1.0 Background; Purpose of and Need for Action

1.1 Introduction

In compliance with the National Environmental Policy Act of 1969, as amended (NEPA), the Bureau of Land Management (BLM) Colorado River Valley Field Office (CRVFO) in Silt, Colorado, has prepared this Environmental Impact Statement (EIS) to analyze the issuance of 65 federal fluid minerals leases within the White River National Forest (WRNF). These leases were issued between 1995 and 2012, and are located in Mesa, Garfield, Pitkin, and Rio Blanco counties, between the towns of De Beque and Carbondale south of Interstate 70, except for one lease northeast of Meeker (see **Figure 1-1**).

1.1.1 Background

The decision that made the 65 parcels considered in this EIS available for oil and gas leasing was documented through the 1993 WRNF Oil and Gas Leasing Record of Decision (ROD) and reaffirmed in the 2002 WRNF Land and Resource Management Plan (LRMP). Before offering the nominated parcels in an oil and gas lease sale, the BLM obtained consent from the United States (U.S.) Forest Service (Forest Service or USFS) and subsequently issued the leases.

In 2007, the Interior Board of Land Appeals (IBLA) held that before including Forest Service parcels in an oil and gas lease sale the BLM must either formally adopt NEPA analysis completed by the Forest Service or conduct a NEPA analysis of its own (see Board of Commissioners of Pitkin County, 173 IBLA 173 [2007]). The IBLA ruled that although the BLM was a cooperating agency on the Forest Service's 1993 WRNF Oil and Gas Leasing EIS, the BLM did not formally adopt the Forest Service NEPA analysis or prepare its own analysis, and therefore did not comply with its NEPA obligations with respect to the issuance of those leases at issue in that proceeding. **The 2007 IBLA decision only addressed three leases specifically in the WRNF that were later cancelled; all 65 existing leases addressed in this EIS share the same NEPA deficiency identified by the IBLA with respect to those three leases.**

Following the IBLA's decision, the BLM determined that the Forest Service NEPA analysis conducted for the previously issued leases is no longer adequate due to changes in laws, regulations, policies, and conditions since the Forest Service's EIS was issued in 1993.

Examples of changed circumstances since 1993 to be considered in the current EIS include modifications to the federal endangered and threatened species list and guidance, major changes to the National Ambient Air Quality Standards, implementation of the **2012** Colorado Roadless Rule, and new oil and gas drilling and production technologies.

In total, the BLM identified 65 existing leases with effective dates ranging from 1995 to 2012 that were issued based on the 1993 WRNF EIS. Based on the foregoing, the BLM determined that it is necessary to conduct additional NEPA analysis to evaluate the impacts of its leasing decisions within the WRNF. The decision of whether forest system lands are available or unavailable for oil and gas leasing, however, remains with the Forest Service, although the BLM retains the ultimate discretion whether to issue a lease (**Title** 43 **of the** Code of Federal Regulations [CFR]**, Section** 3101.7-2). As **a** result, this EIS only considers the 65 currently leased parcels and not future leasing availability, which has recently been addressed in a separate NEPA analysis, the WRNF Oil and Gas Leasing Final EIS published by the Forest Service in December 2014 (USFS 2014a). **The BLM has incorporated by reference as much of the Forest Service's new NEPA analysis of future oil and gas leasing on the WRNF as possible into this analysis (43 CFR 46.120 and 46.135)**. The BLM is a cooperating agency on the WNRF EIS.

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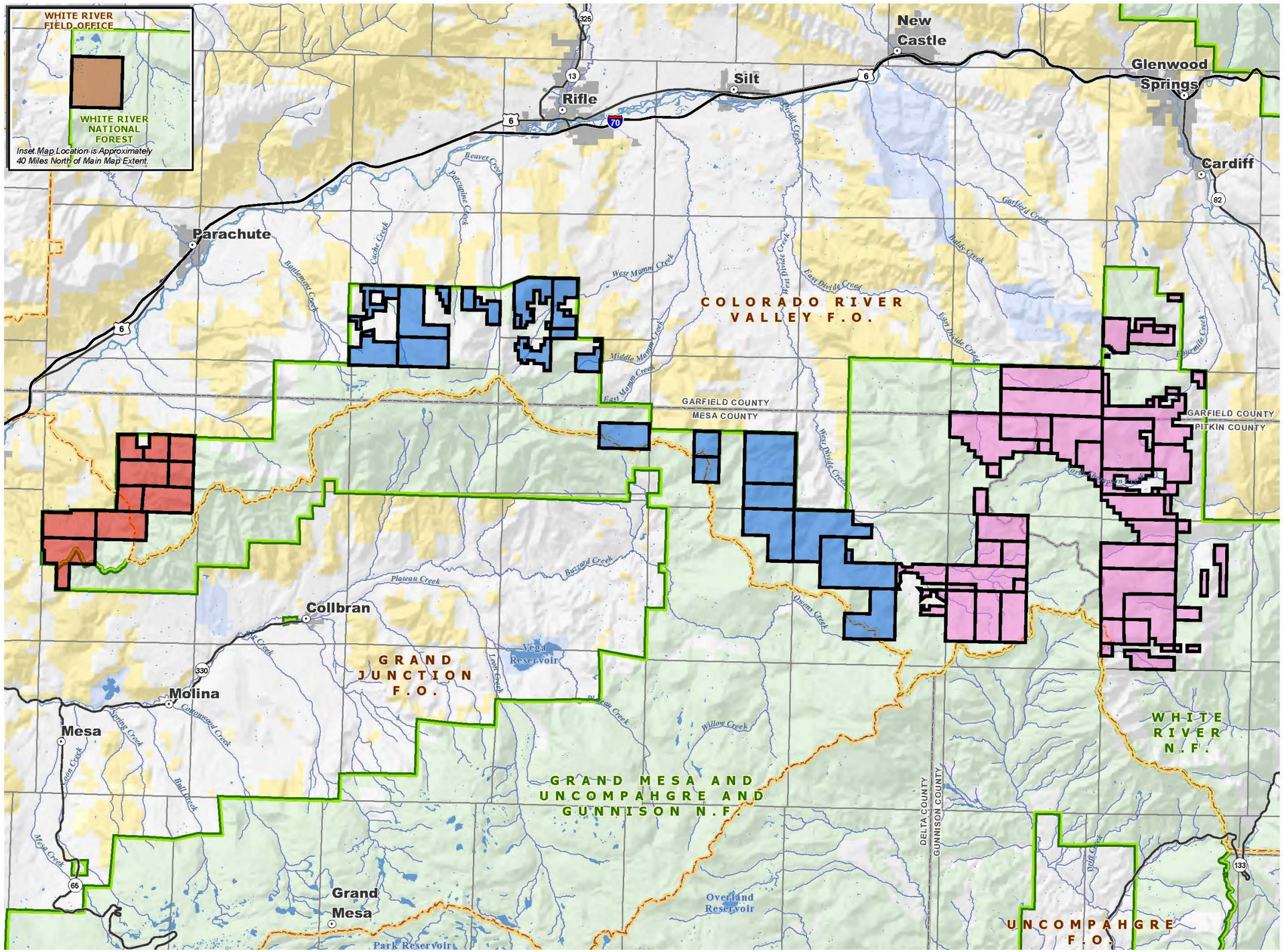

Legend

Project Features

Lease Zones
- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Lease Boundary

Boundaries
- USFS Administrative Boundary
- BLM Field Office Boundary
- County Boundary
- Township/Range
- Urban Area

Hydrology
- Stream/River
- Lake/Reservoir

Highways
- Interstate
- Highway

Surface Ownership
- Bureau of Land Management
- Bureau of Reclamation
- Local
- Private
- US Forest Service

0 2 4 8 Miles
0 3 6 12 Kilometers
N

Y:\GIS\Projects\BLM_WhiteRiver_OG_EIS_60332451\FIGs\DOC\1_PDEIS\FIG_1-1_Leases_Vicinity.mxd

Date: 9/17/2015

Figure 1-1 General Location of Leases to be Evaluated

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1.1.2 Leases

The 65 previously issued leases under consideration in this EIS are listed in **Table 1-1** with the current status of each lease. The total area of existing leases is 80,380 acres. Of the 65 leases to be evaluated in this EIS, 34 are either expired or under suspension, 20 are committed to established oil and gas units[1], and 5 are held by production. The remainder of the 65 leases have a future expiration date. It should be noted that some leases listed in the table have expired since the beginning of the NEPA process and other leases are under appeal and could be eliminated before the completion of the NEPA process. All 65 leases included at the beginning of the NEPA process have been carried forward for consistency of analysis.

Table 1-1 Status of Existing Leases Under Evaluation

Lease #	Effective Date	Expiration Date	Status[1, 2]
COC 058677	12/1/1995		Committed to Orchard Unit
COC 059630	10/1/1996		Committed to Orchard Unit
COC 066727	09/1/2003		Committed to Orchard Unit
COC 066728	09/1/2003		Committed to Orchard Unit
COC 066729	09/1/2003		Committed to Orchard Unit
COC 066730	09/1/2003		Committed to Orchard Unit
COC 066731	09/1/2003		Committed to Orchard Unit
COC 066732	06/1/2003		Committed to Place Mesa Unit
COC 066733	06/1/2003		Committed to Place Mesa Unit
COC 066926	09/1/2003		Committed to Place Mesa Unit
COC 061121	10/1/1998		Committed to Middleton Creek Unit & Held by Production
COC 066723	06/1/2003	05/31/2014	Under Suspension
COC 066724	06/1/2003		Held by Production
COC 066915	09/1/2003	11/11/2016	Lease automatically extended upon unit termination
COC 066916	09/1/2003	11/11/2016	Lease automatically extended upon unit termination
COC 066917	09/1/2003	11/11/2016	Lease automatically extended upon unit termination
COC 066918	09/1/2003		Held by Production
COC 066920	09/1/2003		Held by Production
COC 067147	04/1/2004		Committed to Middleton Creek Unit
COC 067150	12/1/2003		Held by Allocation (Communitization Agreement COC 073718)
COC 067542	09/1/2004	08/31/2014	Under Suspension
COC 067543	09/1/2004	08/31/2014	Expired
COC 067544	09/1/2004		Held by Production
COC 070013	07/1/2007		Committed to Middleton Creek Unit

[1] **The Mineral Leasing Act of February 25, 1920, 41 Stat. 437, as amended, 30 USC Sec. 181et seq., authorizes federal lessees and their representatives unit agreements lessees and their representatives to unite with each other, or jointly or separately with others, in collectively adopting and operating under a unit plan of development or operations of any oil and gas pool, field, or like area, or any part thereof for the purpose of more properly conserving the natural resources thereof whenever determined and certified by the Secretary of the Interior to be necessary or advisable in the public interest (43 CFR 3186.1).**

Table 1-1 Status of Existing Leases Under Evaluation

Lease #	Effective Date	Expiration Date	Status[1, 2]
COC 070014	06/1/2007	05/31/2017	Under suspension
COC 070015	06/1/2007	05/31/2017	Under suspension
COC 070016	06/1/2007	05/31/2017	**Under suspension**
COC 070361	01/1/2008		Committed to Middleton Creek Unit
COC 072157	01/1/2008	12/31/2017	
COC 075070	01/1/2012	12/31/2021	Under suspension
COC 076123	01/1/2012	12/31/2021	
COC 058835	09/1/1996	11/11/2011	Expired, but subject to appeal
COC 058836	09/1/1996		Under Suspension; committed to Willow Creek Unit
COC 058837	09/1/1996		Under Suspension; committed to Willow Creek Unit
COC 058838	09/1/1996		Under Suspension; committed to Willow Creek Unit
COC 058839	09/1/1996		Under Suspension; well capable of production
COC 058840	09/1/1996	11/11/2011	Expired, but subject to appeal
COC 058841	12/1/1996	11/11/2011	Expired, but subject to appeal
COC 066687	06/1/2003	05/31/2013	Under Suspension
COC 066688	06/1/2003	05/31/2013	Under Suspension
COC 066689	06/1/2003	05/31/2013	Under Suspension
COC 066690	06/1/2003	05/31/2013	Under Suspension
COC 066691	06/1/2003	05/31/2013	Under Suspension
COC 066692	06/1/2003	05/31/2013	Under Suspension
COC 066693	06/1/2003	05/31/2013	Under Suspension
COC 066694	06/1/2003	05/31/2013	Under Suspension
COC 066695	06/1/2003	05/31/2013	Under Suspension
COC 066696	06/1/2003	05/31/2013	Under Suspension
COC 066697	06/1/2003	05/31/2013	Under Suspension
COC 066698	06/1/2003	05/31/2013	Under Suspension
COC 066699	06/1/2003	05/31/2013	Under Suspension
COC 066700	08/1/2003	07/31/2013	Under Suspension
COC 066701	06/1/2003	05/31/2013	Under Suspension
COC 066702	08/1/2003	07/31/2013	Under Suspension
COC 066706	06/1/2003	05/31/2013	Under Suspension
COC 066707	06/1/2003	05/31/2013	Under Suspension
COC 066708	09/1/2003	08/31/2013	Under Suspension
COC 066709	09/1/2003	08/31/2013	Under Suspension
COC 066710	06/1/2003	05/31/2013	Under Suspension
COC 066711	06/1/2003	05/31/2013	Under Suspension
COC 066712	06/1/2003	05/31/2013	Under Suspension
COC 066908	09/1/2003	08/31/2013	Under Suspension

Table 1-1 Status of Existing Leases Under Evaluation

Lease #	Effective Date	Expiration Date	Status[1, 2]
COC 066909	10/1/2003	09/30/2013	Under Suspension
COC 066913	12/1/2003	11/30/2013	Expired, but subject to appeal
COC 066948	9/1/2003	**8/1/2015**	**Expired, but subject to appeal**

[1] Section 39 of the Mineral Leasing Act of 1920 (MLA), as amended, provides for a suspension of operation and production in the interest of conservation of natural resources, which addresses a variety of reasons, including protection of natural resources, initiation of environmental studies that may modify the lease(s); or litigation related to issuance of leases or BLM lease management related issues. The term of a lease suspended under Section 39 shall be extended by adding the suspension period. Per Section 17f of the MLA, "no lease shall be deemed to expire during a suspension of either operations or production." An operator may request a suspension for a variety of reasons, including extraordinary weather conditions that prevent required surveys or drilling activities, active litigation over title to lease or surface access, or a denial of an operational proposal by the BLM.

[2] **Expired leases have been carried forward for continuity of analysis. However, unless an appeal process results in reinstatement of a lease, the BLM no longer has a decision to make regarding expired leases.**

1.2 Federal Fluid Mineral Leasing Process on Forest Service Lands

When **National Forest System (**NFS**)** lands are proposed for fluid mineral leasing, the Forest Service must verify that the lands have been adequately analyzed in a Forest Plan level leasing analysis, that leasing decisions are based on the analysis, and that there is no new significant information or circumstances requiring further environmental analysis. The Forest Service leasing analysis must comply with the National Forest Management Act and associated regulations at 36 CFR 219 and 36 CFR 228.102, by considering the suitability of lands for leasing and development and making decisions regarding the availability for leasing. Once the analysis is determined to be adequate, the Forest Service can consent to allowing the BLM to issue a lease on those lands. The leases must incorporate the stipulations that were determined to be required in the Forest Service leasing analysis and Forest Plan, as required by 43 CFR 3101.7-2(a), which states the following:

> *Where the surface managing agency has consented to leasing with required stipulations, and the Secretary decides to issue a lease, the authorized officer shall incorporate the stipulations into any lease which it may issue. The authorized officer may add additional stipulations.*

Following is a brief summary of the leasing and development process for federal fluid minerals on NFS lands. A more complete description of the leasing process can be found in Section 1.4.2 and Appendix C of the WRNF Oil and Gas Leasing Final EIS (USFS 2014a).

The BLM must either adopt the Forest Service leasing analysis or conduct a separate leasing analysis in compliance with NEPA and its implementing regulations at 40 CFR 1500 – 1508 and Department of the Interior NEPA regulations at 43 CFR Part 46, in considering the effects of leasing on the human environment, including reasonably foreseeable future development. Section 1.5.2 of the WRNF Oil and Gas Leasing Final EIS (USFS 2014a) provides additional information on the BLM's process and authority for offering leases for sale and issuing leases on the WRNF.

Federal onshore oil and gas leasing requirements are set out in the regulations at 43 CFR 3100. Oil and gas leases are issued with a primary term of 10 years, expiring at the end of the tenth year unless:

- Drilling operations are in progress on or for the benefit of the lease;
- The lease contains a well capable of producing oil or gas in economic quantities;

- The lease is receiving or is entitled to receive an allocation of production under the terms of an approved communitization agreement or unit agreement; or
- The lease is suspended by the BLM.

The BLM has the authority to cancel a lease if it was improperly issued (43 CFR § 3108.3(d)). The Secretary of the Interior has inherent authority, under her general managerial power over public lands, to cancel leases issued in violation of a statute or regulation. That authority is not superseded by the Mineral Leasing Act (MLA). That authority is reflected in MLA's implementing regulations. Under this authority, BLM may cancel leases if they were issued in violation of NEPA or other laws. The IBLA has characterized as "void" and "a legal nullity" any lease issued for lands that were not legally available for leasing at the time they were issued. In contrast, it has characterized as "voidable" any lease issued in violation of a procedural requirements, such as NEPA, which does not compel any particular decision. In other words, a void lease is one that suffers from a substantive defect that BLM cannot cure, such as including lands that were not available for BLM to lease at the time they were issued. A voidable, cancelable lease is one that suffers from a procedural defect that BLM may be able to correct at its discretion with further action on its part.

The lessee may surrender the lease in whole or in part by filing a written request with the BLM State Office. In that case, the lessee is responsible for plugging any existing producing or abandoned wells, and reclaiming any surface disturbance according to the requirements of the permitting agency. Leases without a producible well automatically terminate if the lessee fails to make annual rental payments. A nonproducing lease may be administratively canceled for failure to comply with lease terms. Under certain circumstances, a lessee may request reinstatement of a terminated lease (43 CFR Subpart 3108).

Per 43 CFR 3162.3-1, to develop a lease the operator must submit an Application for Permit to Drill (APD) to the BLM accompanied by a Surface Use Plan of Operations (SUPO) to be approved by the Forest Service. The submittal of the APD and the SUPO trigger a second level of NEPA analysis, onsite reviews, and decision-making that is more site-specific than the analysis prepared prior to lease issuance. At this time, the Forest Service can decide on the conditions for approval of the surface operations and the BLM can decide on the conditions for approval of the subsurface operations. After consulting with the Forest Service, the BLM must approve the application (with or without additional conditions), disapprove the application, or advise the applicant why the decision has been delayed.

1.2.1 Reasonably Foreseeable Development Scenario

The Reasonably Foreseeable Development Scenario (RFDS) provides a long-term projection of the likely potential future oil and gas development and production within a defined area (the WRNF) and a defined period of time (20 years). The WRNF RFDS was prepared by the BLM for the Forest Service in 2010, and was included as Appendix F in the WRNF Oil and Gas Leasing Draft EIS (USFS 2012).

As stated in the RFDS (USFS 2010a), its purpose is to provide an estimated projection of unconstrained, future oil and gas exploration and development based on a set of assumptions in order "to evaluate potential effects that might reasonably occur as a result of leasing." The RFDS is based on geology; resource occurrence potential; past and current leasing, exploration, and development activity; and engineering technology, with consideration of economics and physical limitations on access to resources. An RFDS is not a decision, and it does not establish or imply a limit on future development.

The RFDS (USFS 2010a) was used as a starting point for estimating the number of wells likely to be developed within the 65 leases that are under evaluation. Using this as the basis for estimating well numbers allows the BLM to build on the previously prepared analysis completed for the Forest Service while focusing on the 65 leases using reasonable assumptions and patterns of observed development.

Its use facilitates an analysis that is consistent with the Forest Service's assumptions and analyses presented in the WRNF Oil and Gas Leasing Final EIS (USFS 2014a), reducing the potential for inconsistencies between the projections for the 65 leases in this EIS and future leasing in the WRNF EIS and enabling better coordination between the Forest Service and the BLM.

The basic assumptions used to develop the estimated unconstrained oil and gas development within the 65 leases are summarized below.

- At least one well can be reasonably foreseen for each of the 65 leases.
- Future development will follow past development trends.
- Almost 4 percent of all wells will be horizontally drilled.
- A total of 444 wells are projected within the 65 leases without taking into account constraints such as No Surface Occupancy (NSO) stipulations.
- The 444 wells would not be evenly distributed across the 65 leases. Rather, the leases have been grouped spatially into zones based on the location of past development, production infrastructure, and access for exploration and production.

The following zones were used to estimate the projected well numbers and types. The leases within each zone are displayed on **Figure 1-1**. It is important to understand that the zones do not constitute management units or legal entities **and are not intended to be used as the basis for any decision resulting from the EIS**. **The zones** are intended only to be used to facilitate the analysis of indirect effects across the EIS alternatives by grouping the leases geographically and to organize the leases by terrain and development potential where useful to the resource discussions. New oil and gas development could be accessed from existing or new well pads constructed on each lease or on adjacent private or BLM land using directional or horizontal drilling technologies.

1.2.1.1 Zone 1

Zone 1 includes 10 leases at the western edge of the analysis area. There are 131 existing wells within 2 miles of the lease boundaries within this zone and, based on the RFDS, it is projected that there would be 63 new wells developed over the next 20 years, should the leases be made available without constraints. It is estimated that 95 percent of all horizontal wells in the analysis area would occur in this zone. The primary target formations are the Mesa Verde and the Niobrara. Existing infrastructure includes pipelines and roads that were constructed to serve the existing wells in the Orchard and Place Mesa units.

1.2.1.2 Zone 2

Zone 2 includes 21 leases within an area in approximately the center of the east-west alignment of the 65 leases. There are 733 existing wells within 2 miles of the lease boundaries within this zone and, based on the RFDS, it is projected that there would be 318 new wells developed over the next 20 years, should the leases be made available without constraints. New development could be accessed primarily from existing and newly constructed well pads. Most of the successful development has been from the Mesa Verde Formation, but due to a successful horizontal Niobrara well, it is anticipated that future development would be likely to produce from both formations using mainly directional or vertical technologies. It is estimated that 5 percent of all horizontal wells in the analysis area would occur in this zone. Existing infrastructure includes the numerous pipelines and roads that access the existing wells.

1.2.1.3 Zone 3

Zone 3 includes 33 leases within an area in the eastern part of the 65 leases. There are 50 existing wells within 2 miles of the lease boundaries within this zone and, based on the RFDS, it is projected that there

would be 53 new wells developed over the next 20 years, should the leases be made available without constraints. New development would be accessed primarily from newly constructed well pads, with little exploration anticipated. No horizontal wells are expected to be drilled in this zone. Existing infrastructure includes Forest Service roads and pipelines. To successfully develop wells in this zone, road improvements and pipeline installation would be necessary.

1.2.1.4 Zone 4

Zone 4 includes only one lease (COC 066948), located approximately 40 miles north of the main analysis area near Meeker, Colorado. There are no existing wells within this zone or within 2 miles of the lease so the projected 10 new wells could only be accessed from newly constructed well pads. No horizontal wells are projected and existing infrastructure is limited to a county road and a pipeline within one mile of the lease boundary.

1.2.1.5 Summary of Existing and Potential Future Wells by Zone

Table 1-2 summarizes the existing wells and projected future unconstrained development in each zone, assuming no constraints such as lease stipulations.

Table 1-2 Existing Wells and Future Development by Zone

Current or Future	Well type	Zone 1	Zone 2	Zone 3	Zone 4	Total
Existing wells within 2 miles of lease boundaries	Horizontal	19	1	0	NA	**20**
	Directional	68	649	3	NA	**720**
	Vertical	44	83	47	NA	**174**
	Total	**131**	**733**	**50**	**NA**	**914**
Existing well distribution	Percentage of total wells	14.3%	80.2%	5.5%	NA	**100%**
	Percentage of horizontal wells	95.0%	5.0%	0.0%	NA	**100%**
Future Projection (Unconstrained)	All wells	63	318	53	10	**444**
	Horizontal wells	16	1	0	0	**17**

As defined in the Forest Service RFDS (USFS 2010a, p. 1), the term "unconstrained" in an RFDS means that there are no restrictions on surface use assumed in the baseline scenario.

1.2.2 Leasing Terminology

1.2.2.1 Standard Lease Terms

Standard Lease Terms **(SLTs)** are part of every lease issued by the BLM. Essentially, these terms establish that the lessee has the right to use as much of the leased lands as is necessary to explore, drill, and extract all the leased resource. They allow for reasonable measures that may be required to minimize adverse impacts to other resource values, land uses, or land users. To the extent consistent with the lease rights granted, these reasonable measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. **However, under SLTs such measures, at a minimum, shall be deemed consistent with lease rights granted provided that they do not: require relocation of proposed operations by more than 200 meters; require that operations be sited off the leasehold; or prohibit new surface disturbing operations for more than 60 days annually (43 CFR 3101.1-2).** The lessee must comply with all laws and regulations regardless of the when the law was enacted and

regardless of the effect it may have on the rights granted. The lessee also must comply with all Oil and Gas Onshore Orders.

1.2.2.2 Lease Stipulations

Lease stipulations are conditions placed on a lease that become part of the lease issued by BLM. The purpose of lease stipulations is to minimize potential adverse impacts of exploration and development operations in compliance with applicable management direction. Stipulations may be necessary to protect specific resources, even where such protection is not specifically mandated by existing laws or regulations. Lease stipulations may be modified only through the use of exceptions, modifications, or waivers that are documented in the lease file. Additional information related to lease stipulations and the specific stipulations considered by the Forest Service to meet the standards and guidelines of the WRNF Forest Plan (USFS 2002a) can be found in Section 1.4.6 of the WRNF Oil and Gas Leasing Final EIS (USFS 2014a).

The following brief summary of different types of stipulations and changes to those stipulations is derived from the Uniform Format for Oil and Gas Lease Stipulations (Rocky Mountain Regional Coordinating Committee 1989). A specific stipulation would apply to oil and gas exploration and development if the resource being protected by the stipulation occurs at the proposed well location, based on site-specific field evaluations.

No Surface Occupancy

The NSO stipulation is intended for use only when other stipulations are determined to be inadequate to protect surface resources. It is used to provide protection for surface resources when standard lease terms are inadequate, such as where the resource protection cannot be accomplished by relocating proposed operations less than 200 meters. The type of resource to be protected and the rationale for attaching the NSO stipulation must be stated in the lease file along with the location of the stipulation or percentage of the lease affected within the lease boundary.

Controlled Surface Use

The Controlled Surface Use stipulation is intended to be used to strictly control lease activities where resource protection cannot be accomplished adequately with mitigation measures provided by standard lease terms, regulations, and other guidance like Onshore Orders. It is less restrictive than NSO or Timing Limitation stipulations and should be applied where use and occupancy is allowed but special operational constraints are needed for specific types of activities that modify the lease rights but do not prohibit all activities. It also may be used to notify the lessee that operations may be moved more than 200 meters to minimize impacts to other resource values.

Timing Limitations

The Timing Limitation stipulation prohibits surface use during a specified period to protect identified resources and resource values on a seasonal basis. The specified period must exceed the annual 60-day period under **SLTs**. This stipulation does not apply to operation and maintenance of existing facilities.

Exceptions, Modifications and Waivers

Exceptions from stipulations can be issued on a case-by-case basis to temporarily exempt the lessee from lease stipulations because the conditions under which the stipulation was establish**ed** do not exist at the time of the exception. The acceptable causes for consideration of exceptions are stated in the applicable land use plan for the area.

Modifications are changes to the provisions of the lease stipulation, either temporarily or for the term of the lease. It may be needed if the conditions for which a stipulation was applied to a lease no longer occur. For example, if an NSO stipulation was established to protect a federally listed plant species, but a survey determines that the plant and its habitat do not exist, this may warrant modifying the lease to remove the NSO stipulation in that portion of the lease.

Waivers are permanent exemptions from a lease stipulation because the reason for implementing the stipulation is no longer applicable. Modifications and waivers are defined at 43 CFR 3101.1-4.

1.2.2.3 Lease Notice

A Lease Notice is a written notice from the authorized officer that serves to implement regulations not covered by stipulations or conditions of approval. It provides instructions on how to implement specific actions or items of local, regional, or state importance. Any requirements contained in a Lease Notice must be fully supported by law, regulations, **SLTs**, or Onshore Orders, CFR 3101.3.

1.3 Purpose of the Action

BLM's purpose for this federal leasing action is to:

- Revisit or reaffirm previous BLM decisions to issue 65 leases underlying Forest Service lands. These leases were issued from 1995 to 2012 following the Forest Service's availability decision considered in the 1993 EIS (USFS 1993a);
- Assess conformance with the decisions making these lands available for oil and gas leasing in the 1993 EIS, as reaffirmed in the 2002 WRNF Plan and consider consistency with the Forest Service's recent availability decisions for lands within the WRNF;
- Support the Forest Service in managing oil and gas resources, as required by law and memoranda of understanding between the agencies; and
- Fulfill the federal government's policy to "foster and encourage private enterprise in the development of economically sound and stable industries, and in the orderly and economic development of domestic resources to help assure satisfaction of industrial, security, and environmental needs" (Mining and Minerals Policy Act of 1970) while continuing to sustain the land's productivity for other uses and capability to support biodiversity goals (Forest Service Minerals Program Policy).

1.4 Need for the Action

The BLM's need for this federal leasing action is to:

- Meet domestic energy needs under the requirements of the MLA, as amended, the Mining and Minerals Policy Act of 1970, and the Federal Onshore Oil and Gas Leasing Reform Act of 1987 ("Reform Act"). The BLM's responsibility under these laws is to regulate the development of oil and gas in the public domain, and to ensure that deposits of oil and gas owned by the U.S. shall be subject to disposition through the land use planning process.
- Address the NEPA deficiency identified by the 2007 IBLA ruling on the appeal by the Board of Commissioners of Pitkin County that BLM must formally adopt NEPA analysis completed by the Forest Service or conduct a NEPA analysis of its own for issuance of oil and gas leases underlying WRNF lands;
- Support Forest Service mineral policy that puts responsibility on field units, with the known presence or potential presence of a mineral or energy resource, to foster and encourage the

exploration, development, and production of the mineral or energy resource consistent with Forest Service management direction; and

- Meet BLM's collaborative responsibility under the Reform Act to issue and manage oil and gas leases where the Forest Service has issued a land availability decision.

1.5 Decisions to be Made

1.5.1 Decisions to be Informed through this Analysis

This EIS considers 65 leases issued since 1993 in the WRNF. The decision to be made by the BLM, based on the analysis in this EIS, is whether the 65 leases should be:

1. Reaffirmed with their current existing stipulations;
2. Modified with additional or different lease stipulations or additional mitigation measures; or
3. Cancelled.

Note that several leases, as shown in Table 1-1, expired before or during the preparation of the EIS. These leases have been retained in the EIS and its analysis for continuity, and because the circumstances surrounding the expiration of several of those expired leases are either subject to administrative appeal or are under appeal to the IBLA. For purposes of the ultimate decisions on any of the actions analyzed in this EIS, there will be no decision made by the BLM on any leases that are expired and no longer subject to appeal at the time of any final decision.

1.5.2 Decisions Beyond the Scope of this Analysis

The decision of whether NFS lands within the 65 existing leases are available or unavailable for oil and gas leasing remains with the Forest Service and is beyond the scope of this analysis, however, it should be noted that the BLM retains the ultimate discretion whether to issue a lease for any particular parcel (43 CFR 3101.7-2). **T**his EIS will not directly affect decisions on any pending or proposed APDs because the Forest Service has the authority to address the NEPA on the proposed SUPO that accompanies each APD.

The purpose of this EIS is to support a leasing decision with respect to the 65 previously issued leases. It will not authorize any development on these previously issued leases. Any discussion of development in this EIS is only to facilitate an analysis of the indirect effects of leasing through analysis assumptions based on historic oil and gas development in this region and the RFDS prepared for the WRNF that is included as Appendix F of the WRNF Oil and Gas Leasing Draft EIS (USFS 2012).

1.6 Relationship to Programs, Policies, and Plans

1.6.1 Major Laws and Regulations

The primary laws and regulations that affect fluid mineral leasing decisions on NFS lands are listed in **Table 1-3**. A variety of federal and state permits are required for development of oil and gas leases; however, none are listed because the decision for this EIS would not authorize development or any surface-disturbing activities. Additional details on laws and regulations that apply to leasing on NFS lands can be found in Section 1.4.1 of the WRNF Oil and Gas Leasing Final EIS (USFS 2014a).

Table 1-3 Major Federal Laws and Regulations Related to Oil and Gas Leasing

Law or Regulation	Brief Description	Agency
Organic Administration Act of 1897, 16, (U.S. Code [USC]) § 551	Authorizes the Secretary of Agriculture to promulgate rules and regulations for the use and occupancy of the National Forests.	Forest Service
Federal Land Policy and Management Act of 1976, 43 USC §§ 1701 et seq	BLM's organic act that defines the agency's mission as one of multiple use. It requires that BLM management allow for "a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and non-renewable resources" on public lands.	BLM
Multiple Use Sustained Yield Act of 1960, 16 USC § 528	Directed the national forests be managed under the principles of multiple use and to produce a sustained yield of products and services.	Forest Service
MLA, 30 USC §§ 181-287	Authorizes the Secretary of the Interior to issue leases for leasable minerals on public domain lands. Requires Secretary approval for proposed surface-disturbing activities within the lease area prior to issuance of a permit to drill on an oil and gas lease.	BLM
Federal Onshore Oil and Gas Leasing Reform Act of 1987, 30 USC §§181 et seq.	An amendment to the MLA important to federal leasing because it establishes the requirements for competitive leasing and grants the Forest Service the authority to make decisions and implement regulations concerning the leasing of oil and gas on NFS lands.	Forest Service, BLM
Mineral Leasing Act for Acquired Lands of 1947, 30 USC §§ 351 – 359	Extends leasing authority to lands that have been acquired by the federal government. Requires that the BLM obtain the consent of the Secretary of Agriculture prior to lease issuance on acquired NFS lands.	BLM
Mining and Minerals Policy Act of 1970, 30 USC § 21a	Establishes the policy of the federal government to foster and encourage the orderly and economic development of domestic mineral resources in the national interest.	Forest Service, BLM
Energy Security Act of 1980, 42 USC § 8855	Authorizes the Secretary of Agriculture to process applications for leases and permits for resource development on NFS lands, notwithstanding the current status of any Forest Plan.	Forest Service
Energy Policy Act of 2005**; Pub. L. No. 108-58 (Aug. 8, 2005)**	Directs the Secretaries of the Interior and Agriculture to improve administration of federal oil and gas leasing programs, inspection and enforcement of oil and gas activities, and the development and implementation of Best Management Practices (BMPs). Under this law, the Secretaries of the Interior and Agriculture developed a Memorandum of Understanding to improve coordination and consultation on oil and gas leasing activities and to establish joint policies and procedures for managing oil and gas leasing and subsequent actions.	Forest Service, BLM
National Forest Management Act (NFMA), 16 USC §§1600 et seq.	Requires the Forest Service to prepare a forest plan for each national forest.	Forest Service

Table 1-3 Major Federal Laws and Regulations Related to Oil and Gas Leasing

Law or Regulation	Brief Description	Agency
NEPA, 42 USC §§ 4321 et seq. and Council on Environmental Quality – Regulations for Implementing NEPA (40 CFR §§ 1500 – 1508, 43 CFR Part 46)	Requires disclosure of the potential impacts of federal actions on the human environment to the decision makers and the public to ensure that informed decisions are based on science. Mandates public involvement in the process.	All federal agencies
Oil and Gas Resources on National Forests, 36 CFR § 228.100 – 116	Provides regulations for the leasing, permitting, operations, and management of oil and gas resources on NFS lands. Includes requirements for Forest Service analysis and approval of a SUPO, leasing analysis, and compliance.	Forest Service
Onshore Oil and Gas Orders, 43 CFR 3160	Onshore Order No. 1 – Approval of Operations Onshore Order No. 2 – Drilling Operations Onshore Order No. 3 – Site Security Onshore Order No. 4 – Measurement of Oil Onshore Order No. 5 – Measurement of Gas Onshore Order No. 6 – Hydrogen Sulfide Operations Onshore Order No. 7 – Disposal of Produced Waters Onshore Order No. 8 – Well Completions/Workovers/ Abandonment (Proposed Rule) Onshore Order No. 9 – Waste Prevention and Beneficial Use of Oil and Gas (Not Published)	BLM

1.6.2 BLM and Forest Service Land Use Plans

The most recent approved WRNF management plan is the LRMP 2002 revision (USFS 2002a), which provides objectives and management direction for oil and gas leasing, exploration, and development. The WRNF Oil and Gas Leasing Final EIS (USFS 2014a) analyzes potential amendment of the 2002 LRMP specific to oil and gas leasing availability. When the **Final** ROD **was** signed by the Forest Supervisor **in 2015**, it amend**ed** the 2002 WRNF LRMP by making forest-wide decisions on oil and gas leasing land availability and approve**d** lease stipulations to be attached to future leases for the purpose of protecting other resources.

The BLM generally divides the responsibility for leasing Forest Service lands by BLM field office (FO). The 65 leases analyzed in this EIS are located primarily within the jurisdiction of the BLM CRVFO and the BLM Grand Junction FO (GJFO), with one lease to the north within the jurisdiction of the BLM White River FO in Meeker, Colorado, in Rio Blanco County.

The BLM CRVFO document that guides its management decisions is the Resource Management Plan (RMP). The most recent fully approved RMP governing oil and gas development in the CRVFO area is the CRVFO RMP, which was approved in June 2015. Management of oil and gas leasing within the GJFO is guided by the Grand Junction RMP, approved in August 2015. The BLM WRFO recently prepared a RMP Amendment and EIS to address potential oil and gas exploration and development activities within the area it manages and amend the 1997 RMP. The ROD and Approved RMP was signed in August 2015.

1.7 Scoping, Public Involvement, and Relevant Issues Identified

1.7.1 Public Scoping

The scoping comment period began April 2, 2014, with the publication of the Notice of Intent (NOI) to prepare an EIS in the Federal Register (Vol. 79, No. 63, pages 18576 to 18577). The NOI notified the public of the BLM's intent to prepare an EIS for the Previously Issued Oil and Gas Leases in the WRNF and the beginning of a 30-day scoping period. The BLM also posted the NOI on the project website (http://www.blm.gov/co/st/en/fo/crvfo/existing_leases_on.html).

The BLM subsequently extended the comment period by 14 days. The scoping comment period ended on May 16, 2014. Additionally, the BLM mailed scoping notification letters to 23 stakeholders on or about April 2, 2014.

The BLM hosted four scoping meetings in April and May 2014 with an attendance (signed-in) totaling 772 people (**Table 1-4**). The meetings provided an opportunity for the BLM to inform those in attendance about the Proposed Action, conceptual alternatives, and the EIS process and to solicit input on the scope of the analysis and potential issues. Each meeting was held from 4:00 p.m. to 7:00 p.m. Attendees were greeted, asked to sign in, given a project fact sheet and comment form, and informed about the meeting agenda, the general flow of information (display boards) in the room, and ways to submit comments to the BLM, including the opportunity for oral comment. A sign-up sheet was provided for attendees wishing to provide oral comments at the meeting.

Table 1-4 Scoping Meeting Attendance

Date	Location	Signed-In Attendance
April 15, 2014	Glenwood Springs, CO (Glenwood Springs Community Center)	151
April 16, 2014	Carbondale , CO (Carbondale Town Hall)	286
April 17, 2014	Aspen, CO (Pitkin County Library)	95
May 1, 2014	De Beque, CO (De Beque Community Center)	240

The BLM received 32,318 comment documents, the majority of which were form letters submitted by individuals. Of all the comment documents (letters, emails, form letters, and meeting testimony), 3,275 were from commenters in Colorado, 25,929 were from other U.S. states, 471 were from outside the U.S., and 2,643 were from unknown locations.

All comments were read, categorized, and entered into a database. The detailed comments and a more in-depth discussion of the public scoping process can be found in the External Scoping Summary Report, February, 2015, which is available on the BLM project website at http://www.blm.gov/co/st/en/fo/crvfo/existing_leases_on.html.

1.7.2 Scoping Issues

Substantive scoping comments fell into the following four broad categories: Process, Purpose and Need, Alternatives Development, and Impacts Analysis (including resource-specific concerns and cumulative impacts). The primary public scoping issues are summarized in **Table 1-5** with the locations in this EIS where they are addressed.

Table 1-5 Summary of Primary Scoping Comments

Resource	Primary Scoping Comments	Resource Issues Analyzed in EIS
Process	What NEPA deficiencies exist and by what process should the BLM address them?	Sections 1.2 through 1.5
	By what authority may the BLM cancel or modify leases?	Sections 1.2 through 1.5
	How can cooperators, agencies with regulatory authority, affected stakeholders, and other interested parties participate during the NEPA process?	Section 1.7
Purpose and Need	Should the Purpose and Need for agency action extend beyond addressing a NEPA deficiency?	Sections 1.2 and 1.3
	How should the BLM balance the requirements of its multiple use mandate under Federal Land Policy and Management Act of 1976 and the need to maintain resource values with the need to respond to the requirements of the MLA?	Sections 1.2, 1.3, and 1.5
	What are BLM's and Forest Service's respective roles and decisions to be made?	Section 1.4
Analysis Approach (General)	What RFDS and other development assumptions should be used for EIS analysis? What level of analysis is appropriate for a lease sale EIS?	Section 4.1
	How should the BLM address changed circumstances and new information in a remedial NEPA process?	Chapter 1.0; Chapter 2.0; Section 4.1
Cumulative Impacts	What reasonably foreseeable future actions are appropriate for inclusion in the cumulative impact analyses?	Section 4.1
Air Quality	How would reasonably foreseeable development activities such as drilling, production, vehicle use, and other sources affect air quality?	Section 4.2
	How will the Proposed Action and alternatives address emissions of greenhouse gasses and potential contributions to climate change?	Section 4.2
	What methods or actions can minimize or mitigate air quality impacts and potential effects on human health and other resources from the Proposed Action and alternatives?	Chapter 2.0; Section 4.2
Geology and Minerals, including Paleontology	What is the potential for seismic activity or other geological instability as a result of reasonably foreseeable development?	Section 4.3
	How would the potential for gas and liquid migration or seismic activity be affected by Mancos shale drilling, hydraulic fracturing, injection of produced water, or other reasonably foreseeable activities? How can those risks be minimized?	Sections 4.3 and 4.5
	What is the potential for impacts to important paleontological resources from reasonably foreseeable development and how can this be minimized?	Section 4.3
Soils	How does area soil type affect the potential for erosion, runoff, and subsequent sediment loading? What is the appropriate level of analysis for a leasing EIS?	Section 4.4
	How will impacts from reasonably foreseeable development to erodible soils, saline soils, or other sensitive soil types be minimized or mitigated?	Chapter 2.0; Section 4.4

Table 1-5 Summary of Primary Scoping Comments

Resource	Primary Scoping Comments	Resource Issues Analyzed in EIS
Water Resources	How would the projected water use affect long-term availability of water sources?	Section 4.5
	How would the characteristics of the oil/gas formations, aquifer formations, and their interconnectedness affect water quality during activities such as drilling, hydraulic fracturing, or other reasonably foreseeable activities?	Sections 4.3 and 4.5
	What are appropriate setbacks for protection of public and private wells, lakes and streams, impaired waters, floodplains, or other water resources? What design features, BMPs, mitigation measures, and conditions of approval can be incorporated into the alternatives to reduce risk to water resources?	Chapter 2.0; Section 4.5
	How can the impacts from spills to water quality and other resources be minimized?	Chapter 2.0; Section 4.5
	How should water quantity and quality be monitored?	Section 4.5
Vegetation and Special Status Species	How will vegetation resources, plant diversity, and ecologically intact/undisturbed locations and special status plant species be protected from the impacts of reasonably foreseeable development and maintained?	Chapter 2.0; Section 4.6
	How would surface disturbance or changes in hydrology affect wetlands, riparian areas, and floodplains and how will these areas be protected?	Chapter 2.0; Section 4.7
	How would the potential spread of noxious weeds be mitigated?	Chapter 2.0; Section 4.6
Wildlife and Special Status Species	How would reasonably foreseeable habitat disturbance, vehicle use, and other elements of oil and gas development such as noise affect terrestrial and aquatic wildlife, special status species, and their habitat?	Sections 4.6, 4.7, and 4.8
	How will the Proposed Action and alternatives affect big game, including habitat fragmentation? How would these impacts affect big game hunting?	Section 4.7
	What stipulations or BMP, mitigation measures, or conditions of approval can be incorporated into the Proposed Action and alternatives to reduce risk to wildlife and special status species?	Chapter 2.0; Sections 4.6 and 4.7
Cultural Resources	How can the BLM protect and conserve cultural resources, including Traditional Cultural Properties from reasonably foreseeable development?	Chapter 2.0; Section 4.9
	What cultural importance do local Tribes place on the analysis area, and how might important areas be affected?	Section 4.9
	How can the setting of historic tourism be maintained in consideration of reasonably foreseeable development?	Sections 4.9 and 4.13
Hazardous Materials	What types and amounts of hazardous materials will be used for oil and gas development? What methods will be used for hazardous materials transport, storage, and operations (including drilling and fracturing processes)? How will contaminants be disposed of? How will the BLM enforce compliance with safety requirements?	Section 4.16
	What contingencies exist to handle unexpected contaminations such as natural occurring radioactive materials or accidental spills and releases?	Section 4.16

Table 1-5 Summary of Primary Scoping Comments

Resource	Primary Scoping Comments	Resource Issues Analyzed in EIS
Health and Human Safety	How will the BLM protect public health and safety in and around the analysis area?	Chapter 2.0; Section 4.16
	What are the cumulative and combined impacts of multiple exposures to chemicals and toxic substances such as hydraulic fracturing fluids, ozone, and volatile organic compounds on humans? How will exposure to these chemicals and substances be minimized for workers, area residents, and visitors?	Section 4.16
	How can the risk of wildland fire from human activity be reduced?	Section 4.16
	How will reasonably foreseeable development impact emergency and health care services?	Sections 4.16 and 4.17
	How can noise from oil and gas development activities and transportation be mitigated?	Sections 4.10 and 4.11
Land Use	How would the Proposed Action and alternatives comply with federal, county and local policies concerning development? How will county lands identified for protection in Master Plans be protected from reasonably foreseeable development?	Section 4.11
Livestock Grazing	How will the BLM minimize impacts to livestock in and around the analysis area from exposure to hydraulic fracturing fluids, fugitive dust, and as well as impacts from noise or traffic?	Section 4.14
Recreation	How would reasonably foreseeable activities affect access to recreation and the quality of the recreational experience? How would this affect the recreation industry? How will effects be minimized?	Sections 4.13 and 4.17
	What are the hunting and fishing values of lands and waters in the analysis area? How would those activities be affected by potential development?	Sections 4.13 and 4.17
Socioeconomics	Would reasonably foreseeable development be compatible with the varying social and economic conditions across the analysis area, including employment patterns, and preferences for oil and gas development versus other industries?	Section 4.17
	How would lease cancellation affect local and regional social and economic conditions? How would lease cancellation affect operators or recipients of past royalties?	Section 4.17
	How would lease reaffirmation affect social and economic conditions on local and regional levels?	Section 4.17
	How would resource conservation measures and other actions that would restrict or limit oil and gas development (such as modifying leases) affect social and economic conditions?	Section 4.17
	What mitigation strategies can be used to minimize adverse social or economic impacts?	Section 4.17
Special Designations	How would the Proposed Action and alternatives comply with the 2001 and 2012 Roadless Rules? How would the alternatives affect the wilderness qualities of inventoried roadless areas and the values of research natural areas? What measures may be implemented to reduce those impacts?	Chapter 2.0; Section 4.12
	How would the values of other special designations such be protected?	Chapter 2.0; Section 4.12

Table 1-5 Summary of Primary Scoping Comments

Resource	Primary Scoping Comments	Resource Issues Analyzed in EIS
Transportation	How will development affect local and regional access and traffic on a daily and annual basis? How will adverse impacts to traffic be minimized?	Chapter 2.0; Section 4.10
	How will reasonably foreseeable development affect the local road system? How will the BLM coordinate with counties on road development? How will adverse impacts to the local transportation network be minimized?	Section 4.10
Scenic Resources	How would the reasonably foreseeable development affect the general landscape and rural character of the area under each of the alternatives? How will adverse impacts to areas with high quality visual resources be minimized?	Chapter 2.0; Section 4.15
	How will the construction and operation activities affect visibility (haze) from Class I and sensitive Class II areas and important recreational facilities?	Sections 4.2 and 4.13

1.7.3 Internal Scoping

Following review of the public scoping comments, the BLM CRVFO interdisciplinary team met to discuss the external scoping comments and to formulate alternatives to be analyzed in the EIS. This meeting was held to identify issues of concern to the BLM and to discuss how to address the public and agency issues in the EIS. The meeting also helped to more fully develop the conceptual alternatives that were presented in the NOI.

1.7.4 Public Meetings and Comments on the Draft EIS

The publication of the Notice of Availability (NOA) for the Draft EIS in the Federal Register on November 20, 2015, initiated the public comment period that ended on January 8, 2016. A news release announcing the availability of the Draft EIS, the public meetings, and the public comment period was issued on November 17, 2015 to local media outlets.

Advertising of the Draft EIS availability, comment period, and public meetings was accomplished through the following methods:

- **BLM News Release (November 17, 2015)**
- **Publication of Federal Register NOA of the Draft EIS (November 20, 2015)**
- **Email announcements to those who provided the BLM with a valid email address (November 19, 2015)**
- **Project website postings of the NOI, news releases, and public meeting dates (http://www.blm.gov/co/st/en/fo/crvfo/ existing_leases_on.html)**

The BLM held three public meetings to review the Draft EIS findings and receive public comments. The locations, meeting dates, and number of attendees were as follows:

- **Glenwood Springs, Colorado—Monday, December 14, 2015 (94 attendees)**
- **De Beque, Colorado—Tuesday, December 15, 2015 (8 attendees)**
- **Carbondale, Colorado—Wednesday, December 16, 2015 (240 attendees)**

During the formal comment period, the BLM received a total of 60,515 submissions, in the form of letters, emails, faxes, oral testimony recorded at a public meeting, or other methods. Each submittal varied in content, and ranged from one to many comments that contained technical information, suggestions for improving the content of the Draft EIS, as well as personal opinions. The majority of the submissions were "form letters" (i.e., submissions containing identical or nearly identical text submitted by more than one person). All submissions were analyzed for content, and the resulting comments were grouped by resource issue and categorized as substantive or non-substantive. In accordance with NEPA guidelines, the BLM has formally responded to all comments identified as substantive. Appendix E contains additional information regarding public outreach, submissions by type, a description of the content analysis process and comment disposition, a summary of out of scope and non-substantive comments, and all substantive comments with BLM responses.

1.7.5 Consultation and Coordination with Federal, State, and Local Governments, and Federally Recognized Indian Tribes

1.7.5.1 Cooperating Agencies

The BLM invited 23 federal and state agencies, counties, tribes, and municipalities to become cooperating agencies in letters sent to each organization on July 3, 2014. **13** agencies and local governments accepted the invitation to be a cooperating agency, listed below.

- WRNF
- U.S. Environmental Protection Agency, Region 8
- Colorado Division of Natural Resources
- Garfield County Commissioners
- Mesa County Commissioners
- Pitkin County Commissioners
- Rio Blanco County Commissioners
- Town of Carbondale
- City of Glenwood Springs
- City of Rifle
- Town of Silt
- **Town of Parachute**
- **Town of New Castle**

Cooperating Agency meetings **were** held at the CRVFO every few months or as needed to obtain comments from the cooperating agency representatives. This input includes comments on the types of information and data they can provide to support the NEPA process, comments on the preliminary range of alternatives, and reviews of sections of the EIS related to their special expertise.

1.7.5.2 Tribal Government-to-Government Consultation

Federal agencies are responsible for compliance with a host of laws, Executive Orders and Memoranda, treaties, departmental policies, and other mandates regarding their legal relationships with and responsibilities to Native Americans. Initially, the BLM CRVFO Field Manager sent scoping letters to the Ute Indian Tribe, the Ute Mountain Ute Tribe, and the Southern Ute Indian Tribe in April 2014, to notify

them about the Previously Issued Oil and Gas Leases in the WRNF EIS, inviting their comments and participation as cooperating agencies. Comments were received from the Southern Ute Indian Tribe.

On July 3, 2014, the BLM Field Manager sent letters to the Ute Indian Tribe, the Ute Mountain Ute Tribe, and the Southern Ute Indian Tribe to invite them to participate as cooperating agencies in the development of the EIS. No responses were received from the tribes.

Formal government-to-government consultation was initiated on June 1, 2015, when the BLM Field Manager sent letters to the tribes requesting that they provide comments or concerns regarding the effects of the alternatives on the known and likely traditional cultural properties, and offering the opportunity for face-to-face meetings with the Forest Service or the BLM. **On April 22, 2016, the BLM sent a letter to the tribes that identified the Preferred Alternative and summarized cultural resource records within the area of potential effect (including potential Traditional Cultural Properties). The letter also offered the opportunity for comments. No responses were received.**

1.8 Organization of this EIS

Chapter 1.0 of the EIS provides an introduction and general overview of the proposed federal action. In addition, this chapter describes the purpose of and need for the Proposed Action; the decisions to be made; existing BLM and Forest Service policies, plans, and programs; relevant laws, and regulations; and a summary of outreach activities.

Chapter 2.0 provides a summary of the EIS alternatives; a summary of the alternatives eliminated from detailed analysis and the reasons for elimination; detailed descriptions of the alternatives analyzed in the EIS; a summary of environmental protection measures and agency-required measures; and a comparison of impacts under each alternative.

Chapter 3.0 describes the existing natural and human environment within the proposed project area, focusing on the conditions that may be affected by the alternatives analyzed in detail.

Chapter 4.0 describes the potential direct and indirect impacts to the natural and human environment that would result from the implementation of the EIS alternatives. At the end of each resource section, there is a discussion of the cumulative impacts that would result from the implementation of the alternatives, in combination with the impacts contributed by other past and present actions and reasonably foreseeable future actions. This chapter also discusses the relationship between short-term uses of the human environment and the maintenance and enhancement of long-term productivity, and irreversible and irretrievable commitment of resources.

Chapter 5.0 provides a summary of the public involvement process; a summary of consultation and coordination undertaken to prepare the EIS; a list of federal, state, and local agencies, tribes, and private organizations and companies that were contacted during the preparation of the EIS; agencies, organizations, and persons to whom copies of the EIS were sent; and the lists of BLM and consultant team members that developed the EIS.

Following Chapter 5.0 is the list of references cited in the EIS, a glossary of terms the readers can use to obtain definitions for scientific or technical terms, an index of key terms and information presented in the EIS, and appendices.