March 21, 2017

Bureau of Land Management
Attn: North Fork Mancos Master Development Plan
2300 River Frontage Road
Silt, Colorado 81652
blm_co_si_mail@blm.gov

Re: North Fork Mancos Master Development Plan ("NFMMDP")

Attention: Allen B. Crockett, Ph.D.
Supervisory Natural Resource Specialist

Greetings Dr. Crockett:

The Board of County Commissioners of Gunnison County, Colorado (the "Board" or "Gunnison County") appreciates the opportunity to offer these comments on the North Fork Mancos Master Development Plan (the "NFMMDP"), and appreciates also the extension of time granted in which to make these comments.

I. General Comments

The Board itself regulates the development of oil and gas resources in Gunnison County, together with the Federal and State governments, with the intent to provide a framework for the responsible exploration and production of oil and gas resources in a manner that conserves other natural resources, that is sensitive to surrounding land uses, and that mitigates adverse impacts to and protects the public health, safety, welfare and the environment of Gunnison County.

The Board recognizes that long term planning is difficult—but it is essential. All of the regulators have the ability—and Gunnison Energy LLC has demonstrated the corporate capacity and intent—to work together to accomplish such long term planning. The Board offers the following as "scoping comments" and intends to provide further specific comments.

Nothing in these "scoping comments" is, or shall be construed as to be, pre-determination of Gunnison County’s own regulatory process or its outcomes—or of future proposals beyond or in addition to the specific first phase of a potential 13 pad development by Gunnison Energy LLC.

II. Project Description

The Board understands that the current proposal for which comments are sought is limited as follows:

- Drill up to 35 horizontal wells from four new well pads and one existing well pad over the next three years.
• Three new well pads would be on National Forest System lands and one new well pad on private land.
• Project area is accessed via Gunnison County Road 265. The Proposal includes upgrading up to 2.2 miles of existing roads and construction of up to 4.6 miles of new road.
• Total initial surface disturbance would be approximately 26 acres of Federal lands and 10 acres of non-Federal Lands.
• Of these totals, about 17 acres of Federal Lands and 3 acres of private lands would remained disturbed over the long term.
• Gunnison Energy estimates the wells could produce 700 billion cubic feet of gas over 30 years.

III. General Locational And Timing Principles
General locational and timing principles to be included in the BLM analysis should include the following:
• Location of well pads and other facilities in close proximity to existing well pads, pipelines and infrastructure.
• Drilling multiple wells from as few pads as possible.
• Incrementally sequencing or incrementally stepping into new development areas to limit the impacts—including “sprawl” and mobilization and de—mobilization.
• Separating development areas to avoid multiple, simultaneous operations occurring at one time—in the same area—using same roads, etc.
• Attention to “assimilative capacity” regarding other essential characteristics: water, air, wildlife, visibility, noise, recreation, timber, agriculture, seasonal and other cyclical constraints.
• Geography, topography, soils, rainfall and slopes may require individualized site approaches to avoid and minimize consequences.
• Employ non-traditional methodologies when appropriate.
• Impacts cross jurisdictional lines

IV. Particular Attention:
Particular analytic attentions should be paid to the following:
• Drainage and erosion control
• Access roads
• Public roadway and traffic impacts
  a Ingress/egress
  b Maintenance and financial considerations
• Wildlife and wildlife habitat
• Livestock and livestock grazing
• Impacts on recreation
• Water body quality
• Wells and public water supply quality
• Water body buffers
• Air quality/air sheds
• Pits
• Management of hazardous materials
  a. Compliance with fed/state requirements
  b. Storage
  c. Spill prevention
  d. Machine maintenance
  e. Disposal
• Emergency response
• Cultural and historic resources
• Wildlife hazards
• Geologic hazards
• Pipeline integrity
• Impact mitigation costs
• Demobilization
• Retirement

V. Offsite Impacts

The Board requests that BLM analyze impacts that may occur outside of the project boundary and its immediate environs. In addition to those elements identified in IV above, consideration should be made to:

• Vibration
• Noise
• Odors
• Air pollution
• Traffic Patterns, volumes and impacts on roadways
• Stormwater discharges

VI. Assimilative Capacity and Carrying Capacity

The Board urges that the proposal be analyzed regarding both “assimilative capacity” and “carrying capacity” of the North Fork area; and that such analyses include not only this proposal—but this proposal superimposed on existing projects, and considering reasonably anticipated projects.
The "assimilative capacity" refers to the capacity of the affected ambient environment to accept and dissipate pollutants, discharges and other detrimental consequences of the proposed action without exceeding environmental and social limits.

The "carrying capacity" refers to the ability of the ambient environment to support the proposed project without exceeding environmental and social limits. That is, the size, pace and location of the project (and its components) should be constrained by the detrimental consequences it produces and that assimilative capacity of the effected ambient environment.

VII. Consideration of Requiring Tracers That Can Identify Frack Fluids In The Environment

Some fear that frack fluid chemicals could contaminate nearby water supplies if the chemicals are accidentally spilled, or released into drinking water aquifers or onto the surface accidentally.

It is possible to identify the presence of frack fluid in spilled or discharged flow-back by tracing synthetic organic compounds that are added to the fluid before it is injected down a well.

But the proprietary nature of the chemicals, combined with their instability in the environment has limited the usefulness of such tracers.

Gunnison County urges that BLM rigorously explore the current state and availability of non-toxic frack fluid tracers with regard to this proposal—particularly in light of the high, headwaters nature of the proposal, and the proximity of both downstream drinking water supplies and agriculture.

Thank you for your consideration to Gunnison County's comments. It is our intent to foster non-adversarial, multi-jurisdictional, public-private long term planning.

Respectfully submitted:

[Signatures]

Phil Chamberland, Chairperson
Jonathan Houck, Vice Chair
John Messner, Commissioner

Cc: Brad Robinson, Gunnison Energy LLC