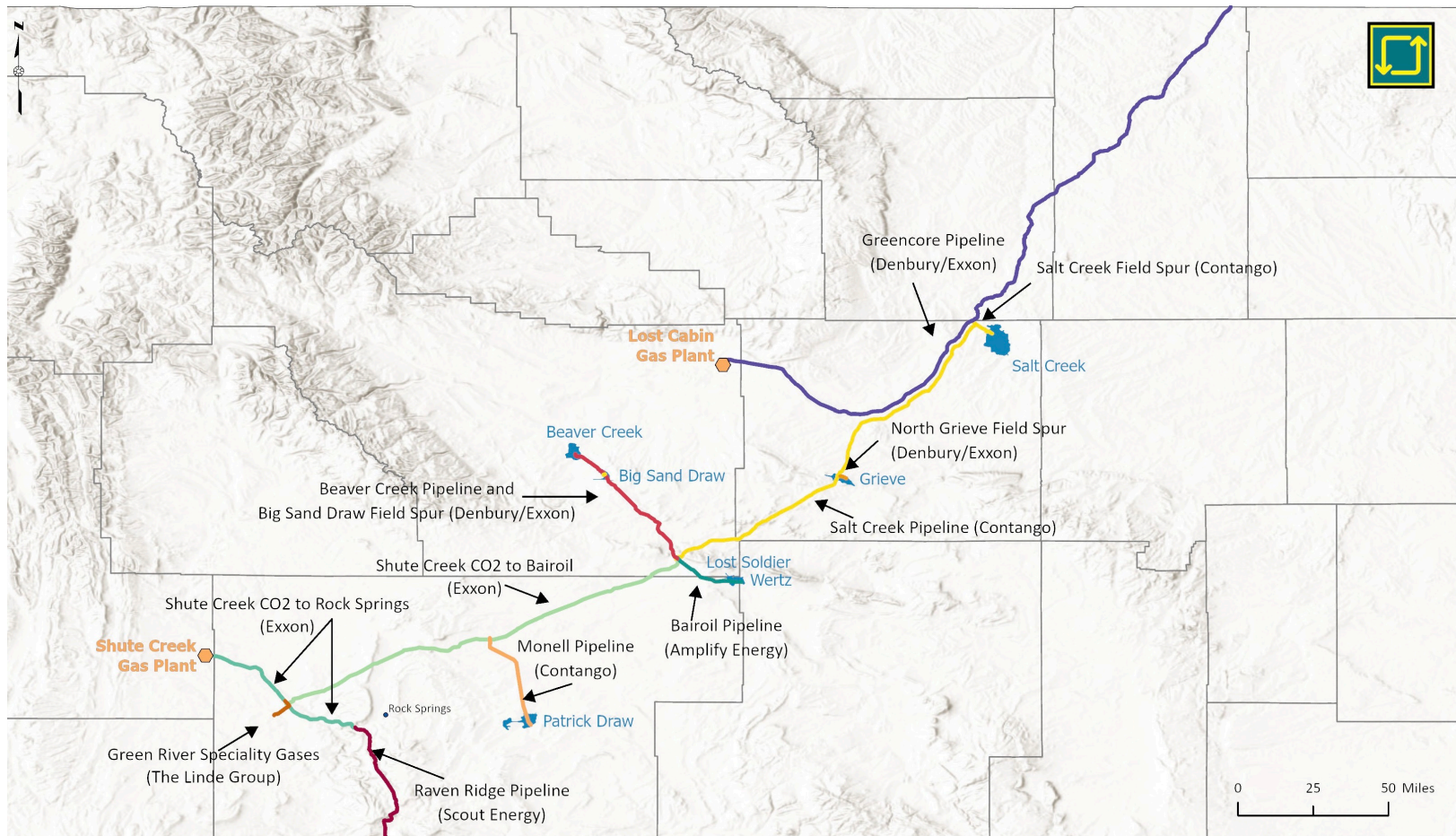
## **EORI : Who We Are and What We Do**

- State funded agency located in Casper, Wyoming
- Team of Petroleum Geologists, Petroleum Engineers and Support Staff including Data Architects, GIS Specialists and Pipeline Support Services
- Funded to work collaboratively with oil and gas operators in Wyoming to increase production and reserves and extend field life
- No cost to the operator - revenue to the State through taxes from increased production
- A collaborative partner with University of Wyoming – School of Energy Resources (SER)

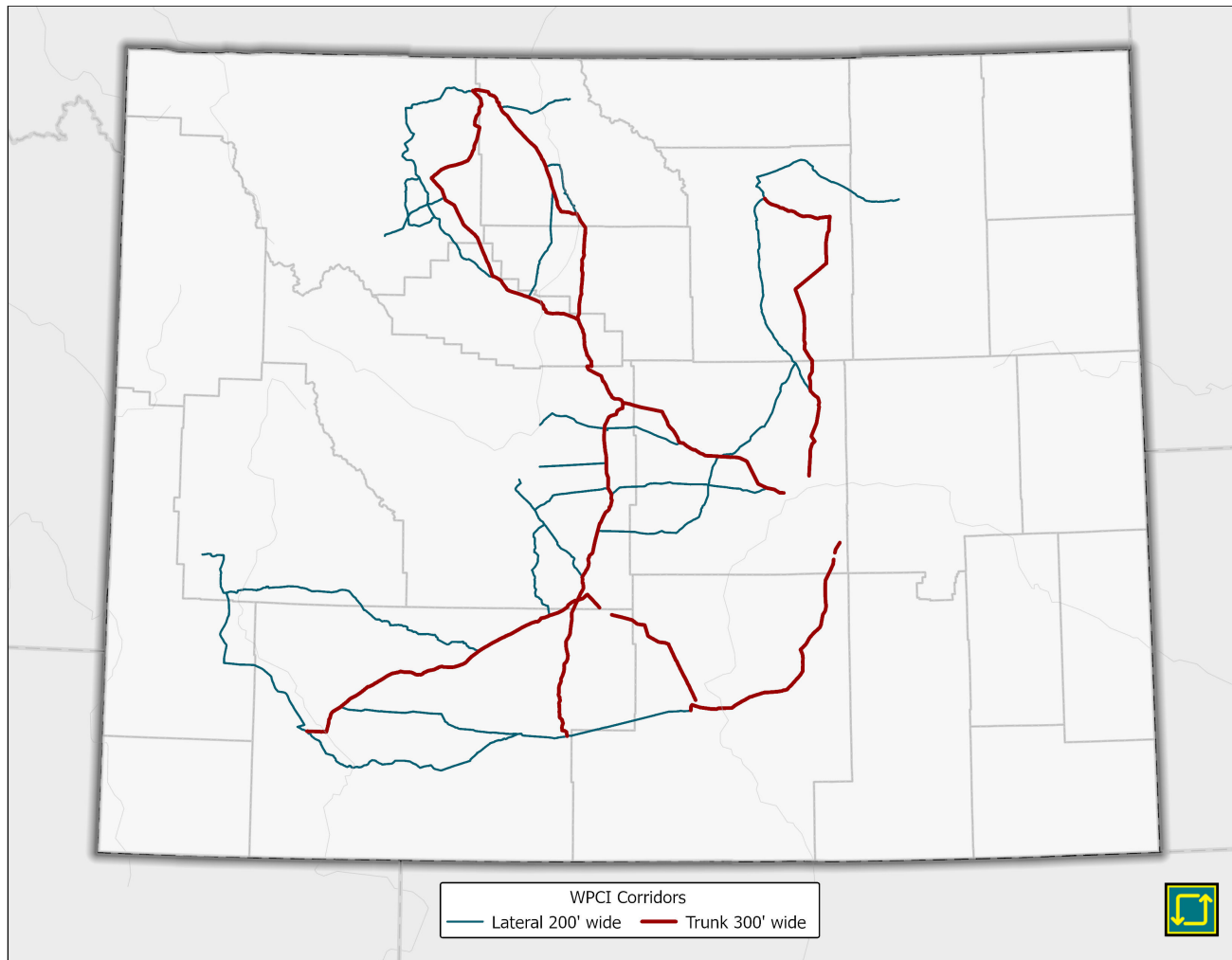
# Wyoming...A Favorable CCS/CCUS Business Landscape

- Developed CO<sub>2</sub> Transportation Infrastructure
  - Wyoming Pipeline Corridor Initiative (WPCI)
- Class VI Primacy
- Supportive State Legislation
  - **Pore Space Ownership**
  - **Unitization.**
  - **Long-term Storage and Trespass Liability**
- 40-Year History of CO<sub>2</sub>-EOR and associated, permanent storage of CO<sub>2</sub> in Wyoming oil and gas fields

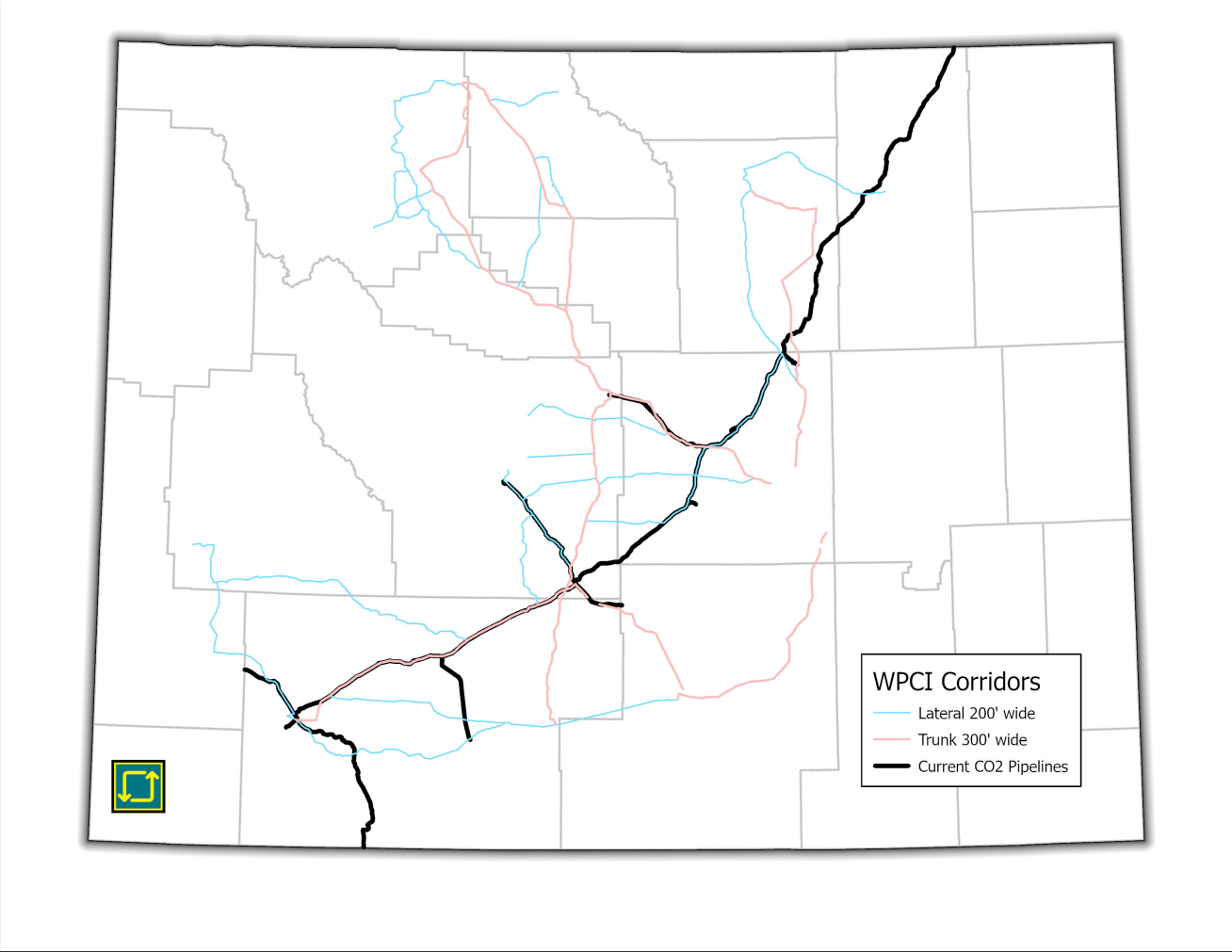
# Wyoming CO<sub>2</sub> Pipeline Infrastructure



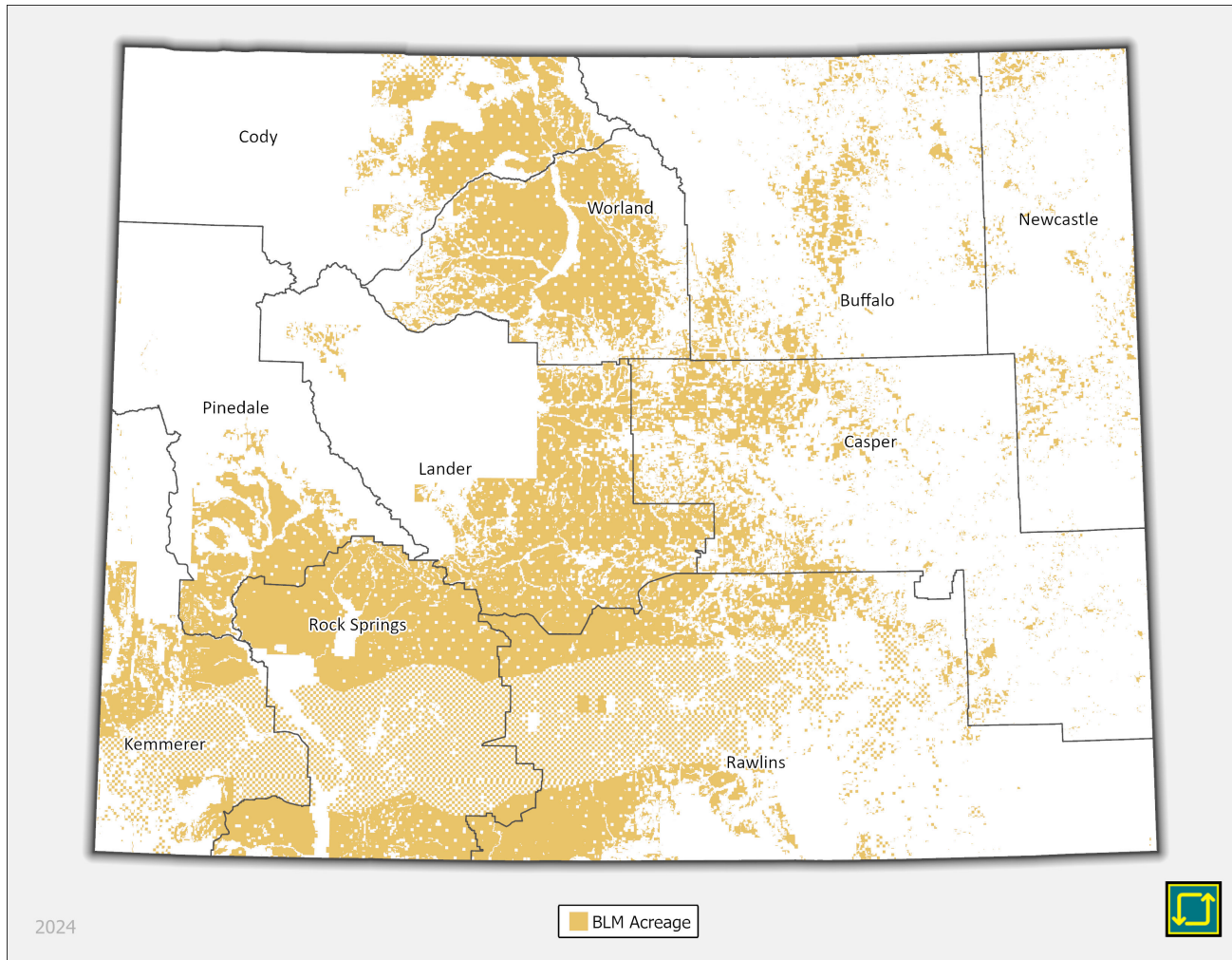
# Wyoming Pipeline Corridor Initiative (WPCI)



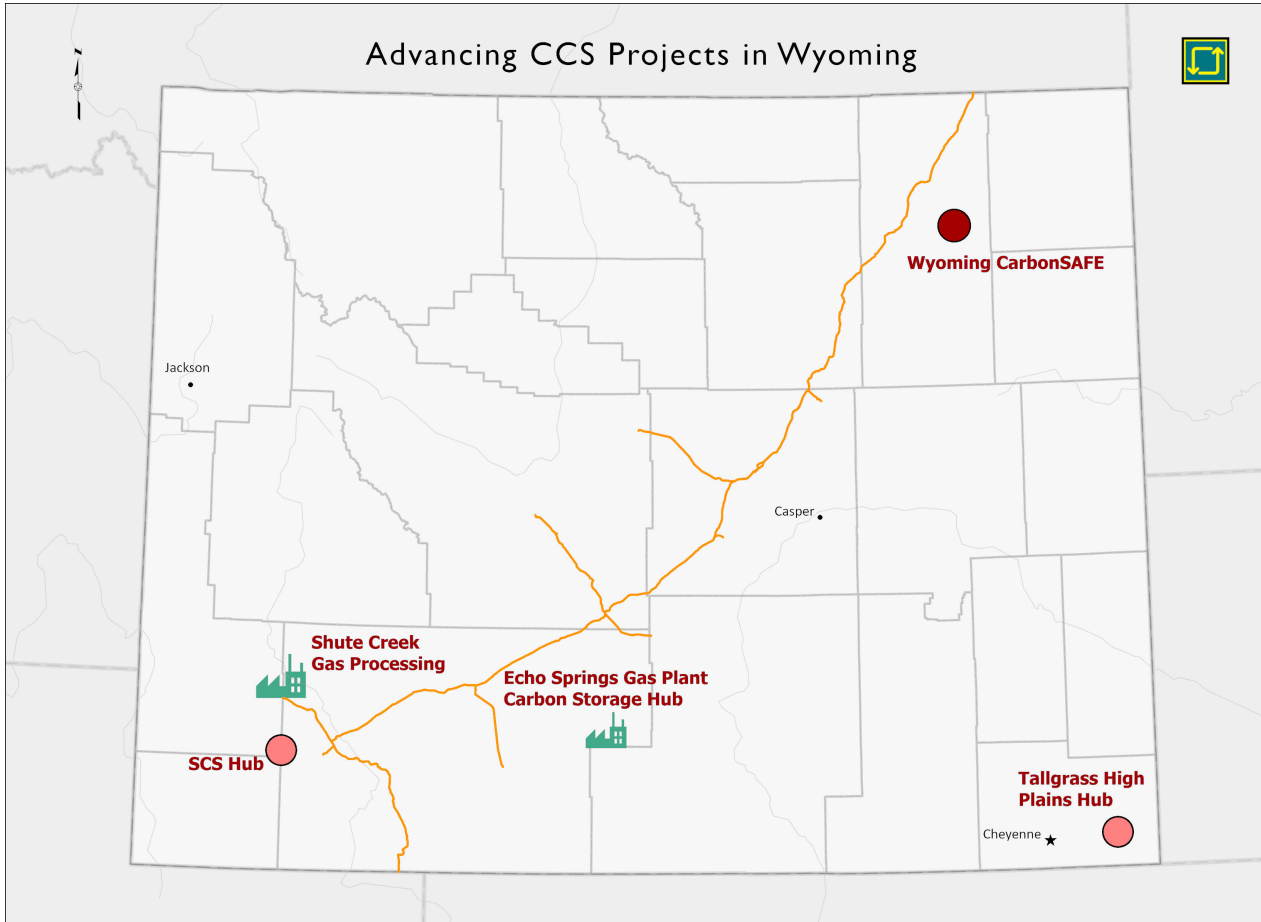
# Current CO<sub>2</sub> Infrastructure and WPCI



# BLM Offices and Acreage in Wyoming



# Advancing CCS Projects in Wyoming



## ExxonMobil La Barge Capture Facility – SW Wyoming

- Largest capture facility in the world, capturing 6-7 Mta (million tonnes/annually)
  - Nearly 20 years of geological sequestration at Shute Creek
  - Recently announced expansion plans increase storage by over 1 Mta

## Frontier Carbon Solutions - Sweetwater Carbon Storage Hub (SCS) – SW Wyoming

- 3 Class VI Permits approved
  - Plans being finalized to drill injection wells in 2024
- Initial Injection Capacity 1.5 Mta
- Total Estimated Storage Capacity 550 Mtonnes
- CO<sub>2</sub> Commitments from multiple partners – Point Source

## Williams Companies – Echo Springs CarbonSAFE II WY Hub – SW WY

- Evaluating the potential of storing CO<sub>2</sub> in the eastern Green River Basin within the Wamsutter Gas Field

## Tallgrass High Plains Hub – SE WY

- 1 Class VI Permit Approved

## SER/University of Wyoming – Wyoming CarbonSAFE III – NE Wyoming

- Drilled and Completed 2 wells to Class VI standards
- Completed NEPA



# Class VI Well Permitting in Wyoming

- Permitting of Class VI Wells in Wyoming is handled by Wyoming Department of Environmental Quality
- [www.deq.wyoming.gov](http://www.deq.wyoming.gov) → Divisions Tab → Water Quality → Ground Water → Underground Injection Control → Class VI Wells
- Currently:
  - 3 Class VI permits have been Issued by DEQ
    - Frontier Carbon Solutions
  - 6 Class VI Permits are in Public Notice Period or Under Review at DEQ
    - Tallgrass
    - Casper Carbon Capture
  - 17 applications in process for submittal in 2024/2025
  - 2 applications to convert Class I wells to Class VI anticipated late 2024/early 2025.

# Thank You



20 Years of Dedicated Service to  
the Oil & Gas Industry of Wyoming

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