Citizens for a Healthy Community

July 6, 2018

Board of Gunnison County Commissioners
200 E. Virginia Avenue
Gunnison, CO 81230

Dear Commissioners,

Citizens for a Healthy Community (CHC) is a 500+ member grassroots nonprofit organization located in Paonia that is dedicated to protecting the air, water and foodsheds of the North Fork Valley and the Delta County region. CHC continues to be concerned about the impacts of oil and gas development in the Upper North Fork Valley watersheds and downstream and downwind impacts on our community. We appreciate Gunnison County's sensitivity to the impacts that oil and gas leasing and development will have on the North Fork Valley, especially in light of the increased connectivity Kebler Pass provides in linking the growing and vibrant arts, recreation, tourism, and agri-tourism economies of our communities and two counties.

On July 2nd, the BLM posted notice of a proposed oil and gas lease sale for the State of Colorado. This lease sale offers nearly a quarter of a million acres of federal lands in the State for oil and gas development. 7,903 of those acres are in the North Fork Valley and Upper North Fork, with approximately 20% of the acreage in Gunnison County. Those leases are contained in Parcels 8389, 8390, 8391, 8320, 8351, 8138, 8135. Attached to this letter is a map of these parcels in context with the existing and proposed oil and gas development in the area. The BLM has opened a scoping phase where the public can bring all potential issues they would like to see the Agency address during subsequent environmental review. While we are still reviewing the implications of this proposed lease sale, we would like to bring the following issues to your attention and respectfully request that Gunnison County submit a scoping comment letter to the BLM.

Issues Related to Specific Lease Parcels

- **Parcels 8320, 8351—Gunnison County**
  - These parcels abut the Paonia Reservoir, and development of oil and gas minerals would pose grave risks to this vital resource.
  - Research from a Canadian university study shows that fracking causes induced seismicity, and researchers recommend a 3-mile buffer around sensitive infrastructure such as dams. These parcels are within that 3-mile buffer.

- Failure of Paonia dam, not to mention contamination of Paonia Reservoir would be catastrophic. See below for more impacts related to Paonia Reservoir.

- **Parcels 8138, 8135—Delta and Gunnison County**
  - These parcels are just west of, and partially within the NFMMDP project area. They are in an area that forms the headwaters of vital watersheds, providing drinking and irrigation water for the North Fork Valley's world-class vineyards, orchards, and ranches. A small portion of Parcel 8135 is in Gunnison County.
- **Parcel 8140 –Gunnison County**
  - This parcel is in the Muddy Creek Watershed, partially within the existing Huntsman Ridge Roadless Area.
- **Parcels 8389, 8390, 8391—these are all in Delta County**
  - However, these parcels have been nominated for the purpose of coal mine methane waste capture. While CHC does not address coal issues, our concern is that an oil and gas lease is being proposed to capture coal mine methane waste which is not permitted under the Mineral Lease Act. We also understand that coal mine methane waste is currently being addressed through the Methane Waste working group.
    - When Gunnison Energy, LLC (GELLC) nominated these parcels, they expressed a desire to capture coal mine methane waste from the existing mine. While capturing coal mine methane waste, rather than venting it into the atmosphere would be beneficial, an oil and gas lease is not the appropriate mechanism for doing so. If coal mine methane waste capture is the objective behind this nomination, it creates an undue risk because these leases are open for competitive bidding. An oil and gas lease conveys the right to develop any geologic formation for oil and gas and cannot be limited to coal mine methane waste.
    - It is also important to note, that the BLM *cannot* issue an oil and gas lease for coal mine methane waste. In 2007, the Interior Board of Land Appeals ruled conclusively that the methane waste from a federal coal lease could not be leased by the BLM under the Mineral Leasing Act. There are other avenues for pursuing the goal of coal mine methane waste capture which should be tied to the current coal lease, not through an oil and gas lease.

  - These parcels directly overlie the Bowie #2 Mine, which has been idled since 2016. Drilling for oil and gas through, or beneath a coal mine is inherently dangerous given the geological instability of the area.

<u>What a lease conveys</u>: A valid oil and gas lease conveys a guaranteed right to drill, a ten-year lease term, and an indefinite right to continue producing if the lease produces within that ten-year term. That is why the leasing stage is so critical, and why analysis of environmental impacts needs to be carefully considered and should not be rushed at this stage. The environmental analysis done at the leasing stage will guide any subsequent

review conducted on subsequent development such as applications for permits to drill or master development plans, and is generally tiered back to the relevant BLM Field Office's Resource Management Plan (RMP). In the case of the Uncompahgre Field Office, the current RMP is woefully outdated and currently under revision.

Issues related to offering new leases under a stale RMP currently undergoing revision

- The Resource Management Plan (RMP) for the Uncompahgre Field Office (UFO) is currently under revision. The field office anticipates releasing the Final EIS this fall, with a Record of Decision (ROD) expected in the spring of 2019. In the draft RMP revision of 2016, the BLM included four alternatives for consideration. Two of the alternatives include consideration of no-leasing, no surface-occupancy, controlled surface occupancy, or other stipulations that would impact these proposed lease parcels and likely make them ineligible for leasing.
- It had been a longstanding practice in the UFO to not offer new leases while the RMP is being revised. From a policy perspective, this makes sense because any new leases issued during the revision process would prejudice the environmental analysis being conducted. The BLM acknowledged that the RMP was stale in 2011 and 2012, when it deferred the proposed 30,000 and 20,000 acre lease sales, respectively, in the North Fork Valley until the completion of the RMP revision. Despite the fact that the leases in this current proposal would still be issued under an RMP that was deemed too stale in 2011 and 2012, the BLM has received new policy guidance to accelerate and expedite oil and gas leasing and development proposals. This new guidance effectively minimizes the State Office and local Field Managers discretion to make decisions on leasing and development based on local information and understanding, further eroding local control of our public lands.
- In addition, the reason the RMP is being revised is because it is woefully out of date. The current RMP lacks consideration of modern drilling technology, including hydraulic fracturing and its impacts, climate change, and the myriad health and environmental impacts described above. Offering leases under this stale, out of date document is irresponsible, unsafe and inappropriate.

Impacts to the North Fork Valley Economy and County Revenue

- The North Fork Valley and the rest of Gunnison County are rapidly becoming more and more connected, through Kebler Pass and the West Elk Scenic Byway, the sale of North Fork produce in the farmers markets and restaurants in Crested Butte and Gunnison, and recreationists visiting the shared watershed for a whole host of uses.
  - A report published last summer by Citizens for a Healthy Community determined that oil and gas development in the North Fork watershed could have significant negative impacts on the North Fork Valley's economy and therefore Delta County's revenue streams. This study focused primarily on property tax and sales tax revenue impacts. Gunnison County could potentially experience similar impacts relative to sales tax revenue associated with tourism and recreation.
    - Recreation revenue:
      - Sales taxes – In Delta County, hunting, fishing, and wildlife watching generate $720,000 per year in sales tax. According to several studies, oil

and gas development has a proven negative impact on outdoor recreation and National Park visitation.
    - For Delta County, that could result in a loss of $187,460 per year from lost recreation visits.
  - Agritourism:
    - The North Fork Valley is an agritourism hub. An extremely conservative estimate of agritourism's economic impact to Delta County shows almost $100,000 per year in tax revenue. Oil and gas development would also likely have a demonstrable impact on agritourism visits. If fewer people visit local orchards and vineyards because of large-scale increases in oil and gas development nearby, other regions dependent on those recreation visits could lose a substantial revenue stream.
  - Broader impact to the North Fork's brand identity:
    - The North Fork Valley has worked for years to transition its economy away from dependence on extractive industries. Studies like North Fork 2020 and the Heart and Soul project describe arts, education, sustainable agriculture, agritourism, and recreation as the future of Paonia. Large-scale oil and gas development in our watershed is inconsistent with such a vision.
- Cost of emergency management: the County should request that the **BLM address how natural gas development of these lease parcels will strain local emergency services** such as volunteer fire, EMS and rescue groups. In the fall of 2015, there was a report of flames in the forest alongside Hwy 133. Paonia Volunteer Fire Department was dispatched to the scene, over an hour's drive from their station. It turned out that one of the wells was flaring gasses and hadn't notified the local authorities as they were required to. This had the effect of wasting volunteers' time and could have been detrimental if there had been a real emergency during the time the fire department and its equipment was tied up investigating this false alarm. If there were a true emergency, where is the nearest HAZMAT team that is qualified to deal with oil and gas spills? What is the response time? The specifics must be determined in the BLM's analysis of this proposal.
- Cost of cleaning up spills and other incidents in Paonia Reservoir and other vital water resources: Many residents, ranchers, and farmers rely on water from the Terror Creek Ditch, the Farmers Mine Ditch, and the Fire Mountain Canal for example, originating in the area of these offered lease parcels within Gunnison County. All of these parcels present a risk to our water resources, but Parcels 8320 and 8351 specifically pose significant risks to Paonia Reservoir. What are the costs associated with cleaning up a spill that impacts the Reservoir? How will the BLM ensure that these costs are not passed on to Delta and Gunnison County and the community most likely to be impacted?
- Cost of increased traffic: any increase in oil and gas development in this area will likely cause an increase in traffic along already stressed and fragile roads.

Impacts on air and water quality surrounding Town

- Water:
  - The proposed parcels are all located within critical watersheds and headwaters

that supply irrigation and drinking water for a significant number of residents. The lease parcels near the Paonia Reservoir are in a particularly inappropriate location for industrial-scale oil and gas activity. Gunnison County benefits greatly from the North Fork of the Gunnison driving the local agricultural and recreation economies. Any contamination of North Fork Valley streams, rivers, or farms would have adverse effects on the Gunnison County economy.

- The BLM should consider the risk from spills, accidents, or explosions during the development and production phases that could result in contaminated water resources. AirWaterGas has identified nine chemicals out of the over 600 chemicals used in fracking fluids, that are toxic, persistent, and fast traveling, and therefore merit BLM's detailed attention[1].
- The County should consider the impact that permanent removal of water from the hydrologic cycle to support fracking and other drilling operations would have, particularly in this period of persistent drought.
- Irrigation water and infrastructure:
  - Risk of contamination to irrigation water and crops from:
    - Fracking chemical contamination of ground and surface waters
    - Damage to irrigation canal access and bridges
    - Airborne volatile organic compounds
    - Airborne silicates
    - Silting in of rivers and irrigation ditches
    - Increases in diesel exhaust from transportation, well and compressor sites
    - Increased runoff from new roads and wellpads
- The County should consider asking the BLM to require in the lease stipulations for these parcels that if the company develops the leased resources, they must monitor, test, and disclose water quality 24/7, as is required of the mining companies.
- Impacts to Paonia Reservoir
  - The Paonia Reservoir is already suffering from a heavy sediment load, poor water quality, and annual flows drastically diminished from their historic average. According to Conservation Colorado's River Report Card, the North Fork has high concentrations of dissolved inorganic material, salts, and metals. A contributing source of that pollution is already-existing industrial development in the watershed above the dam. The offered leases only stand to contribute more to the already high levels of contaminants and pollutants in the reservoir.
  - The development of the offered leases could contribute to fracking-induced seismicity, threatening not just burgeoning businesses like this, but posing a catastrophic risk to everyone and everything downstream.

- Air
  - The BLM's own modeling of ozone levels in the Bull Mountain area exceed EPA thresholds of 70 ppb. The town could be negatively impacted by additional development in the area that would increase ozone levels beyond this already elevated level, and the BLM should not offer any more leases in such a heavily

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[1] Jessica D. Rogers, Troy L. Burke, Stephen G. Osborn, and Joseph N. Ryan, *Framework for identifying Organic Components of Concern in Hydraulic Fracturing Fluids on the Mobility and Persistence in Groundwater, Environ. Sci. Technol. Lett.*, May 15, 2015.

impacted region.

- The eventual development of these would exacerbate regional haze issues and other air pollution concerns near National Parks and Recreation Areas related to any potential flaring that might take place, as well as increased dust and particulate matter from increased truck traffic, which could negatively impact Gunnison County.

Assessment of Health Risks Associated with Oil and Gas Development

- Risk to human health from exposure to chemicals associated with oil and gas development including burning eyes, difficulty breathing, cough, nosebleed, anxiety, headache, dizziness and nausea, as well as birth defects, potential development of chronic diseases including damage to cardiovascular, respiratory, immune or endocrine systems. Risk to public health from airborne contaminants, ozone, particulates, VOC's and radioactive particles, as well as contamination of ground and surface water sources must also be considered. *Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking – Fifth Edition*, Physicians for Social Responsibility, March 2018 (available at: http://www.psr.org/resources/fracking-compendium.html
- Given the potential for negative impacts to human health, the County should ask the BLM to conduct a Health Impact Assessment as a part of their environmental impact assessment.

Impact on climate change and the community

- The North Fork Valley has already seen the impacts of climate change in terms of early runoff, depleted water resources midway through the growing season, higher temperatures impacting vegetative growth, change in wildlife migration as they adapt to warmer temperatures, and resiliency of orchards to adapt to shorter winters. There is risk of accelerating climate change by contributing methane and other greenhouse gases into the atmosphere.
- Decreases in residential, farm, and ranchland property values.
- Decreased quality of life for area residents.
- Potential destruction of a local economy transitioning to organic & sustainable agriculture, agri-tourism, recreation, creative arts, and renewable energy.

Gunnison County questioned the carrying capacity of the region for increased oil and gas activity in its scoping comments on the North Fork Mancos Master Development Plan. We believe that question is also appropriate here in this lease sale proposal. From our perspective, for the reasons stated above, this lease sale is irresponsible, inappropriate and dangerous. Furthermore, the North Fork Valley is a rare and irreplaceable place: it is the organic breadbasket of Colorado, and its vineyards and orchards are world-renowned agritourism destinations. This is no place of oil and gas development. The North Fork Valley and all the communities along the West Elk Scenic Byway have developed a regional, statewide and national reputation for excellence in agriculture, wine production, and orchards, as well as creative arts, education, and renewable energy development. The

North Fork Valley is worth much more than just its natural gas production development potential.

From a procedural and local control perspective, the BLM should return to its policy of deferring leases sales during the RMP revision process, and should withdraw the above described lease parcels from the proposed December 7th, 2018 lease sale. Offering any leases for sale during this process would absolutely and irredeemably prejudice the result of the revision.

Thank you for taking the time to consider these issues and concerns as you review this proposed lease sale. Should you have any questions or would like any additional information, please do not hesitate to contact me at natasha@chc4you.org or at (970) 399-9700.

Sincerely,

Natasha Léger
Executive Director (Interim)
Citizens for a Healthy Community

Additional Information Attachments:

- December Lease Sale Fact Sheet
- UFO Lease Sale document and map
- Map: Proposed Leases with Other Existing and Proposed Development
- Economic Impacts of Natural Gas Development On Delta County
- Conservation Colorado Rivers Report Card

North Fork Valley
December 2018 Oil and Gas Lease Sale
Fact Sheet

On July 2, 2018 the Bureau of Land Management announced an oil and gas lease sale for the State of Colorado and the North Fork Valley.

Background
In 2011 and 2012, the BLM proposed a 30,000-acre and 20,000-acre lease sale in the North Fork Valley. The BLM deferred those lease sales until the revised Resource Management Plan for the Uncompahgre Field is complete, in recognition of the fact that the current RMP is stale and does not provide for adequate protections or considerations. In 2016, the BLM released its draft Resource Management which included no-leasing, no surface-occupancy, controlled surface occupancy and other stipulations. The final Environmental Impact Statement on the RMP is scheduled to come out in Fall 2018, with a Record of Decision in Spring 2019. The BLM's Uncompahgre Field Office had a policy of deferring oil and gas leasing until the revised RMP is completed. Then the Trump Administration pushed new guidance in early 2018, which eliminated routine leasing deferrals and the discretion of state offices by strongly recommending that the State Office consult with the Washington office before deferring any lease parcels. In addition this new guidance made it clear that BLM policy was no longer to wait for completion of a revised RMP.

The Lease Sale in the North Fork Valley

- 8 parcels totaling 7903 acres around Paonia Reservoir, in the Muddy Creek and Hubbard Creek Watersheds, and over Bowie#2 coal mine
    - 1206.89 acres around Paonia Reservoir (15% of the sale acreage)
    - 5072.49 acres over Bowie #2 mine (64% of the sale acreage)
    - 1623.66 acres in the Muddy Creek and Hubbard Creek watersheds (21% of the sale acreage)
- All parcels nominated by Gunnison Energy
- 81% of lease sale acreage in Delta County; 19% in Gunnison County

Issues:

- **Leasing is the most important stage in the oil and gas development process! A federal oil and gas lease conveys an *absolute right to develop*. Once the lands are leased, the developer has a virtually guaranteed right to drill and produce those minerals.**

- **Parcels 8140, 8135, 8138:** Muddy Creek and Hubbard Creek Watersheds, which feed some of the North Fork Valley's most important irrigation and drinking water sources such as the Fire Mountain Canal, are at risk.

- **Parcels 8320, 8351:** These parcels surrounding the Paonia Reservoir are in one of the most geologically unstable regions in the State, which witnessed the largest mudslide in the country, and Hwy 133 has regular problems with rockfalls.

    - There are already injection wells in the area that may be correlated with recent earthquakes near Carbondale (2.8 magnitude on January 19th, 2017 28 km S of Carbondale; 1.6 magnitude on January 19th 26 km S of Carbondale) and Paonia (3.5 magnitude on July 23, 2016 7 km NE of Paonia). The parcels around Paonia Reservoir are dangerously close to the dam. Canadian researchers have found that

fracking results in induced seismicity and recommend a 3-mile buffer around sensitive infrastructure such as dams and reservoirs. These parcels are within that recommended buffer.

- **Parcels 8389, 8390, 8391:** These parcels are over Bowie #2 coal mine. BLM has not analyzed the geological implications, or safety implications of the intersection of coal mines and oil and gas drilling.
- **North Fork Valley farms are the organic breadbasket of Colorado.** North Fork farms stand as a safety net against currently at risk or likely contaminated farms in Colorado. Four of the top agricultural producing counties in the State also four of the top natural gas producing counties in the state. Delta County is the 5th largest agricultural producing county with 1250 farms.
- **Rural gas gathering pipelines are exempt from county, state, and federal oversight,** and the BLM should impose a moratorium on oil and gas leasing and development until the safety of rural gas gathering pipelines can be independently monitored and inspected.
- **The RMP is scheduled to be completed in Spring 2019** and currently has no-leasing, and other important stipulations that conflict with and would otherwise limit or reject these proposed lease parcels.

This proposed lease sale is irresponsible, unnecessary, and dangerous.

This is a complex proposal with significant implications, which merits careful and rigorous review of its cumulative impacts including headwaters, fish and wildlife, recreation, local economy, geological stability, road repair and safety, air quality, seismic activity, and public health.

BLM is seeking scoping comments to inform its Environmental Assessment analyzing the proposal. **The comment deadline is July 17, 2018.**

- Scoping is the first step. The BLM will have a comment period on the preliminary EA from August 27 – September 11th, and then a final protest period from October 22nd – November 1st.

Send comments to the BLM:

- Opposing this lease sale.
- Requesting that BLM withdraw these leases from the December 2017 sale.
- Reminding the BLM that 42,000 no-leasing comments were submitted on the RMP because, a no-leasing alternative is the only way to guarantee that this irreplaceable corner of Colorado is not irreparably harmed.

You can send your comments to:
Acting State Director Greg Shoop: gshoop@blm.gov
Southwest Colorado District Manager Stephanie Connolly: sconnolly@blm.gov
Uncompahgre Field Manager Greg Larson: glarson@blm.gov

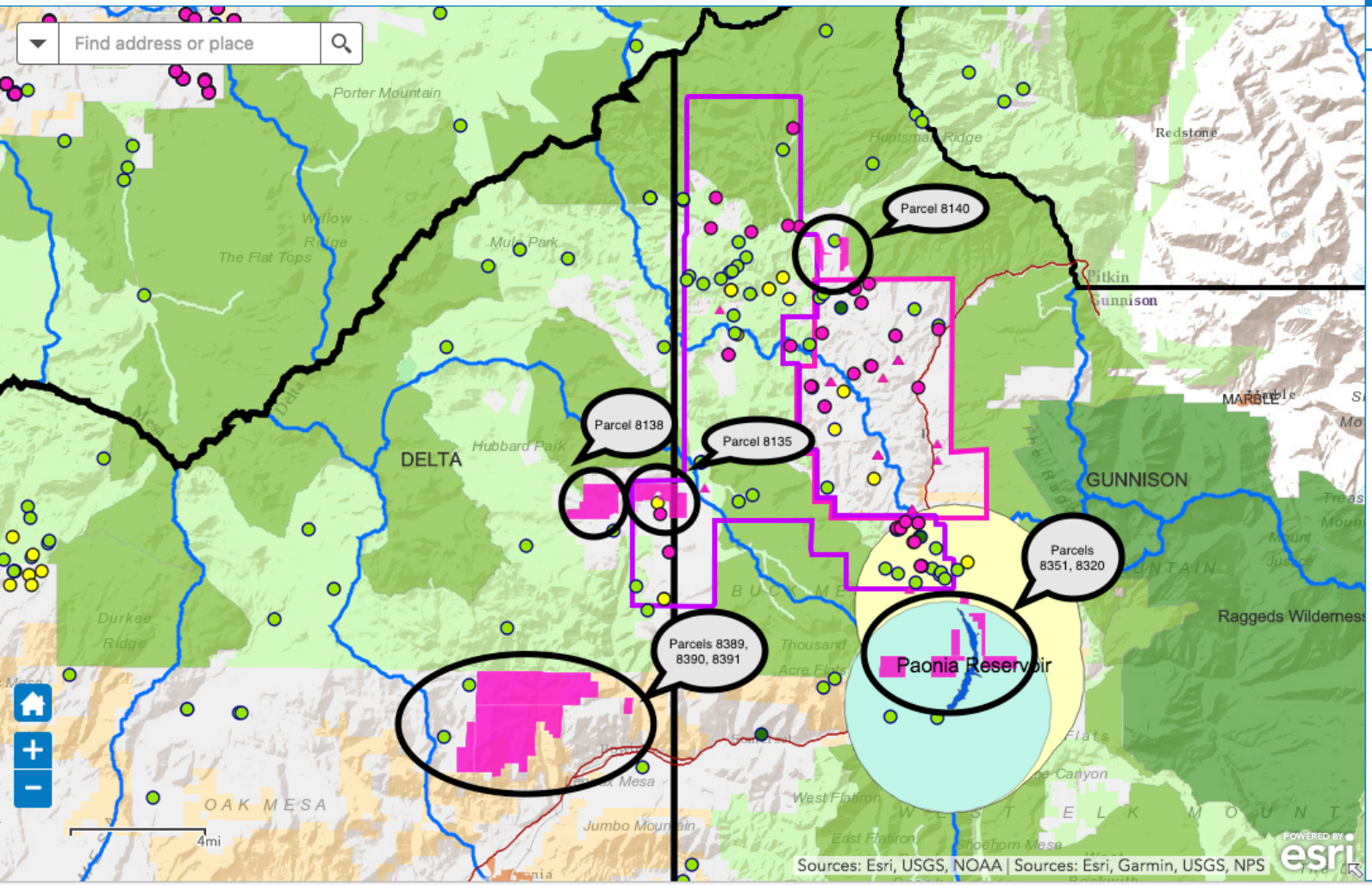
Citizens for a Healthy Community

www.chc4you.org

North Fork Oil and Gas Development

Citizens for a Healthy Community

Visit our website



Legend

Proposed Leases 2018

Wells Producing/Active/Injecting

Other Oil/Gas Wells

- Domestic Gas
- Shut In/Temp Abandoned
- Abandoned
- Drilling

Well Permitted

Well Permit Pending

NFMMDP Project Area

Bull Mountain Unit

Paonia Reservoir