

CLIMATE INSURANCE WORKING GROUP MEETING | AUGUST 21, 2020
DRAFT MINUTES, TO BE CONSIDERED AT THE NEXT WORKING GROUP MEETING

Participants:

Commissioner Ricardo Lara | California Department of Insurance

Alice C. Hill (Chair) | Senior Fellow for Climate Change Policy at the Council on Foreign Relations

Carolyn Kousky (Vice-Chair) | Executive Director, Risk Management and Decision Processes Center, Wharton School of the University of Pennsylvania

Kathy Baughman McLeod | Director, Adrienne Arsht-Rockefeller Foundation Resilience Center at the Atlantic Council

Lloyd Dixon | Senior Economist at the RAND Corporation and Director of RAND's Center for Catastrophic Risk Management and Compensation

Louis Blumberg | Principal of Blumberg West Consulting

Rex Frazier | President, Personal Insurance Federation of California

Raghuvver Vinukollu | Natural Catastrophe Solutions Manager, Munich Re

Katelyn Roedner-Sutter | Manager for U.S. Climate, Environmental Defense Fund

Starla Yeh | Natural Resources Defense Council

I. Welcome and Approval of July 22, 2020 Meeting Minutes

Chair Hill welcomed everyone attending the meeting and acknowledged that attendees in California are actively dealing with impacts from rampant wildfires. Chair Hill asked Deputy Commissioner Mike Peterson to call roll and provide logistical details for the meeting.

Deputy Commissioner Peterson welcomed attendees and advised any members of the public on the call that meeting materials, including an agenda and presentation materials, may be found on the California Department of Insurance ("the Department") website, under the Climate and Sustainability branch webpage. He then turned the meeting back over to Chair Hill.

Chair Hill requested an amendment to page four of the July 22 meeting minutes, clarifying that her comment identified that the temporary hospitals that Florida established in response to COVID-19 were located in flood zones.

Member Blumberg commented that California was experiencing a heat wave, reaching 130 degrees in the most extreme part of the state, Death Valley, and was the hottest location in the world. He shared that the media is generally discussing the heat wave but not the heat wave's impacts and noted the timeliness of the Extreme Heat Subgroup's recommendations.

Chair Hill agreed the heat wave was stressful for those experiencing it, and for the first responders. She thanked Member Blumberg for the reminder that these perils are occurring in real time and are not theoretical. Action is needed.

Vice-Chair Kousky moved to approve the amended minutes.

Member Vinukollu seconded the motion.

The remaining members voiced aye votes. There was not opposition, abstention, or further discussion.

Chair Hill asked the moderator to check for public comment. There was none.

Chair Hill turned the meeting back to Deputy Commissioner Peterson to discuss the timeline, thanking him for keeping the working group on target.

Deputy Commissioner Peterson thanked the subgroups for submitting draft recommendations, specific questions and answers, and references. He has started to pool these components into a general document and the working group is currently on pace with the with the timeline circulated after the July 22 meeting. He requested the subgroups also provide visual aids, if possible, to make the visual elements of the report more robust. By August 29, Deputy Commissioner Peterson needs all final recommendations to be submitted. Our hope is to launch the report on September 28, but that is a target not a guarantee. In California, particularly, this is a challenging time. He asked that members stay in touch and voiced his understanding that this is not an easy time for most people. In the last meeting, there were many recommendations discussed and cross-cutting ideas were developed. Deputy Commissioner Peterson shared that, later in the day, the working group will further develop which themes to push for in public policy recommendations and hear two presentations related to resiliency bonds. He reviewed that the working group's charge is to develop risk transfer mechanisms and nature-based solutions. He concluded that he greatly appreciates the working group's ongoing efforts and has enjoyed receiving all of the recommendations thus far.

Deputy Commissioner Peterson turned to Britt Groosman, asking that she introduce herself.

Britt Groosman introduced herself as the Vice President for Ecosystems at Environmental Defense Fund (EDF) and thanked the working group for inviting her.

Deputy Commissioner Peterson asked Chair Hill to move on to the next agenda item.

II. Discussion: Subgroup recommendations

Chair Hill shifted the focus to discussing each subgroup's recommendations and progress, sharing that the conversation would also be an opportunity for all the members to weigh in on the direction of the recommendations. She identified that the Member Frazier would begin, presenting a new recommendation on behalf of the Wildfire Subgroup.

A. Wildfire Subgroup

Member Frazier shared the Wildfire Subgroup's recommendation for Commissioner Lara to explore building on the existing use of catastrophic models, presently used to forecast earthquake losses and fires resulting from earthquake losses, to forecast insurer losses. The recommendation would encourage Commissioner Lara to examine using predictive models that can be adapted to help insurance companies model wildfire loss using that same model, and do so in a public manner that would consider the policy issues surrounding the need to protect trade secrets with the demand for public transparency.

Chair Hill commented that she has heard this idea raised repeatedly, but that no specific recommendation had yet been shared on expanding the use of predictive modeling, and

because it appears to be an important issue, asked if other members of the working group had any responsive comments.

Deputy Commissioner Peterson stated that this type of recommendation fits nicely within the broader umbrella of: what existing and emerging risk management tools can be assessed and potentially adapted to strengthen climate resiliency? Historically, the Department has found this issue challenging and that considering the use of probabilistic models for different perils may also inform strategies for risk reduction.

Member Vinukollu shared that, given recent advancements in available technology, this recommendation could certainly apply to flood as well. California is threatened by atmospheric rivers and models can be an effective tool.

Vice-Chair Kousky commented that she liked the idea of modeling being a cross-cutting item. She asked for recommendations from the group regarding how to bridge that the insurance industry wants to use catastrophe models to price catastrophe risk and not just rely on historical data in a period of rapid change with regulators' need for transparency. She identified that Florida explored an approach that attempted to balance those issues, ultimately creating a commission to approve models. Vice-Chair Kousky shared an anecdotal story that illustrated the potential value for transparency to improve and validate models.

Member Vinukollu advised that most flood models scoring is based on science. Expanding the ability to use models may allow more than one target, or goal, to be met. Using models also potentially incorporates a different view of risk by considering community-based risk management approaches. By combining risk mitigation and risk transfer, the benefits of using models is that mitigation benefits may actually be considered.

Member Blumberg asked whether catastrophe models consider future climate impacts, and indicated his opinion that they should. He asserted that the working group should recommend that catastrophe models include future climate impacts and note how the state of California has passed numerous laws requiring climate considerations in state activities. Considering future climate impacts would be consistent with that pattern and would support Commissioner Lara in including climate impacts in models that are relevant to the insurance industry.

Member Dixon identified that as another cross-cutting issue.

Member Frazier stated that he thinks everyone shares this desire and identified that RMS announced an initiative to better include climate impacts in modeling approaches.

Member Vinukollu asserted, in terms of being a modeler, for flood modeling, that every model, as long as it is frequently updated, implicitly considers climate change because the model weighs recent events. Because things are drastically changing, models may not consider signals at the rate they are changing. Climate modeling companies are examining this issue. The recommendation could include that those companies be included in the process as well.

Deputy Commissioner Peterson stated that, as science advances, if models are updated regularly, they can incorporate new events. A relevant question is how quickly can models be updated to incorporate these factors? The working group is trying to encourage more frequent updates to hazard maps. On the other hand, models may be updated each year, as new events

are included. How can the Department or the state utilize models most effectively to encourage risk reduction and insurance availability? In the last few decades, rate-making in California has operated under a consistent system. Figuring out how models fit into that would be an important and timely policy discussion, given their complexity and repeated evolution.

Chair Hill agreed the proposed recommendation is sound and may be modified to be relevant to other perils. She thanked Member Frazier and turned to Member Dixon to discuss affordability and how the subgroup's recommendations could improve affordability for a variety of perils.

Member Dixon confirmed modeling is a cross-cutting issue across flood and wildfire. The trend of moving towards risk-based rates can lead to higher rates and higher risk areas. Similarly, the need to mitigate risk can create burdens on lower-income households in higher risk areas. In response to concern regarding flood impacts, Congress asked FEMA to explore options which resulted in FEMA's August 2018 report. Many do not want to deal with issues on a peril by basis which indicates support for a solution that can be integrated across perils. Member Dixon discussed the challenge of funding such programs when assistance from the federal government is not available. A common immediate response is to require insurers to contribute to an affordability fund and recover costs in their rate schedules. This approach would presumably lead to cross subsidies from higher-income to lower-income households. A second, more straightforward approach, would be to come up with an external source of funding like a state tax credit, but that raises the question of who covers that gap of funding. A third approach would be to generate rate reductions through mitigation. Discussion of affordability issues is certainly cross-cutting as those dealing with different perils are examining mitigation issues and grappling with premium costs.

Chair Hill thanked Member Dixon and agreed that affordability will be a major issue going forward. She then sought other comments from the group.

Member Frazier raised several items to consider. He asserted that if the working group wishes to adopt this approach, Proposition 103 poses restrictions, and consideration should be given to whether insurer subsidies can exist in a California ratemaking system. To Member Frazier's recollection, there is no system set up for the direct subsidy of one policyholder by another. He asked whether the concept of insurers subsidizing premiums runs counter to the notion that premiums should be used to signal risk. Policyholders who live in high-risk areas will have higher premiums but that risk would be muted with premium subsidies. Member Frazier urged careful consideration of these issues and their potential tradeoffs.

Vice-Chair Kousky asked Member Dixon to clarify whether he was suggesting affordability assistance measures for all who currently reside in higher-risk areas or just lower-income policyholders.

Member Dixon responded that he would suggest the latter but the recommendation is broad and the working group should develop recommended eligibility criteria. In his view, lower-income households who have resided in high-risk areas for a certain amount of time should be eligible. However, the right to that subsidy should not be transferable.

Vice-Chair Kousky commented that Member Dixon's suggestions about eligibility made sense.

Member Dixon elaborated that the PITI ratio could be relevant in determining eligibility.

Chair Hill suggested that the working group should transition to hearing from the Flood and Sea Level Rise Subgroup. One of the working group's main goals is to find ways to communicate risks and reduce the protection gap. Chair Hill asked Deputy Commissioner Peterson to provide context from the Department on this issue, and then the working group can hear from the Flood and Sea Level Rise Subgroup for an update and how they see their recommendations addressing this issue.

B. Flood and Sea Level Rise Subgroup

Deputy Commissioner Peterson reiterated what Member Vinukollu has emphasized regarding low uptake for flood insurance. There is a significant, wide gap in protection against flood risk. The Flood and Sea Level Rise Subgroup has suggested different levers that increase risk communication, can require people to purchase, and can enact different mechanisms to promote the insurance market. He then turned the meeting over to Member Vinukollu and Vice-Chair Kousky to share more on recent discussions regarding how to increase uptake.

Member Vinukollu commented that integrating models could be using in considering how to increase take-up rates and close the protection gap; there is cross-cutting potential between flood and wildfire perils, where one has a very low take-up rate and the other has a very high take-up rate. There may be opportunities for a community-level approach. In communities surrounding areas like Paradise and Coffey Park, insurance costs are increasing or admitted market policies are not available at all. The proposed idea is to use catastrophe modeling to price what could be a community-based or county-based risk pool, either for flood, or wildfire, or both. Coverage limits would be smaller and homeowners could participate either by paying either through taxes to the county or through direct purchase. The structure could vary based on the need. At the same time, by bringing in research institutions in California, existing brain power could be utilized. For mitigation, a community could identify where there is risk and what mitigation measures could reduce risk. If risk is effectively reduced, that reduction in premium could be held by the community or country towards future mitigation efforts. Member Vinukollu then sought comments from the group.

Deputy Commissioner Peterson identified that this type of recommendation fits a niche in California. He recently reviewed when the California legislature last took up the issue of flood. Very little has happened since then in terms of guidance for flood protection. At the community level, this is an important opportunity to have proof of concept, pilot projects, and demonstration projects to direct people in the right direction. The gap in protection poses significant risk when looking at California flood maps and there are serious equity concerns when future floods reach low-income communities with little coverage.

Vice-Chair Kousky asked if there is a way to create a regulatory sandbox where insurers can experiment in a no penalty way? Several communities would need to work through the process before it could be scaled but there is hesitancy to be the first community to try it. Chair Hill commented that Vice-Chair Kousky raises an important point, piloting will be key for many recommendations.

Deputy Commissioner Peterson agrees it is a good idea and is worth exploring. It is important to grow confidence. There is a gap in information. If everyone had a certain level of coverage

against flood, that could be major in the opportunity it would provide to do something experimental. There is value in exploring ideas like these.

Chair Hill thanked the subgroup for their presentation and turned the meeting over to the Extreme Heat Subgroup.

C. Extreme heat group

Chair Hill asked Member Baughman-McLeod to provide an update on the Extreme Heat Resilience Alliance that her center recently launched, noting that the work is very relevant and can complement the recommendations of this working group.

Member Baughman-McLeod reviewed that the Extreme Heat Resilience Alliance launched 10 days ago. The alliance is made up of more than thirty global partners including the Insurance Development Forum, SwissRe, the Red Cross Climate Center, Commissioner Lara, and six cities including Tel Aviv, Mexico City, Miami, and Athens. The organization's primary priorities are to increase and improve communication, make good policy recommendations, offer new risk and finance tools and identify intervention opportunities.

Chair Hill thanked Member Baughman-McLeod, congratulating her on the wonderful progress and exciting work.

Chair Hill and Deputy Commissioner Peterson agreed the working group should divert from the agenda's order, move to the research presentations, and later return to hear from the Extreme Heat Subgroup regarding their recommendations.

Chair Hill shared that the first presentation is from a marine scientist from UC Santa Cruz and the second presentation is from a California based non-profit that has designed a Forest Resiliency Bond. These concepts have similar building blocks to work that the Environmental Defense Fund has done in financing wetland restoration in Louisiana and some similarities to what the Extreme Heat Subgroup has proposed as one of their recommendations, reported to this group at the last meeting. Chair Hill turned the meeting over to Vice-Chair Kousky.

Chair Hill asked the moderator to check for public comment. There was none.

III. Discussion: Solutions including nature-based solutions

Research Presentation: University of California, Santa Cruz

Vice-Chair Kousky introduced Mike Beck as a researcher at UC Santa Cruz who was part of the team that analyzed the impacts of Superstorm Sandy and the value of wetlands in providing some protection.

Mike Beck reviewed a slide presentation that touched on topics that included the rise of risks and losses, guidelines of valuing coastal protection, benefits and effects of coastal protection, incentivizing nature-based strategies, and combining coastal protection and insurance to build resilience.

Members of the working group asked questions regarding specific slides.

Member Blumberg asked Mike Beck to review the flow of the money in a reef restoration project, including who pays what and how is payout triggered.

Mike Beck advised the money flow is going to be policy specific. However, when he thinks of resilience investments, he thinks, for example, of reef restoration as a solution to provide erosion reduction and flood reduction benefits to a hotel group. That resilience investment could be a group of investors that could include hotel owners, insurers, The Nature Conservancy, and other funders.

Vice-Chair Kousky asked about the challenges of funding for different kinds of policies.

Mike Beck advised that funding may be secured in a variety of ways and it is important to know about damage areas and what happens with the structures themselves. This is an area where innovation is needed particularly for reefs, less so for wetlands. Marshes are typically more resilient.

Deputy Commissioner asked how these concepts can be applied in states like California where there are few remaining wetlands and there is a significant amount of urban and suburban areas facing inland and coastal flood risk. He asked if there is a way to measure the value of a proposed wetland.

Mike Beck confirmed it is possible to and stated it is groups like the Climate Insurance Working Group that need to consider what's realistic. He offered an example in San Mateo where future marsh benefits are being modeled, and stakeholders are considering scenarios that will include questions like "What if some of these salt ponds were marshes? What if, at these elevations, these lands were marshlands?" That information can be entered into a flood model, and it is standard practice from there.

Deputy Commissioner shared that one of the working group's ideas is to identify a community who wants to restore a wetland and asked if that is possible to do that at that granular level.

Mike Beck confirmed it is possible.

Deputy Commissioner thanked Mike Beck his presentation and comments.

Chair Hill thanked Mike Beck for his informative presentation. She asked the moderator to check for public comment. There was none.

The working group then took a short break.

B. BlueForest Conservation Presentation

Chair Hill welcomed the working group back from the break and identified they would then move to the second of two presentations. Blue Forest Conservation is an organization that has ongoing projects in California to reduce wildfire risks. They take a creative approach to investing in forest resilience, are working with the World Resources Institute and have been certified by the Department of Insurance's Community Opportunity Investment Network program. Chair Hill thanked Zach Knight for joining the meeting to present the resilience bond concept.

Zack Knight introduced himself as one of the cofounders and CEO of BlueForest Conservation. Blue Forest Conservation is an asset management company and nonprofit that has existed for five years, is entirely grant-based, and focuses exclusively on the forest resilience bond.

Zack Knight reviewed a slide presentation that touched on topics that included wildfire being the West's biggest natural disaster threat, how forests became overgrown, forest restoration as a proven solution, the benefits of restoration, how forest resilience bonds work, a pilot project in at the North Yuba River Watershed, and future forest resilience bond opportunities.

Chair Hill congratulated Zack Knight on Blue Forest's innovative work that creates a safer environment for everyone. She asked the working group if there were any questions.

Vice-Chair Kousky asked about the money flow in the pilot project he reviewed, asking where is the funding coming from to pay back the bond. If it comes from appropriations, what is the additional benefit?

Zack Knight advised the state has a number of grant programs. The reimbursable nature of these grants can be challenging because of when and how funds are distributed. Blue Forest Conservation focuses on working locally and paying vendors in a more expedited manner which builds up the local restoration economy and contractor capacity.

Vice-Chair Kousky concluded this approach can make public dollars more effective.

Member Blumberg asked if the bond is effectively a loan.

Zack Knight confirmed that it is a loan, not a security. Investors put in four million and draw down one million in the first year, one and half to two million the next year. The money is not all used immediately. In total, four million dollars comes through and the national forest pays contractors.

Chair Hill thanked Zach Knight for presenting to the group and turned the meeting to Member Roedner-Sutter and guest Britt Groosman to provide an overview of the work EDF has done and how the working group can consider that work in the context of the examples presented today.

Chair Hill asked the moderator to check for public comment. There was none.

Environmental Impact Bonds

Member Roedner Sutter advised that, in some ways, their work is similar to the what the working group saw in the Blue Forest Conservation presentation. Louisiana received a large settlement following the BP oil spill and designed a mechanism to use those funds to provide funding upfront for wetland restoration to maximize benefits and bring in new funding. With a 15-year bond issued by state of Louisiana, private industry investors benefit from coastal restoration, including shipping companies and insurance companies. The idea would be to also attract philanthropic funding, green bond investors and other sources of capital. The process occurs over 5-7 years and is monitored and measured by third-parties. There are 600 acres of wetlands in Louisiana. Items that are studied include how vegetation density increases over time, sediment levels, and water to land ratios. There is a set rate of payment that is based on the performance of the project and whether success metrics are met. If the project overperforms, there is then additional repayment that comes out of the BP settlement fund. Member Roedner Sutter asked if guest Britt Groosman would like to provide any additional detail.

Britt Groosman identified that the main issue is front loading funds into the investment. With all environmental impact bonds, it's necessary to connect and bring together the right parties. Britt Groosman asked if the working group had any questions.

Deputy Commissioner Peterson commented that the presentations describe approaches that could work as regional or community strategies. He hopes that these examples will inform the subgroup's recommendations, especially in considering how to move funds forward in California applications. He suggested the group consider how these ideas might fit practically within the working group's framework. California has lost many historic wetlands, and therefore opportunities and needs for wetland restoration.

Vice-Chair Kousky noted that it is important to step back and understand what bonds do. Funding is borrowed so it is immediately available and must have some sort of funding over time so that the bond can be paid back. The application of this structure might be more limited than it appears. Being cognizant of what bonds can and can not do is helpful.

Britt Groosman agreed that was an important point. She suggested using existing bonds and then bring in additional funds and added that insurance companies could potentially invest future earnings in a bond. There is room for creativity with where the future money could come from.

Vice-Chair Kousky agreed that setting up the right structure could mobilize philanthropic funding.

Member Blumberg shared that the Extreme Heat Subgroup has struggled with how a resilience bond could be incorporated. Their recommendations will require philanthropic contribution. A city would need to be in a position to pay back the bond funds. These ideas can potentially help with natural infrastructure, building proof of concept, and help insurance companies to have an insurance transfer mechanism and/or potentially invest. There is also the assumption that the city may invest in mitigation activities.

Deputy Commissioner Peterson commented that insurance companies and the state have a broad incentive to invest in resilience in the future.

Chair Hill turned the working group's focus back to hearing about the recommendations of the remaining subgroup, Extreme Heat.

Discussion: Subgroup recommendations Extreme Heat Subgroup

Chair Hill asked Member Blumberg to briefly review the five recommendations the Extreme Heat Subgroup presented in the last two meetings.

Member Blumberg identified that there no extreme heat products exist currently so, by default, the subgroup's work is an exercise in innovation. Though many solutions might be workable, the Extreme Heat Subgroup has focused on vulnerable communities as they disproportionately bear the brunt of the peril's impacts. There are five recommendations in total; two are foundational.

1. Need for communications and public education campaign to educate decision makers and communities.
2. Backcasting analysis is necessary to analyze costs.
3. Identify action alternatives and develop local heat action plans. Cities and counties would be customers for parametric and don't know the financial or medical risk.
4. Framework with different intervention points. Hospital scale will have the most impact.
5. Risk pool idea.

Chair Hill asked if any of the working group members had any questions.

Deputy Commissioner Peterson commented that, given the exploratory phase of perils, the five recommendations are impressive. He asked, regarding risk communication strategies, does Member Blumberg think that there are overarching, cross-cutting solutions or is extreme heat so not recognized that it deserves its own process.

Member Blumberg stated he does not think it's mutually exclusive. The compounding of risk with fire and heat has been observed. He noted the complexity of identifying the effect on firefighters. These issues deserve further conversation. Business interruption policies to protect against extreme heat may become relevant.

Member Dixon asked if utilities are liable for what happens as a result of power outages, such as medical supplies or spoiled goods.

Vice-Chair Kousky remarked that if utilities are not liable then insurance is not needed. She asked if communities are facing costs with extreme heat. Learning more about cost is probably a prerequisite.

Deputy Commissioner Peterson advised that California has experience several different types of power outages, from rolling black outs preemptive shut-downs when there is a certain level of fire danger. If the outages are short pulses, they're not covered within average business insurance plan. Coverage applies for business interruption if, for example, there is a fire in a store. If the utility is not liable for the outage, the community is more accepting. Broader blackouts would cause a bigger interruption.

Chair Hill asked the moderator to check for public comment. There was none.

Update: California Department of Insurance

Deputy Commissioner Peterson shared information from a recent NAIC meeting on Insurance Solutions involving nature. He indicated that the NAIC launched a new task force at the executive level; the two chairs will be the president of NAIC, Director Farmer of South Carolina, and Commissioner Lara. This is an excellent pairing, a new partnership between two states who do not normally work on policy together. This is an opportunity to introduce the working group's recommendations. Though the recommendations have been developed to present to Commissioner Lara, they apply to other regions. Deputy Commissioner Peterson paused for comments. There were none.

Deputy Commissioner Peterson then discussed the Department's California Organized Investment Network program, or "COIN," that Zack Knight referenced earlier in the meeting. It is

a program that certifies investment opportunities for insurance companies that promote sustainability. He will send working group members a description of the program and encouraged members to consider whether a certification of a certain investment has a role to play in the process. This may be a way to encourage investments and provide opportunities for proof of concept. Deputy Commissioner Peterson paused for comments. There were none.

Chair Hill thanked Deputy Commissioner Peterson for the update, agreed it was a worthwhile to consider, and asked if anyone else had anything to add.

Member Blumberg suggested comparing how the tenets of the COIN program track with the sustainable development goals of the United Nations (“U.N.”); it would be worth noting any overlap in goals.

Deputy Commissioner Peterson agreed, noting the benefit to aligning them if they are not already aligned.

Member Blumberg referenced the potential intersections with the sustainable roadmap the Department is developing with the Member Bacani and the U.N.

Discussion: Review of recommendations

Chair Hill turned the working group’s attention to reviewing the working group’s recommendations. She referenced that in the last meeting, the working group developed cross-cutting categories that could highlight common themes that have emerged as the subgroups have developed recommendations. She noted that not all recommendations needed to fit into a cross-cutting category; the point is more to strengthen recommendations where there is broad overlap in policy goals by communicating them as a cross-cutting recommendation. Chair Hill referenced a document that was circulated with initial thoughts on what recommendations could fit into these categories. Deputy Commissioner Peterson will use this to discuss, revise, add, or subtract recommendations from these categories. Chair Hill commented that she thinks the report should feature cross-cutting issues first and turned the meeting over to Deputy Commissioner Peterson.

Deputy Commissioner Peterson confirmed that everyone had the document to reference and advised this part of the meeting is also an opportunity to identify new ideas that have not been discussed yet.

Member Vinukollu asked if members should only discuss recommendations presented at the May and July meetings.

Deputy Commissioner Peterson advised that members should discuss proposed recommendations they way to add or subtract. Through the public meetings in February, May, and July several recommendations have been shared, some in initial form and others more detailed, and this is a time to discuss additional recommendations as well.

The working group members discussed various revisions and edits to the proposed document

Member Blumberg advised that mapping may apply differently to each peril.

Deputy Commissioner Peterson that building codes may deserve its own category.

Vice-Chair Kousky suggested calling it “Land Use” and include building codes in that category.

Working group members discussed ways in which risk for various perils might be better communicated to homebuyers, including disclosures being required at the municipal level, the role realtors could potentially play, providing disclosures in the offering of a property versus the closing of a sale, and requiring providing a risk map when a home is advertised.

Working group members also discussed affordability of both risk mitigation actions and insurance premiums as a cross-cutting issue, noting the particular impact to vulnerable communities.

Member Dixon suggested focusing on investigating options more generally and suggesting looking to other states as potential examples, versus suggesting modeling after a specific state’s approach.

Deputy Commissioner Peterson raised the issue of not having ample examples to reference for how other states have approached affordability and wildfire. This could potentially be an opportunity to highlight legislation passed in California two years ago that aims to facilitate home hardening by providing financial assistance, but has not yet been funded.

Member Dixon agreed with that approach and suggested emphasizing the means-tested aspect, and targeting to provide resources to lower-income or vulnerable communities.

Britt Groosman commented on the importance of such assistance only being accessible to existing homeowners so that people are not incentivized to move into a high-risk area or to further develop in high-risk areas. Eligibility criteria should be based on income and current residence.

Member Dixon agreed and referenced her point underscoring Member Frazier’s earlier comments. He suggested calling out a program to help create defensible space and to potentially provide assistance to eligible households. He commented that the working group should acknowledge that affordability is about keeping policies and removing trees can be very expensive, as can other mitigation actions.

Member Blumberg shared that he has experience in a grant program for defensible space; he is not sure if programs exist to provide such assistance. He suggested that Commissioner Lara could work with the greenhouse gas fund to ensure there are design elements to promote cooling and get funds from state programs. One of the biggest threats from extreme heat is not being able to cool down at night.

The working group moved on to discuss the third cross-cutting category, community scale action and insurance solutions.

Member Dixon commented that enacting programs to help make premiums affordable might shift away from risk-based rates. He thinks that should be acknowledged.

Member Blumberg asked what community scale encompasses. This is sometimes seen as a neighborhood association or a local government's jurisdiction, and we want readers of the recommendations to know what we are talking about.

Member Dixon and Member Blumberg agreed that entities that have land-use authority function as a definition.

Member Blumberg also suggested the working group indicate what it means by short-term and long-term.

Deputy Commissioner Peterson moved to the next item, closing the protection gap, and suggested an annual event to do community outreach and show what insurance would cover and that is a coverage gap. He reviewed that the working group previously discussed renters' insurance. After catastrophic events, it is surprisingly low. Flood insurance also has a very low take-up rate.

Member Dixon remarked there is overlap between the first and fourth item. Mapping and risk communication might be tools to close the insurance gap.

Chair Hill suggested acknowledging earthquake insurance also, given California's history and the extensive mapping and monitoring of this risk.

Member Vinukollu suggested including community insurance as well.

Member Dixon commented that the working group should identify their overall goals, and which tools will help achieve those goals, to help organize the structure of the cross-cutting categories.

Chair Hill agreed it is useful to call out goals and identify the appropriate tools to accomplish those goals.

Deputy Commissioner Peterson noted that the working group will rename the first item to Risk Communication, mapping and disclosure will fall under this category.

Vice-Chair Kousky noted the value of having a state mapping site to identify fire and flood risk.

Chair Hill added that this information should be included in offering documents.

Chair Hill suggested collapsing the sixth and seventh item, and Member Dixon agreed with that suggestion.

Chair Hill commented on categorizing the "buckets" in an accessible way, so that it's easy for readers to understand.

Deputy Commissioner Peterson agreed and noted that leveraging public dollars could be a sub-bullet. He raised different ways in which perils require innovative solutions. Not all solutions will be applicable to each peril as the responses to extreme heat are novel.

Member Vinukollu referenced the opportunity to bring in the Silicon Valley and tech space to see how innovation may be driven in the climate space.

Deputy Commissioner Peterson suggested using the terms “innovative financing” Or “innovative risk assessment tools” to capture the intent of the group to link technology to enable new funding streams and also better planning, risk reduction, and recovery in the state. The state, local jurisdictions, and individuals need to do financial planning and risk planning and we want to connect new ideas and new funds to risk reduction.

Member Blumberg suggesting expanding the COIN program to include standards for fire, flood and heat. Also, he reviewed that the working group planned to flag which recommendations would require legislative action. He suggested that the timing of the report publication would work well with introducing bills for next year. He reviewed that the working group discussed developing heat actions like LEED and asked whether heat plans can be certified.

Deputy Commissioner Peterson asserted that the working group will discuss building codes. He asked how specific does the working group want to be in those recommendations, and does the working group want to include timelines?

VI. Discussion: Remaining challenges and prioritizing recommendations

Member Dixon asked how Deputy Commissioner Peterson envisions organizing the report.

Deputy Commissioner Peterson suggesting leading with cross-cutting issues and any recommendations that do not fit can be included in sections for individual perils.

Member Dixon asked if to goal is for the reader to focus on the cross-cutting issues chapter.

Deputy Commissioner noted that the high-level discussion of cross-cutting issues is easiest to communicate.

Chair Hill noted that there are broad cross-cutting issues that don't apply to all three perils and discussed ideas for referencing building codes, including an idea from IBHS where buildings are certified to perform better against certain perils, as well as calling for building codes that help with the carbon emission problem.

Vice-Chair Kousky agreed that would fit nicely with the state's efforts to electrify buildings and noted the value of discussing issues in plain language.

Deputy Commissioner Peterson agreed that if the working group can confirm they are safer than nonelectric buildings then they'll have a well-connected strategy. He asked if any other members wanted to add anything regarding building codes.

There was no response.

Deputy Commissioner Peterson asked the working group whether they want to include a cross-cutting category to discuss land use and the incentives for acknowledging the risks of new development in high-risk areas

Multiple members agreed that land use recommendations would fit into a cross-cutting theme and would be more clear to the reader discussed all at once. Risk assessment and communication is the keystone to avoiding more development in the highest risk areas. Averting future climate impacts requires stronger risk communication.

Deputy Commissioner Peterson thanked working members for attending. He will revise the draft report and circulate for comments.

Chair Hill thanked everyone for their thoughtful comments and thanked Deputy Commissioner Peterson and Vice-Chair Kousky for their continued work behind the scenes.

Vice-Chair Kousky thanked Chair Hill for her leadership; she is thrilled with the working group's recommendations.

Chair Hill agreed that she is also excited about the working group's recommendations and noted how much she has learned.