



Date: 3/15/22

*2022 Spring National Meeting  
Kansas City, Missouri*

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

Wednesday, April 6, 2022

8:00 – 9:30 a.m.

Convention Center—Grand Ballroom 2501 AB—Level 2

**ROLL CALL**

Ricardo Lara, Co-Chair	California	Anita G. Fox	Michigan
David Altmaier, Co-Chair	Florida	Grace Arnold	Minnesota
Colin M. Hayashida, Co-Vice Chair	Hawaii	Mike Chaney	Mississippi
James J. Donelon, Co-Vice Chair	Louisiana	Chlora Lindley-Myers	Missouri
Kathleen A. Birrane, Co-Vice Chair	Maryland	Troy Downing	Montana
Barbara D. Richardson, Co-Vice Chair	Nevada	Edward M. Deleon Guerrero	N. Mariana Islands
Andrew R. Stolfi, Co-Vice Chair	Oregon	Eric Dunning	Nebraska
Elizabeth Kelleher Dwyer, Co-Vice Chair	Rhode Island	Marlene Caride	New Jersey
Raymond G. Farmer, Co-Vice Chair	South Carolina	Adrienne A. Harris	New York
Jim L. Ridling	Alabama	Mike Causey	North Carolina
Lori K. Wing-Heier	Alaska	Jon Godfread	North Dakota
Peni Itula Sapini Teo	American Samoa	Judith L. French	Ohio
Alan McClain	Arkansas	Glen Mulready	Oklahoma
Michael Conway	Colorado	Michael Humphreys	Pennsylvania
Andrew N. Mais	Connecticut	Alexander S. Adams Vega	Puerto Rico
Trinidad Navarro	Delaware	Carter Lawrence	Tennessee
Karima M. Woods	District of Columbia	Michael S. Pieciak	Vermont
Dana Popish Severinghaus	Illinois	Tregenza A. Roach	Virgin Islands
Doug Ommen	Iowa	Scott A. White	Virginia
Sharon P. Clark	Kentucky	Mike Kreidler	Washington
Eric A. Cioppa	Maine	Nathan Houdek	Wisconsin
Gary D. Anderson	Massachusetts	Jeff Rude	Wyoming

NAIC Support Staff: Jennifer Gardner

**AGENDA**

1. Consider Adoption of its March 21 Minutes—*Commissioner Ricardo Lara (CA) and Commissioner David Altmaier (FL)* Attachment One
2. Hear a Presentation from Zurich North America and Resilient Cities Network Regarding Their Partnership to Improve Community Resilience—*Brandon Fick (Zurich North America) and Stewart Sarkozy-Banoczy (Resilient Cities Network)* Attachment Two

3. Hear a Presentation from Munich Re Regarding Solutions to Improve Community Flood Mitigation—*Raghuveer Vinukollu (Munich Re)*
4. Hear a Federal Update—*Brooke Stringer (NAIC)*
5. Discuss Any Other Matters Brought Before the Task Force  
—*Commissioner Ricardo Lara (CA) and Commissioner David Altmaier (FL)*
6. Adjournment

 [ClimateTFAgenda.docx](#)

## Draft Pending Adoption

Draft: 3/30/22

Climate and Resiliency (EX) Task Force  
Virtual Meeting  
March 21, 2022

The Climate and Resiliency (EX) Task Force March 21, 2022. The following Task Force members participated: Ricardo Lara, Co-Chair, Mike Peterson, Deborah Halberstadt, Kara Voss, Rabab Charafeddine, and Camilo Pizzaro (CA); David Altmaier, Co-Chair, Christina Huff, Susanne Murphy, and Alexis Bakofsky (FL); Colin M. Hayashida, Co-Vice Chair (HI); James J. Donelon, Co-Vice Chair, Tom Travis, and Stewart Guerin (LA); Kathleen A. Birrane, Co-Vice Chair, and Alexander Borkowski (MD); Barbara D. Richardson, Co-Vice Chair (NV); Andrew R. Stolfi, Co-Vice Chair, represented by Aeron Teverbaugh, Ying Liu, and David Dahl (OR); Elizabeth Kelleher Dwyer, Co-Vice Chair, Matt Gendron, and Jack Broccoli (RI); Raymond G. Farmer, Co-Vice Chair (SC); Lori K. Wing-Heier and Alex Reno (AK); Alan McClain (AR); Jim L. Ridling and Erick Wright (AL); Michael Conway represented by Peg Brown (CO); Andrew N. Mais represented by William Arfanis, George Bradner, and Amy Waldhauer (CT); Karima M. Woods and Sharon Shipp (DC); Trinidad Navarro represented by Frank Pyle and Christina Miller (DE); Doug Ommen, Travis Grassel, and Kim Cross (IA); Dana Popish Severinghaus, C.J. Metcalf, Shannon Whalen, Patrice Dziire, and Susan Berry (IL); Sharon P. Clark (KY); Gary D. Anderson, Rachel M. Davison, and Caleb Huntington (MA); Eric A. Cioppa represented by Sandra Darby (ME); Anita G. Fox represented by Parker Fisher and Renee Campbell (MI); Grace Arnold represented by Peter Brickwedde (MN); Chlora Lindley-Myers, John Rehagen, Jo LeDuc, and Shannon Schmoeger (MO); Mike Chaney (MS); Troy Downing represented by Bob Biskupiak (MT); Mike Causey represented by Michelle Osbourne and Jackie Obusek (NC); Jon Godfread represented by Matt Fischer, Chris Aufenthie, Holly Brockman, and John Arnold (ND); Eric Dunning represented by Connie Van Slyke, Justin Schrader, Martin Swanson and Lindsay Crawford (NE); Marlene Caride and Jesse Kolodin (NJ); Adrienne A. Harris represented by Bob Kasinow, Avani Shaw, and Sahana Zutshi (NY); Judith L. French, Lori Barron, Tynesia Dorsey, and Meredith Craig (OH); Michael Humphreys, Melissa Greiner, David Buono, and Katie Merritt (PA); Alexander S. Adams Vega and Natalia Maldonado (PR); Carter Lawrence represented by Bill Huddleston and Stephanie Cope (TN); Scott A. White represented by Greg Chew (VA); Tregenza A. Roach represented by Suzette Richards, Glendina Matthews, and Cheryl Charleswell (VI); Michael S. Pieciak represented by Mary Block, Marcia Violette, Karla Nuissl, Isabelle Turpin Keiser, Nick Marineau, and Rosemary Raszka (VT); Mike Kreidler, Jay Bruns, and Bryon Welch (WA); Nathan Houdek, Sarah Smith, Rebecca Rebholz, and Darcy Paskey; (WI); and Jeff Rude (WY). Also participating were: Tate Flott and Shannon Lloyd (KS); Kate Kixmiller (IN); Marianne Baker (TX); and Tracy Klausmeier (UT).

### 1. Adopted its 2021 Summer National Meeting Minutes

Commissioner Caride made a motion, seconded by Superintendent Dwyer, to adopt the Task Force's Dec. 14, 2021, minutes (*see NAIC Proceedings – Fall 2021, Climate and Resiliency (EX) Task Force*). The motion passed unanimously.

### 2. Heard Reports from its Workstreams

#### a. Innovation Workstream

Commissioner Hayashida said that in 2022, the Innovation Workstream will continue to explore innovative products that address coverage gaps created by natural catastrophes. He said the Workstream will hear a presentation from the Demex Group on April 13. The Demex Group provides solutions to assess risks from natural hazards and designs coverage options for commercial enterprises.

All meetings of the Innovation Workstream are posted on the Climate and Resiliency Resource catalog innovative product offerings.

## Draft Pending Adoption

### b. Pre-Disaster Mitigation Workstream

Commissioner Richardson said that in 2022, the Pre-Disaster Mitigation Workstream will continue participating in multi-agency stakeholder educational efforts on coverage gaps and pre-disaster mitigation related to climate risks. The Workstream will consider the risks associated with all perils, identify mitigation actions at the community and individual property level, and prioritize consumer education and awareness of coverage gaps that exist due to natural catastrophes. The Workstream will continue to explore state and industry-driven mitigation actions, including mitigation grant programs, building code advocacy, and risk assessment tools.

Commissioner Richardson said the Workstream is planning to host a virtual meeting in May to hear presentations on the benefits of and funding options for prescribed burns to reduce the risk of wildfire. She said Workstream members are mindful not just of the risk for property damage, but also the risk of new or worsening health conditions and loss of life. The Workstream plans to explore how mitigation can help reduce human-related risks in addition to the property impacts.

### c. Solvency Workstream

Commissioner Birrane said the Solvency Workstream held a series of public meetings in 2021 and then issued a set of questions to solicit input on potential enhancements to existing regulatory financial solvency tools. Many commenters suggested that enhancements would be most appropriate to the *Financial Condition Examiners Handbook* and the *NAIC Own Risk and Solvency Assessment Guidance Manual* (ORSA Guidance Manual). On March 21, the Workstream released for comment draft referral letters to the Financial Examiners Handbook (E) Technical Group and the Own Risk and Solvency Assessment (ORSA) Implementation (E) Subgroup. Comments will be accepted through April 20. The Solvency Workstream will hold a public meeting following the comment deadline to consider the comments received and finalize the referral letters.

Commissioner Birrane said after finalizing the referrals regarding the *Financial Condition Examiners Handbook* and the *NAIC Own Risk and Solvency Assessment Guidance Manual*, the Workstream will begin considering the need for updates to the *Financial Analysis Handbook*. Later in 2022, the Workstream will host presentations to gather information on scenario analysis and stress testing.

### 3. Adopted the Proposal for the CIPR to Create a Catastrophe Model Center of Excellence

Commissioner Donelon said the Technology Workstream adopted the proposal for the NAIC's Center for Insurance Policy and Research (CIPR) to create a Catastrophe Model Center of Excellence (COE) on Nov. 22 following multiple discussions and an open comment period. The recommendation was reported to the Climate and Resiliency (EX) Task Force on Dec. 14 during the 2021 Fall National Meeting. The purpose of the COE is three-fold. First, it will provide state insurance departments with access to catastrophe modeling documentation and provide assistance distilling the technical information received. The information shared by catastrophe modelers will be protected through data use agreements and provided to state insurance regulators through a permissioned resource. This resource is already built and has gone through NAIC legal review. Two catastrophe modelers have already signed data use agreements to share information. Second, the COE will provide general technical education and training materials on the mechanics of commercial models, as well as the treatment of perils and risk exposures. It will provide fact-based, unbiased information to state insurance regulators and will work with all vendors who choose to provide information. It is recommended that a governance structure be put in place to ensure transparency and impartiality. Third, the COE will conduct applied research using model platforms to address regulatory questions concerning resilience priorities. It will report to the Technology Workstream quarterly and to the Catastrophe Insurance (C) Working Group as appropriate.

## Draft Pending Adoption

Commissioner Richardson made a motion, seconded by Commissioner Chaney, to adopt the proposal for the NAIC's CIPR to create a COE (Attachment One). The motion passed unanimously.

### 4. Adopted the Revised Proposed Climate Risk Disclosure Survey

Superintendent Dwyer said that in early 2021, the Climate Risk Disclosure Workstream began holding public meetings to hear from interested stakeholders, including academic organizations, climate risk reporting agencies, investment management firms, insurers, industry representatives, state insurance regulators, and consumer groups. The Workstream solicited feedback from stakeholders in the spring of 2021 to guide its work before drafting a revised Climate Risk Disclosure Survey (survey) to companies. Four states participated in the initial drafting: California, New York, Oregon and Washington. The first draft was exposed for comment on Nov. 15, 2021. Commissioner Stolfi presented on that draft during the Task Force's Dec. 14, 2021, meeting. The Workstream then held an open meeting on Jan. 26, 2022, to hear from the commenters. The draft was updated pursuant to comments received. Notable revisions include content added to the introduction regarding confidentiality, materiality, and guidance consistent with the Financial Stability Board's (FSB's) Taskforce on Climate-Related Financial Disclosures (TCFD). All multiple-choice questions were removed, questions considered to be duplicative were eliminated, and compound "yes or no" questions were separated. The "yes or no" questions were made voluntary, and the bulleted questions under the TCFD statements were made into guidance for how insurers would address the TCFD statements, not separate questions an insurer must answer.

The Workstream met again on Feb. 28, 2022, to expose the latest draft and take additional comments. Based on comments following that meeting, the Workstream decided that any insurer who had already completed their TCFD in 2022 may submit it as is, without modification. The reporting deadline was extended for 2022, from Aug. 31 to Nov. 30. The introduction was updated to include clarification regarding reporting deadlines and expectations for content to include in the insurers' response and provide flexibility for state departments to offer extensions at their discretion. Additionally, states may elect not to even request that companies voluntarily answer the "yes or no" questions. Superintendent Dwyer said according to the latest TCFD update, more than 120 state insurance regulators and government organizations support the TCFD. The Financial Stability Oversight Council (FSOC) report issued in October 2021 encouraged all members to consider enhancing climate-related disclosure requirements and offered TCFD as an example.

Under the proposed Climate Risk Disclosure Workstream recommendation, the survey would remain elective for state use. The reporting threshold for insurers would remain the same at \$100 million in direct premium written and licensed in any one of the 15 participating states. The Workstream is not aware of any new states joining this year, so it is anticipated that all insurers required to report this year will have reported an NAIC Climate Risk Disclosure Survey in the past. If there are any new insurers who recently crossed the reporting threshold, their deadline is Aug. 30, 2023, instead of Nov. 30, 2022. Additionally, states can use their discretion to offer extensions to companies. Participating states send letters to companies to request the information so insurers should make requests for accommodation to the state that sent the letter. The Climate Risk Disclosure Workstream adopted the revised survey during its March 11 meeting.

Director French asked if language could be added to the survey specifying that any new companies be given an extra year for reporting in 2023 and beyond. Superintendent Dwyer said states have discretion to offer leeway for all companies, not limited to new companies. She and Commissioner Altmaier said the survey is voluntary for states to use and, therefore, are provided with a lot of flexibility in terms of implementation. Superintendent Dwyer said comments received very early on were supportive of moving to the TCFD, which is what the Workstream has proposed.

## Draft Pending Adoption

Dennis Burke (Reinsurance Association of America—RAA) said the U.S. Securities and Exchange Commission (SEC) exposed its proposed climate disclosure within the last few hours and requested that the Task Force pause the vote until the SEC proposal can be fully reviewed to determine how it compares to the revised NAIC survey.

David Snyder (American Property Casualty Insurance Association—APCIA) said APCIA is requesting that insurers who had been previously submitting the eight-question NAIC survey be given until 2023 to submit the revised survey. Mr. Snyder expressed concern regarding the public nature of the disclosure. He also requested alignment between the revised survey and regulator-only content that may be recommended by the Solvency Workstream via referrals to relevant Financial Condition (E) Committee groups.

Patrick Reeder (American Council of Life Insurers—ACLI) said companies have concerns about moving from the eight-question survey to the revised survey in the proposed time frame. Mr. Reeder also expressed concerns regarding the public nature of reporting and confidentiality concerns of insurers. He said there has not been enough time to review the proposed SEC requirements, but the time frame for reporting would be staged over a three- to four-year period depending on the size of the company and the content of reporting.

Jonathan Rodgers (National Association of Mutual Insurance Companies—NAMIC) said NAMIC would like assurance for companies new to reporting. He requested that new companies not be required to report in the initial year. This would apply to companies just crossing the reporting threshold, as well as companies added due to increased state participation.

Commissioner Altmaier said that the Task Force will review the SEC proposal, but given that it is only a proposal at this time and there will be additional time to compare the disclosure frameworks, he would prefer not to delay the Task Force vote to wait for the SEC determination, which will likely not be finalized until December 2022. He said the Workstream has included guidance to insurers regarding confidentiality within the introduction of the survey. Commissioner Altmaier said the Workstream has included in the draft a significant amount of flexibility in the content and timeline for reporting, as well as discretion to the participating states.

Superintendent Dwyer said the request to delay any climate risk disclosure until 2023 is a step back since companies have already been reporting the eight-question NAIC Climate Risk Disclosure Survey in prior years. She said she is unaware of any new companies being asked to report, and industry representatives have been unable to name any upon request. She said companies that have never participated in the NAIC Climate Risk Disclosure Survey, should there be any, have already been exempted from reporting in 2022. Ms. Teverbaugh said the Workstream included bulleted items to assist companies in determining the type of information to include in a TCFD, easing them into the process.

Amy Bach (United Policyholders) encouraged members to continue making progress on this important initiative. Commissioner Lara said the Workstream will review the SEC guidance but intends to keep moving forward, including through additional guidance to companies, striving for consistency, and aligning the survey to the TCFD framework. Ms. Teverbaugh said there is so much flexibility already built into the voluntary survey for states to use, it seems unnecessary to undermine the state discretion by adding language to limit their timeline for implementation. Acting Commissioner Humphreys (PA) said Pennsylvania began participating in 2021, and few companies had concerns with completing the survey in the same calendar year. Commissioner Humphreys said the state had flexibility to work with companies with concerns and offered extensions upon request. Commissioner Anderson said Massachusetts had a similar experience to Pennsylvania, having joined as a participating state in 2021.

Director French made a motion, seconded by Commissioner Donelon, to amend the survey based on NAMIC's suggestion to extend the reporting deadline for new companies in 2023 and future years.

## **Draft Pending Adoption**

The following voted in favor of the motion: Alabama, Alaska, Arkansas, Iowa, Louisiana, Mississippi, Montana, Nebraska, Ohio, Puerto Rico, South Carolina. The following abstained: Virgin Islands. The following voted against the motion: California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Hawaii, Illinois, Kentucky, Maryland, Massachusetts, Maine, Minnesota, Missouri, Nevada, New Jersey, New York, North Dakota, Oregon, Pennsylvania, Rhode Island, Tennessee, Vermont, Virginia, Washington, Wisconsin, and Wyoming.

The motion to amend the survey did not pass.

Director Lindley-Myers made a motion, seconded by Commissioner Kreidler to adopt the revised survey (Attachment Two).

The following voted in favor of the motion: Alabama, Alaska, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Hawaii, Illinois, Iowa, Kentucky, Louisiana, Maryland, Massachusetts, Maine, Minnesota, Mississippi, Missouri, Montana, Nevada, New Jersey, New York, North Dakota, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, Vermont, Virgin Islands, Virginia, Washington, Wisconsin, Wyoming. The following voted against the motion: Nebraska, Ohio, and Tennessee.

The motion passed.

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

SharePoint/NAIC Support Staff Hub/Member Meetings/2022 Spring National Meeting/EXECUTIVE (EX) COMMITTEE/Climate and Resiliency (EX) Task Force/

## RESILIENT COMMUNITY IMPACT FUND (RCIFund)

The RCIFund is an investment tool, bringing together public and private partners, to secure a resilient future in the cities we live in. With more than half of the world's population living in urban areas and expected to reach 70 percent by 2050, urgent action is required to ensure our cities can withstand the effects of multiple shocks and stresses.

The RCIFund will provide cities with the connections and resources to secure a resilient future. The fund is the first of its kind to focus on building holistic resilience that generates measurable reductions in vulnerability around the world.



**When a city is resilient, it has the capacity to ensure its infrastructure, businesses, institutions, communities and individuals survive and thrive, no matter what chronic stresses and acute shocks they experience.**

Business-as-usual models of siloed and reactive planning do not provide cities with the means to thrive in the face of the acute shocks and chronic stresses of the 21st century. Acute shocks are sudden, intense events that threaten a community, such as natural disasters, cyberattacks or civil unrest. The impact of these shocks are often exacerbated by chronic stresses that can weaken cities over time, such as recurrent flooding and high unemployment.

Resilient Cities Network and partners will raise funds for the RCIFund, targeting a minimum \$10 million USD by end of year 2024. Resources will be targeted toward resilience projects that can further leverage funding from local stakeholders and align with city priorities. Solutions developed through a resilience lens allow cities to enjoy multiple benefits, or resilience dividends – maximizing the value of every dollar spent, and ultimately, improving overall quality of life.

**\$10M  
USD**

## MODEL & MANAGEMENT



## TIMING

The fund was launched in 2022. A global call for co-funding was issued at the time of the launch with initial seed funding committed. The minimum donor contribution is set at \$250,000 USD. First round grants to cities will be awarded by the end of 2022.

## CONTACT

FOR MORE INFORMATION CONTACT US AT  
[RCIFund@resilientcitiesnetwork.org](mailto:RCIFund@resilientcitiesnetwork.org)  
 AND VISIT US AT  
[www.resilientcitiesnetwork.org](http://www.resilientcitiesnetwork.org)



Attachment Three

# Community Flood Resilience Insurance

A Partnership between TNC and Munich Re.



# Drivers of increasing losses from natural hazards

## Generic concept of risk definition

$$\text{RISK} = \text{HAZARD} \times \text{VULNERABILITY} \times \text{EXPOSURE (people, \$)}$$



### Climate change: mitigation

Emissions reduction

New technologies

Long term

### Climate change: adaptation

Data analytics, information, best practices

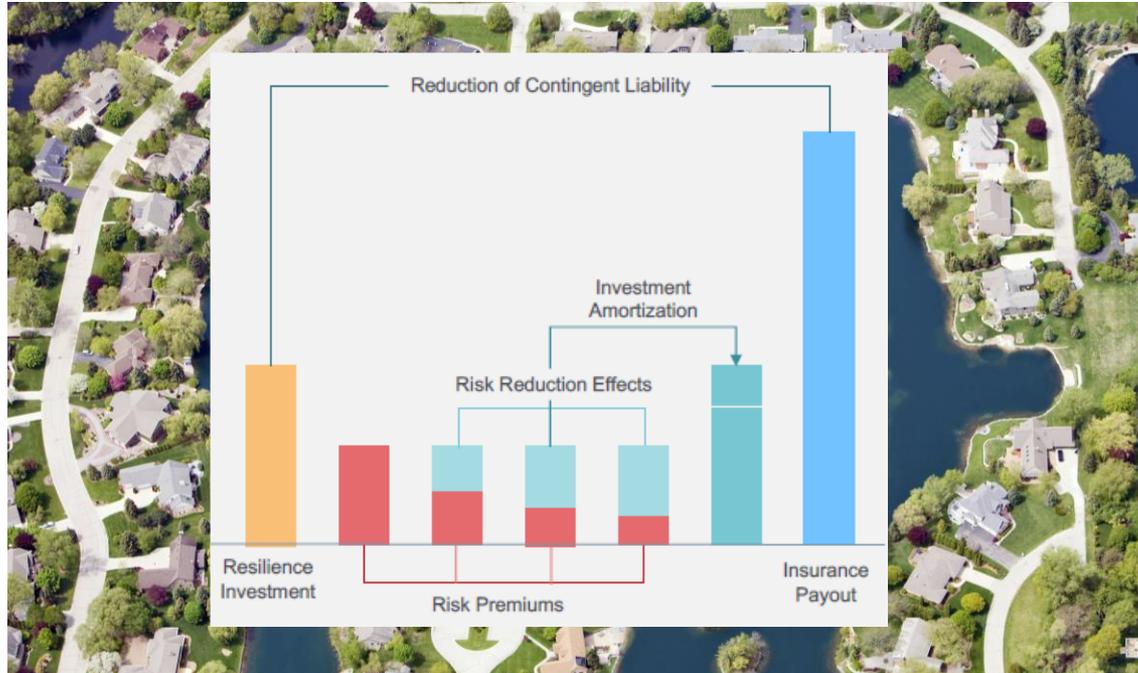
Building codes/construction, land use, etc.

Risk transfer, insurance

Short term / immediate impact

# Community Resilience Insurance

A Sustainable and Integrated approach to Risk Transfer and Risk Reduction



A resilience insurance solution aims to overcome the trade-off between risk reduction and risk transfer, linking the risk reduction effect with an insurable risk within a combined solution:

- ✓ A resilient investment at the beginning of the period reduces the underlying risk
- ✓ The risk mitigating impact is monetized via reduced premiums
- ✓ An incentive is created both for risk reducing infrastructure as well as for risk transfer resulting in increased community resilience

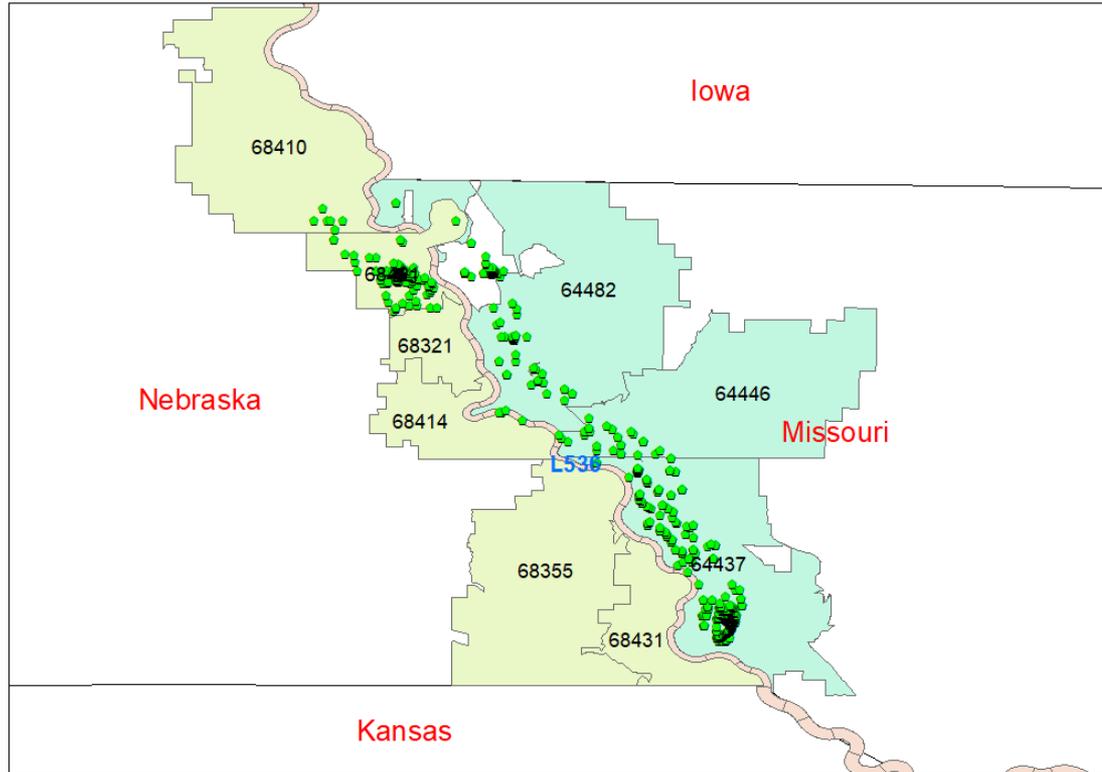
<https://doi.org/10.1016/j.ecolecon.2019.106487>

# NFIP Policy Data 2018 Snapshot

Missouri and Nebraska			
FloodZone	Total Policy Count	AVG BLDG CVG	AVG POLICY PREM
A	9,968	\$ 140,027	\$ 1,190
B	319	\$ 186,238	\$ 1,005
C	566	\$ 166,658	\$ 719
D	2	\$ 77,750	\$ 1,824
N	170	\$ 34,900	\$ 600
X	4,942	\$ 181,265	\$ 585
<b>Grand Total</b>	<b>15,967</b>	<b>\$ 153,852</b>	<b>\$ 942</b>
L536 Zip Codes			
FloodZone	Total Policy Count	AVG BLDG CVG	AVG POLICY PREM
A	141	\$ 120,601	\$ 1,248
C	1	\$ 39,900	\$ 673
<b>Grand Total</b>	<b>142</b>	<b>\$ 109,072</b>	<b>\$ 1,166</b>

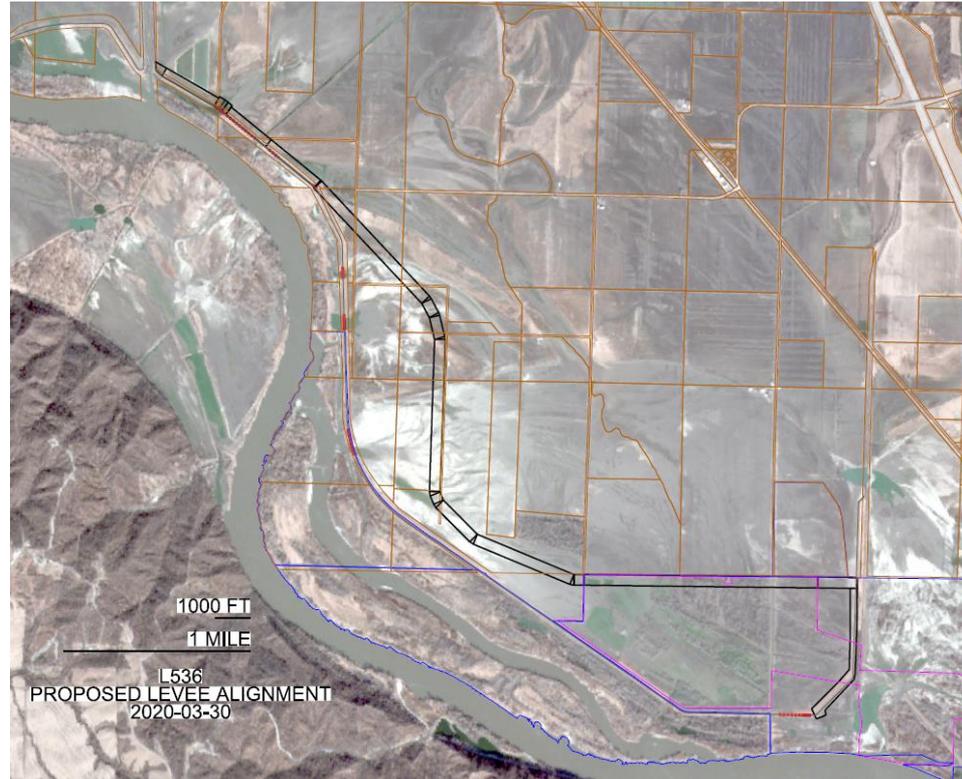
# NFIP Claims Data 1978 - 2018

- 4,443 Claims
- Average Claim: \$14,597
  - Building Claim: \$11,859
  - Content Claims: \$2,636
  - ICC: \$103



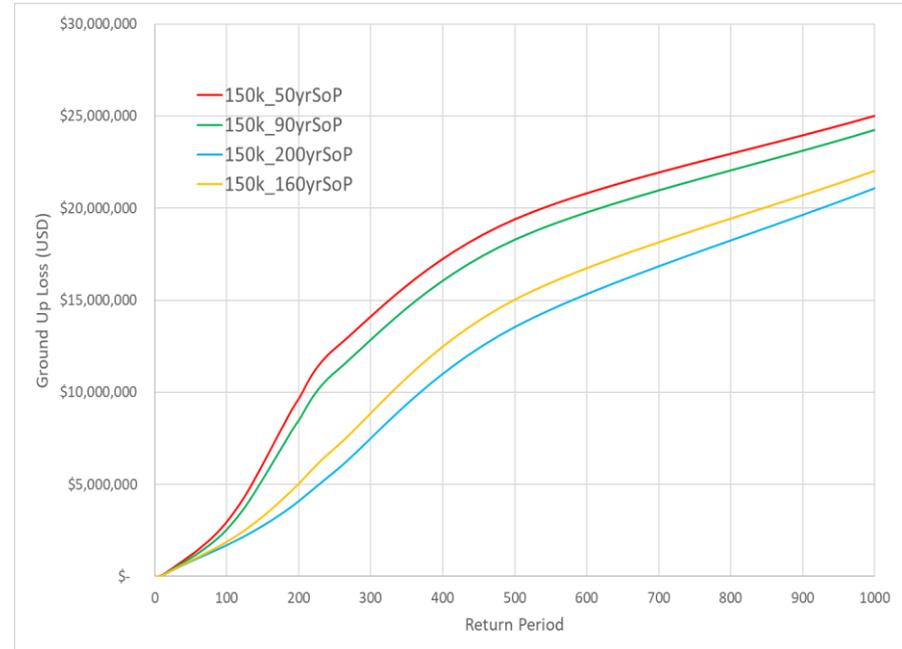
- Property Data used in the selected zip codes
- Locations within 5 miles from the Missouri River
- Total 1,455 locations selected.
  - o Building value: \$150,000
  - o Content value: \$15,000

# Levee Setback in Missouri



# Levee Setback: Modeling the Benefits

- **Perils Modeled:** River Flood and Flash Flood
- **Nature Based Solution:** L536 Setback Levee
- **Standard of Protection of Levee:**
  - ✓ Without a Setback Levee: 50 year
  - ✓ With a Setback Levee: 160 – 200 year
  - ✓ This standard of protection of the levee is applied to river flood modeling only (“fluvial flood”, as opposed to “pluvial flood”, caused by rainfall).



# Cost Benefit Analysis

- 1) **Cost of NFIP per structure: \$1,166**
- 2) **\$581** (average) per structure, if purchased on an **individual, voluntary or mandatory** basis, at a **50-year standard of protection**, which is the standard to which levees in the region are currently expected to be managed.
- 3) **\$455,415 (or \$313 per structure)**, if purchased on a **community, mandated** basis with a nature-based mitigation that set the levee standard of protection to **160-to-200-year**.

Acres targeted for "green infrastructure"	956
Easement or acquisition cost per acre	\$ 3,600
Cost of land easement or acquisition	\$ 3,441,600
Cost of NFIP (community-wide)	\$ 1,370,610
Cost of CFRI (community-wide)	\$ 454,688
Savings from CFRI	\$ 915,923
Savings from CFRI	\$ 915,923
BBB muni financing rate	1.50%
Bond supportable via savings	\$ 61,061,500

Thanks For Your Attention!