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1.0 PURPOSE AND NEED

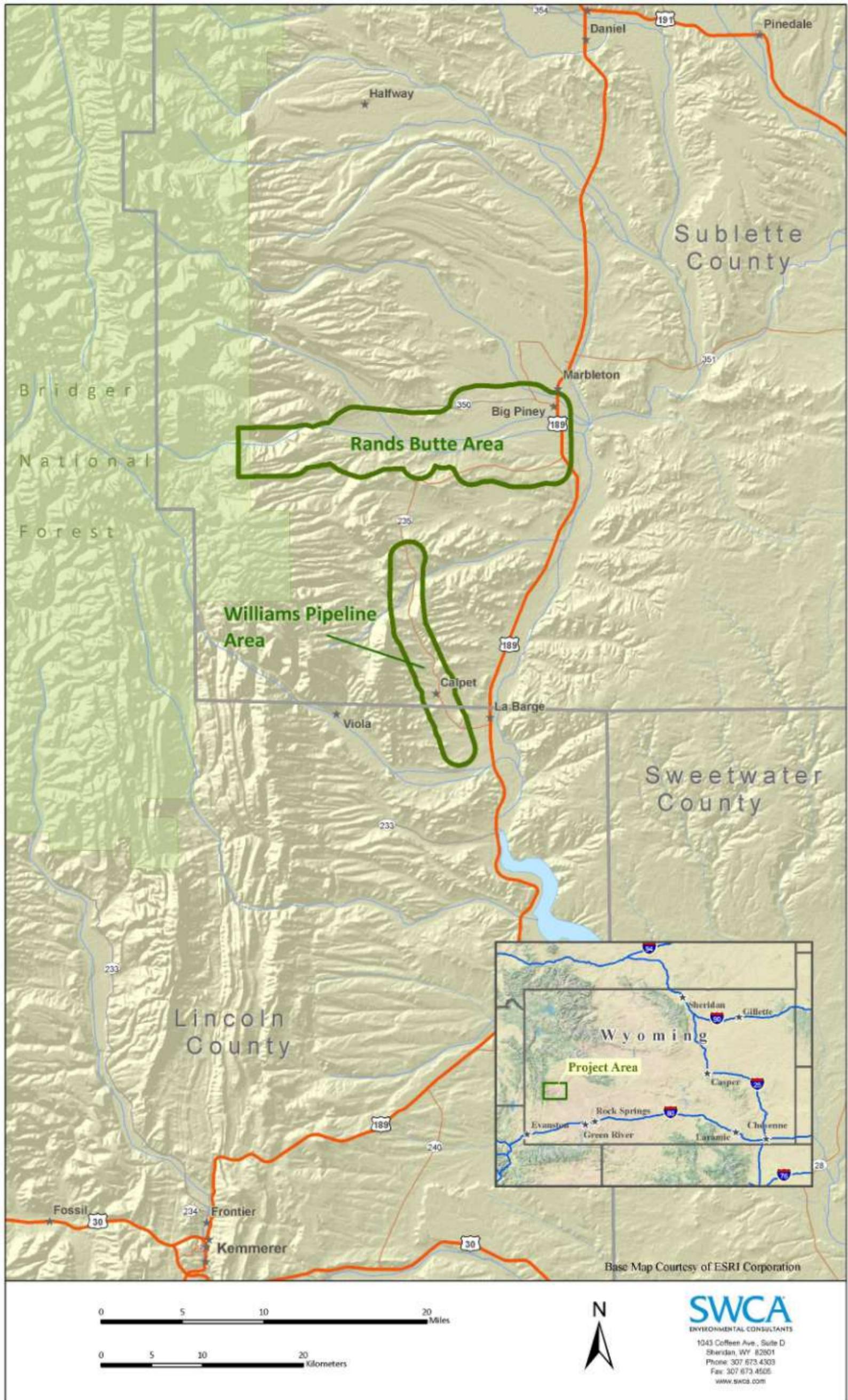
557 1.1 INTRODUCTION

558 Cimarex Energy (Cimarex) has applied to the Bureau of Land Management (BLM) Pinedale
559 Field Office (PFO) for permits to drill on the established Riley Ridge federal unit and for
560 associated rights-of-way (ROWS) lease applications in southwestern Sublette County and
561 portions of Lincoln County, Wyoming (Map 1-1). The proposed gas development project is
562 hereafter referred to as the Rands Butte Gas Development Project (Project), and the project
563 area is referred to as the Rands Butte Project Area (RBPA). The Project is a natural gas and
564 helium gas resource development project involving state, private, and BLM-managed land.
565 The Project would implement and test new technological advances in processing the complex
566 gas mixture composed of hydrogen sulfide (H₂S), carbon dioxide (CO₂), natural gas, and
567 helium from the Madison Formation. The life of the Project is estimated to be 40 years.

568 Cimarex owns several existing gas wells in the Riley Ridge Unit, one of several federal gas
569 development units in the RBPA. In 2008, Cimarex was granted a Wyoming Special Use
570 Lease for development of a new Methane and Helium Recovery Facility (M&HRF) to be
571 located on State of Wyoming land within the RBPA. Cimarex is now seeking approval of
572 BLM Applications for Permit to Drill (APDs) for three additional natural gas wells, an acid
573 gas injection well, and BLM ROW permits in support of the Project.

574 Development of fluid minerals of the Riley Ridge Unit was previously analyzed by the BLM
575 in the Riley Ridge Unit Environmental Impact Statement (EIS) and Record of Decision
576 (ROD) (BLM 1984). The BLM has determined that the 1984 EIS does not adequately
577 evaluate the expansion of hydrocarbon development that is proposed by Cimarex and that
578 additional analysis is required to fully comply with the Council on Environmental Quality
579 (CEQ) guidelines (BLM 2005). BLM Handbook H-1790-1, National Environmental Policy
580 Act (NEPA) Handbook (BLM 2008a), and Department of the Interior (DOI) guidance (516
581 Department Manual 1-7) provide further instructions for compliance with the CEQ
582 regulations. In response to the Cimarex proposal and in compliance with the NEPA and other
583 implementing regulations, the BLM has prepared this Environmental Assessment (EA) to
584 analyze the effects of the Project's proposed development on the natural and human
585 environment in the RBPA to determine if significant effects may occur as a result of the
586 Federal Actions under consideration.

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Map 1-1. Rands Butte Project Area (RBPA) location map with Rands Butte Area and Williams Pipeline Area.

590 This EA has been prepared in accordance with the requirements of the CEQ NEPA
591 regulations and the BLM NEPA Handbook. Cimarex has proposed several Project
592 components that fall within BLM jurisdiction, including three new gas wells; recompletion of
593 an existing federal gas well; raw gas flowlines associated with the new and existing gas wells;
594 an acid gas (H₂S/CO₂) injection well; acid gas (H₂S/CO₂) flowline; a natural gas pipeline; a
595 helium pipeline; an underground fiber optics data transmission cable; underground electrical
596 distribution lines; high-voltage 230-kilovolt (kV) electrical transmission line; market gas
597 pipeline expansion loop; snow control structures; and ambient air monitoring and weather
598 station (AAM&WS).

599 In addition to proposed actions that are within BLM decision jurisdiction, the Project also
600 contains private and state actions that are connected to the BLM action, but are outside of
601 BLM jurisdiction or decision authority. Connected actions are those actions that are “closely
602 related” and “should be discussed” in the same NEPA document (40 CFR 1508.25 [a][1]).
603 These “connected actions” are therefore described and evaluated in the NEPA document.

604 The connected actions that are closely related include; a M&HRF on state land; a produced
605 water injection well and flowline on state land; an HLF on private land; and an equipment
606 staging and storage yard on private land.

607 The NEPA process includes consultation, coordination, and cooperation with other interested
608 parties during EA preparation. The following federal, state, and local agencies have been
609 involved in identifying issues for analysis during scoping:

- 610 • BLM – lead agency
- 611 • U.S. Fish and Wildlife Service (USFWS)
- 612 • Wyoming Department of Environmental Quality (WDEQ)
- 613 • Wyoming Governor’s Planning Office
- 614 • Wyoming State Historic Preservation Office (SHPO)
- 615 • Wyoming Game and Fish Department (WGFD)
- 616 • Wyoming Department of Agriculture
- 617 • Sublette County Commissioners
- 618 • City of Pinedale
- 619 • Town of Big Piney
- 620 • Town of Marbleton

621 Other steps in the NEPA process include the following:

- 622 • Develop reasonable alternatives to the proposed action, including alternatives that may
623 be outside the BLM’s jurisdiction as long as they are practical, feasible, and consistent
624 with existing decisions and statutory and regulatory requirements.

- 625 • Eliminate alternatives that do not require detailed analysis.
- 626 • Gather data and analyze the environmental consequences of the reasonable
627 alternatives.
- 628 • Describe direct, indirect, short-term, long-term, and cumulative environmental
629 consequences and irretrievable commitments of resources that may result from the
630 BLM actions and closely connected actions related to the Project.
- 631 • Disclose to the public any direct, indirect, short-term, and long-term environmental
632 consequences that may result from private and state jurisdictional components of the
633 Project over which the BLM has no decision authority.
- 634 • Disclose to the public the BLM decision regarding the Project.
- 635 • Identify ways that environmental effects can be avoided or reduced through mitigation
636 measures or monitoring.

637 If BLM determines that BLM actions would not result directly, indirectly, or cumulatively to
638 effects with “sufficient context and intensity” to indicate significant impacts, a Finding of No
639 Significant Impacts (FONSI) may be issued along with a Decision Record (40 CFR 1508.13).
640 The FONSI would explain the reasons that an action will not have a significant effect on the
641 human environment.

642 However, if BLM determines through the NEPA analysis that BLM actions would result in
643 significant direct, indirect, or cumulative effects to the context or intensity of relevant issues
644 in the physical, biological, or human environment, then CEQ guidelines indicate that an EIS
645 must be prepared to document any significant adverse impacts.

646 **1.2 OVERVIEW OF THE RBPA**

647 The RBPA is located in southwestern Sublette County, west of Big Piney, and northeastern
648 Lincoln County, Wyoming, as shown in Map 1-1. Two distinct areas are identified for the
649 Project: the Rands Butte Area, which is west of Big Piney, and the Williams Pipeline Area,
650 which is northwest of La Barge, as shown in Map 1-1. U.S. Highway 189 (U.S. 189) defines
651 the eastern extent of the RBPA, and the western extent is approximately 1 mile west of the
652 eastern boundary of the Bridger-Teton National Forest. The towns of Marbleton, Big Piney,
653 and La Barge are the only municipalities near the RBPA.

654 The RBPA includes a total of 73,713 acres of mixed federal, state, and private lands. Of the
655 total area, approximately 36,045 acres (48.9%) are administered by the BLM; 1,909 acres
656 (2.6%) are administered by the U.S. Forest Service (USFS); 3,676 acres (5.0%) are
657 administered by the State of Wyoming; and the remaining 32,083 acres (43.5%) are private
658 land.

659 The RBPA is a portion of the Greater Big Piney-LaBarge (GBPLB) oil and gas development
660 area, with four producing oil and gas fields: Lake Ridge, Riley Ridge, Fogarty, and Tip Top.
661 BLM management of the surface and mineral estate within the RBPA was analyzed in the
662 PFO Resource Management Plan (RMP) EIS and ROD (BLM 2008b). Management

663 Objectives for Oil and Gas identified in Section 2.3.6 of the Pinedale RMP ROD indicate that
664 the federal objective for traditional leasing areas is to make federal lands and mineral estate
665 available for oil and gas leasing and exploration in concert with maintaining the viability of
666 non-oil and gas resource values and land uses (BLM 2008b).

667 **1.3 PURPOSE AND NEED**

668 The Purpose and Need of the Project is to:

- 669 • implement and test new technological advances in processing the complex sour gas
670 mixture found in federal gas reserves within the Madison Formation;
- 671 • help meet industrial need for a steady new federal supply of helium, as identified in
672 the BLM Helium Reserve Program; and
- 673 • allow the leaseholder's right to develop federal natural gas resources to meet the
674 public's continuing economic demands for a dependable and affordable supply of
675 natural gas, while giving due consideration to the protection of other resource values.

676 The primary need for the Project is to implement and test new technological advances in the
677 safe processing of federal gas reserves within the Madison Formation underlying the RBPA.
678 The complex gas mixture of the Madison Formation is composed of H₂S, CO₂, natural gas,
679 helium, and other gases. The Project would test a new cryogenic gas processing technology to
680 separate economical gases from CO₂ and H₂S, and it would also test the process of
681 immediately re-injecting the unwanted acid gases back into the Madison Formation without
682 further processing.

683 The Madison Formation is a large, proven resource for natural gas and helium. Development
684 of this reserve has been hampered by the presence of high concentrations of CO₂, a
685 greenhouse gas, and toxic H₂S gas that are, in combination, difficult and costly to separate,
686 treat, and dispose of safely. The proposed Project has identified new technologies to
687 overcome problems of gas separation and recovery of economic gases. The BLM
688 acknowledges a need for implementing and testing new technologies for development of
689 Madison Formation federal mineral reserves in order to allow development of economic
690 gases, while protecting the public from hazardous gas exposure, reducing land disturbance
691 normally associated with sour gas production, and reducing emissions of air pollutants and
692 greenhouse gases during gas processing and transport.

693 The secondary purpose of the Project is to provide natural gas and helium products to the
694 consumer, as provided for in the PFO RMP. The requested Federal Action is needed to
695 provide access across federal lands managed by the BLM and allow development of minerals
696 within an existing federal unit (Riley Ridge), according to the principles of multiple use,
697 while maintaining the rights and obligations of other users and protecting resources in the
698 RBPA. The need for the proposed Project is established by the BLM's responsibility to allow
699 development of federal minerals by the leaseholder under the Mineral Leasing Act of 1920
700 and to consider a ROW request for legal access under the Federal Land Policy and
701 Management Act of 1976 (FLPMA). The Project is needed to bring a steady new supply of

702 commercial helium and natural gas to market to meet current and future demands for scarce
703 natural resources.

704 Helium, which is currently in short supply nationally and internationally, is an inert gas
705 essential to aerospace and research industries. The world's supply of helium is primarily
706 recovered from natural gas reserves in the federal mineral estate and is managed by the BLM
707 Helium Reserve Program. Helium is a significant component of the gas trapped within the
708 Madison Formation, and the Project would produce approximately 100 million cubic feet per
709 year of industrial helium, in keeping with the mission of the BLM Helium Reserve Program.

710 The proposed development would provide additional natural gas to help meet public need.
711 Drilling and production from the proposed wells have been previously authorized in the Riley
712 Ridge Gas Development EIS and ROD (BLM 1984) and is in conformance with the Pinedale
713 RMP (BLM 2008b). The Project would result in a maximum production of approximately 39
714 million cubic feet per day (MMSCFD) of dehydrated natural gas.

715 Development of existing federal oil and gas leases is an integral part of the PFO RMP
716 management objective for oil and gas, as well as the BLM's oil and gas leasing program
717 under the authority of the Mineral Leasing Act of 1920, as amended; the Mining and Mineral
718 Policy Act of 1970; the FLPMA; the National Materials and Minerals Policy, Research, and
719 Development Act of 1980; and the Federal Onshore Oil and Gas Leasing Reform Act of 1987.
720 National mineral leasing policies recognize the right of leaseholders to develop federal
721 mineral resources to meet the public's continuing economic demands, so long as undue and
722 unnecessary environmental degradation does not occur and due consideration of other
723 resources of value is given.

724 **1.4 BLM ACTIONS, CONNECTED ACTIONS, AND THE DECISION TO BE**
725 **MADE**

726 **1.4.1 BLM Actions**

727 Specific Project components are considered Federal Actions if they are proposed to partially
728 or completely cross or be located on BLM-administered lands, or require a federal permit.
729 Cimarex has proposed that several Project components, described in greater detail in Chapter
730 2 of this document, be authorized as BLM actions, including:

- 731 • three new directionally drilled Madison (sour) gas wells located on federal land;
- 732 • recompletion of an existing federal gas well on private land;
- 733 • raw gas flowlines located partially on federal land;
- 734 • an acid gas (H₂S/CO₂) injection well located on federal land;
- 735 • acid gas (H₂S/CO₂) flowline located partially on federal land;
- 736 • natural gas pipeline located partially on federal land;
- 737 • helium pipeline located partially on federal land;
- 738 • high-voltage 230-kV electrical transmission line located partially on federal land;

- 739 • market gas pipeline located partially on federal land;
- 740 • fiber optics data transmission cable located partially on federal land;
- 741 • electrical distribution lines located partially on federal land;
- 742 • snow control structures to be located partially on federal land;
- 743 • AAM&WS located on federal land; and
- 744 • a 69-kV transmission line that starts on, and crosses, federal land before entering
- 745 private land and connecting an existing substation with the HLF.

746 BLM actions also extend to a recent permit to drill a single well bore into the Madison
747 Formation for purposes of obtaining additional data. The intent of this initial well bore is to
748 collect additional formation structure and pressure data to better refine the formation's
749 capability for re-injection of H₂S/CO₂ gasses in support of the NEPA analysis and the
750 Wyoming Oil and Gas Conservation Commission (WOGCC) injection well permitting
751 processes. BLM approved this permit in 2008, and the resulting test well will be considered in
752 the current NEPA document.

753 No new roads or drilling pads would be constructed for the proposed Project. The Project
754 would use existing upgraded and two-track roads for access to the proposed pipeline and
755 overhead transmission line ROWs, wells, and other facilities.

756 **1.4.2 Connected Actions**

757 Connected actions are those actions that are "closely related" and "should be discussed" in the
758 same NEPA document (40 CFR 1508.25 [a][1]). In addition to components listed above that
759 are completely within BLM decision jurisdiction, the proposed Project also contains
760 interdependent parts of the larger action that are private and state actions that are not within
761 BLM jurisdiction or decision authority. These "connected actions" are also considered and
762 evaluated in the NEPA document. Guidance contained in the BLM NEPA Handbook
763 indicates that if the non-Federal Action cannot be prevented by BLM decision-making and its
764 effects cannot be modified by BLM decision-making, the effects of the non-Federal action
765 may still need to be analyzed in the cumulative effects analysis for BLM Action, if they have
766 a cumulative effect together with the effects of the BLM action (BLM 2008a, Section 6.8.3).

767 The Project connected actions which are outside of BLM jurisdiction to decide, modify, or
768 affect, include:

- 769 • a privately owned M&HRF on state land;
- 770 • a produced water injection well and associated flowline on state land;
- 771 • a privately owned HLF on private land; and
- 772 • an equipment staging and storage yard on private land.

773 The connected actions are also described in greater detail in Chapter 2. Although these
774 connected actions can proceed without federal authorization, these private and state activities
775 are included in this NEPA analysis for purposes of disclosure of any potential impacts to the

776 public, either separately or in combination with BLM actions, or as part of cumulative
777 impacts from existing and reasonable and foreseeable future activity in the cumulative impact
778 analysis area (CIAA).

779 **1.4.3 Decision to be Made**

780 The decision to be made by the BLM is for the approval, modification, or denial of Project
781 components that are within the BLM's jurisdiction. The BLM has decision jurisdiction over
782 facilities that are closely interconnected and interrelated actions that are partially located on
783 federal land, as in the case of federal pipelines that are primarily located on federal land, but
784 cross private or state land.

785 The BLM has no decision jurisdiction over the connected actions and facilities under
786 consideration for development on State of Wyoming or private lands. As such, these non-
787 Federal Actions will be considered in the NEPA analysis to fully evaluate and disclose
788 potential impacts from the entire proposed Project and potential cumulative effects from these
789 interdependent connected actions, along with other reasonable and foreseeable future federal
790 and non-Federal actions in the general RBPA.

791 If, after evaluating and disclosing the impacts of BLM actions and impacts of connected
792 private and state actions, BLM determines that BLM actions would not result directly,
793 indirectly, or cumulatively in effects with "sufficient context and intensity" to indicate
794 significant impacts, a FONSI may be issued along with a Decision Record. The FONSI would
795 explain the reasons that an action will not have a significant effect on the human environment.

796 However, if BLM determines through the NEPA analysis that BLM actions would result in
797 significant direct, indirect, or cumulative effects to the context or intensity of relevant issues
798 in the physical, biological, or human environment, then CEQ guidelines indicate that an EIS
799 must be prepared to document any significant adverse impacts.

800 **1.5 FEDERAL AND OTHER RELEVANT REGULATIONS AND PERMITS**

801 The Federal Action under consideration includes oil and gas drilling permits, as well as ROW
802 grants for associated facilities. Oil and gas leases are issued by the BLM consistent with
803 regulations regarding federal oil and gas leasing and operations (43 CFR Parts 3100 and 3160,
804 respectively). Stipulations and management actions may be added as terms of a lease at the
805 time of lease issuance to reflect management guidance established in the applicable RMP
806 (BLM 2008b).

807 The document that directs management on federal lands within the PFO is the 2008 approved
808 ROD for the Pinedale RMP, as amended. Specific management objectives for ROW
809 applications for electrical transmission lines and pipelines are not specified in the Pinedale
810 RMP except as standard practices, Best Management Practices (BMPs), and guidelines for
811 surface-disturbing activities.

812 Nine Presidential Executive Orders (EOs) also affect implementation of the proposed Project.
813 These EOs, which are binding on all government agencies, place restrictions on government
814 approval of construction activities and apply to wetlands (EO 11990), floodplains

815 management (EO 11988), migratory birds (EO 13186), environmental justice (EO 12898),
 816 Native American sacred sites (EO 13007), historic trails (EO 13195), cultural resources and
 817 historic preservation (EO 11593, and EO 13287), and invasive species (EO 13112).

818 In addition, numerous state and local regulations must be met, and several permits and other
 819 approvals would be required at various stages in the Project. A list of the major permits,
 820 approvals, and authorized actions necessary to construct, operate, maintain, and abandon
 821 Project facilities is provided in Table 1-1. This list is intended to provide an overview of the
 822 key regulatory requirements that would govern Project implementation. Additional approvals,
 823 permits, and authorizing actions may be necessary.

824 **Table 1-1. Major Federal, State, and Local Permits, Approvals, and Authorizing Actions**
 825 **for the Rands Butte Gas Development Project.**

Agency	Permit, Approval, or Action	Authority
Office of the President of the United States	Protection and enhancement of the cultural environment	Executive Order 11593
	Floodplains management	Executive Order 11988
	Protection of wetlands	Executive Order 11990
	Environmental justice	Executive Order 12898
	Native American sacred sites	Executive Order 13007
	Invasive species	Executive Order 13112
	Protection of migratory birds	Executive Order 13186
	Trails for America in the 21st century	Executive Order 13195
	Preserve America	Executive Order 13287
Bureau of Land Management (BLM)	On federal onshore lands: permit to drill, deepen, or plug back (Application for Permit to Drill [APD]/Sundry process); authorization for flaring and venting of natural gas; plugging and abandonment of a well	Mineral Leasing Act of 1920 (30 United States Code [USC] 181 et seq.); Title 43 Code of Federal Regulations (CFR) Part 3162
	Right-of-way (ROW) grants and temporary use clearances on federal lands	Mineral Leasing Act of 1920, as amended (30 USC 185); 43 CFR 2880; Federal Land Policy and Management Act (FLPMA) (43 USC 1761–1771); 43 CFR 2800

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Agency	Permit, Approval, or Action	Authority
	Antiquities and cultural resource clearances on BLM-managed land or federally permitted undertakings	Antiquities Act of 1906 (16 USC 431–433); Archaeological Resources Protection Act of 1979 (16 USC 470aa–470ll); Preservation of American Antiquities (43 CFR 3); National Historic Preservation Act (NHPA) Section 106 (36 CFR 800)
	Approval to dispose of produced water on BLM-managed land	Mineral Leasing Act of 1920 (30 USC 181 et seq.); 43 CFR 3164; Onshore Oil and Gas Order No. 7
	Endangered species clearances on BLM-managed lands	Endangered Species Act of 1973, as amended (16 USC 1531 et seq.)
Bureau of Reclamation	ROW grants and temporary use clearances on federal lands	Mineral Leasing Act of 1920, as amended (30 USC 185); 43 CFR 2880
U.S. Army Corps of Engineers	Section 404 permits and coordination regarding placement of dredged or fill material in area waters and adjacent wetlands	Section 404 of the Clean Water Act of 1972 (40 CFR 122–123, 230)
U.S. Fish and Wildlife Service	Coordination, consultation, and impact review on federally listed threatened and endangered species	Fish and Wildlife Coordination Act (16 USC 661 et seq.); Section 7 of the Endangered Species Act of 1973, as amended (16 USC et seq.); Bald Eagle Protection Act, as amended (16 USC 668–668dd)
U.S. Environmental Protection Agency	Spill Prevention, Control, and Countermeasure Plans	40 CFR 112
	Regulation of hazardous waste treatment, storage, and/or disposal	Resource Conservation and Recovery Act (42 USC 6901)
U.S. Department of Energy	Regulation of interstate pipeline product transportation	Various sections of the USC and CFR
U.S. Department of Transportation (DOT)	Control of pipeline maintenance and operation	49 CFR 191 and 192
Wyoming Department of Agriculture	Weed and pest control – county agency	Wyoming Weed and Pest Control Act (Wyoming Statute [WS] 11-5-102)
Wyoming Board of Land Commissioners/Land and Investments Office	Approval of oil and gas leases, ROWs for long-term or permanent off-lease/off-unit roads and pipelines, temporary use permits, and developments on state lands	WS 37-1-101 et seq.

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Agency	Permit, Approval, or Action	Authority
Wyoming Department of Environmental Quality (WDEQ) - Water Quality Division	Regulation of off-lease disposal of drilling fluids from abandoned reserve pits	Wyoming Environmental Quality Act (WS 35-11-301 through 35-11-311)
	National Pollutant Discharge Elimination System permits for discharging wastewater and stormwater runoff	WDEQ Rules and Regulations, Chapter 18; Wyoming Environmental Quality Act (WS 35-11-301 through 35-11-311); Section 405 of the Clean Water Act (40 CFR 122-124)
	Administrative approval for discharge of hydrostatic test water	Wyoming Environmental Quality Act (WS 35-11-301 through 35-11-311)
WDEQ - Air Quality Division	Permits to construct and permits to operate	Clean Air Act; Wyoming Environmental Quality Act (WS 35-11-201 through 35-11-212)
WDEQ - Solid Waste Division	Construction fill permits and industrial waste facility permits for solid waste disposal during construction and operations	Wyoming Environmental Quality Act (WS 35-11-501 through 35-11-520)
Wyoming Department of Transportation	Permits for oversize, overlength, and overweight loads	Chapters 17 and 20 of the Wyoming Highway Department Rules and Regulations
Wyoming Oil and Gas Conservation Commission (WOGCC)	Permit to use earthen pit (reserve pits) on nonfederal lands	WOGCC Regulations (Section III; Rule 305)
	Authorization for flaring or venting of gas	WOGCC Regulations (Section III; Rule 326)
	Permit for Class II underground injection wells	WOGCC Regulations (Section III; Rule 346)
	Well plugging and abandonment	40 CFR 146; 40 CFR 147.2551
	Permit to drill, deepen, or plug back (APD process)	WOGCC Regulations (Section III; Rule 315)
	Change in depletion plans	Wyoming Oil and Gas Act (WS 30-5-110)
	Minimum safety standards for oil and gas activities	WOGCC Regulations (Rules 321-A, 327, and 328)
Wyoming State Engineer's Office	Permits to appropriate groundwater (use, storage, wells, dewatering)	WS 41-121 through 147 (Form UW-5)
	Permits to appropriate surface water	WS 41-201 (Form SW-1)
Wyoming State Historic Preservation Office	Cultural resource protection, programmatic agreements, consultation	Section 106 of NHPA and Advisory Council Regulations (36 CFR 800)
Sublette County	Oil and gas permits	Office of Planning and Development

Agency	Permit, Approval, or Action	Authority
	Small wastewater permits	Office of Planning and Development
	County road use agreement	Office of Planning and Development
Sublette County	County road bore permits (if they will be crossing county roads at any point. May need DOT bore permits if crossing any state roads)	Road and Bridge Department
Sublette County	Non-residential county building permits	Planning and Zoning

826 **1.6 WYOMING BLM MITIGATION GUIDELINES AND PRACTICES FOR**
827 **SURFACE-DISTURBING AND DISRUPTIVE ACTIVITIES**

828 In addition to the applicable regulations and permits, the Wyoming BLM has adopted a
829 standard set of guidelines and post-lease Conditions of Approval (COAs) that apply to all
830 surface-disturbing activities on federal lands and minerals in Wyoming (Appendix A). These
831 mitigation guidelines address a wide variety of environmental concerns. Upon request by the
832 applicant, an exception to a lease stipulation or a COA may be granted by the BLM, following
833 on-site review, to determine if the exception is warranted. Standard Wyoming BLM
834 mitigation guidelines are applied to all alternatives analyzed in this EA.

835 **1.7 PUBLIC SCOPING**

836 NEPA regulations (40 CFR 1500–1508) require the BLM to use an early scoping process to
837 identify significant issues in preparation for impact analysis within the EA development
838 process. The principal goal of public scoping is to allow and encourage public participation,
839 including federal, state, and local government agencies, culminating in the public's
840 identification of issues, concerns, potential impacts, and potential mitigations that require
841 detailed analysis in the EA. A proactive public scoping process has been implemented by the
842 BLM for this proposed Project EA.

843 The purpose of scoping is to identify issues important to the Project EA. These issues would
844 guide development of alternatives that are evaluated in the EA. The scoping process also
845 provides an opportunity to educate the general public about the Project and allow the BLM to
846 gauge the concerns of those who have a stake in the resources of the RBPA.

847 The scoping period began on September 10, 2008, with the publication of a Scoping Notice
848 and invitation to a Project Open House on the Wyoming BLM website. The Scoping Notice
849 and 118 individual letters were sent to federal agencies; state agencies and boards; local
850 government; educational institutions, universities, and museums; Native American tribes;
851 state and federal elected officials; trade groups; media; and livestock operators. The official
852 scoping period ended on October 10, 2008, although the last scoping comment was received
853 on November 3, 2008. The BLM accepted scoping comments during scoping meetings, and
854 comments were also accepted via letter, fax, and electronic mail during the scoping period.

855 The Project Open House was held in Marbleton, Wyoming, on September 29, 2008. The
856 meeting was held at the Marbleton Town Hall and included a brief presentation of the
857 proposed Project with maps and information regarding relevant resources located in the
858 RBPA. BLM resource specialists and representatives from Cimarex were available to answer
859 questions from the public. Thirty-five individuals from the public registered at the scoping
860 meeting. During the scoping period, the BLM received 64 substantive comments from nine
861 respondents.

862 A Scoping Document was prepared and is available through the PFO. For organization and
863 analysis purposes, comments were categorized into the following 17 topic areas:

Air Quality	Noise
BLM General Management Policy	Policy/NEPA
BMPs/Reclamation	Ranching and Grazing
Cultural and Historic Resources	Technical Issues
Cumulative Impacts	Transportation
Development Practices	Vegetation/Weeds
Health and Human Safety	Water Resources
Light Pollution	Wildlife Resources
Monitoring and Mitigation	

864 **1.8 KEY ISSUES AND BLM NEPA RESPONSE**

865 Key issues with special relevance to the NEPA process were identified during scoping. These
866 key NEPA issues were identified for their potential for Project effects, lack important data for
867 a thorough analysis of effects, or because they may suggest relevant alternatives for analysis.
868 In addition, the BLM has identified actions to be undertaken during the NEPA process to
869 address these key issues, which are identified in Table 1-2, along with a reference to the
870 sections in this EA where they are addressed.

871

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Table 1-2. Key Issues and Concerns Identified During Project Scoping.

Issue	Description of Issue	Response
1. Socioeconomics	<p>Potential effects to local communities may include:</p> <ul style="list-style-type: none"> • Demand for short-term housing may exceed local supply. • Demand for short-term medical, retail, and civic services may exceed local capabilities. • Need for expanded local government services may not have corresponding revenue or compensation. 	Section 4.14.
2. Air Quality	<p>Potential issues include:</p> <ul style="list-style-type: none"> • Increased short-term emissions from drill rigs, equipment operation, crew truck operation, and tractor-trailer rigs carrying heavy loads. • Potential increase in air quality constituents and measures such as increased haze and dust. • Potential for increased emissions in Class I airsheds associated with nearby wilderness areas. • Short-term or long-term increase in greenhouse gas emissions. 	Section 4.17. Alternative 4. Appendix C.
3. Potential Conflicts with Livestock Management Operations	<p>Potential conflicts with livestock management could include:</p> <ul style="list-style-type: none"> • Reduced forage availability. • Increased livestock disturbance and harassment. • Increase in risk of Brucellosis infection in cattle herds. 	Section 4.11. Alternative 2. Appendix B. Appendix F.
4. Potential Impacts to Sensitive Soils	<p>Potential issues could include:</p> <ul style="list-style-type: none"> • Surface disturbance in shallow and steep slopes may reduce reclamation potential and increase runoff. • Increased impermeable surfaces may increase runoff and stream sedimentation. • Increased road use during construction may lead to higher erosion rates. 	Sections 4.3 and 4.3.1. Alternative 3. Appendix E.
5. Wetlands and Riparian Areas	<p>Potential issues may include:</p> <ul style="list-style-type: none"> • Disturbance in hydrophytic soils may lead to wetland loss. • Pipelines crossing streams may degrade wetlands and riparian vegetation. 	Sections 4.7 and 4.7.1. Alternative 3. Appendix F.

Issue	Description of Issue	Response
6. Surface Water and Groundwater Resources	Potential issues may include: <ul style="list-style-type: none"> ● The Project might cause changes in water quality in Spring Creek, Beaver Creek, South Piney Creek, or Middle Piney Creek. ● Water use during drilling and completion could lead to surface water or groundwater depletions. ● Potential changes in groundwater aquifers due to changes in hydrostatic pressure from water injection well. ● Potential for cross-contamination of aquifers with hydrocarbon contamination. 	Section 4.5. Appendix F.
7. Wildlife Habitats	Potential issues may include Project effects on wildlife habitats including: <ul style="list-style-type: none"> ● Short- or long-term reduction in big game crucial winter range. ● Loss of nesting and brood rearing habitats for Greater sage-grouse. ● Long-term noise and traffic effects in wildlife habitats. 	Section 4.9; Alternatives 2 and 4. Appendix F.
8. Threatened or Endangered Species	Direct and indirect effects may include: <ul style="list-style-type: none"> ● Potential depletions to the Colorado River. ● Potential effects on downstream listed, threatened, and endangered species. ● Potential effects on any nearby designated critical habitats, which must be maintained in compliance with the Endangered Species Act. 	Section 4.8. Rands Butte Biological Assessment.
9. Sensitive Wildlife Species	Direct and indirect effects may include: <ul style="list-style-type: none"> ● Disruption of big game migration patterns. ● Disruption of raptor nesting and winter roosting near the Project. ● Displacement of elk into adjacent livestock ranges. 	Section 4.8.2. Alternative 2; Alternative 3; Alternative 4. Appendix B. Appendix F.
10. Cultural Resources and Historic Trails	Potential issues may include: <ul style="list-style-type: none"> ● Changes in the setting and character of sites eligible for the National Register of Historic Places. ● Potential visual impacts within 3 miles of the Lander Road Historic Trail. 	Section 4.20. Appendix F.
11. Visual Resources	Potential issues may include: <ul style="list-style-type: none"> ● Visual impacts to recreation areas and other areas with sensitive viewsheds. ● Changes in perception of the visual landscape such that it becomes predominantly an industrial landscape. 	Section 4.16. Alternatives 3 and 4. Rands Butte Visual Resource Assessment.

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Issue	Description of Issue	Response
12. Human Health and Safety	Potential issues may include: <ul style="list-style-type: none"> ● The potential for accidental release of hazardous and toxic substances into the environment. 	Appendix D. Appendix E.
13. Energy Use and Conservation	Issues of energy use and conservation may include: <ul style="list-style-type: none"> ● Increase in regional coal-based electrical energy consumption. 	Section 4.0. Alternative 4.
14. Cumulative Effects	Potential cumulative effects when combined with neighboring oil and gas development projects may include: <ul style="list-style-type: none"> ● Increase in short- or long-term regional air quality deterioration. ● Increase in short-term socioeconomic disruption. ● Increase in long-term change from rural/agricultural to industrial landscape. ● Short- and long-term disruption of elk migration patterns. ● Loss of Proper Functioning Condition of area wetlands and riparian areas. 	Appendix B. Appendix C. Appendix F.