DRAFT - SUMMARY

JOINT STAKEHOLDER SCIENCE COMMITTEE AND STAKEHOLDER COMMUNITY COMMITTEE MEETING

LAKE TAHOE WEST RESTORATION PARTNERSHIP

Tuesday, March 26, 9:00 am to 12:00 pm

Lahontan Water Board Annex, Hearing Room, 971 Silver Dollar Avenue, South Lake Tahoe, CA

All meeting materials are publicly available on the Lake Tahoe West website
http://nationalforests.org/laketahoewest. For questions please contact the program manager/facilitator
Sarah Di Vittorio at sdivittorio@nationalforests.org or (530) 902-8281.

Contents

Miscellaneous Questions

- What the schedule for proposed action?
  - We expect to start in October 2019 and finish in 3-4 months.
- Can you share the results of the survey?
  - Yes, but note that we feel the discussion adds necessary context.
  - The Design Team found that walking through each question with Eric Abelson was essential. It was hard to understand from the survey how each answer would really be used in EMDS.
  - Sharing the survey results may have lessons for future processes that use EMDS.

EMDS Logic Model Weighting: Overall Explanation and Examples

The Lake Tahoe West Teams walked the Stakeholders through our process for developing the weightings proposal.

- Eric Abelson provided an overview of the EMDS system and decision model, and how it is set up, and the role of the pairwise comparisons
- Example: WUI Fire Risk vs Life and Property

- People weight things the way they did because of their perspectives. But there also other reasons the online exercise produced certain results.
- For some of the topics, the online exercise did not accurately describe the underlying data.
  - In particular: "Life and Property" – name doesn't well reflect the underlying data (it is about property loss, not life).
  - Comment by a stakeholder: I weighted WUI fire risk higher than Life and Property because I did not like the Life and Property criterion definition (which measured value of properties lost).
  - Design Team: note we changed the definition to number of properties lost, not value.
- Suggestion: If some of the final rankings reflect not just social value but also a judgment about the quality of the data, it would be good to include that in the process description.
- Example: Life and Property vs. Quality Air
  - The Design Team had a really detailed conversation about this particular one. We realized this comparison was confusing because of the value vs. number of properties. This gave the impression that we cared more about a $1M house than a less expensive house.
  - This is also why we changed the Life and Property criterion to reflect number of properties lost.
- When looking at the histograms, it is interesting that there are not a lot of rankings on the extremes.
  - For some of the comparisons, there are no extremes. There are few people who would say that A is absolutely more important than B. Nothing is unimportant.

Pairwise Comparisons Discussion

The group discussed each of the comparisons that the Design Team identified as important to discuss with stakeholders.

#1: WUI Fire Risk Vs. Life & Property
- Our process was we always looked at the histogram first
- We felt this was one where the question/data was confusing

#3: Cultural Resource Quality Vs. Greenhouse Gas Emissions
- Local vs global impact
- The Design Team struggled with saying a scenario should be weighted more heavily one than the other

- We kept trying to jump to the ecological values embedded in cultural resources; was hard not to conflate.
- Comment: Why are we comparing these in the first place? These don't seem comparable
    - Response: Yes, there is a little bit of apples to oranges happening. We struggled with this a bit. We have to quantify and standardize the data to compare it
    - EMDS was a tool that was set up to help people with landscape management. We are using it a bit differently: using it to evaluate a bunch of streams of data coming at us. We do get some inherently hard-to-compare comparisons.
- Q: Why did GHG end up in the "social values" category?
- Q: What does this comparison really mean in EMDS?
    - If you were to vote or weight cultural resource quality as more important, then GHG will drive which scenario is performing better in terms of achieving social values
- Comment: I looked at it explicitly socially – as cultural resource quality higher (absolutely A). If everything is ranked equally it doesn't seem like it gives you a lot of value as a comparison tool.
    - It can still give value. It helps us optimize among the scenarios even if many of the values are equal or near-equal.
- Comment: I agree that it's apples to oranges. I would probably put C emissions someplace else in the hierarchy. So I decided I don't want either to be disadvantaged by the other, so I made them equal
- Can you live with a scenario that doesn't give either an advantage?
- A lesson learned is the importance of being clear about definitions so there is less ambiguity.
- Final weighting: 5

#11: Health and Safety vs. Social Values
- Why was this one flagged? Seems pretty solid
    - This one has implications for the comparisons downstream.
- Comment: this one is easy, safety trumps social values.
- If it was a 1 we would just pave the WUI. That's not actually where peoples' values are.

#12: Terrestrial vs. Aquatic Environmental Quality
- IADT proposed 5, equal
    - Quality water represents fine sediment and nutrient loading
    - Water quantity and timing is qualitative measure of increased water yield
    - Treatment (thinning and prescribed fire) generally has water quality impacts. Can have water quantity benefits
    - We feel this one gets at heart of trade-offs
- Comment: there is an issue with short versus long term impacts
    - Short term impacts to water quality vs long term benefits
    - How are you deciding more whether to weight it more based on long or short term?
- Does having more topics in a tree dilute the value of each (e.g. social values have 4 criteria)?

- o **ACTION ITEM: Eric** is asking EMDS experts about whether having more topics in a tree could dilute the value of each, compared to topics in a tree in which there are fewer topics.
  - o If dilution is an issue there may be a numeric way to correct for it.
- Q: Why do the rankings this way (via pairwise comparisons)?
  - o The most straightforward approach would be to give everyone the same tree and have do the rankings overall. But it becomes incredibly complicated, including because people are not internally consistent. Becomes very confusing. So EMDS uses pairwise comparisons instead. In that process it deals with all the logical consistencies
  - o What matters is the relation of a subtopic to the other subtopics in the same level of the hierarchy.
- Final weighting: 5 (A and B are equal).
  - o Note: we achieved consensus on this weighting but one person expressed reservation due to the dilution issue and because the survey results were slightly weighted toward Terrestrial.

Whole tree with all rankings
- Eric noted:
  - o Concept around EMDS is to be able to look not just at the data inputs but to draw meaningful conclusions about tradeoffs and outcomes
  - o Keep in mind that the hierarchical structure also facilitates data exploration. So it is not just about having one value trump another, but rather to provide a lens for data exploration.
  - o If you start monkeying with the numbers at this level (whole tree) it will start biasing things. It is better to change things based on the pairwise rankings.
- Discussion:
  - o There are two aspects of this:
    - ▪ Is this really embodying what we think? Did we get to where we think we should be?
    - ▪ If the numbers look off we should re-evaluate the underlying pairwise comparisons rather than the numbers themselves
  - o The health and safety arm is lower than the ecological values arm of the tree – Design Team might want to consider the optics of that.
  - o Top tier comparisons have big downstream consequences.
- There is stakeholder support for the overall weightings in the tree.
- We should look at comparison #15 because that drives this overall result.

#15: Community Values vs. Environmental Quality
- Forest – recognizing how linked community values are to envtl quality. Sustainable community values are dependent on a sustainable environmental system

- o With that in mind I'd see envtl quality as slightly more important in order to deviver sustainability around community values
- Right now we have scale of 1-4 on either side. We also have ability to do a 0.5
- Christine: The whole point of this project was around improving env quality, not just reducing fuel loads around communities
    - o Eric H: But the way policy and public support and funding are moving…. May want to think more about the relevancy of the fuels issue
- We've been very explicit about the fact that we are emphasizing fuels treatment in the WUI; general forest can be different. Optics may be confusing
    - o In the WUI, safety matters more
    - o In the general forest, env quality matters more
    - o Jennifer: If the public were to look at that w/ understanding that we are emphasizing safety w/in the WUI, they might freak out
        - Should make it clear if we ever publish this anywhere that the WUI is an exception – fire is the focus thered
- We may need to have another convo about this and what to do about it. Jeff or Patrick would have a problem w/ that
- Important to consider how this tool is being used in developing our Strategy
    - o We're not going to develop a strategy that puts the health of our ecosystems above life and property. So may need to be clearer articulation of how this will be used eventually
    - o We will dive in when there are health and safety concerns in the data/EMDS and to better understand why that's happening
    - o We're not going to pick a strategy based just on this
- Forest wants to see variation in how this particular pair cascades down
    - o Can Eric do sensitivity analysis to see if relative value of scenario a, b, c, d changes as we vary this from 6 to a 5
- Sue: let's not tinker w/. If we think it's not reflective maybe we need to gather more info to inform this column
- Core Team and IADT can move forward w/ whether we want to change this or not
- One more objective way to get at it and look at top tier of how survey was constructed. Provokes a response about 2 of 3 but not 3 of 3 pairs
- Sue: I think it's how we talk about it. How do we tell the story about it.

Forest will talk to Eric about sensitivity analysis, particularly regarding pairwise comparison 15.

We recognize this is not a home run (not a perfect tool, not a perfect weighting overall). The question is: Can we live with what we have set up?

Closing Remarks

There were no closing remarks or interested party comments.

Meeting Attendees

Organizing and Participating Agencies

CTC – California Tahoe Conservancy

FWS – Friends of the West Shore

LSLT - League to Save Lake Tahoe

NFF – National Forest Foundation

SFL - Sierra Forest Legacy

CSP – California State Parks

TFFT – Tahoe Fire and Fuels Team

TRPA – Tahoe Regional Planning Agency

USFS LTBMU – U.S. Forest Service Lake Tahoe Basin Management Unit

USFS PSW – U.S. Forest Service Pacific Southwest Research Station

Stakeholder Science and Community Committee Members

1. Zack Bradford
2. Maria Mircheva
3. Jennifer Quashnick
4. Sue Britting
5. Matt Freitas

Staff

1. Svetlana Yegorova, CSP
2. Jen Greenberg, CTC
3. Christine Aralia, CTC
4. Sarah Di Vittorio, NFF
5. Forest Schafer, TFFT
6. Brian Garrett, USFS LTBMU
7. Eric Abelson, USFS PSW
8. Shannon Freidman, TRPA
9. Silver Hartman, CSP
10. Christina Restaino, TRPA
11. Stephanie Coppeto