From:	Alt, Nicole
To:	Sattelberg, Mark
Cc:	Michael Thabault; Pat Deibert; Matt Kales
Subject:	Re: Second stab, but late at night
Date:	Wednesday, May 28, 2014 12:54:39 PM
Attachments:	Lander Q&A revised.docx

Take a look at my rewrites to ensure that the substance was not lost in my attempt to simplify the responses.

Nicole

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On Tue, May 27, 2014 at 11:17 PM, Sattelberg, Mark <mark_sattelberg@fws.gov> wrote:

> I hope this is more of what you were looking for, if not, send it back and I'll massage it more. I am having trouble figuring out the first question about the 1/4 buffer and if that is what you are really looking for, or something else.
>
> I'll be in a meeting all day tomorrow. Lunch break from 12 to 1:30. But can step out if need be. I'll keep my phone handy.
>
> Mark
>
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* Why is ¼ mile buffer OK in Wyoming. Why good in context of plan.

[Need to clarify the question - Are you asking about the 0.6 mile NSO buffer and 1.9 mile buffer for roads? Or only the1/4mile buffer outside of core?] ~~I'm confused about what you are seeking in the question.~~

The Wyoming Corea Area Strategy is intended to protect the core areas in Wyoming with the highest density of birds (~~would protect~~ 85% of the birds on 25% of the land). The ~~premise of the~~ WY Core Area Strategy is designed to protect the leks, birds and its habitat ~~and birds~~ within the core areas; there are fewer restrictions ~~, and have much less restrictions~~ outside of core. The intends to drive developed outside of core areas where possible~~is would incentivize development outside of core.~~ The 1/4 mile buffer applies to~~is for~~ leks located outside of the core areas and protects birds on those non-core leks during lekking season. ~~The premise of the WY Core Area Strategy is to protect the leks and birds within the core, and have much less restrictions outside of core. This would incentivize development outside of core.~~ ~~The core areas in Wyoming would protect 85% of the birds on 25% of the land.~~ The 1/4 mile buffer outside of core is to give ~~"~~non-core area ~~protected"~~ birds a chance to mate and possibly produce off-spring.

* What is the biological basis of the DDTC. There is concern about inflating benefits because of how it is calculated.

In Wyoming, the literature indicates that the majority of birds mate, nest, rear young and over winter within 4 miles of a lek. Therefore, the WY Core Area Strategy uses a tool called the Disturbance Density T C to identify the likely impacts to leks, birds and occupied habitat. ~~The biological basis of the DDCT is that the majority of Wyoming sage-grouse are known to stay within 4-mile radius of the lek for nesting, brood rearing, and wintering.~~ ~~Therefore,~~Specificically, the DDCT is used to identify the impact of a proposed project in core areas through the following calculation. ~~i~~If an activity~~/~~ or development is proposed in a~~the~~ core area, a four-mile buffer is drawn~~put~~ around the proposed disturbed area to identify the proposed ~~(~~footprint~~)~~. Any active leks within that 4-mile buffer are considered to be potentially affected by the disturbance. Any ~~That~~ lek within that footprint is then buffered by an additional~~the~~ 4-mile radius to capture the birds and habitat that may be impacted by the proposed project.~~that those birds are expected to remain within.~~ The area of the disturbance buffer and the active lek buffer is considered the DDCT examination area as a whole; all sage-grouse in the examination area are potentially affected by the project, if it moves forward.

Concerns have been raised that the additional buffer around leks inflates the disturbance area and drives down the disturbance calculation. ~~The issue about inflating the benefits or "diluting the percentage" by adding the additional buffer around the leks within the disturbance buffer would not consider any additional disturbance outside of the disturbance buffer but within the 4-mile buffer of the lek; which would be additive disturbance to that lek. Therefore~~ Depending on implementation, this calculation could inflate or under-estimate the disturbance area. ~~it works both ways, i~~In some cases it may inflate the benefits, in others it may not assess the true disturbance to a lek. As described~~shown~~ above, the DDCT examination area represents the entire range where "affected" sage-grouse would be located year-round (biological

basis). Adding the 4 mile buffer around the "affected" lek could also include additional disturbance areas that would be included in the analysis of the proposed disturbance, putting the proponent over the 5% disturbance cap. The State considered

~~Another option under consideration was to~~ usinge the entire core area to calculate the relationship to the 5% disturbance cap; this was not recommended because it~~, which~~ would have diluted the percentage of disturbance in most cases.

We believe that looking at all possible disturbances to sage-grouse including~~from~~ any proposed disturbance and existing disturbances is the appropriate way to analyze the cumulative affects to any specific lek.

* What makes the mapping resolution in Wyoming that the 5% is OK there but now elsewhere.

We are comfortable minimizing disturbance in core areas to ~~with~~ 5% in Wyoming for a couple of reasons because of the technology used to calculate the level of disturbance and that all likely human caused and natural disturbance is included. In Wyoming, they are using a more precise mapping tool.~~Mapping resolution is t~~~~one of the main points~~. Wyoming is using data based on a 1 meter resolution, which is far more precise. Alternatively, ~~M~~most disturbance, range-wide, has been calculated using 90-meter resolution vegetation maps modeled at a landscape scale which likely under-estimates disturbance levels due to the broader scale of the analysis. ~~Wyoming is using data based on a 1 meter resolution NAIP imagery supplemented with heads-up digitizing, which is far more accurate.~~ Further,~~Also,~~the Wyoming Core Area Strategy includes disturbance that may not be included in other strategies with a lower disturbance threshold. In Wyoming, the cap includes: ~~due to~~ vegetation treatments~~,~~; wildfire~~,~~; and agricultural conversion. ~~These disturbances are not always included in others states calculations of the 3% disturbance.~~

There continues to be a discussion on whether the maximum disturbance should be set range-wide or on a state by state basis. A recent~~2012 master's degree~~ study in WY found evidence that overall disturbance began impacting ~~brood~~ survival of chicks at rates greater than 6% per square kilometer. [Add citation] Additionally, a recent U.S. Geological Survey study by Knick indicates that the birds ability to withstand disturbance may depend on the existing level of disturbance and ~~, at the Utah FMT meeting, admitted that the 3% was a "best guess", that the real number could be~~may range up to 5% or even down to 1%.

* Is BLM treating Federal Minerals on private lands the same as on Federal lands. ~~There is concern that BLM is turning a blind eye to this issue.~~

The Bureau of Land Mangement (BLM) ~~BLM~~ included the WY Core Area Strategy and the ~~has agreed to use the~~ DDCT in the final Lander RMP for ~~in~~ calculating the level of disturbance in core area on BLM lands~~on development~~. The Wyoming Oil and Gas Conservation Commission is~~would~~ also be responsible for using the Core Area Strategy and DDCT before~~in~~ issuing any

state~~their~~ drilling permits. Both agencies must~~would need to~~ approve any development of~~on~~ ~~F~~federal m~~M~~inerals before any project could begin, even on private surface ownership.

*How is BLM handling core areas that are already over the 5%. Re Douglas county that is at 20+ percent

The Douglas Core Area (DCA) has about 16% disturbance level; that calculation~~, it~~ is over 20%, if disturbance that occurred pre-1994 is included. DCA is also mostly private surface and private mineral, so BLM was not involved in those discussions. Much of the DCA is already leased, with companies holding~~Plus the fact that the company has~~ valid and existing rights to access mineral leases~~, so they would have the right to extract minerals either way~~. Based on the Core Area Strategy (and the Lander RMP?), ~~I~~if a core area is at or over the 5% disturbance cap, BLM would have the right to deny the permit, unless there is a current valid and existing right. Any core that is near or above the 5% cap is still put though the DDCT to understand site specific implications of the proposed project~~for site specific information~~. BLM and the State then work with the proponent to see if activities can be moved out of core and/or minimized to stay within the 5% disturbance cap.