



# Integrated Climate Adaptation and Resiliency Program

## Technical Advisory Council

December 6, 2019  
Meeting Minutes

Art Rosenfeld Hearing Room - California Energy Commission  
1516 9<sup>th</sup> Street  
Sacramento, CA 95814  
10:00 AM – 4:00 PM

### Item 1 | Welcome

### Item 2 | Roll Call

Present: Kathleen Ave, Karalee Browne, Sydney Chamberlain (alternate for Michelle Passero), Tom Collishaw, Laura Engeman, Solange Gould, Jason Greenspan, Nuin-Tara Key, Jose Lara (alternate for Christina Curry) David Loya, Sona Mohnot, Darwin Moosavi, Laura Muraida (alternate for Gloria Walton), Andrea Ouse, Jonathan Parfrey, Heather Rock, Brian Strong, John Wentworth, Mark Wenzel (alternate for Lauren Sanchez).

Absent: Craig Adelman, Jacob Alvarez, Jana Ganion, Amanda Hansen, Elizabeth Rhoades.

### Item 3 | Approval of draft minutes (09/20/19)

DISCUSSION: Review of draft meeting minutes from September 20, 2019 meeting.

John Wentworth: There are a few typos that need to be corrected. I have a copy with highlights of those typos.

**ACTION:** Voting to approve draft meeting minutes from September 20, 2019 meeting.

Motion: Jonathan Parfrey

Second: Heather Rock

Aye: All

Abstain: Kathleen Ave, Karalee Browne, Sydney Chamberlain, Tom Collishaw, Solange Gould, David Loya, Laura Muraida, Darwin Moosavi, Andrea Ouse, Brian Strong, Mark Wenzel.

### Item 4 | Latest News and Updates from State Agency TAC Members

DISCUSSION: Updates from each state rep on TAC and overview of state actions.

Nuin-Tara Key:

- First, Executive Order N-19-19 calls for state agencies (specifically, CalSTA and DGS) to align investments toward state climate goals. OPR has been having internal conversations with agencies to think about how we can incorporate physical climate risk into investments that we,

as a state are making. OPR has and will continue to provide technical support to assist with the implementation of the executive order.

- Second, we are continuing to coordinate with the Department of Insurance and their SB 30 working group. Under SB 30 (passed last year), the Department of Insurance must convene a working group to look at innovative insurance policies in the natural infrastructure space. OPR is engaged in those internal conversations and we will be coming back to the Council in 2020 with a work plan on how we can partner with that effort.
- Third, over the next 6 months we will be updating the fire hazard planning section under the General Plan technical advice series (otherwise known as, The Wildfire TA). This came out of SB 1241, and it will be looking at specific land use strategies to reduce wildfire risk (per enabling legislation, is due by July 1, 2020). We would like the TAC to provide input and guidance on the development of this work as it relates to the role of land use in wildfire risk mitigation.
- The Water Resilience Portfolio will be providing recommendations on how to safeguard California's water supply (lead by Resources Agency, CalEPA and CDFG), and it will be released soon (date of release, unknown).
- Lastly, there is a team working to set a series of targets to outline a strategy to think about the role of natural and working lands and how they can help the state reach its climate goals. This will be a key priority for us moving forward into 2020.

Darwin Moosavi:

- In regard to Executive Order N-19-19, section 2 identifies the important role that transportation infrastructure investments can play from a mitigation and adaptation standpoint. Specifically, it orders CalSTA to leverage its \$5 billion discretionary investment fund for transportation infrastructure to be aligned with state climate goals. CalSTA is looking to implement this order through existing program statute. CalSTA is looking to put together a very robust public process for the development of an implementation plan.
- Additionally, I would like to cover the Caltrans vulnerability assessments and adaptation reports. Caltrans has been conducting a series of studies to use the latest scientific information and data on climate vulnerabilities to evaluate impacts on the State Highway System. These regionally focused studies are done per district and ten of the state's twelve districts have completed their reports (the final two will be complete by early 2020). The next phase of this process will be the development of adaptation reports, which will build on the findings of each vulnerability assessment. These assessments will prioritize at risk assets and will help us start to think about how we can start to implement the vision laid out in Executive Order N-19-19.
- Another item to keep an eye on is that Caltrans is putting together a broad adaptation report that will be released in early 2020. It will focus on Caltrans organizational structure and highlight a variety of best management practices to help guide the department in how it thinks about physical climate risks in its processes and practices.

Mark Wenzel:

- First, we have a pair of studies that were authorized under this year's budget as it relates to our 2045 carbon neutrality goals. They look specifically at reducing emissions from light and heavy-duty vehicles. One study is looking at the future of fossil fuel supply and demand in California as we head to a carbon neutral economy. We have had three public workshops on the scoping and we are in the process of gathering public comments and developing a draft scope of work. We welcome any comments/feedback that this council has.

- Second, through the lens of the Department of Toxic Substance Control (DTSC), we've been looking at the role of sea level rise and the potential impact on hazardous waste sites around the state.
- We are also organizing a workshop on coastal groundwater rise as a result of sea level rise. Third, CalEPA has sponsored the creation of the Climate Change Indicators for California Report.

Solange Gould:

- This year, the Department of Public Health has a new Director (Dr. Sonia Angell). Dr. Angell has established a list of priorities around climate change and health-equity. DPH will be looking into the health impacts from public safety power shutoffs (PSPS). DPH will continue to work across state agencies to implement health and equity in to their policies and guidelines. This upcoming year, DPH will focus primarily on implementing health and equity in natural and working lands, transportation planning, and will work to support the implementation of Executive Order N-19-19.
- DPH is especially interested in the activities specified under goal two of the EO that aims to reduce vehicle miles traveled (VMT) and encouraging the development of sustainable communities. DPH is developing a scope of work to ensure that housing policy and climate policy are integrating health-equity and climate resilience with state partners, through our Health in All Policies (HiAP) work.
- Finally, this year the California Council of Local Health Officers declared that climate change was one of their major priorities that they would focus on (this is a continuation from last year). Local health departments are very interested in conducting health vulnerability assessments to understand the impacts of climate change on their populations. DPH will be releasing an online vulnerability assessment tool this winter to help local governments conduct their assessments.

Nuin-Tara Key: Any questions and comments from the council?

Kathleen Ave: These are great updates and it is wonderful to see so much great work going on among state agencies. One thing I would like to raise is, the SACOG board adopted new targets based upon the housing needs assessment. I asked if the board had considered climate impacts in the allocation of the housing units and the answer was no. In respect to the work related to fire hazard reduction in WUI communities (General Plan updates), it's a very serious omission in that planning process. This should be a regional conversation that needs to be addressed. I would like to ask the other TAC members to provide input on how this omission can be addressed at this late stage in the planning process.

Nuin-Tara Key: There was a bill passed last year that wrote OPR in to have a roll in the next allocation, so we will be working very closely with HCD on that process. One of the things that we will bring to the discussion is this question of how to incorporate future climate risk into our long-range planning across the work we're doing. These conversations are just getting started, so I do not know if we will be able to address this in the near-term but certainly more in the long-term.

Heather Rock: I have a question for Darwin. On the timing for the vulnerability assessments, how long do you think it will take to complete? I ask because PG&E is starting to scope out our own climate vulnerability assessment, looking at assets and infrastructure but also at our employees, customers and the communities that we serve.

Darwin Moosavi: This is a process that has been ongoing for several years and we have ten of our twelve districts with complete assessments, which have already been published online at

the Caltrans website. The remaining two (district 1 and district 5), will be completed by early 2020. The rest of the state already has a complete vulnerability assessment for the State Highway System, and it is also available on the Caltrans website.

Brian Strong: I have two questions. Beginning with Darwin, have you guys begun to think about where this begins to get inserted into projects? So many of them are planned well in advance (5-10 years), so how do you insert this into a project that is already underway?

Darwin Moosavi: The key question is, where and how those changes are made. Which is why it's important to have a strong stakeholder engagement process. I think it will take strategies at every step in the process to see what changes we can make to our planning, to our program management and project delivery processes. We will also have to take a project-by-project approach to see where the opportunities are.

Brian Strong: Thanks, Darwin. My second question is in regard to public safety power shutoffs (PSPS). A concern we have in the Bay Area is having no backup power for the Caldecott Tunnel and others in the region in the case of a PSPS. This is related to climate change, maybe not a direct part of it, but it's related to it. So, how can we push for some of the technologies so that we are not always so reliant on diesel generators?

Darwin Moosavi: All of this is very challenging but through Caltrans control over maintenance and operations of the State Highway System, we have the capacity to determine what changes we can make to emergency response in order to be more prepared with how we handle climate impacts. These conversations are underway in the department.

Andrea Ouse: From a city perspective, we would like to see local governments kept in the loop so they can assist with the development of these broad scale policies.

Jason Greenspan: I have two questions for Darwin. First, SCAG just released our transportation infrastructure plan for the next 25 years with planned investments of roughly \$630 million. For the discretionary fund you spoke of, is there an opportunity for the MPOs that are going through this process right now to have a spot at the table to talk about how to prioritize those funds?

Darwin Moosavi: Absolutely. Although we do see the immediate needs, we really see this as a long-term conversation. With that being said, we have already taken some small steps in this direction. For example, the Solutions for Congested Corridors guidelines that were just released by the CTC include more land use and VMT reduction considerations, as part of the guidelines. In the long-term, the action plan and implementation plan we want to put together for the Executive Order (N-19-19), we plan to have local governments and other stakeholders involved in that process.

Jason Greenspan: In regard to the climate adaptation plan you mentioned that would be coming soon, in Southern California we will be finalizing our regional climate adaptation strategy and I would welcome alignment on a district-wide basis so that we are all on the same page. I would also like to add to what Kathleen had mentioned earlier about RHNA (Regional Housing Needs Allocation). In Southern California, we are the MPO responsible for allocating the number that's given to us by HCD and that was 1.3 million households. Our methodology has focused on job access and transit access for existing need, over-crowding or if there are cross-burden households. Our MPO has been in a difficult spot to introduce climate adaptation and resiliency when it hasn't been part of the conversation for a while.

Right now, there are opportunities as HCD develops the guidelines for allocating funds from AB 101 to help cities with planning and site selection/suitability. There is a real opportunity to introduce climate adaptation and resiliency into those guidelines. That's also an opportunity for the programs available through SB 3. There are ways to include climate adaptation and resilience into the guideline development, and OPR can play a key role in connecting with HCD on this for pro-housing cities.

Nuin-Tara Key: That is very helpful, thank you.

Tom Collishaw: In regard to the housing question, we're hearing some emerging themes in the San Joaquin Valley from some of our cities who are concerned about the compatibility of RHNA as it relates to housing development and the Sustainable Groundwater Management Act (SGMA). I am concerned that there's a tendency to use these types of issues in ways to not pursue housing opportunities.

John Wentworth: Generally speaking, there is this idea of regions and districts throughout California. It would be helpful for someone to start thinking about where the regions are in the state because there are a lot of different lines being drawn for regions and districts. It would be helpful to start putting some attention towards to where the regions are and how they do or do not overlap.

Solange Gould: I would be remised to not mention AB 1232, which mandates health and equity in anti-displacement measures in the Low-Income Weatherization Program (LIWP). That is an opportunity to see integrated and mitigated adaptation happen to improve energy efficiency for low-income households but also saves costs, and perhaps prevent homelessness for families on a tight budget where the energy costs could be the difference between being housed or unhoused. This is an interesting way to see the connections between climate and social-vulnerabilities.

Jonathan Parfrey: Thanks for that presentation, Solange. Throughout my career, I have learned that public health impacts almost every public policy. Through public polling, it's very clear that the health argument is by far the most persuasive of any argument to get people to pay attention to climate change. I'm curious to see if we could try and find out if there are ways that this body could help you do your work. Following up on this, I have a few questions: (1) what is the budget of the Office of Health-Equity right now? And, how many people are specifically working on the climate issue? And have you performed a gap analysis to where's the need and what kind of budget might be needed to fill that gap?

Solange Gould: Thanks for that question. I do not know what the budget is for the Office of Health-Equity but I do know what the budget is for our Climate Change and Health-Equity Program. It funds five full-time equivalent (FTE) staff. We do not have an extra budget to do work beyond what is required of that staff. Their work is very strategic, as they are responsible for communicating the health and equity impacts of climate change to other agencies. If we could get a climate and health-equity in all policies approach, that could be the most impactful way to use the funds we do have available. Our Director has asked that every program in the department learn how to integrate climate change messages. Moving forward, we will be working to increase the capacity of the whole department to facilitate this type of communication. The best resource I know of to communicate about climate and health is a tool from the Public Health Institute – Center for Climate Change and Health, which put out a guide to help local health departments work on climate change and health. There is a whole chapter on communication. One last thing for the budget. Public health funding is very specific (i.e. tobacco use prevention and obesity), which makes it difficult to take those funds and use it for addressing climate risks. There are a few local health departments that have been able to

address this, which also happen to be the best funded (San Francisco, Los Angeles and San Diego). They have a little more flexibility with non-specific funding.

Jonathan Parfrey: Has there been a gap analysis done by your department to see where you can go next if there were sufficient resources?

Solange Gould: No, but that is a very good idea and I will share it with our new Director.

Kathleen Ave: My question is for Solange. I have a question about the health vulnerability assessment tool that you mentioned. I'm curious about what the indicators look like for that and how you envision it being used.

Solange Gould: It is basically a tool that describes the health impacts of climate change. It has twenty-two indicators, which are identified under Climate Change and Health Vulnerability Indicators & Visualization portal on the CDPH website.

Nuin-Tara Key: A few key takeaways from this conversation as we look into next year, center around the question of housing, transportation, land use, and how these topics intersect with physical climate risk. As we continue to think about this, the planning and land use team at OPR will be working to facilitate more local engagement as we work to incorporate climate adaptation into the planning conversations we are having across the state. On the tools piece, we are hearing the need for state agencies to coordinate across guidelines, on vulnerability assessments, tools, data, and plans. This is and will remain a key priority for OPR, as we move into 2020.

Nuin-Tara Key: Thanks for this great discussion. I would like to take this time to open the discussion up for public comments.

#### **PUBLIC COMMENT**

Anne-Flore Dwyer: I am an architect from Ecosense Designs in Truckee, CA. I have a comment about PSPSs and backup power. I live in a PSPS zone and it is clear that generators are not a good long-term solution. Also, in regards to the work Caltrans is doing is there a process that we can engage in to review the ongoing projects to determine if they are in line with our long-term vision and see if those funds can be better spent somewhere else?

Darwin Moosavi: It's a very long process to review all projects. In fact, some are driven by a local measure. Part of addressing the Executive Order (N-19-19), is thinking about what that process would even look like and how we could do that. On the mitigation side, there are various efforts currently underway that are looking at it (i.e. under SB 743), but not so much yet on the adaptation side. Exactly how we do this will be part of the Executive Order implementation conversation.

Heather Rock: PG&E is looking very hard at a variety of solutions to reduce the scope of PSPS. For example, we are looking at micro-grids and how to sectionalize/better target the grids that are at highest risk. There is no easy short-term solution at the moment, but PG&E is working to find a viable technology solution.

**Action:** None

## Item 5 | Discussion and Consideration of Final Draft ICARP Report and Future Programmatic Directions

DISCUSSION: Presentation by Governor's Office of Planning and Research on the draft final ICARP Report and targeted discussion on program priorities and recommendations for 2020.

Jenn Phillips: Opening up the discussion, what do you think was done well in this report and what do we still need to do to finalize it? Also, what sort of case studies should we highlight? In terms of the 2020 programmatic discussion, what sort of recommendations do you have given our program evolution and our current capacity?

Laura Engeman: The report looks good but I do have a few comments. First, it would be good to add a quantitative number on page 4 to demonstrate the increasing number of climate adaptation mandates that relate to OPR and the need for OPR to have the ICARP TAC weigh in on those items. Second, I think it would be good to highlight who the TAC is, perhaps with a figure or graph to identify what type of entities make up this group. We could also do a case study example on what type of presentations are given to the TAC. As far as recommendations, the slide (in the presentation) that refers to the big picture topics, it's easy to get lost in the wording. I recommend we pull those out and put them front and center to help highlight what ICARP does.

Kathleen Ave: It's a great draft, but I do have some recommendations for edits on wording in the report. Also, I think we should better highlight the urgency of climate adaptation, particularly in reference to recent UN reports. Additionally, on page 2 there is a discussion on the intent of this report, and I think this should be further highlighted as a means to motivate and inspire. Given that, the way it concludes somewhat undermines that point (see page 12). I also thought that AB 32 should be listed in the background on page 3. On page 4, we should highlight why climate action needs to be tailored to specific regional issues (i.e. RHNA). Finally, I think the conclusion should mention in an integrated way why California needs not only state, local and tribal governments to lead the way but also the private sector. This could be a great place to reference that California has continued to grow even as it has become more energy efficient. I would also like to offer to put together a new case study for the living future buildings in California, as an example of private sector engagement in climate action.

Brian Strong: This report was very well written, great job. I also think that highlighting the sense of urgency is very important. Furthermore, it would be useful to have something up front that shows (graphically) how ICARP fits into the greater context of the state's climate work and California For All. I would also like to see how ICARP and California's work on climate adaptation compares to other states that are taking on climate change (i.e. Florida). Overall, I think the recommendations were really good. Following up on what Jonathan had previously mentioned, I think we also need our own gap analysis to help us develop our own short, medium and long-term goals.

John Wentworth: I have a few things that I would like to share. First, the importance of terminology is huge. For example, equity is mentioned but I cannot find a definition of it anywhere in this report. Vulnerable communities, disadvantaged communities and California For All are other terms that would be helpful to define. I think this report speaks from the right altitude but we need greater clarity on how Regions Rise Together and some of these other initiatives, along with ICARP, all fit together. Building on what Brian Said, I also think it would be great to see how we could tee our work up, which is very much focused on a local and regional level, and share it with the rest of the country. In regard to the urgency mandate, I would be a little careful about that. Finally, I think we should keep this report simple enough so that it is short and printable.

Solange Gould: Great job on the report. I would like to second John's comment that more of a description of equity needs to be highlighted. Fair and healthy climate action requires addressing inequities that can exacerbate community vulnerability. We do have very good definitions of equity at the state such as, health-inequity. ICARP has a great opportunity to elevate the ways we can address public health impacts of climate change, through solving upstream injustices.

Karalee Browne: There is one thing that I would like to see elevated and there a few ways to do this. The strength of this TAC is due in part to the diversity of the folks on it. There are great examples of partnerships from the research symposium that Jonathan's group help put together, that highlighted collaborations between tribal groups, cities and state agencies on the topic of resilience and adaptation.

David Loya: I would also like to acknowledge that this report was really well done. One of the things that could be brought forward more is why this report is important to you (the reader). I think it ties back to some of the integration we're doing and how it ties into the work being done on the local level.

Jonathan Parfrey: I very much appreciate the last sentence on the first page that speaks to the evolution of the program, but I think there could be an even stronger statement. The TAC has been a body that has helped enhance the understanding of climate resilience over the last three years and I think we should do our best to highlight that.

Nuin-Tara Key: Thanks for all those comments. I'm going to do a quick summary of the key points I heard from around the room and then I'm going to make a proposal for action. The comments I heard are as follows: (1) balance the language around urgency and where to prioritize near-term action and long-term planning; (2) the need to better highlight the different case studies that display private sector, special districts and tribal work in the climate adaptation space; (3) put together a graphic of where ICARP sits in the state landscape; (4) make the report available on OPR's website and link it to other resources on the Adaptation Clearinghouse; (5) highlight the diversity of membership on the council with graphs or summaries to identify the type of representation; and (6) develop a description on why this report is important for our key audiences.

Jenn Phillips: A few additional key points to add are: (1) highlight the growth in legislation that specifically calls out OPR or ICARP, using graphs or other illustrations; (2) some council members have provided testimonials, so if any others would like to do so, please send me a sentence or two to include.

Brian Strong: Are there any thoughts about comparing us to other states? For example, Florida is doing a lot of work.

Jenn Phillips: Yes, I meant to flag that. Fortunately, we are a very active partner in the US Climate Alliance, so we may be able to lean on that group and pull something together to help us compare our work with work being done in other states.

Kathleen Ave: Brian, are you speaking specifically towards the regional climate compacts in Florida or are you talking about state government?

Brian Strong: The climate compacts are interesting, but I am also talking about state government. They're doing a lot at the state level (they have their own resilience officer).



Kathleen Ave: I also wanted to check on Brian's input regarding short-term, medium and long-term goals.

Nuin-Tara Key: Yes, I am going to tee that up for an action item.

Jonathan Parfrey: I have a recommendation to reach out to Jessica Grannis at Georgetown Climate Center. She could perhaps contextualize ICARP's role as it relates to the rest of the country.

Nuin-Tara Key: My proposed action for this agenda item is that we vote to approve the language with the summary of edits and additions that will be made, and we propose to adopt it as is. Additionally, I would like to add a second piece to this action, which is to hold a work group meeting in January to have a discussion around prioritizing short, medium and long-term actions for 2020 (in reference to programmatic priorities listed on pages 11 and 12 in the report).

John Wentworth: Madam Chair, do I hear a motion?

Nuin-Tara Key: Yes.

John Wentworth: The motion sounds appropriate but I would like to make sure that the notes that staff read back are included as part of the motion.

Nuin-Tara Key: Yes, but before we make the motion I would like to ask if there are any public comments on the report or the motion on the table.

**PUBLIC COMMENT:** No public comment was received.

**ACTION:** Voting to approve draft final language for ICARP Report and 2020 program priorities

Motion: Nuin-Tara Key  
Second: John Wentworth  
Aye: All  
Abstain: none

## **Item 6 | Presentation on Recent Resilience reports from Asian Pacific Environmental Network and Greenlining Institute**

**DISCUSSION:** Presentation by the Asian Pacific Environmental Network on Mapping Resilience Report; Presentation by Greenlining Institute on Making Equity Real Report.

Sona Mohnot: To help direct our group discussion, we invite the folks here to think about the following question: "what are the policy opportunities to achieving equitable adaptation policy in California? (e.g. research partnerships, CalEnviroScreen 4.0 update)"

Nuin-Tara Key: Thank you. Your point of no more data or tools definitely resonates. Although, I do appreciate that you highlighted that our knowledge of adaptive capacity is not at the same level of understanding as risk and sensitivity. At OPR we are trying to think about the relationship between Cal-Adapt and the Adaptation Clearinghouse, recognizing that the clearinghouse is a repository of information (we're not developing new tools). What we are trying to do is figure out how to better integrate Cal-Adapt into the Adaptation Clearinghouse.

Karalee Browne: There are so many local governments struggling with creating equity in a lot of their policies. Currently, we are working with the City of San Diego to develop an equity framework for the climate programs they are working on, and I couldn't help but share the development of these reports with a colleague who is assisting me with the project. So, thank you for these reports.

Tom Collishaw: We are doing some work in the San Joaquin Valley (SJV) on disaster preparedness for vulnerable and disadvantaged communities. One of the early things we learned is that not all of the SJV counties account for vulnerable and disadvantage communities in their emergency preparedness plan. From a policy standpoint, these county plans need to integrate whatever feedback we can get from the vulnerable and disadvantaged communities we are working with.

Amee Raval (APEN): Some organizations, including APEN, supported the passage of SB 160 which requires cultural competence and community engagement in developing county emergency plans. The challenge is, there isn't a regular schedule that requires a plan update. There is a need, at the county level, to integrate emergency planning into these culturally diverse communities.

Kathleen Ave: I'm curious about the comment you made regarding the analysis and metrics part, because in our experience the process piece has been very challenging. We have dueling issues, which includes fatigue among community members who are already stretched thin and are not compensated for their time to participate in multiple forums, as well as navigating the process challenges. I'm curious about that point. On the metrics side, is there discussion in the reports about using economic status and health disparity metrics to help focus on spending or the intermediate things that don't actually change the health outcomes in these communities?

Sona Mohnot: I agree with your general assessment about the process. A lot of communities feel that we're doing so much planning but we don't actually see projects on the ground that are implemented, which creates a lot of planning fatigue. At the root, it appears to be a lack of capacity (generally speaking). We think there needs to be a lot more resources going towards capacity building and technical assistance activities. Once community members have those skills, it becomes much easier to continue engaging in this sort of process. Building on this, Greenlining helped pass SB 1072, the Regional Climate Collaborative Program (RCCP). This program has the potential to bring different groups together, help facilitate these conversations and move a lot of these planning efforts into implementation. However, until that program is funded, our report has identified a lot of really good practices to help promote strong community engagement. A lot of it is derived from SB 1000. I would recommend folks turn to that as a reliable resource, for the time being.

Amee Raval: As a community-based organization that's doing base building work with residents, we advocate for integrating into our processes, education techniques that invite people to participate. On your second question, I would invite you to take a look at the many tools we highlight (i.e. the healthy places index) as a strong comprehensive framework that looks beyond poverty and income.

Kathleen Ave: Thank you, I will definitely do that. At the department level, who's going to take on the challenge of moving the needle on asthma rates, cardiovascular disease and wealth inequality in impacted communities? Those metrics at a jurisdictional level, is what I am getting at. Thank you.

Brian Strong: Following up on my point earlier, how do you give this thing a sort of longevity? I like the idea of incorporating it into all parts of the program. The one area I think we also need to have follow up on is to track the equity impacts in each aspect of the program. I don't know if folks here have looked at the equity indicators work coming out of the CUNY Institute for State and Local Governance in New York City. They did a pilot with six or seven cities around the country, including Oakland, Boston, Tulsa, and Saint Louis. These cities (and others) were given an equity score (climate and health were big components of it). This may be something else we may want to look at in terms of how we develop some of these tools.

Sona Mohnot: Thanks for pointing out that resource, we'll definitely look into that.

John Wentworth: I have a few questions. When you talk about mapping, is there a consistency with the platforms? Is it GIS based?

Amee Raval: It's all over the place. In terms of the accessibility, the data visualization is very different. Some are more user friendly and intuitive, and others are more difficult.

John Wentworth: In your work, did you engage with federal data? For example, can you speak about federal data vs state data?

Amee Raval: There are several comprehensive frameworks at the national level, but they are limited to the data that's available at that scale. So, the vast majority of the data we reviewed is from California. The name of the tool is, Climate Resilience Screening Index. We are really advocating for a statewide approach.

John Wentworth: Through gathering all of this data and information, have you found resources that are scoring natural resources as assets that are part of the solution for offsetting the challenges that you're seeing?

Amee Raval: There are some tools that do offer the intervention side of nature-based solutions, but not necessarily in a quantitative way.

John Wentworth: Is this potentially an opportunity to bring some of the nature-based solutions into the equation?

Amee Raval: Yes, I think so. As long as it doesn't mean creating a new map that competes and doesn't necessarily integrate with existing resources. There are research gaps that we can and should continue to explore, but my recommendation would be to integrate with existing efforts and build on the foundation of existing tools. The Nature Conservancy does have a coastal resilience tool for California around some of the nature-based flood reduction strategies that may be worth taking a look at.

Solange Gould: Thanks for these great reports. I would recommend to everyone here to get in touch with your local health departments and ask them to start tracking this data. Also, I would like to respond to your question around policy opportunities. Many folks around the state are involved with GARE (Government Alliance on Race and Equity). It's been very internally focused on hiring, recruitment and retention practices. I think there is a great opportunity to work with locals to align their GARE work with

climate resilience work, as a next step. Transformative Climate Communities (TCC) is an excellent example of this.

Laura Engeman: I would like to underscore your point on capacity building and the need to enhance our adaptive capacity. We need to align our resources so we have community partners involved in policy throughout implementation. Transformative Climate Communities (TCC) is a great example of building community engagement.

Nuin-Tara Key: I would like to extend a huge thank you to both Ameer and Sona for the presentation. Two quick closing comments: (1) this presentation will be really helpful to ICARP and the council as we think about the next steps moving into 2020, especially as we think about how to track our progress over time in improving adaptation and resilience outcomes; (2) this is a perfect segue into the next presentation on the APG, which is a process guide.

**PUBLIC COMMENT:** No public comment received.

**Action:** None

## **Item 7 | Overview of Public Review Draft of Adaptation Planning Guide**

**DISCUSSION:** Presentation by the Governor's Office of Emergency Services and consultant team on the Adaptation Planning Guide 2.0 process and update.

David Loya: It looks a lot easier to use. One recommendation I have is to take the presentation, or some synopsis of this, and add it as an appendix so locals can use that to explain the guide overall.

Derek Lambeth (CalOES): The PDF version you have is not actually the final version of the guide. It will actually live on the clearinghouse where it will be a very interactive tool so folks can access and manipulate as they need.

Jose Lara: There will also be some outreach material that will give you the synopsis that you're looking for. It is currently not available right now, but we will make it available at the second public review.

Karalee Browne: I think you guys did a very good job on this. I am happy to see it aligns with ILG's training so we don't have to retrain local governments.

Jonathan Parfrey: Thanks, Karalee. On pages four and five, there is a statement on what the APG is. This will help folks on the local level update the safety element of your general plans, but it is not a point-by-point guide to do that. However, if you're creating an adaptation plan, this can be incredibly helpful. Related to local hazard mitigation planning, this will also be very helpful but it is not a guide to do a local hazard mitigation plan update.

Jose Lara: The basis of this guide is to support local governments in integrating climate into everything that they do.

Nuin-Tara Key: I would like to add that this is just a guide and not state guidance. From OPR's perspective, it is important to point to the General Plan Guidelines as the guidance on how to meet

state law. So, it would be great during the review process to get your (local governments) feedback on whether the language isn't clear on that point.

Laura Engeman: On the front, you could add something to clarify that the APG is just a resource for local governments.

John Wentworth: Our community went through this process and it was very interesting. I am curious as to whether there is anything in here that points toward how to work with a consultant that your town, city or county is going to hire.

Miles Gordon (CalOES): As a spinoff to this project, I have been working with a few counties in test driving this new resource. I will complete a paper by July 2020 that will provide a review of how successfully local governments were able to incorporate the APG 2.0 into their local planning efforts.

Jonathan Parfrey: The authors did consider how to provide advice to municipalities on working with a contractor for this work. I anticipate that the final version will have a box with a few key recommendations.

Laura Engeman: It may or may not be addressed in the vulnerability component but one thing from the science side that is coming up frequently is compound vulnerabilities. This often is revealed in the public comments. In the consultant formula for doing vulnerability assessments, it's typically very siloed and it doesn't actually leave room to think about some of the compound effects of multiple hazards on top of each other.

Jonathan Parfrey: That's a great question on cascading impacts. We will be addressing that.

Sona Mohnot: You mentioned that this would be an iterative document. Will you be looking for case studies on how local governments will be applying the guidance?

Nuin-Tara Key: The content will be finalized over the coming spring and we will be working to integrate the APG content onto the clearinghouse. As we continue to update content, we can in real time, pull in new case studies on how local governments are using the APG. If we want to develop case studies on specific steps, we can also look at that too.

Jonathan Parfrey: The authors would very much appreciate any case studies that would be appropriate to add to this draft and the final version.

Derek Lambeth: Please don't forget to use the survey link as a way to highlight any particular case studies that you'd like to add.

Jose Lara: We will be working very hard to build a system to track and follow up with local governments, so we can learn from their experience using the APG.

Brian Strong: This is a big improvement from the last time. I would like to emphasize how important it is to make this resource consumable. It's great that this will be made available on the clearinghouse. I also think having certain areas sectioned out by chapter will really help local governments navigate this document, so they can find what they're looking for more efficiently.

Jason Greenspan: Looking through this, I find it very accessible and direct. Does this guide allow for a less well-resourced community to go beyond a particular range of stressors and to address a much broader approach within their budget constraints?

Derek Lambeth: Yes, I think so. It takes you from scratch on how to put your team together, it accounts for entities and organizations to include and it directs you step by step from there.

Jonathan Parfrey: The audience we had in mind was an under resourced municipality.

Kathleen Ave: I think the language in the APG can also be of critical value to private and non-governmental organizations and their planning efforts. Yet, I feel like we still aren't getting to the deep integration of what we have to do to actually accomplish this work. It may be useful to add in some language on page four to identify this gap. Is there any discussion in here on retreat?

Derek Lambeth: If you could please provide that feedback in the survey, we would really appreciate it.

John Wentworth: How specific is this document to California and can this be integrated into other state's adaptation and planning efforts?

Nuin-Tara Key: A few things from the OPR perspective. We were looking at the evolution of adaptation planning beyond California, such as the U.S. Climate Resilience Toolkit. The language in here is California specific in the sense that it is tied to specific state laws. Our focus has been developing this as a resource for local governments here in California, but it isn't detached from that broader state of practice.

Jonathan Parfrey: There was a lot of discussion among the authors on who our audience was. The focus was very much on municipalities in California but there is no reason why this process cannot be adopted by others.

Solange Gould: This is an excellent guide that identifies the communities that need to be engaged, from a climate and social vulnerability perspective. However, there still is a major gap in empowering new stakeholders to engage in the process.

Jonathan Parfrey: The goal is to empower an entire set of individuals that haven't engaged.

Karalee Browne: Too few locals are trying to empower their communities. ILG does offer tools for communities that do want to engage and we are happy to share those resources with this group.

## **PUBLIC COMMENT**

Sarah Risher: I am Sarah Risher, formally a fellow at CalOES, and I am now with the Strategic Growth Council. I wanted to respond to a comment made earlier by John about how communities can engage with consultants. There will be a need for consultants on technical pieces but the idea is that the APG would help build capacity so local government staff could do some of the work in-house.

**ACTION:** None

## **Item 8 | General Public Comment**

**PUBLIC COMMENT:** No public comment received.

**Item 9 | Closing, Future Agenda Items, Meeting Adjourned**

Nuin-Tara Key: Thank you to all of our council members for another wonderful year, I really appreciate all your time and effort that goes into helping us build our program. Looking into 2020, some of the council members are either midway or finished with your two-year appointment. If you are at the end of your term and would like to stay engaged, please send Jenn an email. As a reminder, all appointments are made by the OPR Director (Kate Gordon).