

# ROADS TO REMOVAL

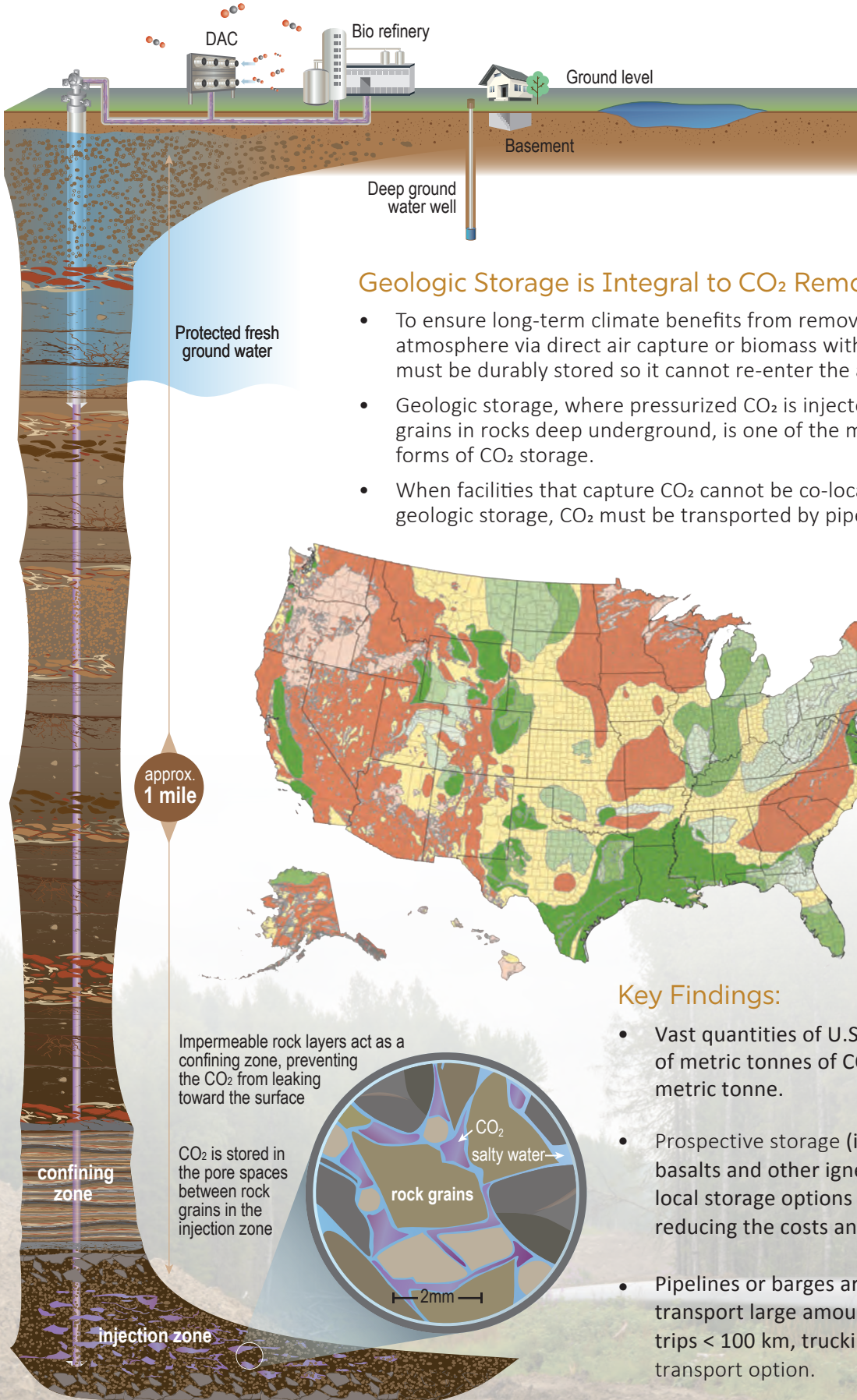
OPTIONS FOR CARBON DIOXIDE REMOVAL IN THE UNITED STATES

# CO<sub>2</sub> TRANSPORT & GEOLOGIC STORAGE

**“Over 50% of the land area of the United States is geologically suitable for CO<sub>2</sub> storage.”**

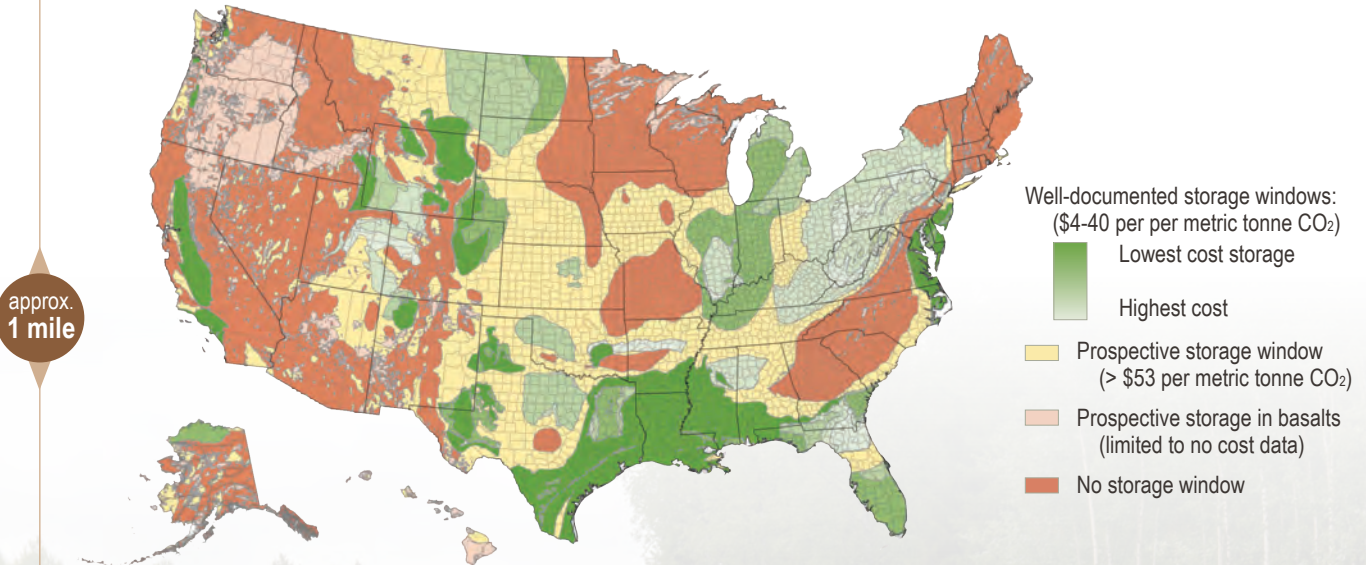
**Dr. Sue Hovorka**

*Lead Author, Geologic CO<sub>2</sub> Storage  
University of Texas at Austin*



## Geologic Storage is Integral to CO<sub>2</sub> Removal

- To ensure long-term climate benefits from removing carbon dioxide (CO<sub>2</sub>) from the atmosphere via direct air capture or biomass with carbon removal, captured CO<sub>2</sub> must be durably stored so it cannot re-enter the atmosphere.
- Geologic storage, where pressurized CO<sub>2</sub> is injected into the pore spaces between grains in rocks deep underground, is one of the most durable forms of CO<sub>2</sub> storage.
- When facilities that capture CO<sub>2</sub> cannot be co-located with injection sites for geologic storage, CO<sub>2</sub> must be transported by pipeline, rail, truck or barge.



## Key Findings:

- Vast quantities of U.S. land could store tens of millions of metric tonnes of CO<sub>2</sub> at costs lower than \$20 per metric tonne.
- Prospective storage (including sedimentary formations, basalts and other igneous rocks) could provide more local storage options across more than 50% of the U.S., reducing the costs and impacts of transporting CO<sub>2</sub>.
- Pipelines or barges are the most efficient way to transport large amounts of CO<sub>2</sub> over long distances. For trips < 100 km, trucking is a more cost-effective transport option.

**Every region has a story. Every region has an opportunity.**

To learn more about each carbon dioxide removal pathway, go to **Roads2Removal.org**