



PROGRAM

Friday, 14 July 2017

Wells High School • Wells, Maine

Our Maine and New Hampshire
Beaches and Coast



The Beaches Conference 2017

7:30 – 8:30 **Registration and Multimedia Session** Exhibit area

8:30 – 10:00 **Plenary Session I** Auditorium

Welcome

Christine Feurt, Wells National Estuarine Research Reserve

Opening Remarks

The state of coastal resources and federal resources

Paul Dest, Wells National Estuarine Research Reserve

Plenary I Panel **Shedding light on the past and present to better manage our future** Auditorium

Moderated by Nathan Robbins, Maine Department of Environmental Protection

State of the Beaches: Highlights of monitoring programs in Maine and New Hampshire

Peter Slovinsky, Maine Geological Survey, Dept. of Agriculture, Conservation and Forestry, and Larry Ward, University of New Hampshire Center for Coastal and Ocean Mapping

Lost to the Sea: Maine's ancient cultural and environmental history

Alice R. Kelley, School of Earth & Climate Sciences, University of Maine

Key considerations in determining the beach action value (bacteria count) for water quality monitoring

Keri Kaczor, UMaine Extension/Sea Grant and Maine Healthy Beaches

Resources for climate change adaptation planning

William DeLong, US Department of Homeland Security Office for Infrastructure Protection

Old laws and new realities: the balance of interests along Maine and New Hampshire coastlines

John Duff, University of Massachusetts, Boston

Flood zone mapping: roles and resources for stakeholders

Jim Nadeau, Nadeau Land Surveys

10:00 – 11:00 **Break, Multimedia Session with Interactives, Bonus Sessions** Exhibit area

Posters

Southern Maine Beach Profile Monitoring Program, Jacob Aman

A GIS-based Approach for Assessing NPS Risk, Bob Kennedy

Human and Ecological Interactions in Dune Systems in Seabrook, NH, Emily Bialowas

Mapping and Removing Marine Debris in Great Bay, Abby Lyon and Emily Lord

An Interactive Map for southern Maine Horseshoe Crabs, Sue Schaller

Beach profile monitoring and shoreline change measurements from the 2017 State of Maine's Beaches report, Maine Geological Survey

Science vs Sales, Will Jones

Green Crab Research and Comics, Bath Middle School

Ground Penetrating Radar and Geoarchaeology, Jacque Miller

Exhibits

AirShark*

Collaborating for Cleaner Beaches:
Blue Ocean Society's Adopt-a-Beach
Program, Blue Ocean Society for Marine
Conservation*

Curtis Thaxter

Children's Author Nancy Donovan*

Rocky Shore Inhabitant Display, Coast
Encounters, LLC*

E. J. Prescott, Inc.*

FB Environmental Associates*

Greater Portland Council of Governments

Maine Coastal Program

Maine EPSCoR and Maine 4-H*

Maine Geological Survey

Maine Sea Grant

Molly Maps

Nadeau Land Surveying*

National Flood Insurance Program

New England Grassroots
Environmental Fund

New Hampshire Department of
Resources & Economic Development,
Division of Parks & Recreation

Save Our Shores Maine

The Plastic Bag Project, Danielle Baudrand

The Wells Reserve at Laudholm

UNH Cooperative Extension
and Sea Grant*

UNH Sea Grant / Marine Docents*

Walsh Engineering

*Interactive

Bonus Sessions

Capturing the Coastline with Technology Room 129/127

*Marshes and beaches and drones, oh my! Integration of UAS technology into the
National Estuarine Research Reserve System*

Susan Bickford, Wells National Estuarine Research Reserve

*Drones as tools for coastal planning, management, and stakeholder
engagement*

Jon Budreski, Air Shark

Monitoring coastal erosion via drone

Rick Harbison, Greater Portland Council of Governments

Making Waves: Engaging communities of learners in marine education Room 229

Discovering the world of aquaculture with K-5 students Room 229

Laurie Bragg, Maine EPSCoR and Sarah Sparks, UMaine Extension

Making waves across the region Room 229

Jen Kennedy, Blue Ocean Society of Marine Conservation

*Clam Class: Teaching 4th-6th graders about marine ecosystems
and fisheries Room 229*

Ruth Indrick, Kennebec Estuary Land Trust

11:00 – 1:30 **Field Sessions, Workshop, Training**

Please pick up bag lunches at registration area to bring to these sessions.

Field Sessions Meet outside main entrance

Wells Harbor: Coastal Monitoring

Long-term environmental and biological monitoring: How the Wells NERR collects long-term data sets to understand changes in our coastal environments

Jeremy Miller, Wells National Estuarine Research Reserve

Beach water quality monitoring

Keri Kaczor and Meagan Sims, UMaine Extension/Sea Grant and Maine Healthy Beaches

Strawberry Island, Kennebunk: A brief geologic history of the sands along southern Maine's beaches

Jon Dykstra, Retired Geologist, Former VP of Research & Development,
MDA Information Services

Wells Reserve: Sounds worth saving: using soundscape ecology for coastal habitat management

Susan Bickford, Wells National Estuarine Research Reserve

Workshop Room 142

Mapping your own love of place: making personal maps of coastlines and beaches

Molly Holmberg Brown, MollyMaps

Training Room 125

Tools to be equipped for change: from raising awareness to adaptation practices, a training introducing the Maine Adaptation Toolkit, Flood Resilience Checklist, and C-RISE (Community Resilience Informed by Science Experience)

Gayle Bowness, Gulf of Maine Research Institute; Nathan Robbins, Maine Department of Environmental Protection; and Abbie Sherwin, Maine Department of Agriculture, Conservation and Forestry

11:00 – 12:30 **Concurrent Session I**

Break Out Sessions

Session 1. Planning for Action: Creating Climate Resilient Communities Room 129

Communicating for engagement

Christa Daniels, Antioch University New England and Climate Access

The New Hampshire Coastal Adaptation Workgroup: Effective collaboration for coastal adaptation

Steve Miller, Great Bay National Estuarine Research Reserve, and Cameron Wake, University of New Hampshire

What do adaptation community champions need from technical assistance providers?

Julia Peterson, NH Sea Grant and UNH Cooperative Extension, and Ally Phillip, New England Grassroots Foundation

Session 2. Wildlife of our Beaches and Coasts Room 127

Marine mammal rescue and response

Ashley Stokes, Seacoast Science Center, Marine Mammal Rescue Team

Racing the tide: nesting ecology and conservation of Maine's tidal marsh birds

Bri Benvenuti, Rachel Carson National Wildlife Refuge

Landscaping for humans and wildlife at the coastal edge

Sue Schaller, Bar Mills Ecological

Session 3. Shoreline Change and Living Shorelines Room 229

A vision for smart shorelines in the NH Seacoast

Kirsten Howard, NH Department of Environmental Services Coastal Program

Advancing coastal resilience: an institutional analysis of living shorelines in New Hampshire

Trevor Mattera, University of New Hampshire

Dealing with coastal erosion through a spectrum of control methods

Greg Berman, Woods Hole Sea Grant and Cape Cod Cooperative Extension

Session 4. Flood Insurance and the Community Rating System Room 228

Overview of the National Flood Insurance Program

Sue Baker, Maine Floodplain Management Program, Dept. of Agriculture, Conservation & Forestry

FEMA Community Rating System and coastal Georgia

Madeleine Russell, Georgia Sea Grant

The Community Rating System in coastal New England: regional approaches and lessons learned

Abbie Sherwin, Maine Coastal Program, Dept. of Agriculture, Conservation & Forestry; Julie LaBranche, Rockingham Planning Commission; and Shannon Jarbeau, Barnstable County/Cape Cod Cooperative Extension

Session 5. Maine and New Hampshire Legislation Room 225

Protecting Maine's beaches for the future: 2017 report update

Bob Marvinney, Maine Geological Survey, Dept. of Agriculture, Conservation & Forestry, and Tina Zabierek, Maine Department of Environmental Protection

Preparing NH for projected storm surge, sea-level rise, and extreme precipitation: a summary of the New Hampshire Coastal Risk and Hazards Commission report and ongoing implementation initiatives

Nathalie Morison, NH Department of Environmental Services, Coastal Program

Session 6. New Topics in Coastal Law and Policy: Access, Ownership, and Marine Algae Room 226

Can you get to the beach? The latest word from Maine courts on public beach access rights and how some communities have responded

Amy Tchao, Drummond Woodsum Law Firm

Seaweed and the shore: pending lawsuits before Maine courts

Ben Leoni, Curtis Thaxter Law Firm

12:30 – 1:30 **Lunch and Roundtable Conversations Cafeteria**

See signs at designated table

Development Regulation Roundtables

Design and permitting

William Walsh, Walsh Engineering, and Werner Gilliam, Town of Kennebunkport

Regulatory updates to Sand Dune Rules and Shoreland Zoning

Maine Department of Environmental Protection

Beach Profilers' Lunch

Beach Profiling volunteer monitors, geologists, and program staff

1:30 – 2:15 **Plenary Session II Auditorium**

Plenary II Panel. Listening for a change: stories of our responses to sea-level rise

The leading question about climate change

Robert Almeder, Ph.D, Philosophy of Science, Senior Fulbright Specialist in American Studies

Notice to mariners: on navigating a shore, excerpts from a work-in-progress

Julie Clark Boak, Salmagundi Productions

Butting heads are better than one: why engaged scholarship is critical for addressing climate change challenges

Cameron Wake, University of New Hampshire

2:15 – 2:30 **Transition to Concurrent Sessions II, with refreshments in cafeteria**

2:30 – 4:00 **Concurrent Session II**

Break Out Sessions

Session 1. Community and Infrastructure Assessments Room 127

Understanding the full spectrum of future coastal flood risk on Maine's coast

Nathan Dill, Ransom Consulting

Assessing tidal crossings for coastal resilience

Pete Steckler, The Nature Conservancy, New Hampshire

Development and utilization of a decision support tool for culvert prioritization

Tom Reinauer, Southern Maine Planning and Development Commission, and Jacob Aman, Wells National Estuarine Research Reserve

Session 2. Swim, Surf, Steward: Engaging Beachgoers to Inform Ecosystem Management Room 129

Beachgoers of Maine: Who are they and what do they think about water quality?

Charles Colgan, Center for the Blue Economy, Monterey Institute of International Studies and Professor Emeritus, Muskie School of Public Service, University of Southern Maine, and Ross Anthony, University of Maine

Pre-contact fish weirs in southern Maine?

Tim Spahr, Cape Porpoise Archaeological Partnership

Surfing the wave of sustainability science

Sophia Scott and Shannon Rogers, Plymouth State University

Session 3. Building at the Beach: Navigating the Maze of Federal, State and Local Regulations **Room 225**

Redeveloping on the beach: A closer look at the permitting and building process

William Walsh, Walsh Engineering, and Werner Gilliam, Town of Kennebunkport

Regulatory updates to Sand Dune Rules

Dave Cherry, Maine Department of Environmental Protection

Session 4. Beach Management: Dunes and Seaweed Room 229

Collaborating for coastal resilience in Seabrook, NH

Emily Bialowas, University of New Hampshire

The State of Maine's Beaches in 2017

Peter Slovinsky, Maine Geological Survey, Dept. of Agriculture, Conservation & Forestry

Digging in: Understanding the complexities of addressing excessive seaweed accumulation on Maine's coastal beaches

Keri Kaczor, UMaine Extension/Sea Grant and Maine Healthy Beaches

Session 5. Collaboration Room 125

The Coastal Research Volunteer Program: Achieving multiple benefits through collaboration in citizen science

Alyson Eberhardt, NH Sea Grant and UNH Cooperative Extension, Amy Lopata, Elmer S. Bagnall School, and Lisa Anderson, Coastal Research Volunteer

From maps to action: Citizen scientists collect marine debris in the Great Bay Estuary

Abigail Lyon, Piscataqua Region Estuaries Partnership, and Emily Lord, UNH Cooperative Extension

Collaborating regionally for citizen science monitoring of Maine's coastal waters: the Maine Coastal Observing Alliance

Ruth Indrick, Kennebec Estuary Land Trust

Session 6. Marine Debris: Different Approaches for a Complicated Problem Room 228

Microplastics on New Hampshire beaches: How impacted are our beaches really?

Gabriela Bradt, NH Sea Grant and UNH Cooperative Extension

Litter on New Hampshire beaches: Collaborating to assess and mitigate the problem

Jen Kennedy, Blue Ocean Society for Marine Conservation, and Meredith Collins, NH Division of Parks and Recreation

Is a clean beach a safe beach?

Ella van Gool, Environmental Research Institute, University of Waikato, New Zealand



Session 7. Tracking Bacterial Water Pollution: New Tools and Applications Room 236

Using co-indicators along with traditional source tracking methods to better pinpoint human sources of fecal contamination: a case study in Rye, NH

Laura Diemer, FB Environmental Associates

Application of a robust microbial source tracking method for identifying bacterial contamination sources near Maine's beaches

Steve Jones, University of New Hampshire and NH Sea Grant

Integrating microbial source tracking tools into local remediation strategies in the Goosefare Brook watershed

Meagan Sims, UMaine Extension and Maine Healthy Beaches

Session 8. Notes on Navigating a Shore: A Short Play Auditorium

Julie Clark Boak, Salmagundi Productions

Lightning Round. Unique Coastal Habitats, Current Challenges and the Future: Multiple Approaches to Managing Our Coast Room 226

Coastal restoration experiences in southern Maine

Sue Schaller, Bar Mills Ecological

Are we ready for rising seas?

Pete Hanranhan, E.J. Prescott

Let's talk wetland benefits

Jane Ballard, National Oceanic and Atmospheric Administration

Local and regional trends in salt marsh integrity

Susan Adamowicz, Rachel Carson National Wildlife Refuge

Artistic mapping for community engagement with shorelines: the pragmatism of artistic mapping

Molly R. Holmberg Brown, Molly Maps

The myth of dry feet: What we can learn from how the Dutch engage in flood defense?

Kristen Grant, Maine Sea Grant and UMaine Extension

4:30 – 6:30 Coastal Social at Wells Reserve at Laudholm
Appetizers, local beer, and oysters, all with a view!



Great Bay National Estuarine
Research Reserve & Stewards

Maine Geological Survey

NH Coastal Program

Maine Boats, Homes & Harbors

Curtis Thaxter

Maine DEP

Piscataqua Region
Estuaries Partnership

