

TAHOE SCIENCE ADVISORY COUNCIL

NOTES | March 2024 COUNCIL MEETING

Date: Thursday March 21, 2024

Time: 10:00 AM – 11:30AM

Location: [Zoom](#)

Documents: <https://www.tahoesciencecouncil.org/live-documents>

Attendees: Sudeep Chandra (UNR), Adrian Harpold (UNR), Monica Arienzo (DRI), Tamara Wall (DRI), Alex Forrest (UCD), Steve Sadro (UCD), Max Moritz (UCSB/DANR), John Melack (UCSB), Pat Manley (PSW), *Open* (PSW), Ramon Naranjo (USGS), Joe Domagalski (USGS), Jason Kuchnicki (NDEP), Ashley Conrad-Saydah (CNRA), Chris Fritsen, Melissa Thaw, Dan Segan, Jason Vasques, Kevin Fromherz, Randy Striplin (LTBMU), Brent Moore (NDSL), Laura Patten (KTB)

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

Next Meeting: Proposed – May 16, 2024

- 1) Welcome and Agenda Review
 - a) Science updates/presentation: Thoughts about updates to science at each meeting
 - i) As a whole or a TSAC project, could be anything, some aspect of the Tahoe Basin that has a science or management spin. 15-20 minute.
 - (1) Sudeep, Tamara, Alex votes yes
 - (2) Alex happy to pitch ideas for speakers
 - ii) Send out a request to the Council Members for proposed speakers
 - iii) Perhaps a council member could volunteer for each meeting to find someone from their institution to present?
- 2) Updates
 - a) Budget/operations
 - i) CNRA operations agreement is up in May, closing agreement and working to open a new one.
 - ii) Working with co-chairs and committee how to use that budget, have always been under then \$100k budget
 - iii) BLM has been audited, every project is being asked a lot of detailed expense questions
 - iv) Closing out USFS SNPLMA funds, closing out Derek Kanukis' project
 - b) Plastics work group
 - i) Compiled first draft of the state of knowledge of microplastics in Tahoe
 - ii) Recommendations from a work group perspective
 - iii) Circulate document to the broader working group
 - iv) Next phase will be getting feedback for next steps
 - v) Great collaborative group
 - vi) Question: comfortable with the way the working group is going?
 - (1) Jen Mair is helpful for organizing the meeting, making agendas, taking notes
 - (2) Set-up a charter in advance for expectations
 - (a) Timeline and product
 - (b) Expectations for everything was really clear
 - (c) Could always refer back to the charter
 - (3) Appreciate the structure and conversation with the NGO partners and agency partners, everyone is really engaged
 - (4) Very efficient, times set-up for working on papers together which holds people accountable
 - (5) Monica has done a good job of shepherding us, set aside writing times, write by yourself on zoom

and at the end of the time you share out what you wrote.

(6) Useful to have a really defined intended product, state of knowledge, and recommendations

- c) Water Quality Working Group has not met in awhile
 - i) Lahontan has 2 contracts for monitoring review and clarity review, most have been working through that
 - ii) Specific mandate, a contract from Lahontan
 - iii) Doing things that are related through a contract that we are responding to, but that's why there's no report from that working group.
- d) TIE Steering Committee
 - i) Each committee member gave a pitch, as part of the Lake Tahoe Restoration Act, ends next year, trying to get it reappropriated
 - ii) Presentation of what they have been doing and what they want to do
 - iii) Intriguing meeting, millions of dollar projects which are mostly allocated for moving dirt, digging trenches, fixing roads, building bike paths, capturing dirt, restoring various things in the Tahoe Basin.
 - (1) No discussion of evaluation of performance, is it really working?
 - (2) Urban run off project, generic difference of perspective from people doing these project. We might see different ways of evaluating the work.
 - (3) The valuation of these projects aren't very thorough from a science standpoint
 - iv) Work groups report to the TIE
 - v) They have separate conversations of Thresholds and the focus
 - vi) LTRA – There are 4 sections of funds under LTRA, Forest health and AIS have been most successful. Less successful for accountability (effectiveness, science, etc.) and in previous time, do we want to build monitoring into the areas where we have had success. 1-2mil requested under the effectiveness, but not successful.
 - vii) Total ask is in the realm of \$50 mil.
 - viii) Attending to the TIE meetings are good for the co-chairs to understand how decisions are being made, great at the high level to engage and advocate for science. Burying science within requests across the EIP is something has been done in the past. We need to do a dual strategy around the utility of science and increasingly minimal funds for scientists. Make bigger and direct asks and be participatory for that committee.
 - ix) the TSAC should do a review of the LTRA restoration activities that have been funded and develop effectiveness monitoring proposal targeted at activities that were funded. Shows that the Council has reviewed all the activities and how they're affecting loads and clarity and have proposals for approve.
 - x) One group is water clarity but they are more stormwater. USGS has been meeting Lahontan to discuss LTIMP program and sediment loading from turbidity, what USGS is finding. Get Council members as reviewers of urban loading program and look for improvements.
 - xi) Lahontan originally looking at DSA for recommendations. If we have funds, we could use those recommendations for guided investments for funded work. What do we know, what are we doing, where do we invest?
 - xii) Why do we need millions, this is the purpose of the S2A to make the case of how the funds will be spent. Will continue to advocate science funding is still a big goal of the Council, further conversation of integrated management plan, this the plan that we point to, this is why we need millions of dollars. Compelling reason for why funds are needed and linking to other plans and projects
 - xiii) Everything in the Tahoe Basin is expensive. Hard to shift money from a construction project to science. Complicated. Need a separate strategy.
 - xiv) We think this is a good investment, there is an expectation of where that goes. Instead of taking project one by one, it is incumbent upon us to understanding the full arc of that funding.

3) Management Effectiveness, Rapid Response, and Council Coordination

- a) Hugh Stafford's work finalized, nice bookend to the Council's rapid response work with the Caldor fire and demonstrates the Council's ability to management needs and how it relates to management activities. How can we continue to respond to issues as they come up and how to meet the needs of management and the basin?
- i) When we invest intentionally, we think this is a good investment, there is an expectation of where that goes. Instead of one by one, incumbent upon us with limited funding find the full arc of that investment.
 - ii) Generated a lot of interested, linked forest health and management activities to the response.
 - iii) How can we as a council do this work in a meaningful way?
 - iv) Some of the findings were interested, WUI study, not really according to Max, relevant too the WUI. Highlight that because all the problems and losses with WUI have their own set of solutions, they are different from the wildlands. But still has some important findings, the tree survival between treated and untreated was striking, the crown scorched and torch height wasn't a big difference but big enough to affect the survival.
 - v) Most effective was mechanical treatments, not prescribed burns was interesting.
 - vi) Piles were actually why some of the higher severity areas burned hotter.
 - vii) This is a very simple look at this data, largely a qualitative analysis, later they'll take a multi-variable approach. Let some of the more detailed analysis inform why they're different, why is mechanical treatment not there (probably because of a slope) etc.
 - viii) How do we translate this into a more refined analysis for management? Open up more support of prescribed burns, the burn window to burn those piles, etc. We can get more feedback from management.
 - ix) Why is prescribed burns less effective, because the forests are already such a mess?
 - (1) Looking forward to the greater analysis.
 - (2) They didn't factor in suppression and backburning, things that are important
 - (3) Would not extrapolate landscape scaled recommendations from this one early study.
 - (4) Council
 - x) Council was a major funder of this project among others, if a press release were to come out, what would be the council's role.
 - (1) How to present this report as a funding entity, perhaps some of the policy implications for mechanical thinning on slopes, maybe something the report is pointing to as more valuable than previously thought.
 - (2) Traffic back and forth with press on this report. Incorporating nuance would be useful. Draft press release to run by a couple Council members from Caitlin Meyer, do not want to oversell results of this one report. Capture the nuance and use this to our benefit.
 - (a) Max and Pat to run the press release by, send to Bob and he will make sure it gets reviewed.
 - (3) Caution agencies in terms of the language being used, preliminary results that are unpublished. Hugh would need to be comfortable with how it's being portrayed. Recommendation for the Council, progress toward a better understanding, but not sure if there is anything definitive. Might be a separate working group meeting for a more in depth conversation.
 - (4) Very few reports of the Council reports that are published. This is not a unique area. The idea of how we frame it from a Council perspective, making sure the nuance is captured, but there is good science here.
 - (5) There could be an opportunity with papers like this, for self promotion, short responses, here are some key takeaways, questions, etc.
 - (6) I will flag for our various press teams to try to capture the nuance and frame this in the right way. (Caitlin)
 - (7) TRPA just passed a code amendment allowing for mechanical thinning on steeper slopes (last year or the year prior) and I'm curious if this is a first step in seeing if this is a good direction to be moving in. Obviously, the need for robust peer review and additional work is important before drawing m

anagement conclusions.

(a) The research used to support that code change was published in the peer reviewed literature.

(8) I like Caelan's concept of short briefs—

perhaps that is where the nuance can be communicated at least a bit more, to support a press release (Tamara)

4) North American Lake Management Society

- a) One of the biggest challenges in CALMS is engaging in California academics, there is a student scholarship/grant committee. We currently have a 100% funding success rate because there are such few applicants. Engage more with academics.
- b) Deena and Todd are the co-chairs for NALMS
- c) Water managers combined with good science in a non-traditional format. Whatever we pitch, they would be happy to take. Anything that doesn't fit into NALMS, we can fit into CALMS.
- d) Alex likes the idea of not making this tradition and lean into the intersection of management and science. Can be interesting.
- e) You would not have a lot of your students go because it leans away from research, not designed like a pure science conference. Have a proposal that's been distributed to the Council.
- f) Push students to attend, many of them do not become academics. Seeing the questions being asked and being part of a greater network and refine their presentation skills, why their expertise is effective to the needs. Students get travel funded as well.
- g) Trying to solicit ideas, who is proposing ideas if there is a need for a special session.
- h) Submitted ideas
 - i) Trout and Saxon creek
 - ii) Field tour of creek and meadow area for restoration
 - iii) Derek Kanukis, presentation on recreation monitoring
 - iv) Tahoe Keys (Lars Anderson) history of AIS there and the control methods test
 - v) John Peluchio, UV treatment of Aquatic Weeds
 - vi) Microplastics workgroup, progress and approach taking
- i) Special Session – Tahoe Specific? Based on the submitted ideas.
 - i) Can just plug in without having to organize?
 - ii) What is the purpose of us plugging in?
 - (1) Organize (sponsor?) what is the theme that would contribute to this conference? Turn into a publication into a variety of journals, then it would be time well spent.
 - (2) Sudeep votes for doing a special session. Not a priority meeting for his lab. Have 1-2 people at the meeting, including self. Especially if there is not major cost. NALMS used to be cost prohibitive.
 - (3) Not sure about producing papers from this conference. Propose a special session and encourage our network to apply. We are just moderating what this session is about. Could get away two sessions: 1) In-lake process, AIS, and microplastics 2) watershed activities
 - (4) The best sessions are the ones people can walk away from and apply to their own lake, not Tahoe specific, having themes key to us
 - iii) To Pat's point, being organized and aggregating around Tahoe specific sessions would have greater impact—
not in my field, but Monica and I agree there are a number of students that would benefit from attending—
 - iv) Sessions are pretty small, we could easily fill two. Target speakers of what you want to present. In the proposal, invite a speaker, not a shortage of speakers. Submit proposal and be generic and ask for two sessions.
 - v) Happy to help organize, take the lead for creating this proposal. Do the people at the keys submit independently? Go ahead and submit abstract and will fill in for special session as needed.
 - vi) Alex happy to step up to create a paragraph for the in-lake session. Pat and Max would be happy to write a paragraph for the terrestrial ecosystem. At this stage, it's a paragraph and an application. Not

too much of a heavy lift. Deadline is April 5. So this needs to be done now.

vii) Let everyone know to check the box, they have a special session being organized by the Council.

5) Council Member Round Robin

- a) Not all institutions have the ability to submit for Congressional funding. Partner with DRI to submit for appropriations and move through congressional members in this region. Consider how can we have the Council write a formal letter of support? Feeling broke when doing work at Tahoe. Going to lose UNR scientists at Tahoe to other areas that are more well-funded. See if advisory council can write letters of support. Not asking for a letter this round but October and November. Needs to have some lead time.
 - i) Congressional ear mark, short funding, etc
 - ii) Institutions have submitted overlapping and conflicting requests, which is difficult for agencies to support. Be a part of the larger process that the partnership can get behind.
- b) Please share the Climate Engine training opportunity with managers and other groups in the basin. You can sign up here:

<https://forms.gle/7zpNne657EMJ2i1z5>