

10-7-19

Mr. Rob Potts
2221 North Raguet St.
Lufkin, TX. 75904

Dear Rob,

Please accept these comments pertaining to the Oil and Gas Leasing Availability Analysis (OGLAA) on behalf of Texas Conservation Alliance (TCA). These comments cover large scale impacts related to human caused climate change as well as localized impacts caused directly by the development of federal minerals on the National Forests and Grasslands in Texas (NFGT).

GLOBAL AND REGIONAL CLIMATE CHANGE IMPACTS

Human caused climate change is directly related to the release of greenhouse gasses (GHGs- carbon dioxide, methane and others) into the atmosphere. The production and burning of oil and natural gas is a major contributor of GHGs. The US is the second highest producer of GHGs globally and has the highest per capita release of GHGs. Climate scientists have warned that in order to avoid catastrophic climate change, the rate of release of GHGs must be greatly reduced and that existing GHGs in the atmosphere must be reduced as well. As one of the leading global producers of GHGs, the US has an obligation to do its part to reduce GHGs emissions by lowering the carbon footprint of this country. A logical starting point is to curtail the development of federal minerals that produce GHGs. Therefore TCA supports a **NO LEASE/ NO SURFACE OCCUPANCY ALTERNATIVE** for the NFGT.

The Environmental Impact Statement (EIS) prepared for this Analysis must include comprehensive impacts associated with global warming based on the proportion of GHGs that the US releases as a whole and not just consider impacts to the Local Analysis Area (LAA). It is noteworthy that Texas produces 12.7% of US GHGs while occupying only 7% of the US landmass. Thus Texas has a disproportionately large carbon footprint for its area. The impacts of GHG- induced climate change are felt in portions of the State outside of the LAA such as the severe storms along the Gulf coast. Texas also experiences the impacts of climate change that affects other states. Examples include higher local food prices and limited availability of agricultural crops grown elsewhere as a result of droughts and floods. It is unquestionable that Texas' GHGs impact an area much larger than the LAA. And must be included in the EIS.

Climate change is causing increasingly harmful impacts to human health and safety as average temperatures rise. Humans face greater risks of heat exhaustion and heat stroke when outdoors or must limit going outside to the cooler parts of the day. Being outside requires greater water consumption for personal hydration, leading to greater production of trash in the form of disposable plastic water bottles. Human health is being threatened as the range of disease spreading pests such as mosquitoes and ticks is spreading. All of these impacts must be considered.

Higher ambient temperatures from global warming cause increased evaporation rates from surface water sources as well as increased water demand for domestic use, irrigation and livestock. Oil and gas development uses vast quantities of fresh water for drilling and fracking. The water used for drilling lowers the water table and depletes surface water impoundments. The release of GHGs causes global warming which in turn increases water demand while reducing supplies. All of these impacts must be considered.

Global warming from minerals development causes higher ambient temperatures that leads to greater use of air conditioning which results in greater use of electricity which leads to increased production of fossil fuels for power generation and more GHGs. The US must decrease its use of oil and natural gas and increasingly utilize non-polluting energy alternatives.

Mainstream climate scientists agree that human caused climate change is causing severe impacts across entire regions of this hemisphere. These impacts include storms such as Hurricanes Harvey and Dorian. These storms caused billions of dollars in reported financial losses plus countless sums in uninsured losses, loss of employment, charitable contributions, family donations and lives changed forever by hardship. All domestic oil and gas development has contributed to climate change therefore the comprehensive impacts of climate change must be considered in the OGLAA for the NFGT.

SMA NOMINATIONS

TCA has nominated several areas for Special Management Area (SMA) status including the Piney Creek Conservation Corridor on the DCNF, C 22 on the DCNF and Ashton Hill Ravines in Cs 1, 3 and 4 on the SNF. Oil and gas development within these areas will impair their ecological integrity and potential to function as SMAs. Oil and gas development will directly impact the vegetation, hydrological function and wildlife values that these areas are nominated to protect. Therefore TCA supports a NO LEASE/ NO SURFACE OCCUPANCY FOR THESE AREAS.

RCW MANAGEMENT

The OGLAA does not allow for the full recovery of the RCW. The entirety of the areas that are currently allocated to RCW Habitat Management Areas (HMAs) will be needed for full population recovery goals to be met. However, much of the HMAs are not occupied by RCWs since the bird is far from full population recovery. The OGLAA allows for development of minerals and clearing of potential RCW habitat in HMAs so long as the areas are not CURRENTLY OCCUPIED. The proposed extensive development of minerals in the HMAs, especially the North Angelina and Sabine NFs, will result in thousands of acres of RCW habitat being cleared or negatively impacted before those RCW populations increase to the point of needing those areas. The result is that the HMAs will not have enough suitable acreage to support a fully recovered RCW population. The fact that much of the minerals rights are privately owned on the ANF exacerbates the potential long term habitat shortage since there is a greater likelihood that private interests will seek to develop their minerals on the NF surface. Therefore it would be prudent to adopt a NO LEASE/ NO SURFACE OCCUPANCY policy for the entirety of the HMAs where the US owns the minerals to reserve as much potential RCW

habitat as possible. The OGLAA must consider potential habitat loss in the HMAs and the long term potential for the HMAs to support a fully recovered RCW population.

WATER USAGE

The Reasonable Foreseeable Development Scenario for Oil and Gas Activities NFGT (RFD) reveals that the proposed mineral development for the NFGT will require the consumption of approximately 1.7 billion gallons of water, mostly fresh groundwater. This figure likely underestimates actual water usage. The RFD utilizes past drilling statistics to arrive at this estimate when vertical wells were the most commonly drilled type of well. Vertical wells use far less water than horizontal wells. Since the current ratio of horizontal wells to vertical wells is now much greater than that used in the RFD, the RFD water usage estimates will be far short of what likely will be required over the plan's lifespan,. Also, there is no mention of re-fracking or re-drilling of existing wells and new wells, which would consume additional water. The Analysis should seek to do a more accurate job of reflecting potential water usage.

Massive groundwater pumping to fracture wells lowers the water table causing local water wells, springs, intermittent streams and wetlands to dry up or hold water for shorter periods of time during the year. I have witnessed a local water well go dry when an adjacent drilling operation withdrew large amounts of groundwater to fracture a new gas well on the Wilcox Formation. The EIS must analyze potential impacts to wildlife, local rural/ municipal water supplies and all types of riparian areas.

LOSS OF NATURAL LANDS

The impacts of minerals development extends far beyond the cleared drill pad. TCA is concerned that oil and gas development is inhibiting the ability of federal lands to function as the sustainable ecosystems that they are mandated to be. The simple loss of surface use in well pads cited in the RFD does not take into account other development impacts associated with drilling activities such as habitat fragmentation, pipelines, roads and seismic surveys. Well pads leak pollutants such as crude oil and escaping methane. These chemicals and the traffic of service vehicles to well sites disrupt and displace wildlife. Lights from night time drilling activities disrupt the life cycles of insects and other wildlife that is drawn to the lights at night. Although the RFD states that a portion of drill pads will be "reclaimed" these areas will suffer from permanent ecological impairment. Scraping and stockpiling of topsoil destroys essential soil biota and mycorrhiza that are the foundation of healthy productive ecosystems. All of these impacts must be assessed.

RECREATION

Minerals development negatively impacts hunting for game animals. The sound and traffic associated with drilling and production displaces wildlife and inhibits a hunter's ability to hear animals approaching. Game animal habitat is lost when well pads are cleared.

SUMMARY OF COMMENTS

- 1) Climate scientists have warned that the continued buildup of GHGs in the atmosphere will lead to catastrophic climate change in the coming decades. The federal government should stop leasing federal oil and gas minerals in order to reduce the buildup of GHGs. TCA supports NO LEASING/ NO SURFACE OCCUPANCY for the NFGT.
- 2) The existing increase in atmospheric GHGs has already caused severe impacts to humans and property through the increased severity of storms and other effects of a warming climate. The EIS must include analysis of the full range of hemispheric climate change impacts as well as those of the Local Analysis Area. The comprehensive economic losses from storms intensified by climate change far outweigh the monetary gains of developing federal oil and gas reserves.
- 3) TCA supports a NO LEASE/ NO SURFACE OCCUPANCY policy for all Special Management Area nominations.
- 4) TCA supports a NO LEASE/ NO SURFACE OCCUPANCY policy for all RCW management lands.
- 5) The FDR should provide a more accurate estimate of the projected water usage for RFD.

Sincerely,

Larry D. Shelton