2024 Coastal Inundation Community of Practice Workshop
Participant Agenda

Day 1 (Tuesday, November 12, 2024)	
8:15 am-9:00 am	**Registration and Coffee**
9:00 am-9:45 am	**Welcome & Introductions** **Objective:** Participants will gain insight into the development of the Coastal Inundation Community of Practice, learn about its currently envisioned objectives, and meet the members of the organizations and implementation team who are standing it up. **Presenters** ● **Henry Bell,** Washington State Department of Ecology ● **Mark Osler**, Senior Advisor for Coastal Inundation and Resilience, NOAA National Ocean Service ● **Coastal Inundation Community of Practice Leadership Team** View speaker bios here.
10:20 am-10:35 am	**Break**
10:35 am-10:55 am	**Peer Networking Activity** **Objective:** Participants will have the opportunity to meet and engage with other practitioners.
10:55 am-11:55 am	**Local Perspectives Panel** **Objective:** Panelists will share coastal inundation challenges they are facing in their region, stories of success, and their perspectives on transformations for a resilient future. **Panelists:** ● **Jessica Brunacini,** Wells National Estuarine Research Reserve ● **Fara Ilami,** Northeast Florida Regional Council ● **Jenny Pool Radway,** Consejo Hispano ● **Ariam Torres-Cordero**, Graduate School of Planning, University of Puerto Rico, Río Piedras **Moderator:** Katy Hintzen, Hawai'i Sea Grant & National Sea Grant View panelist bios here.

AMERICAN SOCIETY OF ADAPTATION PROFESSIONALS

Sea Grant

12:00 pm 1:00	**Networking Lunch**
1:00 pm 3:15	**Flooding Across Timescales Panel & Inundation Innovation Cafe** **Objective:** Panelists will share and discuss the latest coastal inundation modeling work from NOAA and other federal agencies. Participants will increase awareness of existing tools and have an opportunity to provide input to help inform future plans of the tools. **Panelists:** • **Heidi Stiller**, NOAA Office for Coastal Management **Doug Marcy**, NOAA Office for Coastal Management • **Gwen Shaughnessy**, NOAA Center for Operational Oceanographic Products & Services • **Christopher Moore,** NOAA Pacific Marine Environmental Laboratory • **Patrick Barnard,** U.S Geological Survey • **Trey Flowers**, NOAA National Weather Service **Moderator** **Lisa Auermuller,** Rutgers University, Megalopolitan Coastal Transformation Hub (MACH) View panelist bios here.
	Inundation Innovation Cafe **Objective:** Participants will engage through cafe sessions highlighting inundation-related innovations, tools, products, and services. • Coastal Storm Modeling System **(CoSMoS)** • Federal Flood Standard Support Tool **(FFRMS)** • U.S. Sea Level Change Information Hub • Community Model Interfaces for Tsunamis **(ComMIT)** • Sea Level Calculator • High Tide Flooding Outlooks • National Water Prediction Service **(NWPS)**
	Discussion **Objective:** Discuss and summarize the takeaways
3:15 pm 3:25	**Wrap-up & Adjourn**

4:30 pm **6:30**	**(OPTIONAL) Social Hour @ Burke-Gilman Brewery (4:30-6:30 pm)** Join us at a local brewery for an informal social hour directly following the workshop. https://www.burkegilmanbrewing.com/events Directions: 3626 NE 45th St, Suite 102 Seattle, WA 98105
	Explore Seattle Evening activities and dinner on your own. Opportunity to explore Seattle and connect with other practitioners over dinner. Local recommendations will be provided.

Day 2 (Wednesday, November 13, 2024)	
8:00 am **8:30**	**Welcome back! Registration Desk Open and Coffee**
8:30 am **9:35**	**Section A: Inundation Modeling Lightning Talks** • **Road Flooding in Coastal Connecticut,** Jim O'Donnell, CIRCA • **NOAA's National Water Model (NWM),** Trey Flowers & Brian Cosgrove, NOAA NWS Office of Water Prediction • **Tsunami Inundation Modeling and Forecasting,** Ernesto Guerrero-Fernandez & Yong Wei, NOAA Pacific Marine Environmental Laboratory (PMEL) & University of Washington View lightning talk descriptions **here.**
	Section B: Inundation Technology Innovations • **Public-private partnerships for improved monitoring, alerting, and predictions of hyperlocal flooding** Brian Glazer, Hohonu • **Leveraging FloodVision to inform Resilience Decision-Making** Dan Rizza, Climate Central Fara Ilami, Northeast Florida Regional Council • **Alaska Flood Inundation Tool (AK-FIT)** Keith Horen, State of Alaska Division of Geological & Geophysical Surveys • **Diving Into the Digital Coast** Bret Folger and Maravilla Clemens, NOAA Office for Coastal Management View lightning talk descriptions **here.**
	Section C: Community-centered Resilience Lightning Talks • **Community-led Climate Resilience Programs in Urban and Rural Communities** Qiyamah Williams, Mississippi State University Extension/Mississippi-Alabama Sea Grant • **Increasing Community Resilience through Washington State's inter-agency Coastal Hazard Organizational Resilience Team (COHORT)** Ellen Chappelka, Washington State Emergency Management Division Sanpisa Sritrairat, Washington Sea Grant • **Bridging Communities: Evaluating Engagement Strategies in the Connecticut Community Participation and Risk Communication Pilot** Sarah Schechter, Connecticut Sea Grant View lightning talk descriptions **here.**

9:35 am 9:45	**Break**
9:45 am 11:00	**Section A: Compound Flooding Discussion** **Objective:** The purpose of this session will be to discuss challenges and crowdsource solutions related to compound flooding analysis. It will include interactive sharing around the existing science, datasets, tools, and methodology. It will also include discussion on inputs, including how to incorporate future projections of environmental changes and urban development; balancing standardization with flexibility for regional differences; and types of outputs and metadata for inclusion in Vulnerability Assessments. **Facilitator:** Fara Ilami, Northeast Florida Regional Council **Cofacilitator:** Marian Hanisko, NOAA Office for Coastal Management
	Section B: Art as Witness, Art as Praxis for Coastal Inundation Challenges **Objective:** Let's use guided art based approaches to explore and look at coastal inundation through different lenses. All art activities can be done with a paper and pen at minimum, but you can certainly add any materials you like! We'll explore visual art, somatic movement, story telling, and poetry and how all of these forms of expression are vital for working on coastal inundation projects. And we'll generate art pieces to showcase, potentially through a collaborative zine making activity themed around collective imaginaries around inundation challenges. **Facilitator:** Vidya Balasubramanyam, Coastal State Organization **Cofacilitator:** Angelina DeBenedet, American Society of Adaptation Professionals
	Section C: NOAA Sea Level Calculator Objective: NOAA's newest flagship coastal resilience product, the Sea Level Calculator, provides coastal practitioners and decision-makers with authoritative historical and future-looking sea level information. The development of this decision support tool was guided by stakeholder engagement and made possible through interoffice collaboration. By listening to a variety of stakeholders, NOAA has produced a more accessible and intuitive planning tool. While providing new functionality and consolidating the functionality of existing tools, the Sea Level Calculator addresses the challenges coastal communities across the country face right now and in the future. Co-produced by the Center for Operational Oceanographic Products and Services (CO-OPS) and the Office for Coastal Management (OCM), the Sea Level Calculator provides five unique water level analysis tools, or quick views, in one platform. These are 1) Future Sea Levels, 2) Changes in Flood Frequency, 3) Extreme Water Levels, 4) Observed Sea Level Trends, and 5) Seasonal Variation.

	Quick view visuals, such as sea level rise scenarios and flood thresholds, can be customized by the user to fit the needs of their community. All the underlying data are available for users to download and use in their own technical tools. The audience will learn about the product's methodologies, features, and potential use cases. Through a hands-on demonstration, users will discover how to leverage the Sea Level Calculator when assessing their coastal inundation risk or other climate resilience goals. **Facilitators:** Doug Marcy (OCM), Gwen Shaughnessy (CO-OPS) **Cofacilitators:** Heidi Stiller (OCM), Katie Urbanski (CO-OPS)
11:00 am 11:15	**Break**
11:15 am 12:15	**Coastal Inundation Conversations & Tools** **Objective:** In this session, participants will engage in small group discussions. Participants will engage in **three** different conversations of their choice. **Section A:** • **Chronic vs Episodic (nuisance) Inundation** Dolan Eversole, University of Hawai'i Sea Grant • **Coastal No Adverse Impact Discussion** Eleanor Rappolee & Alexandra Pouliot Association of State Floodplain Managers (ASFPM) • **Understanding of Uncertainty on Stormwater, Wastewater, and Flood Management** John Philips, Parametrix **Section B:** • **Conversations Around Retreat & Relocation** Jessica Brunacini, Wells National Estuarine Research Reserve • **Flood Ready Neighborhoods Pilot: Emergent Questions and Learnings** Anne Cox, Piscataqua Region Estuaries Partnership Lucy Perkins, NH Department of Environmental Sciences • **Helping Gulf of Mexico Coastal Communities Prepare for, Respond to, and Recover from Inundation Events** Marian Hanisko, NOAA Office for Coastal Management **Section C:** • **Flood Vision** Dan Rizza, Climate Central; Fara Ilami, Northeast Florida Regional Council

	• **Gulf Tree** Qiyamah Williams, Mississippi State University Extension/Mississippi-Alabama Sea Grant • **Alaska Flood Inundation Tool (AK- FIT)** Keith Horen, State of Alaska Division of Geological & Geophysical Surveys View group discussion descriptions here.
12:15 pm 1:15	**Networking Lunch**
1:15 pm 2:30	**Cooking Up a Successful Community of Practice** **Objective:** In this session, participants will discuss the "ingredients" needed to cook up a successful local or regional community of practice (CoP). Speakers will share examples including the Washington Coastal Hazards Resilience Network (CHRN) that has been active for over a decade, and the more newly formed Rhode Island Climate Resilience Learning Network (RICRLN). An interactive portion of the session will allow participants to share stories of their own local and regional CoPs and the "ingredients" that make them successful. **Facilitators** **Chandler Countryman**, Washington Sea Grant **Jennifer West**, Narragansett Bay National Estuarine Research Reserve **Henry Bell**, Washington State Department of Ecology **Sara Bostrom,** Padilla Bay National Estuarine Research Reserve
2:30 pm 3:25	**Discussion on Next Steps for the Coastal Inundation Community of Practice** **Objective:** Participants will discuss future activities and priorities for the Community of Practice.
	Explore Seattle Evening activities and dinner on your own. Opportunity to explore Seattle and connect with other practitioners over dinner. Local recommendations will be provided.

AMERICAN SOCIETY OF ADAPTATION PROFESSIONALS

Sea Grant

Day 3 (Thursday, November 14, 2024)

Optional field trips

Objective: Learn more about local resilience efforts in Washington.

Option 1: Padilla Bay National Estuarine Research Reserve & Samish Conservation Area
Full day (8:30am - 4:00 pm)

Travel to the Padilla Bay National Estuarine Research Reserve to learn about research and restoration happening in the second-largest eelgrass bed in North America. Participants will discuss and visit the Samish Conservation Area Project which is 74.5 acres of diked farmland (former tidal marsh), current tidal marsh, and tide flat on the Samish Island isthmus at the north end of Padilla Bay. The Samish Conservation Area Project is focused on 1) restoring 105 acres of tidal marsh to Padilla Bay, 2) improve community resilience by addressing the current impacts from sea level rise and coastal flooding to the only land access to Samish Island, 3) restore tribal cultural connection and access to an important former Samish village site called A7ts'íqen, and 4) expand the Padilla Bay National Estuarine Research Reserve to include marsh related research, education, outreach, and public access.

Option 2: Walking Tour of Point Ruston & Owen Beach in Tacoma
Half day (8am - 1:00 pm)

Guided walking tour of the Owen Beach redevelopment, Point Ruston public recreation area, and Dune Peninsula Park. Learn how Metro Parks Tacoma staff incorporated sea level rise into the design of Owen Beach Park. Hear about past and present shoreline stabilization challenges at Dune Peninsula Park. Understand how the Point Ruston redevelopment balanced the cleanup with development and public access.

Option 3: Lower Duwamish Sea Level Rise Workgroup in the Duwamish Valley Resilience District
Half day (9am - 12:30 pm)

The Duwamish Valley Resilience District is located in the South Park and Georgetown neighborhoods of Seattle on the Duwamish River, which is home to the traditional land of the Duwamish People past and present — a diverse mix of residents, and a range of maritime industries and small businesses that are disproportionately affected by sea level rise (SLR). This project integrates multiple elements to advance a holistic strategy that fosters a resilient built environment and community that empowers its families and businesses to thrive in place.

This one-hour walking tour will take participants through transitions along the river from residential areas, to heavy industry and commercial areas and will focus on public investments along the shoreline (shoreline drainage, open space). Tour guides will touch on the current wet weather preparedness methods, flood management in the area, as well as long-term adaptation planning, including cost-benefit solutions vs. community-benefit solutions.

AMERICAN SOCIETY OF ADAPTATION PROFESSIONALS

Sea Grant

Wednesday, Nov 13- Lightning Talks from 8:30 am -9:35 am

Section A: Inundation Modeling

Road Flooding in Coastal CT

I have developed several simple models of inundation in areas of complex bathymetry that use data and hydraulic models to diagnose the causes of flooding during superstorm Sandy and establish flood risk at higher mean sea levels. These models are very useful at small scales. https://circa.uconn.edu/road-flooding-in-coastal-connecticut/

Presenter:
Jim O'Donnell
Connecticut Institute for Resilience & Climate Adaptation (CIRCA)

NOAA's National Water Model (NWM)

Implemented in the summer 2023, version 3.0 of NOAA's National Water Model (NWM) provides first-time total water level (TWL) forecasts for coastal areas of the CONUS, Puerto Rico, the U.S. Virgin Islands, and Hawaii. Complementing regional products, the system simulates the additive impacts of storm surge, tides and freshwater flow, providing guidance on compound flooding for coastal regions that are home to millions of people. In this talk, we'll provide an overview of the system, describe links between the NWM and new flood inundation mapping products, and detail forthcoming upgrades relevant to coastal interests. https://water.noaa.gov/about/nwm

Presenters:
Trey Flowers & Brian Cosgrove
NOAA NWS Office of Water Prediction

Tsunami Inundation Modeling and Forecasting

This presentation focuses on recent research advancements in short- and long-term modeling assessment of tsunami inundation hazards conducted at the NOAA Center for Tsunami Research (NCTR). The short-term assessments characterize real- or near-real-time predicting of tsunami inundation impact during an unfolding event, highlighting NOAA's two-decade research-to-operation development in tsunami forecasting that combines deep-ocean observations and high-performance flood modeling technologies. NCTR's long-term assessments employ both deterministic and probabilistic methods to identify potential abiding impact of tsunami flooding for sites at risk. These efforts prepare coastal communities for eventual tsunami episodes and outcomes of our direct collaborative research with authorities and communities, such as evacuation maps, community-driven modeling tools, national and international building codes to mitigate tsunami loads and effects, etc. We will also showcase recent model developments, including sediment-wave interaction influence in tsunami waves. https://nctr.pmel.noaa.gov/

Section A: Inundation Modeling

Presenters:
Ernesto Guerrero-Fernandez & **Yong Wei**
NOAA Pacific Marine Environmental Laboratory (PMEL) & University of Washington

Section B: Inundation Technology Innovations

Public-private partnerships for improved monitoring, alerting, and predictions of hyperlocal flooding

Over the past 4 years, Hohonu has worked with regional associations of IOOS, Sea Grant, NERR, NWS, as well as local chapters of national non-profits, and directly with local & regional governments, deploying new water level sensors in new areas and deliver actionable data to scientists and nonscientists, alike. Hohonu is currently deployed in 150 locations across 15 states. dashboard.hohonu.io

Presenter:
Brian Glazer, Hohonu

Leveraging FloodVision to inform Resilience Decision-Making

Dan Rizza, Director of Climate Central's Program on Sea Level Rise, and Fara Ilami, Regional Resiliency Manager at the Northeast Florida Regional Council, will share insights from their partnership in implementing FloodVision® in Northeast Florida. This collaboration has utilized science-based data to produce visualizations that illustrate potential flooding and sea level rise impacts. They will discuss how these outputs are being used by government officials and community leaders to strengthen local resilience efforts and inform critical decision-making. Future use of this innovation may incorporate even more complex datasets, including results of an extreme rainfall analysis and a compound flooding analysis being conducted in Florida. https://www.climatecentral.org/floodvision

Presenters:
Dan Rizza, Climate Central
Fara Ilami, Northeast Florida Regional Council

Alaska Flood Inundation Tool (AK-FIT)

Investigating, modeling, and addressing flood risks in rural Alaska presents major hurdles for both scientists and community members. DGGS is working to develop new tools for compiling historical flood records in locations where data are scarce and documentation is minimal. In addition, DGGS recently published a still water inundation model (SWIM) for non-expert GIS users, as well as a flood estimation methodology aimed at promoting accessibility for community planners and efficiently filling gaps for more complex modeling efforts with partner agencies. To achieve these goals, we have undertaken several initiatives seeking local knowledge and community involvement to help refine our methods and models, which will

Section B: Inundation Technology Innovations

ultimately culminate in the Alaska Flood Inundation Tool (AK-FIT), an interactive flood model viewer that is currently in development.
https://dggs.alaska.gov/pubs/id/31154 https://dggs.alaska.gov/pubs/id/31279
https://akdggs.com/floodphotos https://akdggs.com/culverts https://akdggs.com/akfit-demo

Presenter:
Keith Horen, State of Alaska Division of Geological & Geophysical Surveys

Diving Into the Digital Coast

NOAA Office for Coastal Management staff will share national data sets, tools, and learning resources that can support community planning for inundation events.

Presenters:
Bret Folger and Maravilla Clemens,
NOAA Office for Coastal Management

Section C: Community-centered Resilience

Description

Community-led Climate Resilience Programs in Urban and Rural Communities

Resilient East Biloxi and Community Resilience in South Mobile County are two complimentary projects working to increase community action to address current and future flood risk. Both projects have similarities in flood risk and vulnerability as culturally diverse frontline communities, but they face different challenges as urban and rural environments. For this lightning talk, I'd like to share the lessons learned and differences in developing and maintaining climate resilience programs in these two communities. These will include identified barriers in partner organization capacity and municipal support, providing access to locally relevant flood and climate information, collaborating to develop community-led action, and pursuing funding opportunities with community partners.
https://placeslr.org/our-work/activeprojects/resilient-east-biloxi/
https://placeslr.org/our-work/activeprojects/community-resilience-in-south-mobile-county/

Presenter:
Qiyamah Williams
Mississippi State University Extension/Mississippi-Alabama Sea Grant

Increasing Community Resilience through Washington State's inter-agency Coastal Hazard Organizational Resilience Team (COHORT)

The Washington State's inter-agency Coastal Hazard Organizational Resilience Team (COHORT) is composed of representatives from the Department of Ecology, Washington Sea

AMERICAN SOCIETY OF ADAPTATION PROFESSIONALS

Sea Grant

Section C: Community-centered Resilience

Description

Grant, Washington State Emergency Management Division, and Washington State University Extension. It works to streamline local community interactions with state agencies and serve as an advocate for coastal communities self-identified needs. The team works to provide educational opportunities, grant development and support, technical assistance, and help advance community led resilience projects -- especially with an eye towards nature-based solutions and multi-benefit project. The COHORT focuses on providing outreach and assistance to underserved, rural, and tribal communities. Each partner brings a unique facet of resilience work to the table and tries to serve as a "one-stop-shop" for communities wanting to collaborate with the state government from the earliest stages of understanding the hazard, through the process of finding community-led solutions, and finally to funding those projects. https://wacoastalnetwork.com/cohort/

Presenters:
Ellen Chappelka, Washington State Emergency Management Division
Sanpisa Sritrairat, Washington Sea Grant

Bridging Communities: Evaluating Engagement Strategies in the Connecticut Community Participation and Risk Communication Pilot

The Connecticut Community Participation & Risk Communication Pilot was developed following a 2021 meeting of NOAA's North Atlantic Regional Team that recognized the disproportionate vulnerability of underserved communities to climate change impacts, and their exclusion from important planning conversations. This program aims to address gaps in risk perception, information access, and technical tool usability within vulnerable communities. From 2022 through 2024, I have worked with another Connecticut Sea Grant colleague on resilience-focused extension professionals piloted events in underserved communities in Connecticut with objectives to (1) Build relationships with trusted bridge organizations in vulnerable communities, (2) Test alternative stakeholder engagement strategies to determine meaningful incentives (3) Facilitate discussions on climate resilience and equity, and (4) Identify priority information and training needs for immediate delivery. As the program concludes in 2024, this presentation evaluates the effectiveness of various engagement incentives, offers insight into our ongoing collaboration with bridge organizations, and shares lessons learned from the process. Discussion also includes next steps in identifying priority needs aligned with NOAA's objectives.

Presenters:
Sarah Schechter, Connecticut Sea Grant

AMERICAN SOCIETY OF ADAPTATION PROFESSIONALS

Sea Grant

Wednesday, Nov 13- Coastal Conversations from 11:15 am - 12:15 pm

Section A

- **Chronic vs episodic (nuisance) inundation**
  Chronic vs episodic (nuisance) inundation. Ground water saturation vs marine inundation. Subsurface utilities relocation and wet proofing. Learn more about the different forms of sea level rise impacts including direct marine inundation, groundwater saturation, storm water drainage and subsurface backflow. These each have different characteristics and impacts.
  Facilitator:
  Dolan Eversole, University of Hawai‘i Sea Grant

- **Coastal No Adverse Impact Discussion**
  ASFPM’s “No Adverse Impact” work advances a “do-no-harm” philosophy to land use and coastal floodplain stewardship, empowering communities to go above and beyond the state and federal minimum standards. We would love to hear your insights and experiences around the following questions:
    - What does “do-no-harm” mean to you?
    - What resources would help you implement the NAI principle in your community?
    - What are the barriers to implementing NAI principles

  Facilitators:
  Eleanor Rappolee & Alexandra Pouliot
  Association of State Floodplain Managers (ASFPM)

- **Understanding of Uncertainty on Stormwater, Wastewater, and Flood Management**
  Communities can transition from awareness to actionable steps on climate preparedness, enhancing their learning processes. Communities can leverage research investments to better understand the effects of climate change on stormwater, wastewater, and flood management. This focus on adaptation strategies has led to the creation of a new adaptive management framework to handle uncertainties related to climate projections.
  Facilitator:
  John Philips, Parametrix

Section B

- **Conversations Around Retreat & Relocation**
  In Maine, community leaders and practitioners are interested in exploring retreat and relocation - or, "getting out of harm's way" - as strategies for reducing climate risk and building social ecological resilience. Yet there is reluctance to even begin these conversations because the topic is emotionally-laden and seen as politically unpopular.

How are these conversations unfolding in other places around the country, and what types of community-driven, equity-centered approaches have proven most effective?
Facilitator:
Jessica Brunacini, Wells National Estuarine Research Reserve

- **Flood Ready Neighborhoods Pilot: Emergent Questions and Learnings**
  Flood Ready Neighborhoods (FRN) provides direct support and services to neighborhoods experiencing impacts from coastal and stormwater flooding and erosion. Through this technical assistance program, residents work closely with FRN staff to identify and implement strategies that increase flood resilience by protecting coastal ecosystems, infrastructure, and communities.

  Staff primarily support neighborhoods with diverse income levels and alternative forms of land tenure. Programming in each participating neighborhood is responsive to residents' local knowledge, shared assets, social networks, and resilience priorities. This unique approach to technical assistance ultimately seeks to ensure residents have the resources and agency for well-being now and in the future.

  Throughout the two-year pilot, a few wicked questions have emerged that we hope to explore through small group discussions and shared experiences as technical assistance providers in coastal environments:

  - How do we work in partnership with organizations when their practices are incongruent with our guiding principles?
  - How do we support community-driven work when it conflicts with the protection of coastal habitats and ecosystems?

  Facilitator:
  Anne Cox, Piscataqua Region Estuaries Partnership
  Lucy Perkins, NH Department of Environmental Sciences

- **Helping Gulf of Mexico Coastal Communities Prepare for, Respond to, and Recover from Inundation Events**
  The Gulf of Mexico region is no stranger to inundation challenges. This table will highlight several resources to assist coastal communities with the important work of preparing for, responding to, and recovering from inundation events. These products have been co-developed by the Gulf of Mexico Sea Grant Programs, Gulf of Mexico Alliance Resilience Team, and Gulf of Mexico Climate and Resilience Community of Practice. All are transferable to other regions. Products include: Homeowners Handbook to Prepare for Natural Disasters, Federal Disaster Aid Fact Sheets, and Peer Listening Handbook and Training Materials.
  Facilitator:
  Marian Hanisko, NOAA Office for Coastal Management

Section C

- **Flood Vision**
  Dan Rizza, Director of Climate Central's Program on Sea Level Rise, and Fara Ilami, Regional Resiliency Manager at the Northeast Florida Regional Council, will share insights from their partnership in implementing FloodVision® in Northeast Florida. This collaboration has utilized science-based data to produce visualizations that illustrate potential flooding and sea level rise impacts. They will discuss how these outputs are being used by government officials and community leaders to strengthen local resilience efforts and inform critical decision-making. Future use of this innovation may incorporate even more complex datasets, including results of an extreme rainfall analysis and a compound flooding analysis being conducted in Florida.
  Facilitator:
  Dan Rizza, Climate Central
  Fara Ilami, Northeast Florida Regional Council

- **Gulf Tree**
  Gulf TREE (Tools for Resilience Exploration Engine) is a decision-support filter-based search engine designed to match users with relevant climate resilience tools quickly, easily, and confidently. Focused on the five Gulf of Mexico states (Florida, Alabama, Mississippi, Louisiana, and Texas), the guided search option walks users through a series of questions to help them identify the climate tools that best suit their needs. Gulf TREE is always looking to incorporate more tools in their search engine and users can also submit tools they'd like to see added.
  Facilitator:
  Qiyamah Williams, Mississippi State University Extension/Mississippi-Alabama Sea Grant

- **Alaska Flood Inundation Tool (AK- FIT)**
  Investigating, modeling, and addressing flood risks in rural Alaska presents major hurdles for both scientists and community members. DGGS is working to develop new tools for compiling historical flood records in locations where data are scarce and documentation is minimal. In addition, DGGS recently published a still water inundation model (SWIM) for non-expert GIS users, as well as a flood estimation methodology aimed at promoting accessibility for community planners and efficiently filling gaps for more complex modeling efforts with partner agencies. To achieve these goals, we have undertaken several initiatives seeking local knowledge and community involvement to help refine our methods and models, which will ultimately culminate in the Alaska Flood Inundation Tool (AK-FIT), an interactive flood model viewer that is currently in development.
  Facilitator: Keith Horen, State of Alaska Division of Geological & Geophysical Surveys

---

SPEAKER BIOS

Mark Osler

Mark Osler is the senior advisor for Coastal Inundation and Resilience for NOAA. His leadership advances coastal science and the ability of decision-makers to prepare for and respond to

changes affecting the nation's coastlines. He serves as senior advisor to NOAA leadership on defining research, applied science, and policy priorities related to understanding and reducing impacts of coastal risk to the public, our national security, and our nation's economy.

Mark's interagency leadership efforts include serving as the U.S. government representative to the G7's Ocean Risk and Resilience Action Alliance; federal coordinating lead author for the Coastal Effects Chapter for the Fifth National Climate Assessment; co-chair for the Coasts Interagency Group of the U.S. Global Change Research Program; co-chair for the Interagency Council for Advancing Meteorological Services' Subcommittee on Water Information and Services; and as the NOAA representative within various White House interagency fora, including the National Security Council, Office of Science and Technology Policy, and the Council on Environmental Quality.

Prior to joining NOAA, Mark worked for 17 years in the private sector. He holds a bachelor's degree in civil engineering from Lehigh University and a master's degree in civil engineering from the University of Delaware's Center for Applied Coastal Research.

Henry Bell
Henry Bell is the Washington State Department of Ecology's senior coastal planner. He provides planning and project assistance to communities on coastal hazards and climate adaptation while also coordinating Washington's Coastal Zone Management Program. Henry's work involves leading and supporting place-based resilience partnerships and projects that improve community resilience to coastal hazards. This includes Washington's interagency Coastal Hazards Organizational Resilience Team. In addition, Henry has helped manage the Washington Coastal Hazards Resilience Network for the past four years.

Henry earned his master's degree from the University of Washington School of Marine and Environmental Affairs and received his bachelor's degree in geography and environmental studies from Middlebury College. Prior to his work at the Department of Ecology, Henry taught international ocean policy and conducted research for Sea Education Association.

Local Perspectives Panelists

Jessica Brunacini
Jessica Brunacini is a coastal resilience scholar-practitioner who has nearly two decades of experience working in climate change engagement, planning, and research. In her current role as the Director of the Coastal Training Program at the Wells National Estuarine Research Reserve, she partners with Maine's coastal communities, municipal officials, regional planning organizations, and state agencies to increase knowledge and capacity for climate adaptation. She is particularly interested in identifying engaged, equitable, and empathetic approaches that can support communities as they explore options for "getting out of harm's way." Jessica holds a dual degree Ph.D. in Community Sustainability and Environmental Science and Policy from Michigan State University and was a 2020-2022 Margaret Davidson Graduate Research Fellow through NOAA's Office of Coastal Management.

Fara Ilami
Fara Ilami is the Regional Resiliency Manager for the Northeast Florida Regional Council. She works with the communities of Northeast Florida to address shocks and stresses to the region brought about by climate change and other related threats. She has established a regional resiliency collaborative for Northeast Florida (Resilient First Coast), which provides opportunities for members from multiple sectors to share information and work towards goals such as a Regional Resiliency Action Plan. Fara's work includes collaboration with local governments and other partners on such projects as the Climate Action Plan for Northeast Florida. Fara has over 10 years of experience applying principles of earth and ocean science to real-world problems, such as sea level rise and erosion. Her expertise in nature-based solutions to increase the resilience of coastal areas has been featured in such publications as Environmental Connection and was the catalyst for Florida's Living Shorelines Training Course. Fara is a certified Project Management Professional and has a B.S. in Biology and an M.S. in Oceanography.

Jenny Pool Radway
Jenny Pool Radway is a proud Latina, Tica, and immigrant. Born and raised in Costa Rica, Jenny spent her formative years immersed in her native country's rich biodiversity and strong environmental ethos. Jenny's cultural background has instilled in her a deep respect for nature.

Her career spans more than 20 years working across social work, education, health, and advocacy sectors both in the United States and abroad with a focus on facilitating partnerships and collaborations, organizational and programmatic capacity building, and grassroots leadership development. Since 2019, Jenny serves as the Executive Director at Consejo Hispano, where beside her team, she leads initiatives to empower and support the Latinx community. She is passionate about building power and leadership within the Latinx community, advancing social change, economic empowerment, and community self-determination in the Pacific Northwest.

Jenny is a board member for Oregon Worker Relief Fund, Oregon Consumer Justice, Prosperidad Oregon, the Necanicum Watershed Council, and the Astoria-Warrenton Chamber of Commerce. She serves on Governor Kotek's Racial Justice Council, Clatsop County 4-H &

Extension Advisory Council, and the Cascadia Coastlines and Peoples Hazards Research Hub (Cascadia CoPes Hub) Community Advisory Council. Jenny is an American Leadership Forum (ALF) of Oregon Senior Fellow. She holds a Master's Degree in Human Services and a Master's Degree in Latin American Politics and Economics.

Ariam Torres-Cordero
Dr. Ariam L. Torres-Cordero is an Assistant Professor at the Graduate School of Planning, University of Puerto Rico, Río Piedras. He earned his Ph.D. in Regional Planning from the University of Illinois Urbana-Champaign in 2022 and subsequently served as a Postdoctoral Research Scholar at Columbia World Projects, Columbia University, in 2023. His research focuses on urban, coastal, and regional planning, with an emphasis on community engagement, climate adaptation, and disaster recovery.

Katy Hintzen
Katy Hintzen is an Extension Agent with the University of Hawai‘i Sea Grant College Program specializing in coastal resilience. Her work focuses on helping communities prepare for and adapt to changing climate conditions, coastal hazards, and sea level rise. In addition to her climate adaptation work, Hintzen is the Projects and Partnerships Coordinator for the Ulana ‘Ike Center of Excellence. In her role with Ulana ‘Ike she works to further more equitable and reciprocal partnerships between coastal communities, resource stewards, and researchers across the Pacific Islands region.

Flooding Across Timescales- Panelists

Heidi Stiller
Heidi Stiller is the South regional director for NOAA’s Office for Coastal Management where she serves as a focal point for senior-level coastal partner interaction at the regional, state, and local levels from North Carolina to Texas, including the Caribbean. She helps to implement national and regional statutory and other coastal and ocean programs, delivers technical assistance to meet coastal and ocean challenges, and responds to the needs of users, partners, and coastal decision-makers.

Doug Marcy
Doug Marcy is a Senior Coastal Hazards Specialist at the NOAA Office for Coastal Management in Charleston, SC. He has been with the NOAA 22 years working on flooding and sea level rise science and mapping. He helped develop the Climate Informed Science Approach for the Federal Flood Risk Management Standard (FFRMS) and has served as the project manager for the development of the Federal Flood Standard Support Tool, NOAA Sea Level Rise Viewer, and NOAA Sea Level Calculator.

Gwen Shaughnessy
Gwen Shaughnessy is the Coastal Inundation Program Manager and Products Coordinator with NOAA's Center for Operational Oceanographic Products and Services (CO-OPS). In her current role, she is supporting the cross-office Bipartisan Infrastructure Law Seasonal to Annual Flood Prediction efforts. Prior to joining CO-OPS, she served as a Senior Climate Adaptation Specialist with Lynker for the NOAA Office for Coastal Management. Gwen has over 15 years of experience building capacity with coastal communities to better understand the risks, strategies, and choices for how to adapt to the impacts of a changing climate.

Trey Flowers
Trey Flowers is the Director of the Analysis and Prediction Division at NOAA's National Water Center in Tuscaloosa, AL, where he leads the team at the National Weather Service that is responsible for sustaining and enhancing the US Government's freshwater forecasting capabilities. Trey has an undergraduate degree in Civil Engineering from the University of Kentucky and graduate degrees in Environmental Engineering from the University of California at Berkeley.

Christopher Moore
Christopher Moore is the director of the NOAA Center for Tsunami Research at NOAA's Pacific Marine Environmental Laboratory in Seattle, Washington. He has a background in computational fluid dynamics and data analysis and has experience in numerical modeling of coastal inundation from tsunamis and in real-time DART buoy data assimilation and inversion. He leads the development team for NOAA's operational tsunami forecast suite known as the Common Analytic System (CAS), as well as the Community Model Interface for Tsunami (ComMIT), and the Tsunami Coastal Assessment Tool (TsuCAT), and teaches workshops in tsunami hazard assessments as part of the TsunamiReady program. He chairs several working groups and committees including those in the National Tsunami Hazard Mitigation Program, and the UNESCO International Oceanographic Commission Tsunami Programme.

Lisa Auermuller
Lisa Auermuller serves as the Administrative Director of Rutgers' NSF-funded Megalopolitan Coastal Transformation Hub (MACH). In this role, Lisa is the central manager of overall operations of the multi-institution effort. Lisa establishes mechanisms for collaborative sharing of findings among project partners, conducts regular outreach to promote coordination and collaboration with government agencies, and community leaders, and facilitates meaningful and routine collaboration and sharing among project partners.

Prior to 2023, Lisa was the Assistant Manager of the Jacques Cousteau National Estuarine Research Reserve (JC NERR) in Tuckerton, NJ where she had been employed since 2002. Lisa oversaw the day-to-day management of JC NERR's Coastal Center as well as the Reserve's education, outreach, communications, and Coastal Training

Program.

Patrick Barnard
Dr. Patrick Barnard has been a coastal geologist with the USGS Pacific Coastal and Marine Science Center in Santa Cruz since 2003. His research focuses on coastal hazards driven by storms and sea level rise across U.S. beaches and estuaries. Patrick serves on numerous regional, national, and international scientific review panels related to climate change and coastal hazards, including within the White House Office of Science and Technology Policy, and has advised members of the U.S. Congress and Cabinet, as well as state and local government representatives.

Brian Cosgrove
Brian Cosgrove has worked at the National Weather Service (NWS) Office of Water Prediction (OWP) since 2008. He is the Technical Director for the National Water Model (NWM), working with the National Center for Atmospheric Research (NCAR) and others to implement version 1.0 of the NWS' first nationwide operational high resolution water resources forecast system into operations in August of 2016, and now leading the collaborative effort to implement enhanced versions of the system as it moves towards use of the NextGen modeling framework. Brian is involved in NWM design, onboarding, data dissemination and outreach. He also serves as the liaison to the NWS National Centers for Environmental Prediction (NCEP) and conducts coordination activities with partner agencies such as the US Geological Survey, the US Army Corps of Engineers, the National Ocean Service, and other private, public and academic groups. Brian got his Master's degree in Meteorology from Penn State and his Bachelor's degree in Atmospheric Science from Cornell University. Prior to joining the NWS, Brian worked at the NASA Goddard Space Flight Center as a land surface scientist.