

5TH ANNUAL CAPE COASTAL CONFERENCE

RESILIENT CAPE?

Prepare · Adapt · Restore AGENDA

DECEMBER 5 & 6, 2017

Hyannis Resort and Conference Center



WWW.WAQUOITBAYRESERVE.ORG



DECEMBER 5, 2017

9:00AM - 5:00PM

9:00AM-9:15AM - WELCOME, INTRODUCTIONS AND OPENING COMMENTS

Tonna-Marie Rogers, Coastal Training Program Coordinator Waquoit Bay National Estuarine Research Reserve

9:15AM-9:55AM - Framing Coastal Risk and Resilience: Understanding What's at Stake AND PREPARING FOR THE FUTURE - Dr. Erika Lentz, Research Geologist, U.S. Geological Survey Coastal and Marine Science Center, Woods Hole

9:55AM-10:25AM - Understanding the Links Between Development Decisions, Planning, AND COMMUNITY RESILIENCE: WHAT SANDY TAUGHT NEW JERSEY AND TRANSFERABLE LESSONS FOR CAPE COD - David Kutner, Planning Manager, NJ Future

10:25AM-10:45AM - Investing in Coastal Ecosystems for Resilient Communities Patty Doerr, Director of Coastal and Marine Programs, The Nature Conservancy in New Jersey

COFFEE BREAK - 10:45AM- 11:15AM

with Impacts of Storms & Flooding

11:15AM-12:30PM - HARVEY, IRMA, MARIA, OH MY! WHAT IF IT HAPPENED HERE? A Panel Discussion on Flood Risk, Vulnerability, and How Cape Communities Can BetterPrepare to Deal

PANELISTS:

- Flood Risk David Vallee, Hydrologist-in-Charge, NOAA/NWS/Northeast River Forecast Center
- Floodplain Management Joy Duperault, State Floodplain Manager, Director of Flood Hazard Management Program, MA Department of Conservation and Recreation
- Planning Ryan Bennett, Town Planner, Town of Brewster
- Public Works & Engineering Rob Steen, Asst. Director, Dept. of Public Works, Town of Barnstable
- Emergency Management Phil Burt, Emergency Management Preparedness Assistant, Barnstable County Dept. of Health and the Environment and Regional Emergency Management Committee
- Insurance John Vokey, Risk Management Specialist Murray & MacDonald, Insurance Company
- Business Readiness Wendy Northcross, Exec. Director, Cape Cod Chamber of Commerce

12:30PM - 1:30PM

LUNCH (PROVIDED)

BEND NOT BREAK: MAKING ROOM TO ADAPT IN A CHANGING CLIMATE

CONCURRENT SESSIONS (1:30PM - 2:45PM) Each Session has three 20 minute presentations.

SESSION 1

ORLEANS A & B

ALL ADAPTATION IS LOCAL

Town of Brewster Case Study -Developing a Consensus-Based Coastal Adaptation Strategy and Next Steps - Pat Hughes, Chair, Brewster Coastal Committee

Martha's Vineyard Case Study Squibbnocket Parking Lot and Access Way Coastal Resilience Project - Chuck Hodgkinson, Project Manager, Town of Chilmark

Challenges and Lessons Learned from Planning and Implementing **Local Adaptation Projects** Steve McKenna, Regional

Coordinator, Cape Cod & Islands, MA Office of Coastal Zone Management

SESSION 2 OSTERVILLE B

USING NATURAL AND NATURE-BASED INFRASTRUCTURE FOR **COASTAL PROTECTION**

Can We Protect New England Coasts with Living Shorelines? Part I: State of the Practice - Why, Who, How and What's Next - Steve Kirk, The Nature Conservancy

Can We Protect New England Coasts with Living Shorelines? Part II: Design and Use of Profiles and the Applicability Index and Local Case Studies – Elise LeDuc, Woods Hole Group

Key Considerations for Living Shoreline Projects - Seth Wilkinson, Restoration Ecologist, President, Wilkinson Ecological Design, Inc.

SESSION 3 OSTERVILLE A

COASTAL WETLANDS ON THE FRONTLINES

Opportunities for Salt Marsh Migration on Cape Cod

Dr. Jo Ann Muramoto, Association to - Bruce Carlisle, Director, Preserve Cape Cod

Carbon Storage and Greenhouse **Gas Fluxes in Local Tidal Wetlands: Implications for Climate Mitigation** and Coastal Resilience Dr. Kevin Kroeger, U.S. Geological Survey Coastal and Marine Science Center, Woods Hole

Increasing Salt Marsh Resilience in the Face of Sea Level Rise -**Investigating Thin Layer Deposition** (Sediment Augmentation) as A New Management Technique Dr. Megan Tyrrell, Research

Coordinator, Waquoit Bay NERR

Session 4

Agenda

CENTERVILLE A & B

EXPLORING MARINE RENEWABLE ENERGY OPTIONS

Overview of Marine Renewable **Energy Activities in Massachusetts**

Massachusetts Office of Coastal Zone Management

The Cape Cod Canal and **Muskeget Channel Tidal Turbine Projects** – John Miller, Executive Director, Marine Renewable Energy Collaborative of New

England

Working to Get Projects Over the Finish Line - Vineyard Wind Case Study

DAY ONE CONTINUED

COFFEE BREAK - 2:45PM - 3:05PM

DECEMBER 5, 2017

3:05PM-3:45PM - SEA LEVEL RISE – LATEST RESEARCH FINDINGS AND IMPLICATIONS FOR CAPE COD Dr. Jerry Mitrovica, Harvard University

3:45PM-4:05PM - THE RESILIENT CAPE COD PROJECT

Heather McElroy, Natural Resources/Land Protection Specialist, Cape Cod Commission

4:05PM-5:00PM - BEYOND CLIMATE AND WEATHER DATA: INTEGRATING BROADER SOCIAL, ECONOMIC AND COMMUNITY ISSUES INTO LONG-TERM RESILIENCE PLANNING

5:00PM - ADJOURN

- The Cape Cod Blue Economy Project, Phase 2: Action! Leslie-Ann McGee, Cape Cod Chamber of Commerce
- How Do We Meet Housing Needs Whilst Considering Wise Floodplain Management and Changing Risks?
 - Heather Harper, Community Design and Affordable Housing Specialist, Cape Cod Commission
- Sharks on the Cape Feeding Research Into A Bigger Conversation on Ecosystem Dynamics & Community Needs

Megan Winton, Researcher, SMAST, UMass Dartmouth

Day Two

9:00AM-9:15AM - WELCOME AND OPENING REMARKS

Tonna-Marie Rogers, Coastal Training Program Coordinator Waquoit Bay National Estuarine Research Reserve

DECEMBER 6, 2017

9:00AM - 12:30PM

9:15AM-9:40AM - Enhancing Community Resilience by Restoring Degraded Ecosystems: Restoration Needs and Opportunities on the Cape

April Wobst, Restoration Ecologist & Director of the Restoration Center, Association to Preserve Cape Cod

9:40AM-10:00AM - CASE STUDY: THE COONAMASSETT RIVER RESTORATION PROJECT Betsy Gladfelter, Project Coordinator and Conservation Commissioner, Town of Falmouth

10:00AM-10:20AM - Case Study: The Muddy Creek Restoration Project Dr. Robert Duncanson, Director of Health and Natural Resources, Town of Chatham

COFFEE BREAK - 10:20AM- 10:50AM

10:50AM-11:10AM - Using Ecosystem Assessments to Guide Development of Coastal Resilience Strategies - Pleasant Bay Case Study

Owen Nichols, Director, Marine Fisheries Research, Center for Coastal Studies

11:10AM-11:35AM - The Value of Long-Term Monitoring for Guiding Restoration Efforts – Warming Trends and Water Quality

Jennie Rheuban, Research Associate III, Woods Hole Oceanographic Institution

11:35AM-11:55AM - Pond Restoration and Elimination of Cyanobacteria Blooms Rick York, Director, Department of Natural Resources, Town of Mashpee

11:55AM-12:15PM - RESTORING WATER QUALITY THROUGH IMPROVED STORMWATER MANAGEMENT - THE CAPE COD STORMWATER COALITION

Dr. Robert Duncanson, Director of Health and Natural Resources, Town of Chatham

12:30PM - ADJOURN

12:15PM-12:30PM - WRAP-UP & EVALUATION



Partner Organizations









































Afternoon Marsh - Kathryn Kleecamp www.SandwichArt.com

