

Meeting Agenda
Tahoe Science Advisory Council
Thursday March 21, 2019
10:00 AM – 2:00 PM
Luria Room, first floor Patterson Hall
291 Country Club Drive
Incline Village, NV 89451

Participants: Sudeep Chandra (UNR), Alan Heyvaert (DRI), Adam Watts (DRI), Geoff Schladow (UCD), Steve Sadro (UCD), Max Moritz (UCSB/DANR), John Melack (UCSB), Pat Manley (PSW), Joshua Wilson (PSW), Ramon Naranjo (USGS), Paul Work (USGS), My-linh Nguyen (NDEP), Lizzy Williamson (California Resources Agency), Alison Toy (UCD)

Draft Agenda

1. Welcome, agenda review, introductions

a. Agency stakeholders requested to come in at Noon rather than the entire meeting to allow for some free discussion in the next couple of hours

2. Council Operations

a. Update on status of new TSAC program manager to replace Zach's position

i. Alan says Zach left us set up to function for a few months, work orders in place, until a replacement was found. The program officer position is being advertised and answers to those two state agencies. Initially floated in December while they hashed out details. Re-opened a few weeks ago. Will begin the interview process shortly. Will be hired by California Natural Resources Agency at 50% time to do the program manager for council and 50% time to work on Nearshore SB630. Hiring will happen sometime May-June.

ii. Zach was at 15% and this new person will be at 50%, Geoff says we can look forward to the overall cause and expectations.

iii. Lizzy says that because Zach was retired, limited to 15%, looks to the council for bringing people in the future. Position can evolve over time based on the position.

iv. Reporting person for the council. Reports out on the business of the council.

b. Next steps on TSAC UTR Decision Support project

i. Geoff says side-tracked due to requests from the state

ii. Progress was made with weekend workshop, would come up with subgroups, within this conceptual model. A lot of interest in us completing that. Comes at a good time for the science to action time. Climate change driven aspects in the process. Extreme year following drought and the effects. Apply to a specific watershed that has the key elements of the basin. Have an established subgroup working on this, but don't want to assume that the members of the subgroup still want to participate. Alan, Ramon is still interested. Sudeep is tentatively interested, has a busy May ahead.

iii. John is interested but doesn't understand the steps. Are we looking at recent data? Discussed largely in terms of a scheme. Is it more data focused now? When we had that meeting, divided the scheme into parts for people to analyze in a conceptual way. Is that still the plan?

iv. Geoff says that was discussed, but it will be up to the subcommittee to decide

v. John, says a subcommittee meeting may not be enough to flesh this out.

vi. Geoff says yes this would be the first thing discussed, where the initial approach should be modified.

vii. Alan says we need to establish a consistent format.

viii. Sudeep asks about timeline. Geoff says given resources, looking at wrapping this up by June, a three-month effort. There is a limit as to how far we can go.

ix. Geoff to send out an initial for people with scope outline (suggests Alan) to garner interest. John says to also resend the diagrams that Ramon made. Geoff asks Ramon to resend those. John says that if good if part of it initially get back to Geoff to start some dialogue before the meeting. Geoff says that is the intent.

x. Scott maybe, thought that Pat was interested. John points out she was interested in a different conceptual model. She is interested in the second stage, conceptual model of linkages and changes and then embed that in a decision support framework that would be automated. Alan points out this is phase 1 to inform phase 2 that will be taken to the executive meeting in August.

c. PSW-TRPA contract

i. Josh says he and Pat were in contact about that. She is on contract. Josh will work with Alan on Sustainable Recreation. Doesn't want to speak for her, so send her a separate message for a future meeting.

d. TSAC SNPLMA secondary projects

i. Available in the 2004-2014 for capital projects and some science. Some residual funds and a call from the agencies about what can be done with these funds, even though research wasn't specifically called for. Geoff and Alan put in two proposals, one for sustainable recreation and another one based on the aquatic impacts primarily nearshore and pelagic impacts on forests, no study in place, looking what effect that will have on the lake. 175k for sustainable rec and 400k for landscape scale effects on the lake. Questions to start thinking about, what is the scope of these projects? There are issues to be explored there. 400k goes really quickly so there is a limit as to what we can do.

ii. Alan says the landscape scale ties into the discussions for today. Sustainable rec is further from what we usually deal with, but high priority for agency groups in the basin. We have a working group for the agencies, an EIP different themes have working groups that report to executives. A good collaborative discussion, a sustainable working group ready to bring science in a meaningful way to address some of the issues they are dealing with. Tahoe Basin to look like Central Park, potential impacts on the environment. Big topic, we can address it in a detailed comprehensive way. Pick out priority areas that deal with sustainable rec to inform policy changes. In the afternoon Devin Middlebrook, chair for sustainable rec working group to talk more about it. Work closely with them to provide science needed.

iii. Tension saying the science you need compared to our ideas of what science is needed. This tension is always there.

iv. John says in the proposals 2021. Are these two year projects? Money says there is usually time tied to it. Are you asking about colleagues we know who can help? How do we form a group about these issues?

v. Geoff says this is not primarily about these issues. Who we know, what are the science approaches and what are the key science issues.

vi. Procedural question: what's our action? I'm not interested and most of us aren't. But if we know someone or a group who would be interested. Alan says the agency wants us to step up and have a plan in place by the end of the year. Look within organizations to see who can contribute, so we already have a base set of people that we will be talking with and their expertise and see how that will align. So if you know anyone in this field we would like to know of these people as well, just let us know. We will start assembling our list and share list with council.

vii. Geoff says it is unlikely any of us here are going to be directly involved, but this will be a TSAC document, so we will all be inherently involved. Josh says interface of

natural and social science. Maintain natural resources for sustainable rec. But the social sciences for accessibility and socioeconomic levels. Would be a good fit with the PSW and Berkeley agreement.

viii. Alan is PI. Geoff asks if there is a subcommittee to look over products overtime. Not yet, wait to hear what Devin says, then will send out names and document over to the council. Josh mentioned existing agreements, set-up with Lake Tahoe Basin Mgmt unit, not inclined to issue multiple subcontracts on one of these individual things. So it will go through one organization. Good to save money and extend funding as much as possible.

ix. Josh wondering if additional outreach needed to frame out science needs to management agencies interns of science support.

x. Sudeep says to Elizabeth Kobelli, doesn't want to get burdened by Tahoe meetings. Trying to work with old data from Paul Sabatier, using social media to see what people are finding sustainable not. The agencies may have it here. Perceptions of people of what they see, we may not be tracking, but she is finding in her social media research and interviews. Honing in with this working group, will be good for suggesting the right people. Focusing on what people want and not the agencies. Alan has reached out to Elizabeth, she was marginally interested but could not commit. Figure out exactly what we are going after and then finding the people. No master agreement but the funds will be with LTMU. Geoff says what the agencies say the biggest project, is how do we solve the transportation parking issue, used for that, will hear from Devin.

e. New work plan priorities

i. 50% indirect cost rate, is there a CESU a cooperative agreement that we can run through with a less indirect cost rate. On Geoff's to-do list and will see what kind of funding we will ultimately have. What is feasible, what are the higher priority items we can attack?

ii. Alan says nearshore, it was put together in 2013 just for monitoring not for research. But both are relevant for evaluating conditions in the nearshore. More of focus on nearshore rather than mid-lake?

iii. Sudeep says it is still not getting the attention it needs. A common linkage also a social dimension that will come up on the recreation issue.

iv. Geoff hypothetical situation 50% of trees are removed or 2/3 what is going to happen and is that going to affect the nearshore, hydrologic flux, pelagic effects etc. What do we model or explore

v. Ed just came from meeting about sediment transport and we don't have a good enough handle on inputs from the bay. The inputs in the lake are not as well defined as described. Putting some emphasis on the changes into the lake would be appropriate.

vi. Alan agrees and thinks more work could be done, changes and inputs that haven't been accounted for in current models. Landscape scale effects on the lake, climate is certainly one of those things that propagates from the watershed into the lake.

vii. Sudeep the nearshore is affected, these are issues of scale. At what level are you trying to manage. Are these hot spots managed by... put work into broader concept. Resilient to change that may not affect nearshore and those are better questions alternative to climate change. Why are some areas turning out to be hot spots or green spots. This spot on the west shore is so unique. Management relevant package and system resistant change, to be discussed in future workshop about this topic.

viii. Geoff says it would be different. What is available to us, the before conditions. How is it working now? Affecting, driving hot spots, nearshore, midlake, etc. What I had in mind, having some transects, one through more urbanized area or untouched area. Previous fire effects of ground water, streamwater fluxes, etc. Look at what a change would have.

ix. Alan say it would help to have an outline of the dominate effects expect in in the landscape in terms of climate. A lot of that may exist from Tahoe West, helping to guid in what we suggesting in transects or monitoring.

x. Climate drives landscape and Sudeep says it is a one track mind frame. What is it about the properties of the system that are important. Needs to tie in. Not necessarily just the landscape, couple be along the margins of the lake. But the proposal is about landscape, but good point not to be constrained to the landscape. Something consider in terms of guiding the project.

xi. How do you expect a collaborate team to work? Asks Ramon. TSAC can't accept funds, go through institution. Who will be doing, what are we doing and do it in a collaborative way. At the end of the day we won't be able to do everything work. But projects like this will help to bind scientists of different interests. The request is for people to think about it and a. let us know if you are interested, yes I can do this, my colleague could do this, third party, or level of interest to flush out a critical set of questions. Not a good venue to throw out hypothesis, but continue discussion by email and have a separate zoom 3 hour workshop.

xii. Do you see a connection between science to action, that we will be asking funding for, yes. It is a key area part of what we are recommending for science to action, seeing we are leveraging funds that feed into that larger framework of science to action. Get in writing in the next couple of months. Getting an opportunity make measurements of these key issues. All these projects are finally having connections between themselves.

xiii. My-linh has questions 1) reducing overhead rates, looking for ways to reduce overhead rates. Each agency has dif. Overhead rate change, will that affect work? LTMU, so already established, serving as pass through organization. LTMU chose to be federal sponsor. 2) Ecological landscape changes projects for agency will be intimately involved but not developing independently, working with TIE steering committee. PSW because of Lake Tahoe West is instrumental. Email to the entire group with ideas and reservations for a consensus scope (ACTION)

3. TSAC review and approval of Guidelines for Independent Peer Review

a. Bring up to speed with lunch

4. Council members discussion on Phase 2 of the TSAC Lake Science to Action project

a. Received comments from agencies, more discussion needed, not reflective of everyone's beliefs. So a good way to proceed rather than consistently modify, we want to call an end to the document. End of phase 1, using it to proceed to phase 2. Did it quickly because of the need to have it completed by the beginning of the year. Now working on Phase 2 that is a set of recommendations for science needs, cost of that science, and why. They don't just want a list of what isn't being done, a list of possible projects and a rationale for those priorities. What project steps should be taking and what is the science backing, what do they need to know to implement those projects. Input: no one is interested in a long shopping list, small projects are insignificant, we need a significant ask: 1990s TMDL, California put over 10 mil because of the program set aside to what is needed in a short period of time and those funds became available. Proposing that we create this program with a 5 year time frame.

b. A science program focused on the lake is what is being proposed says Alan. How it is all tied together, why its important, and why it's a priority. Management based on science for 10 years from now. Outline what the program looks like and what it takes to get there.

c. Ramon looking for clarification. Document sent out for review was phase 1, shouldn't be finalized but try to include comments, leaving something that isn't complete out there, ultimately we should try to make it as complete as possible. Rather than it be a draft forever. Geoff says we could put effort into that, but we could also include comments as appendix, take into account, but then use the full council. But will the agency be satisfied? Alan says this is a subcommittee document, phase 2 does have to produce a product of TSAC, has to be something that represents council as a whole and be fully supported. Alan expects phase 2 to change a lot, explaining significance and prioritization will be explained.

d. John says the way it's framed as a strategy document is a good way. Short term midterm, long term, that part is right. The appendix part goes into way too much detail. If you start writing paragraphs, it gets very different than a strategy document. This current document is inappropriate, leave it with a conceptual report with the 3 phases, all that appendix stuff is inappropriate and is misleading. Alan says it was discussed with the subcommittee, he resisted putting in numbers, but the iteration brought to the council in December, received major pushback from program manager, caveat, broader discussion required for phase 2. Document doesn't have to be listed anywhere, could be on the website? John says if there's a consensus that the document has real value but why can't we change it. It's a subcommittee project, it's not a council document. The italicized paragraph says it is misrepresenting TSAC and agency. Sudeep likes parts the appendix, saw the notes from manager discussion, Bob says helpful for dollar numbers, would be helpful topical subjects in appendix, phase 2 will flush out actual costs associated with it. Phase 2 refine Tahoe Advisory Committee. Paul says thinking about how management would review it, looks more like a project of what scientists want to do, not how the science would be used. Steve says he thought some of the material was added at the requests of the manager, document doesn't capture rationale of the decision making behind it. Yes, agencies asked us to include info in appendix. Geoff says, yes it is what it is, end it, take discussion and use it to develop phase 2. When phase 2 is done, then phase 1 is a report never referred to. We could do what John suggested and just eliminate budgets and numbers from appendix. Or we could spend time addressing the purpose in a broader scale, which could be front and center in phase 2 or 1. Reliant on everyone's effort.

e. Alan would like to take out the estimated numbers, didn't want them there in the first place. The agency members wanted it there. John says yes it's good to have a large target, one option to include, not to have the fine scale numbers, give people a perspective involving new serious money. The science in the fine scale numbers had never been discussed, then the large numbers sends the message you're trying to send. Alan and Geoff agrees that will work and won't take too much effort. Geoff is there a consensus agreement that we tyrb phase 1 into final report, remove from appendix final draft document go out for review over a 1 week timeframe, without major disagreement, considered final. Alan says leave numbers for existing projects. (ACTION) We discussed 3 timescales, short med, long. Short-term ones were things that could be commenced in the short-term. Who wants to work on phase 2? Everyone? Subcommittee? Can't be done in a meeting like this, can't be done in an email? Not a proper TSAC product, doesn't see this being this being done by telecom. Alan agrees this is what we want to do, do it differently in phase 2. Need to pull on additional resources from TSAC to engage the appropriate individuals see if the individual resources are there. John says this might be a document needs peer review by true independent peer review for phase 2.

f. Doesn't think that this can be done by August to make significant progress. These deadlines seem arbitrary. Part of the deadlines are based on the constraint on the august summit when there is a push to get funds approved. Sudeep says it is what drives discussion, whether good or bad. Agrees august deadline would be difficult, but present initial thought in executive meeting. Sudeep says we might want guiding documents to explain why they are there, might be as simple as putting a paragraph together, justify rationale.

6. Lake Science to Action Phase 2 work plan discussion with Council members & agency representatives

a. Gavin sitting in for Zach

b. Reservations expressed about the details in regards to the Phase 1 document. TSAC has decided to remove the cost estimates there, worried that once something is in writing those numbers are required from a discussion point of view. Tune up a couple of things and call it done with subcommittee report, notes from conference call, there for the record, and use that

report for phase 2 Eventually we will have meaningful numbers. Other point raised, timeline set for us is unrealistic for what needs to be done. Go for agency stakeholder comments, not sure when it will be done, but will not be done by August given the need for peer review. Laying framework for years to come, should not be a rushed document. For priority near returns, will flush those out, more specificity, for long term items require more time for review. Some numbers in it to get the ball rolling so they know what is coming.

c. Dan wants to know the audience. First one for executive level, with the adding of detail, that may not necessarily be executives. Geoff says 1st document is first half and the 2nd one is the complete document. Are the two agencies, consensus science document that has convinced the stakeholders that this is aligned with needs.

d. Bob doesn't know if the phase 1 document reflects alignment, but it is not supposed to. The phase 2 will address that. Not meant for broad distribution, phase 2 when we develop strategy and program, a science program for the lake reflecting what really needs to be done in the short and long-term. Target audience is TSAC for phase 1, two states target audience for phase 2. This is all a request from states and natural resources.

e. Josh says that the LTMU manages basin, many activities can be involved. Getting to the point of applying to the basin, requires going through specific process. Geoff says hopefully everyone will use for long-term goals, that's the aim.

f. Jason wants to know if the document going to be more work plan focused. Here's the outcomes, info we will gather, gap it will fill, and detailed budget. Geoff says not project level. Alan says somethings will get that kind of focused but not everything. Geoff things changes will come in prioritization and the order/steps to get end goal. Holistically get science to where it needs to be. This is something up for discussion, with newer research and knowledge.

g. Alan says part of this will be finding new funding for managing lake. Provide foundations for requests. Bob says the holistic approach sounds right and it taking time. Is there sufficient guidance or is there guidance within the document for short term investment opportunities, would be like to be consistent with TSAC if funds become available. Geoff doesn't believe that things will change in phase 1 very much. Bob says that the TSAC involvement is less than perfect in document, may need further conversation. Alan says we need to provide basis for recommendations, from a science perspective.

h. Insight for prioritization, Sudeep follows-up. Bob says we already provided the agency perspective on prioritization, but no gaps filled on what was discussed. Sudeep says we need to process this (time) thoughtful in presenting information back to agencies. Prioritization will come, but patience is needed through august, have a process where we get together, and then we will have a highlight of priorities. Bob says that we can input and then proceed with a united front. Geoff says phase 1 is just we will get to where we want to go, if we move forward. Alan says we want to hear priorities and they will be represented. Phase 2 is finding that alignment, the process to get this all wrapped up and dialed in by July is not realistic.

i. Sudeep with opportunities in the short-term, is there a mechanism of funding, could that be sent to a broader TSAC committee for a response. Helpful to have a broader chairing committee, those discussions can help members outside of the basin understand the priorities that agencies see. Is this possible? Bob supports from agency end. Wants the opportunity to be involved with the process, whether it's a subcommittee, defer to chairs as to how that works. Tight coordination will benefit both TSAC and agency well. John says yes, be more aware of non-present members, this is a subcommittee document, not a TSAC document which is why we need time, we don't disagree with concepts. We have this old TMDL report, as science advances we need time to step back and observe. New techniques in analytics, monitoring, etc. need to interface better with what is practical. Less-tahoe centric review, advance a larger world-view over several decades. John was an external peer reviewer for the TMDL report.

j. Bob says from a state level and tmdl level and we are pretty well aligned. Dan agrees. Dan says we align on key management questions, rather than what the projects are to address

that. For the last 6-8 months, reduce fine sediment loads, climate change is messing summer clarity or something, that frames viewpoint. How do the questions fit in the framework? Are we missing something that shifts our view? Alan discusses summer clarity being a key question, are there other key questions? Bob says that we don't see fundamental flaws in our system, we see progress, less interested in adjusting that unless there's something about our understanding of our system is wrong or we are missing something. How much of this system is within management control? Jack says the notion of attainability, interested in knowing if the changes are irrevocable, whether it ever is attainable. Bob says we are a long way from sustainability, understanding summer clarity. 50 year target may be unattainable. Dan says not key management aspect for water quality, be deliberate with what management questions are being answered by the research. Alan says we are more focused on clarity. Dan thinks there is a separate AIS discussion, Geoff says we are throwing our hat in that as well. When we are discussing quality in years, this will make conditions more or less favorable for native or non-native. Parameters may change as time progresses, not evaluating past looking for future science methods to address what is happening.

k. John summarizes, looking at changing science, etc. Bob says it is clarity plus. Suggests parse out those individual program sections in phase 2, this is where agency perspectives will be useful. Still needs to be better crafted. What are the management implications, TMDL is aggressive already, investments are massive, changes are substantial, what additional change is expected, desired, or needed for change?

l. last meeting Patrick suggested a compilation of changes, useful background info. Bob says we provided 2 pages of that. Submitted in coordination with CTC and Patrick, some degree about what is being done, we can flesh that out further. CTC bristled at not being included with climate change studies. Push back about narrowing scope, but maybe look a second time and consider re-including if this is a broader scope. Alan says take a second look and flesh out more deliberately and respond and address science questions being answered. Bob says they are happy to look again. Alan asks is it ok if we attach in appendix in phase1 document sufficient? Bob says yes. Alan says we went in more detail but it is worth adding, provides context. Bob says look at water quality monitoring, some discussion specifically about ARSWMP program being addressed. Send out to full TSAC. (ACTION) This is what we need for phase 2. We will be asking for an expansion. Geoff says no excruciating detail, for example groundwater, we have a program measuring this, says two wells measuring is not etc. dollar amount, number of sites, etc. Alan says he think it will require a specific amount of detail, will work with agencies to find appropriate level of detail. Bob says we have an estimate and is there a reason to question the estimate. Geoff says the programs don't exist, science in the past... motivation for review, how conditions are going to change. Bob says, let's go back to where we system driven by clarity. 20 year old science, where are we now.

m. Jason wants to know justification for studying this. Ramon purpose for getting agency knowledge, find out areas lacking science, tasked to go to entities and determine sampling and costs. Need agency info because of a gap in info so we can address missing information, look at gaps in at the holistic monitoring effort in the basin.

n. Discuss process for phase 2. Alan says in terms of where we are trying to get, want something fully vetted by council (July) representing that to agency execs. Whoever is interested at summit. Won't be peer-reviewed at that point, but get the entire TSAC behind it agree on structure and priorities, we will be in good shape. Objective, focus on near, shorter term items, but this end of July. Other things will be included but not fleshed out in full detail in July. Need to have workshops as John had suggested where TSAC can engage and will want to engage with agencies as well. Another meeting in May, opportunity to collectively discuss what is going on and get a workshop on either side of that. So three meetings including the regular TSAC meeting. Will have to have subcommittee going into phase 2, direct interaction will full TSAC, have work orders in place for original subcommittee members, but the future is the entire

TSAC, determine outline for what the document we have now compared to phase 2. Bob appreciates need to meet July deadline, question of scope, how does this fit into the 10 questions from the states? Is this still a guiding document or is it beyond the initial request? Geoff thinks 10 questions has been addressed, but implicit was what should we be doing? Not just in terms of lake clarity. Be prepared to address with executive committee meeting. Alan says with the document we have, send out late march, early april with intent to have first workshop in april, tsac meeting may, workshop june, and have a document in July. Geoff says rather than him or Alan draft, maybe someone with a broader view would consider drafting outline for phase 2 document like John Melack. John has been engaged in external peer review and could provide fresh perspective. He is willing to be involved, can contribute, but probably cannot lead. Geoff worried with bias from himself and alan based on extent of Tahoe involvement. John says we should look at other members contribution. This is the 1st draft to give to other members, discussion to happen offline (ACTION). Alison to organize meeting dates (ACTION). Full TSAC will be involved with dispersal of documents. Need a draft available to take to meeting in June. Drivers in terms of clarity. Workshop in June to go over document, with initial document ready in July for full TSAC review. Try to represent dissenting review from TSAC and agencies. Ultimately going to executive members in August. Geoff says if it isn't enough time, we just say so. Patrick says this is pressure on the agency to produce along same timeline, how will agencies absorb info and the two secretaries their reviews. Next point of contact is that they will be part of, will the agency members attend the workshops? Important that full council hears agency input. Alan inclination to say yes include agency members.

7. Background info on sustainable recreation project

a. Devin recaps, working group under EIP led by USFS and TRPA, mix of business partners looking to reimagine recreation in basin. Funding is static, visitation levels exceeding, etc. Vision, mission statement, objectives, relating to this group looking for monitoring and thresholds. Tahoma to Camp Rich, issues on transportation side. State 28 route corridor. Not just transportation side and how people move through the area, what experience is intended? Continue to work on this plan, draft expected early fall. Creating strategy, actionable, for objectives attempting to reach. Guidelines to integrate sustainable rec with plans. Taking results from WG, using to inform processes with state parks. TSAC conducted lit review, known impacts, baseline understanding of impacts of recreation on other thresholds. Better understand linkages to thresholds. Look at environmental impacts as well as socio economic impacts, experience and social impacts, public access. More modern measures to ensure people can enjoy the lake. Ideally have something solid by the end of the year.

b. Alan feels confident advancing to that by 2021 according to timeline. Josh looking for information for TSAC review, Devin to send document to Alan for distribution (ACTION). Devin looking for within the great numbers of survey info available, develop standardized monitoring framework to inform management strategies, infrastructure, are they achieving goals? Alan think we will need to find third parties with people with direct experience related to research. Suggests that if TSAC members know people, provide contact information to be linked with Devin's people. Sudeep, such a broad topic, focused on economics, happiness, etc. given to the funding available, agency colleagues advise where the focus is. What do you think is the level of visitor use? Economics? We need direction as a starting point. How many people can the system support? Suggests that we can't do it for everyone. Devin says we have some ideas, after this meeting, Alan will present work plan, and then as a WG, once we have this workplan, Alan can work to narrow that list down. Sudeep says significant effort keeping NV and CA together, sensitive topic, etc. Through this idea of pressure points or hot points, areas over capacity? Not at capacity across entire basin, no caps, and no entry fees.

f. Alan one question, interested environmental condition metrics, work out priorities with working group. Linkages to existing interests.

8. Next meeting date/time and agenda items (Geoff) 5 minutes

a. Sudeep agenda topic: wants to know more science interests. Flash talks by a TSAC member. Alan says we would like to get back to that on the agenda, but got broadsided with other things, we will definitely keep that in mind.

b. Science to Action and UT Conceptual Model. Email to be sent out to everyone to find workshop date and then a next step meeting date for UT Conceptual model. May skip formal meeting. Preference between weekday or weekend? John good any day. Sudeep wants weekday, Geoff weekday, look to week day meeting.