



Integrated Climate Adaptation and Resiliency Program

Technical Advisory Council

April 2, 2018
Meeting Minutes

375 Beale Street, Suite 800
San Francisco, CA 94105
9:30am – 4:00pm

1. Welcome

2. Roll call

Craig Adelman, Kathleen Ave, Kit Batten, Louise Bedsworth, Louis Blumberg, Keali'i Bright, Karalee Browne, Jason Greenspan (on behalf of Darin Chidsey), Jana Ganion, Solange Gould, David Loya, Sona Mohnot, Andrea Ouse, Jonathan Parfrey, Bruce Riordan, Brian Strong, Gloria Walton, John Wentworth

Absent: Danielle Bergstrom, Ashley Conrad-Saydah, Tina Curry, Elizabeth Rhoades

3. Approval of draft minutes ([12/08/17 meeting](#))

Louise Bedsworth opened the floor to voice any changes that needed to be made to the December 2017 meeting minutes or to motion for their approval.

DISCUSSION

Jonathan Parfrey: I have a proposed change to the bottom of p. 11, concerning the upcoming SGC research funding opportunity. Although my comment did concern achieving GHG saving with reflective materials like cool roofs that also help with adaptation (cooling), my question was whether the funding was for GHG emission reductions only, whether SGC is taking that definition literally, or if research programs could qualify if they study effects that preemptively reduce radiative forcing in the first place, such as cool roofs.

Kit Batten: I have a point of clarification on the top of p. 2. The last sentence states "All of this information is in the RAMP filing, which is publicly available on our site." It should say "All of this information is in the RAMP filing, which will become publicly available on the CPUC site."

PUBLIC COMMENT

No public comment was received by OPR staff.

ACTION

Adoption of December 8 meeting minutes with the above amendments.

Motion: Jonathan Parfrey

Second: Gloria Walton

Aye: Kit Batten, Louise Bedsworth, Louis Blumberg, Keali'i Bright, Karalee Browne, Jason Greenspan (on behalf of Darin Chidsey), Jana Ganion, Sona Mohnot, Andrea Ouse, Jonathan Parfrey, Bruce Riordan, Brian Strong, Gloria Walton,
Abstain: Craig Adelman, Kathleen Ave, Solange Gould, David Loya, John Wentworth

4. ICARP overview and approval of revised Technical Advisory Council Charter

Louise Bedsworth presented to the Council a brief overview of the Integrated Climate Adaptation and Resiliency Program and reviewed the draft changes to the ICARP Technical Advisory Council Charter.

Louise Bedsworth:

Most people are familiar with the ICARP program that was established by Senate Bill 246 by Senator Wieckowski in 2016. The Program was established to coordinate adaptation activities at the state, local and regional government levels. There are two main components of the Program, which are this Advisory Council and the creation of an online Adaptation Clearinghouse. We will review the Adaptation Clearinghouse in a later agenda item. Over the course of this year, we are trying to figure out ways to engage and interact more with the public that can help to inform products of this Council, and how to make this Council most effective.

Last year we established what we are working towards by adopting a set of vision and principles, which lead to a desire to spend more time discussing how we define vulnerable communities in the context of this work. We will be continuing that discussion today.

This Council is also subject to the Bagley-Keene Open Meeting Act of 2004 that requires all Council meetings to be open to the public. This requires that all meeting locations and agenda items be posted ten days in advance of any meeting. Due to the barriers this can pose for convening such a large council that covers a wide geography of the state, we hold four Quarterly meetings, but also hold Workgroup meetings via webinar between meetings to have more in-depth conversations where needed. For this reason it is important that you share your participating locations prior to all Workgroup meetings.

With regard to the Charter, two substantive changes are proposed for Council adoption. This is the change from one-year to two-year staggered terms to ensure continuity. Also, under "council leadership" we revised the Vice Chair section to indicate that the OPR Director *may* designate a Vice Chair (changed from "shall").

DISCUSSION

Louis Blumberg: Are we funded on an annual basis?

Louise: The bill appropriated funding for two years for the program but is subject to annual appropriations after the first two years. The positions will remain but funding must go through the budget process each year. We will make this clearer in the charter language.

Brian Strong: I like the idea of staggered terms. What is the number of new and returning people?

Nuin-Tara Key: There are 5 new members and 18 returning members.

ACTION

Approval of revised ICARP Technical Advisory Council Charter

PUBLIC COMMENT

No public comment was received by OPR staff.

All: Aye

5. TAC Vision Framework – defining vulnerable communities

Nuin-Tara Key presented to the Council a brief overview of the proposed definition of “vulnerable communities” for the council’s consideration.

DISCUSSION

Nuin-Tara Key: One of the first accomplishments of the council was the adoption of vision and principles. The decision was made in September 2017 to adopt the vision and principles with the decision to work on defining vulnerable communities as a next step. The direction of the Council was that the definition should be actionable within a California context. The Vision and Principles Workgroup met in February to discuss a draft definition and supplemental materials provided by staff. Today, our aim is to adopt the revised definition based on feedback from the Workgroup and to receive feedback from the Council on the supplemental materials to the definition. These supplemental materials are meant to help make the definition actionable and may serve as a living document.

The following definition is presented for the Technical Advisory Council’s consideration:

Vulnerable Communities

Climate vulnerability describes the degree to which natural, built, and socio-economic systems are at risk of exposure to climate change impacts. Vulnerable communities experience heightened risk and increased sensitivity to climate change, and have less adaptive capacity to cope with, adapt to, or recover from, climate impacts. These disproportionate effects are caused by one or more physical (built and environmental), social, political, and economic factor, which are exacerbated by climate impacts.

Nuin-Tara Key: The first sentence of the definition serves as context setting. The second sentence answers the question of *what* it means, and the third sentence aims to get at the underlying factors to answer the question of *why*.

DISCUSSION

Kit Batten: Please add “(s)” after factor.

Bruce Riordan: I am bothered that people aren’t mentioned in this definition. Perhaps we should say “natural, built and human systems” to direct our attention to the fact that people are a big part of this.

Louis Blumberg: Yes, or we could use a term like “human communities.”

Gloria Walton: How do people feel about being explicit about race, national origin, class etc.? I think that would be helpful in the definition in the third sentence.

Solange Gould: I agree that we should add a human aspect. I think it would also help to specify what we mean by sensitivity. I also wonder if it would help to list all of the social/demographic aspects of vulnerability. “Increased sensitivity” and “adaptive capacity” are a little wonky and don’t feel intuitive. I think it could help to add examples of these terms in parenthesis.

Craig Adelman: I would like to echo Bruce and Gloria's statements. I think the definition is technically proficient. If we want this to be a communication tool to the general public we should rectify it with "socioeconomic and racial systems" in the first sentence.

Brian Strong: I do think it feels a bit wonky. However, I think the context is important. Do we want this to stand alone or will it be paired with the other document we have here? My understanding is that this definition will be for practitioners. In that case, do we think about it differently? I also want to address the human side and examples of vulnerable communities in the clarifying document.

John Wentworth: I am concerned that there lacks a holistic sense of what climate change means, including animals and natural systems.

Bruce Riordan: I agree with that, but the first sentence addresses this.

Kit Batten: I am afraid we could discuss this forever. There is a need for succinctness, but I also think it could be useful to give examples of vulnerable communities, as Solange suggested. I am worried about including an exhaustive list being too much or potentially leaving out key populations. I recognize the intent here is to have something understandable and not too lengthy, but people also need to see themselves in this.

Louise Bedsworth: I think we have a lot to ask of three sentences to stand alone and should recognize that is likely unachievable. We have a lot of resources that were created through the EO B-30-15 TAG guidance process. We also haven't talked about the supplemental materials provided yet. This can reside on the clearinghouse and be a living document.

It sounds like we all agree to add the reference to factors including race, class, national origin, and income in the last sentence. We can recognize a plethora of vulnerabilities but are elevating these.

Jonathan Parfrey: I strongly support that. I would also like to defend keeping "sensitivity" and "adaptive capacity." If people aren't familiar with that language and this framework, we want them to be. It shows that we are trying to create policies that align with the global approach. If it were a public document not meant for practitioners, I would suggest changing this language.

Karalee Browne: I don't have problem with including sensitivity. Perhaps we could use the word "ability"?

Kathleen Ave: Highlighting racial injustice and concentration of wealth is incredibly important. These are a major societal issues today and thus more important to focus on in the future.

Craig Adelman: We originally focused on the word "thrive" as being important in communities adapting to climate change. This works in context of our current political climate. I struggle with how we draw the line with specificity if we are to call out examples of vulnerable communities. We should think more about the third sentence. I do agree with the observation about redundancy of adaptive/adaptive capacity and think we should strike "adaptive" in "adaptive capacity."

Brian Strong: Yes, just say "less capacity"

Sona Mohnot: I strongly support explicitly mentioning race and class and referencing examples throughout. For example, after the word "capacity" – add parenthesis (eg. access to air conditioners or vehicles). This would give context outside of the full document.

David Loya: We could have exhaustive list but reference the fact that we have legal and social systems in place that impact race and class. There should be an explicit statement that mentions race and class. This doesn't have to be exhaustive. We can state that there are other characteristics that have disproportionate impacts. We should also add a reference to LGBTQ communities.

Craig Adelman: I am questioning whether we need the term "socioeconomic."

Louise Bedsworth: We can use the word "human" here instead.

Bruce Riordan: We should remove "one or more" to make the first sentence less wordy.

ACTION

Approve proposed "Vulnerable Communities" definition:

Climate vulnerability describes the degree to which natural, built, and human systems are at risk of exposure to climate change impacts. Vulnerable communities experience heightened risk and increased **sensitivity**¹ to climate change and have less **capacity**² and fewer **resources** to cope with, adapt to, or recover from climate impacts. These disproportionate effects are caused by physical (built and environmental), social, political, and/or economic factor(s), which are exacerbated by climate impacts. These factors³ include, but are not limited to, race, class, sexual orientation and identification, national origin, and income inequality.

PUBLIC COMMENT

Abby Halperin (Pacific Forest Trust): Add "and/or" before economic factor(s).

Motion: Brian Strong

Second: Andrea Ouse

All: Aye

Supplemental materials: [Staff Memo "Vulnerable Communities"](#)

Nuin-Tara Key: The direction last year from the Council was that a definition alone is not actionable. The purpose of this document is to provide practitioners in California with an overview of publicly accessible resources that help to make this definition "actionable." It highlights existing state-wide assessment tools, provides suggestions for additional indicators that could be used on a case-by-case basis, and a list of process guides that outline a series of questions that can inform both the analytical and engagement processes when defining vulnerable communities. This is not intended to be an exhaustive inventory of all resources and is not legal or policy guidance.

¹ "Sensitivity is the degree to which a system or species is affected, either adversely or beneficially, by climate variability or change. The effect may be direct (e.g., a change in crop yield in response to a change in the mean, range, or indirect (e.g., damages caused by an increase in the frequency of coastal flooding due to sea level rise)." (*IPCC, 2014: Climate Change 2014: Impacts, Adaptation, and Vulnerability*. https://www.ipcc.ch/pdf/assessment-report/ar5/wq2/WGIIAR5-AnnexII_FINAL.pdf)

² "Adaptive capacity is the ability of systems, institutions, humans, and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences." (*Ibid.*)

³ Governor's Office of Planning and Research. *Executive Order B-30-15 Resiliency Guidebook: Vulnerable Populations*. 2017. <http://www.opr.ca.gov/planning/icarp/resilient-ca.html>

Based on the conversation today around the definition, we can also bring in additional resources from the TAG guidance and include some definitions. The goal is to host this document on the Adaptation Clearinghouse as a resource. This will incorporate the definition that was adopted today.

DISCUSSION

John Wentworth: For a lot of smaller communities, General Plan updates alone are very difficult. It would be useful to include a section on what would be helpful to use this in the context of a General Plan.

How do you anticipate these things are maintained that could be useful for a variety of stakeholders? It would be useful to understand how staff maintains this document (such as the additional indicators). We should include in the additional indicators “communities experiencing wildfires.”

Keali’I Bright: This will also be a helpful resource for state agencies and staff who are incorporating climate adaptation considerations into new or existing grant guidelines. For example, if Prop 68 passes, there will be a number of new grant programs that will need to incorporate climate considerations and vulnerability. For many grant program managers, this will be the first time they’ve done so. A resource like this will be useful guidance for them. We should start thinking about how to ensure state agency staff know about this resource.

Jana Ganion: I suggest the addition of “tribal community demographic data” under on p. 7. Tribal demographics are notoriously inaccurate (undercounted), so it is worthwhile for people to investigate whether census demographic data are correct or the best source of information for an assessment process. Under environmental hazards, I also suggest adding a reference to AB 617 high hazard communities for air pollution. Under “public/private utilities”, add households that don’t have connection to electrical grid and households without internet/broadband. Add the phrase “lifeline sector,” which encompasses energy, water, food, communication, IT and transportation.

Bruce Riordan: We should also include the Indicators of Climate Change report under the list of available tools and data when it is published. I find this to provide good context and is very accessible.

John Wentworth: We should also add to the list “smoke from controlled managed wildfire burns”

Brian Strong: There are also issues of smoke from wildfires too. Earthquake and flood insurance are also important but those may already be captured here. I also support adding the term lifeline sectors to this list too.

Kit Batten: Households with water or energy shut off in last 12 months should also be included.

Kathleen Ave: It would be good to include something about whether or not the community/individual made the choice to be off grid or not. I will follow up with ideas on this.

Jana Ganion: Yes, it is important to capture households that have never been connected to the grid and not by choice.

Jonathan Parfrey: The state of California has identified 16 different climate zones. It might be helpful to have that as a guide to where there are common planning strategies that take place in each of those zones.

Louise Bedsworth: I also think we should move all asterisks to bottom of table rather than mixing in with footnotes because hard to follow.

Gloria Walton: Someone made reference earlier to geographic terrain (urban, sub rural, rural, etc.). Is that captured anywhere here?

Nuin-Tara Key: This is captured in some of the factors in the first column of the table.

Solange Gould: One related comment is that on p. 4, I think we should be referencing sensitivity, not just adaptive capacity. Is there an indicator in here that addresses food access/prices?

Gloria Walton: I appreciate this conversation around centralized/distributed grid models. While this is not the place for this conversation, I would like to eventually discuss the democratization of energy and where leaders are headed towards for a new model for energy.

Kathleen Ave: We should also discuss the use of local resource bases, such as processing of local waste, local manufacturing, sourcing, purchasing, etc.

Louis Blumberg: I would like to address the context of this document. A table of contents would be useful. Be sure to frame this as a resource guide that fits into the vision and principles. Identify this as a draft set of living indicators and describe how this all fits together.

Louise Bedsworth: Thank you all. Please send any additional comments to us via email.

PUBLIC COMMENT

Coastal Commission: This will be a helpful document for us. It would be even more helpful if it outlined how this can be used in coordination with definitions of disadvantaged communities established through legislation and in government codes. I would hope that using the definition adopted today does not leave out these other communities.

Abby Halperin (Pacific Forest Trust): I would like to support John's points by suggesting looking for ways to include natural infrastructure in this.

6. Adaptation Clearinghouse demo

Nuin-Tara Key provided a [presentation](#) on the beta site of the California Adaptation Clearinghouse, including an overview of feedback received to date and next steps.

Nuin-Tara Key: Staff have been working on this resource over the last year. It is a database driven and query-able resource that allows users to find information to answer specific questions. Each resource is tagged with a suite of curated fields and have been organized by topic. Our partnership with OPC on their AB 2516 database produced by the Climate Readiness Institute makes the site very heavy on the sea level rise impact, but we are working to build out some of the climate impact and topics areas that are lacking over time.

We are currently in beta testing and are planning for a public launch this summer. It will be a living database that is continually updated.

Nuin-Tara Key provided a demo of the site: <http://resilientca.org/>

DISCUSSION

John: Will it be a https site? OPR's site has been a challenge to access lately, which needs to be addressed.

Nuin-Tara Key: We understand the challenge with the website not being a secure site (https) but since we are not hosting secure data, it will be an http site for cost saving considerations

Jonathan: I noticed that the City of Inglewood is not tagged under LA region.

Nuin-Tara Key: Thank you, this may be because the map search functionality is not completely built out yet, but we will also make sure this isn't an issue with our tagging

Louis Blumberg: There are many cities and counties that have climate action plans. Are the ones that are included only those that include adaptation?

Nuin-Tara Key: Yes

Kit Batten: Will there be room for private funding opportunities to be included on the financing page as well?

Nuin-Tara Key: Yes

John Wentworth: What is the best way to provide meaningful feedback on the topic pages?

Nuin-Tara Key: We have provided an online form for users to submit feedback. If the form is useful for you that is great. We are also happy to set up conference calls to talk directly with you about this. If other people are interested in this we can set up a public call for this specifically. If you have suggestions for people within your region to reach out to we are happy to do this.

John Wentworth: Is there a deadline to submit feedback by?

Nuin-Tara Key: We would like to get most of our feedback by the end of April.

Jonathan Parfrey: I saw Cal-Adapt linked on the site somewhere, but maybe it needs to be elevated in some way. A related thought is about the amount of research studies that have been performed. Providing even just abstracts on this site would be very helpful. If a local practitioner wanted to come here for urban heat island strategies, it would be useful to have studies here. Perhaps this is something that Cal-Adapt should be doing instead.

I also think it would be useful to have California's guidance across different topics/impacts here with examples of how to implement key adaptation strategies through the best practices, stories, and examples.

Bruce Riordan: Through our contract for AB 2516, we have been working on "spotlights" that highlight specific challenges specifically. We initially wanted to tag resources by challenge, but that proved to be very difficult.

Brian Strong: How will this be maintained? Is this maintained through budget requests?

David Loya: Maybe people can submit items to help with the amount of work that it takes to add and update resources?

Keali'i Bright: This resource will take a large amount of work over time to be successful. Be sure to track your workload now to let the legislature know that this needs even more funding, recommend talking to Department of Finance as a first step. I like the feature that highlights state funding. We need to think proudly as possible for this (like including Prop 68 here). It will be difficult to organize and manage information for these funding opportunities. I suggest organizing funding by legislation, too.

Sona Mohnot: Will users be able to save resources?

Nuin-Tara: Not right now, but this is something we may look towards in the next fiscal year if we receive more feedback on this.

Jana Ganion: In terms of key words/tags, do they refer to key words envisioning principles such as green infrastructure?

Nuin-Tara Key: Yes

Kit Batten: I think this will be of interest to jurisdictions outside of California. Do you have a communication or outreach plan for this? There was a lot of hope for this kind of product coming out of the Obama administration. Sharing the development of and lessons learned from this would be helpful.

Karalee Browne: I encourage you to maintain resources and analytics to make sure this stays fresh. I have found through my work that adaptation gives the ability to connect with rural communities that we hadn't connected with in the mitigation space.

Andrea Ouse: Try to aggregate resources to guide users through the case studies and topic areas. I would also stress the importance of having very clear summaries so that they are useful and folks don't have to spend time reading the resources themselves to get a good understanding for the resource.

Solange Gould: I agree with Keali'i on needing to talk with the Department of Finance about this. There is also no funding right now for locals that want to address the human impacts of climate change. We spend a lot of time integrating public health language into other grants. I think it would be worthwhile to create a tab on the investing in adaptation page that is held for human and social resilience, as this is something we need. There are very few social service, public health funding sources, but I would like to say that we at least have a placeholder. Also, we should include the Federal Reserve Bank as a resource.

Craig Adelman: We should elevate integrated approaches. Could this be a database search function?

Nuin-Tara Key: We will go back through our language throughout this site to make sure we are highlighting integrated approaches across topics and maybe in a more specific place.

Bruce Riordan: What we heard clearly was to not silo this piece of work. Link to CAF, bring to workshops, could use this to become a big part of this program. This applies to everyone in room.

John Wentworth: How do we make sure we leverage resources to find synergies and not self-silo?

PUBLIC COMMENT

No public comment was received by OPR staff.

7. 1:00pm-3:30pm Workshop Session: Tracking Adaptation Progress

Nuin-Tara Key provided a presentation that reviewed the framework, where it came from, and the Council's intended use of it.

Dana Brechwald of ABAG/MTC next provided a presentation of their application of a similar framework.

Two public workshop sessions were held to:

1. Review and discussion of proposed framework to assess progress on adaptation efforts in California.
2. Review and discussion of proposed application of the framework to existing planning processes at the State and local levels.

8. GENERAL PUBLIC COMMENT

No public comment was received by OPR staff.

9. MEETING ADJOURNED