



Draft date: 11/9/23

2023 Fall National Meeting

Orlando, Florida

#### **CLIMATE AND RESILIENCY (EX) TASK FORCE**

Sunday, December 3, 2023 8:00 – 9:15 a.m. Bonnet Creek IV-XII & Corridor I - Level 1 - Bonnet Creek

#### **ROLL CALL**

Lori K. Wing-Heier, Co-Chair	Alaska	Mike Chaney	Mississippi
Ricardo Lara, Co-Chair	California	Chlora Lindley- Myers	Missouri
James J. Donelon, Co-Vice Chair	Louisiana	Troy Downing	Montana
Mike Kreidler, Co-Vice Chair	Washington	Remedio C. Mafnas	N. Mariana Islands
Mark Fowler	Alabama	Eric Dunning	Nebraska
Peni Itula Sapini Teo	American Samoa	Scott Kipper	Nevada
Barbara D. Richardson	Arizona	D.J. Bettencourt	New Hampshire
Alan McClain	Arkansas	Justin Zimmerman	New Jersey
Michael Conway	Colorado	Alice Kane	New Mexico
Andrew N. Mais	Connecticut	Adrienne A. Harris	New York
Trinidad Navarro	Delaware	Mike Causey	North Carolina
Karima M. Woods	District of Columbia	Jon Godfread	North Dakota
Michael Yaworsky	Florida	Judith L. French	Ohio
Gordon I. Ito	Hawaii	Glen Mulready	Oklahoma
Dana Popish Severinghaus	Illinois	Andrew R. Stolfi	Oregon
Amy L. Beard	Indiana	Michael Humphreys	Pennsylvania
Doug Ommen	lowa	Alexander S. Adams Vega	Puerto Rico
Sharon P. Clark	Kentucky	Elizabeth Kelleher Dwyer	Rhode Island
Timothy N. Schott	Maine	, Michael Wise	South Carolina
Kathleen A. Birrane	Maryland	Kevin Gaffney	Vermont
Gary D. Anderson	Massachusetts	Scott A. White	Virginia
Anita G. Fox	Michigan	Nathan Houdek	Wisconsin
Grace Arnold	Minnesota	Jeff Rude	Wyoming

NAIC Support Staff: Aaron Brandenburg

#### **AGENDA**

1. Consider Adoption of its October 12 Meeting Minutes—*Director Lori K. Wing-Heier (AK)* 

Attachment One

2. Hear a Presentation on Carbon Capture Technology—Edda Bjork Ragnarsdottir (CarbFix)

Attachment Two

3. Hear a Presentation on Parametric Insurance —Katie Sabo (Aon)

Attachment Three

4. Consider Adoption of the NAIC National Climate Resilience Strategy for Insurance

**Attachment Four** 

- —Director Lori K. Wing-Heier (AK)
- 5. Receive an Update from the Solvency Workstream
  —Commissioner Kathleen Birrane (MD)
- 6. Receive an International Update—Ryan Workman (NAIC)
- 7. Receive a Federal Update—Shana Oppenheim (NAIC)
- 8. Discuss Any Other Matters Brought Before the Task Force
  —Director Lori K. Wing-Heier (AK)
- 9. Adjournment

#### **Draft Pending Adoption**

Draft: 11/21/23

Climate and Resiliency (EX) Task Force
Virtual Meeting
October 12, 2023

The Climate and Resiliency (EX) Task Force met Oct. 12, 2023. The following Task Force members participated: Lori K. Wing-Heier, Co-Chair, represented by Chad Bennett (AK); Ricardo Lara, Co-Chair, represented by Mike Peterson (CA), James J. Donelon, Co-Vice Chair, represented by Thomas Travis (LA); Mike Kreidler, Co-Vice Chair, represented by Jay Bruns (WA); Mark Fowler represented by Brian Powell (AL); Alan McClain (AR); Barbara D. Richardson represented by Jon Savary (AZ); Michael Conway represented by Keilani Fleming (CO); Andrew N. Mais represented by Wanchin Chou (CT); Trinidad Navarro represented by Beverly Powell (DE); Michael Yaworsky represented by Anoush Brangaccio (FL); Doug Ommen represented by Travis Grassel (IA); Dana Popish Severinghaus represented by C.J. Metcalf (IL); Amy L. Beard represented by Linda Grant (IN); Sharon P. Clark represented by Shawn Boggs (KY); Gary D. Anderson represented by Rachel Davison (MA); Kathleen A. Birrane represented by Alexander Borkowski (MD); Timothy N. Schott (ME); Anita G. Fox represented by Chad Arnold (MI); Chlora Lindley-Myers represented by Cynthia Amann (MO); Troy Downing represented by Sam Loveridge (MT); Jon Godfread represented by Holly Brockman (ND); Eric Dunning and Connie Van Slyke (NE); D.J. Bettencourt represented by Christian Citarella (NH); Justin Zimmerman represented by Jesse Kolodin (NJ); Adrienne A. Harris represented by John Finston (NY); Judith L. French represented by Matt Walsh (OH); Andrew R. Stolfi represented by Brian Fjeldheim (OR); Michael Humphreys represented by David Buono (PA); Elizabeth Kelleher Dwyer (RI); Tregenza A. Roach represented by Cheryl Charleswell (VI); Kevin Gaffney represented by Rosemary Raszka (VT); Nathan Houdek (WI); and Jeff Rude represented by Shamika McDonald (WY). Also participating was: Marianne Baker (TX).

#### 1. Adopted its Summer National Meeting Minutes

Travis made a motion, seconded by Commissioner McClain, to adopt the Task Force's Aug. 15 minutes (see NAIC Proceedings – Summer 2023, Climate and Resiliency (EX) Task Force). The motion passed unanimously.

#### 2. Heard a Presentation from the CCIR on Canadian Flood Risk

Peterson said during the Task Force's meeting at the 2023 Spring National Meeting, the Task Force heard from the <u>Canadian Council of Insurance Regulators (CCIR)</u> and Public Safety Canada (PSC) on Canadian flood risks. He said since that meeting, the CCIR has released a new position paper on their study of flood insurance in Canada.

Lucas Neufeld (CCIR) said Jessica Strauss (PSC) is leading the work at the national level on designing a flood insurance program. Strauss said in the spring of 2023, the Canadian government announced plans to set up a national flood insurance regime. She said PSC is currently planning out what an affordability subsidy might look like within a national flood program. She said PSC has been working with provincial jurisdictions to look at some of the differences across Canada and how the needs of local areas fit into a national program.

Neufeld said the CCIR position paper states that the insurance industry needs to do more to ensure consumers understand their property-specific risk and insurance options. He said insurers and intermediaries need to work together to develop a coordinated and consistent approach to action on each of the recommendations in the paper. He said the CCIR and its working groups studying flood risks have met with insurance industry representatives to discuss the recommendations. He said they have begun to scope out implementing actions based on the recommendations. He said that once best practices have been implemented, they will continue to monitor the outcomes of the actions.

#### **Draft Pending Adoption**

Neufeld said workstreams are being developed based on each of the four recommendations in the paper: 1) identification and communication of risk; 2) tailoring the product and communicating coverage options to the consumer; 3) providing a summary of natural catastrophe-related coverage to the consumer; and 4) training for intermediaries, including to ensure they understand the insurers' product offerings and relevant protections.

Rob O'Brien (CCIR) said some of the issues CCIR is trying to address include the relationship between insurers and intermediaries and their shared responsibilities; communicating complex issues to consumers; facilitating innovation and competition while recognizing the need for common language; and insurance availability and accessibility.

Chou asked if insurers in Canada are using modeling to evaluate flood risks and what their process is to determine if the model is working correctly. O'Brien said a federal initiative is underway to improve the quality of flood mapping, as that has been a consistent challenge expressed by insurers and modelers. He said that currently, flood insurance is readily available in low-risk areas and not at all available in high-risk areas. He said the current challenge is understanding the risks of those in the middle areas, and while there are initiatives to update and better understand flood mapping, there is still work to be done. Strauss said there is little quantitative information on the availability of flood insurance and if the coverage is adequate. She said it is also a concern of what the federal government can do for those in the highest-risk areas where coverage is unavailable.

Ethan Sonnichsen (NAIC) asked how the Canadian government is thinking about rating sufficiency, making sure that rates are adequate for coverage but also affordable for those who need the coverage, and how they deal with the low uptake of flood insurance. Neufeld said rating issues are handled at the federal level. At the provincial level, they are looking at changes to policies that are limiting the amount of coverage available. He said they are looking at things like high deductible limits or specific exclusions for certain types of floods. He said at the federal level, they are looking at a transitional model that starts with product affordability and subsidization and moves to a model with a more risk-based rating. He said they are also considering whether making a flood insurance product mandatory would be a factor in keeping coverage adequate but affordable.

Peterson asked if CCIR is looking at different approaches for residential and commercial risks. Neufeld said they are currently only focused on residential coverage. Peterson asked if there is consideration for tailoring a flood insurance product for the type of flood risk. Neufeld said their position paper emphasizes the need to clearly communicate to the consumer what the flood insurance product actually covers, including if certain types of flooding are excluded from coverage. He said one consideration of a federal program would be that it would provide blanket coverage for any type of flood.

#### 3. Received a Presentation on NAIC Private Flood Data

Aaron Brandenburg (NAIC) said private flood data was first collected through the NAIC Financial Annual Statement for data year 2016 on the Exhibit of Premiums and Losses (State Page). He said data collection on the state page combined residential and commercial coverage. He said that in 2020, state insurance regulators began collecting data through a data call that gathered more granular information and split out residential and commercial coverage. He said the template of that data call was then adopted as a supplement to the annual statement.

Brandenburg said for combined residential and commercial policies in 2022, there were over 641,000 policies in force, with about \$1.3 billion in direct written premiums. He said residential policies comprise about 419,000 of the total policies, and the written premium for residential policies has doubled in the last two years. He said the data is also collected on a standalone versus endorsement basis. He said standalone policies now make up the majority of those policies, and the number of standalone policies has nearly doubled in the last two years. He said the data is collected on a first-dollar versus excess basis, and there is a large majority of first-dollar policies when comparing the two types.

#### **Draft Pending Adoption**

Brandenburg said the top 15 writers of residential private flood insurance wrote over \$348 million in premium in 2022, making up about 79% of the private flood insurance market.

Brandenburg said the states with the highest loss ratios in 2022 were Florida, Kentucky, Missouri, Nevada, and Tennessee.

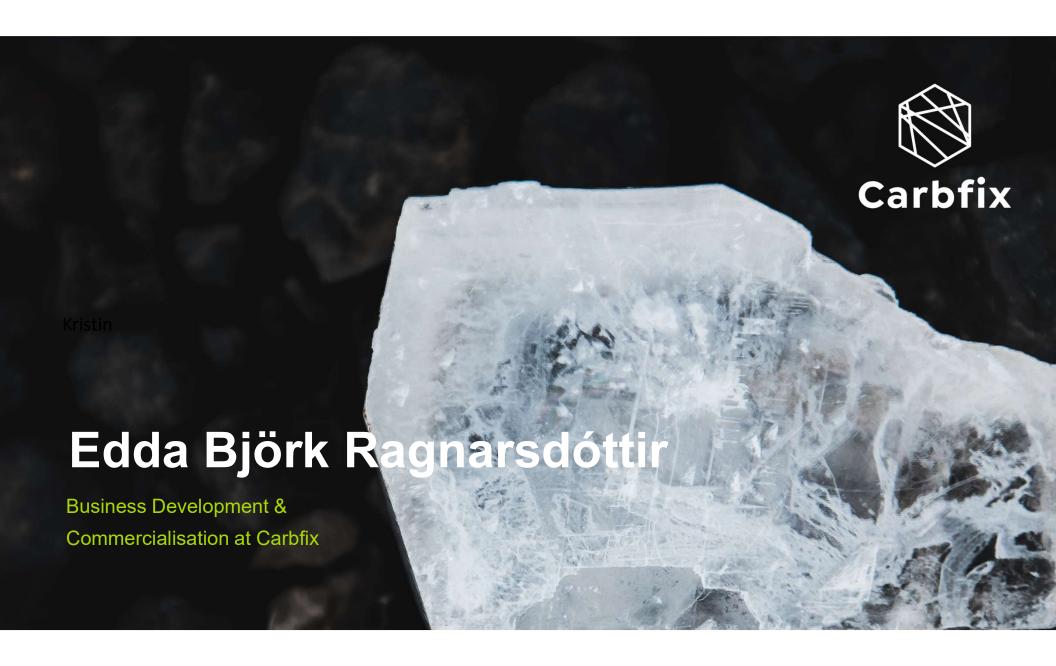
Brandenburg said surplus lines carriers wrote the majority of policies.

Brandenburg said when looking at policies from the National Flood Insurance Program (NFIP), the top 10 states with the most NFIP policies account for 82% of total policies written. He said the number of policies written by the NFIP has decreased by about 400,000 over the last five years. He said while private flood insurance policies have increased over the last five years, it has not been at the same rate; therefore, we are seeing less total coverage for flood risks.

Van Slyke asked if, due to rising home values, people are turning to private flood insurance to get coverage equal to the available limit of NFIP policies. Brandenburg said the NAIC does not collect data on policy limits, but higher limits are a benefit of the private market.

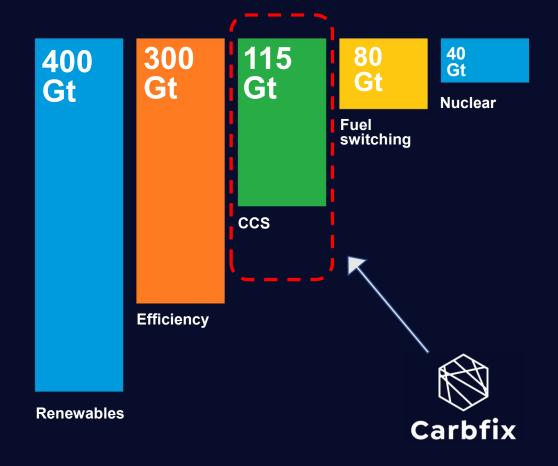
Having no further business, the Climate and Resiliency (EX) Task Force adjourned.

SharePoint/NAIC Support Staff Hub/Committees/EX CMTE/CRTF/2023\_Fall/CRTF\_1012\_Minutes





Climate goals will not be met without carbon capture and storage.







# Mission

The company's mission is to significantly contribute to climate recovery through worldwide scaling and further development of underground CO<sub>2</sub> mineral storage.







## The Carbfix process

CO<sub>2</sub> dissolved in water

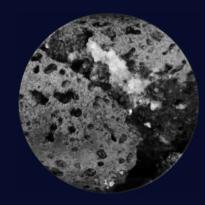
**Basalt and other reactive rock formations** 

**Carbonates** 



+







# From research to deployment



On-site capture and storage



Direct air capture

Transport & storage Coda Terminal

Carbfix project founded by OR, UI, Columbia and CNRS

Mineral storage confirmed



Science publication

Nature publication

DAC and mineral storage

Scale-up

Preparation and design

Pilot phase

Industrial scale CCS

Commercialize

2022

2007

2008

2009

2010

2011

2012

13 🔪 20

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201

201

2019

202

Carbfix inc

2021

Carbfix

## Mission

To be a key instrument to tackle the climate crisis and substantially reduce global CO<sub>2</sub> emissions





# Certified technology with competitive advantage



#### **Permanent**

Stable for millennia, no longterm monitoring needed



#### 100% safe

Leakage eliminated with instant solubility trapping underground



#### **Cost-effective**

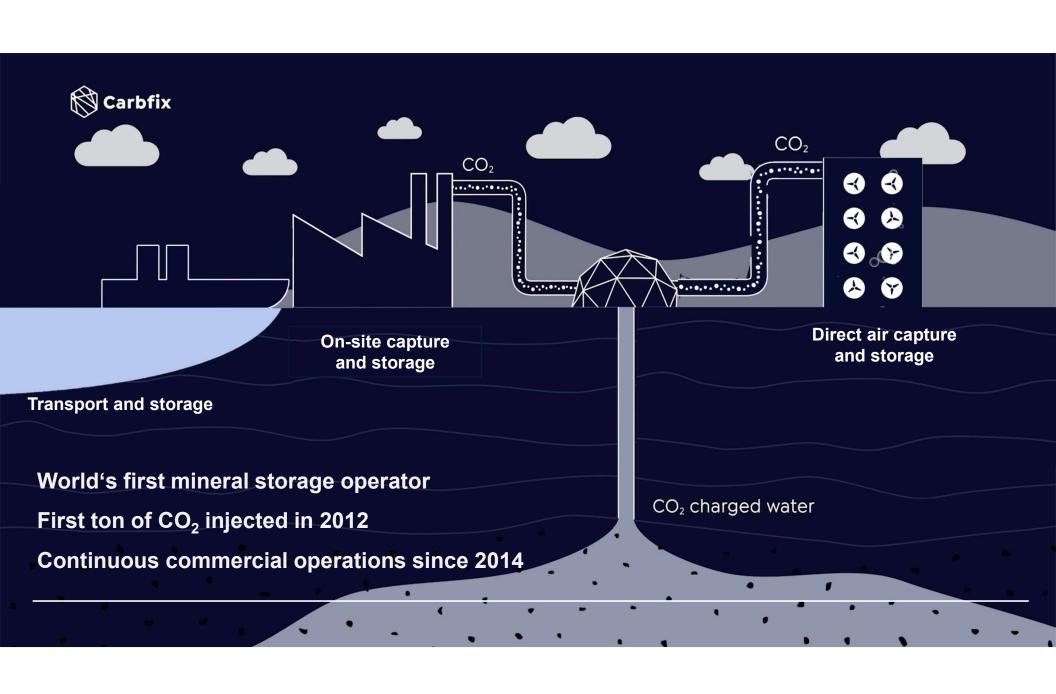
Low up-front capital costs Network of shallow wells



#### Scalable

Storage capacity much greater than needed for climate goals



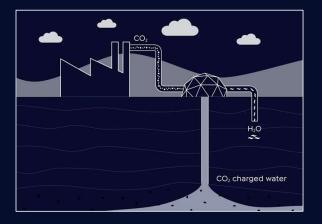






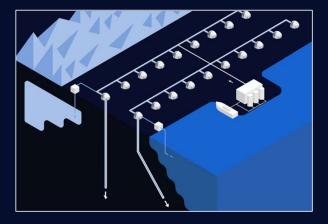
## A

On-site capture and mineral storage



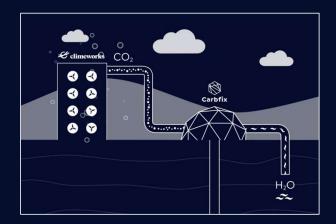
### B

Transport hubs with mineral storage



#### C

Direct air capture and mineral storage



## First Commercial Direct Air Capture and Storage Chain



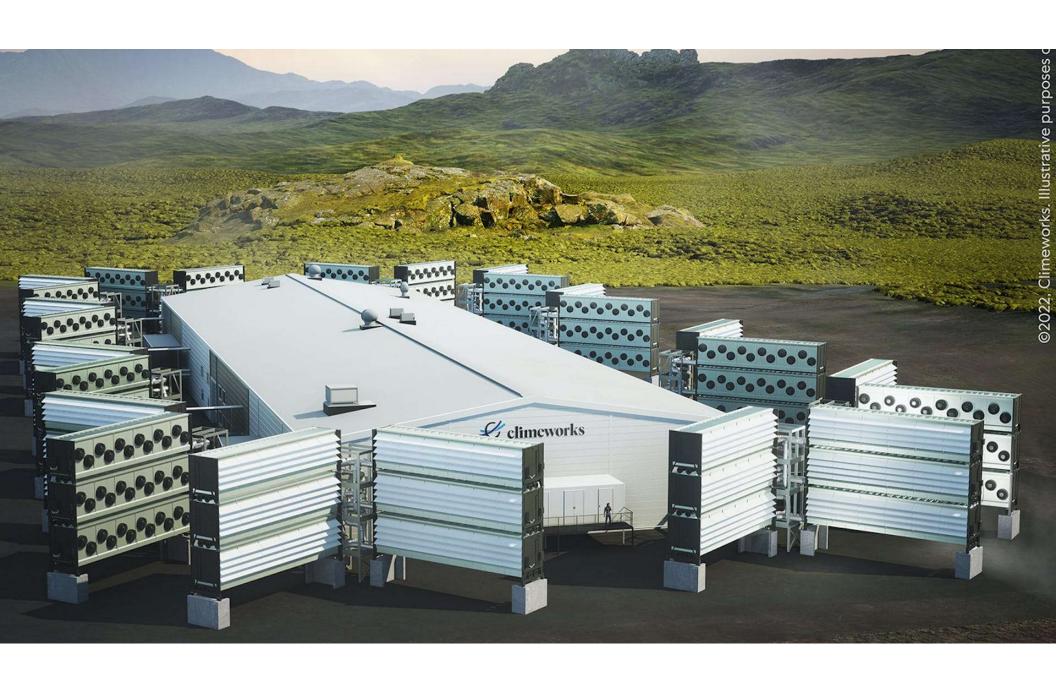
4000 tCO<sub>2</sub>/yr capacity



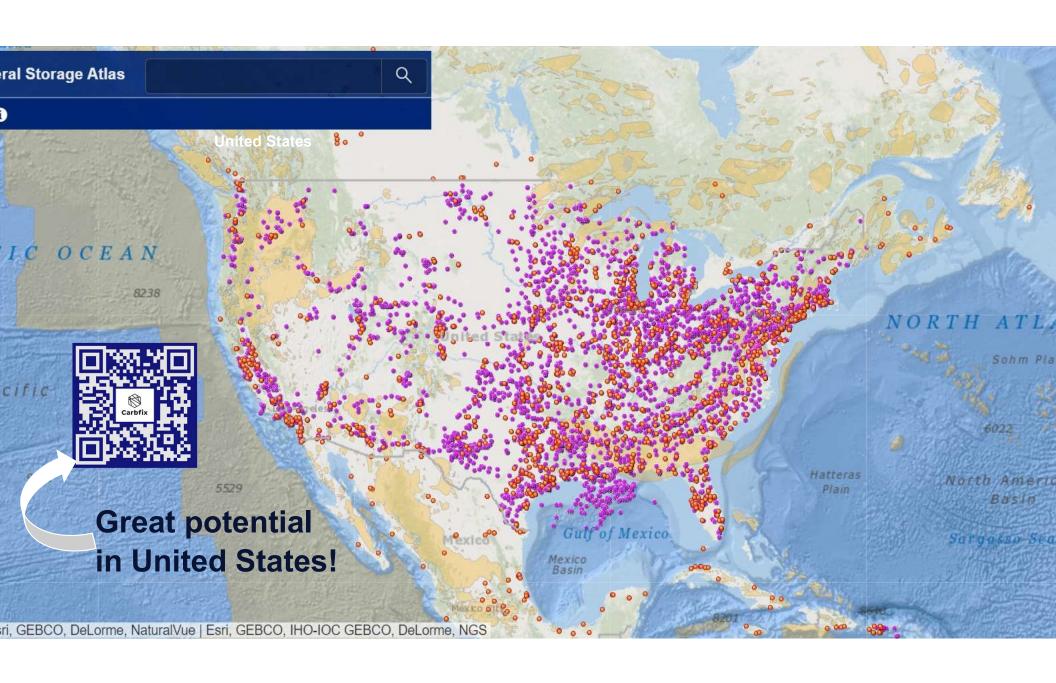




Injected to 400-800m depth
Mineralization verified using chemical tracers









































## **Innovation focus**

- Ongoing research on using seawater and other rock formations for injection
- Coda Terminal proof of concept for large-scale mineral storage hubs & cross-border value chains
- DAC Innovation Park following XPrize success
- Improve regulatory framework for new technologies







# AON

# Exploring Parametric Solutions for Public Entities

**NAIC Climate Committee** 

December 3, 2023

Katie Sabo Senior Managing Director Government Segment Leader Aon Reinsurance Solutions



## **Who Uses Parametric Solutions**

- Fortune 500/100 companies
- Food/Ag Companies
- Non-profits
- Risk Pools
- Renewable energy firms i.e. carbon, solar, hydrogen, etc.







"For governments, parametric insurance can provide resources to cover losses not covered by federal assistance..."

- Government Finance Officers Association



# Deeper Dive into the "Why"

Parametric Utilization

**Difficult-To-Insure or Uninsurable Risk Supplement Traditional Nat Cat Insurance Non-Damage Business Interruption** "New" Exposures



# The "Why" Public Entities

Parametric Utilization

**Supplement Traditional Property Insurance** 

Additional Insurance for FEMA's Obtain & Maintain Requirement (O&M)

**Budget & Programming Resiliency** 



# The "Why" Is not a Limiting Factor In How Funds are Used

Disconnecting the Why from the How

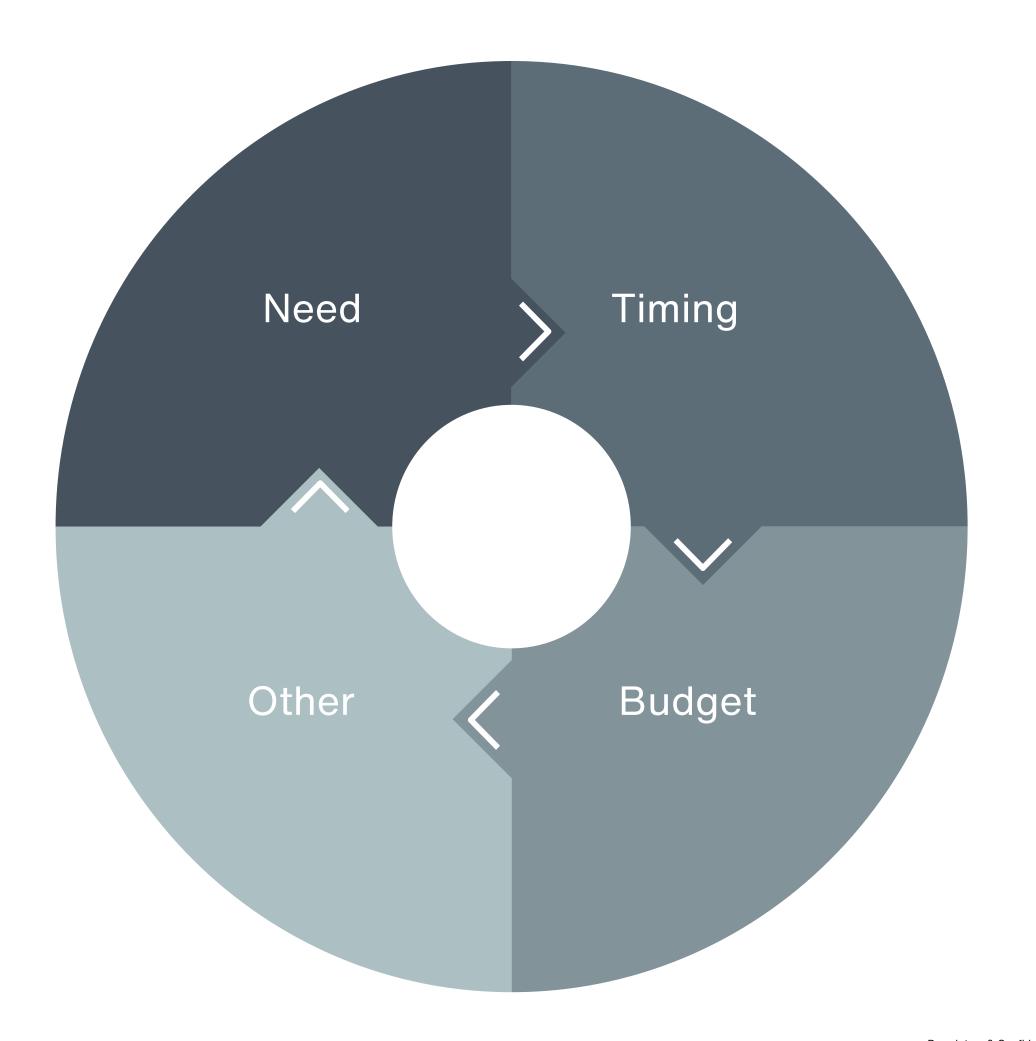
Parametric Flood Coverage Parametric Insurance is Triggered & Losses are Incurred

Budgeting and Risk
Management Decision
on How to Use Insurance
Recoveries



## Taking a Step Back: The Evaluation Process

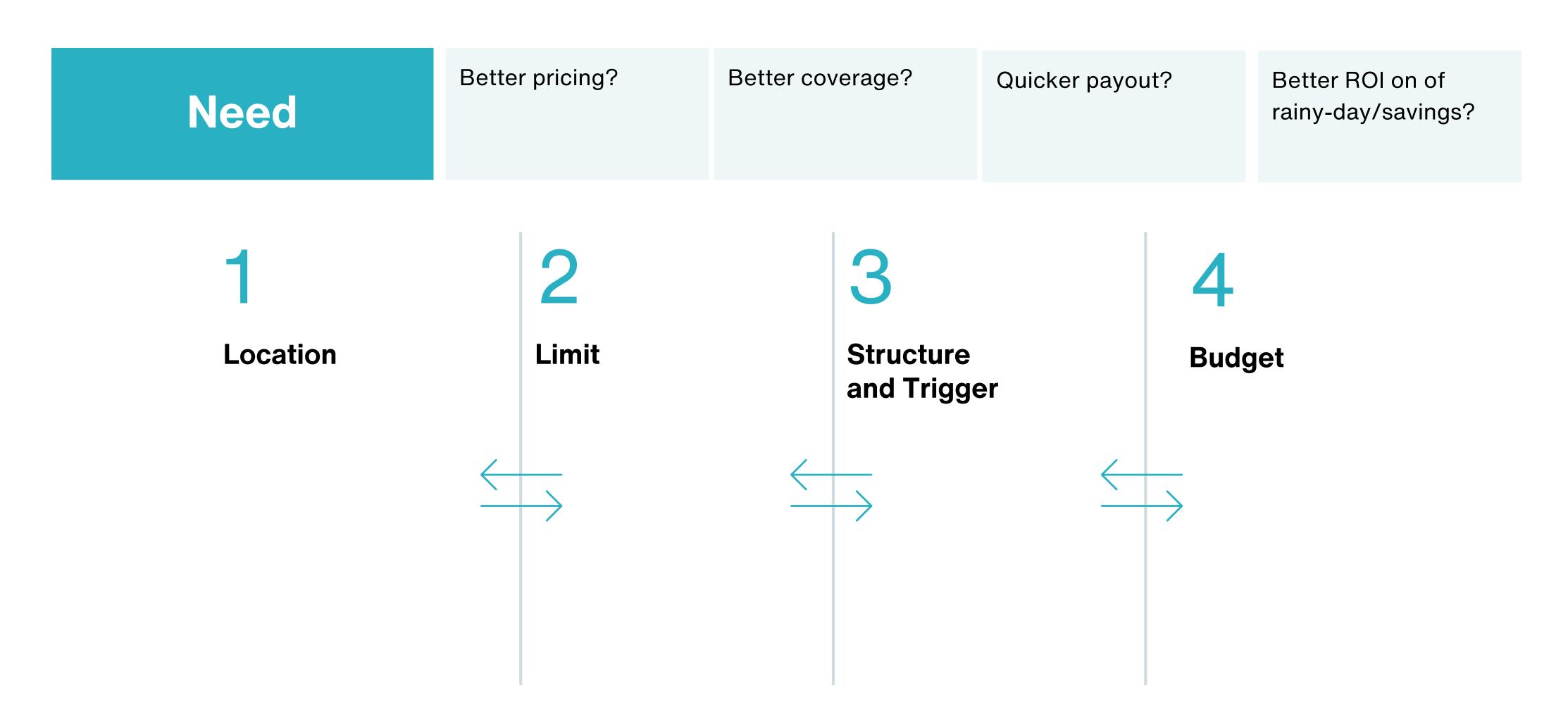
Developing non-traditional solutions to solve for unique needs





# Key Components of a Parametric Insurance Policy

Objective, Fortuitous and Able to Be Modeled





# Ex. Developing a Parametric Option

Developing EQ Coverage for State X.

For Illustrative Purposes Only



State X.

# Key Components of a Parametric Policy – Client Inputs

Need: Would like to protect against a portion of the net budgetary losses following a catastrophic EQ.

1

### Location

Coverage area should contain the densest zip codes, the largest economic center of the state and should also correspond to historical EQ activity

2

## Limit

There was approximately \$15M of net losses tied to a large 7Mw EQ last year. There are rainy days funds to cover the majority, but State X would like to redirect some of the rainy-day funds to invest in mitigation and they want to make sure they have insurance to replace what they are reinvesting. They also have property insurance.

3

# Structure and Trigger

Coverage for last years EQ and higher

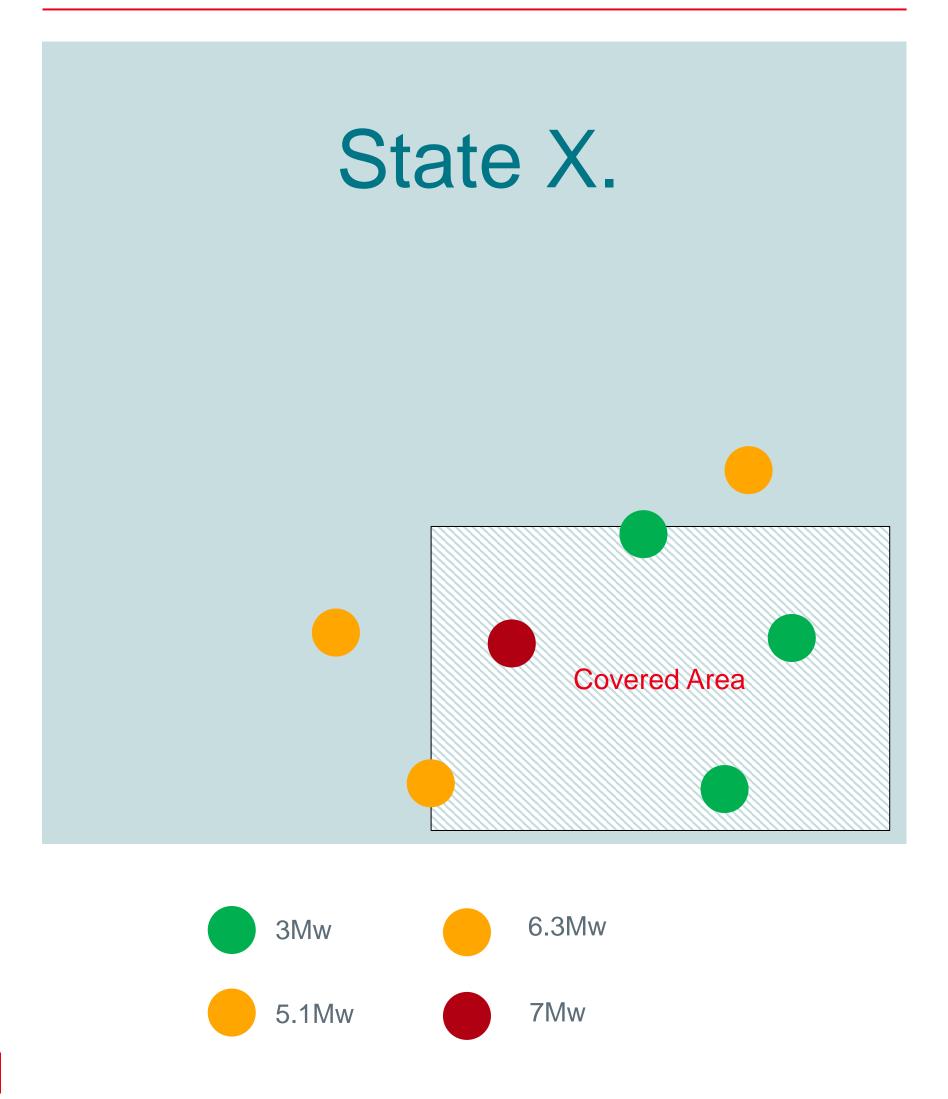
4

## **Budget**

**Budget is not more** than \$500k



### Cat-in-a-Box/Circle



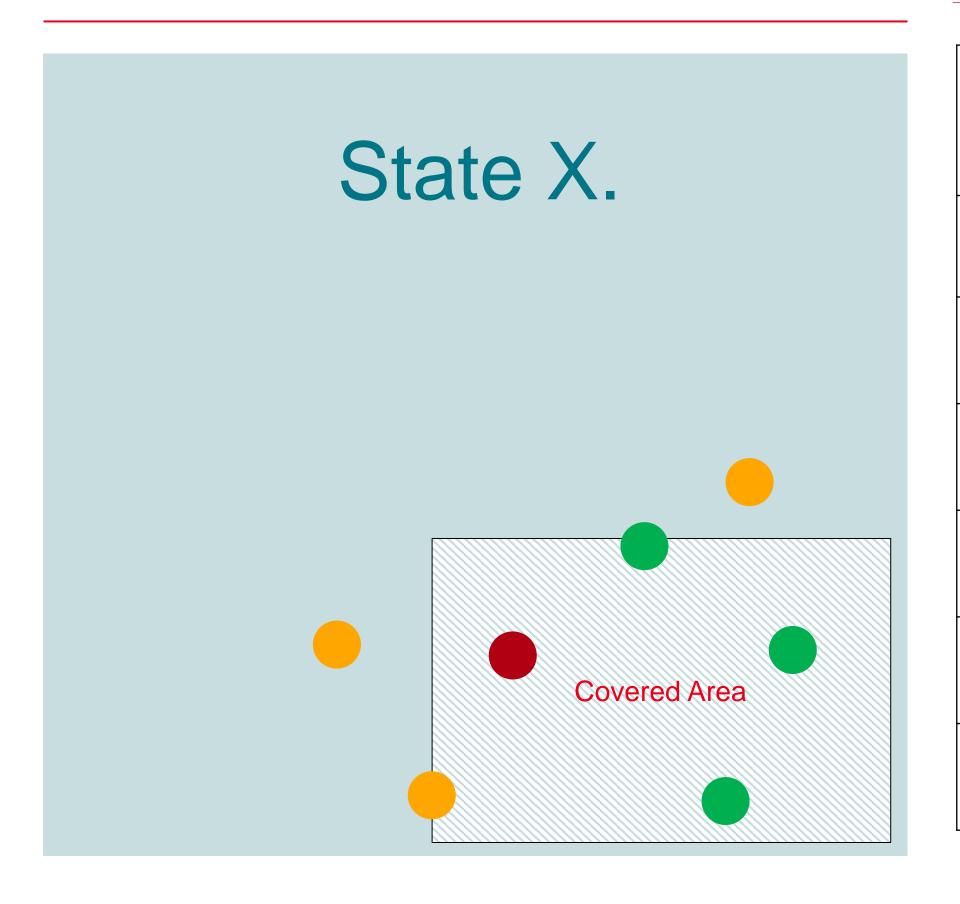
### \*Not Actual Modeled Statistics \*Pricing is For Illustrative Purposes Only

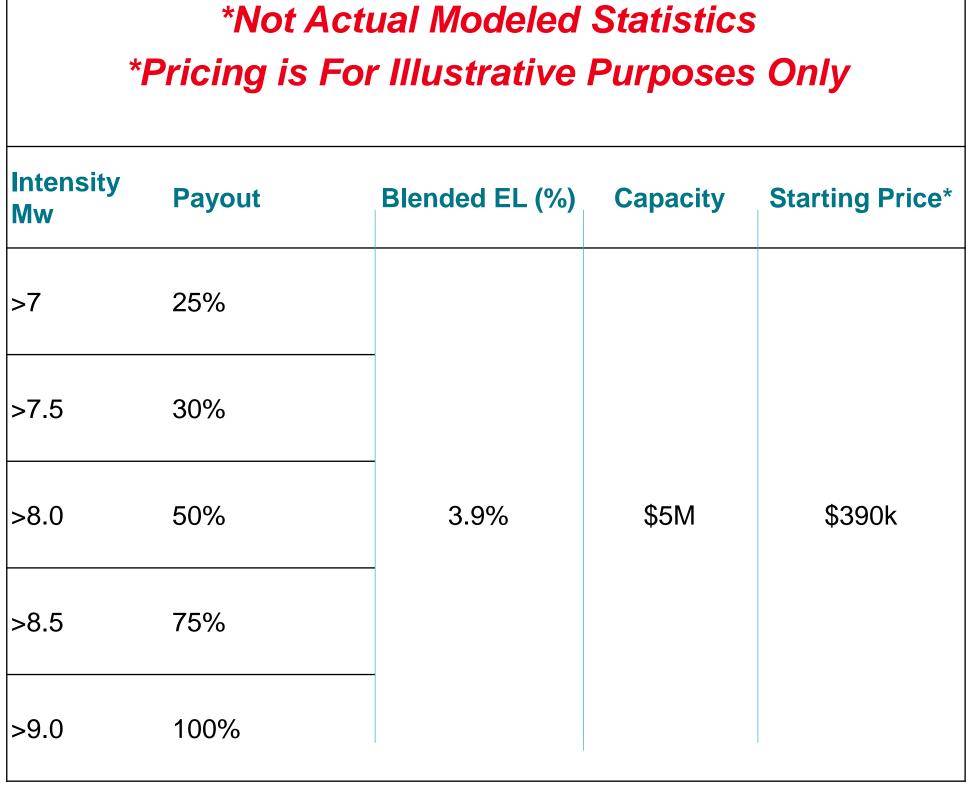
Intensity Mw	EL (%)	Capacity	Starting Price*
>7	6.5%	\$5M -20M	\$700k
>7.5	6.0%	\$5M -20M	\$550k
>8.0	4.0%	\$5M -20M	\$400k
>8.5	2.0%	\$5M -20M	\$200k
>9.0	1.0%	\$5M -20M	\$100k

Typical analysis is done based on Moment Magnitude (Mw) data from the United States Geological Survey Agency (USGS).



## Cat-in-a-Box/Circle Example - Blended & Layered









## Peril and Available Capacity

- Wind Speed or hurricane rating
- Earthquake Shake
   Intensity or magnitude
- Hail Size
- Water Level
- Temperature (heat/freeze)
- Rainfall level (excess/drought)

Hurricane	Earthquake	Hail	Tornado	Other
Capacity: \$100m +	Capacity: \$100m +	Capacity: \$100m +	Capacity: \$100m +	Perils: Flood Wildfire
Geographic Availability: Worldwide	Geographic Availability: Worldwide	Geographic Availability: U.S. and Select Other Jurisdictions	Geographic Availability: U.S. and Select Other Jurisdictions	Temperature  Capacity: Varies by peril
Triggers: Cat-In-Geometry Wind Speed At Location	Triggers: Cat-In-Geometry Wind Speed At Location	Triggers: Hail Size At Location	Triggers: Intensity At Location	Geographic Availability: Varies by peril



### Current Parametric Nat Cat Portfolio (Public and Private)

British Columbia	EQ
U.S.	Hail, Tornado
U.S. California	EQ, Wildfire
U.S. Pacific Northwest	EQ
Florida	Hurricane
Puerto Rico	EQ, Hurricane
Gulf of Mexico	Hurricane
Caribbean	EQ
Chile	EQ

Nepal	EQ
Japan	EQ
Philippines	Typhoon
Australia	Bushfire, Tropical Storm, Flood
New Zealand	EQ
Australian	Bushfire



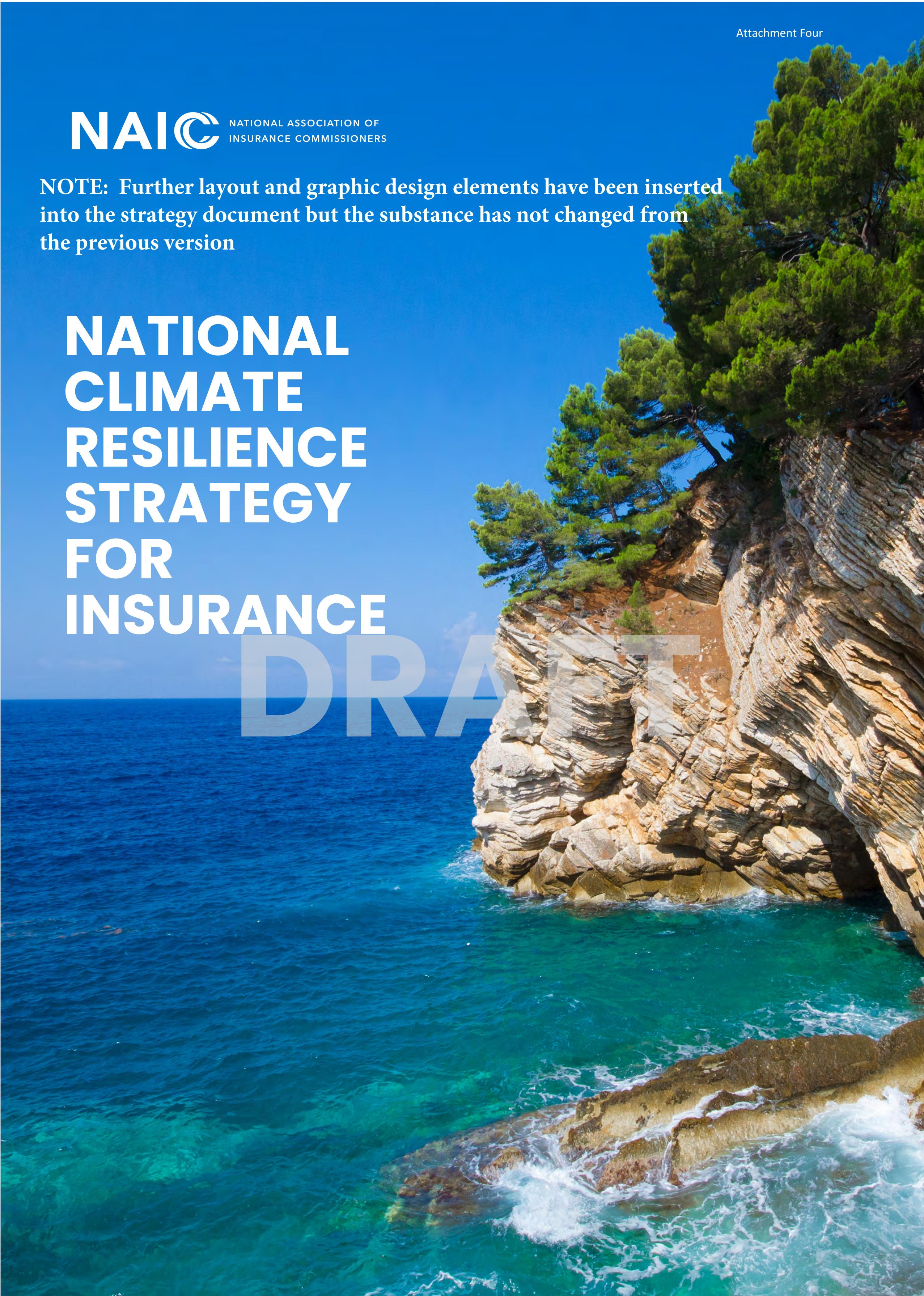
# Questions?

**Contact Information Katie Sabo** 

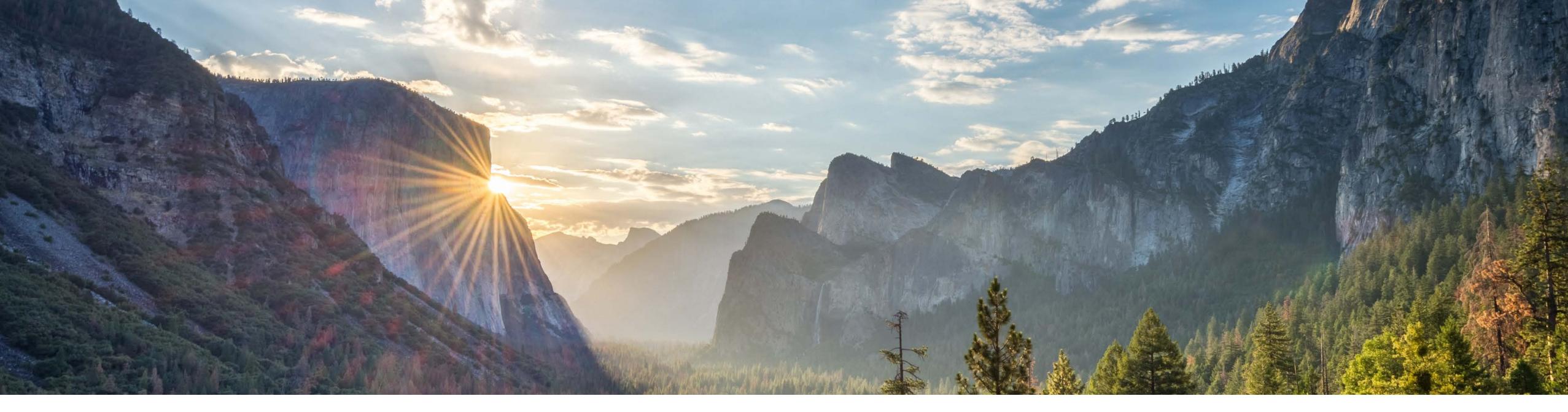
Email: Katie.Sabo@aon.com

Phone: 773-896-6816





# Table of Contents Letter from NAIC Co-Chairs Leadership on Climate Resilience in the Insurance Sector Strategy Overview Resiliency Actions and Action 1: Close Gaps Action 2: Flood Insurance Blueprint **Action 3: Comprehensive Data Action 4: Risk Mitigation Action 5: Test Scenarios** 10 Acknowledgements



For years, U.S. Insurance Regulators from the Great Lakes to the Gulf of Mexico have worked together to strengthen insurance markets for the future. Today we are seeing the consequences from wildfires, floods, and storms, among other perils, that are threatening communities and their economies. As the insurance regulators in Alaska and California, we are honored to serve as Co-Chairs of the NAIC Climate and Resiliency Task Force, which include over 40 of our insurance regulator colleagues from diverse jurisdictions: large and small populations, coastal and inland, urban and rural, and the island jurisdictions that face urgent and unique challenges. The following NAIC National Climate Resilience Strategy represents our most recent collective action.

Improving climate resilience requires blending regional perspectives and coordinating actions across federal, state, and local governments. We worked with our peers across the nation to create this first-ever national climate resilience strategy for insurance. While state regulators have supervised insurance markets for over 150 years, the challenges we face today are national in scope and require a unified approach. That is why we have come together at this moment to formalize the actions we will take as insurance regulators to strengthen climate resilience.

We are at a watershed moment on climate and resiliency. Insurance continues to be a crucial backbone to communities throughout the US. In the aftermath of recent wildfires, windstorms, and atmospheric rivers, insurance has helped improve lives by aiding recovery. But that can only occur if insurance is available and reliable. The number and scope of severe disasters that our jurisdictions have faced in recent years has raised questions about the sustainability of insurance availability and the challenges for consumers seeking insurance to be able to find and maintain it.

Our NAIC National Climate Resilience Strategy prioritizes pre-disaster mitigation because protecting insurance consumers begins long before a wildfire starts or a hurricane makes landfall. We are not starting from scratch. Several strong examples exist among our member jurisdictions. The <u>California Safer From Wildfires</u> program, for example, provides premium incentives for reducing wildfire risk through home hardening, while the <u>Strengthen Alabama Homes Program</u> provides grants to homeowners to retrofit properties based on the Insurance Institute for Business and Home Safety (IBHS) <u>Fortified</u> standard. Earlier this year, the state of Minnesota passed a similar law requiring incentives for homes that meet the Fortified standard, demonstrating the regional diversity of such approaches.

Our actions also include taking new steps on data collection and solvency tools. For the first time, the NAIC will conduct a national data collection on the availability and affordability of insurance in our jurisdictions, empowering our members to better understand each jurisdiction and regional trends. Our members will also be implementing cutting edge solvency tools that analyze future scenarios to understand solvency issues for the insurance sector. These actions address the challenges we face in a forward looking and comprehensive way.

This strategy is the first for the NAIC and its members. Insurance markets are an indicator of underlying risks and critical to recovery. The new actions pursued by the NAIC in our National Climate Resilience Strategy will strengthen resilience by helping federal, state, and local governments get more organized and effective when implementing risk mitigation funding.

Sincerely,

Ricardo Lara Commissioner, California Lori Wing-Heier Director, Alaska

Co-Chairs, Climate and Resiliency Task Force of the Executive Committee National Association of Insurance Commissioners (NAIC)



Mitigating the risk of severe weather and wildfire is essential for the safety of families and communities. Research shows Americans are not powerless – there are known, effective actions that home and business owners can take now to reduce their risk and help break the cycle of damage, disruption, and dislocation all too often associated with these natural perils. In parallel, IBHS will continue to work with the NAIC to inform and educate regulators and policymakers as they also work to bend down the risk curve and foster healthy insurance markets."

Roy Wright, President and Chief Executive Officer, Insurance Institute for Business and Home Safety

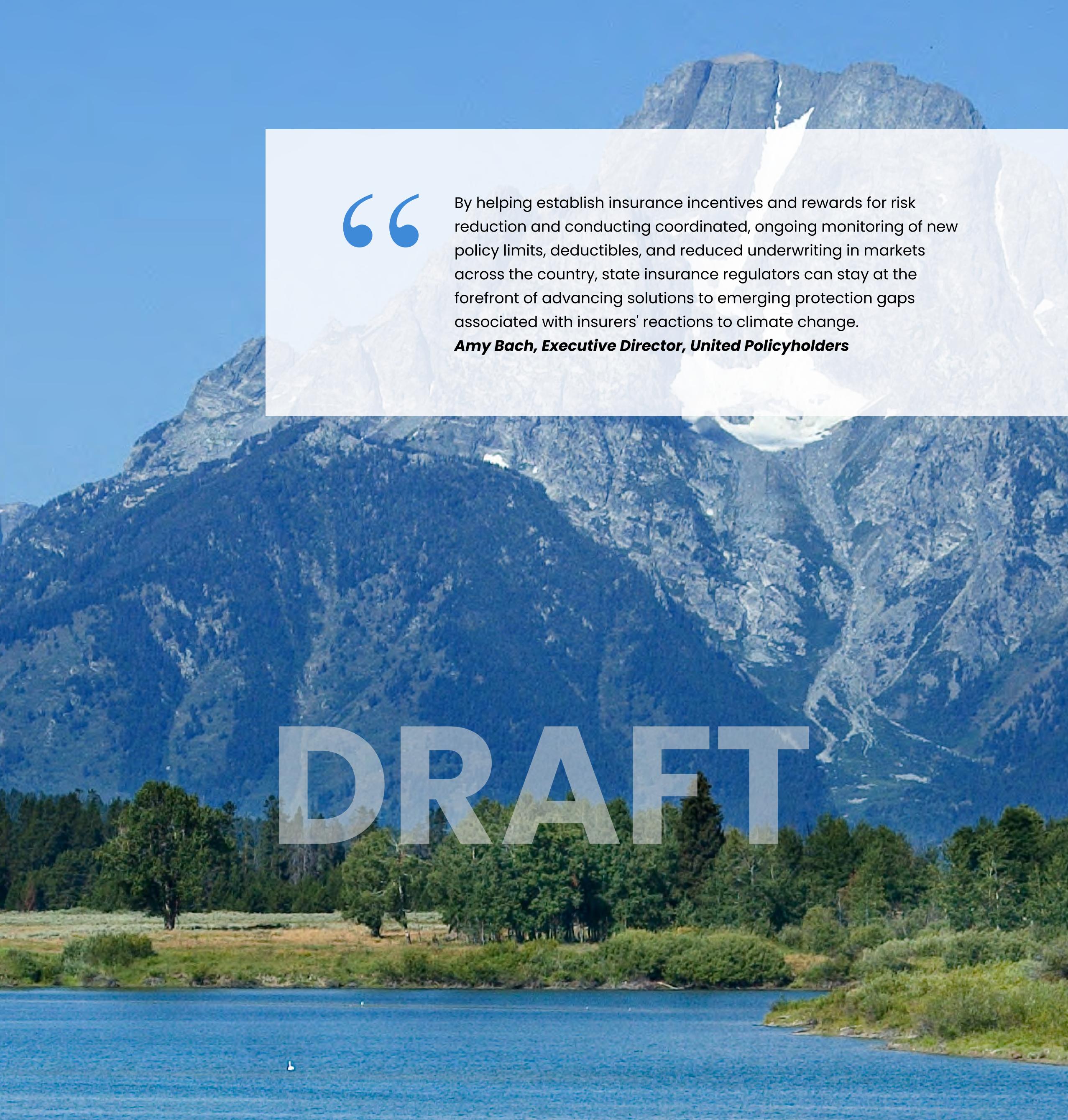
# Leadership on Climate Resilience in the Insurance Sector

A National Climate Resilience Strategy for Insurance will bring together and formalize resilience actions that can be coordinated by the National Association of Insurance Commissioners (NAIC), both pre- and post-disaster. A cornerstone of this multi-year strategy is more comprehensive data collection by the NAIC, ultimately producing better risk mitigation decisions in state jurisdictions and a greater ability to identify diverse funding strategies for risk mitigation. Insurance is critical to climate resilience and US state regulators are experts in risk assessment, insurer solvency, and disaster recovery. The NAIC and insurance regulators have been working on the issue of climate risk and resiliency for more than a decade.

The foundational deliverables created in the past few years will drive this forward looking strategy and meet the current watershed moment for insurance availability. It is part of our overarching mission to manage risks, ensure the availability and reliability of insurance products, promote insurer solvency, and close protection gaps. Our work to identify, assess, and communicate risk and risk reduction solutions, as well as to improve oversight of the insurance sector, has positioned state insurance regulators to implement a climate resilience strategy.

The Climate and Resiliency Task Force of the Executive Committee is launching this strategy to bring together the products of

existing workstreams into an enduring strategy that promotes resilient insurance markets in all US jurisdictions. The actions in this document will address the local risks, including flooding, extreme heat and cold, wildfires, hail, convective storms, atmospheric rivers, drastic snowfall, and hurricanes. Insurance regulators have the role and responsibility for ensuring stable, competitive marketplaces and financially solvent carriers. Two crucial parts of this role are to make sure that insurance companies have the financial resources to make good on their promises to pay claims and to take steps to close insurance protection gaps.



## Strategy Overview

The National Resilience Strategy for Insurance will set clear goals and direction, creating stronger cohesion among the four task force workstreams: Solvency, Technology and Innovation, Climate Risk Disclosure, and Pre-Disaster Mitigation. By using new state regulator tools, such as the Catastrophe Modeling Center of Excellence and the Protection Gap Dashboard, in a coordinated way to increase regulator understanding of climate risks and risk mitigation in insurance markets, this strategy will support NAIC members now and in the future, which will build resilience to the climate vulnerabilities we see in every jurisdiction.

This strategy will incorporate data from existing NAIC efforts. For example, the NAIC Property and Casualty Committee is creating a long-term framework for collecting more granular data from insurance companies related to climate-intensified wildfires, floods, hailstorms, convective storms, earthquakes, atmospheric rivers, and other events to better understand property markets. The new data will inform the implementation of the National Climate Resilience Strategy.

Additionally, the NAIC Center for Insurance Policy Research (CIPR) will be a key partner to implementation of this strategy.

## Resiliency Actions:

## Action 1: Close Gaps

The NAIC members will identify and coordinate the measurement of protection gaps, maintain a dashboard to understand where protection gaps are widening, evaluate policy options that have been attempted or considered, and measure progress in losing those protection gaps.

### **Deliverables:**

- **1A.** Launch an NAIC Protection Gap Dashboard, developed by NAIC staff, to understand current protection gaps and to inform state and jurisdiction specific priorities for insurance availability.
- **1B.** Convene State Regulator staff and researchers to better understand the role of insurance policy innovation in closing protection gaps and the specific characteristics of innovative policies that may be relevant to insurance regulation
- 1C. Encourage local governments to include insurance access as a priority to local mitigation projects.
- **1D.** Create training tools for State Regulator staff and tools for communicating with policyholders, state agencies, and the public.
- **1E.** Use the NAIC Protection Gap Dashboard to establish goals and measure progress for expanding insurance options and closing protection gaps.
- **IF.** Use the Protection Gap Dashboard to design new risk and resilience communications to the public and local governments.
- **1G.** Assess how the compounding consequences from multiple perils, such as extreme heat and wildfire, create specific challenges for specific jurisdictions.



Cooperation is the bedrock upon which we can construct climate resilience and bridge the protection gap. It hinges on collaboration among diverse stakeholders, including households, insurance regulators, policy-makers, insurance, and other industries, as well as fostering unity among nations and states. The NAIC National Climate Resilience Strategy for Insurance, along with its comprehensive database, offers the solid groundwork needed to turn this vision of cooperation into a reality."

Yoshihiro Kawai, Chair, OECD Insurance and Private Pensions Committee

## Action 2: Flood Insurance Blueprint

Create a blueprint for the future of flood insurance. We cannot only rely on the NFIP to close protection gaps to flood. We can coordinate on insurance regulator approaches to new strategies on innovative products, risk assessment tools, risk communication, and risk mitigation programs that can help close protection gaps for flooding.

### **Deliverables:**

**2A.** Launch a national initiative to increase awareness of risk mitigation recommendations, including IBHS science, and flood insurance options.

**2B.** Flooding is the consequence of many scenarios, including storm surge along coastlines, snowmelt, and high rainfall events.

**2C.** Create new partnerships with universities in state jurisdictions to conduct localized risk assessments and risk mitigation strategies.

- a. Establish four university hubs, one for each zone, to focus insurance regulator engagement on flood risk mitigation and expanding insurance access based on the most common sources of flood risks in the zone.
- b. Provide data to local governments on the number of private flood insurance policies in their region to identify opportunities for local governments, special districts, and townships to understand their collective risks and opportunities.

**2D.** Build stronger communication with local governments to support more effective risk understanding and awareness, as well as to share best practices for flood risk communication and risk mitigation, including information on the existing options for their constituents.

**3E.** Incorporate state-level insurance information into advocacy for state and federal funding to reduce flood risks.



The NAIC National Climate Resilience Strategy for Insurance demonstrates the united front needed to confront climate risk. With this landmark nationwide strategy, US insurance regulators are leading by example on how to make risk-informed decisions that build climate-resilient communities and economies. Insurability goes hand-in-hand with resiliency."

Butch Bacani, Programme Leader, UN Environment Programme's Principles for Sustainable Insurance Initiative

## Action 3: Comprehensive Data

Fill long-term insurance data gaps and utilize the Catastrophe Modeling Center of Excellence to improve understanding of how coverages are changing within and among jurisdictions.

Continue to make the Catastrophe Modeling Center of Excellence a resource for all members to understand mitigation priorities.

#### **Deliverables:**

- **3A.** Use the data collected by the upcoming NAIC Climate Property and Casualty Data Call to reinforce the connection between risk reduction and insurance availability to understand trends in the recent actions of insurance companies by geography, impacts to consumers, and to develop risk mitigation and risk communication priorities.
- **3B.** Prioritize the development of trainings and deliverables from the Catastrophe Modeling Center of Excellence for each Zone, and for island jurisdictions.
- **3C.** Understand how models are assessing risks and apply this understanding to determine priority areas for community risk mitigation and advocating for additional funding.
- **3D.** Use information from upcoming Property and Casualty Insurance Availability Data Call to aggregate state level data on insurance availability and affordability, especially among regional groups of jurisdictions facing similar risks.
- **3E.** Commit to a multi-year data collection to continue to keep insurance regulators informed on the trends in the markets they oversee for availability and affordability of insurance, including whether coverages are becoming more limited through changes to deductibles or coverage limits.
- **3F.** Pair insurance market data with storm, wind, wildfire, flooding, and extreme heat risk information and other economic and mitigation factors to better understand the changes in pricing and availability of insurance.
- **3G.** Advocate for federal funding for pre-disaster mitigation to address priority areas for reducing future losses and increasing insurance availability and affordability.
- **3H.** Continue to expand NAIC advocacy for both increased federal investment in existing risk mitigation programs and tax parity amount federal and state risk mitigation programs to achieve more successful risk mitigation. The NAIC will continue to bring together examples of successful state-level mitigation programs as models for other jurisdictions.
- **31.** Use IBHS science and resources to consistently inform state regulators about ongoing advancements in climate risk and resilience.

Congress has excluded grants provided through the Federal Emergency Management Agency (FEMA) from federal income tax, but state grants, including those offered by state established residual market mechanisms, for the same purpose are, in many cases, subject to federal income tax even if they are exempt from state income tax. This reduces both the impact of the grant and the incentive to pursue them. As US jurisdictions continue to experience the devastating effects of climate-related disasters, it is more important than ever to encourage residents and homeowners to utilize pre-disaster mitigation programs, and for the funding in those programs to help as many people as possible reduce their risk of a loss, whether insured or uninsured.

## Action 4: Risk Mitigation

Create and coordinate new resilience tools to assist all state regulators in developing state level mitigation grant programs and expanding incentives for pre-disaster mitigation. A growing number of states are implementing or proposing mitigation grant programs, either linked to FEMA funds or state level funds. The creation of a common resource, or roadmap, for state insurance commissioners to contribute to risk mitigation programs would reduce future losses and promote insurance availability in member jurisdictions.

#### **Deliverables:**

- **4A.** Create specific opportunities for state level insurance regulators to advocate on where federal and state mitigation dollars, such as the FEMA BRIC program, will generate the most benefits to insurance access. Strengthen pre-disaster mitigation by identifying how federal and state funds could have the most benefits for insurance access in communities.
- **4B.** Better prepare policyholders and those seeking insurance for the risks they face. Improve coordination on communication of risk reduction information. The NAIC can be a communicator of IBHS risk reduction science to the public and the communicator of risk reduction information on rapid-onset impacts like high rainfall, slow-onset impacts like spring snowmelt, and compounding impacts like increased flood risks after severe wildfire seasons. These are types of flooding that are too often overlooked and are significantly impacting certain states and jurisdictions.
- 4C. Engage with FEMA to better align FEMA pre-disaster funding to reduce risk for insurance markets.
- **4D.** Create an updated and more robust Disaster Preparedness Guide for State Insurance Regulators.
- **4E.** Synthesize the experience of insurance commissioners on specific perils to transfer knowledge to fellow state regulators and future commissioners.
- **4F.** Create an updated "living" Disaster Preparedness guide that includes the experience of regulators facing recent disasters, including the market and solvency questions that regulators have considered and addressed, for internal use in the immediate aftermath of disasters.
- **4G.** Build partnerships with stakeholders that support risk mitigation actions. For example, work with groups like Ducks Unlimited on applying for federal funding that reduces the community flood risk through land management. For example, in Canada, collaboration between Ducks Unlimited and insurance companies has linked funding with flood risk reduction that improves insurability in nearby communities.
- 4H. Use data collected by insurance regulators to support advocacy for federal risk mitigation grant funding.



"As climate change stresses property insurance markets, reducing the risks households and communities face from escalating weather extremes will be paramount. NAIC leadership to monitor trends, support risk reduction, and develop innovative approaches will not only help stabilize insurance markets but increase our overall resilience."

Carolyn Kousky, Associate Vice President for Economics and Policy at Environmental Defense Fund

### **Action 5: Test Scenarios**

Expand insurance regulators' leadership on new solvency tools. Solvency oversight is a critical part of insurance regulation. Preparing insurance regulators to better adapt to climate change requires new scenario analysis tools. Testing catastrophe models, scenario analyses, and risk mitigation factors will all contribute to more resilient communities. Simultaneously, it will require our Departments of Insurance to build knowledge.

### **Deliverables:**

**5A.** Create scenario analysis resources for state regulators to use to understand solvency risks to insurance companies.

**5B.** Build stronger partnerships between insurance regulators and regional universities or research centers. Insurance regulators would benefit from working with universities and colleges to access and develop data sources, improve risk communication, keep pace with state-of-the-art science and technology, and fortify the pipeline of new talent to insurance careers.

**5C.** Create resources and opportunities for multi-state partnerships to use multiple scenario analyses to better understand potential solvency considerations for the insurance sector.

**5D.** To better assess solvency impacts, embed climate stress testing and climate scenario analysis into routine financial analysis, data collection, and financial surveillance.

# RA



State insurance regulators are focusing on the growing challenges of more intense wildfires and floods and will play a critical role in promoting better decisions on where and how we build, and encouraging the investments in natural infrastructure and safety that are essential to improving insurability of communities. A coordinated, multi-year climate resilience strategy for insurance can accelerate pre-disaster mitigation investments and preserve insurance options that are essential to community recovery."

Alice Hill, David M. Rubenstein senior fellow for energy and the environment at the Council on Foreign Relations



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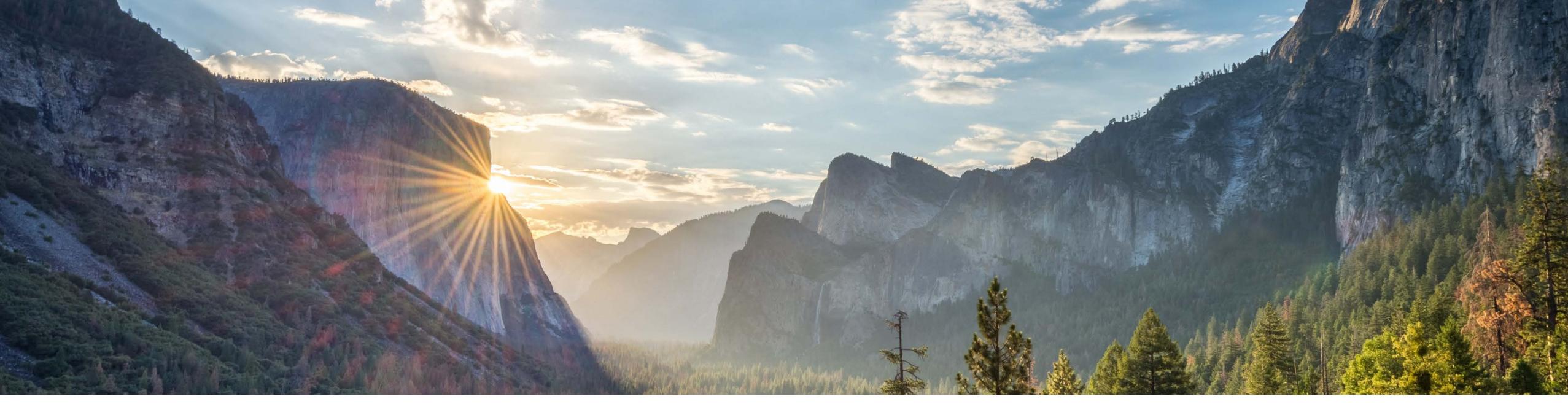
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With Special Thanks to: Michael Peterson, PhD, Climate and
Sustainability Branch, Deputy Commissioner at the California
Department of Insurance





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For years, U.S. Insurance Regulators from the Great Lakes to the Gulf of Mexico have worked together to strengthen insurance markets for the future. Today we are seeing the consequences from wildfires, floods, and storms, among other perils, that are threatening communities and their economies. As the insurance regulators in Alaska and California, we are honored to serve as Co-Chairs of the NAIC Climate and Resiliency Task Force, which include over 40 of our insurance regulator colleagues from diverse jurisdictions: large and small populations, coastal and inland, urban and rural, and the island jurisdictions that face urgent and unique challenges. The following NAIC National Climate Resilience Strategy represents our most recent collective action.

Improving climate resilience requires blending regional perspectives and coordinating actions across federal, state, and local governments. We worked with our peers across the nation to create this first-ever national climate resilience strategy for insurance. While state regulators have supervised insurance markets for over 150 years, the challenges we face today are national in scope and require a unified approach. That is why we have come together at this moment to formalize the actions we will take as insurance regulators to strengthen climate resilience.

We are at a watershed moment on climate and resiliency. Insurance continues to be a crucial backbone to communities throughout the US. In the aftermath of recent wildfires, windstorms, and atmospheric rivers, insurance has helped improve lives by aiding recovery. But that can only occur if insurance is available and reliable. The number and scope of severe disasters that our jurisdictions have faced in recent years has raised questions about the sustainability of insurance availability and the challenges for consumers seeking insurance to be able to find and maintain it.

Our NAIC National Climate Resilience Strategy prioritizes pre-disaster mitigation because protecting insurance consumers begins long before a wildfire starts or a hurricane makes landfall. We are not starting from scratch. Several strong examples exist among our member jurisdictions. The <u>California Safer From Wildfires</u> program, for example, provides premium incentives for reducing wildfire risk through home hardening, while the <u>Strengthen Alabama Homes Program</u> provides grants to homeowners to retrofit properties based on the Insurance Institute for Business and Home Safety (IBHS) <u>Fortified</u> standard. Earlier this year, the state of Minnesota passed a similar law requiring incentives for homes that meet the Fortified standard, demonstrating the regional diversity of such approaches.

Our actions also include taking new steps on data collection and solvency tools. For the first time, the NAIC will conduct a national data collection on the availability and affordability of insurance in our jurisdictions, empowering our members to better understand each jurisdiction and regional trends. Our members will also be implementing cutting edge solvency tools that analyze future scenarios to understand solvency issues for the insurance sector. These actions address the challenges we face in a forward looking and comprehensive way.

This strategy is the first for the NAIC and its members. Insurance markets are an indicator of underlying risks and critical to recovery. The new actions pursued by the NAIC in our National Climate Resilience Strategy will strengthen resilience by helping federal, state, and local governments get more organized and effective when implementing risk mitigation funding.

Sincerely,

Ricardo Lara Commissioner, California Lori Wing-Heier Director, Alaska

Co-Chairs, Climate and Resiliency Task Force of the Executive Committee National Association of Insurance Commissioners (NAIC)



Mitigating the risk of severe weather and wildfire is essential for the safety of families and communities. Research shows Americans are not powerless – there are known, effective actions that home and business owners can take now to reduce their risk and help break the cycle of damage, disruption, and dislocation all too often associated with these natural perils. In parallel, IBHS will continue to work with the NAIC to inform and educate regulators and policymakers as they also work to bend down the risk curve and foster healthy insurance markets."

Roy Wright, President and Chief Executive Officer, Insurance Institute for Business and Home Safety

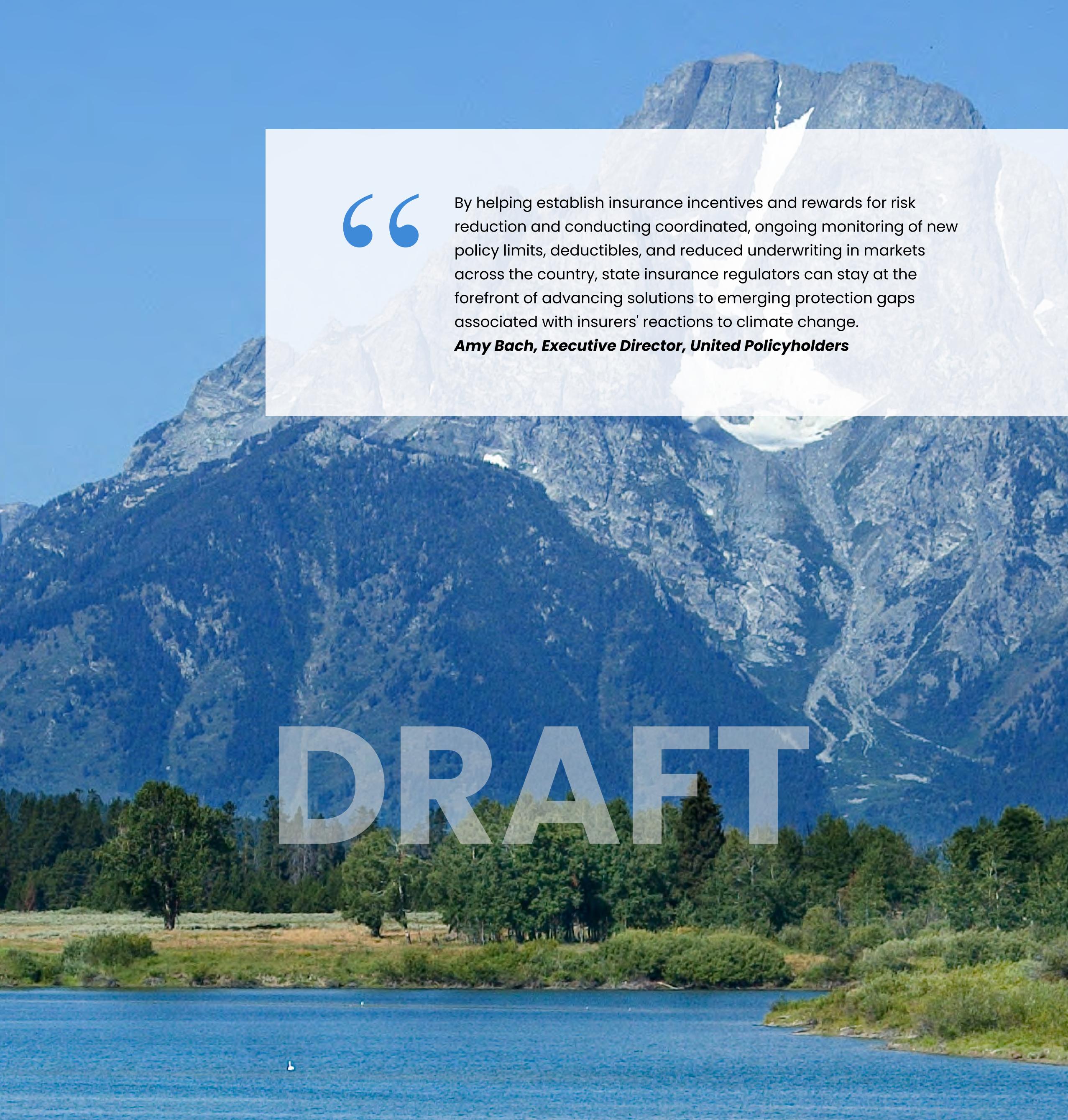
# Leadership on Climate Resilience in the Insurance Sector

A National Climate Resilience Strategy for Insurance will bring together and formalize resilience actions that can be coordinated by the National Association of Insurance Commissioners (NAIC), both pre- and post-disaster. A cornerstone of this multi-year strategy is more comprehensive data collection by the NAIC, ultimately producing better risk mitigation decisions in state jurisdictions and a greater ability to identify diverse funding strategies for risk mitigation. Insurance is critical to climate resilience and US state regulators are experts in risk assessment, insurer solvency, and disaster recovery. The NAIC and insurance regulators have been working on the issue of climate risk and resiliency for more than a decade.

The foundational deliverables created in the past few years will drive this forward looking strategy and meet the current watershed moment for insurance availability. It is part of our overarching mission to manage risks, ensure the availability and reliability of insurance products, promote insurer solvency, and close protection gaps. Our work to identify, assess, and communicate risk and risk reduction solutions, as well as to improve oversight of the insurance sector, has positioned state insurance regulators to implement a climate resilience strategy.

The Climate and Resiliency Task Force of the Executive Committee is launching this strategy to bring together the products of

existing workstreams into an enduring strategy that promotes resilient insurance markets in all US jurisdictions. The actions in this document will address the local risks, including flooding, extreme heat and cold, wildfires, hail, convective storms, atmospheric rivers, drastic snowfall, and hurricanes. Insurance regulators have the role and responsibility for ensuring stable, competitive marketplaces and financially solvent carriers. Two crucial parts of this role are to make sure that insurance companies have the financial resources to make good on their promises to pay claims and to take steps to close insurance protection gaps.



## Strategy Overview

The National Resilience Strategy for Insurance will set clear goals and direction, creating stronger cohesion among the four task force workstreams: Solvency, Technology and Innovation, Climate Risk Disclosure, and Pre-Disaster Mitigation. By using new state regulator tools, such as the Catastrophe Modeling Center of Excellence and the Protection Gap Dashboard, in a coordinated way to increase regulator understanding of climate risks and risk mitigation in insurance markets, this strategy will support NAIC members now and in the future, which will build resilience to the climate vulnerabilities we see in every jurisdiction.

This strategy will incorporate data from existing NAIC efforts. For example, the NAIC Property and Casualty Committee is creating a long-term framework for collecting more granular data from insurance companies related to climate-intensified wildfires, floods, hailstorms, convective storms, earthquakes, atmospheric rivers, and other events to better understand property markets. The new data will inform the implementation of the National Climate Resilience Strategy.

Additionally, the NAIC Center for Insurance Policy Research (CIPR) will be a key partner to implementation of this strategy.

## Resiliency Actions:

## Action 1: Close Gaps

The NAIC members will identify and coordinate the measurement of protection gaps, maintain a dashboard to understand where protection gaps are widening, evaluate policy options that have been attempted or considered, and measure progress in losing those protection gaps.

### **Deliverables:**

- **1A.** Launch an NAIC Protection Gap Dashboard, developed by NAIC staff, to understand current protection gaps and to inform state and jurisdiction specific priorities for insurance availability.
- **1B.** Convene State Regulator staff and researchers to better understand the role of insurance policy innovation in closing protection gaps and the specific characteristics of innovative policies that may be relevant to insurance regulation
- 1C. Encourage local governments to include insurance access as a priority to local mitigation projects.
- **1D.** Create training tools for State Regulator staff and tools for communicating with policyholders, state agencies, and the public.
- **1E.** Use the NAIC Protection Gap Dashboard to establish goals and measure progress for expanding insurance options and closing protection gaps.
- **IF.** Use the Protection Gap Dashboard to design new risk and resilience communications to the public and local governments.
- **1G.** Assess how the compounding consequences from multiple perils, such as extreme heat and wildfire, create specific challenges for specific jurisdictions.



Cooperation is the bedrock upon which we can construct climate resilience and bridge the protection gap. It hinges on collaboration among diverse stakeholders, including households, insurance regulators, policy-makers, insurance, and other industries, as well as fostering unity among nations and states. The NAIC National Climate Resilience Strategy for Insurance, along with its comprehensive database, offers the solid groundwork needed to turn this vision of cooperation into a reality."

Yoshihiro Kawai, Chair, OECD Insurance and Private Pensions Committee

## Action 2: Flood Insurance Blueprint

Create a blueprint for the future of flood insurance. We cannot only rely on the NFIP to close protection gaps to flood. We can coordinate on insurance regulator approaches to new strategies on innovative products, risk assessment tools, risk communication, and risk mitigation programs that can help close protection gaps for flooding.

### **Deliverables:**

**2A.** Launch a national initiative to increase awareness of risk mitigation recommendations, including IBHS science, and flood insurance options.

**2B.** Flooding is the consequence of many scenarios, including storm surge along coastlines, snowmelt, and high rainfall events.

**2C.** Create new partnerships with universities in state jurisdictions to conduct localized risk assessments and risk mitigation strategies.

- a. Establish four university hubs, one for each zone, to focus insurance regulator engagement on flood risk mitigation and expanding insurance access based on the most common sources of flood risks in the zone.
- b. Provide data to local governments on the number of private flood insurance policies in their region to identify opportunities for local governments, special districts, and townships to understand their collective risks and opportunities.

**2D.** Build stronger communication with local governments to support more effective risk understanding and awareness, as well as to share best practices for flood risk communication and risk mitigation, including information on the existing options for their constituents.

**3E.** Incorporate state-level insurance information into advocacy for state and federal funding to reduce flood risks.



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## Action 4: Risk Mitigation

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### **Action 5: Test Scenarios**

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### **Deliverables:**

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