

SEC Members,

I am writing today on behalf of two clients, Churchill and White Pine Counties, that both have significant interest in updates to the State's Greater Sage-Grouse Habitat Management Category Maps. Due to a personal conflict, I won't be able to attend Thursday's meeting.

I have been fortunate to follow the USGS (Coates) habitat modeling process since it began with the Bi-State population and ultimately evolving into a Nevada state-wide model adopted by this Council in 2015. As they say, all models are wrong, and some are helpful. I believe this model is extremely helpful, unless it is taken out of context. That being said, as a Cooperating Agency representative for both Counties I've been able to follow various iterations of this mapping update to the extent they were shared. I believe this version is much improved from the 2015 version, primarily because it is informed by more and better modeling baseline and Sage-grouse data. But the model still has some quirks. For example:

- It is still very lek-centric.
 - In some areas the "lek circles" will actually extend "Priority" or "General" habitat outside of Population Management Unit boundaries and into areas that are simply not habitat.
- There is still isolated modeled habitat in areas where there aren't Sage-grouse and there aren't likely to be into the future.
 - A good instance of this is a large patch of modeled "Other" habitat near the historic Stillwater site (Salt desert habitat and historic ag lands with very little sage). There are also small flecks or individual pixels of priority habitat scattered throughout the state.
- There are still areas of occupied habitat that either aren't modeled or aren't modeled correctly.
 - These appear to be primarily located in areas where there is a lack of lek data and/or collared birds.
- There are still areas of modeled habitat that overlap rural neighborhoods and existing major infrastructure. For example:
 - The Blue Diamond subdivision south of Ely is located in "Priority Habitat";
 - The Ely Airport between Ely and McGill is located in "General" and "Other" Habitat; and,
 - The Ely State Prison is located in "Priority" and "General" Habitat.

The one part of the mapping iterations that Cooperating Agencies were not privy to until recently (publication of support material and the SETT Web Mapper, which I greatly appreciate) was the modeling, masking or clipping around cities and towns. While I believe many of the rural city and town "cores" that I am aware of are addressed in the model there are still rural communities or neighborhoods beyond the "City / Town limits" that are not (see examples above). This is a difficult function to model, but none-the-less important to Nevada's rural way of life and those communities. It is your decision on Thursday to determine if we should let "perfect" get in the way of "progress" as relates to this version of the maps. I have advocated to both the BLM and the USGS that we should take the time to get it right this time around and not be rushed by arbitrary deadlines. We cannot repeat the mistakes of 2015 where the State and Federal agencies operated under different maps and different interpretations of the maps as a result of different timelines.

Given the disclaimer on the support materials that, *These data are **preliminary and subject to revisions**. They have **not been subjected to accuracy assessment** and are being provided early to meet the need for **timely science***. I personally would table adoption of the maps until the “final” version can be reviewed. However, I would certainly take this opportunity to provide feedback to the State, Federal and USGS teams so that “timely” science can become “best” science.

If the Council does move forward with adopting the updated maps on Thursday, I would recommend the following:

1. The model must be trimmed back to the PMU boundaries.
 - a. The PMUs have been developed by in-state Sage-grouse experts and areas outside of the PMUs are those where they are confident that “modeled” habitat does not equal habitat contributing to conservation of Sage-grouse populations.
2. A disclaimer needs to accompany the maps, shape files, etc.
 - a. Something similar to, or directly from, the Coates et al 2016 Report would likely suffice: *Importantly, the map was informed by updated resource selection functions derived from new data across multiple site-specific studies of sage-grouse and scaled up to a region-wide level as a habitat suitability index. The power of this approach rests within the map output that can be downscaled back to the local level that **may help inform specific, “on the ground,” habitat-management decisions, with full recognition that field data and other sources of information and expertise should be used in conjunction with inferences from this model.***
3. Collectively, we need to find a way to account for existing communities and infrastructure better than we do now. Whether that is built into the model or adjusted based on common knowledge, the maps shouldn’t include existing neighborhoods, airports, etc. as Sage-grouse habitat.

As always, I thank you for your consideration of these comments and your service to the State!

Thank you,

Jeremy Drew
Principal Resource Specialist



Resource Concepts Inc.
340 N. Minnesota St., Carson City, NV 89703

Phone: 775-883-1600 Ext. 4149
Cell: 775-843-9109
Email: jeremy@rci-nv.com **Website:** www.rci-nv.com