

U.S. Department of the Interior  
Bureau of Land Management

# Tallgrass Southeast Wyoming CO<sub>2</sub> Sequestration Project

DOI-BLM-WY-D030-2023-0071-EA

Location: Wyoming – High Desert District – Rawlins Field Office

## Environmental Assessment April 2025

High Desert District, Rawlins Field Office  
1300 North 3<sup>rd</sup> Street  
Rawlins, WY 82301  
Phone: (307) 328-4200

*The BLM's multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.*

**DOI-BLM-WY-D030-2023-0071-EA**

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## ENVIRONMENTAL ASSESSMENT

**BLM Office:** Rawlins Field Office

**ROW Number:** WYWY105862215 (Legacy Number WYW-192001)

**Proposed Action Title / Type:** Tallgrass Southeast Wyoming CO<sub>2</sub> Sequestration Project

**Applicant:** Tallgrass High Plains Carbon Storage, LLC

**Location of Proposed Action:**

Sixth Principal Meridian, Wyoming

T. 12 N., R. 60 W.,  
sec. 4, SW 1/4

T. 13 N., R. 60 W.,  
sec. 28, W 1/2.

### Chapter 1: Introduction

This environmental assessment (EA) for the Tallgrass Southeast Wyoming CO<sub>2</sub> (carbon dioxide) Sequestration Project has been prepared to analyze and disclose the potential site-specific environmental consequences of the Tallgrass High Plains Carbon Storage, LLC (Tallgrass) right-of-way (ROW) application to the Bureau of Land Management (BLM), Rawlins Field Office (RFO). The proposal from Tallgrass requests the use of BLM-administered federal pore space under two tracts (480 acres total) of public lands in Laramie County in southeast Wyoming.

The ROW application was filed with the RFO on August 17, 2022. The ROW would be needed for use of the federal pore space for permanent storage/disposal of captured CO<sub>2</sub> and does not include any related surface activities or infrastructure on BLM lands.

The federal lands involved in this project are within Tallgrass' proposed Eastern Wyoming CO<sub>2</sub> Sequestration Hub (EWS Hub). The EWS Hub is approximately 150,000 acres, of which the BLM acreage represents approximately 0.32% of the overall project.<sup>1</sup> The remaining acreage within the EWS Hub area are private and state lands and is where all ground-disturbing activities are planned to be conducted.

CO<sub>2</sub> for the EWS Hub is planned to be captured from emission sources in Colorado, Nebraska, and Wyoming and transported through the Trailblazer pipeline. Trailblazer is an existing 436-mile natural gas pipeline, of which will have 392 miles converted to CO<sub>2</sub> service. Once the CO<sub>2</sub> reaches the terminus of Trailblazer, it will be compressed and transported via pipeline to the EWS Hub injection wells. More than 10 million tons per year of CO<sub>2</sub> can be transported through Trailblazer.<sup>2</sup>

<sup>1</sup> The original estimated acreage of the EWS Hub project was 200,000 acres. The updated acreage was received via letter dated October 7, 2024, from Cody Wagoner, Director, Land-Subsurface & New Ventures, of Tallgrass.

<sup>2</sup> Tallgrass' EWS Hub Unit #1 geologic sequestration unit presentation dated February 11, 2025.

Six injection wells and six monitoring wells are planned for the EWS Hub. The permitted CO<sub>2</sub> storage capacity is more than 100 million metric tons. A 30,000-horsepower compressor station is currently under construction. This compressor station will connect to approximately 28 miles of CO<sub>2</sub> pipeline and will transport the CO<sub>2</sub> to each of the injection wells.<sup>3</sup>

### **Background: Geologic Sequestration of Carbon Dioxide**

Carbon Capture, Utilization & Storage (CCUS) refers to the process in which CO<sub>2</sub> is captured from industrial processes and either utilized by turning the CO<sub>2</sub> into a new product or stored by injecting the CO<sub>2</sub> into a storage site, usually underground in a geologic formation.

The US EPA regulations group Underground Injection Control (UIC) wells into six classes. Class VI wells refer to the type of wells in which CO<sub>2</sub> is captured from industrial processes, direct air capture, or other sources and stored by injecting the CO<sub>2</sub> into a storage site, usually underground in a geologic formation.

The United States Environmental Protection Agency (US EPA) is authorized by the Safe Drinking Water Act (SDWA) to develop requirements and provisions for the UIC Program. This program regulates the injection of fluids (such as water, wastewater, brines from oil and gas production, and CO<sub>2</sub>) into the subsurface for the purposes of storage or disposal. The main goal of the UIC Program is the protection of Underground Sources of Drinking Water (USDW) such as aquifers or parts of aquifers that supply a public water system or contain a sufficient quantity of groundwater to supply a public water system now or in the future. Primary enforcement authority, often called primacy, refers to state, territory or tribal responsibilities associated with implementing US EPA approved UIC programs. Primacy programs are established under Section 1422 and 1425 of the SDWA. Wyoming received primacy over Class I through V wells in 1983. The Wyoming Department of Environmental Quality (WDEQ) received primacy over Class VI wells on September 3, 2020. Wyoming is one of four states to have received primacy for implementing the Class VI program; the others are North Dakota, Louisiana, and West Virginia.

The WDEQ's Class VI UIC Program regulates the subsurface injection of nonhazardous waste fluids, subsurface storage of liquid and gaseous fluids, and mineral solution mining to protect current and future uses of USDW. A USDW site is defined as an aquifer which currently, or could, supply a public water system with drinking water.

Prior to constructing or operating a Class VI well, a party must first obtain a well-specific permit from the WDEQ. Information about the WDEQ Class VI well permit application process can be found at <https://deq.wyoming.gov/water-quality/groundwater/uic/class-vi/>. The long-term underground storage is called geologic sequestration (GS). GS, as part of CCUS, is a technology that can be used to reduce CO<sub>2</sub> concentrations in the atmosphere and mitigate climate change. Possible sources of CO<sub>2</sub> for GS include CO<sub>2</sub> captured from point source emissions, such as from an industrial facility or energy production, as well as CO<sub>2</sub> captured directly from the atmosphere.

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<sup>3</sup> Tallgrass' EWS Hub Unit #1 geologic sequestration unit presentation dated February 11, 2025.

The Class VI well requirements are designed to protect public health and USDW from the unique nature of CO<sub>2</sub> injection for GS, including the:

- Relative buoyancy of CO<sub>2</sub>
- Subsurface mobility
- Corrosivity in the presence of water
- Large injection volumes

Requirements include:

- Site characterization requirements to ensure the geology in the project area can receive and contain the CO<sub>2</sub> within the zone where it will be injected, including that the area is free of faults and fractures and that induced seismicity is not a concern.
- Requirements to predict the extent of the injected CO<sub>2</sub> plume and associated pressure front for the project using computational modeling, and to identify and address any deficiencies of existing wells within the Area of Review through corrective action. The Area of Review includes the area where the injected plume and its associated pressure front may impact pore fluids.
- Well construction requirements to ensure the Class VI injection well is constructed in a manner that will prevent any CO<sub>2</sub> from leaking outside of the injection zone. Class VI injection wells and in-zone monitoring wells are designed for the life of the project. Owners or operators must demonstrate that the well materials, including casing and cement, are corrosion resistant and compatible with the conditions and fluids to which they may be exposed.
- Testing and monitoring requirements to monitor the integrity of the injection well, groundwater quality, and the movement of the CO<sub>2</sub> plume and pressure front throughout the life of the project, including after CO<sub>2</sub> injection has ended, until the permitting authority determines no additional monitoring is needed to ensure that the GS project does not pose an endangerment to USDWs.
- Operating requirements to ensure the injection activity is appropriate to the well's construction and geologic characteristics so that it will not endanger USDWs or human health.
- Requirements to plug the injection well in a manner that will not allow fluid movement that endangers USDWs.
- Requirements for the operator to establish and maintain financial instruments sufficient to cover the cost of corrective action, plugging the injection well, post-injection site care, and emergency and remedial response for the GS project (i.e., financial responsibility).
- Requirements to develop and maintain a site-specific emergency and remedial response plan.
- Requirements for the Class VI well owner or operator to report all testing and monitoring results to the permitting authority to ensure the project is operating in compliance with all permit and regulatory requirements.

The issuance of a Class VI permit to construct authorizes an applicant to construct a Class VI injection well. The WDEQ has the opportunity to review the results of the well construction (including an inspection of the well) before authorizing an applicant to inject CO<sub>2</sub> in the subsurface pore space though a second permitting action, the permit to inject and operate.

Likewise, the public and the BLM will have the opportunity to review the permits for each Class VI well through the WDEQ public comment process. This robust administrative process ensures a careful review of the proposed CO<sub>2</sub> sequestration project by the WDEQ and a thorough vetting by the stakeholders and the public.

### **Purpose and Need**

The purpose of the federal action is to respond to the proponent's application for a ROW to store captured CO<sub>2</sub> in the federal pore space underneath 480 acres of BLM surface.

The need for the action is established by the BLM's authority under Title V of the Federal Land Policy and Management Act of 1976 (as amended), 43 CFR 2800 regulations ("Rights-of-Way under the Federal Land Policy and Management Act").

### **Decision to be Made**

The BLM's authorized officer (AO) will decide whether to grant the ROW to Tallgrass and if so, under what terms and conditions. Stipulations, other restrictions and required mitigation would be administered once the ROW grant approval has been determined.

### **Conformance with Land Use Plan**

The Proposed Action is subject to the Record of Decision (ROD) and Approved Rawlins Resource Management Plan (RMP), approved on December 24, 2008, as amended. The RMP has been reviewed to determine if the Proposed Action conforms to the land use plan as required by 43 CFR 1610.5-3. The Proposed Action is in conformance with the applicable RMP, because it is specifically provided for in the following RMP decision(s):

Section 2.3.5 Lands and Realty (page 2-16),

Management Goals: 1. Manage the acquisition, disposal, withdrawal, and use of public lands to meet the needs of internal and external customers (Appendices 6, 7, and 34).

Management Objectives: 5. Manage public lands to be consistent with goals and objectives of other resource programs.

### **Relationship to Statutes, Regulations, or Other Plans**

This EA was prepared in accordance with National Environmental Policy Act of 1969 (NEPA), as amended, procedures and complies with all applicable laws and regulations subsequently passed, including the U.S. Department of Interior Regulations for Implementation of NEPA (43 CFR Part 46); the EA also follows DOI and BLM policies, including the USDI BLM NEPA Handbook, H-1790-1; and the Department Manual Part 516.

This EA was also prepared in accordance with the following laws: Endangered Species Act, as amended (ESA); Federal Land Policy and Management Act (FLPMA 1976) (43 U.S. Code Chapter 35); Title 54 U.S.C. § 300101, et seq., commonly known as the National Historic Preservation Act of 1966, as amended (NHPA); and the Clean Air Act of 1970, as amended.

## **Scoping, Public Involvement, and Issue Identification**

### **Internal Scoping**

The BLM interdisciplinary team (IDT) members formulated potential issues (see Appendix A below) with the associated Proposed Action during internal scoping which was conducted during December 2022.

### **External Scoping**

External scoping was conducted for this project on ePlanning from September 6, 2023, to December 15, 2023. Scoping included two alternatives; 1) Proposed Action, and 2) No Action Alternative. Press releases were sent to statewide media, posted online and on the BLMs social media. The BLM sent informational letters about the project to 53 various state and local governments, interested parties and native American Tribes requesting comments during the scoping period. The BLM received 11 comments. A summary of the scoping comments and responses are in Appendix E.

### **Environmental Assessment Public Review and Comment**

Once the WDEQ-WQD has completed their review of the final draft EA, the BLM will release the EA for a 15-day public review and comment period. Adjustments will be made to the EA, if necessary, based on the public comments.

Project NEPA compliance documentation can be found on the BLM's ePlanning register at:  
<https://eplanning.blm.gov/eplanning-ui/project/2026483/510>

### **Cooperating Agencies**

The BLM is working with the Wyoming Department of Environmental Quality's Water Quality Division (WDEQ-WQD) for review and concurrence with the EA. The WDEQ-WQD submitted scoping comments to the BLM on October 10, 2023. The WDEQ-WQD reviewed the draft EA and submitted comments to the BLM, via letter dated July 24, 2024. The WDEQ-WQD's is the ultimate permitting agency for the Class VI injection wells but requested to be a cooperator to ensure there are no cross-jurisdictional conflicts between the agencies.

### **Issues Identified for Analysis**

Issue 1: How would the subsurface storage of captured CO<sub>2</sub> affect surface resources or groundwater resources?

### **Issues not Analyzed in Detail**

The issues not analyzed in detail but were considered by the interdisciplinary team are documented in the Interdisciplinary Team Checklist (Appendix A). The checklist indicates which resources of concern are either not present in the project area (listed as "NP") or would not be impacted to a degree that requires detailed analysis (listed as "NI"). Any potential impacts to resources that are listed as "NI" in the checklist would not have differing effects whether the ROW was approved by the BLM. The BLM parcels associated with this project are near or on

the edge of the project boundary (labeled as AoR (Area of Review) in Map 1). Due to the proximity of these parcels to the AoR, only one out of the six proposed injection wells (the Cypress I-1) would need to have reduced CO<sub>2</sub> volumes injected to not occupy the BLM-administered federal pore space. The Cypress I-1 is the Class VI well that is planned to be utilized to inject CO<sub>2</sub> that would occupy the BLM-administered pore space.

## **Chapter 2: Proposed Action and Alternatives**

### **Proposed Action**

The proposed ROW is for 480 acres of pore space beneath 480 surface acres of federal public lands in Laramie County, Wyoming for the permanent GS of CO<sub>2</sub>. The BLM's ROW authorization would only provide for use of the subsurface BLM-administered federal pore space within the project area and not State of Wyoming or private lands. The BLM's pore space ROW grant would not authorize surface-disturbing activities or surface occupancy of BLM-administered public lands.

Accordingly, the Proposed Action does not include any use of BLM-administered public lands for related surface infrastructure (e.g., access roads, well pads, pipelines, etc.). These types of surface infrastructure are not currently proposed on BLM-administered public lands. All related surface infrastructure is proposed entirely on non-federal lands. The BLM does not authorize or regulate use of non-federal lands, and the BLM's ROW grant would not authorize or restrict use of the non-federal lands in the project area by the non-federal landowners (or anyone granted the lawful right by the landowner to use their lands).

The Proposed Action includes the terms and conditions identified in Appendix D including a stipulation that would require the ROW grant holder to seek and obtain authorization from the BLM under a Notice to Proceed (NTP) before using the BLM-administered federal pore space (e.g., before injection operations resulted in the CO<sub>2</sub> plume encroaching upon BLM-administered federal pore space). The BLM will not issue an NTP until the ROW grant holder obtains an authorization to inject from the WDEQ-WQD<sup>4</sup> under W.S. § 35-11-313 and a unitization order from the Wyoming Oil and Gas Conservation Commission (WOGCC) under W.S. § 35-11-314 to -317.

In March 2023 and December 2023, Tallgrass submitted a total of six Class VI UIC well applications to the WDEQ-WQD. These six Class VI wells are all within the proposed EWS Hub project area. Please refer to WDEQ-WQD website<sup>5</sup>, including the application for the Cypress I-1 well that is intended to use the BLM-administered federal pore space in the proposed ROW application. The WDEQ-WQD issued Permits to Construct in September and October 2024 for the six injection wells. The Permits to Construct solely authorized construction and preinjection testing activities for each applicable well. Once construction and preinjection testing activities

<sup>4</sup> On October 9, 2020, the State of Wyoming was granted primacy by the Environmental Protection Agency to administer the Class VI Underground Injection Control program in Wyoming (see 85 FR 64053-64056, October 9, 2020).

<sup>5</sup> <https://deq.wyoming.gov/water-quality/groundwater/uic/class-vi/>

have been completed, Tallgrass will apply for permit modifications for authorization to inject and operate the injection wells.

While the use of Class VI wells for permanent GS is relatively new in Wyoming, operations involving the subsurface injection of CO<sub>2</sub> to deep geologic formations is not novel, and the nature of operations is expected to be like oil & gas exploration and production operations in many regards, particularly those associated with injection of CO<sub>2</sub> for enhanced oil recovery.

### **Alternative 1 - No Action Alternative**

Under the No Action Alternative, the BLM would reject the proposal as submitted by Tallgrass therefore denying Tallgrass' proposal to use BLM-administered federal pore space for permanent GS of carbon dioxide.<sup>6</sup> Tallgrass would be unable to permanently sequester CO<sub>2</sub> in the BLM-administered federal pore space, though Tallgrass could use the non-federal pore space in the project and reduce the amount of CO<sub>2</sub> injected into the Cypress I-1 well.

### **Alternatives Considered but Eliminated from Detailed Analysis**

The BLM IDT, in review of the Proposed Action (as modified during internal scoping, and subsequent review), did not identify unresolved resource conflicts that would necessitate development of additional action alternatives.

## **Chapter 3: Affected Environment and Environmental Impacts**

This section describes the existing environment that would be affected by the No Action Alternative or the Proposed Action and discloses the potential impacts of these alternatives. Resources which are not present or are not affected by the Proposed Action or alternatives, as determined during internal scoping, are documented on the IDT checklist (Appendix A) and resource issues carried forward are identified in Section 1.2.

The Environmental Effects section of this chapter discloses the impacts that the Proposed Action and No Action Alternatives are likely to have when considered in the context of impacts associated with past, present, and reasonably foreseeable future actions that have occurred, or are likely to occur, in the project area.

Reasonably foreseeable future actions (RFFAs) include those actions for which there are existing decisions, funding, formal proposals, or which are highly probable, based on known opportunities or trends. The only actions for the project area, which are highly probable, are continued livestock grazing, and range improvement projects. There are no proposals for new infrastructure at this time.

<sup>6</sup> The BLM has issued policy on the use of ROWs for carbon capture, utilization, and storage projects located on BLM-administered public lands (see BLM Instruction Memorandum 2022-041, "National Policy for the Right-of-Way Authorizations Necessary for Site Characterization, Capture, Transportation, Injection, and Permanent Geologic Sequestration of Carbon Dioxide in Connection with Carbon Sequestration Projects," June 8, 2022). Available at: <https://www.blm.gov/policy/im-2022-041>

**Issue 1: How would the subsurface storage of captured CO<sub>2</sub> affect surface resources or groundwater resources?*****Affected Environment***

The 480 acres is in Laramie County approximately eight miles south of Pine Bluffs, Wyoming. Ranch operations and residential housing are present in the surrounding areas. The federal land in this project generally consists of rolling hills which are a combination of grassland and coniferous trees. No BLM managed surface development is authorized or planned, so the only affects for the BLM ROW are subsurface.

***Environmental Effects******No Action Alternative***

The proposed ROW application would be denied. Access to the 480 surface acres would not be granted. Therefore, the subsurface storage of captured CO<sub>2</sub> would not occur in Federal pore space. The proposed project could continue on non-federal pore space. This would result in no change or disturbances on BLM surface lands and resources.

***Proposed Action***

The proposed ROW would be for subsurface access allowing the subsurface storage of captured CO<sub>2</sub>. There would be no ground disturbance or surface occupancy authorized, therefore there would be no direct effect on surface resources from those activities. Surface resources and groundwater resources within the proposed ROW would not be affected by the subsurface storage of captured CO<sub>2</sub>, barring any leakage from the injection formation.

CO<sub>2</sub> is planned to be injected into the Lyons sandstone formation in the EWS Hub. The top of the Lyons in the project area ranges from approximately 9000 feet to 9600 feet below ground level and varies in thickness from approximately 54 feet to 66 feet<sup>7</sup>.

The Goose Egg formation overlays the Lyons and will act as a “cap” to prevent CO<sub>2</sub> from leaking above the Lyons. The Goose Egg consists of interbedded shales and siltstones, thin limestones, and gypsums and varies in thickness from approximately 200 feet to 250 feet in the project area.

Below the Lyons is the Satanka shale formation. The Satanka acts as another confining formation to prevent CO<sub>2</sub> from leaking beneath the Lyons. The thickness of the Satanka is greater than 100 feet throughout the EWS Hub project area<sup>8</sup>.

Adjacent to each injection well, will be a monitor well. The monitor wells will monitor temperature, pressure and seismic activity. These wells are planned to be in continuous operation during the life of the project. If any abnormal temperatures, pressures or seismic activities are detected, injection operations will cease. The injection wells will also utilize continuous pressure and seismic monitoring to ensure injection operations proceed safely.

<sup>7</sup> Tallgrass’ EWS Hub Unit #1 geologic sequestration unit presentation dated February 11, 2025.

<sup>8</sup> Tallgrass’ EWS Hub Unit #1 geologic sequestration unit presentation dated February 11, 2025.

The WDEQ-WQD notes that CO<sub>2</sub> leakage out of the Lyons formation would be a violation of Wyoming Statute, Water Quality Rules Chapter 24, and conditions of the permit.

The ROW application does not propose any surface- disturbing activities or occupancy. If the proponent decides in the future to propose surface disturbing activities on BLM-administered public lands, a ROW application would need to be submitted and approved by the AO prior to any such surface disturbing activities occurring.

#### **Chapter 4: Tribes, Individual, Organization, or Agencies Consulted**

There were 53 public scoping comment letters sent out to tribes, individuals, organizations, and other local, state and federal agencies on September 6, 2023, and December 15, 2023. Public scoping was also posted in ePlanning for public comments. A total of 11 comments were received. The comment table is Appendix E of this document.

#### **Chapter 5: List of Preparers**

<u>Name</u>	<u>Title</u>	<u>Resource/Agency Represented</u>
Bonnie Bruce	Sup. Archaeologist	Archaeology
Natasha Keierleber	Archaeologist	Archaeology
Mitch Lane	Sup. PET	Geology
Maureen Hartshorn	Forester	Forestry
Anna Rothleutner	Natural Resource Specialist	NRS, Soils, Weeds
Ryan Shively	Sup. Natural Resource	NRS, Soils, Weeds
Michael Murry	Range Specialist	Rangeland
Tim Novotny	Field Manager	Authorized Officer
Andrew Kauppila	AFM, M&L	BLM Project Manager
Jacob Stout	Hydrologist	Hydrology
Craig Thomas	Archaeologist	Paleontology
Eddie Vandenburg	WH&B Specialist	Wild Horse and Burros
Kirk Warrington	P&ES	NEPA
Andrew Williams	Outdoor Recreation	Recreation, WSAs

#### **Chapter 6: References**

Bureau of Land Management 2008. Record of Decision and Approved Rawlins Resource Management Plan, Rawlins Field Office, Rawlins, WY, as amended. Approved: December 24, 2008 (RMP).

Bureau of Land Management 2015. Record of Decision and Approved Resource Management Plan Amendments for the Rocky Mountain Region including the Greater Sage-Grouse  
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Sub-Regions of: Lewiston, North Dakota, Northwest Colorado and Wyoming and the Approved Resource Management Plans for Billings, Buffalo, Cody, HiLine, Miles City, Pompeys Pillar National Monument, South Dakota and Worland, as amended. (ARMPAs) Approved: September 21, 2015.

Bureau of Land Management Reservoir Management Group 2023. Geologic Assessment of Both the Porosity Value and Federal Minerals Potential of the Federal Estate, Tallgrass Proposed Geologic Carbon Sequestration Facility Project, SE Wyoming, Laramie County.

State of Wyoming, Department of Environmental Quality n.d. Underground Injection Control, Class VI. <https://deq.wyoming.gov/water-quality/groundwater/uic/>

## Appendix A: Interdisciplinary Team Checklist

NEPA Number: DOI-BLM-WY-D030-2023-0071-EA

DETERMINATION OF STAFF: (Choose one of the following abbreviated options for the left column)

NP = not present in the area impacted by the proposed or alternative actions

NI = present, but not affected to a degree that detailed analysis is required

PI = present with potential for significant impact analyzed in detail in the EA; or  
identified in a Determination of NEPA Adequacy (DNA) as requiring further analysis

NC = (DNAs only) actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section C of the DNA form.

Table 1: Resources and issues considered (includes supplemental authorities Appendix 1 H-1790-1)

Determination	Resource	Rationale for Determination	Resource Specialist
NI	Air Quality <sup>9</sup>	The proposed ROW would not impact air quality since no surface disturbance, construction, or injection of CO <sub>2</sub> is occurring as part of this ROW approval.	R. Jacoby
NP	ACECs	There are no ACECs associated with the pore space.	A. Williams
NI	Cultural Resources	No surface disturbance or occupation is authorized, and cultural resources will not be affected by the utilization of the pore space.	B. Bruce/ N. Keierleber
NI	Fish and Wildlife Excluding USFWS Designated Species	BLM Sensitive Species are either not present or would not be measurably affected by the project since no surface disturbance, construction, or injection of CO <sub>2</sub> is occurring as part of this ROW approval.	A. Bridger
NP	Floodplains	Not Present	J. Stout
NI	Greenhouse Gas Emissions	The applicant's goal includes permanent GS of CO <sub>2</sub> that would otherwise be vented or released to the atmosphere. In that sense, this would result in a net reduction of CO <sub>2</sub> emissions.	R. Jacoby

<sup>9</sup> All required permits will be obtained from the respective WDEQ division.

<b>Determination</b>	<b>Resource</b>	<b>Rationale for Determination</b>	<b>Resource Specialist</b>
NI	Hydrologic Conditions (stormwater) <sup>10</sup>	The proposed ROW is entirely subsurface and therefore would have no effect on Hydrologic Conditions (stormwater).	J. Stout
NI	Invasive Plants/Noxious Weeds	The proposed ROW is entirely subsurface and therefore would have no effect on the spread of Invasive Plants/Noxious Weeds.	A. Rothleutner/ R. Shively
NP	Lands With Wilderness Characteristics (LWC)	There are no Lands with Wilderness Characteristics in the project area.	A. Williams
NI	Lands/Access	The public does not have access to the public lands. Therefore, the proposed ROW will have no effect on public Lands/Access.	T. Smith/ C. Fiedor
NI	Livestock Grazing and Rangeland Health Standards	The proposed ROW is entirely subsurface and therefore would have no effect on Livestock Grazing and the achievement of Standards for Healthy Rangelands.	M. Murray
NI	Migratory Birds	The proposed ROW is entirely subsurface and therefore would have no effect on Migratory Birds.	T. Bridger
NI	Mineral Resources/ Energy Production	There is little to no Federal Minerals that occupy the pore space of the targeted injection formations. The BLM Wyoming Reservoir Management Group concluded that the target injection formation is suitable for permanent GS.	A. Rothleutner/ R. Shively
NP	Native American Religious Concerns	The proposed ROW is entirely subsurface and therefore would have no effect on culturally sensitive sites that would have Native American Religious Concerns.	B. Bruce/ N. Keierleber
NI	Paleontology/ Geology	The proposed ROW is entirely subsurface and therefore would have no effect on Paleontology/Geology, barring any leakage from the Lyons formation.	C. Thomas

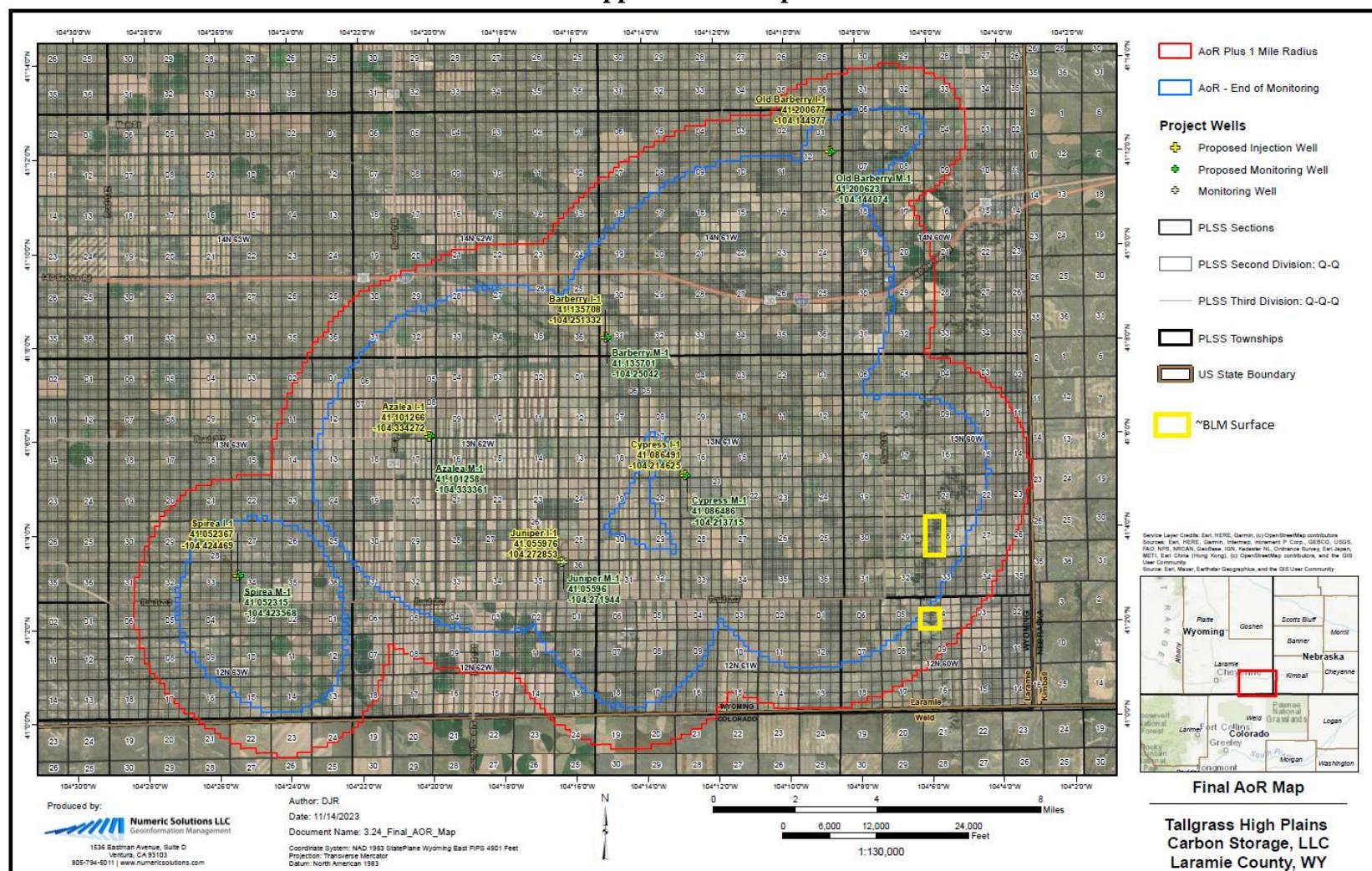
10 All required permits will be obtained from the respective WDEQ division.

<b>Determination</b>	<b>Resource</b>	<b>Rationale for Determination</b>	<b>Resource Specialist</b>
NI	Recreation	The public does not have access to the pore space. Therefore, the proposed ROW will have no effect on recreation.	A. Williams
NI	Socioeconomics	<i>This resource will not be further analyzed.</i> The Proposed Action and No Action Alternative will have minimal differences in effect on the local economies because the no action is only a small decrease in pore space for the project and may not amount to less injection wells and infrastructure.	Chris Toalson
NI	Soils	The proposed ROW is entirely subsurface and therefore would have no effect on the preservation of the soils.	A. Rothleutner/ R. Shively
NP	Threatened, Endangered or Candidate Animal Species	There are no known Threatened, Endangered or Candidate Animal Species in the project area.	T. Bridger
NP	Threatened, Endangered or Candidate Plant Species	There are no known, Endangered or Candidate Plant Species in the project area.	T. Bridger
NI	Vegetation Excluding USFWS Designated Species	The proposed ROW is entirely subsurface and therefore would have no effect on Vegetation Excluding USFWS Designated Species.	M. Murry
NI	Visual Resources	The proposed ROW is entirely subsurface and therefore would be in conformance with the Visual Resources Class.	A. Williams
NI	Wastes (hazardous or solid) <sup>11</sup>	No solid or hazardous wastes will be located on BLM lands.	T. Smith/ C. Fiedor
NI	Waters of the U.S. <sup>11</sup>	The proposed ROW is entirely subsurface and therefore would have no effect on Waters of the U.S	J. Stout

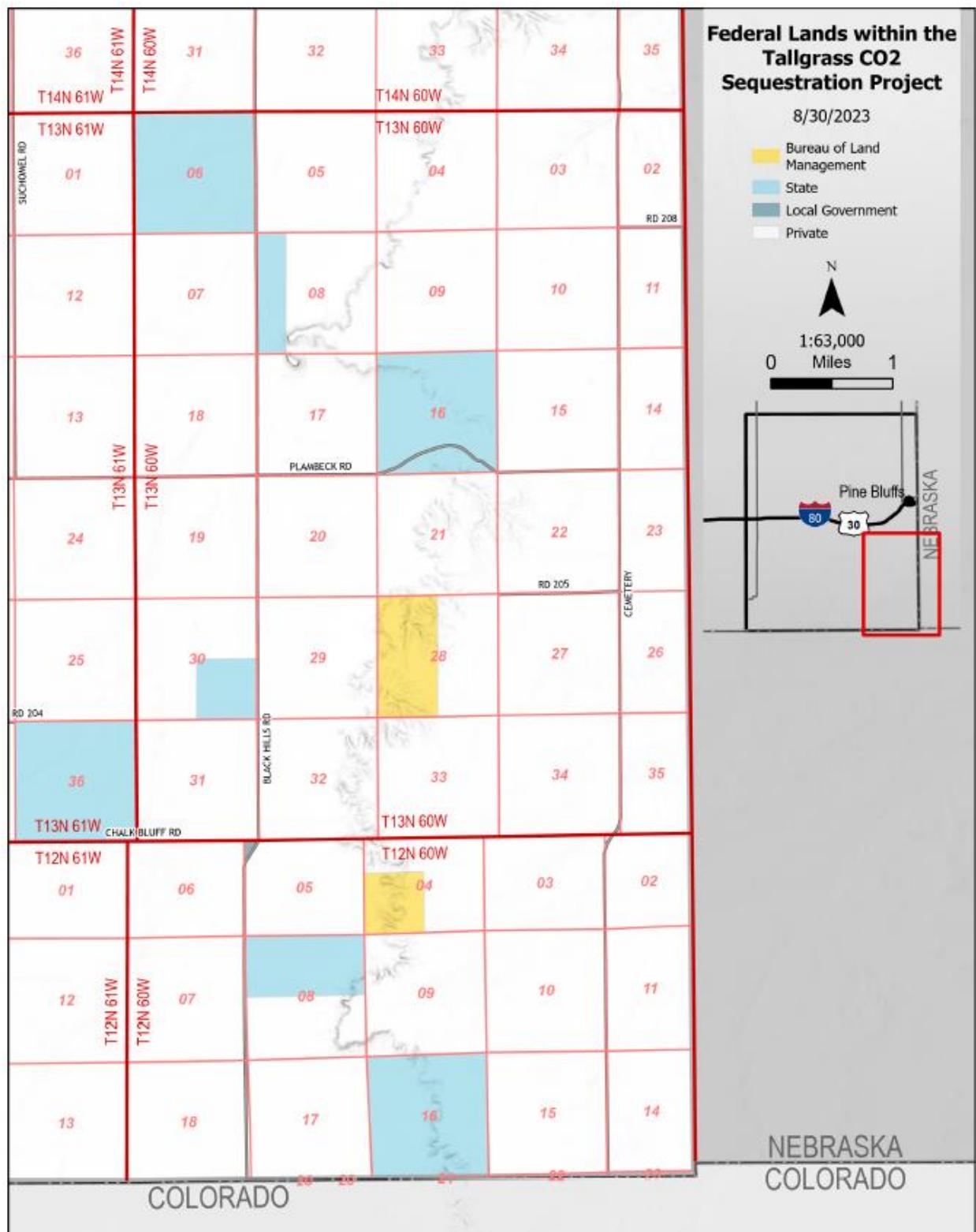
11 All required permits will be obtained from the respective WDEQ division.

<b>Determination</b>	<b>Resource</b>	<b>Rationale for Determination</b>	<b>Resource Specialist</b>
NI	Water Resources/Quality ground) <sup>11</sup>	The BLM will provide for compliance with applicable water quality standards by requiring the applicant obtain the necessary authorizations from the State of Wyoming, including permitting under the Wyoming Department of Environmental Quality's Class VI Underground Injection Control program. The State of Wyoming has been delegated primacy to regulate Class VI UIC wells in Wyoming by the Environmental Protection Agency (see 85 FR 64053-64056, October 9, 2020).	J. Stout
NI	Water Resources/Quality (surface) <sup>11</sup>	The proposed ROW is entirely subsurface and therefore would have no effect on Water Resources/Quality (surface).	J. Stout
NP	Wetlands/Riparian Zones	Not Present	J. Stout
NP	Wild and Scenic Rivers	Not Present	J. Stout
NP	Wild Horses	Not Present	E. Vandenberg
NP	Wilderness/WSA	Not Present	T. Bridger
NI	Woodland/Forestry	The proposed ROW is entirely subsurface and therefore would have no effect on Woodland/Forestry.	M. Hartshorn

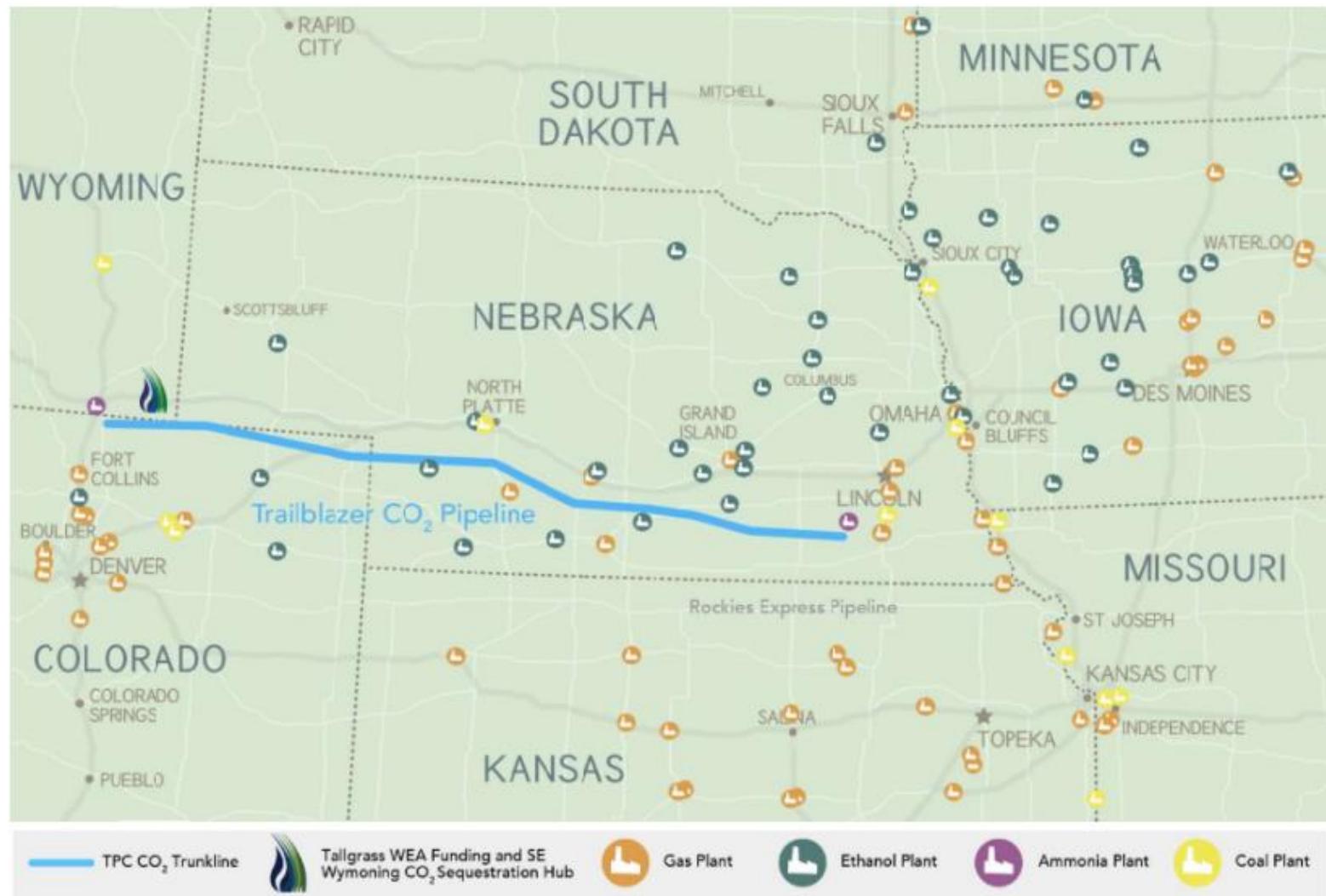
## Appendix B: Maps



Map 1



**Map 2**



Map 3<sup>12</sup>

12 Tallgrass' EWS Hub Unit #1 geologic sequestration unit presentation dated February 11, 2025.

## **Appendix C: Legal Land Description of the Proposed Project**

Sixth Principal Meridian, Wyoming.

T. 12 N., R. 60 W.,

sec. 4, SW1/4.

T. 13 N., R. 60 W.,

sec. 28, W1/2.

## Appendix D: Proposed Right-of-Way Grant Stipulations

### Standard

1. The Holder(s) shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the Holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, *et seq.*) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
2. The Holder is responsible for informing all persons associated with this project that they shall be subject to prosecution for intentionally damaging, altering, excavating, or removing any archeological, historical, or vertebrate fossil objects or sites. If archeological, historical, or vertebrate fossil materials are discovered, the Holder is to suspend all operations that further disturb such materials immediately and contact the Authorized Officer. Operations are not to resume until written authorization to proceed is issued by the Authorized Officer (BLM 8100.02.E; Title 16 U.S.C. § 470aa-470mm).

### Pore Space Stipulations

1. The Holder must avoid unreasonable interference with operations on existing mineral leases authorized under the Mineral Leasing Act of 1920 (MLA), as amended, by preventing unnecessary or unreasonable damage or material interference to surface and subsurface authorized uses and economically recoverable mineral resources.

### Notice to Proceed (NTP)

1. The holder shall not initiate any injection activities under the right-of-way grant without the prior written authorization of the BLM authorized officer. Such authorization shall be a written notice to proceed issued by the BLM authorized officer. Any notice to proceed shall authorize injection or use of the BLM-administered federal pore space only as therein expressly stated and only for the particular location or use therein described.
  - a. The holder must submit the Class VI well authorization(s) to inject and operate from the Wyoming Department of Environmental Quality – Water Quality Division to the BLM authorized officer with their request for BLM approval of the NTP.

2. The authorized officer may suspend or terminate in whole, or in part, any notice to proceed which has been issued when, in his judgment, unforeseen conditions arise which result in the approved terms and conditions being inadequate to protect the public health and safety or to protect the environment.

**Bonding**

1. A bond, acceptable to the authorized officer, shall be furnished by the Holder before a notice to proceed is issued or at such earlier date as may be specified by the authorized officer.

## Appendix E: Public Scoping Comments

No.	Comment/ Reference/Issue	Response	Whom
<a href="#">TS-1-500349525</a>	Supports the project	Thank you for your comment.	Private Individual – No name provided
<a href="#">TS-1-500351758</a>	Supports the project	Thank you for your comment.	“American”
<a href="#">TS-1-500352034</a>	Supports the project	Thank you for your comment.	Affie Ellis, Wyoming State Senator
<a href="#">TS-1-500372321</a>	Supports the project	Thank you for your comment.	Budd Falen – Wyoming Nebraska Pore Space Owners Association
<a href="#">TS-1-500372463</a>	Supports the project	Thank you for your comment.	Kathleen Sgamma – Western Energy Alliance
<a href="#">TS-1-500372654</a>	Supports the project	Thank you for your comment.	J. Pete Obermueller – Petroleum Association of Wyoming
<a href="#">TS-1-500372662</a>	Updated the number of Class VI applications that had been received (six total for the EWS Hub) and gave status updates on the applications. Clarified the name of the project Tallgrass is proposing. Request to update geologic formation and verbiage regarding respective WDEQ divisions. Requested copy of the POD, if available. Wanted clarification for the exclusivity of the ROW prior to and after issuance of the NTP from the WDEQ-WQD.	The number of Class VI wells was changed in Chapter 2. Name of EWS Hub was added.	Jennifer Zygmunt – Wyoming DEQ, Water Quality Division Administrator
<a href="#">TS-1-500372783</a>	BLM should evaluate the impacts that the project would have on natural resources, seismicity, climate change, and wildlife and protected species. BLM must also consider a “no action” alternative, as well as disclose and consider the sources of the carbon dioxide at issue. Ultimately, proper analysis of impacts warrants the agency conduct an EIS.	The WDEQ-WDQ has primacy over the approval of the Class VI wells and will be conducting the analysis of those wells and addressing any potential concerns through their approval process. With the BLM pore space only encompassing 0.32% of the EWS Hub project area, the EWS Hub would be able to move forward without the BLM pore space ROW approval.	Center for Biological Diversity
<a href="#">TS-1-500602158</a>	General comments	Thank you for your comment.	Richard Spotts
<a href="#">TS-1-500604755</a>	General comments	Thank you for your comment.	Private Individual
<a href="#">TS-1-500607758</a>	Supports the project while protecting groundwater from leaks or toxic contamination	Thank you for your comment.	Private Individual