

Integrated Climate Adaptation and Resiliency Program Technical Advisory Council



March 22nd, 2019
Meeting Minutes

California Energy Commission |
Art Rosenfeld Hearing Room
1516 9th Street | Sacramento, CA 95814
9:30 am – 4:00 pm

Item 1 | Welcome

Welcome presentation by Senator Wieckowski, Senate District 10 (video recording)

Welcome remarks made by Kate Gordon, Director of the Governor's Office of Planning and Research. Director Gordon provided a brief overview of her professional background, followed by a brief statement on the priorities of the current administration, as they relate to climate adaptation and the work of the ICARP TAC. Director Gordon highlighted this administration's commitment to resilience being integrated into all state activities: housing, land use affordable and accessible healthcare, soil health, fires, energy, and health. She also highlighted that OPR focuses on the intersection of local land use, risk reduction, and climate resilience. She thanked the Council members for their service and highlighted the importance of their bringing diverse voices into the conversation.

DISCUSSION:

Kathleen Ave: Thank you for your presentation. I am curious about discussions happening in the administration about disaster capitalism. We need to rebuild better, seeing that disasters are coming at a faster rate. Has that bubbled to the top of conversation?

Kate Gordon: These issues are coming up more and more. The silver lining of the wildfires is that they have provided an opening for this conversation. We are starting to see discussions about rebuilding – or not rebuilding – in specific places. People are looking at what you are talking about. Santa Rosa is doing a rebuild and a replan, looking at development patterns and design. Caltrans is starting to have these conversations because they are experiencing high costs from snow removal and funding roads. They are seeing this as a budget issue.

Jonathan Parfrey: My question has to do with OPR/SGC funding. Are there sufficient resources for the job ahead? Some of us present today were part Technical Advisory Group that informed the EO B-30-15 Guidance. What we learned was that within agencies there is insufficient training to understand the resilience problem. OPR is the right place to have that Technical

Assistance. Could you please talk to us about the resources that Governor Newsom is going to bring to OPR?

Kate Gordon: OPR expanded under the last administration and it will not be shrinking under this administration. We are restructuring the organization so that it reorients to the priorities of governor. We promoted Nuin-Tara in the organization so that climate adaptation and resilience is a focus and there is a team working across this space. We have created three teams, and we use those teams to align OPR and SGC: a team for planning and land use, a climate team, and an education and research division. To your second question, at the last SGC meeting, the council talked about having an analysis of technical assistance across agencies and focusing on sustainable growth.

John Wentworth: Do you have any thoughts on engaging with landscapes not managed by California? What kind of partnerships does the state have with Federal forestry offices?

Kate Gordon: That is much more in the wheelhouse of the California Natural Resources Agency, which is headed by Secretary Wade Crowfoot. Secretary Crowfoot has elevated the Forest Management Task Force, which was the Tree Mortality Task Force. At OPR and SGC, we are interfacing with the Forest Management Task Force and strong partnership with Federal agencies is also something we highlighting in the 45-Day Report.

Laura Engeman: How do you get funding allocated to at-risk communities and what is the definition of at-risk communities?

Kate Gordon: CalFire's 45-Day Report called for defining vulnerable communities. One thing they did was to try to think through an immediate definition and a longer-term definition that goes beyond this fire season. The PUC is working to define vulnerable and disadvantaged communities in the lens of utilities (R1804019). For a long time, we identified equity as an urban issue and not a rural issue. That is starting to change. Fire is a great lens for that issue. Fires start in rural areas, but the smoke moves into urban areas that already have poor air quality. We have to think about how these impacts start in one place and end in another.

Item 2 | Roll call

Present: Nuin-Tara Key, Jana Ganion, Solange Gould, Karalee Browne, Jason Greenspan, Kathleen Ave, Ashley Conrad-Saydah, David Loya, Tom Collishaw, John Wentworth, Jacob Alvarez, Jonathan Parfrey, Elizabeth Rhoades, Laura Engeman, Heather Rock, Brian Strong, Gloria Walton, Michelle Passero

Absent: Craig Adelman, Sona Mohnot

Item 3 | Approval of draft minutes (12/7/18 Meeting)

DISCUSSION: Review of draft meeting minutes from December 7th, 2018

Corrections to draft minutes:

Gloria Walton: third page where it says “I get funding from AB 617 and Physicians for Social Responsibility” it should read: “Our organization, and others like Physicians for Social Responsibility were funded to do work around air quality in Los Angeles and in particular South Central Los Angeles, one of the areas identified in CalEnviroScreen under AB 617”.

Kathleen Ave: On page 5 in the discussion about the Nature Conservancy’s work around the Delta, at the top of the page, I have a comment there. In my first sentence I think I said that SMUD was involved in funding a study in that area. I can’t recall exactly but I would just request that that first sentence be struck, and just leave “There was a huge public interest in offsets”.

Gloria Walton: It may be helpful to number the pages.

Karalee Browne: Just a quick note that my name is misspelled throughout. It is missing an A.

Jonathan Parfrey: On page three, please spell out Johnathan Parfrey.

ACTION: Voting to approve draft meeting minutes from the December 7th, 2018 meeting.

Motion: Jonathan Parfrey

Second: David Loya

Aye: Nuin-Tara Key, Solange Gould, Karalee Browne, Jason Greenspan, Kathleen Ave, Ashley Conrad-Saydah, David Loya, John Wentworth, Jonathan Parfrey, Laura Engeman, Heather Rock, Gloria Walton

Abstain: Tom Collinshaw, Jacob Alvarez, Laura Engeman, Brian Strong, Elizabeth Rhoades, Jana Ganion, and Michelle Passaro

Item 4 | Technical Advisory Council Charter and Bagley-Keene

Nuin-Tara Key reviewed the Council’s charter, highlighting the Bagley-Keene requirements for the Council’s work, including any workgroups of the Council. Nuin-Tara Key also reiterated that the Council’s charge is to advise OPR and its ongoing work related to adaptation. In this role, the Council cannot take positions on active legislation nor can Council members engage in the legislative process under their role as an ICARP Council member.

DISCUSSION:

Ashley Conrad-Saydah: If a Council member testifies, do you want members of this council to *not* identify themselves as members of this group, or would you rather members make it clear that they are not representing themselves as members of the Council by explicitly stating such?

Nuin-Tara Key: Council members should make it clear that you are not representing your role on the council by taking the extra step to state this when engaging in conversations about legislation that relates to the work of the council.

John Wentworth: Can the charter be amended in the future?

Nuin-Tara Key: This charter can be amended or modified by a vote of the council. The Council cannot take action on the charter today, but if you have suggestions for revisions we can discuss it at the next meeting.

John Wentworth: I am not advocating opening up the discussion, but if it comes up, we can take it up by a vote.

Jonathan Parfrey: I don't see anything about council members being able to add agenda items. Do you foresee that as one of the tasks the council members can engage in?

Nuin-Tara Key: Yes, we will explicitly add this to future agendas. In the meantime, if you have suggestions for the next meeting in June, direct them to Jenn Phillips, lead staff for the TAC and OPR's Senior Scientist.

ACTION

None

PUBLIC COMMENT

No public comment was received by OPR staff.

Item 5 | ICARP Overview, 2017-2018 Progress Report, and Overview of Program Recommendations for 2019-2020

DISCUSSION: Presentation by Governor's Office of Planning and Research providing an overview of the Integrated Climate Adaptation and Resilience Program (ICARP) and the 2017-2018 ICARP Progress Report; and a targeted discussion of recommendations on programmatic focus for 2019-2020. Based on the Council's discussion from the previous December meeting, Nuin-Tara Key proposed forming a workgroup to address community-scale planning and insurance. Nuin-Tara Key suggested that the workgroup be a fact-finding effort to better understand the dynamics of insurance, climate, and local land use planning in order to add to the discussion of other workgroups and councils across the state, including the AB 30 workgroup, the Commission on Catastrophic Wildfire Cost and Recovery, and the Governor's 60-Day Report.

Ashley Conrad-Saydah: I would prefer this not to be a topic for a workgroup, but be a topic in the next meeting. Perhaps the Commission on Catastrophic Wildfire Cost and Recovery and the authors of the 60 Day Report, and any other insurance industry voices from the commissioners' office could give presentations. The idea is that it's not going to be a state solution. It is going to be a solution that requires all level of government and business to respond to the problem.

Brian Strong: I agree. I would caution that it could turn into a rabbit hole. We have been working in the Bay Area with the Nature Conservancy as well as the Insurance Commissioner on a Protecting the Bay project, and we are struggling to just get data on who has insurance.

Michelle Passero: I'm not sure of the workgroup. I wonder if there is a process to understand the Insurance Commissioners' efforts. Maybe we can plug in with them or other existing groups and try to create a tighter connection. On another topic, how well are we reflecting the integration of adaptation and mitigation on the Clearinghouse? We want to be able to show how this could be done for local governments.

Nuin-Tara Key: To answer your question about integrating mitigation and adaptation resources on the Clearinghouse: this is an area where we need to focus more attention. Our initial focus was on adaptation and resilience resources, especially since it's a new topic.

John Wentworth: For communities with recreation based economies, we want to address the cross cutting topics (called out in the report), like the VMT issue.

Gloria Walton: I would rather address the insurance issue in a big group than in a workgroup. I know we use the term resilience often when we are talking about a resilient California, but an integrated approach is not just about adaptation and mitigation; it is also about adaptation, mitigation and resilience. Adaptation is about adjusting to the changed environment, mitigation is about lessening impacts, and resilience is about recovery. Black, Latin X, and native communities deal with environmental racism, environmental degradation and cumulative environmental impacts, as well as economic exclusion and underemployment every day. I would ask that we include the topic of workforce development to the linkages across sectors, because that is part of resilience.

Jonathan Parfrey: It might be good to be more explicit about our goals and metrics for the Clearinghouse. We should have a target on the number of Clearinghouse visitors. By showing the demand of people visiting the site, it will help make the argument for more funding. Perhaps there are other goals in 2019 in terms of content or including videos. I think it is great to drive more audiences to the Clearinghouse through social media. Your partners could also help in that effort, whether it's ARCCA, LGC, or ILG. It would be helpful to see more data. There are people in this room who could add to case studies, but who are not on the Clearinghouse. I am not a fan of the current finance guide. There are other documents that are more accessible, especially for locals and non-municipal finance experts to use. What if this body was known for creating an annual report? We could report on what local governments identify as the gaps and risks across the state. If OPR worked to make that document, it could help other states understand the role for more work and legislation.

Nuin-Tara Key: The need for better communication and messaging on the work we do at OPR is something we've been talking about internally.

Heather Rock: In December, we talked about engaging the private sector. What is the private sectors' impact to employees and communities where we are open and operating? These discussions are very Bay Area focused. How do we extend that conversation across the State,

and how do we engage the private sector? Also, through the CPUC adaptation proceeding we are discussing how IOUs should plan to be resilient. What sort of data methods and tools should we use? If the CPUC creates guidance, should we have a bunch of guidance documents, or should we have a single set of guidance?

Jana Ganion: I think highlighting the cross-cutting nature of public health is important. Air pollution and water shortages and water fouling are not above the fold yet. That would be a good focus for this group. This group has had success creating decision-making tools. I would like to see this group pairing mitigation and adaptation and more decision-making tools around carbon life-cycle analyses.

Solange Gould: At CDPH, we have one staff member funded to do public resilience health planning, but no funding to actually enable local agencies to do the work. Unfortunately, health officers are not sufficiently aware. They ask: “What do we do? What can you offer to increase our capacity?” SB379, LHMPs, all of these are outside of their wheelhouse. ICARP could focus on helping to enable local health departments.

David Loya: I want to second Jonathan’s idea that we have a work product that is also a tool that will not only tell folks what we are doing, but also to make this work related to locals’ day-to-day work. Locals aren’t paying attention to the codes that are required for their General Plans.. I agree with having technical assistance around what we are doing, and linking it to insurance impacts and to climate change. That will be important to folks who need to use it. I also agree that we need metrics to assess how many people are accessing the Adaptation Clearinghouse and who is using it.

Kathleen Ave: We don’t talk about consumption, waste and resource issues, but they are important to addressing mitigation and adaptation.

Jacob Alvarez: I want to touch on climate change in regards to heat. In the Coachella Valley, it gets up to 120 degrees. It is important to look at areas like ours to see how we handle those issues and how our developers handle those issues. How does climate change impact seismic activities?

We need to engage without disrupting businesses. The more energy businesses use, the less money they make. They are looking at utility providers who are less expensive.

Jason Greenspan: We are in the process of projecting growth up through 2040 regionally. We tried to assess the degree to which SB 379 has been incorporated into their planning efforts. We learned that cities don’t have the resources, time, and guidance to plan for fires and floods. For local implementation, we need a pulse on the statewide plan. I would like us to be that resource for them.

In terms of urban heat, we did a competitive call for projects through our grant to address cool streets and urban forestry. Very few people came forward because people don’t understand those resources are available.

Jonathan Parfrey: Our friends from OES are here. They are working on the APG to provide direct resources to update the LHMP and address the SB 379 mandate, so this will hopefully be a useful resource to address this need.

Ashley Conrad-Saydah: People who are locals, it would be great if you could package what the TAC has done and do presentations to your local city government so that they know we exist. We should hold our meetings in locations around the state. We could have a discussion in Coachella about air pollution. We should get out of Sacramento.

It sounds like all of these topics fit under rubric of land use. As we shift our approach, it would be wise to include land use decisions.

John Wentworth: Mammoth Lakes got an SB1 grant to do an adaptation plan. We facilitated a conversation with Nuin-Tara and came away with some lessons learned. It would be possible to share this with this group.

Karalee Browne: I appreciate all that this group is talking about, but we can either pick a few, clear subset of items and address those, or we can think about it as a land use thing and then relate the smaller issues as needed. I worry that we are expanding the discussion before talking about our vulnerable communities.

Brian Strong: Our role and the State's role are to make more resilient communities. So we cannot get so obsessed with mitigation that we forget the other issues going on. We need to be thinking about what a resilient community is. There are regional issues that we can begin to work on around land use and housing. While we don't need to comment on legislation, we could offer some perspective on impacts. In San Francisco, we are trying to establish equity measures and at the same time we are trying to figure out what performance standards should be for our infrastructure, for our buildings, what recovery timeframes should be for utilities that we own or are in our area. These are bigger issues than a city or region, so we would appreciate the State coming in, whether it is around sea level rise or how we expect buildings to perform in relationship to fires or heat. For example, in San Francisco, we are getting heat island affects that we have never experienced before.

Nuin-Tara Key: We need to maintain our focus and think about our role given our place advising OPR. Keeping our frame around land use and long range planning is a good way to keep us focused. I propose we take all of your feedback and scope out what an annual report could look like, and then get your input at the next meeting. We will weave in these topics around regional, local, and state decisions in the next meetings. There are some things, like lifecycle cost accounting, we don't have the expertise or the resources to build or support, but we can find out who is doing that work and where we can connect with those agencies.

Jana Ganion: I probably wasn't clear. I was thinking that we could have a roll-up of existing tools. I was suggesting making those available through Clearinghouse or Cal-Adapt or others.

Nuin-Tara Key: How do we approach collecting the perspectives of locals who are not on the council?

Jacob Alvarez: When SB 375 was passed, SCAG held all of that information. They sent technical advisory planners so that every city planning director would hear that information. We could use this as a model to reach out to communities that aren't on the Council.

Nuin-Tara Key: That is a good suggestion and we'd want to better understand the type of support infrastructure needed to do that.

John Wentworth: We should be creating, as well as aggregating, that information.

Heather Rock: Similarly, we need to think about some process for collecting that information and transmit it to you. We get city requests all the time, whether it is Davis or Humboldt or Alameda, that are starting their planning processes. When they are asking questions or have feedback, how do we best convey that information to you?

Nuin-Tara Key: That is something we are going to have to figure out. I propose that we come back with suggestions on a process for that with you all as counsel and talk about it at our next meeting.

Karalee Browne: We have the Beacon Program, which includes about a fifth of the State.

Nuin-Tara Key: These are great suggestions and highlight that each of you already have existing networks to help reach out to communities not at the table. I don't think we want to create a new mechanism, but figure out how to leverage our existing relationships.

We don't need a formal action since we aren't forming a workgroup.

PUBLIC COMMENT

No public comment was received by OPR staff.

ITEM 6 | Possible Resilience Planning for Wildfire-Affected Communities

DISCUSSION: Nuin-Tara Key discussed the possibility of a \$300 thousand resilience planning grant that would be allocated by the Strategic Growth Council (SGC) using returned 2006 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act (Proposition 84) funds. SGC is considering giving awards totaling \$50-75 thousand. The goals are to develop a narrow enough scope that would address the urgent need around wildfire resilience and to support planning around wildfire and post-wildfire resilience. The two options for the grant include: support resilience planning in general planning efforts, or have a rebuild option. There would be an emphasis on supporting community engagement activities in both. SGC seeks the ICARP Council's input on the scope of funding, the types of activities funded, and the ICARP Council's role.

Ashley Conrad-Saydah: Is this limited to wildfire affected communities or could it also be communities at risk from wildfire?

Nuin-Tara Key: The initial idea is to focus on wildfire affected communities, but SGC is interested if Council members have input on this point.

Ashley Conrad-Saydah: We should put together a rubric. This money should address those at risk of fire. It would be useful if grants were less about a plan, and more about community engagement on stressors, risks, and threats, or technical assistance.

Also, rather than making this wildfire focused, SGC should make it more general. This could address seismic issues. San Francisco ports have air quality concerns and urban heat islands. Addressing those issues requires the same amount of community engagement.

John Wentworth: Where I am from, a key technical capacity problem goes to fire safe councils. The fire safe councils are the means by which the state gives locals money for technical assistance. One of our fire safe councils just got a grant for \$1,000,000 to do fuels reduction. Money like this could get on-the-ground efforts going, including technical assistance and capacity and leverage funding.

Karalee Browne: We should avoid General Plan funding because SB2 money and SB1 money can fund that. We should limit grantees to those who have already had fires. It is unfair to have all of places that have already had fires and are at limited capacity to compete with other at-risk places across the state that have more capacity. This could become a nuts-and-bolts toolkit for before, during, and after a wildfire.

Brian Strong: Often, the affected communities have resources and it is hard to find things to spend the money on. This funding should go to both types of communities. I would not advocate for it going to General Plans because that's already a cottage consultant industry. This could be innovative and go to other types of plans.

Michelle Passero: We should leave it open to at-risk. It is such a small amount of money. Is there a way to leverage it with other state agency programs?

Laura Engeman: These communities might not be interested in such a small grant. You cannot write a recovery plan for \$150 thousand. Existing funding is mostly allocated to disaster work. What locals lack is day-to-day funding. We need to bring in technical advisors and look for any way that we can find more money to match this funding.

David Loya: I agree that we should limit funding to fire affected communities. If this funding can't be leveraged, perhaps they should make it regional. Maybe technical assistance is the way to go. To streamline the process, SGC could consider distributing funding to all of the wildfire effected communities, if it doesn't need to be a competitive process.

Nuin-Tara Key: It has to be competitive.

Solange Gould: The people who are most vulnerable to wildfire are displaced, injured, or dead, so there is less of an opportunity to learn from those communities. We should focus on primary prevention. This funding could support those grants that are engaging with vulnerable

communities in wildfire risk areas. We should be focusing on elders, disabled, and the linguistically isolated, and be learning from past fires. We have an opportunity with these grants to hear about the viable solutions that would protect them in a fire.

Nuin-Tara Key: We will bring these suggestions back to SGC staff.

PUBLIC COMMENT

OPR staff received no public comment.

ITEM 7 | Workshop Session: Linking Vulnerability Assessment Frameworks and Climate Tools with Practitioner Needs

DISCUSSION: Nuin-Tara Key introduced the panelists for a discussion on adaptive capacity in the human and social, built, and natural environments. Nuin-Tara Key explained that the framework the panelists would be using was a simplification of key topics designed to frame the issue, but does not advocate looking at human and social, built, or natural systems separately from each other. The panel discussion included a live demonstration of Cal-Adapt, followed by a discussion of how Cal-Adapt could meet the needs of local governments as one tool for completing vulnerability assessments.

Staff Presentation: “Conceptual Framework: Climate Vulnerability Assessments”

Panel Presentation: Community Capacity and Socioeconomic Assessment in the Sierra: Jonathan Kusel, Sierra Institute

DISCUSSION:

Ashley Conrad-Saydah: How many community members were involved in capital scoring?

Jonathan Kusel: A good example would be the Sierra County Workshop. We were looking at only 4 communities. We had about 10 people in the workshop. We’ve had 19 and then 25. We like to get a couple people per community, and we will often have a single person do a few narratives of each community. The narratives are confidential. We don’t talk about individual numbers specifically; we talk about them more generally.

Jonathan Parfrey: I understand you have 5 types of capacity. Did you weight any of them?

Jonathan Kusel: We let the community members weight them. If the financial capital is so high that it cancels out other forms of lower capacity, then they don’t average them. Capacity is simply the capability to deal with external or internal stressors.

John Wentworth: How is your geography defined?

Jonathan Kusel: They are defined by the IRWM boundaries.

John Wentworth: Within those boundaries, how are they defined?

Jonathan Kusel: We communicate with planners, draft a map of the collected communities, and then engage the community directly to understand how they define their community. This is an iterative process between the community and local planners. We struggle with census block groups because they don't always follow a community's definition of community boundaries (they may not include everyone considered to be part of a community).

Presentation: Conserving California's Coastal Habitats: Alyssa Mann, The Nature Conservancy

Presentation: Private Sector Perspectives on Assessing Physical Climate Risks: Yoon Kim, 427

Discussion

Nuin-Tara Key: Each of you (panelists) has provided insight into how to think of adaptive capacity. We at OPR are thinking about how to weave together those discussions on adaptive capacity in the built, natural, and human systems. Given your work, do you have thoughts on integrating these perspectives around adaptive capacity?

Alyssa Mann: Our motivation was recognizing that communities are actively looking at how they adapt their infrastructure and communities to a changing climate, but not necessarily looking at how these things could be integrated. Our work is about providing a useful dataset.

Jonathan Kusel: In our workshops, we found that people focused on the notion of social capital which inherently brings a number of these systems together.

Yoon Kim: There is value in looking at credit rating agencies with a risk and resilience perspective. Ultimately, communities who align with one another are going to be better off. We have opportunities to enrich their frameworks because they are still thinking this through themselves.

Jonathan Parfrey: Jonathan Kusel presented a compelling argument for including rural communities in the definition of disadvantaged communities. Would including rural communities into the CalEnviroScreen definition of vulnerable communities require a legislative fix or can that be done at CalEPA?

Ashley Conrad-Saydah: The legislature asked us to look at social OR health factors, and we chose to do both. We developed nineteen factors. All factors had to be available statewide, which is difficult because very little data, including wildfire data, is available statewide. CalEnviroScreen is effective at looking at historical data, but it would be great to enrich it by having forward-looking data, and another layer to bring in a resilience and adaptation perspective. We are trying to include an additional layer that includes rural communities through the SGC research program.

Nuin-Tara Key: I think there is a need to understand the types of policy questions CalEnviroScreen can help inform in an adaptation context, but also to think of this as one of

many tools to help us understand climate vulnerability. Rather than trying to develop a single climate vulnerability tool, I think it's important to overlay many different considerations, tailored to a specific policy question or project, given the complexity of issues out there.

Ashley Conrad-Saydah: It needs to be the same data or the same level of data or rigor. It would be great to have a legislative fix that was more qualitative.

Jonathan Kusel: Qualitative data is not necessarily less rigorous data. I argue with the way that data is used. Rural agricultural communities have more measures, and rural forested areas have fewer measures, so rural forested areas will never score high on CalEnviroScreen. It has to be tweaked in rural areas, especially when it is used to determine funding.

Ashley Conrad-Saydah: We should be educating the legislature on rural communities and funding and assistance to these communities. GGRF is only one fund source and CalEnviroScreen is a standalone tool. This is a legislative discussion about how the GGRF is allocated. Don't focus solely on fixing CalEnviroScreen as the single solution.

John Wentworth: Is there some role for this group to start identifying all of the resources and money being spent on collecting data, identifying the gaps in those resources, and pointing that out for legislators? I would hate to have this discussion become more reactive, and less proactive. We should be able to say to the State: "What is the value of the natural resources? How are you investing in maintenance of those resources?"

Ashley Conrad-Saydah: AB 2480 said that maintenance and repair of source watersheds is eligible for the same forms of financing as other water collection and treatment infrastructure.

Brian Strong: This is a question for Yoon, Accounting Standards Boards should be included. Do rating agencies focus on the quantitative and qualitative?

Yoon Kim: They are in the early stages of thinking about these things. Standard and Poor's has said that they are taking into account whether entities have adaptation plans. They are more concerned about the existence of an adaptation plan than the plan's quality.

Brian Strong: We have the ability to see what they are doing, so we should be proactive.

Cal-Adapt Demonstration and Discussion: Nancy Thomas, UC Berkeley and Owen Doherty, Eagle Rock Analytics

Nuin-Tara Key: We are interested in knowing what you need to have more comprehensive vulnerability assessments, and what enhancements to Cal-Adapt would help you.

Kathleen Ave: It would be useful to have a basic report that all local governments could access that set a standard for the entire state. There is also potential to integrate health data and consolidate it with the CHAT tool (which 427 developed).

David Loya: In addition, this body can help inform the parameters of that report.

Jacob Alvarez: Is there a way to track wind?

Jana Ganion: We rely on this data for wildfire prevention notification. We need weather data five or ten days ahead of an event. We also use distributed energy, mostly with solar and energy storage. This is data that the public pays for anyway, so if there is a way to use it through Cal-Adapt, that would be useful.

Nancy Thomas: Owen, do you want to talk about near and long-term data?

Owen Doherty: Cal-Adapt has never had short-term or mid-term forecasts because federal agencies already have so much. We don't know what we are missing locally. If there were a way to synthesize that data at regional level, it would fill our blind spot.

Solange Gould: CDPH has various health data available at the census-tract level. It would be useful to know where people live, and include long-term housing and transportation-infrastructure. There is also an Environmental Health Tracking Program, which has useful health data in concert with climate exposures and projections. Is there a way to see heat exposures on CalEnviroScreen?

Nancy Thomas: Yes, you can look at any of these layers and then average the climate projections over that boundary layer. Unfortunately, it is not possible to download census data with climate data in it. We wonder how people spatially aggregate this data. Do you do it by county or census tract?

Brian Strong: We use census tract and supervisorial districts usually.

Ashley Conrad-Saydah: Census or any jurisdictional district where you have an elected official.

Brian Strong: I'm trying to think about we can connect some of the coastal communities and cities with the rural populations because they are both impacted by these events simultaneously.

Nancy Thomas: The wildfire data, which only includes acreages burned, is from UC Merced. They are currently working on getting emissions data. When they have that data finished, we will include that into Cal-Adapt

Nuin-Tara Key: It would include emissions data, but would it also look at smoke and wind patterns?

Nancy Thomas: I think that would be another step.

Brian Strong: Similar to the model that they are developing, the researchers ignite a fire and then they allow the meteorologists to blow the wind to certain locations so that they could see the regions that would be effected.

Karalee Browne: Cities are frustrated by census data because they cross boundaries, so I promote the city level data.

John Wentworth: Are you concerned about the politicization of the data coming in, particularly with federal data?

Owen Doherty: We are concerned about federal data. The CEC has directed us to look at data loss and we are archiving data in California. We would like to look at whether there is broad loss of data, but we are not presently doing that.

John Wentworth: Make sure your sources have credibility and make sure that you are having these conversations about how the federal government is funding data collection efforts.

Jana Ganion: There is serious concern about data loss.

Kathleen Ave: The State has done one inventory of top-down methodology for assessing land based carbon storage capacity. That would be an interesting dimension that gets put in reports to local governments. It is important to transition that work to a local level. Are we going to have a broader discussion back to that framework that you proposed?

Nuin-Tara Key: Yes.

Jason Greenspan: It would be useful to see the spheres of influence in terms of geographies. Getting LAFCOs around the state would be great. What about snowpack, stream flow and groundwater data? That could be interesting as a self-sufficient feature.

Nancy Thomas: No, I don't know if there is a good data set to use.

Owen Doherty: That is an interesting question but no one has asked us for this data yet.

Jason Greenspan: Maybe through the Sustainable Groundwater Management Act?

Julie Ekstrom, Department of Water Resources: It includes recharge and stream flow to develop groundwater sustainability plans.

Heather Rock: We have been partnering with the Department of Energy which has a partnership for energy sector water resilience. A lot of utilities have been participating in this. Last month, we did a webinar to see how effective our efforts were, followed by a presentation by NASA and NOAA. That information is still being collected at the federal level by asking utilities outside of California "what are your data needs and how can we fill that gap?"

Ashley Conrad-Saydah: We are also part of the US Climate Alliance. It would be great to share this tool and replicate and elevate across other jurisdictions.

Jonathan Parfrey: It struck me as odd that we don't have CalFire's vulnerability areas in Cal-Adapt.

Nancy Thomas: When we do our expanded wildfire tool, that's one of the things we talked about putting on there. There is also a big RFP out by the Energy Commission about more sophisticated wildfire modeling, so there is going to be more data coming into that tool over the next several years.

Tom Collinshaw: It would be useful to have groundwater data. We are accumulating data based on well-drilling in the San Joaquin valley.

Jana Ganion: Wind energy is coming to the North Coast of California,. The Bureau of Offshore Energy Management developed that data basin tool. I just want to make sure you've seen it.

Nancy Thomas: We have.

Michelle Passaro: Is there any interaction between them?

Nancy Thomas: They are separate, but we have interacted with the people who have created that tool.

Laura Engeman: I have offered to showcase the Adaptation Clearinghouse and Cal-Adapt at a meeting next week (San Diego Climate Summit), please share any materials you want me to use.

Kathleen Ave: This is a comment on the framework presented at the beginning of the workshop - we should borrow from the restorative justice movement by focusing on who is harmed and who will be harmed and add this into the framework. We should be sure to identify the actions necessary to address those harms.

Solange Gould: It is so important to have uniform state data. What we produce here has to be created with engagement from locals. It is important to give people the space to name their own assets and deficits.

Laura Engeman: Locals have more granular data than is available at the State. I don't have a clear solution for defining local communities. We need to give people the opportunity to define their own communities.

Nuin-Tara Key: Thank you for a robust conversation today and to all our speakers. We will take all this input to inform a proposal for an ICARP TAC annual report. Also, we are tentatively planning to hold the June meeting in the Bay Area, but will send meeting logistics closer to the date, which is June 28th, 2019.

ACTION

None

PUBLIC COMMENT

No public comment was received by OPR staff.

ITEM 8 | General Public Comment

OPR staff received no public comment.

ITEM 9 | Meeting Adjourned