



***Sent via Fax to 505-954-2010 and U.S. Postal Service Return Receipt***

August 15, 2014

Jesse Juen  
State Director  
New Mexico BLM State Office  
P.O. Box 27115  
301 Dinosaur Trail  
Santa Fe, NM 87508

**RE: Protest of Specific Parcels offered in the October 2014 New Mexico BLM Competitive Oil and Gas Lease Sale**

**Specific Parcels are: NM-201410-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, and -013.**

Dear Director Juen,

Trout Unlimited, et al. (the "Parties") respectfully protests, pursuant to 43 C.F.R. §§ 4.450-2 and 3120.1-3, the Bureau of Land Management's (BLM) lease sale offering of the October 2014 Lease Sale Parcels NM-201410-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, and -013 in the Farmington Field Office (hereafter referred to as the "FFO Parcels"). The Parties protest the offering of these Parcels for the following reasons:

- Due to significant proposed changes foreseen with the increased development in oil and gas activities in the Mancos Shale Formation, the FFO parcels located on the Santa Fe National Forest should be deferred.
- The Santa Fe National Forest (SFNF) planning documents used for lease analysis are outdated and lacking in National Environmental Policy Act (NEPA) adequacy in evaluating the parcels for the October 2014 lease sale. Documents referred to in the SFNF analysis include the outdated BLM oil and gas analysis and a 1987 SFNF Land Use Plan. The BLM planning area for the RMP Amendment process mentioned above includes the western portion of the SFNF, and the BLM has withdrawn all other parcels from the October lease sale until the RMP Amendment and further analysis is completed. We support BLM's withdrawal of these other parcels and believe the SFNF should follow suit and defer these Parcels from the October 2014 lease sale.

- Leasing the FFO Parcels would be in conflict with BLM Instruction Memorandum (IM) 2010-117 language, requiring resource specialists be included in the lease review, and the lack of a New Mexico BLM Oil and Gas Leasing Reform Implementation Strategy, required under this IM.
- Current NEPA analyses in the EA is insufficient and fails to include any analysis or recognition of Rio Grande cutthroat trout (RGCT) habitat or the streams containing Rio Grande cutthroat trout that exist within and adjacent to these FFO Parcels.
- Existing stipulations being applied to the FFO Parcels located on the SFNF are not adequate to protect fisheries (native and wild) and water quality resources located on and downstream of the these Parcels.
- NEPA analysis in the EA is insufficient and outdated for big game habitat both on BLM and SFNF lands. The SFNF contains significant habitat for big game species, in particular important winter range for mule deer, and the EA fails to include a hard look at this required analysis.
- NEPA analysis on impacts to important groundwater resources on the SFNF is insufficient to address possible effects of oil and gas exploration, in particular unconventional oil and gas development and high volume hydraulic fracturing.
- The EA fails to adequately provide cumulative effects analysis for this lease sale.
- A Finding of No Significant Impact (FONSI) is not warranted for Environmental Assessment (EA) DOI-BLM-NM-F010-2014-0154-EA which covers the Parcels located on the SFNF.

#### I. Affected Parties

Trout Unlimited (TU) is the nation's leading coldwater fisheries conservation organization with more than 155,000 members nationwide and more than 900 members in New Mexico who share a mission to conserve, protect and restore North America's coldwater fisheries and their watersheds. Central to this mission is the promotion of land and water management that maximizes habitat conservation and minimizes impacts caused by land and water use activities, including the development, construction, operation, and decommissioning of energy projects and facilities. TU has a proven track record of science-based analysis using respected tools for evaluating and mitigating impacts on coldwater fisheries. It is TU's policy to encourage energy development in a way that meets the needs of people while eliminating, minimizing, or mitigating the impacts to coldwater fisheries and their watersheds. TU works to ensure that energy projects are designed, sited, constructed, operated, and decommissioned in a manner that conserves coldwater fisheries and their watersheds. Many of our members—including those from our chapters in Taos, Santa Fe, and Albuquerque — use the lands at issue in both the SFNF and the Farmington resource area for recreational opportunities and to hunt and fish.

Founded by Aldo Leopold in 1914, the New Mexico Wildlife Federation (NMWF) is celebrating its hundredth anniversary this year. NMWF is New Mexico's oldest conservation organization and one of the oldest sportsmen-based conservation organizations in the nation. With approximately 15,000 members and supporters statewide, these sportsmen utilize public lands to hunt and fish

in New Mexico. NMWF members are a conglomerate of diverse individuals that encompass virtually every racial, cultural, religious and socio-economic community in the state.

Hispanics Enjoying Camping, Hinting, and the Outdoors (HECHO) is a conservation organization that brings the Latino voice to issues ranging from public lands protection to balanced oil and gas development. Our members use public lands in the BLM Farmington Field Office for a variety of recreational purposes, including hunting and fishing. At HECHO, we believe that energy development does not have to come at the price of sacrificing the public lands we have utilized for centuries. We believe that a balanced approach to energy development ("smart from the start") will provide for a mutually beneficial outcome for all stakeholders in our public lands.

Rio Grande Restoration (RGR) is a nonprofit organization dedicated to protecting and restoring flows in the Rio Grande and its tributaries. RGR engages primarily in education and policy on New Mexico water matters. Recent work has focused on the Rio Chama Flow Project, which is a multi-stakeholder effort to create a hydrograph below the Chama's El Vado Dam that meets all downstream water obligations while serving the goals of increased quality of recreation (wild trout fishing and rafting primarily) and improved ecological resiliency.

Collectively, the Parties have been proactive in advocating for responsible energy development that meets the needs of people while eliminating, minimizing, or mitigating the impacts to coldwater fisheries, their watersheds, big game habitats, and protecting hunting and fishing culture and values.

The Parties have participated in the early BLM planning process conducted for this lease sale, offering our comments to the draft EA.<sup>1</sup> Separately, we have communicated our concerns with the SFNF staff and are hopeful that this matter will be resolved. However, we are filing this protest in order to preserve our rights to appeal pursuant to 43 C.F.R. §§ 3120.1-3 and 41.410, should these parcels not be withdrawn from this sale.

## II. Statement of Reasons

***A. Due to significant proposed changes foreseen with the increased development in oil and gas activities in the Mancos Shale Formation, the FFO parcels located on the Santa Fe National Forest should be deferred.***

The BLM has withdrawn 22 of the 35 parcels offered in the October 2014 lease sale<sup>2</sup> using the reasoning that the Farmington BLM resource planning area is undertaking a Resource Management Plan (RMP) Amendment to evaluate increased and predicted development associated with the Mancos Shale/Gallup Formation.<sup>3</sup> We support BLM's decision to do this but

<sup>1</sup> TU et al., May 30, 2014 Comments to the Farmington BLM District Office Proposed Oil and Gas Lease Sale for October 2014. Submitted via email to [NMLeasesalecomments@blm.gov](mailto:NMLeasesalecomments@blm.gov).

<sup>2</sup> EA and Unsigned FONSI: July 18, 2014. October 2014 OG Lease Sale EA FFO Protest Correction 1: Finding of No Significant Impact.

[www.blm.gov/nm/st/en/prog/energy/oil\\_and\\_gas/lease\\_sale\\_notices/2014\\_lease\\_sales/october\\_lease\\_2014](http://www.blm.gov/nm/st/en/prog/energy/oil_and_gas/lease_sale_notices/2014_lease_sales/october_lease_2014).

<sup>3</sup> Federal Register Notice of Intent to Prepare a Resource Management Plan Amendment and an Associated Environmental Impact Statement for the Farmington Field Office, New Mexico. Vol. 79, No. 37/Tuesday, February 25, 2014.

request the remaining 13 parcels, located on the SFNF (see Figure 1), also be deferred.<sup>4</sup> The Mancos Shale Formation extends into the western portion of the SFNF and is considered part of the BLM planning area for this Amendment. The EA states the analysis is tiered to and incorporates by reference both the 2003 Farmington RMP FEIS and the FEIS for Oil and Gas Leasing and Roads Management, Santa Fe National Forest. Therefore, based upon the evidence before the agency, we believe the BLM is within its jurisdiction to withdrawal these lease Parcels, as it did with the previous 22 parcels, until the Amendment is completed.<sup>5</sup>

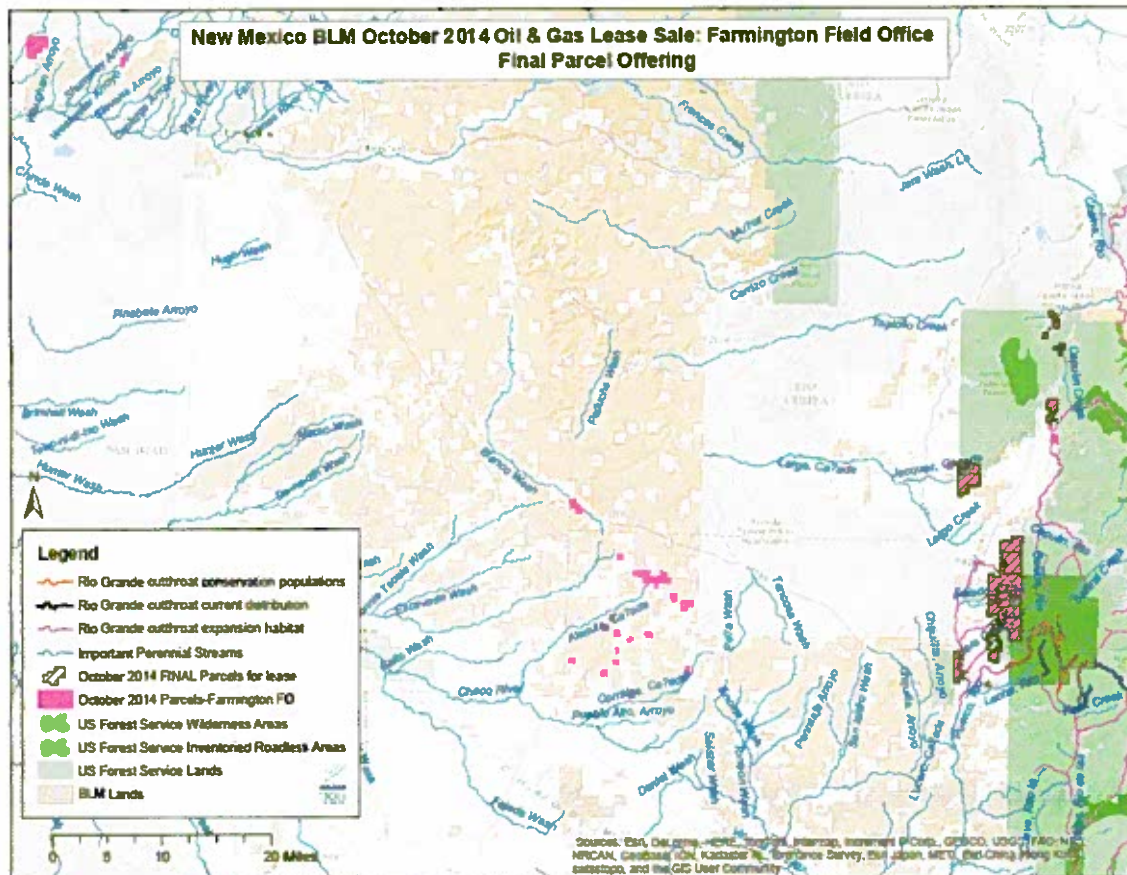


Figure 1. October 2014 lease parcels, deferred and not deferred, and location of Rio Grande cutthroat trout habitat.

In addition to the above argument for deferring the 13 parcels located on SFNF lands, we believe the BLM and the SFNF failed to provide any reasoning as to why the 13 parcels were not deferred. In the unsigned July 18, 2014 FONSI and Final EA, neither the BLM or the SFNF provided any reasoning for why the FFO Parcels we are concerned about remained in the sale while the other 22 were deferred. The sole factor expressed for deferring 22 parcels, i.e. significant new information regarding development potential in the Mancos Shale/Gallup Formation, is applicable to all parcels in question and all parcels should be deferred; it is arbitrary to do otherwise.

<sup>4</sup> "The other parcels as described under the Proposed Action, Alternative B, would be deferred until after the FFO Mancos Shale/Gallup Formation RMPA/EIS alternatives have been developed." EA, p. 14.

<sup>5</sup> Interior Board of Land Appeals. *Western Energy Alliance vs. UTU #9903 IBLA 2014-67 (July 25, 2014)*.



Finally, the EA is incomplete in its analysis of the 13 parcels on the SFNF. From air quality (where no mention of Class I Wilderness Area airsheds or Inventoried Roadless Areas airshed impacts is discussed), to statements indicating there are no water resources, riparian areas, perennial streams, or fisheries located in or near the 13 Parcels, to Cultural landscapes (which confusingly referenced National Park Service references from 1999, 1996, and 1992), to cumulative effects, which only contained a discussion on air quality, the EA fails to fulfill NEPA's basic tenet to "help public officials make decisions based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment"<sup>6</sup>. Clearly the EA fails to provide the adequate and required NEPA analysis for this lease sale and we suggest the BLM select Alternative A as the only legal option at this time.

***B. The Santa Fe National Forest (SFNF) planning documents used for lease analysis are outdated and lacking in National Environmental Policy Act (NEPA) adequacy in evaluating the parcels for the October 2014 lease sale.***

The EA appeared to include only references to the SFNF planning documents as sufficient for analyzing the 13 parcels located on the SFNF but that is as far as the BLM went in terms of evaluating the 13 parcels on the SFNF. Yet the BLM planning area for the Mancos Shale development encompasses the proposed leases on the SFNF.

The SFNF referenced analysis includes the outdated BLM oil and gas analysis and a 1987 SFNF Land Use Plan, among other dated materials. The SFNF's Final Supplement to the Final EIS for Oil and Gas Leasing on the Santa Fe National Forest and the Record of Decision for Oil-Gas Leasing is outdated and references information provided by the FFO Reasonable Foreseeable Development (RFD) scenario, including the projection of up to 20 new oil and gas wells. Though both documents are signed with 2011 and 2012 dates, the associated referenced development of the document is 2005 and 2002 respectively. Further, there is inconsistency throughout the EA on these SFNF parcels with respect to parcel discussions, correct parcel reference numbers on the SFNF, and the estimated number of wells proposed under this lease sale. This last point is noted under the Greenhouse Gases discussion (page number not identified in the EA) where the discussion states:

*Leasing the subject tracts under either action alternative would have no direct impacts to climate change as a result of GHG emissions. Any potential effects to air quality from sale of a lease parcel would occur at such time that the lease was developed. The potential for full field development of the proposed lease sale is estimated at 118 oil wells (see Assumptions for Analysis for more information). (Emphasis added).*

Should there be 118 oil wells proposed under this lease sale, the SFNF needs to provide much better analysis than what it is offered for this lease sale. It does not help that the SFNF Forest Management Plan (ROD 1987) is also significantly dated and cannot adequately be referenced in making land use decisions that have the potential to permanently impact fish and wildlife habitat, our waters, air, and recreational values. As we emphasized in our May 2014 EA comments to the sale, and again in this Final EA, there is a troubling lack of any reference to fisheries, BLM and USFS Sensitive native trout species, perennial streams, soil and erosion

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<sup>6</sup> 40 CFR. 1500.1

issues, climate change, big game habitat and migration corridors, groundwater and surface water issues – none of these important issues have been addressed by the BLM or SFNF. Thus, the current NEPA analyses completed for this lease sale are insufficient to address the potential effects of oil and gas exploration and development activities as they exist today. For this reason, we ask the BLM to defer these 13 parcels until the Amendment is complete and the SFNF is able to provide more accurate and substantial environmental analysis.

Finally, the FS is in the midst of updating numerous forests with new planning revisions, under the 2012 Planning Rule. The SFNF is one of the Forests scheduled to undergo this revision, likely starting this year. Because of the dated quality of the current Plan for the SFNF, we feel the Forest should not allow the leasing of these parcels based on the lack of adequate NEPA provided and the lack of new science and technological information provided in the FS lease analysis. By withdrawing these parcels until the new SFNF Plan is complete, there will be a level of assurance that future leasing decisions are consistent with management direction included in the new Forest Plan.

Based on the above discussion, TU, NMWF, HECHO, and RGR request that the BLM and FS reconsider the leasing of these areas by withdrawing the identified parcels from the sale. In doing so, an appropriate NEPA analysis can be conducted and completed, effective stipulations for resource protection can be developed and a better-informed decision can be rendered.

***C. Leasing the FFO Parcels would be in conflict with Instruction Memorandum (IM) 2010-117 language, requiring resource specialists be included in the lease review, and the lack of a New Mexico BLM Oil and Gas Leasing Reform Implementation Strategy, required under this IM.***

On May 17, 2010, the BLM issued the Instruction Memorandum (IM) No. 2010-117 titled "Oil and Gas Leasing Reform – Land Use Planning and Lease Parcel Reviews". This IM was effective immediately and requires the BLM State and Field Offices to establish a process that is designed to ensure a more orderly, effective, timely and environmentally responsible leasing process for oil and gas resources on Federal lands (see IM Purpose). To that, the Parties believe the BLM FFO failed in meeting this directive for the following reasons and that the IM policy also applies, in this case, to those lease parcels located on the SFNF. Three reasons provide support for our statement.

First, the IM clarifies this early in its **Policy/Action** discussion on how the BLM should apply the policy when federal minerals exist under federal non-BLM lands, such as Forest Service lands. Under Policy/Action, the IM states:

*[T]he BLM does not manage leasing on tribal lands; therefore, this policy does not apply to tribal lands. In addition, sections I through III.F of this policy do not apply to the leasing of Federal minerals under lands managed by other Federal surface management agencies. Those sections, however, do apply to split estate lands within National Forest System (NFS) units if leasing decisions for such lands have not been analyzed in documentation prepared jointly by the U.S. Forest Service (FS) and the BLM for lands within the external boundaries of NFS units. (Emphasis added).*

Upon review of the EA, there is little reference to any jointly prepared analyses by both agencies; instead, the BLM has left any SFNS resource analysis out of the EA, referring only to two outdated documents the FS provided as supportive documentation for leasing these Parcels.

Our second reason for inferring that the BLM failed to meet the directives of the IM involves the lack of FS participation within the IDPR Team (Interdisciplinary Parcel Review Team). Section III.C. (Interdisciplinary Review of Lease Sale Parcels) of the IM explains that:

*Field offices will form an Interdisciplinary Parcel Review Team (IDPR Team) of resource specialists to review lease sale parcels and ensure compliance with NEPA (see III.E. NEPA Compliance Documentation, below) and other legal and policy requirements. The IDPR Team will include subject matter experts for the resources potentially affected by leasing. When appropriate, the IDPR Team should consider including staff specialists from other agencies when lands and/or resources that are administered by those agencies could be impacted by future development on the lease parcels under review...." (Emphasis added).*

The EA briefly refers to the IDPR Team in its opening pages when it references IDPR work but it does not identify any of the participants. Nor does it identify Team member participation from the SFNF (or from New Mexico Game and Fish) as part of the "ID Team Member" list identified in Table 28 under the Consultation/Coordination discussion (unnumbered page). Equally important, the IDPR Team identified in the EA does not contain any Fish Biologists, though there are several within all three agencies who work exclusively on RGCT issues within the region.<sup>7</sup> We contend that based on the guidance and specific requirements identified in the IM, the BLM failed in its responsibilities to include appropriate and specialized agency and staff participation in the review of the lease parcels and preparation of the EA.

In examining the adequacy of existing agency resource management decisions, resource subject matter, and data gathering and assessments (as outlined the in the IM), it appears the BLM considered tribal land agencies and private land owners but neglected to reach out to other pertinent outside resource specialists and information in its decision to withdraw only 22 of the lease parcels; those remaining 13 Parcels which are tiered to the FFO RMP and which remain within the resource planning area should also be deferred. This is especially relevant given the SFNF has referenced the FFO RMP and ROD in their documents for determining leasing adequacy in protecting important resources.

Third, the IM requires site visits to parcels prior to leasing and to coordinate with outside agencies in determining leasing adequacy. Due to the lack of SFNF participation (or New Mexico Game and Fish) on the IDPR Team, neither site visits nor coordination seems to have occurred for these 13 Parcels. Had site visits been conducted on the 13 FFO Parcels, the BLM would not have stated in the EA that perennial streams, wetlands, or riparian areas did not exist in or near these Parcels (Table 12 on unnumbered page in Final EA).

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<sup>7</sup> Personal communication with the Rio Grande Cutthroat Trout Biologist for the New Mexico Department of Game and Fish indicated he was unaware of the lease sale or of the parcels located in the SFNF. August 14, 2014.

In addition to the above three points, each state was required to develop a set of leasing reform implementation strategies, as discussed under the Policy/Action section of IM 2010-117. We saw no reference to this document for New Mexico in the Final EA and ask that the BLM provide a more updated reference to it and how it will provide the required lease stipulation reviews. Since the SFNF is dependent on BLM leasing reviews and supportive resource documents, we believe this is relevant to the SFNF leasing review as well.

We respectfully ask the BLM to withdraw the 13 Parcels until the Amendment is completed and the SFNF is able to provide adequate environmental analyses for these 13 parcels.

***D. Current NEPA analyses in the EA is insufficient and fails to include any analysis or recognition of Rio Grande cutthroat trout (RGCT) habitat and the streams containing Rio Grande cutthroat trout that exist within and adjacent to these FFO Parcels.***

The EA provides little to no analysis of the impacts the sale of these lease parcels would create on native and wild fish habitat located within and adjacent to these 13 Parcels. As we discussed in our May 2014 EA comments to this sale and as we reaffirm these comments after reading the incomplete Final EA, the BLM has not fulfilled its management and NEPA obligations in providing sufficient analysis for this lease sale. Further, none of the SFNF NEPA analysis contained any reference to native and wild fish habitat and potential impacts from oil and gas development.

1. ***Special Species Designations:*** Similar to the draft EA, the Final EA continues its lack of any analysis on Rio Grande cutthroat trout (RGCT), identified as a Candidate species by US Fish and Wildlife Service (USFWS)<sup>8</sup>, a Special Status Species and Sensitive Species under BLM and the US Forest Service designations, and a Species of Greatest Conservation Need and managed as Protective Species by New Mexico Game and Fish, and is identified as the State Fish.<sup>9</sup> Moreover, there is no mention of the fact that RGCT is identified as a management indicator species in the SFNF. As we pointed out in our May 2014 EA comments, the EA identifies USFWS sensitive and T&E species but erroneously states RGCT do not occur within the SFNF leasing area. Again, in the Final EA, this same statement is included, this time in Table 12. In this Table it also incorrectly identifies parcels that are not part of this October lease sale (for instance, a Parcel #73 is identified as not containing sensitive species). Further, the Table goes on to state there are no wetland, riparian, or perennial streams within the proposed parcel location areas.

2. ***Conservation and Economic Efforts to Date:*** According to the information described in the 2013 RGCT Conservation Strategy document, New Mexico's Rio Grande cutthroat trout biologists have initiated and/or completed 14 restoration projects in New Mexico RGCT habitat since 2002. In collaboration with these efforts, national forests in New Mexico have contributed to the conservation of the species and over \$1.5 million has been spent on habitat improvement projects, surveys, restorations, and genetic and disease monitoring.

The SFNF has developed a "Respect the Rio" program and has participated extensively in RGCT public outreach in the Lower Rio Grande watershed, including developing a RGCT Trout Lifecycle game, adopted by the New Mexico State Department of Education. This game has received extensive distribution with the objective of highlighting the importance of RGCT and the threats

<sup>8</sup> USFWS May 2012. USFWS Species Assessment and Listing Priority Assignment Form for Rio Grande Cutthroat Trout.

<sup>9</sup> New Mexico's Comprehensive Wildlife Conservation Strategy (NMGF 2006).



to the species. Most notably, the SFNF has developed a trout mascot, “Carlos Cutthroat”, which is used in its education presentations. It seems intuitive that with the adoption of a National Forest mascot, the SFNF would provide a more extensive environmental analysis on the leasing effects to these important watersheds. Yet none of this information is reviewed or considered in the EA or within the documents referenced by SFNF.

BLM lands adjacent to the SFNF Parcels contain downstream RGCT habitat and conservation efforts in collaboration with BLM were not recognized in the EA as well. It is clear that a significant economic contribution to important fisheries has been made in RGCT waters and the Parties (contributors to these conservation efforts) believe the BLM and SFNF should provide a more thorough analysis on their investments before leasing these 13 Parcels.

3. *RGCT Habitat in SFNF Leases*: In the 2013 Conservation Strategy discussion for RGCT, the fourth Objective (“*Secure and Enhance Watershed Conditions*”) that the FS (including the SFNF) and the BLM have agreed to is the provision that current Land and Resource Management Plans will be evaluated and updated as necessary to provide adequate protection for RGCT with current best management practices. It goes on to state that land management activities that would result in the loss of habitat or cause a reduction in long-term habitat quality will be avoided (Conservation Strategy, page 28). We believe that the current 1987 SFNF Forest Plan does not represent current best management practices and the SFNF Oil and Gas leasing FEIS does not adequately reflect management protection for RGCT habitat or commitments to the 2013 Conservation Strategy.

Further, USFWS concluded in their species assessment for RGCT<sup>10</sup> that “...based on the best scientific and commercial information to us, the present or threatened destruction, modification, or curtailment of its habitat or range is a threat to the continued existence of Rio Grande cutthroat trout.” Oil and gas leasing can eventually lead to activities which involve, among other actions, removal of surface vegetation, an increase in road development, erosion and sedimentation events, accidental spills, stream crossings, and potential habitat fragmentation and all of these factors work to impact RGCT habitat.

The Lower Rio Grande GMU has only 10 percent remaining of their presumed historical habitat and the majority of their habitat exists on national forest lands. The Lower Rio Grande GMU has the most conservation populations (62 of 127 of the five GMUs).<sup>11</sup> These populations are important in that they contain a high genetic purity (greater than 90 percent) and are considered secure populations. Any impact that threatens the purity and security places the species in a vulnerable situation, potentially leading to a federal listing as threatened or endangered. Therefore, it is critical for any leasing action to contain adequate analysis, stronger protective stipulations and in some cases, placing these special areas off limits to any kind of disturbance.

Our recent GIS analysis, using updated databases inventories provided by the RGCT Rangewide Assessment and Conservation Team<sup>12</sup>, delineates streams containing Conservation populations

<sup>10</sup> USFWS Species Assessment and Listing Priority Assignment for Rio Grande cutthroat trout. May 30, 2012. Page 13.

<sup>11</sup> Rio Grande Cutthroat Trout Conservation Team. 2013. *Rangewide Report*. Dated in Letter February 12, 2014.

<sup>12</sup> Conservation Agreement for Rio Grande Cutthroat Trout (*Oncorhynchus clarkii virginalis*) in the States of Colorado and New Mexico. October 2013.

of RGCT within two (Parcels 005 on Rio de los Pinos and 009 on La Jara Creek) of the 13 Parcels located in the SFNF (see Figure 2).

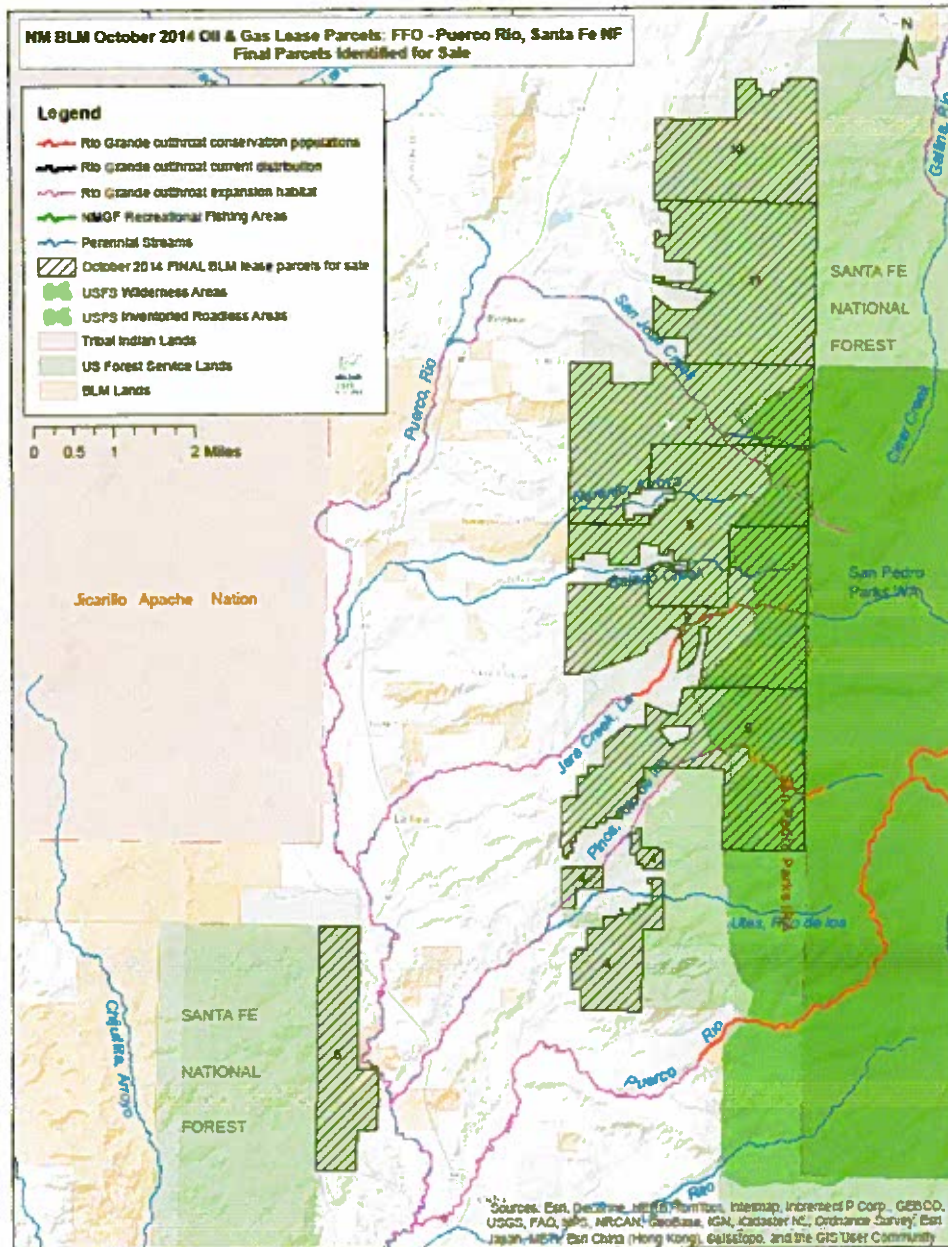


Figure 2. Important Rio Grande cutthroat trout habitat located within and near October 2014 leases parcels.

In addition to conservation populations located within the lease Parcels, six other parcels are located in streams that contain current populations of RGCT and additional stream reaches of suitable expansion habitat (Figure 2 and Figure 3). Expansion habitat is identified in the Conservation Agreement and the Conservation Strategy for RGCT as an important objective for maintaining current and future populations of RGCT. Heavy silt and sedimentation events,

among other impacts from oil and gas activities and infrastructure, could affect important native trout and wild trout populations within this watershed. Impacts from oil and gas development activities to these streams and to this Candidate-listed species are too high and should not be placed in this high risk situation.

FFO Parcel 001 is located within a half-mile from the Gallina River, identified as important expansion habitat for RGCT.

FFO Parcel 004 contains three fragmented pieces and one of those fragments has the Rio de los Pinos flowing through it while another fragment of this Parcel is adjacent to this river. Both Parcel pieces are located in expansion habitat for RGCT.

FFO Parcel 005 also has the Rio de los Pinos flowing through it. In addition to containing Conservation populations of RGCT, expansion habitat for RGCT is located downstream in the Parcel.

FFO Parcel 006 is located in a small section of the SFNF and a very small section of BLM land. The Puerco River flows through the BLM land within this Parcel and adjacent to the SFNF lands. The Puerco River is considered important expansion habitat for RGCT.

Both FFO Parcels 007 and 008 contain San Jose Creek which is identified as expansion habitat for RGCT. In addition several other perennial streams act as tributaries to the San Jose and all eventually flow into the Puerco River.

Because of the importance of protecting both occupied RGCT habitat and streams suitable for expanding RGCT populations, the Parties believe that the BLM should withdraw the 13 FFO Parcels on the SFNF until further environmental analysis and updates to resource and land use management plans have been completed.

***E. Existing stipulations being applied to the FFO Parcels located on the SFNF are not adequate to protect fisheries (native and wild) and water quality resources located on and downstream of these Parcels.***

The EA fails in its adequacy to provide protection stipulations which would minimize potential impacts to fisheries, big game, waters, and soils for this lease sale. The SFNF stipulations identified in the EA also fail to provide adequate protection measures and are based on outdated resource information with respect to oil and gas development. Modern oil and gas exploration and production activities, especially those which can occur with the development of the Mancos Shale Formation, are not considered in the EA or the SFNF analysis documents. Indeed, recent research on the impacts to landscapes and biological communities show that there are significant gaps in understanding the impacts of shale development, and that coupled with other environmental changes (i.e., climate change) cumulative impacts to living organisms may be calamitous.<sup>13</sup>

<sup>13</sup> Souther, Sara, et al. 2014. Biotic impacts of energy development from shale: research priorities and knowledge gaps. In *Frontiers in Ecology and the Environment*. *Front Ecol Environ* 2014; 12(6): 330-338, doi:10.1890/130324.



Stipulations discussed in the EA were established more than 30 years ago by BLM and the USFS; significant changes have occurred in the oil and gas development community, including more extensive development access, increased depth of drilling, new resource plays that require different extraction methods, and increases in the number of wells per pad. All of these types of resource extractions take a toll on the environment. Establishing stronger and more protection stipulations for environmental resources provide agencies and industry better options for development with potentially minimal impacts. A hard look, as required by NEPA<sup>14</sup>, must be provided at the impacts of unconventional oil and gas development and associated hydraulic fracturing activities. This did not occur for this lease sale in the EA analysis.

The EA makes vague and unsubstantiated statements that existing stipulations would minimize impacts, would have no impacts, animals would adapt to impacts, or impacts are similar to other activities that affect terrestrial and aquatic species. Little reference or documentation is provided with respect to a growing body of research and impact studies on fish and wildlife from irresponsible and unexpected impacts from oil and gas development. In addition to impacts that can have direct effects on water bodies located on the leases, any sediment and spills associated with oil and gas development would pose a downstream risk to RGCT and wild trout fisheries in the SFNF and potentially as far downstream onto BLM and private lands.

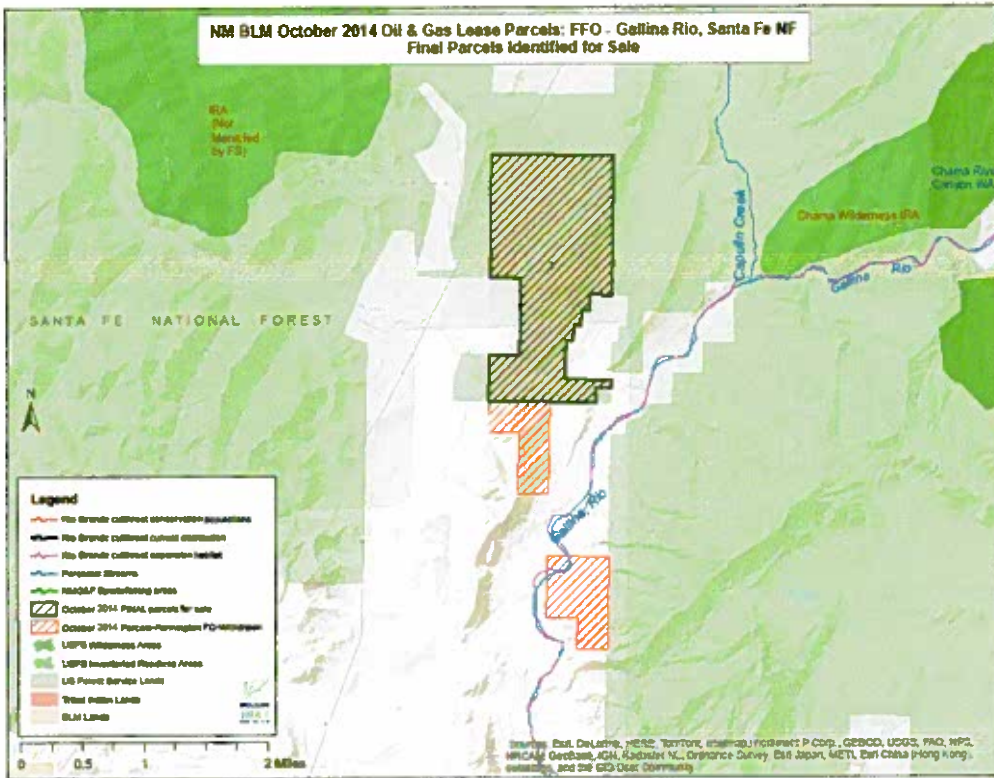
1. Fisheries Stipulations: The SFNF's only reference to some type of protection for riparian or wetland areas is the vague CSU-1 (Controlled Surface Use) from the 2008 Oil and Gas ROD, which states that avoidance should be made in placing well pads and attendant facilities within wetlands and riparian areas. For small streams with very narrow riparian areas (up to 10 feet or less in some cases), such as those on the lease Parcels in the SFNF, this stipulation would allow a well pad within 10 feet or closer of a critically important trout stream. Stipulations that lack any defined measured protective distance do little for protecting fisheries, watersheds, surrounding riparian habitats, and those other species dependent on this ecosystem.

The EA failed to recognize the potential impacts caused by heavy sediment deposition affects to native and wild trout fisheries, a typical event when New Mexico experiences heavy monsoonal rains. Parcel 001 is located adjacent to the Rio Gallina (see Figure 3), important expansion habitat for RGCT and an important wild brown trout fishery to sportsmen and the NMGF. The Rio Gallina flows into the Rio Chama, a Wild and Scenic River prized by fisherman and considered important high quality spawning areas. Any type of accidental spill, groundwater or surface water contamination or other contaminating incidents can ecologically and economically impact these waters and what they provide to New Mexico's residents.

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<sup>14</sup> “[I]f there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts, a supplemental EIS must be prepared for an old EIS so that the agency has the best possible information to make any necessary substantive changes in its decisions regarding the proposal.”





**Figure 3. Parcel 001 near Gallina Rio Grande cutthroat trout expansion habitat and wild trout habitat.**

In our May 2014 comments to the October 2014 draft EA we had requested that the BLM and SFNF include stronger stipulations for RGCT habitat and we provided numerous examples where BLM and USFS field offices across the West have increased their stream and riparian buffers to protect native trout streams. The Final EA did not acknowledge these suggestions or analyze a range of alternatives with varying levels of avoidance and mitigation. Thus, we can only request now that all 13 Parcels are withdrawn from the October lease sale until the completion of the Amendment and the revision of the SFNF Forest Plan.

2. Terrestrial Stipulations: Timing limitations are the only stipulations which have been applied to big game species for this lease sale. Very little discussion is provided on the importance of habitat within the SFNF for big game (see Figures 4 through 7). Both BLM and SFNF timing limitations contain vague and indefensible language that offers little protection should a drilling company request an exception or modification to the stipulation. Protection of calving and fawning areas, migration corridors, and transition areas are not discussed. Further, the EA fails to adequately provide a hard look at impacts to big game from oil and gas development activities which could occur as a result of this leasing action. Rather, the EA references the reader to another document, stating "...detailed information on wildlife species and habitat is contained in the PRMP FEIS..." (Under **Other Special Status Species** discussion, page not provided). We believe it is the responsibility of the EA to include all relevant and pertinent information within the context of the EA for review.

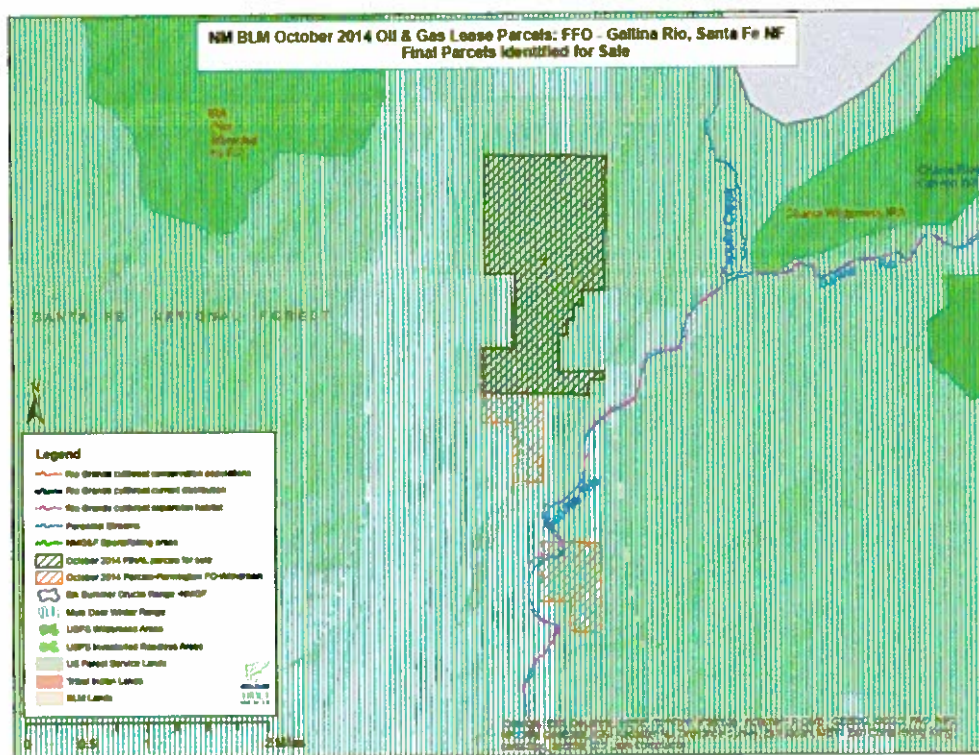


Figure 4. Big game habitat locations within and adjacent to Parcel 001.

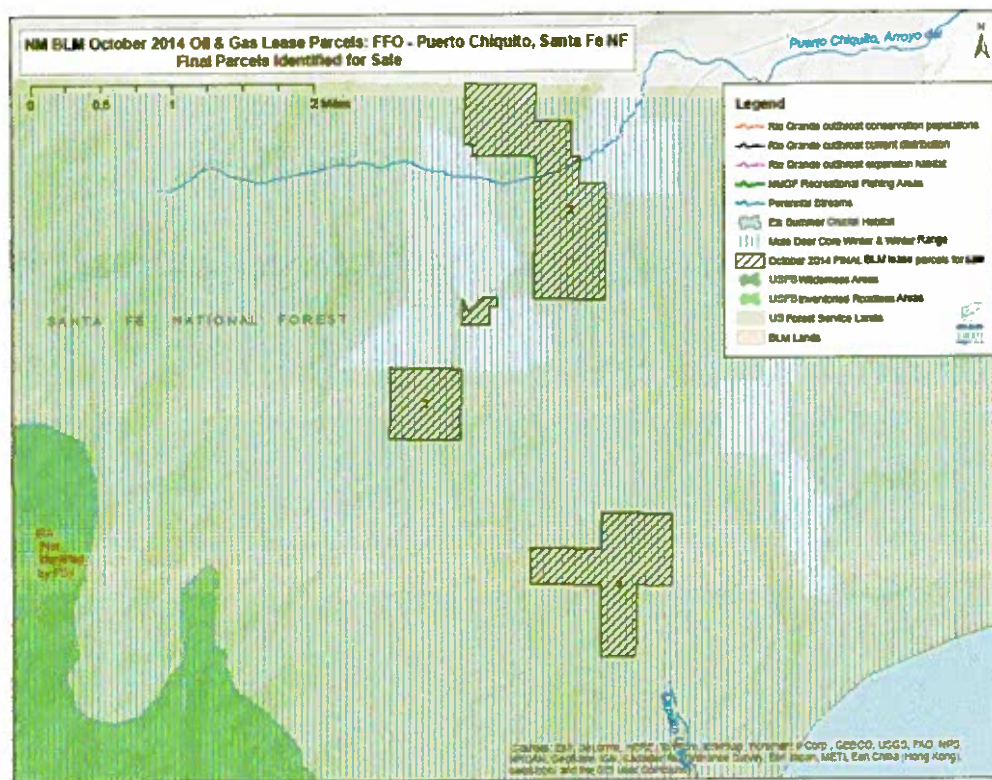


Figure 5. Big game habitat located within Parcels 002 and 003.



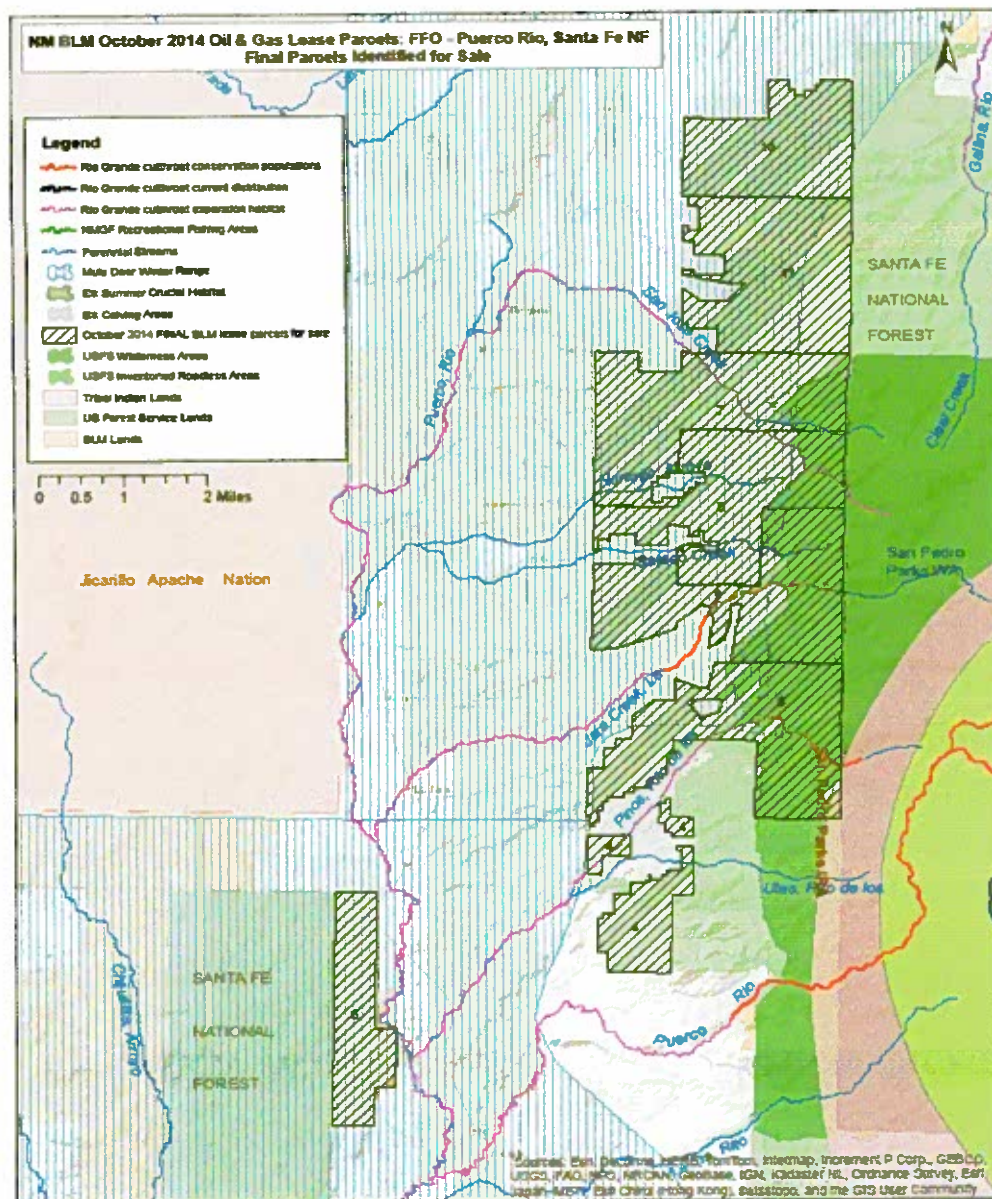


Figure 6. Big game habitat located within and adjacent to Parcels 004, 005, 006, 007, 008, 009, 010, and 011.

We have concerns that Timing Limitations are very narrow and limiting since 1) they are only designed to be effective during exploration and development, not production when activities continue to impact wildlife, 2) production phases results in substantial and long-term loss of habitat functions and mitigation is not typically required during the production phase, and 3) in a larger drilling project that has been unutilized, stipulations tend to be decreased during additional and subsequent development.<sup>15</sup> In fact, BLM and the Wyoming Game and Fish

<sup>15</sup> Wyoming Game & Fish Department. "Recommendations for Development of Oil and Gas Resources within Important Wildlife Habitats." 2010 Revision.

Department (WGFD) are no longer recognizing the use of Timing Limitations as stipulation requirements; rather they are working with industry in implementing new and more specific stipulations designed to be effective from exploration through production.<sup>16</sup> They are able to implement these new strategies based on years of research on energy impacts to big game and respective insufficient protections that Timing Limitations provide.<sup>17</sup> We suggest the BLM and SFNF review these “adaptive management” techniques for future leasing options as it applies to standard stipulations.

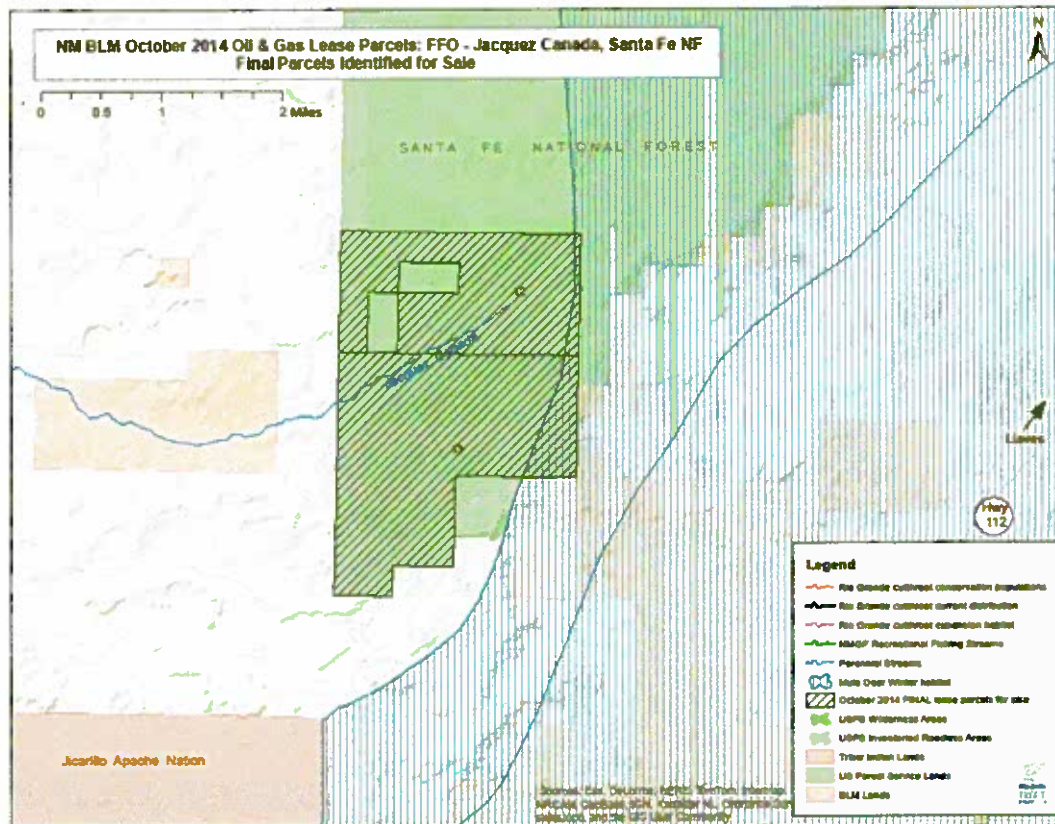


Figure 7. Big game habitat located within and adjacent to Parcels 012 and 013.

Because new research continues to be revealed with respect to stipulations adequacy and the EA does not include any of this analysis, the Parties believe these 13 Parcels should be deferred until updated impact analysis is reviewed and appropriate stipulations that offer better protection are applied to future leases.

<sup>16</sup> Rawlins BLM Proposed FEIS for the Continental Divide-Creston Natural Gas Project. 2014. Personal conversation, WGFD August 2014.

<sup>17</sup> Sawyer, Hall, et al. 2006. "Winter Habitat Selection of Mule Deer Before and During Development of a Natural Gas Field". *Journal of Wildlife Management* 70:396-403; Sawyer, H. et al. 2009b. "Influence of well pad activity on the winter habitat selection patterns of mule deer." *Journal of Wildlife Management* 73:1052-1061; Kremmling BLM Field Office Environmental Analysis.



***F. NEPA analysis in the EA is insufficient and outdated for big game habitat both on BLM and SFNF lands.***

The SFNF contains significant habitat for big game species, in particular important winter range for mule deer and crucial summer range and calving areas for elk. Yet, the EA fails to include a hard look at this required analysis. Neither the BLM nor the SFNF provided any new research data, habitat evaluation, or landscape analysis that the BLM requires in conducting new lease sales.

The EA fails to acknowledge research regarding impacts to big game from oil and gas development, including recent research that shows elk avoid energy development much like mule deer have been doing. In a University of Wyoming study, research has shown that elk lost 50 percent of their habitat and change in their movements as new energy infrastructure is built.<sup>18</sup> The study further concludes that while elk are large, mobile animals that might have opportunities to avoid impacts if appropriate habitat protection mitigation is implemented, other more sensitive species or species that are not as large and mobile may experience greater impacts.

The omission of critical big game wildlife habitat and migration routes, for instance, in Parcels 001-013 indicate this lack of review (see Figures 4-7). The EA contains misleading statements that, on one hand, state that biologists reviewed the 2002 Biological Opinion (BO) offered by the USFWS and concluded no impacts would occur and no further consultation is required (unnumbered page at the beginning of the EA) while on the other hand, further into the EA, statements say the action alternatives may not be in compliance with the BO of this same document (under USFWS T&E Species discussion—undefined page number). This lack of analysis places many sensitive and threatened and endangered species (T&E) that reside within the BLM planning area and the SFNF management area at risk.

Further, in the Environmental Impacts discussion, under the Wildlife section and Special Status Species section, any review of impacts is dismissed with a statement that describes impacts from oil and gas activities as “...impacts similar to those described in 4.9” and “...wildlife becomes habituated...” to energy development. There is no Section 4.9 in the EA, and the statement regarding habituation is unreferenced and unsubstantiated. Based on these statements, along with numerous other incorrect, confusing and wrongly-referenced citing’s in this EA, we are lead to wonder whether any of the analysis and discussion in this EA was given an appropriate hard look as required under NEPA.

In the discussion of Other Special Status Species in the Final EA, the statement is made (in reference to Table 13) that these “Other” species are not mapped (nor identified) due to recent additions to the list—yet, this reference is dated 2011. Even if these species are not mapped, they should at least be mentioned in the EA and given the required analysis due to their special status recognition. Without having information about species occurrence on or near these Parcels, we believe the EA’s analysis is insufficient in addressing the possible effects of leasing and subsequent development.

<sup>18</sup> Buchanan, Clay B. 2014. Graduate Thesis. “Identifying Disturbance Mechanisms Influencing Resource Selection by Elk in a Natural Gas Development Field”. [www.uwyo.edu/esm](http://www.uwyo.edu/esm)

Finally, we take issue with the last paragraph in the Wildlife discussion section which states:

*In general, most wildlife species would become habituated to the new facilities. For other wildlife species with a low tolerance to activities, the operations on the well pad would continue to displace wildlife from the area due to ongoing disturbances such as vehicle traffic, noise and equipment maintenance.*

Such unsupported statements will place New Mexico directly into a path that potentially results in a decrease in mule deer, elk, grouse, and other wildlife species, and increase in air pollution, and changes in water quality. All of these changes have occurred in Wyoming and are starting to show up in Colorado and Utah. We believe it is unacceptable to make statements such as these without offering more updated mitigation options, new stipulations that help curb this potential impact, and provide some management restrictions that close special places to development.

Leasing is the place where these impacts begin (through an irretrievable commitment of resources) and, we believe, the place where considerable damage can be alleviated or reduced. By implementing newer, stronger stipulations and conditions of approval attached at the sale of these leases, habitat and fish and wildlife are given a fair chance, as is the public and the industry. The October 2014 EA does not provide any of the necessary analysis or provide certainty that protects New Mexico's and the Santa Fe National Forest's landscape. Therefore, we request that the BLM defer these 13 FFO Parcels until the BLM and SFNF update their land use plans and Amendments, and provide further environmental analysis.

***G. NEPA analysis on impacts to important groundwater resources on the SFNF is insufficient to address possible effects of oil and gas exploration, in particular unconventional oil and gas development and high volume hydraulic fracturing.***

As with the draft EA, we have found the Final EA to be lacking in its analysis of direct, indirect, and cumulative impacts to groundwater and surface water from energy development. Concerns about water quality and quantity remain high with TU, NMWF, HECHO, and RGR. Both the BLM's RFD and the SFNF's RFD analysis suggest that an increase in hydraulic fracturing due to the significant oil reserves is likely to occur in the planning area. This is especially troublesome given the current demands on scarce surface and groundwater resources, both within the vicinity of the leases and in the region at large.

The Final EA failed to include analysis that considers the potential effects on public health and safety from hydraulic fracturing operations, including air quality, oil spills, water contamination, and water shortages. The BLM's reliance on the current RMP as being adequate for such analysis is incorrect. A decision in a recent court case<sup>19</sup> found that the BLM was required to "...conduct a more detailed NEPA analysis to determine whether the sale of the parcels would have a substantial environmental impact." Citing general uncertainties about hydraulic fracturing, which is what the Final EA has done, can no longer be BLM's excuse for not including further analysis on the practice.

Groundwater impacts from oil and gas drilling can affect the watershed and fisheries. Very little discussion occurred in the EA as to what types of mitigation will be applied to prevent such

<sup>19</sup> *Center for Biological Diversity v Bureau of Land Management*, No. C 11-06174 PSG March 31, 2013.

incidents. The cumulative effects of multiple surface and/or groundwater withdrawals throughout a watershed have the potential to affect downstream hydrology and connectivity of trout habitats.<sup>20</sup> The EA did not adequately consider such impacts though the reference to using groundwater and streams as water sources for drilling was mentioned.

As we mentioned in our May 2014 comments and feel it is worth repeating, the FS is in the midst of reviewing new directives for groundwater resource management.<sup>21</sup> Because the SFNF oil and gas FEIS did not contain a review of groundwater impacts from oil and gas development, we believe the deferral of these 13 FFO Parcels is critical to protecting these important perennial streams, groundwater recharge areas, and even ephemeral and intermittent drainages. Deferring these lease Parcels until the FS provides a more comprehensive and consistent direction regarding the management and conservation of groundwater must be considered.

The Parties remain concerned with the very limited environmental review of the impacts that many of these important streams, creeks, springs, and groundwater systems may sustain should accidental spills occur or contamination results from the everyday business of oil and gas development. Recent research on impacts from oil and gas activities to native trout suggest that these activities, including hydraulic fracturing, pose multiple threats to surface waters and limit trout populations.<sup>22</sup>

Numerous studies exist which discuss the interactions between groundwater and surface water. New Mexico depends heavily on groundwater for the majority of its water uses and any type of contamination issues associated from oil and gas development would be devastating to any number of enterprises and resources. The Final EA continued its same line of reasoning with the statement that there were no verified instances of contamination from hydraulic fracturing. And we repeat that, by the same token, no one has studied the impacts from cradle to grave on the effects of hydraulic fracturing to groundwater systems, especially drinking water. The EPA, the Department of Energy (DOE), and the BLM are currently working on trying to further understand potential impacts but at this point, there are enough unknowns as to what happens beneath the earth's surface from the extensive fracturing of rock that it requires conservative protection measures.

It is important to understand that surface spills from accidents at well sites can impact groundwater, directly and indirectly. New Mexico is experiencing two oil and gas spills each day according to the state's Energy, Minerals, and Natural Resources Oil Conservation Division. In 2013, 934 spills were reported to the Oil Conservation Commission, now publicly available information on their website.<sup>23</sup> In the last 13 years, 10,300 spills occurred. These spills have the potential, at some point—including with increased development scenarios—to affect water quality and quantity.

<sup>20</sup> Rahm, B.G. et al. 2012. "Toward strategic management of shale gas development: regional, collective impacts on water resources". *Environmental Science & Policy* 17:12-23.

<sup>21</sup> USDA. Proposed Directives for National Best Management Practices (BMPs) for Water Quality Protection on National Forest System (NFS) Lands. Federal Register /Vol. 79, No. 87/Tuesday, May 6, 2014/Notices.

<sup>22</sup> Weltman-Fahs, Maya, et al. 2013. "Hydraulic Fracturing and Brook Trout Habitat in the Marcellus Shale Region: Potential Impacts and Research Needs." *Fisheries*. Vol 38 No 1. January 2013.

<sup>23</sup> New Mexico Energy, Minerals, and Natural Resources Oil Conservation Division.  
[www.emnrd.state.nm.us/OCD/statistics.html](http://www.emnrd.state.nm.us/OCD/statistics.html).

Without the required NEPA hard look at reviewing water quantity issues (including how the extraction of large amounts of water required to drill and fracture a well will affect river ecology, adjacent users, and municipalities), we believe the BLM should defer leasing of these 13 FFO Parcels. Both surface water and groundwater issues are of significant importance as the amount of drilling increases in this resource area. In addition to the obvious degradation issues from surface disturbances, other water impact activities include non-point source pollution, point source pollution, and hydraulic fracturing cannot be ignored.

***H. The EA fails to adequately provide cumulative effects analysis for this lease sale.***

The cumulative effects of oil and gas development in the BLM planning region and the SFNF region will be greatly affected by increased development associated with the Mancos Shale/Gallup Formation interests. As with the draft EA, the Final EA provides a less than adequate analysis for the cumulative effects; in fact, the Cumulative Effects section only discusses air quality. Other considerations, including climate change—particularly as it affects water resources and RGCT, are missing from the discussion. Of particular interest to the Parties is the significance of climate change discussions in New Mexico. In 2006, a report was prepared for the Governor in consultation with leading scientists from the Southwest and the New Mexico Office of the State Engineer (NMOSE) that provided the effects of climate change in New Mexico.<sup>24</sup> Briefly, this report stated that warming trends in the American Southwest exceed global averages by about 50 percent; even moderate increases in precipitation would not offset the negative impacts to the water supply caused by increased temperatures; increases in temperatures are expected to continue; delays in the arrival of snow and acceleration of spring snowmelt will lead to earlier seasonal runoffs; and the intensity, frequency, and duration of drought may increase. All of this means bad luck for RGCT survival. Additional climate change reports have been published since the 2006 report and all indicate a decrease in water resources and snowpack.

Because the Final EA fails to adequately address the cumulative impacts of the selling of these 13 lease parcels, including those impacts to soils, wildlife, fisheries, water, and vegetation, and climate change, we believe there is no other course at this time than for the BLM to defer these 13 FFO Parcels until further environmental analysis is completed.

***I. A Finding of No Significant Impact (FONSI) is not warranted for Environmental Assessment (EA) DOI-BLM-NM-F010-2014-0154-EA which covers the Parcels located on the SFNF.***

For all the reasons we have stated above, the Parties contend that a FONSI is not warranted for Environmental Assessment DOI-BLM-NM-F010-2014-0154-EA and that the 13 FFO Parcels should be deferred.

Specifically, a FONSI is not warranted because the lack of protections and incomplete analysis for fisheries, water quality, wildlife, air, soils, and vegetation calls into question the conclusions

<sup>24</sup> New Mexico Office of the State Engineer (NMOSE). 2006. The impact of climate change on New Mexico's water supply and ability to manage water resources. Santa Fe, New Mexico. Accessed August 13, 2015. <http://www.nmdrought.state.nm.us/ClimateChangeImpact/completeREPORTfinal.pdf>.



in the EA that the intensity of impacts would not be significant. The FONSI concludes that "lease stipulations that accompany the tracts proposed for leasing would mitigate the impacts of future development on these tracts. Therefore, preparation of an Environmental Impact Statement is not warranted." Stipulations are not mitigations. Simply mitigating impacts is not analogous with reducing impacts to insignificance. While mitigation measures might render insignificant the impacts of oil and gas activities on the leases in question, this assertion is not supported by the EA.

Moreover, the FONSI states that "...The impacts of leasing the fluid mineral estate in the areas described with this EA have been previously analyzed in the 2003 Farmington RMP, the 2002 Biological Assessment, and the Final Environmental Impact Statement (FEIS) for Oil and Gas Leasing and Roads Management, Santa Fe National Forest." However, the EA fails to describe how new information and changed circumstances (e.g. such as an increase in expected development levels due to exploration and production in Mancos Shale/Gallup formations) will not result in significantly different effects than those which were previously analyzed. If the BLM and the SFNF are to rely upon previous environmental documents to support a FONSI, they have fallen short of the standard to do so.

It is important to note that the agencies cannot merely claim that new information or changed circumstances is not significant; it is incumbent on the agency to show on the record how it came to the conclusion that new information or changed circumstances would not result in significantly different environmental affect than what were previously disclosed. Notably, Departmental Regulations state:

*"[a]n existing environmental analysis prepared pursuant to NEPA and the Council on environmental quality regulations may be used in its entirety if the [decision maker] determines, with appropriate supporting documentation, that it adequately assesses the environmental effects of the proposed action and reasonable alternatives. The supporting record must include an evaluation of whether new circumstances, new information or changes in the action or its impacts not previously analyzed may result in significantly different environmental effects." 43 C.F.R. § 46,120(c) (Emphasis added).*

Although we raised the issue of increased development and outdated reasonable foreseeable development scenario in our comments for the draft EA, and the BLM is clearly aware that this area is likely to result in a marked increase in exploration and development, the EA does not address the issue of increased development in the Mancos Shale/Gallup Formation, let alone an evaluation as to whether or not these new circumstances would result in impacts different than previously analyzed. As such, the record is devoid of any evaluation and supporting documentation of whether this new information and changed circumstances would or would not result in significantly different environmental effects and a FONSI is not supported.

As previously noted, the fact that the BLM deferred the majority of the lease parcels in order to provide a more comprehensive and updated resource plan Amendment to evaluate increased and predicted development associated with the Mancos Shale/Gallup Formation illustrates to us that current analysis, assumptions and protections associated with the environmental analysis are not adequate. Because the BLM and the SFNF relied on and tiered all their analysis to development levels assumed in the BLM's now-outdated RMP, we believe that the resulting conclusion of insignificant impacts on the SFNF leases is arbitrary and inconsistent with the facts before agencies.

### Summary

Overall the EA is inconsistent, provides incorrect information about the specific lease parcels being reviewed, and provides confusing information about which alternatives are being discussed. As an example, in the opening discussion on page 14 in the EA, Alternative C's discussion (referred to as the Preferred Alternative) explains the difference between Alternative C and Alternative B (the Proposed Action). The EA states the other parcels as described under the Proposed Action, Alternative B, would be deferred until after the FFO Mancos Shale/Gallup Formation RMPA/EIS alternatives have been developed. Yet, the discussion under Alternative B on page 6 confusingly states in the first line of the section that Alternative B would lease 25 parcels while further into the page is the statement that all 35 parcels are recommended for leasing, as presented in Table 1.

The BLM has proposed to offer Parcels located in the Farmington Field Office in the October 2014 lease sale that contain fisheries, wildlife, water, and air resources that may be adversely affected by oil and gas development. Both the BLM and the SFNF are in the early stages of developing new management plans and amendments that should add significant protections to environmental resources.

As discussed and explained above, the BLM and SFNF failed to provide adequate NEPA analysis for these 13 Parcels. Alternative A is the No Action alternative and states on page 5 that all 35 parcels would not be offered. Considering the substantial issues that remain unresolved and the highly sensitive fish and wildlife habitat found on these lease Parcels, we support Alternative A and believe it is the only prudent, legal Alternative at this time, given the nature and inadequate content of the EA.

Sincerely,

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