THE PLAN FAILS TO SHOW WHAT LANDS ARE SUITABLE FOR OIL AND GAS LEASING

Objectors addressed this issue on pp. 123-129 of their comments on the draft Plan and DEIS of December 29, 2017.

A. OIL AND GAS OPERATIONS HAVE IMPACTS WHICH MIGHT NOT BE MONITORED.

DEIS comments, p. 123, second paragraph under A. Impacts include air quality and human health. "Numerous scientific studies point to potential problems with human health related to oil and gas operations." See, e. g., McKenzie et al, 2012; Colborn et al, 2011; and Concerned Health Professionals of New York et al, 2016."

Impacts would not be monitored. In the monitoring chapter (chapter 4) of the Plan, we see no monitoring related to air quality. The FEIS, Volume 1 section on air quality (pp. 70 et seq.,) does not mention impacts to air quality from oil and gas operations.

Pg 78 of the FEIS, Volume 1 continues, "Cumulatively, upwind sources can impact downwind receptors. Past, ongoing, and reasonably foreseeable future impacts to air quality would continue on the Forest at similar rates over the planning period. Monitoring and modeling efforts would continue to integrate knowledge and understanding of local and regional inputs to air quality standards."

Unfortunately, plan components and lease stipulations rely solely on the 1996 Revised Plan, the suitability analysis conducted at that time, and the Standard Mineral Leasing form. From 1996 till now, 10 production wells addressed in the suitability analysis are clearly not considered to be particularly disruptive to the environment, compared to other high production areas in Colorado and the southern Rockies. As stated in The Plan, Cumulative effects, Pg 78, "Impacts from the energy extraction and production industry and from large cities upwind of the Forest will likely affect air quality. Air quality impacts can also be realized from forest management practices to downwind receivers. Cumulatively, upwind sources can impact downwind receptors."

The Plan goes on to say "Cooperation among agencies and other entities would also continue so that as monitoring results become known, adjustments or changes would be made to mitigate air quality impacts across the Forest and the air shed." Pg 79, FEIS, Volume 1

As of 2019, the San Luis Valley and Rio Grande National Forest are not being monitored for gases by the CDPHE. At the Great Sand Dunes National Park and Preserve, Nitrogen & sulfur (acidification), Mercury and Toxics (harmful to humans and wildlife), and Ozone at ground level

(plant leaf damage) are monitored at the Park. How would that air quality monitoring support be sufficient for potential oil and gas production areas around South Fork and Del Norte, some 60 miles away? Large air quality monitoring gaps currently exist, so when the Plan says "as monitoring results become known." (FEIA, Volume 1, Page 79). This statement can be interpreted as saying "as pollution develops, we will respond with "mitigation".

Suggested improvement: We recommend that the Forest Service work with the CDPHE, Air Quality Control Division to set up air quality monitoring stations (particulates and gaseous) in critical areas around Forest Service boundaries before an Operations Plan for a lease occur. These baseline monitoring stations could serve a variety of purposes to inform management decision making and encourage maintenance of a healthy air shed within forest boundaries. It's critical to be aware of air quality, along with moisture and temperature conditions, irrespective of oil and gas development scenarios.

B. LOW OR NO INTEREST IN LEASING NOW DOES NOT MEAN NO INTEREST THROUGHOUT THE LIFE OF THE PLAN

Proposals to develop oil and gas on up to 144,000 acres of land partially on the RGNF near Del Norte and South Fork in 2008 generated intense controversy. Even though these leases have been deferred as of 2017 (II FEIS at 47) and there is no activity and little industry interest today, the Forest Service should not assume there will be no oil and gas leasing over the life of the Plan. The lack of interest could change with an increase in the price for oil and gas. The deferred leases described above could be revived at any time.

The technology in use when the 1996 Plan was formulated has changed. Hydraulic fracturing, or "fracking" along with directional drilling has made much more area that may contain oil or gas potentially available for drilling.

There is also an assumption made that O & G development scenarios might not even occur. Volume 11, Appendix D Comment-MIN-5 states that "Leasing direction from 1996 forest plan, as amended is still applicable and thus been adopted in this proposed plan. The Forest is not completing a new oil and gas availability analysis at this time.... New programmatic lease stipulations will be developed when, or if, the Forest Service determines the need to complete a new leasing analysis. However, lease stipulations consistent with this forest plan may be applied to individual lease parcels. There is currently not a reasonably foreseeable development scenario for oil and gas development. It is speculative at best, to assume that oil and gas development would even occur...". Comment-MIN-5, Pg. 49.

According to the Oil and Gas Resources in Rio Grande National Forest (R2-RFD Report, Pg. 3 summary) research document, published in 1995, which most of the previous 1996 amended and

current Plan refers to, the following estimate states that 23 wells are projected in San Juan Area, 13 to be plugged and abandoned and 10 to be producers. It also goes on to say that "Projected oil and gas exploration and development activity is based on what is currently known" and cannot be expected to include accurate predictions in future fluctuations in O & G markets" ... "and unpredictable changes in technology." Projected Oil and Gas Exploration and Development Activity, Pg 4.

Suggested Improvement: We recommend that the Rio Grande Forest place a moratorium on all Oil and Gas leasing until Suitability determination and Reasonably Foreseeable Development Scenarios can be fully analyzed. The Forest Service has maintained an attitude that "no O & G development has happened yet…", but that approach is not taking into consideration that two Oil and Gas Exploratory drilling attempts on public lands were stopped through litigation, and two leasing attempts were stopped through public pressure and technicalities. One exploratory drilling prospect did move forward on private land, but came up empty. The Forest Service cannot presume that there will be no interest in leasing for the full life of the plan, especially as oil and gas prices increase, which they likely will.

C. SUITABILITY FOR EACH MANAGEMENT AREA AND STIPULATIONS FOR ANY LANDS SUITABLE NEED TO BE DISPLAYED IN THE PLAN

"Specific lands within a plan area will be identified as suitable for various multiple uses or activities based on the desired conditions applicable to those lands. The plan will also identify lands within the plan area as not suitable for uses that are not compatible with desired conditions for those lands."

Planning Rule at 36 CFR 219.7(e)(1)(v). Though "[t]he suitability of lands need not be identified for every use or activity" (ibid.), we believe it should be for oil and gas, given the potential for oil-gas activities to create impacts, which can be severely adverse and/or persistent.

"This forest plan is adopting the leasing analysis from the 1996 forest plan, as amended; it is not amending or revising the current leasing analysis, so we are not determining suitability of lands or developing any new stipulations at the programmatic level."

II FEIS at 48.

According to the 1996 Forest Plan FEIS, approximately 46% of the Forest or 840,000 acres have high potential for oil and gas development, and another 10 percent has medium potential. Id. at 3-302.

However, nowhere are the lands that are suitable or unsuitable for oil and gas leasing displayed in the Final Revised Plan. There are no maps of suitable/unsuitable lands. Thus the public and the agency staff cannot determine what lands are suitable, nor what stipulations must be applied to any leases.

The FEIS for the 1996 Plan had a table showing what stipulations would be required for each MA. See Table 3-65, 1996 Plan FEIS at 3-315. Such a table is needed in the final revised plan/FEIS.

The 1996 plan contained a management area, 3.3 Backcountry, under which high potential areas required NSO stipulations, with all other areas administratively unavailable for leasing. 1996 Plan at IV-16. However, this MA is not used in the revised plan. It is thus hard to tell what stipulations, especially NSO, might apply to which MAs.

On p. 126 of our December, 2017 comments, we recommended that no surface occupancy (NSO) stipulations be required for leases in various areas to conserve important values.

Suggested improvement: Lands suitable and unsuitable should be displayed on maps as part of the Plan. The Plan should also state what stipulations are required for suitable lands in each management area where any leasing would be allowed.

D. PROTECT CHAMA BASIN

Objectors requested the designation of Chama Basin as a special interest area in Appendix 7 to the alternative we submitted with scoping comments on October 28, 2016.

Page 72 of the Plan states: Management Area 4.1 – Special Designation – Special Interest Areas Desired Conditions: Special interest areas favor the protection or enhancement of unique characteristics that occur across the Forest. Special interest areas typically contain unique botanical, geologic, historical, scenic, or cultural areas and values.

Chama Basin fits this description. Over 10 miles of streams within Chama Basin have been determined eligible for inclusion with the Wild and Scenic Rivers System. These include both the East Fork and West Fork of the Rio Chama, as well as 5 miles of Archuleta Creek. The streams were categorized under the Scenic classification, even though the entirety of these segments is inaccessible by road. The 4-5 miles of the Rio Chama mainstem should similarly be recognized as eligible for inclusion as a scenic river. (Rio Grande LRMP FEIS, 1996)

The Rio Chama Potential Conservation Area identified by Colorado Natural Heritage Program is entirely contained within the proposed watershed protection area. The Rio Chama PCA is a 191-

acre site of High Biodiversity Significance identified for its montane riparian forest. The basin's broad floodplain has large amounts of alluvium, abandoned river channels, and downed logs that create a very dynamic, active riparian system. Biodiversity elements of specific interest include mountain willow (Salix monticola)/mesic graminoid montane riparian willow carr, and a narrowleaf cottonwood/thinleaf alder (Populus angustifolia/Alnus incana) montane riparian forest. (CHNP Potential Conservation Area Report, 2015).

Potential for oil and gas in Chama Basin is high. It should be unsuitable for oil-gas leasing. If any part of it is suitable, NSO stipulation must be required to ensure protection of resources from impacts of any oil and gas leasing.

According to the Western Land Group (WLG) website:

https://westernlandgroup.com/index.php/portfolio-item/banded-peak-mineral-exchange/ "On behalf of Banded Peak Ranches, WLG Closed the Banded Peal Mineral Exchange in March 2011. The trade was relatively unique in that it dealt with mineral rights only. Involved were 16,176 acres of Federal oil and gas rights within the San Juan National Forest beneath the surface lands owned by three ranches in the headwaters of the Navajo River, Colorado collectively known as Banded Peak."

"In exchange for these Federal oil and gas rights, the complete mineral estate owned by Banded Peak Ranches beneath 19,725 acres of lands within the Rio Grande National Forest was conveyed to the United States. **This exchange was critical to advancing the conservation purposes of this remarkable landscape.**"

Suggested Improvement: With all this activity to acquire these mineral rights on behalf of the American public, and attention paid to this area since the 1996 plan, we recommend designation of the Chama Basin a Special Interest Area (SIA), and require NSO stipulations for any leases.