

# TAHOE SCIENCE ADVISORY COUNCIL

## NOTES | JANUARY 2021 COUNCIL MEETING

**Date:** Thursday January 20, 2022

**Time:** 10:00 AM – 1:00 PM

**Location:** [Zoom](#)

**Participating Council Members:** Adrian Harpold (UNR), Tamara Wall (DRI), Steve Sadro (UCD), Max Moritz (UCSB/DANR), John Melack (UCSB), Pat Manley (PSW), Ramon Naranjo (USGS), Paul Work (USGS), Paul Comba (NDEP), Jim Lawrence (DCNR), Ashley Conrad-Saydah

Robert Larsen (CNRA), Alison Toy (UCD)

**Agency stakeholders:** Domi Fell ( ) Rhiana Jones (Washoe Environmental Protection Department), Brian Judge (LWQCB), Laura Patten (KTB), Jason Kuchnicki (LWQCB), Julie Regan (TRPA), Dan Segan (TRPA), Amy Horne, Brian Garrett, Meghan Kelly, Jack Landy (EPA), Mary Fiore-Wagner (LWQCB), Alan Heyvaert (DRI)

1. Welcome and Agenda Review (Ramon)
2. Council Business (Ramon, Bob)
  - a. Monthly Column
  - b. 2022 Meeting Schedule
    - i. Notify Bob if any outstanding conflict (ACTION)
    - ii. Otherwise meetings will proceed with current standing date
  - c. Co-chair rotation
    - i. Ramon is stepping down in August
      1. Extra funding is important
      2. Good experience
      3. Any questions? Reach out to Ramon or Sudeep
    - ii. Notify Bob if interested (ACTION)
    - iii. California v. Nevada, University? Balance needed? Nothing hard and fast. Some diversity is nice but not necessary.
    - iv. Bob sent out a survey asking for interest and will revisit to see who is on the list (ACTION) But can add more names if there is new interest.
  - d. Sustainable Recreation RFQ
    - i. Priority for TRPA for the coming year, requiring guidance from Council
    - ii. Less social science background from Council, needs members to reach out to other people within institution with relevant background.

e. TRPA Threshold Update Support

- i. Will be hearing from Dan with more information at next meeting
- ii. Validating one class of standards over a year? Next couple months? What is the realistic timeline? If you change thresholds to some standard, it would have regulatory implications, seems complicated, needs to meet legal standards as well as practicality. What is the real scope and restrictions based on regulations?
  1. Threshold standards are mandated by the compact between federal government and two states.
  2. Every time a project comes through the door, whether its large development or a deck, make sure it does not impede thresholds
  3. Regional plan and thresholds made in the 1980s don't reflect higher level goals
  4. Need formal plan to achieve goals, established what we think the goals should be but have not updated regulatory framework and the thresholds themselves. Believe it can happen over the next year, but some may require more information and will not happen in the next year.
  5. Outline to be presented at next tie steering committee to provide broad structure (November 2022), depending on the outcome from that meeting TRPA would reach out to the Council either right around then or potentially a couple months after
- iii. Two steps: 1) applying framework and 2) evaluating standards. Will you require the Council in both?
  1. Ideally both, Sudeep had previously offered support (Dan)
  2. Thresholds adopted moving forward must be standards based and how measurements quantify success
- iv. What do you envision as Council engagement? What does the process look like?
  1. Might need a larger umbrella council group, see if we are applying the framework appropriately.
  2. Individual sub-groups for specific topics and theme, forest question to pull in the appropriate expertise.
  3. Likely different resource air quality, forests, biodiversity, remote sensing, etc.
  4. Maybe 2-3 individuals per resource and a lead member to oversee all the effort and how all the pieces fit together.

3. State updates (Jim, Ashley)

- a. Ashley serves on TRPA governing board and joining the Council on recommendation from Crowfoot. Working as deputy secretary of climate and was at BLM on solar and wind energy development. Land management and policy experience, working with states for better climate policies.
- b. Jim updates: Not a lot, in between sessions. No real word on budget yet, agencies are expecting budget instructions February or March.
  - i. Put on calendar: standing committee that looks at TRPA and Tahoe issues in the interim, first meeting February 15. 5-6 meetings in between February and the end of August.
  - ii. February 15<sup>th</sup> will be largely administrative, TRPA will likely be on the agenda, bi-state efforts with California
  - iii. A lot of new members and one returning member, new chair might be very interested in engaging with science
  - iv. Council might be asked to give a presentation in the future. Bob would be happy to coordinate presentation.

#### 4. Integrated Science to Action Plan (Bob, Adrian, Tamara)

- a. Project Phasing
  - i. So far it has been just Bob, Adrian, and Tamara to put together a WO to see where we go from here and how to coordinate with our management partners. Community needs and visitor issues into a single plan.
  - ii. Hope over next 6-8 months, leverage the Uplands to Science Action and previously Lake Science S2A and combine them.
  - iii. Come up with a plan and identify stakeholders
  - iv. Best way to structure conversation to make sure that we are getting the necessary feedback while incorporating the relative science
  - v. Timeline: plan for how we do this for next several weeks.
    - 1. Document before the end of 2022.
    - 2. Draft available for August Bi-exec meeting.
    - 3. Progress report to share with the March Exec meeting.
  - vi. Would be helpful to have Julie in the room, Julie agrees
  - vii. Important to make sure we have the correct stakeholders in the room
  - viii. Have some targeted topic areas: forests, fire, lake, nearshore
  - ix. Finalizing within the next month, just to get things done.
  - x. The Uplands S2A document is the main foundation and should start there. Lake S2A has already been in advancement, so we need to revisit lake science needs and coupling that with SNPLMA funds. Looking at water quality more

holistically and then the connections between uplands and water.

- xi. WO should refer more clearly to the Uplands S2A document. The linking the upland and lake is a way more complicated effort and should be a separate WO. It involves different people and involves a watershed modeling project. They are very different things in my mind (John Melack) This year, get Upland docs operative, funded, and move forward. Lake is not done, still in early stages, trying to do the models, lots of info hasn't been assembled yet. Suggests dividing into two things and done separately. Depends on urban runoff calculations, lake conditions analysis, etc. making a pitch to be done separately.
- xii. Document the complicated connections and work that needs to be done. Need to document what those needs are and set a trajectory forward. Lake plan has been initiated, but yes more than needs to be done and we should be explicit about what is still needed.
- xiii. Setting up a plan and the steps for what needs to be done, the investments for what it takes to move forward would be the integrated effort.
- xiv. What is the end goal? A lot of it comes back to making sure we are a force for science in the basin, by being very clear with policy makers and having a strong brief with the managers. The August summit makes sense as a target for this every year. Make sure our voice is out there every year (Adrian). To John's point, it's tough to decide to divide the project.
- xv. A year and a half ago since we've seen the Uplands S2A, we are passed planning, we need to pick out parts of what is practical and start doing some things. (John)
- xvi. Using the August summit is good time timeline goal. Making sure you have something to say about all three things would be good. Lot of money coming down \$1.3B projects to connect to forest resilience and watershed health. Bucketing those things, what's been planned, what we have accomplished, where we're going, etc. (Ashley) Additionally, this team knows directionally what actions to take, even as we determine the exact magnitude of benefits of each action. We can be clear on that - planning and monitoring gets us more resolution on benefits, but do not need to be complete before implementation.
- xvii. Getting the ball rolling as we did with the Lake. We can make some good investments based on the info we have. Have a near-term discussion with managers to match opportunities with funding based on priorities. Partner with managements, funding discussion with managers might be useful. (Pat)
- xviii. Agrees that picking prioritization projects based on the Uplands S2A and proceeding is one part. But the larger question of integration, how do we advance that?
- xix. Process question: Uplands S2A and priorities, getting into action, do you feel like you have enough feedback and management guidance to proceed?

1. If we had \$3M we would have to have more discussion
  2. We have a limited set of resources and have enough info to invest that wisely for both science and management needs, at least for a first good step (Pat)
  3. No prioritization for the next 5 year though, would need more discussion with management.
  4. Did not really do the outreach to bring managers along in the process, which might give us more justification (Adrian) If there's a lot of money, we are talking about big expensive ideas. The Upland team didn't engage the managers as well as the Lake group has, but maybe it's more challenging of a task. Think we need a little more engagement to confirm ideas.
- 
- xx. We can separate out the two if it's too messy.
  - xxi. Living document and a living process. We have had some engagement and would prefer more engagement. Being explicit in our co-development and coevolution of this process.
  - xxii. Knowing who to turn to from a policy perspective, using S2A plans for priorities would be helpful to resources agencies. Of \$3.7B what should go to direct implementation versus planning versus research. Where are the gaps in knowledge that prevent implementation? Come up with 1-2 pages based on S2A here's where we would prioritize putting dollars over the next 5 years to accomplish x, y, z, something like that and share as a deliverable. Amount of science direction is currently limited.
  - xxiii. Look at this exercise as a funding justification. Something accessible tangible and quickly communicates our needs.
  - xxiv. Given the pace of funding, is August too late? August is too late for a state budget.
  - xxv. Even if the funds are appropriated now, it won't be spent for years. If there is an interest in doing something sooner.
  - xxvi. It would be great to start some items and it sounds like there is something already in the document that might just need to be finessed.
  - xxvii. Agreed upon prioritization was never completed for Uplands S2A but like the idea of starting on things that are agreed upon and refer back to the larger document.
  - xxviii. Nice 2-pager that could define a spring finance, look for the next fiscal year. But we are all well-positioned to look at spring finance and immediate funding needs. But still have a larger integrated project that needs to get started (Bob) Doing these two things in tandem is too difficult and complicating the discussion, need to be clear about how to advance the priorities already identified. Separating out and figuring out what we need to do now with Uplands S2A. Will keep pushing the integration effort.

xxix. Still in need of Urban data, determining what those needs are is still in progress.

5. Council 5-year Plan (Bob, Pat)

- a. Background: Council has been great at reacting to issues, but there are areas where projects haven't had as much traction with specific science questions or requests. Would be helpful to have staff to provide that type of work.
- b. Building Capacity
  - i. Hiring 2-3 post-docs from Council institutions to do the efforts we have struggled to get off the ground.
  - ii. Work beyond just the members of the Council, increase the expertise, and network
  - iii. Being part of a think tank, it's stimulating and exciting, students have new thinking and new approaches.
  - iv. Finding funding, not just about what we have, but explore exciting opportunities for breakthrough research
  - v. We have the need, the need is greater than ever, there is only so much one can bring to the table, more minds are better.
  - vi. Would be mentored by the Council and their individual institution. They serve the Council and we (the Council) would be the host institution.
  - vii. Assuming the funding would come through CNRA, bob would serve as the Liaison for the cadre.
  - viii. Ramon concerned about the true need, a post-grad or post-doc could serve the role? A post-doc wants publications and research and are highly competitive, they want to see by the end of the term something to show for their time. Almost feels like position may just need a post-grad. Might be challenging to get the proper oversight. Getting the right people for the position is the highest need as well as making sure they truly understand what they will be doing. Also, it is a substantial amount of money being requested, discussion might be needed to understand where it's coming from, should not being taken from the Council. If the Council members are too busy, reevaluate their ability to sit on the Council.
  - ix. Adrian has similar concerns, post-docs aren't always trying to stay in academia. You could have a policy or science focused person. I don't think the Council have the time to properly mentor. Might be issues in the details and funding.
  - x. Whether they are doing little or big things is another discussion. We wouldn't stick them with all little things. This is more of an expansion on our ability to function as a science body (Pat). This discussion of capacity building is to bring in new perspectives, but also building new relationships with the management community.. consistency is needed to do that being around for

1-2-3 years where we can build momentum in ideas and implementation just another facet of the science-management dynamic that has bearing on how we might build capacity and impact.

- xi. It addresses gaps in our capacity, there are complexities we will face as Ramon laid out. Sometimes you get lucky with post-docs, sometimes you don't. Concern with the post-doc model. One of the issues with engaging with our own personnel. This ends up being a logistical problem, to have the funding support to think more broadly, ways to engage the existing engagement we have.
- xii. General support for expanding capacity. Sudeep has said this is also the opportunity to bring younger science support in Tahoe, some succession planning moving forward. Not married to any particular approach, just a general conversation of what is the appropriate support we need (Bob). Need to increase funds altogether, should not be concerned about taking money from the Council pot, but look at it as an opportunity for expanding funds.
- xiii. John does not think it should be brought up in March. Grants and bring new perspectives to the conversation. But this needs to be thought out more. It might sounds like details, but to say they are part of the Council would bring a lot to bear. What do we need for different tasks? Proposals is Bob's role. How we do this? Lots of path, urge slowing down, and evaluating further.
- xiv. Bob has not been expected to write any grants, but could be a further discussion moving forward.
- xv. The conversation of the S2A plans, we'll be right back in the convo of who is doing the work. We can't put off this conversation for long.
- xvi. A merge of Pat and John's comments - there are definitely great young people within or coming out of CivicSpark, Grizzly Corps, Climate Corps, who could dig in and be a part of this team in a support role - taking notes at other relevant meetings, assisting Bob when he's going after funds, acting as supportive connective tissue here. We could look for someone from one of those programs annually. And there are great PhD fellows from the California Council on Science and Tech program who could also assist for a year. In between, there are masters' students from the UCD enviro policy and management program who can work part time while in school. There are a lot of options - we just need some descriptions of what we need to go after the right community. (Ashley) Would still need assigned sponsors, and what do we need, basic work and then are their programs we can draw from. Define the position more.
- xvii. Is there any positions within the states that might have overlap? Where there might be positions within the agencies. There are certainly internships with NDEP, but the funding would still be a challenge.
- xviii. TRPA currently in discussion in reviving internship program, co-hosting an intern that would work for the Council. Would be happy to scope what the agencies need and what these positions look like (Dan)

- xix. Tamara likes the idea of co-locating a student with a state agency and the council, to give them opportunities for training and understanding the context of both research and management.

6. March 2022 Executive Committee Meeting (Ramon, Bob)

- a. Ashley to talk to Wade Crowfoot and get back to the Council (ACTION) Competing priorities, it is important for there to be alignment
- b. Jim agrees, capacity building is important, that conversation of bringing students on, but the general capacity building conversation would be good, potentially around what isn't getting done. Brad is always interested in the clarity report, but will have more updates for Bob a little later.

7. Washoe Tribe (Rhiana Jones) – Interim Director of Washoe Environmental Protection Department

- a. Background – Not a lot of areas
- b. Current Activities
  - i. Mayala Wata Restoration Project at Meeks Meadows
  - ii. Fire Restoration: Cutter (2012), Preacher (2017), Numbers (2020), Tamarack (2020) burned areas
  - iii. Fire Resiliency: Cultural Burning, Native Resource Crew, Defensible Space
  - iv. Washoe Resilience Garden: Cultural and Native Plant Nursery
  - v. Recycling and Solid Waste project
  - vi. Brownfields and Invasive Species
  - vii. Streambank stabilization
  - viii. Air and Water Quality Program
  - ix. Stakeholders in the Leviathan Mine
  - x. Climate adaptation and resiliency
- c. Science Needs
- d. How can the Council engage?
  - i. Adrian to follow-up with Rhiana about the monitoring work at Meeks. See potential to bring cultural burning practices into Uplands S2A plan.
  - ii. Tamara to reach out offline about the air monitoring sites, could at least assess what needs to be done? Put in touch with Amber from DRI for cultural burning certificates, potential way of building capacity.
  - iii. Bob to share Rhiana's contact information and connect appropriate members (ACTION)



- iv. If there is a need for the modeling effort that Wes was doing, please reach out to Ramon at USGS.
- v. There is some great expertise at PSW in terms of pine regeneration, climate change adaptation in conifers - Jessica Wright and Courtney Canning - and two of our scientists that work a lot with supporting and integrating TEK into agency management approaches - Frank Lake and Jonathan Long. Jonathan in particular has worked with the Washoe to a degree over the past few years.
- vi. Ashley to share some potential contacts and ideas with Bob to share to Rhiana.
- vii. Any connections with EPA 9? Rhiana can share more information with Jack at EPA.
- viii. Bob to add Rhiana to the Council Stakeholder list (ACTION)

## 8. Adjourn