SHOREUP MAINE 2019

Sea Level Rise: Who Pays and How?

FRIDAY, SEPTEMBER 27, 2019
UNITED FARMERS MARKET OF MAINE • BELFAST, MAINE
## Schedule of Events

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<tr>
<td>8:30 - 9:00</td>
<td>Registration and Refreshments</td>
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<td>9:00 - 9:45</td>
<td>Keynote: Charles Colgan</td>
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<td>9:45 - 10:00</td>
<td>Break</td>
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<tr>
<td>10:00 - 11:00</td>
<td>Lightning Talks: Maine Landscape</td>
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<td>11:00 - 11:45</td>
<td>Lightning Talks: Case Studies from Away</td>
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<td>11:45 - 12:00</td>
<td>Report: The Cost of Inaction</td>
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<td>12:00 - 1:30</td>
<td>Lunch followed by optional self-guided walking tour of Belfast's waterfront</td>
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<td>1:30 - 2:00</td>
<td>Role Play - Funding Sources: an exercise with Allen Kratz and Sarah Cox</td>
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<td>2:10 - 3:10</td>
<td>Panel: Economic and Social Consequences of Climate Change</td>
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<td>3:15 - 3:20</td>
<td>Maine-based Resources: Nathan Robbins</td>
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<td>3:20 - 4:20</td>
<td>Panel: Emerging and Innovative Financing Options</td>
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Optional No-Host Networking Happy Hour/Dinner at Darby’s Restaurant in Belfast following the conference.
Keynote: Charles Colgan
Research Director, Center for the Blue Economy, Middlebury Institute of International Studies

Charles Colgan will speak about the climate-related challenges facing our coastal communities and approaches to resilience actions.

Lightning Talks: Maine Landscape
- Mary Ellen Barnes (Lincoln County Regional Planning Commission)
- Matt Lutkus (Town Manager, Damariscotta)
- Owen Casas (Town Administrator, South Thomastown)
- Richard Bates (Select Board Chair, St. George)
- Sarah Curran (Senior Analyst at Maine Governor’s Office of Policy, Innovation, and the Future and coordinator for Maine’s newly established Climate Council)

Lightning Talks: Case Studies from Away
- David Levy (Professor of Management at UMass Boston; Academic Co-Director of the Sustainable Solutions Lab; author of Financing Climate Resilience: Mobilizing Resources and Incentives to Protect Boston from Climate Risks)

The Cost of Inaction
The Island Institute’s study on the economic cost of inaction in the face of rising seas will be released.

Self-guided Walking Tour of Belfast’s Waterfront
Introduction by Jonathan Beal of Belfast Climate Crisis Committee. Walk along Belfast's waterfront and observe vulnerable landmarks. (maps in back of program)

Role Play - Funding Sources
Facilitated by Allen Kratz (Principal, Resilience Works, LLC; oversaw floodproofing of Hoboken, NJ Public Library with $2.2M of federal, state, county and municipal funding) and Sarah Cox (Chair of Brookville, Maine’s Comprehensive Plan Committee; Chair of Ordinance Committee; former harbormaster).
Panel: Economic and Social Consequences of Climate Change

- **Jon Pottle** (Shareholder, Eaton Peabody, specializes in environmental law, municipal law, project development and finance)
- **Sam Merrill** (Environmental Finance Consultant; recognized leader in next generation approaches to benefit-cost analysis for climate adaptation purposes)

Maine-based Resources

- **Nathan Robbins**, Climate Specialist, Maine Department of Environmental Protection will discuss state of Maine resources overview.

Panel: Emerging and Innovative Finance Options

- **Bruce Van Note** (Commissioner, Maine Department of Transportation)
- **Andrea Smith** (Director of the Tax Incentive Program, Maine Department of Economic and Community Development)
- **David Levy** (Professor of Management at UMass Boston; Academic Co-Director of the Sustainable Solutions Lab; author of *Financing Climate Resilience: Mobilizing Resources and Incentives to Protect Boston from Climate Risks*)
- **Charles Colgan** (Research Director, Center for the Blue Economy, Middlebury Institute of International Studies)
Keynote Presentation

CHARLES S. COLGAN, PH.D.
Dr. Charles Colgan is the Director of Research for the Center for the Blue Economy (CBE) at the Middlebury Institute for International Studies in Monterey, CA. Dr. Colgan oversees the conduct of research activities and serves as Editor-in-Chief of the *Journal of Ocean and Coastal Economics* (JOCE). In addition, he serves as adjunct faculty in the International Environmental Policy Studies program.

Prior to his role as Research Director for the CBE, Dr. Colgan served as a Professor of Public Policy and Management in the Edmund S. Muskie School of Public Service at the University of Southern Maine. Dr. Colgan was the Chair of the Muskie School's PhD Program in Public Policy and is a Senior Research Associate in the USM Center for Business and Economic Research. His long term economic forecasts were used by the Maine Department of Transportation and the Economic Development Districts of Maine. Prior to joining the University of Southern Maine, he served in the Maine State Planning Office, was State Economist, and Director of Natural Resource and Economic Policy.

Speakers (in alphabetical order by last name)

BRIAN AMBRETTE
Brian Ambrette brings a capacity building approach to community climate resilience with a focus on small cities, towns, and rural places. At the Eastern Shore Land Conservancy in Maryland, he worked to generate science- and nature-based adaptation strategies for local governments and launched one of country's first “regional climate collaboratives” serving rural communities. Previous posts include The Nature Conservancy and the Environmental Defense Fund. Brian has a master's from Yale's School of Forestry & Environmental Studies and a bachelor's degree from Middlebury College.

MARY ELLEN BARNES
Mary Ellen Barnes is Executive Director of the Lincoln County Regional Planning Commission and has worked in economic and community development for Lincoln County since 2009. Much of her work for the county has focused on municipal and business assistance through use of the Community Development Block Grants, Brownfields Hazardous Waste Assessments, Workforce Development, and business resource connections. Sea level rise mapping and coastal projects have been led by the County Planner. Mary Ellen partners with the County Planner on adaptation planning, funding support for harbor, waterfront, and infrastructure projects, and coastal municipal ordinances.
RICHARD BATES

Richard Bates trained as an engineer in England, then emigrated to the US in 1981. He worked for more than 30 years in research and development and business. After moving to Maine, he became involved in local government.

OWEN CASAS

Owen Casas was born and raised in midcoast Maine. After completing a 4.5 year enlistment in the US Marine Corps he returned home to Maine and worked in construction and commercial fishing. Owen received his undergraduate degree in Applied Science from The University of Maine and his masters in Organizational Development from Case Western Reserve University. He has served on the Rockport, Maine Select Board, in the State Legislature, and on many municipal committees including his current role as Chair of the Mid Coast Solid Waste Corp Board of Directors. He has been the Administrator for the Town of South Thomaston since December of 2018.

SARAH COX

Sarah Cox, who spent her childhood summers in Brooksville, moved there as a year-round resident in 1996. She founded the Lyric Tile Company, which imports and distributes decorative accent tiles finished in seashells. After participating in the writing of the Brooksville Harbor Ordinance, she served as Chair of the Harbor Committee from spring 2002, when the town passed the Ordinance, until late 2018, and was Acting Harbormaster from Spring 2004 to Spring 2018. From 2013-2016, she was also Castine’s Harbormaster. She is currently Chair of the Brooksville Ordinance Committee and Chair pro tem of its Comprehensive Plan Committee.

SARAH CURRAN

Sarah Curran is a Senior Analyst with the Governor's Office of Policy Innovation and the Future, which was established by Governor Mills to prepare policy and foster collaboration to address the state's most critical issues. Prior to joining the Governor’s Office, Sarah most recently worked for the Maine Development Foundation, where she served as Program Director for Forest Opportunity Roadmap (FOR/Maine), a collaborative effort by industry and community stakeholders to strengthen and grow Maine's forest products industry and reinvest in rural communities impacted by recent mill closures. Sarah has more than a decade of community and economic development experience working with Maine communities and non-profit organizations. From 2007 to 2016, Sarah worked as a consultant with Planning Decisions, Inc., a Maine-based research and planning firm. She has a master's degree in community planning and development from the Muskie School of Public Service at USM.
MEGHAN GRABILL
Meghan is a community development officer at the Island Institute. Meghan collaborates across the organization and is responsible for data analysis and translation for project teams, as well as GIS work involving capturing, analyzing, and managing geographic data. Prior to joining the Island Institute, Meghan lived in Ohio, where she completed her Ph.D. in Regional Development Planning.

ALLEN KRATZ
Allen Kratz, principal of Resilience Works, LLC, brings four decades of experience in funding and project management to the challenge of funding coastal resilience. At New York University's Institute for Public Knowledge, Allen tracked the progress of seven HUD-funded post-Superstorm Sandy Rebuild by Design flood-mitigation projects in New York, New Jersey and Connecticut.

When he was president of the board of trustees of the public library in Hoboken, New Jersey, Allen led a $3.2 million post-Sandy rehabilitation project to preserve the historic structure and protect it from sea level rise, coastal flooding, and rain-event flooding with $2.1 million in federal, state, county, and municipal funding. In Brooksville, Maine, Allen serves on the Comprehensive Plan Committee, underscoring the importance of coastal resilience and securing new financial support.

DAVID LEVY
David L. Levy is Professor of Management at the University of Massachusetts, Boston, and was a co-founder of the Sustainable Solutions Lab there. David, an Aspen Institute Faculty Pioneer Award Winner, conducts research on corporate strategic responses to climate change and urban climate adaptation. His work explores strategic contestation over the governance and finance of controversial issues engaging business, governments, and NGOs, such as climate change and sustainability standards. David has spoken and published widely on these topics, for both academic and practitioner audiences. David holds a DBA from Harvard University, an MBA from Tel Aviv University, and a B.Sc. from Manchester University.
**JONATHON A. POTTLE**

Jon provides legal services to both public and private sector clients in the areas of environmental law, land use law, municipal law, utilities law, economic development, project development and finance, renewable energy, real estate, timberlands, and natural resources law. Jon's practice in these areas helps clients with their strategic and tactical planning, day-to-day operations, project development and financing, real estate and business transactions, municipal and utility district governance, and resolution of related legal disputes, including representation before Maine and Federal Courts as well as local and state administrative boards and agencies.

Jon's legal services assist clients in several industries in Maine, including municipalities, sewer districts, water districts, timberlands, forest products, wind energy, solar energy, solid waste, banking and financial institutions, real estate development, telecommunications, healthcare, nonprofits, educational institutions, and hospitality businesses. Jon also assists private individuals on their legal needs, such as those involving permitting or licensing before local, state, or federal governmental boards and agencies.

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**SAM MERRILL**

Dr. Sam Merrill has held directorships in nonprofit, academic, and government sectors and has been a small business owner. He is a recognized leader in climate adaptation planning and community well-being. For twelve years, he was Associate Research Professor at the Muskie School of Public Service, University of Southern Maine, and Director of the EPA's New England Environmental Finance Center at the Edmund S. Muskie School of Public Service. He has published 29 peer-reviewed articles and received awards for his work, including an Environmental Merit Award from the EPA in 2014 and a Visionary Award from the Gulf of Maine Council in 2015. He is also an Honorary Lieutenant Colonel with the Minnesota National Guard; for his work there in the 1990s, and in 2000 he received a Commander's Medal for Distinguished Public Service.

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**MATT LUTKUS**

Matt Lutkus has been Damariscotta's Town Manager since January 2012. Prior to that, he was employed as Deputy City Manager in Westminster, Colorado, a large community north of Denver. He served the city in various capacities for 31 years. As the Deputy Manager, he was responsible for managing the Town's General Services Department, working on regional transportation initiatives, and overseeing the city's federal and state lobbying efforts. Before that, he held positions with the cities of Kansas City, Missouri and West Hartford, Connecticut. He grew up in southern Connecticut and has a bachelor's degree from Southern Connecticut State College and a masters in Public Affairs from the University of Connecticut. His duties in Damariscotta involve the range of responsibilities that come with managing one of the smaller designated regional service center towns in Maine.
NATHAN ROBBINS
Nathan Robbins is the Climate Change Specialist for the Maine Department of Environmental Protection. He studied Biology at Wheaton College and received a M.S. in Resource Management and Conservation from Antioch University of New England. Nathan has worked in state and local governments, for non-profits, and with private businesses on partnership building, informed decision-making, community engagement, and sustainable resource management practices for the past 10 years. He currently focuses on integrating climate change into agency practices, programs, and initiatives. This includes coordinating with agencies and partners, serving on state and regional groups, and providing climate services assistance to individuals and communities impacted by climate change.

ANDREA SMITH
Andrea currently serves as the Director of the Tax Incentive Programs at the Department of Economic and Community Development and Maine’s Program Manager for the Northern Border Regional Commission. Prior to 2017 she served 10 years as a Program Manager for the State’s Community Development Block Grant Program overseeing the Economic Development and Workforce Training Programs. She is a graduate of Leadership Maine (Phi Class) and the Kennebec Leadership Institute and is currently pursuing a bachelor’s degree in Public Administration at the University of Maine-Augusta. Andrea has dedicated her public service career to working with communities and businesses to enrich the lives of Maine citizens.

BRUCE A. VAN NOTE
Commissioner Bruce A. Van Note is an engineering graduate, an attorney and a professional land surveyor. He was born in Houlton, Maine, and moved to Bath at a young age, where he attended public schools. He holds degrees in engineering and law. Bruce has 25 years of professional transportation work experience in Maine, including 20 years at MaineDOT. His MaineDOT experience included 12 years as Deputy Commissioner, during which time he managed most aspects of the department. Most recently, he served as the Director of Policy and Planning at the Maine Turnpike Authority.

DAWN ZIMMER
Dawn Zimmer served as Mayor of Hoboken from 2009-2017. She led her city through the devastation of Superstorm Sandy in 2012. Her resiliency achievements include leading a successful initiative to win, build community consensus, and approval for a $230 million Federal Rebuild by Design project. This comprehensive water management strategy will protect Hoboken from rising seas and severe weather. She created a Greener Hoboken through resiliency parks, complete streets, and green infrastructure legislation.

She served on President Obama’s task forces for Sandy recovery and climate preparedness. Under Governor Murphy, she served as Co-chair of the Urban & Regional Growth Committee. She now works for Schneider Electric helping communities to develop resilient, sustainable, and cost-effective energy solutions.
PLEASE JOIN THE SHOREUP MAINE GOOGLE GROUP

The intent of the group is to share information and provide tools to coastal communities so that they better understand implications of sea level rise in their communities and can make informed adaptation decisions, especially around critical waterfront infrastructure. These tools include resources, events, and best practices that help build community awareness and resilience around rising seas and coastal flooding. Managed by the Island Institute, this group strives to leverage, connect, and expand existing coastal and island networks necessary for communities to prepare for changing impacts.

Please feel free to make posts by emailing:
shoreup-maine@googlegroups.com

Or interacting through the online portal at:
groups.google.com/forum/#!forum/shoreup-maine

DISCOVER WHAT WORKS WITH OUR SOLUTIONS LIBRARY

Read about how innovative communities are addressing issues and solving complex problems at our What Works Solutions Library on the Island Institute website:
islandinstitute.org/what-works-solutions-library
Event Hosts:

- Island Institute
- Maine Coastal Program
- New England Environmental Finance Center
- Casco Bay Estuary Partnership

Event Sponsors:

- Maine Coastal Program
- NOAA National Ocean and Atmospheric Administration
- Maine Department of Agriculture, Conservation, and Forestry
- Eaton Peabody Attorneys at Law
Belfast, Maine

Sea Level Rise Area of Impact
Self-guided walking tour

Projected 6 feet of sea level rise

Water Pollution Control Plant

Marshall Wharf Brewing
Passagassawakeag River
Sea Level Rise Projection

- Highest astronomical high tide
- Highest astronomical high tide plus 6.1 feet
This map displays the area of inundation in the Belfast area from a sea level rise scenario of 6.1 ft on top of the highest astronomical tide. Inundation depths associated with flooding as well as storm surge scenarios are also available at: maine.gov/dacf/mgs/hazards
Become a member today!

Our members support our programming to strengthen island and coastal economies, enhance education and leadership, and deliver and share solutions for sustainable communities.

**As an individual...**

Member benefits include:
- Subscription to our monthly newspaper, *The Working Waterfront*
- A 10% discount at our store, Archipelago
- Invitations to Island Institute events
- Members at $100 and above also receive the annual publication, *Island Journal*

**or as a business**

Receive individual benefits as well as:
- Event corporate sponsorships opportunities
- Subscriptions to our publications,
- Discounts on advertising and more

Learn more at www.islandinstitute.org/memberships