MONTANA WILDLIFE AND TRANSPORTATION

DATA AND INFORMATION WORKGROUP

9:00am – 1:00pm, Thursday, June 24, 2021

Meeting Notes

Purpose: Continue to work through the process of ranking and weighting data layers

Objectives:

- Agree on how to best address spatial coverage issues
- Agree on the analyses for Criteria 2-4
- Agree on next steps for combining the four criteria
- Determine the overall timeline, milestones, and next steps

Attendees:

- D&I Work Group: Andrew Jakes (MSWP), Gabe Priebe (MDT), Paul Sturm (MDT), Brian Andersen (MDT), Justin Gude (FWP), Adam Messer (FWP)
- Planning and Implementation Team (PIT Crew): Renee Lemon (FWP), Nick Clarke (MSWP), Deb Wambach (MDT)

Agenda:

1. Introduction

2. Update on spatial coverage issue
   Outcome - The group decided to eliminate the spatial coverage ranking from the calculations for all criteria but to leave it in the spreadsheet for documentation. Instead of applying a spatial coverage ranking, the group will apply scores within a dataset that doesn't cover the whole state or species ranges only to the spatial extent of that dataset.

3. Timeline and Milestones Document – the group liked the document and made the following edits:
   a. Moved "Document data needs and gaps" and "List of initial intended uses for the product" up to September to compliment "Document all datasets and limitations".
   b. Added "Develop schedule for reviewing and updating product" to the end.
   c. Added a "Lead" column to note who will organize and coordinate completion of each task. Members will think about which tasks they would like to lead and be ready to fill this in at the July meeting.
   d. Added "Present and test product within organizations" so each organization can present the draft product and get input from staff within their organizations. This aligns with the steering committee's request for agency staff to test the product. This will occur over September and October. The purpose is not to reopen questions and decision points the work group has resolved, but to get specific input that could improve or refine the product. The work group will need to develop specific questions and the questions may be different based on the organization.
   e. Outcome - An updated document and next steps:
      i. Renee will email updated document.

ii. Members will think about the tasks they want to lead and be ready to fill in the "Lead" column at the next meeting.

4. Criteria 2-4
    a. NAC 2 – Adam provided an overview of Criteria 2. The group discussed whether to use the 5 km or 10 km resolution. Paul remembered the group agreeing to the 5 km resolution. Gabe wondered if the group should use the broader 10k because it picks up the highway near areas of need. Justin is less comfortable with the 5 km resolution because the underlying data is coarser. Brian suggested Adam change the number of categories used to display the values of the analysis to see how this affects the map. The group discussed the need to explain the differences between lower and higher values to help users interpret the data.
    b. NAC 3 – Adam provided an overview of Criteria 3 and the group zoomed into several areas and looked at several underlying datasets. There were no suggested changes.
    c. NAC 4 – Adam provided an overview of Criteria 4. The group decided the SWAP Tier 1 Communities should include all community types not just riparian areas and wetlands. The group discussed the methodology of several layers and would like to refine rankings now that they have seen the data. Adam will work with Brian to confirm the data layers are in the mapping application so members can look at the layers as they are ranking. Andrew asked about including linear features that may have cumulative effects on wildlife movement across highways and create greater need, which was discussed at the last meeting. He has thought about this more and will send around ideas, which could be the start of a data need and research proposal.
    d. Questions/issues that still need to be answered:
        i. What scale to use for the analysis?
        ii. The need to explain the differences between lower and higher values to help users interpret the data.
    e. Outcome - Agreement on next steps
        i. Adam and Brian will make sure all the criteria data layers are in the shared mapping application.
        ii. Adam will email the ranking spreadsheet for Criteria 2-4 so members can revise rankings.
        iii. Adam will modify the analyses based on input at the meeting and modified rankings.

5. Combining the Four Criteria
    a. Resolution
        i. Currently, the Criteria 1 analysis has a resolution of 1/10 mile. Criteria 2-4 analyses have 5 km and 10 km versions.
        ii. Justin suggested a 10 km resolution because underlying wildlife layers are coarser.
        iii. Deb and Gabe discussed a concept of transforming Criteria 1 to 5 km or 10 km for apples to apples comparison with Criteria 2-4. However, they could still maintain the 1/10-mile analysis. There should be two scales – coarser and finer. The finer scale analysis may come into play with local/regional groups.
        iv. Paul noted that if Criteria 1 is transformed to 5 km or 10 km, the group should pick 5 km because information shown by 6-mile stretches of highway (10 km) would not be useful.

v. MDT had concerns about losing the specificity and value of the carcass data by transforming it to 5 km.

b. Analysis
    i. Adam will complete a moving window analysis (analyze everything within a certain distance of the 1/10-mile segments of the highway) to capture wildlife values surrounding the highway for Criteria 2-4.
    ii. Brian will use linear referencing to create a 5 km analysis.

c. Outcome - Agreement on next steps:
    i. Brian and Adam will meet and develop a plan for exploring a resolution of 5 km.
    ii. Brian will create a 5K analysis for Criteria 1.
    iii. Adam will create 5K analyses for Criteria 2-4.
    iv. Brian and Adam will add all four analyses together.
    v. At the next meeting, the group will review the results and continue this discussion.

6. Next steps
    a. August 5 Steering Committee
        i. Adam and Brian are available. We'll follow up on Liz and Justin's availability.
        ii. One item for discussion is asking the steering committee about agency leadership's expectations and thoughts on the product.
    b. See Action Items for a list of agenda topics for the July 22 meeting, which will be extended from 9am to 1pm.

7. **ACTION ITEMS:**
    - Tasks, Timelines, and Milestones Document - Renee will send around updated tasks, timelines, and milestones document. Members will think about which tasks they want to lead and be ready for discussion at July meeting.
    - Criteria 2-4 - Adam and Brian will ensure data layers for Criteria 2-4 are in the shared mapping application. Adam will email the ranking spreadsheet for Criteria 2-4 so members can revise rankings. Adam will modify the analyses based on input at the meeting and modified rankings.
    - Combining 4 Criteria - Adam and Brian will meet and develop a plan for exploring a resolution of 5 km. Brian will create a 5K analysis for Criteria 1, Adam will create 5K analyses for Criteria 2-4, and Brian and Adam will add all four analyses together. At the next meeting, the group will review the results and continue this discussion.
    - July 22 Work Group Meeting - Renee will extend meeting on July 22 and the following topics will be on the agenda:
        - Review the 5 km analyses for all four criteria and a combined version and discuss next steps for the draft product.
        - Fill in the leads on the tasks, timeline, and milestones document.
        - Prepare for the August 5 steering committee meeting.
        - Make plans for the next work group meeting on August 26.