Comments Submitted on Draft Montana Lidar Plan

Because the commenters were not notified in advance that their comments would be made public, identifying information such as personal names, company names, etc. has been stripped out of this document. Substantive comments on the plan have been retained. Additionally, some of these comments have been addressed or made irrelevant due to changes in the most recent draft of the plan.

Comment #1:

Figure 3: page 13 | Why would you use a logarithmic scale?

There are two main reasons to use logarithmic scales in charts and graphs. The first is to respond to skewness towards large values; i.e., cases in which one or a few points are much larger than the bulk of the data. The second is to show percent change or multiplicative factors.

Comment #2:

Page 19 - The dissemination section is underdeveloped. Basically says Library will develop a platform similar to Oregon's. More information regarding how is needed.

Comment #3:

My thoughts on the Lidar plan is that it looks really good! I know a lot of hard work went in to this document and it is reflected in the way the plan reads.

A few thoughts on the document are listed below:

On page 2 we mention that the goal of the State Lidar plan is to have full Statewide coverage by 2024 but, on page 3 we mention that the USGS goal is to have nationwide coverage by 2023. I think these two dates should mirror each other to show a cohesive approach to matching the USGS timeline.

On page 9 there is a paragraph that breaks down the MTEWG and it mentions that we may need to meet less frequently depending on need. If getting legislature support for elevation data is our priority then I think we need to take that statement out as it leads people to believe that we may not be needed in the future. I think this group is a strong group that should manage coordinative efforts for Lidar in the State moving forward.

On page 11 we show a graphic (Fig 2) and at the bottom of the graphic we mention that FEMA has been the primary funding mechanism for Lidar in the State thus far. If I were a politician and I was presented a graphic like that, my first question would be why should the State put any \$\$ in the pot if the Federal government is paying for it all.

On page 17 there is a statement in red regarding the identification of QL1 areas vs QL2. I would recommend any populated areas, floodplain areas, and national parks or national forest areas and a QL1 area. The rest could be QL2. Although, the State of Louisiana is currently flying the entire state in QL1. You may want to contact the LANRCS to see what their uses are. I can provide a contact if you need it.

On page 20 the \$450/sq mi estimate is used and we mention that it is an antiquated number. Should we use a more realistic number? I would recommend using the number the USGS used last year in their application, I think it was around \$250 for QL2. I would say a conservative effort for QL1 would be \$325/sq mi.

Outside of those small edits I think this plan is one of the better ones that I have seen and you should be proud of leading this effort.

Thank you for allowing me to comment.

Comment #4:

The baseline document looks really good. I don't have many comment on that section. I asked [our lidar manager] to review the APPENDIX B - MONTANA BASE LIDAR SPECIFICATION. The attached file has multiple comments. [Our lidar manager's] review is purely focused on USGS requirements versus what is in the document. We believe the State will be required to meet the USGS minimum requirements but can add requirements beyond the minimum set by the USGS.

There are a few comments in there that are fairly trivial. For example, [our lidar manager] is a stickler for not capitalizing LiDAR and instead adopting the USGS nomenclature of lidar. However, there are several additional comments that are very valuable and it probably makes sense to review this section in further detail. I would be happy to provide a version of the APPENDIX B that is in alignment with the USGS requirements as a starting point if you would like. However, I didn't want to go too far down that path without understanding if this would be valuable to your team.

Comment #5:

I have reviewed the Montana Lidar Plan draft. You have clearly put a lot of work into it and I think it will be an important document for improving Montana's lidar coverage.

In the attached version, I offer several minor editorial comments (using track changes) for your consideration. I did not see any substantive technical issues that you had not already flagged.

Many thanks for your efforts.

Comment #6:

[My colleague] and I added some suggestions and comments to Draft 1, attached here. We hope that you will find the comments and information helpful.

[My colleague] had some additional considerations you may find useful, and to bring up with [USGS Staff] in planning future LiDAR projects:

There is a pretty high probability that the next BAA round that comes out will include an option for producing elevation enhanced hydro that could be used to update the NHD. If you are starting to think about additional hydro network development for MT, all signs are pointing to USGS providing some type of matching funds for that effort. It is unclear to what level that would be at this time. There are also signs that Topobathy will be incorporated into the BAA grant for matching funds if not this year then definitely the following year.

Thank you for giving us the opportunity to review and provide comments on your Draft LiDAR Plan. It is an honor to be part of this historic event.

We look forward to seeing the next version release, perhaps with some cool LiDAR graphics!

Comment #7:

I got up to page 22 – almost the end. Some of it's just edits, but there are a few comments etc. that might be helpful. Let me know if there is anything else I can do to help get this wrapped up.

Comment #8:

Looking around at other states, there may be some external funding sources to help support the library's repository efforts

Comment #9:

In regards to QL1 or QL2, aim high in the plan. A goal for QL1 statewide is good.

Comment #10:

This plan is nicely done!

I didn't get to re-read about SeaSketch and IEI to make sure I understood it clearly...but wanted to make sure [you] knew that you could ask the US IEI committee (I'm on it) or the USGS Liaison if you have some special workflow request to document State and below requirements.

...[The] QL1 statewide vs. selected areas will likely take many discussions and iterations to resolve...but I believe we can all work toward an affordable/sustainable solution that also meets the majority of the stakeholder needs.

Some repeat coverage requirements also factor into this discussion...

Comment #11:

Look into amazon cloud and having a 3rd party monitor & host the data. Can be less costly than having state IT system bogged down. There is a lot of liability with forming a consortium and taking in funds from partners. You would need to hire a CFO. Other states like NV have looked at using a 3rd party non-profit to manage the account. Leverage private sector partners for outreach. Any agency or private company that is invested in the program can be an ambassador for the program.

Comment #12:

The Oregon Lidar Consortium adds 15% for PM, QC, hosting. Just a few years ago it was higher. MEWG could also hire a 3rd party to QC data. Suggest reaching out to private partners again. QC processes are documented and do not need to be re-created.