

CLIMATE INSURANCE WORKING GROUP MEETING | NOVEMBER 8, 2019

**California Department of Insurance
300 Capitol Mall, 17th Floor
8:45 a.m. – 2:30 p.m.**

I. Welcome and Approval of Previous Meetings' Minutes

Chair Alice Hill thanked the working group members and members of the public for attending the meeting. In this meeting, Chair Hill would like to define the California Insurance Working Group's mission to clarify the direction of the group's work. Once the mission is defined, she'd like to discuss different ideas for the working group and identify meeting dates so the membership can make plans. Chair Hill shared that it is exciting to step forward into this phase. The group faces a remarkable opportunity to determine how to improve response to rapidly changing risk.

Chair Hill asked for Deputy Commissioner Mike Peterson with the California Department of Insurance (CDI) to call role.

Participated by Phone:

Kathy Baughman McLeod | Director, Adrienne Arsht-Rockefeller Foundation Resilience Center at the Atlantic Council
Daniel Firger | Co-Founder, Great Circle Capital Advisors
Butch Bacani | United Nations, Principles for Sustainable Insurance Initiative
Rachel Fakhry | Natural Resources Defense Council

Participated in Person:

Commissioner Ricardo Lara | California Department of Insurance
Alice C. Hill (Chair) | Research Fellow at the Hoover Institution at Stanford University
Louis Blumberg | Principal of Blumberg West Consulting
Michelle Passero | Climate Change Program Director at The Nature Conservancy
Michael Lynes | Audubon Society Director of Public Policy
Raghuveer Vinukollu | Natural Catastrophe Solutions Manager, Munich Re
Carolyn Kousky (Vice-Chair) | Executive Director, Risk Management and Decision Processes Center, Wharton School of the University of Pennsylvania
Katelyn Roedner Sutter | Manager for U.S. Climate, Environmental Defense Fund
Serena Sowers | Vice President, Public Sector Solutions North America, Swiss Re
Kristen Pawling | Sustainability Program Director, Los Angeles County Chief Sustainability Office

Chair Hill asked if there were any objections to the minutes from the September 10 meeting which have been posted to the CDI website. There was no comment or objection from the public in the room or listening on the phone. The minutes were approved.

Members of the Climate Insurance Working Group who were unable to attend the September 10 meeting introduced themselves.

Member Katelyn Roedner Sutter shared that she manages climate work in California for the Environmental Defense Fund (EDF) which includes work on air quality, cap and trade, and aviation. Member Roedner Sutter does not consider herself to have a deep knowledge of insurance or insurance products, but EDF has a growing interest in learning about resiliency. Member Roedner Sutter lives in a rural part of the state and is interested in issues specific to rural communities and equity issues related to insurance, particularly maintaining affordability in light of climate change.

Member Louis Blumberg is a climate policy consultant who has engaged the intersections between climate change and nature since 2000. He worked under Governor Gray Davis at the Department of Forestry and then for fifteen years worked with The Nature Conservancy where he became interested in nature-based solutions. Initially, that work was unsuccessful but was eventually and his team was able to get legislation passed. Intrigued by the potential role of insurance, Member Blumberg embarked on the Quintana Roo Coral Reef project. Interested in how that model can be applied in California, Member Blumberg worked with then Senator Lara on SB-30 as well as on a working group focused on protecting the San Francisco Bay area with former California Insurance Commissioner Dave Jones. In 2019, Member Blumberg helped organize a panel called Insurance-Based Approaches to Mitigation and Resilience at the California Climate Resilience Symposium at UCLA. The potential to capture the financial resources of the insurance industry and inject those resources into climate adaptation is huge.

Member Rachel Fakhry is with the Natural Resources Defense Council. She evaluates the economic and cost impact of various policies, examining policy making at a granular level. In the past year, Member Fakhry has become more interested in adaptation work which has included the discussion of insurance. She is looking forward to the working group's discussion and narrowing down their path to identify what they can get done.

II. Update from the California Department of Insurance on climate risks and resources

For Agenda Item II, Chair Hill asked Deputy Commissioner Mike Peterson to provide an update from CDI.

Deputy Commissioner Mike Peterson reviewed the following:

- 1. The Technical Advisory Council (TAC)**, which is run through the state's climate adaptation infrastructure, has an interest in the Climate Insurance Working Group's recommendations. Working Group Member Sona Mohnot also participates in the Technical Advisory Council and sought questions from the Council when she attended their last meeting.

Questions from the Technical Advisory Council:

- How can we leverage insurance products and policies to advance climate mitigation

efforts?

- What can cities or counties do at the community level to pass on potential savings?
- How can we provide localized education about insurance at the household level so people know what options are available and how to access them?

The Technical Advisory Council is a group focused on climate adaptation under the Governor's Office of Planning and Research and meets several times a year; their next meeting is December 6. They identify and provide guidance and best practices to local governments and communities.

Chair Hill and other members of the working group noted the potential opportunity and benefit of having an established body like the Technical Advisory Council voice an interest in the work of the California Climate Insurance working group.

- 2. Continued Wildfires in California.** There is non-renewal data available on the CDI website that the Department will continue to augment, likely each year. Because there is a lag time between fires occurring and the data being collected and published it is not completely up to date. The data are by county and zip code of non-renewals over the last 3 years. They do not include the 2018 Camp Fire or 2019 fires.

Another indicator of increased non-renewals is the increase in the FAIR Plan's take-up rate. The FAIR Plan is California's insurer of last resort and has historically been utilized in inner-city areas. The number of FAIR Plan policies had been going down over the years and the uptick in new policies coming from more wildfire prone areas, often in State Responsibility Areas, indicates a disturbing trend. Deputy Commissioner Peterson identified that State Responsibility Areas (SRA) are areas where the state (Cal Fire) is responsible for fire suppression and prevention.

Deputy Commissioner Peterson clarified for the working group some general information about CDI and the Commissioner's statute-based authority and jurisdiction. He referenced the significance of recent legislation, requiring an additional thirty days of advance notice prior to the non-renewal of policyholders. Consumers will now receive a total of 75 days noticed prior to a nonrenewal as a result of Assembly Bill 1816 (2019). The result of this additional time will hopefully increase consumers' ability to access insurance by providing additional time to mitigate or consider additional insurance options prior to non-renewal date.

- 3. Climate Risk and Resilience (C) Working Group | National Association of Insurance Commissioners (NAIC).** In his work with the National Association of Insurance Commissioners (NAIC), Commissioner Lara is the Vice Chair of the Climate Risk and Resilience (C) Working Group. In this role, the Department collaborates with other states and can expose the work of the Climate Insurance Working Group to a greater audience. Every year the Department conducts a climate risk survey of approximately one thousand companies which presents some difficulty as responses vary and require analysis. Similarly, recommendations from our California Climate Insurance working group can potentially be applied at a national level.

III. Discussion: Defining the mission statement, scope, and deliverables of the working group

Chair Hill stated that Deputy Commissioner Peterson's updates regarding wildfire highlight the need for innovative solutions. The working group should be mindful of ways to marry adaptation and mitigation to develop a long-term solution

A. Develop a mission statement

Chair Hill asserted that in developing a mission statement the working group is setting its agenda. Focus is essential; where might the working group take the most useful first steps?

Chair Hill advised that based on the legislative language from SB 30 (2018) working group members are being provided a draft mission statement which will be read aloud for those listening on the phone:

The mission of this working group is to identify, assess, and recommend risk transfer market mechanisms and insurance incentives that promote investment in natural infrastructure to reduce the risks of climate change.

Chair Hill stated that the draft mission statement takes in to account the major aspects SB 30 as well comments received thus far from working group members regarding the opportunities for the working group to provide impactful recommendations for the insurance sector related to climate change.

Deputy Commissioner Peterson stated that the working group should consider the questions posed by the legislature as the group discusses the mission statement in providing its recommendations. While the initial draft mission statement contains the main directive, the working group may consider a range of ideas related to the mission statement, or refocus its goals as it develops recommendations.

The members of working group discussed the challenges of different phrases and terms and considered whether there would be common understanding in their use of them in the mission statement. Consideration was given to not define the statement too narrowly.

The working group reached agreement on the following mission statement:

The mission of this working group is to identify, assess, and recommend risk transfer approaches to reduce the risks of climate change impacts including, but not limited to insurance incentives that promote nature-based solutions.

Chair Hill asked if there was any public comment. There was none.

- B. How to prioritize commonly identified risks that include nature as part of the solution, including urban heat, wildfire, drought, flood and sea level rise**
- C. Consideration of state-level, community, groups or personal insurance options**
 - i. Community flood insurance, parametric products, microinsurance**

Chair Hill turned the discussion to what the working group intends to do. She identified that they have the opportunity to approach their work in a variety of ways, including by identifying urban or rural priorities or by certain peril or by who is being protected. Chair Hill advised that the goal is to define the working group's mission and areas to focus on and organize subgroups that will report at the next meeting. What should be the priority? What is worthy and doable? The ultimate goal is to help Californians and this is where the working group takes its first step.

- ii. Urban and rural priorities**

Member Passero raised the importance of including wildfire as it directly affects rural and urban communities. The associated health impacts affect the populations of those communities. There may be other issues to consider but that's certainly something that is on people's minds on multiple fronts. In contrast to flood, there is no national wildfire program.

Member Lynes queried how the group might prioritize the risk; where does a high volume of written policies intersect with increased wildfire risk? In California, much emphasis is placed on sea level rise and property risk on the coast line. Are insurance companies approaching wildfire from an economic model? Where is the status of policies being issued? If there a slight uptick in policy costs is there a larger economic return to make the kind of investment? Urban heat is an issue that should be considered given the human impact with health risk as well as health insurance risk.

Member Vinukollu emphasized the important of address wildfire before the issue escalates further. There is an opportunity to address core issues on wildfire now.

Member Pawling asserted that the most vulnerable people are property owners. Being mindful of equity issues, how can the working group bring in equity for vulnerable people? Urban heat is not just a Los Angeles or Central Valley issue. All cities are grappling with urban heat—it is a global issue. There is an opportunity for scale, either nationally or internationally, that the working group doesn't get with wildfire.

Member Sowers stated that from an insurance perspective, models that existed for fire models have been disrupted. The models that were in place are being reassessed. The working group would need to determine what that might look like following several years of multi-billion losses, which will be difficult. Any model is changing significantly. It is a goal the working group should be working towards, but not the initial focus. It's not accomplishable in the next few months. We do aggressively look at the global impact of

what happens regionally. Urban heat, drought, flooding present more data now that the working group can use to develop solutions. The wildfire piece poses big issues that the working group may not be able to resolve.

Member Vinukollu argued that wildfire should not be the only prioritization but it should be a priority. What are the costs of insurance if the working group does not address wildfire?

Member Roedner Sutter asked whether the working group is considering risk or groups at risk? Her inclination is to think about people first and communities (coastal, rural, state-level, etc.). She assumes that some solutions may apply to multiple perils. The approach may be similar but who has some of the highest groups at risk. The working group should consider equity when assigning priority; begin with community-level solutions that consider who is most vulnerable.

Member Carolyn Kousky pointed out that the question was at least in part defined for the work group. To what extent will the working group focus on nature-based solutions and risk transfer? If the working group is considering wildfire a priority, then the working group would need to really be about wildfire. The mission statement speaks to nature-based solutions, risk transfer, and general adaptation in the state. There are questions to be considered regarding wildfire. How do you help the homeowners market before there is a crisis? Perhaps with nature-based solution. Also, is there a way to insure forests to replant them or is there another, more appropriate, policy option? Finally, can the state of California take out an insurance policy?

Urban heat is also a critical problem. There is no link to risk transfer. How can the working group help low-income consumers? Nature-based solutions. Member Kousky sees two approaches: First, insure the natural asset directly, though in her opinion there are not many opportunities. Second, use traditional property insurance and incentivize to provide protection to the property. This is house-to-house not community-based. How can the working group rethink risk transfer solutions?

Member Blumberg stated there are many questions worth addressing. Can the working group correlate urban heat to vegetation cover? Is there potential savings to medical industry—there could be a link there? He thinks that the working group shouldn't rule out anything at this point. Is there a community pool effort that could work in a wildfire setting? Are insurers already in working in this space?

To answer initial questions regarding different approaches in C, the working group may be able to answer questions in B. By looking at B and choosing priorities we get to nature-based solutions. The working group might want to look at composite approaches. Member Blumberg emphasized that Member Vinukollu made an excellent point about maintaining focus. If California can reduce wildfire the huge emissions are avoided. Land use will come into play as far as do we rebuild in the same place. Urban heat and wildfire are the two issues that resonate the most.

Member Baughman McLeod agrees with Member Blumberg about the potential to answer

questions. She has partnered with Swiss Re to construct a risk and finance facility for extreme heat and would like to lend what is learned in that effort to the California context. That project will convene in December. They are working with a group of modelers on risk transfer products that will be designed around the human body and the breakdown of heat. There are opportunities to think about risk transfer in innovative ways for risks that we now have increasing information and analytics to understand.

Member Passero suggested the working group address two to three topics and focus on equity and impacts to vulnerable or disadvantaged communities within each topic. The working group may share and refine what it means by nature-based solutions.

Deputy Commissioner Peterson emphasized that, as Member Vinukollu suggested, subgroups focused on a top down approach and bottom-up approach, wherein cross-cutting issues apply to multiple perils may maximize the overall group's efforts. Each of the perils discussed affect California communities and most areas of California face peril. The group should consider how risk and insurance is aligned. If resiliency improves as a result of better forecasting of events will more vulnerable, previously unprotected communities be better protected? Is this an opportunity to avoid future losses with resiliency investments? Can we ask this question from a top down and bottom up approach and then have an approach for many perils? The way the day is structured, the working group should choose topics and move towards identifying deliverables.

Chair Hill asked the working group's subgroups to evaluate whether there are additional questions to be considered by the subgroups. She asked whether, in the context of heat and wildfire, insurance has a role to play with relocation. Are there any nature-based solutions that work for these topics? Is there a community-level approach? Is there an insurance mechanism to reduce risk to communities?

D. How can insurance enhance potential resiliency initiatives, such as a California resiliency focused bond or other climate finance initiatives?

Deputy Commissioner identified that the legislature references ongoing discussion of a resiliency bond. There is an upcoming fast-approaching legislative session, starting in December. Does the working group have a recommendation to inform a piece of legislation?

Member Lynes suggested there is role in California for tribes and governments to insure communities that others might not. There could be an additional question that subgroups could consider. For the flood group, there are opportunities for flood plain work in the Central Valley that create natural infrastructure and risk reduction. Why hasn't there been an insurance-based solution? The flood insurance primarily operated by the NFIP, with some private market interest in recent years. Could insurers build floodplain objectives into a private insurance policy? Are insurers taking an interest here? As we try to address the private market for flood, and recommendations from this working group would be timely.

Member Vinukollu shared that the private market is starting to get its hands on the flood in the past few years. What kind of issues do people think about with flood? What is the amount of policy coverage? As the working group tries to address the private market for flood, this is a perfect solution to make suggestions. The working group should consider what kind of solutions already exist to property owners and what new solutions address more investment and risk mitigation.

Chair Hill asserted that the working group needs to walk out with a work plan. To capture momentum, the working group must set goals. The working group has a mandate and choices must be made.

Member Firger asked for clarification regarding what the group is specifically charged with—white papers or high level principles and recommendations? The insurance commissioner has authority to help implement the recommendations. The working group could provide a set of recommendations, divided into subcategories within Commissioner Lara's authority, for things that would require California's leadership to take action in the world rather than immediate acts from Californians. The recommendations would give actionable next steps for Commissioner Lara.

Deputy Commissioner Peterson advised that the working group is directed to provide recommendations to the Commissioner, and consider a number of issues in the legislation which are mostly in the working group's mission statement at this point. The working group has the flexibility to do that in a way that the group decides. The group comes up with the subgroups with specific questions and deliverables. The deliverable is a series of recommendations that then can be directed to Deputy Commissioner Peterson to synthesize and draft, and then present to the Working Group for approval and comment and then be presented to Commissioner Lara. If the working group's recommendations go beyond the Insurance Commissioner's authority but remain within the scope of the legislation, then the recommendations help develop mechanisms for the commissioner to pursue with governmental partners or other frameworks.

IV. Discussion: Group organization, including the formation of subgroups to focus on specific insurance topics

A. Structure, topic areas, and outcomes

The working group concluded that subgroups would focus on wildfire, extreme heat, flood/sea level rise.

- Issues to consider in each subgroup:
- What are the social/equity issues?
- Nature-based solutions?
- Current role of insurance?
- Community-level approach
- Different considerations for tribes?
- Authority of commissioner?

- Top down or bottom up approach?
- Considerations related to relocation?
- Greenhouse gas emissions and potential to reduce GHGs through risk transfer?

Chair Hill confirmed subgroups should be mindful of the timeframe the working group is operating within when setting short-term and long-term goals. Subgroups should realistically identify the time needed to accomplish goals but should not plan on taking so long that irrelevancy becomes a risk. Chair Hill defers to Deputy Commissioner regarding timing, but feels the end goal should be a quality product.

Deputy Commissioner Peterson would like each subgroup to part today with a question to answer between now and the February meeting that is sufficiently substantive to be developed into a recommendations, proposals, reports, or other similar deliverables, but also achievable to some level within nine months. Questions may be changed or evolve but the goal is for a deliverable from each subgroup.

Member Blumberg asked what is the current authority of the Commissioner in the insurance sector? What are the general subcategories of insurance within the state and how does the Department interact with those types of insurance? Are insurers proposing new types of insurance for homes or communities?

Deputy Commissioner Peterson advised that the Commissioner has rate-setting authority over admitted carriers. Something like the Quintana Roo Coral Reef project may be too broad, or likely require collaborators, but the working group can develop best practice guidance for such projects or recommend pilot projects that build toward a larger risk transfer strategy. If the working group's recommendations apply to homeowners' policies, the Insurance Commissioner has substantial jurisdiction. If the recommendation is for a community-level policy, it may be outside his authority, depending on the specifics.

Member Lynes asked if the working group's recommendations exceed Commissioner Lara's authority, what are the next steps? From the industry perspective, if California is making natural resource investments with public dollars, what is the expectation for a return on investment? Is there a way to marry public money with private money? Should this working group get more information from the insurance industry or find a way add that expertise to the group? How do resiliency investments inform insurance policies for communities, tribes, or individuals? Do insurers or CDI have a long-term interest in resiliency investments or have ongoing work in this area?

Member Bacani asked whether the working group would consider opportunities for insurer investment discussions. Is the working group missing an opportunity to support this agenda? Insurance funds can be directed to nature-based solutions. If the working group is open to the idea to explore this option given its stated focus on risk transfer and risk reduction then the working group can remain open to insurer investments being directed to nature-based solutions. To what degree are international or US-based insurers accounting for nature-based investments in their policies or considering nature-based investments in the investing strategies?

Chair Hill stated that subgroups need to define questions or the scope of its work path. Additionally, one member of each subgroup must assume a leadership role.

The working group divided into subgroups to identify leaders and initial thoughts on deliverables.

Flood. Member Kousky will be the subgroup leader. The February deliverable is to identify what the report would look like from a risk communication standpoint.

Member Kousky stated that it is important to compare take-up data of how FEMA is defining flood areas versus catastrophe vendors working pro bono for the state to communicate where flood risk is going in the future. The state could strengthen flood regulation or provide the risk for today's and tomorrow's risk. An initial recommendation is to keep the research in state by utilizing researchers at the University of California. The equity issue at play is that this information is privatized so private companies sell consumers information about the risk the consumer faces. The state could be offering this as a public good regarding their risk. The subgroup also considered community-level insurance or a California flood insurance pool as an answer to how to fund green infrastructure investment and risk reduction strategies. It is unclear whether this would contradict or conflict with the NFIP.

Extreme Heat. Member Blumberg will be the subgroup leader. The February deliverable is to provide a clear statement of the problem and scope of the exercise. A target product for August is a pilot project concept that would include next steps, stakeholders, and stakeholder buy-in. The project would produce a checklist of urban heat elements that a local jurisdiction should adopt. The subgroup intends to outline the universe of heat aspects but delve into one aspect in particular. Aspects will include how food affects people in urban areas, utility systems, and the environment

Chair Hill suggested reaching out to Google or some other tech company to come up with a platform. Companies are starting to take on these issues more proactively. Google just announced that they are doing a climate change accelerator.

Wildfire. Member Passero will be the subgroup leader. The February deliverable is a problem statement and refined set of questions digging into Question #1 with a work plan. The subgroup's three bucket questions include:

1. When and how to mitigate against fire risk?
2. How and when to avoid new development in high risk fire areas.
3. When to relocate and under what conditions?

The working group will plan to meet on the following dates in 2020:

February 20

May 21

August 21

October 21

Member Sowers suggested that members could share interesting work through a mechanism run by CDI, and that could be combined into a reference document, available to the public.

Deputy Commissioner agreed regarding the value of a public bibliography. He also discussed whether there was a need for additional expertise in the working group. According to the rules adopted at the September meeting, members may be added to the working group if the two-thirds of the working group support the addition. The working group may want to have outside experts or groups give presentations at group meetings to provide information related to the group's work. There is value to having presentations but he wants to make the best use of the working group's time.

Deputy Commissioner suggests the working group should read Member Bacani's report *Insuring a Low Carbon Future*, recently released this fall.

Member Sowers shared that the IBF and World Bank's *How to Insure Public Assets* is also a good report.

Member Kousky suggested the working group consider webinars for presentations.

Deputy Commissioner Peterson likes that idea so people could choose to participate and they can be made public.

Member Sowers would like to present on global solutions for a webinar.

Chair Hill agreed that education is important and sharing other things that are happening is informative.

V. Closing comments and adjournment

Chair Hill thanked the membership for attending the meeting and adjourned the meeting.