



UW

School of Energy Resources
Center for Energy Regulation
& Policy Analysis

Regulatory Considerations for Carbon Dioxide Storage and Plume Migration on Interstate and Federal Lands

WHAT IS CARBON CAPTURE AND STORAGE (CCS)

CCS refers to a process in which carbon dioxide (CO₂) is captured from either the atmosphere or an industrial point source (such as a coal or natural gas power plant) and injected into reservoirs deep underground (pore space) for permanent storage. CCS technologies offer key benefits on a global scale by removing excess amounts of CO₂ in the atmosphere.

WYOMING'S FAVORABLE ENVIRONMENT

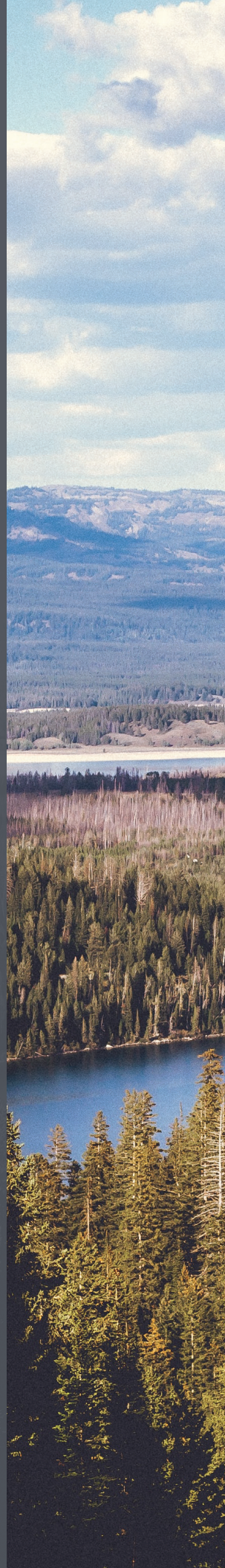
Wyoming is one of the largest emerging hubs for carbon capture and storage (CCS) infrastructure projects. Equipped with extensive deep subsurface saline storage reservoirs and an existing network of CO₂ pipelines, Wyoming is suited to embrace this CCS opportunity.

FULL STORAGE POTENTIAL

Since 2010, Wyoming has taken significant steps to establish a cohesive statutory and regulatory framework to streamline the permitting process to facilitate carbon management through CCS. However, the challenge of widespread CCS deployment is ultimately a regional one, requiring coordination with Wyoming's neighboring states and numerous federal land agencies to mobilize the high volume of shared pore space resources that transcend state boundaries.

WHY THIS ANALYSIS WAS NEEDED

For Wyoming to realize its full storage potential, it will need to collaborate regionally with federal partners and neighboring state agencies. This paper identifies and analyzes the scope of legal and regulatory concerns arising from the potential for interstate CO₂ storage by looking at the current regulation and permitting structures in neighboring states as well as the challenges posed on federal lands.



State

Status of Class VI Primacy in Wyoming and its Neighboring States

Status of Pore Space Ownership in Wyoming and its Neighboring States

Colorado

Colorado has not applied for nor obtained Class VI primacy. In 2021, however, Colorado Oil & Gas Conservation Commission, Department of Natural Resources, submitted its legislative proposal, *Creating Colorado's Carbon Sequestration Framework: A Legislative Proposal* (hereinafter the "COGCC Report"), to address the legal changes necessary to achieve a comprehensive regulatory regime for CCUS in Colorado. The proposal identified recommendations to seek primacy over Class VI wells.

Colorado has not enacted statutes nor promulgated regulations to define pore space, establish whether pore space ownership is vested with the owner of the correlating surface or mineral estate, or regulate the severance of pore space. However, in its 2021 report, the COGCC recommends the Colorado Legislature enact legislation to vest the surface owner with ownership of the underlying pore space, unless it has been expressly conveyed and that pore space may be severed from the surface estate and transferred in the same way as mineral rights.

Idaho

Idaho has not applied for nor obtained Class VI primacy.

Idaho has not enacted statutes nor promulgated regulations to define pore space, establish whether pore space ownership is vested with the owner of the correlating surface or mineral estate, or regulate the severance of pore space.

Montana

Montana has not applied for nor obtained Class VI primacy.

If the ownership of the geologic storage reservoir cannot be determined from the deeds or severance documents related to the property by reviewing statutory or common law, it is presumed that the surface owner owns the geologic storage reservoir.

Nebraska

Nebraska has not applied for nor obtained Class VI primacy.

Pore space ownership is vested in the owner of the surface estate unless severed and separately conveyed.

South Dakota

South Dakota has not applied for nor obtained Class VI primacy.

South Dakota has not enacted statutes nor promulgated regulations to define pore space, establish whether pore space ownership is vested with the owner of the correlating surface or mineral estate, or regulate the severance of pore space. In 2020, South Dakota Senate Bill 63 proposed vesting ownership of pore space with the surface owner, but the bill was deferred indefinitely.

Utah

Utah has not applied for nor obtained Class VI primacy, but has provided that the Utah Division of Oil, Gas, and Mining will undertake exclusive Class VI permitting jurisdiction should Utah obtain primacy in the future.

Utah law vests title to pore space underlying in the owner of the surface estate.

Wyoming

Wyoming obtained primacy over its Class VI program in October 2020. Its program is administered by the Wyoming Department of Environmental Quality.

Pore space ownership is vested with the owner of the overlying surface estate. Pore space interests may be severed and separately conveyed from the surface estate and are presumed to pass with the surface estate in conveyances unless severed.

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