OSU College of Forestry
McDonald-Dunn Research Forest Faculty Planning Committee (FPC) Meeting #16
31 October 2023, noon-2:00pm
316 Peavy Forest Science Center and Zoom

Faculty Planning Committee Members present: Holly Ober (chair), John Bailey, Mindy Crandall, Mark Kerstens, Dave Lewis, Ian Munanura

Ex Officio Members present: Jenna Baker, Cristina Eisenberg (online), Steve Fitzgerald, Brent Klumph, Carli Morgan (online)

I. Welcome, Overview of Recent & Upcoming Activities

The group reviewed the meeting agenda and reviewed the forest planning website which contains materials associated with past and future meetings and events. They also reviewed a diagram outlining the forest planning process, summarized the 5 new 'management strategies', the 5 'scenarios' that will be evaluated during the first of two anticipated rounds of modeling, and discussed the sequencing of future input-gathering opportunities (FPC meetings, SAC meetings, and Community Input Sessions). There was acknowledgement that the process is taking longer than originally anticipated, which will result in the need to select later dates than previously planned for the next SAC meeting and Community Input Session, and ultimately push back the completion date of the entire draft plan.

II. Metrics to be used to Evaluate Tradeoffs among Forest Values

The group revisited the methodology that will be used to estimate some of the forest characteristics to enable an evaluation of tradeoffs among scenarios.

- **Culturally important species** – Cristina indicated that many culturally significant flora require disturbance, as do culturally significant mammals such as elk and deer. Some also require large areas. She recommended a conversation with Tribal partners through a scoping meeting to obtain input on the best approach to incorporate culturally important species into the plan.
- **Recreation suitability / scenic beauty** – The group discussed 3 approaches:
    1. Intercepting forest users at trailheads, asking them to rate photos depicting various forest conditions as well as their use of the forest, multiplying the amount of time stands in each management strategy would be in each of the stages depicted in photos, and then multiplying by the proportion of the forest in each management strategy to arrive at a single value for each scenario.
    2. The same as described above, but with data collection occurring through surveys of individuals from specific known user groups (e.g., bicyclists, runners, equestrians) rather than all users at trailheads.
    3. Begin by soliciting expert opinion, similar to the approach used for biodiversity modeling, and then have user groups ground truth.

  There was much discussion as to sampling specifics, such as whether to use one or two metrics (one to represent aesthetics and another to represent recreation suitability), and whether to call it "suitability" or "acceptability". There were suggestions to word questions and to provide answer options that have previously been vetted in published research efforts and to convene a focus group or use some other means to test a draft survey

instrument before implementation. Concern was noted about the time needed to develop a valid survey, and lack of ability to account for seasonal differences in use of the forest due to the short turnaround time. The recreation experts will continue to evaluate the best approach to develop this metric.

- **Resilience-density** – We will use stand density index (a percentage).
- **Resilience-composition** – There was discussion as to whether to use a well-known diversity metric (e.g., Shannon's Index), a binary metric reflecting the existence of a hardwood basal area above some minimum threshold, or a binary metric reflecting the existence of trees of any species other than Douglas-fir above some basal area minimum threshold. It was ultimately decided that John will talk with a forest health expert (Dave Shaw) to solicit ideas on an appropriate threshold value, and then the group will discuss how to convert this to an index with a 0-5 range so it is similar to other metrics under consideration.
- **Wildfire risk** – This will be an index ranging from 0-10 that will be developed using data available through FVS (canopy bulk density, canopy base height, and canopy cover). John will provide the exact formula.

III. Process for Assessing Tradeoffs Among Scenarios

The group discussed the challenges anticipated in interpreting the values that will emerge through the modeling effort, and talked through the virtues and downfalls of several potential approaches to portraying the information so that it would be meaningful. Options discussed included:

- Presenting raw numbers for each metric in each scenario
- Collapsing information into high, medium, and low categories for each metric across the 5 scenarios
- Collapsing information into rank orders for each metric across the 5 scenarios

Discussion ensued about whether it would be possible to set thresholds as to what could be considered 'high' or 'low' in advance of seeing the modeling results, and it was decided this might be possible for some metrics while impossible for others. A shortcoming of categorizing into 'high', 'medium', 'low' is that this approach would force every forest value to be relativized such that there would be 2 low, 1 medium, and 2 high, which is problematic if in fact on an absolute scale (ecological or economic) perhaps all or most would in fact be high. Although the ranking approach overcomes this concern a bit, it doesn't fully ameliorate it. Some context would be needed for the classifications.

TO improve upon this, the group discussed the possibility of presenting the data in comparison to the baseline, Scenario A, (e.g., ++ or – for the more qualitative metrics; +10% or -30% for the more quantitative). It was also suggested that alternative data visualizations be considered, like bar charts. Recognizing that each individual on the FPC has knowledge and expertise in a specific area, it was suggested that the FPC break into subgroups to develop suggestions on how to interpret several of the metrics. This will likely be done during the next FPC meeting.

IV. Writing of the New Plan

The group discussed the entire draft document, section by section.

- **Chapter 1** (Introductory Context) is entirely drafted, with no input needed at this time.
- **Chapter 2** (Site Description) is mostly drafted but needs additional detail and updating. The group discussed the sections pertaining to disturbance history, recreation use history, and current forest conditions, noting that information needed for the current forest conditions section will emerge through the modeling effort.

- **Chapter 3** (New Management Paradigms) is partially drafted. The group spoke about draft material for the section on Tribal Engagement (3.1), the possibility of GIS specialists creating heat maps to depict areas of high use for teaching and for outreach (3.2), removal of funding considerations from 3.3.5 to a new sub-section (initially proposed as 3.8, but then perhaps recommended as a new 3.3 with all subsequent material being adjusted), receiving assistance from INR on certain aspects of the biodiversity subsection (3.4), movement of the WUI subsection from threats (3.5.5) to human dimensions (3.6.3), the possibility of adding the concept of Native American sweat lodges to the section on cultural heritage (3.6.2) or Tribal engagement (3.1), renaming the section on volunteering to "Volunteering and Community Partnerships" (3.7.1) and renaming interpretation to "Interpretation and Education" (3.7.2). Rather than covering economic sustainability in a new section at the end of this chapter (e.g., 3.8), perhaps a new section 3.3 could be inserted, highlighting the concept of sustainability (describing it as one of three components, perhaps with a diagram), to call attention to the primacy of sustained income generation, along with additional explanation regarding revenue generation expectations. Attention was called to the need to discuss changes to forest staff size over time and the staff size and composition needed to accomplish what's envisioned (1.4 and 4.1). It was suggested that explanations be provided as to the decisions that guided allocation of stands to management strategies, to the extent possible (3.3.2).
- **Chapter 4** (Plan Implementation) was discussed a bit. It was suggested that the group clearly articulate who will be making decisions about which stands are allocated to each management strategy, and when (4.1).

V. Indicators of Performance

The group initiated discussion about the approach used in the 2005 Plan to set indicators. That plan defined 7 goals, set 1-4 objectives for each goal, and proposed 1-8 indicators for each objective. At future meetings the FPC will develop objectives and associated indicators for the new plan.

VI. Next Steps

- John will get the precise formula to be used to evaluate wildfire risk to Carli and Fitz to communicate to the modelers.
- John will discuss with Dave Shaw ideas on an appropriate threshold value for forest composition in light of resilience, to bring back to the FPC for further discussion.
- Fitz and John will meet to discuss the timeline of forest stand conditions for the photo-sequence to be used as part of the recreation suitability / scenic beauty assessment.
- Fitz will continue gathering photos.
- Experts knowledgeable in recreation science (Ian, Jenna, Ashley) will make final decisions on how to assess recreation suitability / scenic beauty and proceed accordingly.
- Holly will have further discussions with the Institute for Natural Resources about their assistance with some aspects of plan writing.
- Holly will draft a timeline to describe the remaining work to be done to enable all FPC members to plan their service commitments.
- Exact dates for the next SAC meeting and first Community Input Session will be dictated by the timing of the modeling results, and will be publicized as soon as possible. It appears unlikely these 2 events will occur before Thanksgiving.