

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Senior District Judge Richard P. Matsch

Civil Action No. 08-cv-00144-RPM

SAN JUAN CITIZENS ALLIANCE,
COLORADO ENVIRONMENTAL COALITION,
COLORADO WILD,
OIL AND GAS ACCOUNTABILITY PROJECT, and
THE WILDERNESS SOCIETY,

Plaintiffs,

v.

MARK STILES, in his official capacity as San Juan National Forest Supervisor and BLM Center
Manager of the San Juan Public Lands Center,
RICK CABLES, in his official capacity as Regional Forester of the Rocky Mountain Region of the U.S.
Forest Service,
UNITED STATES FOREST SERVICE,
THOMAS VILSACK, in his official capacity as Secretary of the Department of Agriculture,
UNITED STATES BUREAU OF LAND MANAGEMENT, and
KEN SALAZAR, in his official capacity as Secretary of the Department of Interior,

Defendants,

and

BP AMERICA PRODUCTION COMPANY,
ELM RIDGE EXPLORATION COMPANY, LLC,
EXOK, INC.,
PETROX RESOURCES, INC., and
XTO ENERGY INC.,

Intervenor-Defendants.

MEMORANDUM OPINION AND ORDER

A distinctive geological area of southwestern Colorado and northern New Mexico known as the San Juan Basin (SJB), encompassing approximately 26,000 square miles, produces a large amount of natural gas and contains extensive natural gas reserves. Since the mid 1980s most of the gas production has been coal bed methane (CBM) extracted from coal bed reservoirs using technology that is different from conventional gas wells.

Some of the area is within private ownership of both surface and mineral estates, and some areas are in divided ownership with private surface and federal minerals, or federal surface and private minerals. Much of the area is in full federal ownership.

The Department of Interior through the Bureau of Land Management (BLM) has control of the nation's publicly owned mineral resources and, since the Mineral Leasing Act of 1920, is authorized to grant leases to extract oil and gas from public lands. Under the Federal Land Policy and Management Act ("FLPMA"), the BLM manages resource development on federal lands by developing a resource management plan ("RMP") for land areas; granting leases for the development of sites within the area, subject to the RMP; and reviewing and approving applications for permits to drill ("APDs"). *New Mexico ex rel. Richardson v. BLM*, 565 F.3d 683, 689 (10th Cir. 2009); 43 C.F.R. §§ 1712(a), 1601.0-5(n) & 3162.3-1.

With the creation of the National Forest System near the turn of the 19th Century, the Secretary of Agriculture became responsible for the management of designated lands and the Forest Service ("FS") was created for that purpose. The Multiple-Use Sustained-Yield Act of 1960, now at 16 U.S.C. § 528, established the policy that the national forests are to be administered for "outdoor recreation, range, timber, watershed, and wildlife and fish purposes" but not so as "to affect the use or administration of the mineral resources of national forest lands"

The Federal Onshore Oil and Gas Leasing Reform Act of 1987, now at 30 U.S.C. § 226, provides for complementary regulatory authority by the Secretary of Agriculture, acting through the FS, and by the Secretary of the Interior, acting through the BLM, over oil and gas exploration and development in the national forests as follows:

The Secretary of the Interior, or for National Forest lands, the Secretary of Agriculture, shall regulate all surface-disturbing activities conducted pursuant to any lease issued under this chapter, and shall determine reclamation and other actions as required in the interest of conservation of surface resources. No permit to drill on an oil and gas lease issued under this chapter may be granted without the analysis and approval by the Secretary concerned of a plan of operations covering proposed surface-disturbing activities within the lease area.

30 U.S.C. § 226(g)(1). On National Forest System lands, the FS has ultimate authority to regulate all surface-disturbing activities. 30 U.S.C. § 226(g); 43 C.F.R. § 3162.3-1; 36 C.F.R. §§ 228.107(b)(2) and 228.108(a) and (f).

In considering an APD for a federal lease, the agencies may impose any restrictions required by specific, nondiscretionary statutes, regardless of the terms in the lease. 43 C.F.R. § 3101.1-2. A lessee must not conduct “drilling operations, nor surface disturbance preliminary [to those operations]” without receiving BLM’s approval of the APD, including a Surface Use Plan of Operations (“SUPO”). 43 C.F.R. § 3162.3-1(c). The SUPO, a required part of the APD, must give a complete physical description of the location and scope of the proposed exploratory well, and all ancillary facilities and activities, including production facilities in the event the exploratory well is successfully completed for production. 43 C.F.R. § 3162.3-1(f); 36 C.F.R. Part 228. The SUPO must include a reclamation plan for the end of the project. For leases on National Forest System lands, the FS must approve the SUPO before the BLM can grant a permit allowing any surface disturbing activities. 30 U.S.C. § 226(g); 43 C.F.R. § 3162.3-1(h).

By the enactment of the National Forest Management Act of 1976 (NFMA), Congress directed the Secretary of Agriculture to develop and maintain land and resource management plans for units of the National Forest System to assure compliance with the multiple use provisions of the 1960 Act, 16 U.S.C. §§ 1604(e) and (g)(3), pursuant to the Congressional

finding in § 1600(1) that:

[T]he management of the Nation's renewable resources is highly complex and the uses, demand for, and supply of the various resources are subject to change over time[.]

The FS developed a comprehensive management plan (the "Forest Plan") for the San Juan National Forest ("SJNF") in 1992, setting requirements generally applicable to the entire forest and more specific requirements for designated management areas. The Forest Plan seeks to protect the natural resources in the area, including (a) old growth forests, (b) water quality and riparian areas, and (c) wildlife. To approve any project for use of a specific site, the FS must find the use will be consistent with the Forest Plan.

Like all federal agencies, the FS and the BLM must comply with the procedures mandated by the National Environmental Policy Act (NEPA), 42 U.S.C. § 4332, before undertaking any major action "significantly affecting the quality of the human environment." *Id.*

In 2000, six companies operating gas wells proposed an increase in production of coal bed methane gas by drilling as many as 300 wells in an area of about 125,000 acres in the SJB consisting of 7,000 acres of BLM-administered land, 49,000 acres of FS-administered land, 9,000 acres of privately held land with federal minerals and 60,000 acres of state or privately held land with non-federal minerals. (ROD at 5-6 (AR 37474-475).) The project area is within La Plata and Archuleta Counties. (*Id.*) Some 185 wells were proposed to be drilled on federal leases. The proposed project included construction of roads, pipelines and compressor stations including infill wells and infrastructure within existing oil and gas fields and established units. At the time of the initial proposal, there already existed some 300 oil and gas wells, 58 miles of

attended pipelines and roads, and 6 compressor stations within the project area. (FEIS at 2-27 (AR35479).)

The Colorado Oil and Gas Conservation Commission and La Plata County held public hearings on the proposal and on April 4, 2000, the federal agencies published a Notice of Intent to Prepare an Environmental Impact Statement (EIS) to address the environmental impact of this development.

The defendant agencies conducted the necessary studies of expected social and environmental effects of the proposal, considering multiple alternatives, ranging from disapproval to significantly increasing the size of the development. A Draft Environmental Impact Statement (DEIS) describing the potential effects from those alternatives was published in June, 2004. After receiving written comments and many public meetings and hearings, a Final Environmental Impact Statement (FEIS) was completed and published in July, 2006.

After receiving additional public comments, including those submitted by the environmental groups who are plaintiffs in this action, the BLM and FS issued a Record of Decision (ROD) on April 4, 2007, adopting alternative seven from the FEIS, with some modifications, approving five SUPOs for new wells and describing the process to be followed before authorizing additional wells (anticipated to be no more than 138), including the imposition of mitigation measures and measures for monitoring the sites.

After pursuing an administrative appeal within the Department of Agriculture, resulting in an affirmation of the ROD with some additional mitigation measures, the plaintiffs filed this civil action as authorized by the Administrative Procedure Act to review the agencies' action and to rescind the ROD. Some additional wells have been approved and drilled during the pendency

of this review.

The entire administrative record has been submitted in electronic format. Five of the companies (“Intervenors”) holding federal leases have been permitted to intervene to protect their private interests. After extensive briefing and oral argument the plaintiffs’ claims are rejected and the ROD is approved.

The plaintiffs challenge the adequacy of the FEIS on which the ROD is based under NEPA contending the agencies did not sufficiently direct and assure enforcement of adequate mitigation measures for the environmental impacts of the project and did not adequately disclose, analyze and discuss the potential effects on the environmentally sensitive areas of the HD Mountains and the Archuleta Mesas. The plaintiffs also contend that the FEIS fails to show adequate consideration of potential air quality impacts, including visibility effects on national parks and wilderness areas in Colorado and New Mexico.

The plaintiffs also assert that the agencies have violated the NFMA because the ROD fails to meet the requirements of the Forest Plan for the protection of old growth ponderosa pine, streams and riparian areas, and wildlife and habitat in certain management areas. These NFMA challenges are different from the NEPA claims. NEPA is a procedural statute requiring only that agencies take a “hard look” at potential environmental impacts before taking action. It does not restrain that action under any substantive standard restricting environmental impacts. The claims under NFMA are asserted as substantive restrictions on agency action.

The federal defendants and Intervenors contend that the NFMA claims are not ripe because the ROD’s approval of the project for development is not final action approving future drilling of wells on specific sites within the project area.

The familiar standard for judicial review of an agency's final decision under the Administrative Procedure Act, 5 U.S.C. §§ 701 & 706, is whether the decision was arbitrary, capricious, an abuse of discretion or otherwise not in accordance with law. *Holy Cross Wilderness Fund v. Madigan*, 960 F.2d 1515, 1521 (10th Cir. 1992). In approaching this case, guidance has been provided by the Tenth Circuit Court of Appeals in *Colorado Environmental Coalition v. Dombeck*, 185 F.3d 1162 (10th Cir. 1999) (expansion of the Vail Ski Area) and *Citizens' Committee to Save Our Canyons v. Krueger*, 513 F.3d 1169 (10th Cir. 2008) (permitting helicopter skiing in the Wasatch and Uinta National Forests).

Under NEPA, the Court must determine whether the EIS in form, content and preparation is sufficient for informed decision making with public participation. The plaintiffs suggest that the agencies did not use the best scientific information available but the record fails to support that assertion. There is no issue about public participation in the process. The principal contention is that the FEIS does not provide for adequate mitigation measures for the identified adverse environmental impacts as required by 42 U.S.C. § 4332(C)(ii) and 40 C.F.R. §§ 1502.14(f), 1502.16(h), 1508.14 and 1508.25(b)(3).

The mitigation analysis requirement was addressed by the Circuit Court in *Colorado Environmental Coalition* at 1173. As noted there, a mere listing of mitigation measures is not sufficient. Both the ROD and the FEIS address mitigation in some detail. What concerns the plaintiffs is that the adequacy of these measures depends upon monitoring and enforcement which, the plaintiffs say, should not be assumed, given the track record shown by approvals of drilling permits in the ROD and subsequently during the pendency of this action.

There is some concurrence between the plaintiffs' contentions under NEPA and NFMA.

If the studies of environmental impacts from the Project show that there may be violations of substantive law, the FEIS must explain how mitigation measures will avoid those violations. The plaintiffs claim that the discussions in both the FEIS and ROD are too vague and conditional to determine whether the Forest Plan requirements will be met and the stated assurances of enforcement of those measures should not be accepted.

There are two questions of law presented. The first is whether the Forest Plan requirements at issue are to be considered as substantive law. The second is what degree of discretion is to be recognized in the detailed management decisions involved in the approval of SUPOs required for approval of APDs.

The federal defendants and Intervenors emphasize that the statutory and regulatory requirement is that the actions must be consistent with the land management plan and the consistency determination requires technical competence for which the agency should be given considerable deference. *E.g., Utah Environmental Congress v. Russell*, 518 F.3d 817, 824 (10th Cir. 2008). The plaintiffs argue that while some provisions of the Forest Plan are admittedly aspirational providing only general guidance for decision making, those they rely on are so specific to identified management areas that they may not be avoided. These challenges are not answered by any general statement of legal principles. They require careful analysis of the record presented.

The second question is also dependent upon the factual record presented. It blends into the ripeness challenge. The ROD gives approval of the lessees' development plans at the project level. Some wells were also approved. The specific drilling, construction and operations to be conducted pursuant to the project depend upon approval of SUPOs by the FS on its lands before

the BLM can issue the necessary permits.

When a federal lessee submits an APD on National Forest System lands, the FS must approve a proposed SUPO before the BLM may approve the APD. 30 U.S.C. § 226(g); 43 C.F.R. § 3162.3-1(h); 36 C.F.R. § 228.106. The SUPO must contain the information specified by the Onshore Oil and Gas Order in effect. 36 C.F.R. § 228.106(c). The SUPO must provide specific information including the location, type and scope of operations, existing and proposed roads or access routes to be used in connection with the operations, the period of proposed operations, measures for environmental protection, and reclamation plans. 43 C.F.R. § 3162.3-1(f); 36 C.F.R. § 228.4(c). The FS may impose conditions of approval, including mitigation measures. 36 C.F.R. § 228.107; Onshore Oil and Gas Order Number 1. In reviewing the SUPO, the FS must comply with NEPA and FS policies and procedures, and ensure the SUPO is consistent with the lease, applicable Federal laws and the applicable forest plan. 36 C.F.R. § 228.107(a)(1)- (3).

The FEIS analyzed and disclosed the potential environmental consequences at the project level. When reviewing a proposed SUPO for a specific site within the project, at least three choices are available to the FS to comply with NEPA. If the FS determines that there are new circumstances or information, or substantial changes, which will affect the quality of the human environment in a significant manner or to a significant extent not already considered, a supplemental EIS must be prepared. 40 C.F.R. § 1502.9(c); *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 373-374 (1989). If the FS concludes that new information or changed circumstances do not require the preparation of a supplemental EIS, a supplemental information report or “SIR” may be used to document the FS’s environmental evaluation and

conclusion. *Marsh, supra* at 384-385; *Pennaco Energy, Inc. v. U.S. Dept. of Interior*, 377 F.3d 1147, 1151 (10th Cir. 2004); *Idaho Sporting Cong. Inc. v. Alexander*, 222 F.3d 562, 566 (9th Cir. 2000). If the proposed activity falls within that provided under the Energy Policy Act of 2005, a categorical exclusion from NEPA may be used. 42 U.S.C. § 15942.

The FS's action taken on a proposed SUPO may be subject to appeal. 36 C.F.R. § 228.107(c). Once a SUPO is approved, and any appeal exhausted, the BLM may act on the APD. Before approval, the BLM must consider well plats, drilling plans, and other information, and conduct onsite inspections.

I. The NFMA Challenges.

The plaintiffs raise NFMA challenges to the approval of the project, alleging the Forest Plan requirements for protection of three resources have been violated: (1) old growth, (2) water quality and riparian areas, and (3) wildlife. The plaintiffs contend the FS offered vague promises of future mitigation when it approved individual wells shown in the administrative record but the promises have not been kept or mitigation measures have not been sufficient to show compliance.

The NFMA requires “instruments for the use and occupancy of National Forest System lands” be “consistent” with the applicable forest plan. 16 U.S.C. § 1604(i).

The Forest Plan sets forth “Management Activities,” “General Direction Statements,” and “Standards and Guidelines.” (AR 030050.) “Management Activities” are “work processes that are conducted to produce, enhance, or maintain levels of outputs, or to achieve administrative and environmental quality objectives.” “General Direction Statements” “specify the actions, measures, or treatments (management practices) to be done when implementing the management

activity, or the condition expected to exist after the general direction is implemented.”

“Standards and Guidelines” “are quantifications of the acceptable limits within which the general direction is implemented.” (AR 30050.)

The Forest Plan identifies different geographic “management areas” in the SJNF and sets forth wildlife guidelines for each management area. (*See* Forest Plan at III-2 (AR 30046); FEIS at 3-294 to 3-295 (AR 35798-799).) The environments in these areas are not static; they are affected by such factors as fire, wind, weather events, climate changes, disease and insect infestation. The agencies must be afforded discretion in their management of such areas to ensure consistency with the Forest Plan.

A. Old Growth.

One of the Forest Plan’s “Standards and Guidelines” for the “General Direction” of “maintain[ing] structural diversity of vegetation” provides: “[i]n forested areas of a unit, 5 percent or more should be in old-growth. . . .” (Forest Plan at AR 030052.) For this project, the FS defined the “unit” as “forested areas on NFS lands in the Project Area.” (FEIS at 3-270 (AR 35774).) At the time the project was approved, the FEIS identified 746 acres of old growth ponderosa pine stands on NFS lands in the project area, or 3.8% of the total area of ponderosa pine on NFS lands in the project area, located primarily in the southeastern portion of the project area, i.e., Spring Creek, Ignacio Creek, and other nearby watersheds. (FEIS at 3-231 (AR 35735); ROD at 16 (AR 37485).) The FS recognized the Standard and Guideline was not being met. (FEIS at 3-270 (AR 35774).)

In approving the project, the FS evaluated whether there was a Forest Plan consistency issue with the project’s effects on old growth, as approximately 13 of 746 acres (~1.7%) of old

growth could be removed during implementation of the ROD, and six of fifteen old growth stands could be impacted. The FS concluded no Forest Plan amendment would be required because the “old growth guideline describes desirable, though not mandatory, conditions.” (ROD at 16 (AR 37485).) The FS also found the potential adverse effects to old growth were an acceptable deviation from the standard because of the relatively small number of acres impacted, and because the potential impacts may be further reduced during field siting of facilities as permits are processed. (ROD at 17 (AR 37486).)

The plaintiffs contend that the “5 percent or more” figure is mandatory and no “acceptable deviation” is permitted, citing to not only the Forest Plan but also statements by the FS in the record. For instance, the Final Supplemental EIS for the amendment of the Forest Plan states that plan adapted a number of standards “to address the viability of species dependent on early or late successional habitats” which “require maintenance of a minimum of 5 percent old growth. . . .” (AR 29704.) That EIS also identifies an “Old Growth Constraint,” stating “[t]he constraint requires at least 5% of all timber types be retained as old growth.” (AR 29727.) The FEIS for the project at issue states: “[t]he lack of compliance with the Forest Plan Standard and Guideline associated with the old growth implies that the structural diversity of vegetation . . . in the Project Area . . . is not adequate.” (FEIS at 3-271 (AR 35775).)

The plaintiffs’ view that statutory requirement of “consistency” as requiring full conformity with the Forest Plan whereas the federal defendants and Intervenor contend that the restriction on the federal agencies’ discretion is that the FS must not authorize uses and occupancy that would be inconsistent with the management plan. That view is a reasonable reading of the statute. To require literal compliance with the 5% guideline wherever old growth

is found assumes a static environment. What trees and other vegetation will be present at a given moment in time will depend upon factors not within agency control. As noted earlier, fire, wind, weather events, climate changes, disease and insect infestation are some of such factors.

Technological advances in gas drilling and production will also affect the efficacy of mitigation measures at specific sites. There is, therefore, a need to entrust the agencies with considerable discretion in management decisions that must be made during implementation of the project.

Lamb v. Thompson, 265 F.3d 1038 (10th Cir. 2001).

As there is no old growth Forest Plan violation, the plaintiffs' arguments about the adequacy of any mitigation measures to protect old growth are moot. Even assuming mitigation is required, the FS has shown it considered the impact of proposed activities on old growth and utilized its expertise in deciding appropriate mitigation measures to apply at the site-specific stage. (*E.g.*, FEIS at 3-230 to 3-232, 3-253, 3-264 to 3-268 (AR 35734-736, 35757, 35768-772).)

As of the date of the hearing on the plaintiffs' petition for review, twenty-one wells have been approved. Of them, 14 are located on FS land and 7 on BLM land. The Forest Plan applies only to wells on FS land. Of the 14 wells on FS land, five of the SUPOs were approved in the ROD and the remaining nine approved after the ROD were the subject of SIRs. One mitigation measure utilized is avoidance as shown by the no surface occupancy ("NSO") stipulations recognized in the ROD to avoid areas of old growth and as explained in the FEIS. (FEIS 3-253 (AR 35757): "Avoidance mitigation would be utilized during road and well pad staking to reduce extent of" impact on old growth; ROD at 32, 34-36, 38 & 40 (AR 37501, 503-505, 507 & 509).) Waivers, exceptions or modifications may be permitted at the site-specific stage, but they

will be in accordance with the Forest Plan. (ROD at 32-41 (AR 37501-510).) The plaintiffs' reliance on select portions of the record to refute the FS's use of mitigation measures is unavailing.

First, the plaintiffs cite to the wildlife habitat mitigation checklists for three wells, Sauls Creek GU#2, Fischer-Mark Federal B4, and Federal 08-01 #2. The habitat checklist is but one aspect of the site-specific approval process. (See AR 44838-839 (setting forth field review dates and various reports prepared, including wildlife reports, for seven wells); AR 45679-680 (same, for two other wells).)

Next, the plaintiffs have not shown that old growth stands have been "regularly" destroyed. The three checklists show that large diameter ponderosa pines and snags were observed. The plaintiffs contend that such features suggest the presence of old growth but the FS did not determine whether they were old growth before allowing them to be destroyed. There is substantial evidence this determination was made.

The checklist for Sauls Creek states that there was a mature ponderosa pine stand which recently burned. (AR 45421.) The checklist for Fischer-Mark Federal B4 identifies ponderosa pine and "[s]ixteen inch dbh & greater trees in the right of way." (AR 45542-543, 45548.) The FS made a determination that for the trees in the right of way, avoidance would cause a larger overall disturbance area and disturbance to ephemeral drainages. (AR 45550.) The checklist for Federal 08-01 #2 identifies the existence of large ponderosa pine but the FS determined that avoidance would cause a larger overall disturbance area and disturbance to ephemeral drainages. (AR 45058 & 45065.) The SIRs state that site-specific field reviews were made for each of those wells and the FS found that "no old growth stands would be impacted" for all three wells.

(SIRs at AR 44838-839, 44842.) That conclusion is accepted as an agency determination that the trees identified in the checklists did not constitute old growth and an exercise of agency discretion on applying mitigation measures.

Similarly, site-specific evaluations were also completed for the remaining six Forest Service wells approved after the ROD and the FS found “no old growth stands would be impacted.” (AR 44842 [SIR for 7 wells] & 45683 [SIR for 2 wells].) Based on this record, the plaintiffs’ contention that old growth was regularly destroyed is unsupported.

B. Streams and Riparian Areas: Management Area 9A.

The plaintiffs contend: 1) the Forest Plan restricts or limits development in riparian areas, known as “water influence zones” (“WIZs”) designated as 9A areas; 2) the project nonetheless contemplates development in 9A which the FEIS predicts may or would violate five “General Directions” governing 9A, citing to Lange Canyon, Bull Canyon and Goose Creek; 3) the FS promised, in the FEIS, to correct these violations with mitigation measures during the approval of individual wells, but the FEIS does not explain how the measures would be applied, explain or evaluate whether they would be effective, or assure they will actually be applied, citing to the 2008 approval of Petrox Resources wells 9U#4 and 16U#1 and an access road in the Bull Creek area as examples.

The cited Forest Plan “General Directions” are not absolute; they do not prohibit roads, trails and development completely. Instead, they generally suggest the use of mitigation measures in the discretion of the FS. (Forest Plan at AR 30330, 30333, 30334 & 30102.) For example, proposed new land-use facilities will not “normally” be located within floodplain boundaries for the 100-year flood and, when they are, the Standards and Guidelines provide

mitigation measures are to be implemented. (AR 30330.) These General Directions are recognized in the FEIS. (FEIS 3-176 to 3-179 (AR 35680-683).)

Also recognized in the FEIS are the directions in the FS's Watershed Conservation Practices Handbook ("Handbook"). (FEIS 3-179 (AR 35683).) This Handbook was developed by the Rocky Mountain Region of the FS and "contains proven, effective watershed conservation practices to protect soil, aquatic, and riparian systems. . . . If used properly, the watershed conservation practices will meet applicable Federal and State laws and regulations, including State BMPs [best management practices]." (FEIS at 3-179 (AR 35683).)

As the plaintiffs admit, the FEIS provides a specific watershed-by-watershed discussion of the potential impacts of the project. (Doc. #84, p. 10.) The watershed analysis evaluated the project alternatives' conformity to the Forest Plan and the FEIS addressed the potential impacts in detail. (FEIS 3-179 to 3-181 (AR 35683-685).) The plaintiffs' complaint is with the manner and method in which the FS has chosen to address such potential impacts, with the mitigation measures selected and how and when they are to be applied.

The watershed analysis of the proposed development in Lange Canyon, Bull Canyon, and Goose Creek in the FEIS suggests several project alternatives may not conform to the Forest Plan. (FEIS at 3-179 to 181 (AR 35683-685).) These areas "would be addressed through field siting, facility engineering, and utilization of BMPs [best management practices] and standards and guidelines applicable to watershed protection." (FEIS at 3-179 (AR 35683).) Accordingly, the ROD requires that all SUPOs and APDs authorized subsequent to the ROD "conform to the Forest Service/BLM policies, regulations and approved LRMP/RMP direction pertaining to oil and gas exploration and development activities." (ROD at 46 (AR 37515).) That decision to use

site-specific mitigation to comply with the Forest Plan is not contrary to law, arbitrary or capricious. (FEIS at 3-167 to 175 (AR 35671- 679).)

The plaintiffs assert that the approval of two wells, Petrox Resources wells 9U#4 and 16U#1, and an access road in the Bull Creek area show that the FS did not meet the expectation of providing for adequate mitigation of adverse environmental impacts.

In a November 2006 memo, a FS hydrologist, Kelly Palmer, addressed the need for conformance with 9A area standards in potential road construction in the valley bottom of Bull Creek. (AR 41769.)

A December 2006 memorandum by Cathy Begej, a hydrologist retained by Petrox, documented a field review of a proposed access road, apparently a reconstruction of an existing road, and stated the road will be “always within the 100-year floodplain” and there “may be stretches of road that are inside the WIZ.” (AR 12654.) The Petrox hydrologist stated that alternatives to the use of the existing road would be more “environmentally impacting.” (AR 12653.) The Petrox hydrologist also stated Petrox would “re-profile the centerline of the road as far away from the stream trace as practicable,” and that the “identified route would meet the intent of Forest Service and BLM guidelines with appropriate best management practices.” (AR 12653.)

Thereafter, in a January, 2007 email, Kelly Palmer, the FS hydrologist, wrote that a response to Petrox should wait until the ROD goes public, depending on whether a NSO stipulation is maintained or not on the 1/4 mile of Bull Creek where the road is proposed. Palmer also questioned whether documentation and analysis of alternative routes would be required, if the stipulation is not maintained. (AR 26727.)

The 2008 SIR for the Petrox wells recites subsequent field reviews in June and July 2008, before the wells were approved. (AR 45669-670.) The 9U#4 well is located in a 5B Management Area and the 16U#1 well is located in a 4B Management Area, and the reconstruction of the existing Bull Canyon Road is noted in that SIR. (SIR at AR 45673 & 45669.) (*See also* Petition, p. 18, Doc. #70.) The SIR also states slight adjustments were made to the pad, access road and pipeline location and design to minimize resource impacts and comply with the FEIS and ROD requirements, including the minor rerouting of roads. (AR 45672.) The SIR reports the conclusion that, after site-specific evaluations, “no riparian zones would be affected” and “all surface-disturbance will be done in a manner that controls and reduces the potential for sedimentation to streams and other water bodies.” (AR 45673.) The FS also found no potential conflicts with the Forest Plan standards and guidelines. (AR 45673.) There is no mention of the 9A area standards or the WIZ in the SIR or related approval documents.

There appears to be some confusion about the location of the wells and road. The Intervenor says that the wells are not located in the 9A area, so no compliance with those standards is required. The Intervenor further contends that the SIR demonstrates the FS nonetheless evaluated potential impacts to streams and water bodies.

The federal defendants acknowledge the potential riparian impacts associated with the location of the road proposed by Petrox in the Bull Creek watershed. (Doc. #79, p. 45.) They argue that the FS identified the potential impacts early on, conducted field trips to assess the potential for road construction, made a field inspection in June 2008, and decided the reconstruction of the existing road minimized the impacts and therefore concluded that “no

riparian zones would be affected.” (FEIS at 3-180 to 3-181 (AR 35683-684); AR 41769-41770; AR 45669-670, 672, & 673.) That statement, taken literally, is not correct but it is accepted as an agency conclusion that mitigation measures were adequate to avoid harm.

C. Wildlife Guidelines: Management Areas 4B, 5B and 6B.

i. Management Area 4B - Management Indicator Species (“MIS”).

For wildlife management, the FS identifies certain species that have the same special habitat needs or population characteristics as other animal species to serve as proxies to determine the effects of activities on wildlife in the management areas. These animals are classified as “management indicator species” (“MIS”). The MIS in the FEIS include Abert’s squirrel, bald eagle, beaver, black bear, brown trout, deer mouse, elk, green-tailed towhee, hairy woodpecker, mallard, Merriam’s turkey, Mexican spotted owl, mountain bluebird, mule deer, northern goshawk, and southwestern willow flycatcher. (FEIS at Appendix J, Management Indicator Species Analysis.)

For Management Area 4B, the Forest Plan provides:

a. Maintain at least 90 percent of the habitat needed to support the State population goals for each species [i.e., species commonly hunted, fished, or trapped].

and

a. Maintain habitat capability at a level at least 80 percent of potential capability [for MIS].

(AR 30210.)

The plaintiffs contend the FS failed to comply with NFMA because: 1) there is no express discussion or analysis of the 90% habitat standard in the FEIS; 2) the FS relied on the premise that the 4B area would be left unroaded and undeveloped when in fact the project

authorizes

wells and roads in that area; and 3) the FS applied an incorrect scale of analysis.

The 90% habitat standard was not specifically mentioned in the FEIS but the record shows that impact to game species, i.e., elk, mule deer and black bear, was considered and contains substantial evidence addressing the standard. (*See, e.g.*, FEIS at 3-272 to 3-297 (AR 35776-801), J-72 (AR 36708), J-100 to 101 (AR 36735-736), J-179 to 180 (AR 36813-814).)

The record shows the NFS land in the project area has 49,324¹ acres of habitat for elk and deer, which is 99% of the forest land in the project area, and 44,848 acres for black bear, which is 91% of the forest land in the project area. The project will affect 354 acres of elk and mule deer habitat (1.1%) and 277 acres for black bear habitat (0.9%), thereby reducing the habitat to 97.9% for elk and mule deer and 90.1% for black bear. (FEIS at 3-284 (AR 35788).)

In the FEIS, the FS stated that the 4B area would remain unroaded and undeveloped under Alternative 7. (FEIS at 3-296 (AR 35800); Admin. Decision at 4 (AR 37687).) That statement is incorrect. The federal defendants have now acknowledged in their court papers that roads and well pads are authorized in the 4B area but argue that because a large area of the 4B area remains undeveloped and therefore lightly impacted, their conclusion of consistency with the 90% standard is not arbitrary. That argument is accepted and the conclusion is entitled to deference.

The plaintiffs contend there is inconsistency with the Forest Plan because it sets standards for each *management area* but the FEIS analyzed wildlife habitat on a *project area*-

¹Although the record states the project area consists of 49,000 acres of FS administered land, there is no inconsistency because that number is an approximation. *See* FEIS at 3-549 (AR 36053) (the project area contains “approximately 125,000 acres”).

wide basis. The effect is the dilution of the damages to habitat. The plaintiffs argue that an analysis of the 4B area is possible because the Final Supplemental EIS for the SJNF stated, for “prescription 4B,” that vegetation characteristics and human activities are managed “to meet population goals jointly agreed to with the State Fish and Wildlife agencies.” (Final SEIS at AR 29650.)

The CDOW [Colorado Division of Wildlife] monitors populations of big game species by DAUs [data analysis units]. A DAU is a specified geographic area where harvest and census data are gathered and used to estimate the size of wildlife populations. Most of the Project Area is in DAU E-31. Less than 1 percent of the Project Area . . . is in DAU E-30 and is not considered for this analysis.

(FEIS at J-90 (AR 36726); AR 40418 & 40459.) The DAUs do not correspond to the various management areas but the FS’s decision to utilize this approach is within its discretion and therefore not arbitrary.

The plaintiffs contend there is no compliance with the 80% habitat potential capability standard for MIS because: 1) the Federal Defendants based their finding of compliance on the incorrect assumption that the project will leave the 4B Area unroaded and undeveloped; 2) the record suggests the project will cause habitat effectiveness to drop below the 80% standard, as evidenced by the data on black bear; and 3) the FEIS wildlife analysis addresses MIS habitat for the entire project area without detailing how specific areas are impacted or whether the requirements are met for those areas, such as 4B.

The plaintiffs’ argument regarding the projected development in the 4B area has been addressed.

The plaintiffs contend that habitat effectiveness and habitat capability are the same standard. (Doc. #70, p. 17. n.6.) The FS defines habitat capability as “[t]he estimated ability of

an area, given existing or predicted habitat conditions, to support a wildlife, fish or plant populations.” (Amended Forest Plan at AR 30492.) Habitat effectiveness is defined as “[t]he degree to which a physical wildlife habitat is free from man-caused disturbances, and therefore attractive to wildlife occupancy.” (*Id.*)

An extensive MIS analysis was completed and the record shows the project area meets the 80% potential habitat capability standard and guideline. (*See, e.g.*, FEIS at Appendix J (AR 36630 *et seq.*); J-200 to 202 (AR 36834-36846); 3-296 (AR 35800).) The plaintiffs cite specifically the black bear, relying on charts concerning habitat effectiveness. The FEIS contains discussion and data on habitat effectiveness but that is not the same as potential habitat capability. Based on its extensive MIS analysis shown in the FEIS (FEIS at J-57 to 73 (AR 36693-36709)), the FS concluded the 80% potential habitat capability standard and guideline for black bears is met in the project area. (FEIS at J-72 to 73 (AR 36708-709).) The FS’s determination of consistency with the Forest Plan relies on agency expertise and professional judgment. Its methodologies and conclusions are entitled to deference.

ii. Management Area 5B - Big Game Species.

For the 5B Area, the “prescription” “[e]mphasis is on big game winter range in forested areas,” namely, habitat for deer, elk, bighorn sheep and mountain goats. (AR 30226.) The Forest Plan standards and guidelines for this area include:

- f. Maintain habitat effectiveness during winter of at least 90 percent; [and]
- g. Maintain habitat capability at a level at least 80 percent of potential capability.

(Forest Plan at AR 030232.)

The plaintiffs contend that these standards and guidelines were not removed in the ROD,

and the FS failed to comply with them because: 1) the FEIS fails to evaluate habitat effectiveness in the 5B Area; 2) the FEIS nonetheless indicates the project will result in a loss of effective habitat, as shown by the data regarding mule deer and elk; and 3) winter road closures are insufficient to protect habitat capability and effectiveness, limiting road densities is required. The record shows otherwise.

The Forest Plan amendment for the 5B area, made in the ROD, effectively removed any standard for that area which would prevent the implementation of the project. (ROD at 16 (AR 37485); Appeal Decision at AR 37688.) Thus, the 80% potential habitat capability and 90% habitat effectiveness standards do not apply to the project. Even assuming these standards apply, compliance is shown in the record.

The 90% habitat effectiveness is not mentioned in the FEIS but the record shows, for mule deer, habitat effectiveness on winter range on NFS lands would be reduced from 98.2 percent to 91.8 percent. (FEIS Table J-63 at J-175 (AR 36809).) For elk, habitat effectiveness would be reduced from 99.1 percent to 93.9 percent. (FEIS Table J-42 at J-97 (AR 36732).) All 5B areas are winter range, and the FS's analysis of winter range provides the requisite analysis of 5B management area compliance with 5B area standards for big game on winter range.

The FS reasonably concluded the impact of the project on winter range for big game would be minor and the 80% habitat capability guideline would be met. (FEIS at 3-297 (AR 35801) & J-202 (AR 36836); Appeal Decision at 4-5 (AR 37687-688).)

The FS's decision to meet the standards and guidelines in the Forest Plan by seasonal road closures rather than limiting road densities is neither arbitrary nor capricious and is entitled to deference. (ROD at 16 (AR 37485); FEIS at J-202 (AR 36836); Appeal Decision at 5 (AR

37688).)

iii. Management Area 6B.

For Management Area 6B, the Forest Plan directs the FS to “[m]aintain [habitat] capability at 60% of potential capability” for MIS, and “[p]rotect and/or provide 20 snags/10 acres in all forested types. Also provide for snag replacements[,]” for hairy woodpecker and mountain bluebird. (AR 30253-54.) The plaintiffs contend the FS: 1) incorrectly used a project area-wide analysis instead of the specific management area; and 2) has acknowledged the project will not comply with this standard but only offered vague, conditional promises of future mitigation.

In the FEIS, the FS acknowledged concerns that some portions of the *project area* may not be meeting the 60 percent habitat potential guideline for hairy woodpecker and bluebird and the snag guideline in portions of the pine type, particularly in Sauls Creek. (FEIS at J-126 & J-202 (AR 36761 & 36836).) The FS concluded that implementation of the project would have only minor impacts to maintaining habitat potential capability and snag loss. (AR 36761 & 36836.) The FS concluded that populations of hairy woodpecker Forest-wide are stable and the Forest Plan direction, standards, and guidelines will continue to be met Forest-wide. (AR 36761.) *See also* FEIS at J-202 (AR 36836) (discussing snag loss but concluding minor impact in changes in habitat capability).

The FEIS also acknowledged that the 60% habitat potential guideline would not be met in the *6B area* for the hairy woodpecker and bluebird (FEIS at J-202 to 202 (AR 36835-836)), but concluded that this standard can be maintained through mitigation:

The 60-percent habitat capability standard can be maintained or promoted for these species through management that includes tree thinning and prescribed fire in the grassland, sagebrush, and pine types and prohibitions on standing dead tree harvest. These activities would be accomplished through wildlife habitat improvement projects.

(FEIS at J-202 (AR 36836).) In response to the plaintiffs' administrative appeal, the FS required implementation of mandatory mitigation measures to ensure "the project will be consistent with Plan direction for 6B Management Areas." (AR 37688 & 37709.)

The use of the larger area of the project for the analysis is not an error of law and is within the discretion given to the FS to exercise professional judgment.

iv. Mitigation.

The mitigation measures described in the FEIS and ROD are not so vague and conclusory that their effectiveness cannot be evaluated. The FEIS contains detailed wildlife mitigation measures. (FEIS at J-9 to J-17 (AR 36645-53).) Some measures are conditional, reflecting that some measures may not always be practical or possible.

The measures have not been shown to have been "regularly disregarded" as the plaintiffs claim. One example relied on by the plaintiffs in support of the FS's alleged disregard for woodpecker and bluebird habitat is at AR 45542-43. But that On-site Wildlife Habitat Mitigation Checklist shows that construction did not conflict with mitigation assumptions for nest cavity trees because an inventory was completed and no cavity trees were found. (AR 45543). Where construction did conflict with mitigation assumptions, the FS explained that the avoidance of snags would cause a larger overall disturbance area and disturbance to ephemeral drainages. (AR 45550.)

Similarly, for another well approval cited by the plaintiffs, the FS imposed timing

restrictions to protect the bluebirds, delaying construction to minimize the risk of loss of snags prior to bluebird fledging. (AR 45423.) The record shows there is sufficient bluebird habitat in the project area and the SJNF for any bluebirds which may be displaced. (FEIS at J-154 to 155 (AR 36789-790).) The FEIS projects, at most, a 2% displacement of bluebird habitat on NFS land in the project area. (Table 3-89, FEIS at 3-284 (AR 35788).)

The agencies' mitigation commitments for deer, elk and black bear in areas 4B and 5B withstand review. The primary mitigation measures to protect deer and elk are the prohibition of non-routine activities between December 1 and May 1, limiting hours of operation for routine activities to between 9:00 a.m. and 3:00 p.m., and keeping vehicle speeds to 15 mph or less included in the conditions of approval and surface use plan of operations on permits issued. (E.g., Federal 08-01 #2 Gas Well at AR 45069, 070, 073 & 079.) Gating roads to prevent public access and eliminating off-road use in the project area are also mitigation measures for the protection of wildlife. (E.g., FEIS at J-10 (AR 36646).)

II. The NEPA Challenges.

NEPA requires that agencies take a "hard look" at the environmental consequences of their proposed actions. *Utahns for Better Transp. v. U.S. DOT*, 305 F.3d 1152, 1163 (10th Cir. 2002). The agencies must address possible mitigation measures to the adverse environmental impacts identified in the FEIS but NEPA does not require their implementation. 42 U.S.C. § 4332(C)(ii); 40 C.F.R. §§ 1502.14(f), 1502.16(h), 1508.25(b)(3). "Such discussion must be reasonably complete in order to properly evaluate the severity of the adverse effects of a proposed project prior to making a final decision." *Colorado Environ. Coalition v. Dombeck*, *supra* at 1173 (internal quotation marks omitted). "Nor does NEPA impose any substantive

requirement that mitigation measures be implemented.” *Holy Cross Wilderness Fund v. Madigan, supra* at 1522-23.

The FEIS contains a detailed discussion of mitigation. The FS and BLM considered, analyzed and documented potential mitigation measures which could be applied to reduce environmental impacts of the project. (*E.g.*, FEIS at 3-167 to 3-175 (AR 35671-679) (discussing mitigation measures to reduce CBM development effects to surface water, and stating that effectiveness of majority of mitigation measures is documented in FSH 2509.25); FEIS at 3-264 to 3-268 (AR 35768-772) (discussing mitigation measures to minimize environmental effects to vegetation, including protecting old growth and riparian areas); and FEIS at 3-272 to 3-276 (AR 35776-780) (discussing mitigation measures for wildlife).)

The FEIS provides more than a “list” of recommended mitigation measures for riparian areas and it incorporates measures from the Watershed Conservation Practices Handbook. (FEIS at 3-167 to 3-175 (AR 35671-679).) The potential effectiveness of these measures is specifically addressed: “[e]ffectiveness for the majority of [these] mitigation measures is documented in [the Forest Service Handbook]. . . .” (FEIS at 3-167 (AR 35671).)

The FEIS’s discussion of mitigation measures for old growth and wildlife is reasonably complete. As the agencies explained, not every measure will be appropriate or possible for every location:

The Forest Service and BLM use qualifiers such as “where possible” in recognition of the fact that it is the intent of the land managers to implement the mitigation measure, but implementation in every case may not be possible after field investigation and evaluation of tradeoffs. . . .

Mitigation requirements are prescribed in surface use plans of operation, engineering plans, and during the facility siting process. . . . These requirements are then monitored by field inspectors to assure they are carried out in accordance with these plans. . . .

(FEIS at Appendix O, Chapter 4 at 156 (AR 37077).)

The plaintiffs complain that the agencies' use of computerized estimates and aerial photos rather than on-the-ground surveys of the 125,000-acre project area to identify old growth as an example of the agencies' failure to use "readily-available information." The methodology used is not irrational and is within the judgment and expertise of the agencies.

The FS is required to "consider the best available science" in implementing the project. 36 C.F.R. § 219.35(a) (2001). The Tenth Circuit has interpreted the phrase "best available science" to require:

From these cases and the regulations it is clear that although the Forest Service need not collect new data, it should "seek out and consider all existing scientific evidence relevant to the decision" and it "cannot ignore existing data." . . . The Forest Service must determine which data "are the most accurate, reliable, and relevant," and that will be reviewed deferentially, but it still must be good science-that is reliable, peer-reviewed, or otherwise complying with valid scientific methods.

Ecology Center, Inc. v. U.S. Forest Serv., 451 F.3d 1183, 1194 n.4 (10th Cir. 2006) (internal citation omitted).

The plaintiffs contend the FS failed to mention or apply the best available science standard. The record shows that while the ROD does not specifically mention "best available science" or cite to the 2000 regulation, there is substantial evidence the FS considered the best available science in conducting the analyses which support its decision. (*See, e.g.*, FEIS at 3-280 to 3-297 (AR 35784-801), FEIS at Appendix J, and AR 37692.)

For northern goshawk, the plaintiffs argue the best available science is the "Reynolds

Report,” a 1992 report containing management recommendations for northern goshawk prepared by R.T. Reynolds. The plaintiffs contend this report requires a protective 600 acre buffer around active goshawk nests between April 1 and August 15 for Region 3.

Region 2 is at issue in this case and the plaintiffs fail to establish the 1992 Reynolds Report is the best available science for Region 2. The cases they rely on are also inapposite. Nonetheless, the record shows the FS considered the Reynolds Report, contacted Reynolds twice, and specifically discussed with Reynolds the proposal for CBM development and the FS’s planned mitigation. (FEIS at J-180 to 184, 189-191, 193 & 212 (AR 36814-818, 36823-825, 36827 & 36846) and AR 38221.) The FS also consulted a peer-reviewed conservation assessment of the northern goshawk prepared by P.L. Kennedy in 2003, which the FS considered to be the best available science. (AR 37700 & FEIS at 8-16 (AR 36248).) The plaintiffs have failed to establish the FS’s determination is arbitrary or capricious.

For management areas 4B and 5B, the plaintiffs acknowledge the FS “collected published and unpublished studies, as well as existing population data, on different species.” (Petition, p. 46, Doc. #70.) The FS “collected inventories of the Project area for certain species.” *Id.* The plaintiffs take issue with the FS’s use of this scientific information in deciding how to implement the Forest Plan, arguing such data was not used. Appendix J in the FEIS demonstrates this information was considered. The plaintiffs’ disagreement is with how the FS applied this scientific information. That application is within the agency’s discretion.

III. HD Mountains roadless area and Archuleta Mesas.

The plaintiffs contend the agencies violated NEPA by failing to analyze, discuss and disclose how the project will affect the wilderness character and research natural area (“RNA”)

values of the HD Mountains roadless area and the Archuleta Mesas, respectively, before approving the project.

For the HD Mountains, the plaintiffs argue the agencies must: 1) analyze the project's impact to that area's wilderness character, and the FS's reliance on the FEIS's discussion of different resources in the project area is insufficient; and 2) analyze whether the impact may disqualify the area for possible future wilderness designation instead of deferring this issue to the Forest Plan revision process.

For the Archuleta Mesas, the plaintiffs argue that: 1) the agencies must evaluate this area as a prospective RNA and the impact of allowing drilling before modifying a NSO stipulation on lease COC 64932; and 2) the FEIS's general discussion of natural resources, without any mention of the proposed RNA, in the project area is insufficient.

There is some potential for designation of a wilderness area and a research natural area but that possibility is not material in the FEIS.

The HD Mountains area is managed for multiple uses, including oil and gas development. (FEIS at 3-343 to 346 (AR 35847- 35850); FEIS at Chapter 3, pp. 72-73 (AR 36993-36994).)² Prior to the issuance of the ROD, with some minor exceptions, "all federal lands within the Project Area [were already] leased for energy mineral development." (ROD at 6 (AR 37475).) The project involved "proposals to develop numerous leases issued over a period of approximately 30 years." (ROD at 6 (AR 37475).)

²On more than one occasion, citations by the parties to the record did not correspond to the numbers in the record contained in the CDs submitted to the court. For example, the plaintiffs' citation to DEIS at 3-298, AR 32449 (plaintiff's Exhibit 9 to Doc. #70) is located at AR 32127 in the administrative record on the CDs submitted to the court.

At the time the ROD was issued, the HD Mountains was not a wilderness area nor a proposed wilderness area. After notice and hearing, the FS can recommend an area as suitable for preservation as wilderness. 16 U.S.C. § 1132(d)(1). The FS cannot designate wilderness. That requires Congressional action. 43 U.S.C. § 1782(b). A wilderness suitability analysis is conducted by the FS as part of the land and resource planning process, not at the project level. (FEIS at Appendix D, p. 318 (AR 37239) & AR 38044.) “Wilderness” characteristics are enumerated in the Wilderness Act, 16 U.S.C. § 1131(c).

In *Custer County Action Ass’n v. Garvey*, 256 F.3d 1024 (10th Cir. 2001), the Tenth Circuit Court of Appeals held that agencies must “make a reasonable, good faith effort to analyze environmental impacts.” *Id.* at 1038. That is what is required.

In this case, there is substantial evidence that the agencies did evaluate the potential impacts of the project on resource values in the HD Mountains area, which collectively include the area’s “wilderness character.” (*See, e.g.*, FEIS at 3-343 to 347 (AR 35847- 851) (describing the roadless area and its values and uses, and disclosing all alternatives would affect the unroaded land within the project area); FEIS at 3-356 to 357 (AR 35860-861) (analyzing impacts to HD Mountains for each alternative and disclosing that impacts to habitat, recreation, vegetation and other resource values are examined in detail in their respective sections); FEIS at 3-373 to 379 (AR 35877-883) (recreation impacts); FEIS at 3-277 & 3-282 (AR 35781 & 35786) (wildlife); FEIS at 3-252 (AR 35756) (old growth); FEIS at 3-405 (AR 35909) (watershed and habitat impacts); FEIS at 3-200 to 212 (AR 35704-716) (soil impact); FEIS at 3-445 (AR 35949) (noise).)

In the FEIS, the agencies recognized the unroaded area provides a variety of values and

uses, disclosed the roadless areas are being reviewed for wilderness suitability as part of the Forest Plan revision process, and disclosed that the project would alter the size of the land area which would be subject to wilderness suitability review. (FEIS at 3-344 & 346 (AR 35848 & 35850).) The potential development in and the impact to the unroaded area were also addressed. (FEIS at 3-356 to 357 (AR 35860-35861).) The record shows the FS took a “hard look” at the environmental consequences of the project on relevant resource values in the HD Mountains and the FEIS allowed for informed decision making and public participation in this area. This is sufficient under NEPA. *Custer County Action Ass’n v. Garvey, supra* at 1038.

The Archuleta Mesas includes what was formerly Archuleta Creek and Deep Canyon. (DEIS at 3-298 (AR 32127) & FEIS at 3-348 (AR 35852).) At the time the EIS was being prepared for the project, the Archuleta Mesas was one of a number of areas to be evaluated for possible RNA recommendation through the SJNF’s Forest Plan revision process. It was not a RNA. (DEIS at 3-298 (AR 32127).) That information was disclosed in the DEIS and FEIS for the project. (DEIS at 3-298 to 299, 308 (AR 32127-128, 32137); FEIS at 3-347 to 348 (AR 35851-852).)

The determination of whether to designate the Archuleta Mesas as a RNA, like other land use determinations, is made at the forest plan level and will be documented in the Forest Plan and analyzed in an accompanying NEPA document. *See* 16 U.S.C. § 1604; 36 C.F.R. Part 219; AR 38277 (discussing RN analysis process). The analysis of the impacts on the Archuleta Mesas is what is required at the project level and that analysis was done.

The Archuleta Mesas area provides lower montane forest, woodland, and shrubland ecosystems. (FEIS at 3-348 (AR 35852).) In the FEIS for the project, the agencies addressed

the impacts to the resources located in the Archuleta Mesas, such as ponderosa pine, sagebrush, gambel oak, and mixed conifers. (FEIS at 3-217 (AR 35721); FEIS Figure 1-3 & 3-33 (AR 35451 & 36153).) The FEIS includes a project area-wide analysis of the impact to these resources. (FEIS at 3-217 to 3-220 (AR 35721-724) (describing vegetation types); FEIS at 3-222 (AR 35726) (disclosing vegetation disturbance); FEIS at 3-230 to 232 (AR 35734-736) & 3-252 to 253 (AR 35756-757) (discussing impact to old growth ponderosa pine); FEIS at 3-237 to 240 (AR 35741-744) (disclosing maximum vegetation removal, by type, under each alternative); and FEIS at 3-257 to 260 (AR 35761-764) (displaying cumulative vegetation removal under each alternative).)

The BLM issued lease COC64932 in the Archuleta Mesas in May 2001 which contained a NSO stipulation pending determination of whether that area would be recommended for inclusion in the RNA system. (DEIS at 3-298 to 299 (AR 32127-128).) The plaintiffs argue that NSO stipulation was improperly waived and development is now authorized in the potential RNA. The federal defendants contend the agencies maintained the NSO stipulation for lease COC64932 but the record shows otherwise.

The agencies disclosed in the DEIS the existence of the NSO stipulation on COC64932, that whether the NSO would be continued would depend on whether the Archuleta Mesas area is recommended as a RNA, and that various levels of development are proposed in the Archuleta Mesas. (DEIS at 3-298 to 299, 308 (AR 32127-128, 32137).) In the FEIS, the agencies disclosed that the FEIS and ROD would document their decision on whether to waive, except, or modify that NSO stipulation. (FEIS at 1-2 (AR 35439); *see* ROD at 7 (AR 37476).) The FEIS discussed the proposed development in that leased area, and that such proposal would be acted

on in the ROD for the project. (FEIS at 3-347 to 348 (AR 35851-852); *see* FEIS at 3-358 (AR 35862).) Under Alternative 7 considered in the FEIS, the NSO stipulation to COC64932 would be waived and surface occupancy assumed. (FEIS at xviii (AR 35402); ROD at 12 (AR 37481).)

In the April 2007 ROD, the agencies stated that “[m]ost of area included in the original stipulation is no longer identified as a RNA candidate, except for portions being considered as part of the potential Hidden Mesas RNA,” which was being reviewed in the Forest Plan revision process. (ROD at 31 (AR 37500); AR 38273-278.) The NSO stipulation was modified accordingly, allowing the use and occupancy of areas covered by Archuleta Mesas lease COC64932 which are no longer identified as a RNA candidate. (ROD at 18, 29-30, 31 (AR 37847, 37498-99, 37500).)

IV. Air Analysis: Ozone and Visibility.

The plaintiffs contend the agencies ignored the project’s impacts to: 1) ozone pollution and whether it will drive the Colorado portion of the San Juan Basin into violation of the ambient air quality standards for ozone; and 2) air quality (visibility) in nearby wilderness areas and national monuments.

A. Ozone. The United States Environmental Protection Agency (“EPA”) sets national ambient air quality standards (“NAAQSs”) for six air pollutants to protect public health and welfare. 42 U.S.C. §§ 7408 & 7409. When the project was approved in April 2007, the NAAQS for ozone was 0.08 parts per million for the three-year average of the annual fourth maximum daily 8-hour average value. (Table 3-188 at FEIS at 3-527 (AR 36031); 73 Fed.Reg. 16436, 16437 (March 27, 2008).) The EPA reduced the ozone NAAQS to 0.075 ppm on March 27, 2008. 73 Fed.Reg. 16436, 16436 (March 27, 2008). It is undisputed that ozone is formed

through chemical reactions between nitrogen oxides and volatile organic compounds (“VOCs”). It is also undisputed that produced natural gas from CBM is almost pure methane with negligible VOC emissions. (DEIS Air Quality Impact Assessment Technical Support Document at 17 (AR 38878); Air Quality Impact Modeling Protocol at 7 (AR 38795).)

The plaintiffs contend the agencies failed to take a “hard look” at the potential impact of the project on ozone because they erroneously assumed that no VOCs are produced during CBM development, failing to account for VOCs produced during activities associated with the project. The plaintiffs cited to VOC emissions from wellhead compressors, other motorized compressors, vehicles, and glycol dehydrators. (Petition, Doc. # 70, p. 54.)

The federal defendants prepared an Air Quality Impact Modeling Protocol (“Protocol”) for the NSJB EIS. (AR 38785-38827.) The Protocol “provide[d] a description of the analytical methods, data and assumptions that will be used in conducting the air quality impact analyses so that project proponents and participating regulatory agencies will have an opportunity to provide technical input to the study design prior to execution.” (AR 38789.) Section 3 of the Protocol provided “a detailed description of the emission inventories that will be developed as part of this study.” (AR 38789.) Emission inventories were to be “developed to evaluate air quality effects from both construction and production (near field and far field) activities.” (AR 38793.)

Three stages of construction, occurring sequentially, were identified and emission rates for each activity were to be calculated for VOCs, CO, NO_x, and SO₂. (AR 38793-794.) For the production phase, the primary sources of air pollutants are “natural gas-fired compressors and small gas-fired heaters.” (AR 38794.) The compressors emit NO_x, CO and HAP pollutants and the heaters emit small quantities of NO_x and CO. (AR 38794.) The Protocol concluded that

VOC emissions would be negligible. (AR 38795.)

Based on the Protocol, the agencies prepared the Air Quality Impact Assessment Technical Support Document (“Air Quality Assessment”) which analyzed the primary sources of air pollutants emitted during the production and operational phases. (AR 38875-876.) The potential emission of small amounts of VOC from compressors was recognized. (AR 38875-877.)

The Air Quality Assessment also evaluated emissions from separators and dehydration units, noted that they would utilize natural-gas fired heaters (using CBM), and concluded that because the natural gas produced would come from CBM, “minimum reactive VOC emissions would be associated with the proposed development.” (AR 38878.) Three tables in the Air Quality Assessment set forth a detailed emission inventory for the three construction phases, including VOC emissions from equipment, vehicles, and gas flaring. (AR 38888-890.) The agencies’ experts determined that insufficient VOCs would be emitted to result in significant ozone formation. (*E.g.*, FEIS at 3-613 (AR 36117); FEIS at Appendix O, Chapter 5, pp. 263, 277-278 (AR 37184, 37198-199); AR 47267-268.) Deference is to be afforded to them.

B. Visibility. The plaintiffs challenge the federal defendants’ determination as to the geographic scope of their visibility analysis, arguing the agencies should have considered potential impairment of visibility to Class I areas beyond Mesa Verde National Park and Weminuche Wilderness Area. They argue that Class I areas in New Mexico should have also been addressed, as suggested by the State of New Mexico Environment Department and National Park Service.

Identifying the geographic boundaries in which cumulative effects will be measured is

committed to agency discretion. *Kleppe v. Sierra Club*, 427 U.S. 390, 414 (1976); *see Custer County, supra* at 1037. The federal defendants identified Mesa Verde and Weminuche as the Class I areas they would analyze in the Protocol, but would include a portion of northwestern New Mexico in their modeling domain. (AR 38798 & 38814.) These two areas are the closest Class I areas to the project. (Plaintiffs' Exhibit 35; Petition, p. 56, Doc. #70 ["nearby" Mesa Verde and Weminuche].) The areas identified by the plaintiffs are farther away from the project area. (Plaintiffs' Exhibit 35.) The federal defendants discussed with New Mexico how to mitigate visibility impacts and responded to its concerns. (*See* ROD at 21 (AR 37490); AR 16103.) The federal defendants took the requisite hard look at visibility impacts.

The EPA has extensive authority to enforce the Clean Air Act and other regulatory provisions covering air quality. *E.g.*, 42 U.S.C. § 7401 *et seq.* Colorado's air quality control program is set forth in the Colorado Air Pollution Prevention and Control Act, which created the Colorado air quality control commission. C.R.S. § 25-7-101 *et seq.* That commission works in conjunction with the Colorado Department of Public Health and Environment to oversee air quality control in Colorado. C.R.S., Title 25, Article 7. The EPA and Colorado agencies provide oversight over areas of environmental concern, including the enforcement of air standards and regulations. If the project violates NAAQS or other regulations, the plaintiffs are not without a remedy. Those violations can be addressed by the applicable agency.

Conclusion

The activity authorized by the ROD in this case is the exercise of property rights granted by mineral leases to explore for and extract coal bed methane gas from federal lands including approximately 49,000 acres of the San Juan National Forest, which encompasses about

1,870,000 acres lying within 10 counties in southwestern Colorado. The project area is within two of those counties where producing wells with collection and transmission facilities exist. The plaintiffs' challenges must be considered from this perspective. This not an opening up of a virgin wilderness. The proposal made to the agencies was to authorize increased production from known gas reserves to meet the demands for energy to support the amenities provided by urbanization.

The extraction of non-renewable resources is an anathema to many in our society. Gas production is the antithesis of environmental protection. The national policies expressed in NEPA and in energy legislation are in direct conflict. The agencies are confronted with the dilemma that they cannot meet both goals. They must attempt to achieve a balance between them that is a reasonable accommodation between harms done to either of them. There are flaws in the analysis done in the preparation and writing of the FEIS and in the matching up of the project with the requirements of the Forest Plan. Those that have been identified by the plaintiffs are minor in proportion to the full context of the agency action under review. They do not support a finding that the ROD is the result of arbitrary agency action or that it is contrary to the statutory constraints. Accordingly, it is

ORDERED that the ROD is affirmed, and it is

FURTHER ORDERED that intervenor BP America Production Company's Partial Motion to Dismiss [Doc. #68] is denied as moot; and it is

FURTHER ORDERED that the Federal Defendants' Motion to Strike Plaintiffs' Notice Regarding Four Corners Air Quality Task Force Report [Doc. #98] is denied.

DATED: May 3, 2010

BY THE COURT:

s/Richard P. Matsch

Richard P. Matsch, Senior District Judge