



Integrated Climate Adaptation and Resiliency Program Technical Advisory Council Resilience Metrics Work Group Meeting

Meeting Minutes

April 21, 2021 | Zoom Video Conference | 10:00 AM – 12:00 PM

Item 1 | Welcome and Roll Call

Present: Jacob Alvarez, JR De La Rosa (Alternate for Christina Curry), Susan Haydon (Alternate for Grant Davis), Laura Engeman, Jana Ganion, Andrea Ouse, Sydney Chamberlain (Alternate for Michelle Passero), Nathan Bengtsson (Alternate for Heather Rock), Malinda Dumisani (Alternate for Yana Garcia), Linda Helland (Alternate for Mark Starr), Brian Strong, John Wentworth

Absent: Karalee Browne, Jason Greenspan, Amanda Hansen, Nuin-Tara Key David Loya, Dan McDonald, Sona Mohnot, Darwin Moosavi, Jonathan Parfrey, Gloria Walton, Wilma Wooten

Item 2 | Approval of Draft Meeting Minutes

DISCUSSION

Juliette Finzi-Hart opened discussion for review of draft meeting minutes from the [1/20/2021](#) and [2/24/2021](#) work group meetings.

ACTION

Councilmembers voted to approve draft meeting minutes. John Wentworth motioned to approve; Jacob Alvarez provided a second.

Aye: Jacob Alvarez, JR De La Rosa (Alternate for Christina Curry), Laura Engeman, Jana Ganion (1/20/2021), Andrea Ouse, Sydney Chamberlain (Alternate for Michelle Passero), Nathan Bengtsson (Alternate for Heather Rock), Linda Helland (Alternate for Mark Starr), Brian Strong, John Wentworth (2/24/21)

Abstain: Susan Haydon (Alternate for Grant Davis), Jana Ganion (2/24/21), Malinda Dumisani (Alternate for Yana Garcia), John Wentworth (1/20/2021)

PUBLIC COMMENT

None.

Item 3 | Discussion on Resilience Metrics

Juliette Finzi Hart summarized the results of previous resilience metrics meetings, research, and analysis, and opened the TAC discussion.

Linda Helland: Natural, social, and built categories don't necessarily account for human biological factors such as chronic conditions, pregnancy, or different demographics' susceptibility to extreme heat or smoke, etc. I assume this goes under natural or social, but can we be more explicit about it?

Juliette Finzi Hart: Agreed; it depends on how we present the connections. This is inherently intersectional, and the categories are meant to be porous.

Susan Haydon: I don't see the term regional in the social resilience word cloud. Regions capture and synergize co-benefits of built natural and social systems. Planning, implementing, and looking at priorities by regions is important, in addition to the state/community level.

John Wentworth: Reinforcing these two previous statements, I second the relationships of human beings to the natural environment and the need to avoid considering humans as separate. On regions – there's a need to clearly define them: The USDA Forest Service Region V did not properly define "bioregions" during their forest management planning efforts, and it didn't serve them.

Malinda Dumisani: I am pleased to see environmental justice identified as a priority. This should also include and highlight Tribal Ecological Knowledge and not treat it as a separate category.

Sydney Chamberlin: We've defined these siloes to dig in conceptually, but they're all interconnected. We should also speak to economic resilience as an additional category that impacts and ties together all these systems.

Linda Helland: I agree with Sydney - economics is a huge driver of so much, including health and well-being.

Juliette Finzi Hart summarized connections to the State Adaptation Strategy draft priorities and invited feedback on the level of chosen indicators thus far.

Jana Ganion: In the priorities, I don't see mention of low carbon solutions, or reducing greenhouse gas emissions in tandem with adaptation, in the Strategy

Priorities or subcategories language – this should ideally be reinforced in everything we do and say.

Juliette Finzi Hart: We hear you. Let's work together to figure out wording suggestions.

Sydney Chamberlin: I strongly agree with Jana. Adaptation and mitigation are two sides of the same coin; we should holistically view our priorities in a way that considers both.

John Wentworth: It's helpful to know where the human beings are going, and what they are doing when they get there. Climate impacts are inspiring visitation, relocation, movement, etc. Tracking this will be an important indicator or metric. Secondly, the state in this metrics effort should not ignore Federal processes, we should work in tandem with those processes.

Juliette Finzi Hart: Noted; we have been coordinating with other states and Federal agencies.

Brian Strong: There's also regions, across states, beyond California doing work on this, within America, that we should think about; for instance, the Pacific Coast Collaborative may provide opportunities to coordinate. We shouldn't rely on the Federal government to form these collaborations. On the leveraging funding piece, "working in collaboration" doesn't feel strong enough. We do want to be collaborative, but the "resource issue" is at the center of all major discussions. How we integrate climate resilience with other challenges is key: equity, pandemics, earthquakes, housing, transportation, etc. all intersect. We need to more strongly recognize the need to work within existing frameworks. We need to be more aggressive with our language, and move towards not just leveraging, but identifying specific resources.

Laura Engemen: I agree with the leveraging resources comment; it's also financial resilience. How do we galvanize the state's investments to bring both equity and drive change in a new transitional world? It's about keeping in mind strategic investments, financial strategies, and human capital and capacity.

Brian Strong: Can we add some language about opportunities around green jobs (Green New Deal), etc. that connect with the economy?

Juliette Finzi Hart: Let's transition now to our workshop exercise. Can all of you think about how you might phrase some of these comments to fit into our Miro visualization at the indicator scale?

Jana Ganion: In the science priority: We need carbon lifecycle assessment tools that take the raw data/science and transform it into a format that is easy to use and support decision-making, so that we can use carbon lifecycle assessments, current conditions data, and predictive climate science modeling to understand how adaptation measures also reduce GHG emissions.

Linda Helland: There's lots of useful language and framing in the Planning and Investing for a Resilient CA [guidance](#) to implement EO B-30-15.

Malinda Dumisani: Leveraging resources of not only state agencies but also our partners including tribal governments, regional entities, and other external partners is critical to advancing climate resilience in an equitable way.

Sydney Chamberlin: Under the "Protect public health and safety" column, I'd suggest adding "and wildfire risk" to the last bullet. Nature-based solutions can include ecologically founded management techniques that reduce wildfire severity.

Jana Ganion: We often see GHG included implicitly as a co-benefit, but instead I think we should explicitly state "Multiple benefits including GHG reductions." There's also other climate forcing emissions like black and brown carbon.

Juliette Finzi-Hart: Just a reminder that from here we'll need to get down to the granular level on what we're measuring. A lot of this is already being measured by somebody, but we'll figure out the gaps later in the process.

Laura Engemen: One of the hardest ones might be strengthening protections for vulnerable communities: we have lots of communities vulnerable to wildfire/wildfire smoke and existing air quality challenges. What do we mean in terms of a metric for those communities – I'm just challenged with the metrics being more than state policies that support planning or funding for adaptation. Part of this metric must be about understanding the overlap of existing health and social issues and how those will be ameliorated, addressed, and improved. This pertains to the nexus of mitigation, adaptation, and resilience; we must mitigate today's impacts, adapt to changing conditions and empower them to become more resilient. How can different metrics get at each of these components? If strengthening protections for climate vulnerable communities, a metric for the state is providing funding or capacity to address existing air quality, health, or social science issues.

Juliette Finzi Hart: there's multiple places where we can think about this.

Brian Strong: I agree with Laura, this connects to barriers faced by everyone but particularly vulnerable communities. For instance, trees vs parking decisions; urban greening intersects with transit and housing

access needs. We need to remove barriers; another example is the cost of doing retrofits, living wages, and jobs. One of the best ways to support the environment is to find Jobs that enable people to support the environment or remove barriers that are preventing them.

Juliette Finzi Hart: These might be some metrics that connect to the concept of a just transition.

Jana Ganion: Top bullet could be "Funding for climate mitigation and adaptation planning, to improve overall resilience, and ensure processes and engagement are equitable and accessible, and prioritizes climate vulnerable communities."

Malinda Dumisani: The bullet where CA has worked to ensure that climate vulnerable communities have the information they need to plan for climate change – we need to ensure funding/other resources to address climate change impacts and remove barriers.

Laura Engeman: Great idea Brian re: metric around workforce development that helps implement resilience.

Jana Ganion: Add "Ensure CA's direct expenditures are not at risk from climate impacts, and work to reduce carbon emissions." And "Ensure CA's direct expenditures / investments are not at risk from climate impacts, and work to reduce carbon emissions."

Malinda Dumisani: Add: "Including meaningful outreach, funding, & technical assistance to support with vulnerable communities' ability to participate in the discussion to ensure their priorities and needs for equitable climate resilience solutions is integrated into climate planning & mitigation decisions and solutions."

Nathan Bengtsson: The first category regarding protecting vulnerable communities might be served by a reframing to "Build resilience in vulnerable communities." Because there are so many facets of resilience and many of them contribute to climate resilience, it might be easier to think of that category as a statement of approach i.e. how much state funding is going to DVCs relative to other communities? How much is focused on climate adaptation efforts specifically? It seems to me the state is not entirely able to promise "protections" as many adaptation efforts will likely be driven by communities and local jurisdictions.

All comments I've been hearing are valid and good. On the word Protection in the first priority: that word might be important for some people, but also the state might be a facilitator or connector – but how

much can the state actually directly protect people vs facilitating that? Measuring resilience does have to be relative to the community in question with a view of the future; because it has to be local, could this be reframed as a statement of approach and say, prioritize resources to support local efforts. This better characterizes the state's role and may lead to an easier metric.

Jana Ganion: Natural infrastructure can also be described as climate mitigation and adaptation assets - they can buffer climate impacts and serve as carbon sinks. Same with natural infrastructure management techniques - certain natural management techniques can reduce carbon emissions — such as prescribed fire vs. wildfire, or prescribed fire to reduce wildfire (tribal nations and researchers in our far northern California region are actively working on this.) Understanding the climate science and carbon lifecycle assessments that include natural infrastructures is crucial.

Juliette Finzi Hart: This is part of the State Adaptation Strategy – it's meant to be more of a framework that nests all other work, such as the 30x30 and natural and working lands work. These other initiatives will roll into these priorities. We don't need to prescribe how to measure; we can say based on the region, impact, and community; you measure what's important to you but here's the direction you should head. We may not have a number, but we'll have a direction with flexibility.

Jana Ganion: Could we include language that contemplates state support for - and metrics that demonstrate rates of -community engagement in climate vulnerable communities? Vulnerable communities are often least resourced to engage. This economic and other inability to engage is a frequent refrain from disadvantaged communities and could be turned into a powerful metric to bring focus on improvements.

General suggestion: add the words "mitigation and" in front of the use of "adaptation" in every use, e.g., "climate mitigation and adaptation planning."

Nathan Bengtsson: As an organization that is in the process of discussing adaptation-related outreach in DVCs, I just want to highlight that everyone wins when vulnerable communities are empowered with financial resources to enable them to participate and partner in engagement around planning

PUBLIC COMMENT

Kai Lord Farmer: I suggest some sort of metric/recognition around the fact that communities/households may have solutions that cannot be implemented from top down but rather ground up. Personal autonomy in resilience to make choices around climate adaptation, whether its during emergency events or mobility during disasters, etc. Part of resilience is enabling personal autonomy and removing those barriers. On the metric level, personal finances, and savings at a household level support personal autonomy; income and savings being low means someone is restricted in personal autonomy or community autonomy. The protection that needs to happen can't always happen from the State's top-down approach but needs to be driven at the individual or community level.

Juliette Finzi Hart: At the state level we can only dictate what the state can do; nevertheless the State can't be the only player, but there may be things we can do to support local/personal autonomy. How do we get these to be meaningful for everyone and make sure most folks can see themselves in our priorities? Maybe we can't yet, but we can show that we're moving forward, and allow for flexibility at the local and regional levels while we create the broader vision and direction.

Shefali Juneja Lakhina (Wonder Labs): Great work. Perhaps make explicit how we're adopting a systems view that recognizes the dependencies and co-benefits across these dimensions. In terms of categories, 'Natural' can be replaced with 'Ecological' and 'Built' with 'Infrastructure'. This allows us to open these categories to each other and recognize their interdependencies. For example, 'ecological' helps us acknowledge nested biological and social systems. Also affirms that nature is not separate from social. And, 'Infrastructure' doesn't limit us to metrics for the human built environment but can also include related metrics for forests and watersheds that in fact provide critical infrastructure for ecological resilience. At Wonder Labs, we're taking a bottom-up view by encouraging communities to develop metrics for wildfire resilience through a Living with Fire Design Challenge, see here: <https://www.wonder-labs.org/design-challenge.html> Happy to share what teams come up with. I must leave now but really look forward to contributing further.
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Linda Helland: Great point Shefali.

Brian Strong: Great points Shefali. Language is important here, and I like the bottom up approach.

Jamaica Gentry (CalTrans): The strategy priority to, "Help nature adapt to climate change, and accelerate nature-based solutions," is a bit unclear. There

is a general understanding that climate is an expression of nature or is a part of nature. Therefore, nature cannot adapt to climate change; nature is climate change. What this priority says, to me, is the strategy is to control the climate. Perhaps the priority intends to say, 'Make our environment resilient to climate change'?

John Wentworth: I support this last comment - the wording of that priority needs to be re-drafted for clarity; not sure we've done such a good job helping Nature to date.

Reema Shakra (Rincon): In addition to addressing underlying health inequities, consider adding other bullets that address underlying social inequities and underlying economic inequities. This is so that we are thinking about how climate adaptation efforts can assist in contributing to the environmental and social justice movement.

Using the efforts and attention for addressing vulnerable communities is an opportunity to look at existing inequities from historic and institutionalized racism. We can think about how we chip away at that while also looking at adaptation efforts. We can dig deeper than just building resilience, by addressing existing inequities and building economic resilience in a more holistic way.

Item 4 | General Public Comment

None received.

Item 5 | Closing, Future Agenda Items, and Meeting Adjourned

Juliette Finzi Hart: We will share the results and the Miro and folks can send us additional comments in the next few weeks before our next meeting.