MONTANA WILDLIFE AND TRANSPORTATION

DATA AND INFORMATION WORKGROUP

9:00am – 1:00pm, Thursday, May 27, 2021

Meeting Notes

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

Objectives:

- Learn about the steering committee's latest feedback and guidance
- Learn about key themes from a discussion on May 21 about NAC 2-4
- Complete the wildlife and habitat connectivity analysis
- Determine next steps for the struggling and at-risk wildlife populations
- Plan for the next work group meeting on June 24

Attendees:

- D&I Work Group: Liz Fairbank (MSWP), 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), Hannah Jaicks (MSWP), Deb Wambach (MDT)

Agenda:

1. Introduction

2. Debrief on steering committee meeting
    a. Overall, the steering committee was supportive and pleased with the work group's progress.
    b. The steering committee had questions about whether and how the four criteria would be combined. They also wondered how useful the tool would be if there are a high number of needs identified across the state.
    c. Adam and Brian shared the results of the steering committee filling out the weighting exercise. The steering committee recognized a need to refine the weighting of the four criteria as the project evolves.
    d. The steering committee asked the work group to develop milestones and provide progress updates when they have met milestones.
    e. The steering committee also asked the work group to plan for agency staff to test drive the app when it's ready.
    f. The steering committee would like the work group to have a product by the end of 2021.
    g. Outcome: The group understands the steering committee's feedback and need to develop milestones to complete the product by end of 2021.

3. Criteria 2-4
    a. On May 21, Andrew, Adam, Justin, Brian, Paul, and Gabe met to discuss confusion and overlap between criteria 2-4. They determined the original approach of having 4 criteria was valid, but the group needed to better define criteria 2-4 to avoid double dipping

(i.e., including one species in multiple criteria) and represent species in the right criterion.

b. The group decided to review the layers for each of criteria 2-4 during the meeting. Then, they would update the ranking for all four criteria.
c. The group decided to move lynx and grizzly bear data to criteria 3 because they are listed under the Endangered Species Act. While biologically similar to wolverine and fisher, which are in criteria 2, MDT provides greater emphasis on listed species during highway planning.
d. The group discussed whether to include highways and adjacent infrastructure (railroads, canals, fences, frontage roads, waterbodies) in the analysis for criteria 4 because more barriers (cumulative impacts) create a higher need for wildlife accommodations. For example, the analysis could account for multiple linear barriers are in a highway corridor. The group discussed that connectivity models may include highways and railroads but may not get to cumulative impacts. Fencing was added to the list of missing data. The group decided not to add highways and adjacent infrastructure to the criteria 4 analysis at this point, but to reassess when reviewing the draft analysis.
e. The group individually filled out the weighting exercise for the four criteria and then Justin averaged the weights of the work group with the steering committee. This will be used when the four criteria analyses are put together.
f. Adam shared the latest analysis results for criteria 2. The group decided not to incorporate FWP's ungulate migration and seasonal analyses (Brownian bridge) into criteria 2 because the scale of the analysis is broader and it would be more appropriate for local groups to use this finer scale information when they hone in a highway corridor. FWP's ungulate migration and seasonal analyses is different than the pronghorn connectivity data because the pronghorn connectivity is predictive across a larger landscape. The group decided to adjust for valid areas and leave the pronghorn connectivity layer.
g. Adam shared the latest analysis results for criteria 3. Adam will ensure the list of data layers includes all SOC 1 and 2 (other than birds, bats, fish, and plants). Paul suggested applying the grizzly bear layer to only where it's valid. The rest of the group agreed. Adam needs group members to provide an overall ranking the data layers in criteria 3.
h. Adam shared the latest analysis results for criteria 4. The TNC connectedness layer and FWP's large landscape blocks are similar so the group decided to use the TNC layer because it is nationwide and may have less edge effects. Justin suggested the group look at the rest of the layers not yet compiled at the next meeting to make sure there aren't more duplications (e.g., multiple riparian layers). Adam needs group members to provide an overall ranking the data layers in criteria 4.
i. Adam asked if the spatial coverage ranking matters now that they're validating layers that don't cover the whole species range or state. For example, the group could choose to only apply layers where they are valid and drop the spatial coverage ranking. Brian had concerns about dropping spatial coverage for the carcass data and how to account for inconsistencies in how the data is collected across the state. MDT and Adam will follow up with a conversation.
j. Outcome: More clarity on the definitions of criteria 2-4, agreement on data layers to include in the analyses for criteria 2-4, and a new set of weights for the four criteria (to be applied when rolling up the four criteria analysis into a final score)

4. Overall timeline and milestones
    a. The group brainstormed the following milestones:
        i. Have a draft product ready to present to the steering committee at their August 5 meeting
        ii. Final product possibly to present to steering committee at their December 7 meeting
        iii. Need to further refine the application to include all components
        iv. Need to decide what data can be represented and whether any is sensitive
        v. Need to document the need
        vi. Need to list applicable uses as well as wouldn't be applicable uses
        vii. Need to develop guidance – for example, localized GPS data may not be used in the analysis but would be useful for local groups. How use the application, contacts – who in the agencies is point
        viii. Document data sources and limitations
        ix. Need guidance from SC on updates and maintenance in the future
    b. Liz will take these ideas, draft a document, and send it around to the group by the next meeting.

5. **ACTION ITEMS:**
    - Adam will send around a spreadsheet so group members can rank criteria 3 and 4 data layers (overall relative importance). Adam will reach out to data experts to fill in spatial accuracy and data quality. Then, Adam will update the analyses for the next meeting.
    - Brian and Adam will work together to think through how to combine the four criteria analyses and highlight questions the work group needs to consider. This may include developing some examples to help the group visualize the results.
    - MDT and Adam will have discussion about whether to apply the carcass layer where valid and drop the spatial coverage ranking.
    - Liz will draft a document with an overall timeline and milestones and circulate it to the group before the next meeting.
    - Renee will attempt to reschedule the next meeting but if it's not possible the group will meet on 6/24.