Northern Blues Forest Collaborative - Minutes

Meeting Date: April 22, 2020
Location: online
Approved: *May 27, 2020*

In Attendance:

NBFC Members and Guests: Mike Billman (ODF), Brian Dill (U. of Illinois), Pam Hardy (WELC), Doug Heiken (OW), Kerry Kemp (TNC), Rob Klavins (OW)

Forest Service: Bill Gamble, Richie Gardner, Brian Goff, Nathan Poage

Staff: Jeff Costello (Facilitator)

Minutes Key

- Meeting minutes do not represent collaborative agreements, unless they specifically say so. They are meant to record three basic things only: 1) the issue discussed, 2) the major points or questions raised in the conversation, and 3) the resolution, if there was one. Unless specifically stated, resolutions are only the resolutions of the people present at the meeting.
- Common Abbreviations:
  - Q: Question
  - A: Answer
  - Cmt: Comment
  - Tx: Treatment
  - Rx Fire: Prescribed Fire
- Highlighted Items are typically those that require follow-up.
  (Usually suggestions for future agendas)

Meeting Notes

Preliminaries:

- The NBFC Steering Committee invited core collaborative members to participate in a follow-up discussion to the March 26th presentation by Umatilla NF staff, regarding the early-stage development of their Landscape Restoration Prioritization process. Although the collaborative is not being asked to directly participate in the design and decision-making of this Prioritization process, the Umatilla NF team members involved with its development agree that our feedback, input, comments and questions are of value, in that they have potential to help inform their approach and areas of focus. The Forest Service hopes to have this Prioritization process complete, by early summer; so, any feedback we wish to offer needs to be shared sooner than later.
- In preparation for this meeting participants were asked to review the one-hour portion of our March 26th meeting - including the slide presentation by Richie, Andrew, and Lizzy; as well as the comments and questions posed by the collaborative members. Link at:

  https://zoom.us/rec/play/upMudOys_z83TNOU5ASDAactW43rK6ushHUc_qYNmBqwAXkCZgb3b-QbY7Zm4HY5qbwtOA1Ui_J5RtXo?autoplay=true&startTime=1585243111000

  And to prepare answers to the following questions:

- How the FS team might eventually build a platform to measure HRV departure analysis
- The current data available to include in the Prioritization (which can also be quantified across the entire forest), and the process those data represent
- What might be missing, from the perspective of the NBFC, and what data could be incorporated to address those missing processes
- The possible limitations and sideboards to the process that are bound by the current Forest Plan
- Other similar processes that might be able to help inform this process on the UNF
  (eg. - WA DNR 20-Year Strategy & Rouge Basin Strategy)

In addition, the Steering Committee asked participants to consider the following discussion questions:

- Identify a common understanding/interpretation of what was presented (ie. - What can we synthesize out of this research, or these data, that we can all agree is an accurate representation of what we heard here?).
- Identify where the full group may still be in disagreement on the topic/issue presented...as well as areas where broad agreement is likely (including exploring specific differences here that may lead to a better understanding of where our broader divergences occur).
- Consider to what extent this research may be directly applicable to the work of the NBFC, and how can we integrate what we learned into current and future NBFC projects.

Meeting Notes

- Link to the recording of this meeting is available upon request
- Goal for Today: When we have a visiting researcher, or technical presentation
  we want to take some time to work through the information, and better understand
  - common understandings we all drew from the presentation
  - the divergences of opinion within the group
  - how we think the ideas might impact local projects
  - questions we might still have
- Perhaps this will also have some use for the FS as they further plan.
  NOTE: This is not a NEPA process, and this is not formal public input.
  Nonetheless, the FS has expressed interest in our thoughts about the project.
  We are hoping to provide the FS with a letter highlighting our thoughts.
  We are also hoping to identify more questions if those arise.

Key Collaborative Questions:

- What is our common understanding of what we learned in the original presentation?
- Where are there areas of broad agreement?
- Where are there areas of major disagreement?
- How will lessons learned from this project be applicable out work going forward?

Key Questions to open up the Science

- How is the UMF evaluating “departure” or HRV?
- What data are being used for that?
  What processes do these data represent?
  Is there anything missing?
  (Data sources must be forest-wide,
  so lidar is not currently an option because we only have it for part of the Forest.)

- What limitations exist in the Forest Plan that influence planning processes/outcomes?
- Do other similar processes have lessons to share with us?
  EG: the WA DNR Landscape Evaluation or the Rogue Basin Strategy

Debrief

- Cmt: The FS is trying to evaluate ecosystem resilience, and prioritize tx's to improve that in a systematic way. Looking for ways to identify and better understand tradeoffs among values such as ecosystem resilience, economic feasibility etc.
- Cmt: is it prioritization, or what constitutes forest resilience?
  How do we determine what constitutes a big risk for insect & disease?
  I don't understand what criteria the models are using to predict outcomes.
  Perhaps that's part of the source of divergence.
- Q: Which data sets/criteria are used to determine whether a place needs treatment?
- Key questions about the status of the trees in the forest:
  - what is there? and how do we know?
  - what risks does this create, and how do we know?
  - what used to be there, and how do we know?
  - what should be there? EG: Haugo 2015. re: NRV

  Different data sets are good for different things. None are perfect.
  - Lidar is really good for structure, but it doesn't get species
    (we also don't have lidar forest-wide, so it's not useful in this process)
  - Landsat is in color, but it's a bigger pixel. So, it's less precise,
    but with additional work, you can infer species
  - FIA/GNN does species & diameter, but it's a big extrapolation
  - Stand Exam data – good for the location sampled, but also uses extrapolate.
- Q: What is GNN?
  Q: What is the 5-Year Plan replacing?
- GNN stands for "Gradient Nearest Neighbor."
  It is a computer process by which a model predicts what the likely ecosystem composition is in any particular stand. It uses known FIA data and then predicts that other nearby locations with similar climate, slope, aspect and satellite imagery and other such variables, are likely to be similar. Data from GNN processes underlie a lot of big area projects because it's "wall to wall" data.

  "Inventory data" aka "FIA data" (Forest Inventory Analysis) is a census of the forested land - both public and private - across America. It's created by taking careful measurements on randomly selected plots, and then extrapolating those data to areas that have similar characteristics (climate, slope, aspect etc.)
- GNN website: https://lemma.forestry.oregonstate.edu/methods
- Cmt: The key question here is not whether the data are right.
  It's what we choose to model.
- Cmt: Concern that this will lead to prioritization of things that we may not want to see done.
- Kerry: this is a way to figure out where to do the next NEPA project.
  This does not replace NEPA. It just changes the order in which we do projects.
  This doesn't get at which specific stands will be treated in which ways.
- Concern that this will be the analysis that justifies a lot of CEs
  - for example because so many places are identified as at risk for insects & disease -

but CEs don't have the same public review process as EAs,
so it could be leading to decisions out of the public eye.

- So it becomes important to know whether the data/criteria the Forest is using to make these strategic decisions are accurate, and generally agreed upon, and that our values are being considered.
- Rob – there are lots of other concerns besides composition, such as
  - wildlife presence & habitat
  - social license: Tx's in IRAs
  - recreation
  - low social license such as cool moist forests where there is not agreement about appropriate tx
  - road density
  - unroaded, but not IRAs

  Can we get those in there?
- So, where do we get the data for those things?
  How do we frame those questions so that we can put accurate data into a model?
- Rob: Use the example of social license:
  We agree on the treatment of old clear-cuts, and location of past clear-cuts should be easy to get.
  If you wanted to prioritize social license you would choose places with more old clear-cuts.
  Same might apply to project areas with a lot of acres within the ignition zone of a home.
- Kerry: It's possible to have several values optimized at different levels,
  and to see where the most values are maximized.
- Rob "departure" is a big issue
  - What are the factors we're going to measure departure from?
  - And what time scale are we using?
- Nathan – Regarding other data sets such as recreation value,
  it would be helpful if you could help the FS find the data to develop such a thing.
- Richie re: HRV: We use Powell for the planning process, and
  we use something different for the forest as a whole.
  Economics have to be a part of our analysis.
- This prioritization process only tells us where to go next – it's very coarse.
  It doesn't tell us what to do there … at least not very much.
  It does help us understand where we can have the greatest impact on resilience.

After the Break ~ 1:23

- This is helpful because it assures us that the collaborative better understands
  why we're treating where we're treating.
- Re: HRV & whether it's an appropriate standard to use at all:
  Richie, District Silviculturist, sent out a white paper by Dave Powell before this meeting
  that explains how & why the Umatilla evaluates HRV.
  Link: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd716442.pdf
  "We don't consider HRV contentious."
  Structure is the only thing we're *required* to analyze
  However, density & species composition are also considered in each prescription.
- Q: Isn't evaluation of HRV required by the Eastside Screens?
  A: Yes. It's a pretty foundational piece of the Screens, whether we like it or not.
  It's part of a roadmap to help determine how to restore the landscape.

- Nathan has offered to provide a workshop on different approaches to HRV because it comes into play in multiple places.
- Q: Powell uses GLO data to determine HRV, right?
  A: It's one of many sources that he uses, and directs us to use in our HRV analysis.
- Rob: we have concerns with HRV, but this is not the place to explain those.
  We would like to "submit that feedback"…it's worth talking about.
  It's good to know that there are other factors being considered.
- HRV is one metric for resilience.
  There are other factors besides HRV considered for ecological resilience such as
  - insects
  - susceptibility to uncharacteristic fire behavior
  - fire transmission risk
- Cmt: HRV is useful to me because it's an ecosystem that the native wildlife were likely adapted to.
  The most practical part of the historical record to go back to is the early 1800's
  simply because we have better records for that than the 1300's.
- Cmt: A key factor in choosing a particular period for HRV is that it's a similar climate to what we're dealing with now.
- Richie offered two quotes in text:

  "As commonly used in the interior Pacific Northwest, Range of Variability refers to a range of reference conditions existing prior to Euro-American emigration (the 'pre-settlement' era). The Eastside Screens states that "the HRV should be based on conditions in the pre-settlement era" (USDA Forest Service 1995)."

  "For the Blue Mountains, a pre-settlement timeframe is defined as early to mid-1800s because it coincides with an Oregon Trail era when Euro-American influences began (Evans 1991). It is also well aligned with contemporary climatic conditions, which have been in place for about 2,700 years (Mack et al. 1983)."
- All Powell White Papers: https://www.fs.usda.gov/detail/umatilla/maps-pubs/?cid=stelprdb5326230

Other Issues that could be considered

- Carbon Sequestration:
  This could potentially be considered a value that could be measured across the forest.
  Perhaps it could be measured in estimated biomass.
- Rob: Caution: This could be introducing another level of controversy.
  There might be inappropriate conclusions drawn about fire risk & carbon,
  especially around whether fire puts more carbon into the atmosphere than logging.
  Fires mostly burn the fine fuels that would have rotted in the next few years anyway.
- Cmt: There is anecdotal evidence that certain kinds of thinning might improve carbon sequestration.
  Not clear on whether that applies to the ecosystems on the UMF.
  Resp: science is mixed on this.
- We should be looking at climate & associated issues.
  It's just a politically fraught subject that will require careful consideration.
- Q: Are there other items we should be considering in measuring resilience.
  - Snags & down wood!!
    And the associated wildlife that needs that sort of habitat.

- Wildlife values
  However, different species need such different things.
  What's good for a pileated isn't good for an elk.
  It would require a lot of individual layers,
  How many, and which ones do you include?

Summaries: What we might want to share with the FS

- There is a desire from this group to see processes that have clear public input opportunities ie: probably EAs rather than CEs.
- There are questions about how departure analysis is/should be conducted.
- There is confusion about the criteria used to drive model outcomes.
- We didn't identify any lacking data sources re: ecological resilience
- There is interest in a layer that talks about snags, down wood etc.
- There is interest in a layer for recreational attributes
- There is interest in a layer that helps us understand carbon sequestration potential
- Gratitude to the FS for bringing this in front of us.

Adjourn: 3:47pm