



4TH CAPE COASTAL CONFERENCE

OUR COASTAL FUTURE: TAKING ACTION FOR A PROSPEROUS & HEALTHY CAPE COD

DECEMBER 6 & 7, 2016

HYANNIS RESORT AND CONFERENCE CENTER



Putting Science, History and Innovative Economic Strategies to Work

DAY ONE

TUESDAY, DECEMBER 6

9:00AM - 4:30PM

Registration, Coffee & Conversation
Conference Center
7:30AM - 8:45AM

Welcome, Introductions & Opening Comments
Grand Ballroom
9:00AM

Coffee Break & Exhibits
10:25AM - 10:50AM

Lunch (*provided*)
12:00PM - 1:00PM

Concurrent Sessions
1:30PM - 2:45PM

WELCOME AND OPENING REMARKS

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

CAPE COD THROUGH THE YEARS: HERITAGE IN TRANSITION

A Visual Reflection Viewed Through Art, Maps and Historical Photographs

KEYNOTE - CAPE COD: AN ENVIRONMENTAL AND ECONOMIC HISTORY OF A FRAGILE ECOSYSTEM

Dr. John Cumbler, Emeritus Professor, University of Louisville

OUR BLUE ECONOMY

Christopher Adams, Chief of Staff & Leslie-Ann McGee, Blue Economy Program Manager, Cape Cod Chamber of Commerce

CHANGE IS THE ONLY CONSTANT: THE PAST, PRESENT AND FUTURE OF THE CAPE'S FISHERIES

PANEL DISCUSSION

Moderator - Owen Nichols, Director, Marine Fisheries Research, Center for Coastal Studies
Our fisheries and their associated communities have changed over the centuries, persisting today amid changes in the economy, regulation, and the environment. Panelists will recount the history of Cape Cod's fisheries with a focus on innovation and adaptation up to the present day, closing with the status of today's science and management at regional and community scales. Panelists will share their perspectives on the manner in which the Cape's towns can best support their local fisheries.

Panelists:

HISTORY AND EVOLUTION OF THE CAPE COD FISHING INDUSTRY

Sandy MacFarlane, Author & Principal of Coastal Resources Specialists

CURRENT FISHING METHODS, SPECIES & MARKETS-ADAPTING TO CHANGING REGULATIONS, MARKETS AND CLIMATE

John Pappalardo, Exec. Director, Cape Cod Commercial Fishermen's Alliance

PERSPECTIVES ON RESOURCE & HABITAT MANAGEMENT-COLLABORATIVE RESEARCH & MANAGEMENT EFFORTS WITH FISHERMAN

Dan McKiernan, Deputy Director, MA Division of Marine Fisheries

ADAPTIVE MANAGEMENT OF THE HARBOR TO MEET THE NEEDS OF A CHANGING FISHING INDUSTRY

Rex McKinsey, Harbormaster, Town of Provincetown

SCIENCE ADDRESS - COASTAL AND OCEAN ACIDIFICATION

Dr. Scott Doney, Senior Scientist & Department Chair, Marine Chemistry and Geochemistry, Woods Hole Oceanographic Institution

AFTERNOON CONCURRENT SESSIONS

Session 1: Getting to Clean Water - Session 2: Shellfish Aquaculture

Session 3: Resoring Our Ponds

FROM DISPOSAL TO TREATMENT: CAN SMALL CHANGES IN LEACHFIELDS REDUCE NITROGEN TO OUR MARINE EMBAYMENTS?

George Heufelder, Director, Massachusetts Alternative Septic System Test Center, Barnstable County Department of Health and Environment

EMERGING CONTAMINANTS IN THE WATERS OF CAPE COD: LESSONS LEARNED FOR PROACTIVE WATER QUALITY PROTECTION

Laurel Schaidler, Ph.D., Research Scientist, Silent Spring Institute

A LANDFILL'S IMPACT ON WATER SUPPLY: EASTHAM'S STORY

Jane Crowley, Health Agent, Town of Eastham

DAY ONE

TUESDAY, DECEMBER 6

continued

Concurrent Sessions
1:30PM - 2:45PM

Afternoon Break
2:45PM - 3:00PM

Afternoon Plenary Session
3:00PM - 4:30PM



CLEAR WATER REVIVAL: SOLARBEES ON SANTUIT POND, MASHPEE
Catherine Laurent, DPW Director and Andrew McManus, Conservation Agent, Town of Mashpee

PONDS IN TRANSITION: WHAT DO WE NEED FOR PROTECTION & IMPROVEMENT?

(A facilitated discussion with town and community representatives)

CONSIDERATIONS FOR SCALING SHELLFISH PROPAGATION FOR NITROGEN MANAGEMENT - Josh Reitsma, Cape Cod Cooperative Extension & Woods Hole Sea Grant

ACIDIFICATION IMPACTS ON LARVAL SHELLFISH

Dr. Dan McCorkle, Chair, Department of Geology and Geophysics, Woods Hole Oceanographic Institution

VIBRIO PARAHAEMOLYTICUS (VP) CAUSED ILLNESS IN MASSACHUSETTS AND IMPACT ON THE CAPE AND ISLAND'S SHELLFISH INDUSTRY - Chris Schillaci, Aquaculture Specialist and Vibrio Coordinator for the Massachusetts Division of Marine Fisheries

Session 4: Exploring the Marine Technology Cluster

EXPLORING THE MARINE TECHNOLOGY CLUSTER

This session will introduce the audience to the range of marine technology businesses and ventures that are currently occurring in the Cape Cod Region. Presenters will pull back the veil on what they do and how they do it. Following presentations there will be a facilitated discussion with panelists and the audience focusing on topics such as what is the Marine Technology Cluster? What opportunities are there for partnerships and collaborations? How can we grow the Cluster and make it even more of a signature piece of the Blue Economy in the Cape Cod region?

Panelists:

Jim Bellingham, Director of the Center of Marine Robotics, Woods Hole Oceanographic Institution

Peter Furze - Teledyne Webb Research

Hung "Tom" Pham, Project Officer, Mass. Maritime Academy

Carl Mancuso, VP of Sales & Marketing, Falmouth Scientific, Inc.

RESILIENT IN THE MIDST OF TRANSITION: SEIZING OPPORTUNITIES FOR INNOVATION AND COLLABORATION

Plenary Session - Roundtable Discussion (Grand Ballroom)

Participants:

ECONOMY-Wendy Northcross, CEO, Cape Cod Chamber of Commerce
MARINE TECHNOLOGY-Duane Fotheringham, President & Chairman of the Board, Hydroid, Inc.

FISHERIES-Dan McKiernan, Deputy Director, MA Division of Marine Fisheries

COASTAL RESILIENCE & PROTECTING COASTAL RESOURCES-
Bruce Carlisle, Director, Massachusetts Office of Coastal Zone Management

WRAP-UP & TRANSITION TO NETWORKING SESSION

CAPE CONVERSATIONS: View exhibits and posters and check out resource tables - learn more about what different towns and organizations are doing. Don't miss out on this great opportunity to catch up with colleagues, discuss topics with presenters and other experts, share new ideas and spark new collaborations. *One of the best parts of the conference!*

DAY TWO

WED., DECEMBER 7

9:00AM - 12:30PM

Registration View Exhibits & Posters

Conference Center

7:30AM - 8:45AM

Welcome & Opening Comments

Grand Ballroom

9:00AM

Coffee Break & Exhibits

10:35AM - 10:55AM

Concurrent Sessions

11:20AM - 12:30PM

12:30 Wrap-up & Adjourn

WELCOME AND DAY 2 AGENDA OVERVIEW

Tonna-Marie Rogers, Waquoit Bay National Estuarine Research Reserve

MAKING STRIDES IN ENHANCING COASTAL RESILIENCE-A Snapshot of Local Projects Underway

PUTTING REGIONAL SEDIMENT MANAGEMENT INTO ACTION: DEALING WITH NATURAL, POLITICAL AND MUNICIPAL BOUNDARIES (PANEL DISCUSSION)

This panel will describe what regional sediment budgets and sediment management plans are and their value as management tools in long term coastal resilience planning. Panelists will discuss why it is important to develop a regional sediment management plan for Cape Cod and how this could be done. Panel presentations will be coupled with a facilitated discussion to engage both panelists and attendees in a meaningful exploration of key questions such as: (i) what obstacles lie in the way, (ii) how these may be overcome, (iii) who could lead such an effort, and (iv) will new powers be needed to develop and actually implement a regional sediment management plan.

Panelists:

Mark Borrelli, Director, Seafloor Mapping Program, Center for Coastal Studies

John Ramsey, Sr. Coastal Engineer and Principal, Applied Coastal Research & Engineering

Brad Washburn, Asst. Director, MA Office of Coastal Zone Management

Ted Keon, Director of Coastal Resources, Town of Chatham

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

INTRODUCTION TO THE RESILIENT CAPE COD PROJECT: BLENDING ADAPTATION PLANNING, ENVIRONMENTAL ECONOMICS AND COMMUNITY

ENGAGEMENT - Kristy Senatori, Deputy Director, Communications, Economic Development & Strategic Information, Cape Cod Commission

CONCURRENT SESSION PRESENTATIONS

EFFECTS OF SEA LEVEL RISE ON THE CAPE'S GROUNDWATER

Don Walter, United States Geological Survey

MODELING SEA-LEVEL RISE IN COASTAL WETLANDS: UNDERSTANDING POTENTIAL IMPACTS AND THEIR IMPLICATIONS FOR MANAGEMENT ON CAPE COD Marc Carullo, Massachusetts Office of Coastal Zone Management

SAVING MONEY: COMMUNITY RATING SYSTEM AND FLOOD INSURANCE UPDATES

Shannon Jarbeau, CRS & Floodplain Coordinator, Barnstable County Cape Cod Cooperative Extension

HABITATS, ROADS, CULTURAL AND RECREATIONAL RESOURCES, BUILDINGS AND BATHROOMS: IN A CHANGING CLIMATE, WHAT SHOULD WE PROTECT? COASTAL VULNERABILITY INDEXING, MAPPING, ASSESSMENT AND ADAPTATION ON THE TRUSTEES OF RESERVATIONS COASTAL PROPERTIES - CASE STUDY - Thomas O'Shea,

Russell Hopping, Trustees of Reservations &

Ted Wickwire, Brittany Hoffnagle, Joe Famely, Kirk Bosma, Woods Hole Group

"BRIDGING" RESILIENCY IN INFRASTRUCTURE & CAPITAL PLANNING PROJECTS - A BOOTS ON THE GROUND PERSPECTIVE - Ray Jack, DPW Director, Town of Falmouth

IMPLEMENTING A COASTAL RESILIENCE PROJECT: EFFORTS TO ANALYZE AND PERMIT A NEARSHORE SEDIMENT BORROW SOURCE FOR SANDWICH BEACHES: CASE STUDY - Steve McKenna, Cape & Islands Regional Coordinator, Massachusetts Office of Coastal Zone Management

WHAT CAN CAPE COD LEARN FROM NEW JERSEY'S EXPERIENCE WITH SANDY? Elissa Commins, Municipal Engineer, Floodplain Administrator, Township of Brick, NJ