

Draft Pending Adoption

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Climate and Resiliency (EX) Task Force
Seattle, Washington
August 15, 2023

The Climate and Resiliency (EX) Task Force met Aug. 15, 2023. The following Task Force members participated: Lori K. Wing-Heier, Co-Chair (AK); Ricardo Lara, Co-Chair (CA), James J. Donelon, Co-Vice Chair (LA); Mike Kreidler, Co-Vice Chair (WA); Mark Fowler (AL); Alan McClain (AR); Barbara D. Richardson (AZ); Michael Conway represented by Peg Brown (CO); Andrew N. Mais (CT); Karima M. Woods (DC); Trinidad Navarro represented by Stephen C. Taylor and Susan Jennette (DE); Michael Yaworsky represented by Virginia Christy (FL); Gordon I. Ito represented by Jerry Bump (HI); Doug Ommen (IA); Dana Popish Severinghaus (IL); Amy L. Beard represented by Patrick O'Connor (IN); Sharon P. Clark (KY); Gary D. Anderson (MA); Kathleen A. Birrane (MD); Timothy N. Schott (ME); Anita G. Fox represented by Steve Mayhew (MI); Grace Arnold represented by Peter Brickwedde (MN); Chlora Lindley-Myers represented by Cynthia Amann (MO); Mike Chaney (MS); Troy Downing (MT); Mike Causey represented by Angela Hatchell (NC); Jon Godfread (ND); Eric Dunning (NE); D.J. Bettencourt represented by Christian Citarella (NH); Alice T. Kane represented by Leatrice Geckler (NM); Scott Kipper represented by Nick Stosic (NV); Adrienne A. Harris represented by Bob Kasinow (NY); Judith L. French represented by Tom Botsko (OH); Andrew R. Stolfi represented by TK Keen (OR); Elizabeth Kelleher Dwyer (RI); Michael Wise represented by Will Davis (SC); Tregenza A. Roach (VI); Kevin Gaffney (VT); Nathan Houdek (WI); and Jeff Rude (WY). Also participating were: Michael Peterson (CA); and Wanchin Chou (CT).

1. Adopted its Spring National Meeting Minutes

The Task Force also met Aug. 2 in regulator-to-regulator session, pursuant to paragraph 6 (consultations with NAIC staff members related to NAIC technical guidance) of the NAIC Policy Statement on Open Meetings, to preview the NAIC Climate Risk Dashboard.

Commissioner Kreidler made a motion, seconded by Commissioner Clark, to adopt the Task Force's March 24 minutes (see *NAIC Proceedings – Spring 2022, Climate and Resiliency (EX) Task Force*). The motion passed unanimously.

2. Heard a Presentation from the ASU Global Futures Laboratory on Global Temperature Rise

Commissioner Lara said sea level rise is an issue that presents insurance challenges, most notably when intense coastal storms are combined with high tides and storm surge. He said that leads to additional consequences for residential and commercial insurance markets.

Peter Schlosser (Arizona State University—ASU) said society has reached a new geological age in which humankind has touched every part of the planet, and this is highlighted through climate effects because they are visible to us. He said more extreme events are occurring at a higher frequency, and the challenge facing society is the short amount of time there is to respond.

Schlosser said while use of renewable energy is increasing, it cannot make up for the amount of energy from coal, oil, and gas that is being consumed. He said scientific data shows carbon emissions and an increased carbon dioxide concentration are heating the atmosphere. He said there is a global demand for more energy, but society is not at a point where it is using the kind of energy that does not lead to global warming. Schlosser said during the last decade, the warmest eight years on the planet were recorded.

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Schlosser said extreme weather events, including wildfires, drought, and flooding, will continue to increase in frequency.

Schlosser said the melting of ice sheets in the Arctic and Antarctic regions has increased. He said the main contributor to sea level rise is the increase in melt days that cover large areas of Greenland and Antarctica. He said projections show a rise in sea level of 1 to 3 meters by the end of the current century. He said this would affect the seaports that ship 90% of globally exchanged goods.

Schlosser said the goal to cut emissions in half by 2030 is falling behind and that more carbon dioxide would have to be taken out of the atmosphere to make up for the lack of emissions reduction. He said the U.S. Department of Energy has made available \$3.5 billion to advance technology that can remove carbon from the atmosphere.

Schlosser said the work of the Global Futures Laboratory at ASU includes monitoring the health of critical ecosystems, such as coral reefs; innovating ethical energy system transformation; providing advanced decision support; and engaging stakeholder dialogues to support areas under pressure from climate risks. He said the decisions made in the next 10 years will likely shape the climate and how society is able to deal with it for the upcoming century.

Commissioner Lara said the Task Force will be hearing a presentation on parametric insurance products related to coral reefs.

Chou asked if nuclear fusion has been considered a solution for moving away from fossil fuels. Schlosser said nuclear energy, which is mainly based on nuclear fission instead of fusion, will not play a dominant role in solving the problem. He said smaller reactors conducting nuclear fission still involve the problem of nuclear waste.

Commissioner Kreidler asked if there is any message that could assist state insurance regulators in playing a more active role with insurance companies in recognizing the volatility of climate risks. Schlosser said the data over the last 10 years would show the evolution of the indicators of extreme events, such as wildfires and drought. He said this data would give enough information to conclude that now is the time to look at what role insurance can play in climate solutions. He said it is known that some areas prone to catastrophic events should not be rebuilt, and other areas should look at increasing resilience measures.

Commissioner Lara asked what happens to the Pacific Islands if sea level rise continues at the projected rate. Schlosser said coast lines are already eroding, and some islands will be completely underwater within a few decades. He said the 1.5-degree Celsius target set at the 2011 United Nations (UN) Climate Change Conference (COP17) would have allowed a good fraction of the islands to survive with adaptation.

3. Heard a Presentation from Ceres on an Inclusive Insurance Study and a Climate Risk Disclosure Study

Commissioner Lara said for communities faced with climate risk, insurance is critical to their overall resilience, yet increasing climate risks are causing challenges for insurance affordability and availability. He said pre-disaster mitigation is going to help communities avoid impacts and access insurance, and new approaches are needed so that some communities are not left behind.

Steven M. Rothstein (Ceres) said disaster insurance is critical for recovery. He said too many people are underinsured for disasters, are unable to afford coverage, or are unable to find coverage that meets their needs. He said there are new policies, regulatory changes, and innovative insurance products that can improve inclusivity in disaster insurance.

Draft Pending Adoption

Rothstein said through conversations with state insurance regulators, insurers, and community groups, Ceres found five principles of inclusive insurance: 1) affordable; 2) accessible; 3) transparent and understandable; 4) people-centered; and 5) just.

Rothstein said its *Inclusive Insurance for Climate-Related Disasters* report included 14 recommendations for actions under federal and state policy, regulatory reform, local government programs, and private sector offerings. He said one example of this work is the roof fortifying programs being offered in several states. He said one way to fill the gaps in insurance inclusivity is with new products like microinsurance and parametric insurance.

Rothstein said Ceres and the California Department of Insurance (DOI) recently completed an analysis of the Task Force on Climate-Related Financial Disclosures (TCFD) reports. He said this analysis did not suggest that all insurers should answer the questions presented in the TCFD the same way, but they looked at the amount of information provided by the companies for each of the 11 recommendations. He said they used a machine learning (ML) analysis and rules-based text mining to review 480 unique TCFD reports. He said based on their review, 95% of reports provided information on risk management and strategy, and 39% of reports provided information on metrics and targets. He said 78% of reports provided information on six or more of the TCFD recommendations.

Rothstein said the completed analysis report includes a deeper analysis of 15 companies, reviewed against 200 TCFD-aligned data points to assess decision utility.

Rothstein said Ceres has released a report on an analysis of more than 400 insurance companies' investment portfolios. He said the 2019 data was provided by the California DOI. He said the analysis looked at both property/casualty (P/C) and life insurance companies, and reviewed how much companies invested in electric utilities, fossil fuels, and green bonds, among other categories.

Commissioner Downing asked if any research has been done on the risks of certain vulnerable communities if the transition away from fossil fuels is done too quickly. Rothstein said some of that research is available in the *Inclusive Insurance for Climate-Related Disasters* report. He said these economic problems are affecting communities of color disproportionately, and these problems are not specific to just coastal regions. Commissioner Roach said it is important to think about the theoretical questions of how ceasing the use of fossil fuels could have economic impacts on certain communities, but the climate data shows there are areas, particularly island communities, that will completely cease to exist due to the realities of climate impacts.

4. Heard a Presentation on Atmospheric River Storms

Director Wing-Heier said the Task Force continues its yearlong emphasis on the peril of flooding. She said the Task Force heard from two Canadian organizations at the Spring National Meeting, and the NAIC has maintained an emphasis on flood insurance data collection. She said there are certain types of storms where the impact is high rainfall in a specific location, causing substantial damage. She said many western states have areas that are not adjacent to large rivers but still have major flood events, and that is due to atmospheric rivers. She said the impacts seen in Alaska can be particularly damaging if an atmospheric river occurs on snow and ice. She said as state insurance regulators determine how to better mitigate the damage at the state and local level and how to advocate for federal risk mitigation, they need to understand what makes these storms different and so damaging.

Peterson said when looking at mitigating flood risk in individual communities, there is research that shows how specific types of flood events are going to cause an impact. He said all jurisdictions face flood risk and have had issues with flood insurance uptake, and more that is known about a specific flood event will help inform the advice for mitigation efforts.

Draft Pending Adoption

Peterson said the first documented use of the term “atmospheric river” was in 1994, but data from the National Oceanic and Atmospheric Administration (NOAA) shows that there were major flooding events in the past that were caused by atmospheric rivers.

Peterson said atmospheric rivers tend to affect western states, although they do occur in the Northeast states but are less common. He said atmospheric rivers are long, narrow streams of water vapor that originate in the tropics. He said these storms will drop a month’s worth of precipitation in just a couple of days. He said California gets 50% of its water supply from atmospheric rivers, but they also account for 90% of flooding events.

Peterson said in Alaska, winds, flooding, and landslides from an atmospheric river caused an estimated \$29 million in damage to public infrastructure in 2020, not including private property losses. He said this year in California, an atmospheric river caused an estimated \$5 billion to \$7 billion in economic losses, with less than one-third of those losses being insured. He said in western states, 85% of flood losses are due to atmospheric rivers, and 95% of flood losses in coastal areas are due to atmospheric rivers. Peterson said these areas are also affected by storm surge. He said climate change is predicted to increase the temperature of these storms, which will increase intensity.

Peterson said scientists and policymakers are beginning to build a vocabulary around high-intensity rainfall. He said there is a proposed ranking system for severity of atmospheric river storms. He said in ranking zones 1, 2, and 3, atmospheric rivers are primarily beneficial to areas in need of the water supply. He said zones 4 and 5 are more hazardous and produce significant damage. He said this ranking system will help advise the type of mitigation needed for these storms.

Peterson said western states are at a high risk for intense atmospheric rivers and low insurance uptake, creating a protection gap challenge. He said these storms are a growing source of insured and uninsured losses. He said although these storms are specialized to certain areas of the country, they will have very high severity of losses. He said there is an opportunity for better risk communication and risk mitigation to reduce future losses.

5. Received an Update from its Solvency Workstream

Commissioner Birrane said at the 2022 Summer National Meeting, the Task Force accepted the recommendations of the Solvency Workstream to make referrals to three Financial Condition (E) Committee working groups to strengthen the oversight of the climate change impact on the financial condition of U.S. insurers. She said those referrals were made to the Financial Examiners Handbook (E) Technical Group, the Financial Analysis Solvency Tools (E) Working Group, and the Own Risk and Solvency Assessment (ORSA) Implementation (E) Subgroup. She said the Financial Examiners Handbook (E) Technical Group and the Financial Analysis Solvency Tools (E) Working Group have taken up those referrals, and each group is meeting in August to consider detailed guidance that NAIC staff have drafted to address those referrals. She said both groups expect to finalize their guidance by the end of 2023 for inclusion in the year-end 2023 handbooks. She said the Own Risk and Solvency Assessment (ORSA) Implementation (E) Subgroup has not yet taken up the referral and is waiting for the completion of the *Financial Examiners Handbook* and the *Financial Analysis Handbook* work. She said the Workstream has been focused on the evaluation and development of a U.S. regulatory approach to climate scenario analysis. She said the Workstream has been meeting in regulator-only session to do a deeper dive into the approaches and is working with NAIC staff to consider what methods will provide valuable information to state insurance regulators. She said the Workstream has reached directional consensus and is now working to build out a draft referral that is expected to be exposed for a public comment period in September.

Having no further business, the Climate and Resiliency (EX) Task Force adjourned.

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