



Integrated Climate Adaptation and Resiliency Program

Technical Advisory Council

Visioning Workgroup
February 23, 2018
1:30-3:00pm

Meeting Minutes

1. Welcome

Nuin-Tara Key, OPR

Nuin-Tara Key welcomed the group and provided brief background information for the purpose of the meeting.

The TAC adopted its vision and principles in September of 2017 with the caveat that more work needed to be done around defining vulnerability. This workgroup is here to discuss this today.

2. Roll Call

Nuin-Tara Key, OPR

Council Members: Jonathan Parfrey, Kathleen Ave, Sona Mohnot, Solange Gould, Kit Batten, Craig Adelman, Brian Strong, Louis Blumberg, Jana Ganion, David Loya, John Wentworth, Andrea Ouse, Emma Johnston (alternate for Keali'i Bright)

OPR Staff: Nuin-Tara Key, Greta Soos

3. Defining Climate Vulnerability

Nuin-Tara Key, OPR

Nuin-Tara Key walked the group through the [Defining Climate Vulnerability Memo](#) that was prepared for the meeting. Four key components of the memo were described:

1. *Draft definition of climate vulnerability*
2. *Summary of existing state-wide assessment tools that can be used to evaluate climate vulnerability*
3. *Additional indicators that could be used to assess underlying vulnerability on a case-by-case basis*
4. *An Equity Checklist that may provide a process guide for agencies undertaking efforts to define climate vulnerability*

Louis Blumberg: Are we trying to describe vulnerability at large or vulnerable communities?

Nuin-Tara Key: We have been thinking about this as vulnerable communities in the context of adaptation, but we can further discuss this today. The direction given from the TAC in 2017 was to further define vulnerable communities as referenced in the vision and principles.

Louis Blumberg: We should be sure to clarify this difference.

DISCUSSION

1. *Draft definition of climate vulnerability*



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Climate vulnerability describes the ways in which a person, community, or social system is at a higher risk of exposure to impacts resulting from climate change¹. In addition to having higher risk, climate vulnerable communities have less adaptive capacity to cope with or adapt to impacts. These disproportionate effects are caused by a number of physical (built and environmental), social, and economic factors.

Nuin-Tara Key: This definition draws upon the work of the Climate Justice Working Group's [Guiding Principles and Recommendations for Policy and Funding Decisions](#) and brings in multiple compounding factors (social, environmental, economic, etc.) that contribute to vulnerability.

Kit Batten: I suggest removing "a higher" in the first sentence.

Jonathan Parfrey: I would also add "sensitivity" to "exposure" and "impacts", which is included in IPCC's definition of vulnerability.

Kathleen Ave: Was there discussion of inclusion of natural resources in this definition? What about natural resources in areas that are not highly populated?

Greta Soos: This is discussed in the vision statement and characteristics.

Sona: I like the definition with two additions: Add "cope with, adapt to, or recover from impacts" and at the end of the last sentence, add "...and are exacerbated by climate impacts"

Andrea Ouse: I have a question about the last sentence. Are those factors meant to be all inclusive? What if a jurisdiction only meets one of those factors? We should make sure this is inclusive/relatable.

Nuin-Tara Key: Perhaps we should replace "and" with "or"?

Kathleen Ave: Or you could say "caused by one or more"?

Brian Strong: I suggest removing "a number of". This dilutes the sentence and it could be any or a combination.

Louis Blumberg: I would suggest saying "many factors including". I also think we should remove "exposure to"

Jonathan Parfrey: This gets to sensitivity. They are sensitive due to socio economic impacts.

¹ *Advancing Climate Justice in California: Guiding Principles and Recommendations for Policy and Funding Decisions*. Prepared by the Climate Justice Working Group. August 2017.



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Solange Gould: I second that. Everyone experiences exposure, but what is important is whether or not they can survive and thrive given exposure.

Brian Strong: We should say “at higher risk and sensitivity to impacts”. I also think that the phrase “adaptive capacity” muddles the sentence, maybe just say “less capacity”.

John Wentworth: The term of adaptive capacity has a lot of meaning in our community (rural), so I would like to keep that phrase.

Jonathan Parfrey: The IPCC definition includes description of the ability to cope, but I like the phrase adaptive capacity because it is more forward looking.

John Wentworth: I think of vulnerability as a combination of exposure, adaptive capacity, and sensitivity. It seems like these are being teased out but are not referenced.

Nuin-Tara Key: We can include definitions, but we would like to make this language accessible so those who are not deeply involved in adaptation can still relate. We can also include definitions of these terms as supplemental materials/reference to the definition.

Sona Monhot: I recommend changing how we describe this definition from “climate vulnerability” to “Vulnerable communities in the context of adaptation”

Jana Ganion: I would like to add “political” to the end of the list of factors. This gets at things that are beyond the communities control in terms of governance structures. Also, some people don’t have the ability to move to address this. For example, tribes are unable to move because their reservation land is set in a particular location and their legal and political rights are tied to that location. The word political encompasses that without going into that level of detail.

Brian: I think political and social are closely related. Maybe you could place “political” in parentheses.

Nuin-Tara Key: We will incorporate your feedback and provide definitions for adaptive capacity, exposure, and sensitivity.

2. Summary of existing state-wide assessment tools that can be used to evaluate climate vulnerability

Nuin-Tara Key and Greta Soos described the next section of the memo:

The definition alone is not actionable, so staff pulled together a suite of statewide tools available to assess vulnerable communities. Along with descriptions of each tool, a comparison table was drafted that identifies differences and similarities of indicators among the tools, and we recommend combining these tools with Cal-Adapt. The intent was to pull information together so agencies know what tools are available to do an assessment of vulnerable communities in the context of their work.



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Jonathan Parfrey: We might want to consider including CalEPA's urban heat island index (UHI). CEC also subsidized a statewide social vulnerability study with the Pacific Institute, which produced data up to the census tract level. The physical document is available on the CEC website. This was part of third climate assessment. There is also nothing on here on ocean impacts. OPC's recent literature would suggest including something on this.

The state has not engaged in a neighborhood level analysis of social vulnerable data. The Pacific Institute study gives us an idea of how many people are vulnerable, but it doesn't identify it at the neighborhood scale and it doesn't engage the public in building their own resilience. We can't talk about this without highlighting fact that research hasn't been done on the neighborhood scale.

Nuin-Tara Key: We can include the UHI. Cal-Adapt does include sea level rise data, so that is captured in this approach. We are trying to avoid listing every tool, just the main ones. While it is a bit outdated now, we will also look at the Pacific Institute report. Including a gap analysis is a bigger question, which we will discuss in the next part of this memo and next steps for the TAC on this.

John Wentworth: I appreciate this analysis. I would like to take this table and run it by town staff and rural staff to get their thoughts. A gap analysis could be very useful in making sure we are covering all components of this.

3. Additional indicators that could be used to assess underlying vulnerability on a case-by-case basis

Nuin-Tara described the next section of the memo and provided discussion questions: The next table includes potential indicators that are not currently included or available in any of the statewide tools we discussed in the previous table, but is a starter list of examples of other indicators that could also be considered in this context. This table can be added to or expanded upon if members see that as a need. Does the TAC want to include these indicators? Are there suggestions for additional indicators or other feedback?

Louis Blumberg: This table is helpful, but in thinking about our charge as a Council, which is to foster communication and coordination with local and regional governments, we should think ahead that some local planners may be overwhelmed by this and could result in them shutting down. It might be more helpful to be less inclusive and really think about what and how much we want to include in this.

Nuin-Tara Key: Your point about not overwhelming our audience is helpful. We can think about how to separate out the information in this body of work by intended audience (local government practitioners, tool/model developers, etc).

Kathleen Ave: I would suggest an example of how each of these indicators/indexes were used (X jurisdiction used UHI for Y purpose). This would help narrow the list of options to use for someone looking at this.



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With regard to the second table, research suggests that the combined effect of air quality and heat can lead to more compounding effects in communities. We should suggest recommending looking at this combination of data as well.

Jonathan Parfrey: It would be great to know the number of people with access to air conditioning.

Solange Gould: The CCHVI tool includes data on the number of households without air conditioning at the county level.

Jonathan Parfrey: If this document is intended for use by locals, we should have a focus group that includes local government practitioners that looks at this.

Kathleen Ave: We should consider including an indicator of whether or not a city or county has adopted codes that require air conditioners in single/multifamily units.

Brian Strong: What about the dangers from exacerbating effects of sea level rise on earthquakes and liquefaction? Can these also be considered?

Nuin-Tara Key: While we need to have bookends on this effort and keep our focus on climate change related indicators - and we want to make sure, as Louis pointed out, that we aren't overwhelming our audience – as long as there is a clear climate impact nexus, we should include it. So in the case of the relationship between sea level rise and liquefaction, that is a clear nexus.

Solange Gould: Poverty rate and living wage are also indicators that CDPH maintains.

Nuin-Tara Key: These are good recommendations, please send additional recommendations to Greta and I directly.

4. *An Equity Checklist that may provide a process guide for agencies undertaking efforts to define climate vulnerability*

Nuin-Tara Key presented the final portion of the memo and provided discussion questions: This is a process guide that was developed as part of the Technical Advisory Group process for Executive Order B-30-15. This guide, titled the "Equity Checklist" is a set of questions that agencies could ask themselves as they begin to define vulnerability in the context of their work. Is something like this useful? It is not meant to be prescriptive, but is meant to be an example of how agencies should begin thinking about a process around this.

Sona Mohnot: I think this is very useful. Not all of it will be applicable to every agency, but it's a very good start to begin with this.

Jonathan Parfrey: Who decides which indicators to use? The agency or the communities?



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Nuin-Tara Key: That's a decision that would need to be made locally. We can't tell local governments to follow one process/approach. What we want to achieve by offering this is for agencies to consider participation of community members in the process of defining community vulnerability. This should begin the thought process.

John Wentworth: We should do beta testing with this. Don't want to see this as being exclusionary.

Nuin-Tara Key: We also don't have to use this; it was meant as a starting point. We could also use it and include more framing language around it.

Jonathan Parfrey: We should include questions on identifying and responding to financial risks. Cities will be at greater risk for not taking action.

Andrea Ouse: I agree. Fiscal considerations are a motivator. Cities are constantly looking at fiscal realities. The risk of not addressing climate impacts needs to be made clear.

Nuin-Tara Key: Financial risks also translate into an entity's ability to provide services and respond to social and economic conditions that cause increased vulnerabilities.

David Loya: I think this is a good starting point. Think the questions need to be fleshed out. Many people might not understand the outcomes we are trying to get at with the questions.

Louis Blumberg: I think process guide needs framing. The NAACP document referenced in the memo has caveats that frame their indicators that we could use ("this list is not all inclusive", not intended to be required, purpose is to provide an equity lens, etc). It would be useful to have this upfront.

ACTION

Nuin-Tara Key: We have had good conversation around each of these four elements. Does anyone object to including all four of these components of the memo in our framework or to bringing this for further discussion at our April meeting and then to the June meeting or adoption?

Solange Gould: There are more checklists like this that cover various sectors and various population subgroups. Do we want to stick to this or open up the option of looking at other check lists?

Nuin-Tara Key: Yes, this could get at Jonathan's point. We will consider this and follow up with you to get these examples.

Louis Blumberg: I recommend that the Council consider voting on this in April. I think we need to keep the process moving and move on to implementation.

PUBLIC COMMENT

No public comment was received by OPR staff.



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5. **General Public Comment**

No public comment was received by OPR staff.

6. **Meeting Adjourned**