TAHOE SCIENCE ADVISORY COUNCIL

NOTES | NOVEMBER 2024 COUNCIL MEETING

Date: Thursday November 7, 2024
Time: Meeting from 3:15-5:00PM
Social Event from 5:10-7:00PM
Location: In person at the North American Lake Management Society Conference

Goals for this meeting

- Review 2023-2024 successes and accomplishments
- Revisit the focus, purpose and need for the Council and the roles and responsibilities of Council Members
- Begin to develop an efficient process for identifying priority questions for science delivery at Tahoe

Council Members: Sudeep Chandra (UNR), Scott Kelly (UNR), Monica Arienzo (DRI), Tamara Wall (DRI), Max Moritz (UCSB/DANR), John Melack (UCSB), Pat Manley (PSW), Ramon Naranjo (USGS), Joe Domagalski (USGS), Jason Kuchnicki (NDEP), Ashley Conrad-Saydah (CNRA)

Robert Larsen (CNRA), Alison Toy (UCD), Caelan McGee (Facilitator)

1. Welcome and Agenda Review
    a. Adrian Harpold replaced with Scott Kelly, expertise in sustainable transportation, has assisted with Council VMT project.
2. 2024 Council Accomplishments
    a. Overview (Chairs and Program Officer)
        i. Thank you for the hard work and accomplishments, looking forward to continue progress. Discuss what we have done well and hearing from the following list as well as anything not on the list.
    b. Progress:
        i. Water Quality Work Group Activities
            1. Effective/regular meeting, approx. every 3 weeks
            2. Lahontan, TRPA, NDEP representatives. Ramon, John Melack, Joe, Sudeep. Directly funded by Lahontan.
            3. Specific requests from Lahontan – monitoring program
            4. Wrote elaborate report for Lahontan
            5. Statistical analysis from Ramon and Adrianne Smits
            6. Currently finishing nearshore project from Adrian and John.
            7. Each project had specific budget and completed on time. Things have dragged.

a. This has been an issue in the past. Appreciate the conversations that has happened and sees improvements in the process. (Jason)

8. Specific conversations about what is really wanted based on the budget and time and then rewrote the deliverables based on those conversations. Constant communication is key.

9. Monitoring project with the limnology committee, get some pretty detailed analysis. Joe did analysis for free and using our own expertise was great. Everyone else was completely separate from the Council.

10. Leveraging expertise external from the Council has been very successful. Council members are very busy.

11. Meetings related to finishing something, Bob will coordinate with John, do we have a project to discuss, now what do we do, what do we tackle next. If there isn't anything to discuss, no meeting.

12. Part of the success is the active engagement on the manager side. Other projects we struggle to find the stakeholders that are involved.

ii. Microplastics Memorandum (Monica)

1. Done and online. It will be in Monica's talk tomorrow. Monthly meetings, members of TSAC, scientists in and out of the basin, and stakeholders.

    a. League to Save Lake Tahoe, Tahoe Water Suppliers, TRPA, Lahontan, Tahoe Fund, TRCD, State waterboard, NDEP, IVGID, Eldorado

    b. Important to understand all the stakeholders in the basin and familiarize yourselves.

2. Different speakers from outside and within the basin as well. Use this group and surveys to get feedback from stakeholders. The feedback seeded conversations during meetings.

3. Clarity of expectations was helpful, from the Science Council, from the members of the group, etc.

4. Strong engagement was also helpful, participation is surveys and discussions.

5. Very specifically focused on Tahoe, helpful with summarizing the status of knowledge in the basin, the how this fits into a larger scale landscape

iii. Integrated Science to Action

1. Adrian had done a detailed report on the uplands and how that feeds into the rest of the basin. Another document about the lake. Conclusion is that both are important and it isn't sufficient to just look at the lake. Create high level document of what is important to look at the basin.

2. Not a static document. New things may come up and can be added at a later time. Not a lot of details. A consensus document with Council members and agencies.

    a. Engagement from: Lahontan, TRPA, NDEP, etc.

b. Many people have worked on this document for two years. Finally had a lot of feedback which is reflected in the document. Key themes summarized and package it in a way that is accessible to a variety of audiences.

c. Alison and Bob worked to distill the work of Adrian and Tamara.

3. Any other accomplishments? Things that worked?

    a. The Tahoe Science Conference was really positive. So rare to have such a large community interested in science.

    b. Science Communication thought, might be worthwhile to create a document for the three projects of the Water Quality working group. An executive summary. Something to discuss further. Something digestible for a wider audience.

        i. Coming to the end of large SNPLMA projects, would also need to be distilled to larger public facing documents.

        ii. Projects from the WQWG are not for public consumption. The next steps should be what action are we going to take in implement the monitoring program.

        iii. Not fair to take that document and distill it into a "comic book"

        iv. Perhaps it's a 1-page highlight. Put the advisory in TSAC. When you're advising a TRPA, the science literate population is much smaller. Here's what we learned, here's what we know, here's what we suggest. Based on the science what should we do. Going beyond the scientific report into something digestible.

4. What are the next steps?

5. For John and Monica, answer the questions: what worked, for whom and how? A good practice for all these smaller working groups.

6. Had some turnover in the Council which is good, keeps it fresh. Shows that we are able to change and integrate new ideas and perspectives. The second PSW chair has been filled, Natalie could not attend.

7. S2A plan positions us well. We are 5 years in existence (10 since the MOU) but in functionality. Still have a lot to learn.

8. Thinking about funding, is it essential for what we do? How do we manage it? Something to think about. Good models for moving forward.

9. Lake group has been in existence for a long time. Examples of building an effective working group and come up with deliverables that are really effective and satisfying.

c. Status:

    i. Forest Health, Fire, and Biodiversity – Where are we, why or why not? (Pat)

        1. Would like to get the perspective of the group. This is a newer group, doesn't

have as much momentum. Strong management but less of a strong science. This is something to talk about, how does the topic of forest or biodiversity, without having a lot of Council capacity, how do we build it. This has always been a challenge.

a. Forests = Trees and plants under trees, Biodiversity = Animals.

b. Upland S2A did a good job of identifying the different themes and defining them. It's about linkages and systems. Not just wildlife. It's about the whole suite of biota and the processes that drive those and how they contribute to Lake Tahoe.

2. Fire – In the IS2A, fire is the glue to connect the uplands system to the lake, can cause these big pulses/changes. Could use a plant biodiversity lens. Max does not have projects in Tahoe, but do a pretty good job in the plan.

3. Consider a working group, to look at the questions, consider prioritization, and have a broader conversations.

a. Seems like TEON became the working group? Jumped ahead with the monitoring. But not the future state, drivers, ecosystem state, etc. that we would get out of further discussion from a working group.

b. Worth bringing up the broader biodiversity talking. Even in the lake, we aren't dealing with most species. Restructure into the uplands, spatial constraints about what we talk about. No one puts any effort or attention to the endemic species. Something that could be considered. Biodiversity is already so much in the meadow, consider leaving lake biodiversity.

d. Group Discussion (Round Robin):

i. What do you consider the Council's successes in 2024?

ii. What did it take to achieve these accomplishments?

3. The Need for and Focus of the Tahoe Science Advisory Council

a. Review points of agreement from preparatory calls (Facilitator)

i. Advance operational improvements

ii. Revisit mission, clarify roles and responsibilities

iii. Engage executives (first clarify why we are engaging)

iv. Build on S2A Plan to identify priority research questions

v. Engage managers to find overlapping priorities

b. Discussion: How can the Council have the greatest impact?

i. Opening statements (Council Chairs)

1. Operational things that are important, just get a conflict of interest document etc. done.

2. Some are interested in greater science delivery or focus on science research priorities.

3. Agreement is to identify science delivery questions, sometimes answering them, putting them in front of managers and elevating them. Then coordinate with the priority management questions.

4. Executive management is important, but what are we after? In-basin managers might be the starting point.

5. 2023 Conference feedback is not uniform. Science delivery and discussions with managers were important. Fire, Sustainable recreation, and one other category could be the main ones. Consider a more traditional conference.

6. Researchers leading science delivery. S2A, a living document, but should be actionable items, with suggestions of what are the key research topics for the whole council to consider.

7. Improvements: a more specific work plan, tighten up contracts, more working groups, etc.

ii. Bringing science to managers, engage with managers, this Council is constrained by MOU, so while there are hopes of the latitude of the Council, there is a need to look at the MOU and maintain expectations.

1. "Luxury Council", inform management, this may not be possible on a federal level in the future. In the next four years, highlight how the Council has informed sound science decision making. There is a need to highlight and broadcast for a bipartisan partnership.

2. Read the MOU, but are we using it? Does not believe in the constraints, everything seems reactive to the managers, which is not a bad thing. Invasive species, plastics, etc. was not a concern until scientists mentioned it. The MOU could be read more broadly. A science meeting is important at this point. (Sudeep)

3. Different types of delivery, diverse approaches. 1) Delivery and engagement; 2) Science conference, managers, scientists, etc. helpful to get everyone up to speed the issues, what do we do. ; 3) not one or the other, it's both.

4. UCCE there are two job appointments, county-based advisors (responsible for issues, they do a needs assessments of their stakeholders, identify issues, cogenerate based on research.) Campus-based specialist – doing the scientist role, bringing up new issues. Nobody does both appointments. There are different processes for both positions. Both cogenerated research, one is top down and one is bottom up.

5. We are here for identified public management needs. It's contingent on the council to make connections. The dialogue between management and scientists, rather than just having scientists in a room talking about what is interested from there.

6. Surveys of priority management questions, research agendas with management questions, where do they align.

a. TMDL needs to be revisited from a science and a management perspective. (as an example).

7. Where is the USFS? As management engagement.

    a. How can we spur management engagement?

    b. We are supposed to be supporting management. We don't need to force participation, we should try to have communications, and engagement. Try to be responsive to needs. How do we as a Council respond to management needs, advise, guidance etc. Not necessarily created new projects or monitoring.

    c. Scientists survey for things before they become management issues. Management is more reactive, even though it's emerging. Political figures want facts and figures. Point to data and numbers, that is what is helpful for managers to be responsive to public comments. It shouldn't feel like a burden to do both. How can the work of TSAC benefit 30x30.

    d. There will always be a time to bring up pressing issues and in order to be relevant, we must be at the forefront.

    e. Is the A for advisory or advocacy, that can get tricky. But that's where numbers become helpful. More storytelling is needed.

    f. Managers are looking for answers and political cover. May not be appropriate for scientists.

    g. Science is a process, not a bundle of facts. Analysis of empirical data. Policy is a different type of process.

    h. Turnover on the Council, offered some training on communications in 2025. (Sudeep)

    i. How are we coordinating resources, make a placeholder with resources and budgets. There are budget needs for the council for workshops, for trainings, peer-review, etc. A science budget, but the Council should not be responsible for that,

        i. CNRA budget have gone to small projects. Operational funding could be used for workshops, training, communications, etc.

    j. Lahontan projects were from Lahontan funded. Support of Council activities from operational funds.

    k. Not a Science-doing Council, it's a Science Advisory Council. Enjoy interacting with Agencies, not looking for funding and this is important for Council members otherwise it becomes a COI issue.

        i. There is a desire among agency for Council support for RFI creation, proposal review and selection, etc.

        ii. TEON could provide review and feedback, Council activity is the use of what TEON is producing.

    l. Prioritize a COI document to directly address this. Council members

advocating for specific projects and are best poised to do that work.

i. Agree 100%, but if gets tricky. Some of the questions the managers have are not the most interesting questions. Because of this, I can differentiate between the two. Identify ourselves as scientists v. advisors. Scientists have questions that differ from the advisor questions. (Monica)

ii. Agencies come forward with question and the Council helps to identify resources (people) and expertise to get it done. Experts do not have to be from within the basin, but end up often being from related institutions. (Scott)

iii. Limited funds to do work in the Tahoe Basin. Clear lake report from USGS and UC Davis, climate bonds funding for Clear Lake.

    1. Council has had questions regarding particle loads in streams, USGS answers loading questions, tried to bring questions back to USGS to improve how we convey data and improve public interface. Building tools for USGS that are useful to the Council, but not soliciting funding for developing that tool.

iv. Science findings that come from within and outside of the Basin. Bring it back together, what is the management relevance? Then that helps identify needs? That leads to concerns, assessments. Offboarding concerns. Onboarding science into offboarding management, navigates any conflict of interest. If we have a logic model like this, it might help us keep clean. Could work on a version to navigate through this.

    1. Bring someone from the agency that does contracting. Then look at the risk of the funding coming back to the person who suggests the project.

v. Important to have more communications.

vi. Only so much can come from these conversations. What do we want to do?

vii. Do you want to do some efficient process to identify priority research and science delivery questions?

viii. Do you want to engage executives to compare science question with management questions?

    1. Who are the executives? TIE steering committee, bi-state, and the Council Executive committee.

    2. Formerly had meeting from Council executives with the Secretary of the states, not the best use of time.

    3. TIE Steering, meets regularly. Good for guidance for the Council. They are identifying their work in the coming year. The Council needs to be on that list. Something for

the Council to discuss. Think about those as the two levels of who you're communicating with. Most communications happens with the first, but the second group can make or break the future of the Council. MPP and law degrees mostly.

4. Having an executive level above, from an institutional standpoint, could be helpful from a funding standpoint. Important to have institutional representation as well as the two states. Just to remind people what we're doing for budget purposes. Helps elevates managers as well.
    a. We're advocating for funding, for whom?
        i. Operational funding. Topical areas.
        ii. Seems like a direct COI
        iii. On the Nevada side, lack of support. Advising support. Once we say "science topics" that makes people nervous (Tamara/John)
        iv. Conversations and engagement are critical. Relevancy, here's the project we did, here's how we informed the management community. Bring it to a tangible level, and that conversation can blossom into what we can do that is more.
    b. Reinforce are relevance? Explain our importance? If we don't engage executives in some effective way, existence will be less relevant. Make space and intentional with how we are engaging executives. Year-end review and impact and what needs to be done. (Pat)
    c. Question in mind: MOU is coming up on 10 years. Is it time to renew? Does it need to be renewed? It would be tricky and opens itself up to being cancelled. Should we celebrate the 10 year anniversary?
    d. Let's show James and Wade, the cool, relevant things that they care about. This is a feather in their cap, how the work of the Council connects to them.

ix. Science is needed for the managers for of air quality, water quality. Then there are other managers that are regulatory, imagine them as lawyers trying to win.

iii. Discussion: Which Council activities or products most effectively advance research and science delivery? (Open Discussion)

c. Leadership in Science Delivery: How can the Council better fulfill its mission?

    i. Discussion: How can the Council identify a reasonable number of research or synthesis questions that the Science Council should champion? (Open discussion)

        1. Use the S2A Plan as a starting point

        2. Who should be a part of identifying priority research questions?

    ii. Discussion: As a Council member what can you do, and what do you need to fulfill the mission? (Open Discussion)

    iii. Discussion: How should the Council engage managers and executives to discuss research priorities? (Open Discussion)

4. Need more opportunities to meet in person.

5. There is work to be done

    a. Meet with Executives/Managers

    b. Coordinate a conference

    c. What do you want? Proposal from co-chairs and program officer, what do you want to do this coming year, something to think about. Milestones, work tasks, what happens in the next year. It is helpful to have something to react to, as long as it is not onerous for them. People in agreement.

    d. Meeting again in January (virtual makes sense, but keen on getting people in person). Standing invitation to have people at the UNR-LT, TERC facility.

    e.

6. Adjourn