

# The Coastal Society



**TCS Bulletin**  
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## Resilience Revolution

by Michelle Covi

The TCS/RAE Summit attendees were “taken by storm” by Susanne Moser’s opening plenary. Dr. Moser was the Marc J. Hershman Keynote speaker, an honor reserved for a professional whose contributions to the field of marine policy and coastal management has had a significant positive influence on students, scholars and others, in the spirit of the work and life of Marc. Dr. Moser is the Director and Principal Researcher of Susanne Moser Research and Consulting in Santa Cruz, CA, where she focuses on adaptation to climate change, vulnerability, resilience, communication, social change, decision support and the interactions between science, policy and the public. Dr. Moser has contributed to the IPCC’s Special Report on “Managing the Risks of Extreme Events and Disaster to Advance Climate Change Adaptation” and was the lead author for the coastal chapter of the Third U.S. National Climate Assessment.

Dr. Moser’s presentation, “Taken by Storm; America Impending Resilience Revolution,” was a rapid, all cartoon, visual and auditory description of our nation’s current resilience challenges. While she declined to define the term “resilience,” which has been in frequent debate among scholars of the different fields of study in which the term is used, she discussed the origin of the term “revolution.” In order to have a revolution, Moser explained, you must have five elements: a public griev-

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## The 2014 Joint Summit - Better for the Private Sector in More Ways than Two

by Steve MacLeod

Those who have attended TCS conferences in the past may have noticed a slightly different feel during this year’s TCS-RAE joint Summit. While we did not all have cool matching orange t-shirts like the staff of the Synergy 2014 conference that was simultaneously underway at the Gaylord Hotel in National Harbor, there was definitely a bit more of a “trade show” feel in the air. This was related to the partnership with Restore America’s Estuaries in two major ways. The first, of course, was the size of the event - not quite RAE’s largest, but at 1,200+ it was certainly a considerably larger draw than previous TCS conferences. The second was the “boots-on-the-ground” nature of the RAE mission. These two factors provided a greater incentive for a number of private businesses to attend as sponsors and exhibitors.

Compared to RAE, The Coastal Society tends to have a more academic and policy-driven focus, and casts its net more broadly in terms of coastal issues. This provided an enhanced benefit for attendees from the private sector, who often cannot earn their bread-and-butter on estuary restoration work alone. For example, the TCS influence helped bring a conference spotlight on coastal resilience, a holistic theme that incorporates disaster planning and climate change adaptation. This is a field that provides a major opportunity for environmental scientists, planners and engineers in the private sector--a rapidly growing field that more

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Dear TCS Members,

What a year it has been! It was exciting to see so many of you join TCS and Restore America's Estuaries in November at our joint 2014 Summit on "Inspiring Action, Creating Resilience" in the Washington, D.C. area. It was a very successful event, and many thanks to the TCS members who helped make it happen. I also wish to extend my thanks to Restore America's Estuaries for their terrific partnership. This Summit was a significant meeting for both organizations, as one of the goals of our partnership was to bring together the coastal and estuarine restoration and coastal management communities. It was great to see everyone participate in thoughtful, interdisciplinary discussion and take advantage of the opportunity to get better acquainted.

It should come as no surprise then that this issue of the TCS Bulletin includes perspectives and stories from the Summit. Whether sharing lessons learned from the TCS-ELP workshop on "Weaving Your Coastal Network," the value of volunteering, or the economic and ecologic value of coasts through the lens of fisheries, this issue highlights how making connections is critical to succeeding in our role as coastal professionals.

TCS also presented several awards at the Summit, recognizing exceptional student presentations and posters and recognizing service to TCS. Congratulations! I'd like to take the time to share their names here, for those who were unable to join us at the Summit.

Thomas Bigford Awards      Best Student Presentation: Katherine Johnson, University of Maryland  
                                          Best Student Poster: Andrew Dolan, Sacred Heart University

Sea Grant Assoc. Award      Best Student Presentation: Rachel Gittman, University of North Carolina at Chapel Hill  
                                          Best Student Poster: Chandra Richards, University of California-Berkeley

TCS Awards                      Partnership Award: Restore America's Estuaries  
                                          Robert W. Knecht Award for Professional Promise: Caitlyn McCrary, Communications Committee Chair  
                                          President's Award: Chris Ellis, Board of Directors  
                                          President's Award: Brian Smith, Board of Directors  
                                          Distinguished Service Award: Jeff Smith, past Treasurer  
                                          Distinguished Service Award: Lisa Schiavinato, President

I wish to extend a heartfelt thank you to the Bulletin's longtime editor, Ellen Gordon. Ellen has done tremendous work for TCS over the years, and it is through her commitment and leadership that this newsletter has become a much-loved publication for TCS members. Ellen is retiring at the end of this year, and the Board of Directors and I thank her for her dedication and service and wish her all the best!

This fall, TCS held its annual elections. I'd like to welcome our incoming Board members and recognize outgoing Board members. Thank you to outgoing Board members Tony MacDonald and Andrew Bohlander for their service to TCS. I've enjoyed working with them and will miss our regular conversations. And I extend a warm welcome to our incoming Board members. They will assume office on January 1.

President: Thomas Bigford, American Fisheries Society  
 President-Elect: Julia Wyman, Marine Affairs Institute and Rhode Island Sea Grant Legal Program  
 Director: Susan Farady, University of New England  
 Director: Lewis Lawrence, Middle Peninsula Planning District Commission  
 Director: Erika Washburn, Lake Superior National Estuarine Research Reserve  
 Director: Steven MacLeod, Ecology & Environment, Inc.

Given Tom Bigford's transition from Director to President, the Board appointed Steven MacLeod to serve the remainder of Tom's director term. With that, I close my final President's letter for the Bulletin. It's been a pleasure to lead this organization. TCS has played an important role in my growth as a professional and allowed me to make lasting connections and friendships. I'm grateful to be a part of such a vibrant community and to have had the opportunity to serve TCS for the past six years.

Thank you for your support of TCS. Happy Holidays!

Regards,

Lisa Schiavinato, TCS President



### From the Editor's Desk:

Winter unmistakably embraces the land where I live, here in the Maryland Piedmont, though it's rather mild this morning—the temperature is already 41 degrees. While there's not nearly enough of it, I love the winter light, particularly first thing in the morning or late in the afternoon. It illuminates the landscape in a manner that's very different from any of the other seasons of the year. Today I thought that I would share the view from my home office—the same place I've written all of my columns as editor of the Bulletin. Instead of the expansive colors of spring, or the mad greenery of summer, or the vivid yellows and oranges of fall, I have to find enjoyment in the subtleties of gray, beige, faded green and brown. I try to take a larger lesson from that; I care passionately—as we all do—about the health of the ocean and the preservation of coastal resources. I devote considerable time to efforts that I hope will help. Others do much more, but there's room for all the help we can give. And yet, the triumphs are often very small, and occur at a snail's pace—and sometimes require some optimistic squinting to see that they are, in fact, victories. Yet if we are not to lose hope, subtle successes—like the understated shades of color in the winter landscape—need to be recognized and appreciated.

10 years ago, when I began my role as editor of the Bulletin, I wrote exuberantly about a trip with my son's 6th grade class—he's 21 now and his cohort is nearly finished with college—to the Smithsonian's Environmental Research Center, on the Rhodes River, a tributary of the Chesapeake Bay. Parent volunteers helped staff field stations, to which the students came around in groups. I happily grabbed the beach seining station as my spot. From that column, *"Each group got to pull on chest waders, which was a first for most of the kids. In pairs, they waded into the river, stretched the net out between them and then walked it back to shore. Much as I really love mucking about, smelling the sharpness of the brackish waters and examining the critters pulled in, my favorite part of the day was watching the kids wade out, and listening to them. To the last child, boy or girl, every one of them began to giggle. Some made it only as far as knee deep before the giggles began. Some got all the way to their waists (which was as deep as they were allowed to go). But every single child giggled! We're all familiar with the much-used phrase, "innocence of childhood," but it was truly appropriate at that moment. Their joy was contagious! Many of them also gasped, sure that they were getting soaking wet. With the magic of the waders they could feel the cold of the water, could feel the pressure of the water squeezing the rubber and neoprene against their legs, but when they emerged and pulled off the waders, they were dry! When they pulled the net up onto the beach, everyone in the group would gather around, picking through algae, aquatic weeds and rotting detritus to look for grass shrimp, blue crabs, eels, amphipods and a variety of small fish. Although some were initially a bit squeamish, nearly every one of the 53 children was willing to gently hold the animals, and transport them to the large temporary containers in which we held them. There we used charts to identify them before releasing them back into the river... I find hope in this experience as I am certain that in that group of 53 young students, there are more than a couple of budding oceanographers, and even more for whom this experience spurred their interest in the natural world, their desire to learn more about aquatic resources and*

*to play a role in ensuring their future."* Although these young adults are just edging out of college with their careers not yet defined, I do know that many have chosen to study the environment. They are anxious to explore the world, to seek opportunities, and to make a difference. I believe that my hope in them was not misplaced.

I attended the recent Summit that's nearly the entire focus of this issue of the Bulletin. I chatted with many longtime colleagues and met new ones, attended some fantastic sessions and found that, despite many years in this field, there's still so much I am excited to learn! I enjoyed the receptions, the exhibitors in the large hall, the posters and the live band. I capped it all with a late night drinking session with some longtime colleagues—who shall remain nameless, but whom I'll just refer to as "CZM lifers." We spent the lattermost part of the evening telling sad tales of the litany of ills that we know all too well beleaguer the ocean and the coasts. And yet, here we all are, still at it, still unwilling to give up, still convinced that we can and will make a difference.

And so we will—those who are long at it, together with those who are just now joining the field. Although this is my last Bulletin issue as editor, I will continue to actively participate on TCS' Communications Committee. The "Comm Comm" group is bursting with ideas on how to ensure that TCS members stay connected and informed, with the energy and participation to make it happen. I'll continue my other longtime activities, including practicing good stewardship of our land; chemical-free, large-scale gardening; and local activism where I live that seeks a middle ground that protects agriculture and our food supply, but also ensures that farming transpires in a way that reduces environmental impacts to the Chesapeake Bay watershed. With the approach of the new year, I am looking forward to new opportunities and new adventures—and I know that no matter the paths I choose, they will always lead me back to the ocean and coasts.

Best wishes for a joyous holiday season and may the new year bring us all good cheer and small successes for the aquatic world—they do add up!

Ellen Gordon

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© Ellen Gordon

View of the National Harbor outside the Gaylord National Resort and Convention Center.

*"It will not be our technology that will save us, but our own and nature's resilience that will prevail."*

*- Susanne Moser*

ance, radical solutions, an effort to transform institutions, mass mobilization and non-institutional actions that support the revolution. Dr. Moser observed that we are seeing the public grievance associated with climate change now. Some areas are experiencing nuisance flooding and others have had extreme weather events. Even the scientists who predicted the impacts of climate change are surprised at the human experience of it. Dr. Moser explained that in some places people are closing their eyes to the reality of climate change, but in other places the facts are changing the way people view the problem and people are looking for solutions. She warned us that if we don't capture people now and provide constructive paths forward, "despair will have them for lunch."

Here is where the radical solutions will come in, according to Moser. She believes that people are ready to hear some new ideas. Many traditional solutions will no longer work and innovation is needed. The costs of delaying action are high and everyone is looking for the federal government to bail them out, but there is not enough money to go around. Ultimately, Moser explained, local governments will be the ones that adapt. What is needed

to move forward is leadership--and not just from the usual places. People will need to lead from wherever they are. Leaders will need to frame the solutions, she told the audience; this cannot be an "us versus them" problem. Building climate change resilience will require formation of coalitions, including unusual coalitions with people talented in different ways. Moser cautioned that we should be ready for people to be upset about the reality of climate change. People will be deeply threatened and experience fear, anger and grief. The resilience revolution will not be nicely scripted, but we will have to build community that will persist through our problems. Moser said, "It will not be our technology that will save us, but our own and nature's resilience that will prevail."

Michelle Covi is an Assistant Professor of Practice in Old Dominion University's Department of Ocean, Earth and Atmospheric Sciences. She is also part of the Virginia Sea Grant Extension staff, serving as the Climate Adaptation and Resilience lead. When not splashing through puddles in Norfolk, she enjoys hiking, kayaking and knitting--although not all at the same time.



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citizens and all levels of government are recognizing as critical for sustainable coastal communities, both nationally and internationally. Also, TCS supports a strong student component, with representatives from multiple university chapters around the U.S. These students are career-minded, and the conference served as a good recruiting venue for private companies.

Of course, those of us in the private sector also ultimately have roots in an academic background, at least as former students, and many of us have also served in governmental and/or nonprofit positions prior to our current employment. Networking with new and former colleagues outside the private sector was invigorating, and reminds us of the reasons that we entered into the business we are in. One of the best examples of the Summit's achievements was presented in a session where the moderator took a head count and found nearly equal representation from members of all fields. It is not just that representatives from private businesses were present, but that they were completely intermingled with their counterparts in other sectors. So reporting from the private sector, the combination of the TCS and RAE missions successfully created a certain--dare I say it--synergy; a result that was greater in scope and opportunity than the previous conferences offered by the two organizing groups alone.

Steven MacLeod is an Environmental Scientist at Ecology and Environment, Inc. in Buffalo, New York. He is a TCS member and served on the planning committee for the November 2014 Joint Summit.

## Economic and Ecological Values of Our Coasts and Estuaries

by Thomas E. Bigford

One paper at the RAE-TCS Summit struck me as particularly noteworthy for the opportunities and partnerships it presented.

While coastal professional wear their commitments with unbridled passion, not everyone shares our convictions. I have always struggled to describe the value of wetlands or coastal shallows in terms appreciated by decision makers, politicians, or even my family. Those connec-

tions, and our success across the coastal professions, may be eased based on what I heard during a session on the role of habitat in fisheries management. Galen Tromble's comments offer great promise as his position as Chief of Domestic Fisheries for the National Oceanic and Atmospheric Administration's National Marine Fisheries Service places him in the midst of coastal and marine resource management discussions.

Mr. Tromble's talk focused on those fish stocks that fail to respond to traditional management strategies such as area closures, harvest limits, and closed seasons. After a slow shift, it seems the fisheries management profession is becoming more comfortable with the notion that some stocks of commercial, recreational, or ecological value may be controlled at least partly by factors beyond fishing mortality, specifically environmental threats such as those we face each week.

This is a huge opportunity for coastal professionals. By recognizing the value of coastal and estuarine habitats to the health of shellfish and finfish (shrimp, striped bass, salmon, flounder, oysters, and many more), we will add value to our own profession and to near shore environments generally. That concept is not new but the public acknowledgment could be a watershed moment. The value of ecosystem services and economic rent could be applied to decisions related to fields far removed from fisheries management. Imagine if we determined that short- or long-term environmental conditions, represented by degraded fish habitats, could be connected with a declining harvest in a valuable fishery, malnourished marine mammals, fewer seabirds, declining sales by shore-side seafood industries, and swooning real estate appraisals. Our coasts could be a common denominator.

Those cascading connections could reflect reality for at least several dozen important fisheries. Although the majority of fish stocks are indeed affected most by direct harvest, the ecological connection angle will enable coastal professionals to describe economic impacts and ecosystem services that can strengthen our positions on many coastal issues. With improved knowledge about the implications of habitat degradation we might argue for a different construction schedule, new materials, or some other change that will benefit fish and our coasts.

This opportunity depends on receptive audiences. Traditional fishery managers need to add new variables to their models, especially as they seek to determine the driving factors in fish population health. Increased certainty from

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those models will help to offset uncertainty from climate change that diminishes the value of historical data and observations. Decision makers such as wetland permit agencies will need to give appropriate weight to this new information, and the value of sectors affected by their decisions.

The RAE-TCS Summit provided dozens of examples of how oysters and other shellfish contribute to overall environmental quality. It would be great to confirm those ecological and economic values in terms of dollars and employment, as we might do for select fisheries. Hopefully the new approaches described by Mr. Tromble can be mirrored by similar advances in other fields and by reduced uncertainty across all coastal professions. It would be nice to look back on the RAE-TCS Summit and recognize the discussions as a "Eureka moment" in assigning coastal values.

Tom is Policy Director at the American Fisheries Society, and was just elected President of TCS. He looks forward to working with other members on future TCS ventures such as with RAE at the Summit.

## National Disaster Preparedness Training Center (NDPTC) Participates at the "Inspiring Action, Creating Resilience" Conference

by Dennis Hwang

At the "Inspiring Action, Creating Resilience" conference held by Restore America's Estuaries and The Coastal Society, the NDPTC was pleased to provide free training to the conference attendees. On November 2, the day before the conference, and November 6, the day after, instructors Allison Hardin, a Planner for the City of Myrtle Beach in South Carolina, and Dennis Hwang, a Coastal Hazard Mitigation Specialist and author with the University of Hawaii Sea Grant taught the four-hour Coastal Community Resilience Course. The Course provides a powerful framework for building community resilience based on empowering individuals and organizations, planning through the entire resilience cycle, and addressing all social, economic and environmental sectors. In addition, attendees learned about the difference between hazard and vulnerability and risk assessments and how one relies on the other to assist with resilience planning.

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Attendees of the November 6, 2014 Coastal Community Resilience class pose for a group picture on a break from class exercises.



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An enthusiastic class of over 30 people for each day participated in class lectures, group exercises and team reporting. In addition to learning how resilience, adaptation and sustainability overlap, the classes provide a great way for attendees to network with each other before the conference begins. For those who attended the post conference session, they were able to apply what they learned at the conference to the course's resiliency framework.

All courses held by the National Disaster Preparedness Training Center are FEMA sponsored and certified. Particularly popular courses are the mentioned Coastal Community Resilience Course; Flood Risk Reduction for those dealing extensively with flood issues and the National Flood Insurance Program; Hurriplan for hurricane design put together for engineers, planners and architects; and Social Media for those interested in the increased use of such tools in Resiliency Planning. The complete course catalogue can be found at: (<https://ndptc.hawaii.edu/training/catalog>). All courses are free and require the organization making the request to fill out an official form at: ([https://ndptc.hawaii.edu/training/training\\_request](https://ndptc.hawaii.edu/training/training_request)), as well as provide a suitable venue with at least 25 attendees.

Dennis Hwang is a faculty member with the University of Hawaii Sea Grant College Program and an instructor with the National Disaster Preparedness Training Center. He is author of the Hawaii Coastal Hazard Mitigation Guidebook, which is used in the land use process in Hawaii and has been modified for Louisiana and Indonesia. He also wrote the Homeowners Handbook to Prepare for Natural Hazards which is in Hawaii and has been adapted for MS, AL, LA, TX, FL, DE and MA.



Conference and course attendees for the November 2 class go over best practices for building community resilience in a group session.

## Inspiring Action and Collaboration in Restoring our Coasts and Estuaries

by Kathy Minsch

I think the Summit succeeded on many levels. I arrived with cautious hope and left feeling reinvigorated. Having been immersed in Puget Sound restoration since moving out here in 1991 from EPA headquarters in DC, and this being the first national coastal conference for me in recent years, it was refreshing to see so many from all our coastal and estuarine areas working on the cutting edge, on many of the same issues. My only complaint; having to choose amongst the cornucopia of presentations in 12 concurrent sessions! I focused mostly on the living shorelines, green infrastructure and coastal fish enhancement tracks, and a few of the geographic sessions; the Potomac and Bronx rivers and the Seattle seawall habitat enhancements. The presentations I heard were full of many interesting stories of successes and challenges. In particular what resonated for me were the common themes of persistence, scientific excellence, generation of practical tools, the importance of community connections, and collaborative partnerships; all to overcome the too common challenges of political obstacles, funding constraints, and the temptation to feel overwhelmed by the enormity of the damages to our fragile coastal and estuarine habitats and wildlife.

I was struck by the gems of wisdom scattered throughout, from practitioners, scientists, community liaisons, policy experts and executive level leaders, based on concrete actions taken, not just theory. A few that caught my attention were: meet people where they are; provide public access as part of restoration so people can see the water/land interface; show people how their money is being spent (dedicated fees from license plates for example); that damaged inner city rivers like the Anacostia and the Bronx are just as important and possible to restore--a valuable message for those that don't work in those environments (the Duwamish in Seattle is another example but not represented at the conference). From Maryland Department of Natural Resources' Kristin Saunders, we hear of the three "C's" of successful collaborative partnerships; the importance of creativity, giving up control, and clear, frequent communication. I was also able to catch a few talks on the Chesapeake Bay, Great Lakes and Sarasota Bay which described successes in overcoming

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various challenges in those well-established programs.

I loved Monday's innovative keynote presentation by Dr. Susanne Moser. Who knew that a theoretically academic talk on the importance of the social interface in restoration, based on cartoons as it turns out, could be so penetrating?! This was one of the most interesting keynotes I've ever heard at a conference, including her responses in the long "q and a." Aside from the humor, I liked her pragmatic, insightful approach to leadership in tackling barriers-- which could be applicable anywhere, not just the environment. Paraphrasing her steps on "leadership from where you are;" name the problem and who, frame a solution based on "change is good together," and form unusual coalitions based on funding, knowledge, political savvy, skills and nature.

While I appreciated that there were a few sessions and talks highlighting critical issues and restoration work in Puget Sound--derelict fishing gear, soft shoreline solutions, the Northwest Straits, ocean acidification impacts on the shellfish industry--as well as from Oregon and California, there is also an immense amount of work on salmon habitat and floodplains restoration that would be helpful for others around the country to hear about at the next conference.

Finally, I thought the combined meetings of RAE and The Coastal Society was key to the success of this conference, and reflects the value in collaborative partnerships (along, of course with the long list of sponsors) as we all work to keep forging ahead in bringing back to life our invaluable coasts and estuaries for people and wildlife.

Kathy is currently the City of Seattle's liaison for regional salmon recovery and natural resource issues. She has worked on Puget Sound restoration at the local, state and federal levels. She has a B.S. in coastal oceanography from Southampton College and a Master's of Public Administration from the University of Washington.

Tracie Kiernan recently completed the Environmental Science and Policy graduate program at Johns Hopkins University in Washington, DC. She is a new member of The Coastal Society's Education Committee and is looking forward becoming more involved with TCS. →

## Weaving your Coastal Network

by Tracie Kiernan

Far from a typical networking lecture, the "Weaving Your Coastal Network" workshop engaged a diverse group of environmental professionals at this year's TCS-RAE Summit. From those hoping to transition into the environmental field to those with established careers, participants walked away with new understanding on how to cultivate and maintain a successful professional network.

In keeping with their tradition of offering leadership development and mentoring programs, The Coastal Society (TCS) brought in Errol Mazursky, the Executive Director of the Environmental Leadership Program (ELP), to present at this year's Summit. The workshop began with an exercise to strengthen the group's individual ability to share their passions and accomplishments with each other while also practicing focused listening. These exercises offered a unique opportunity to "network" and connect one-on-one without interruption or distraction.

Later in the program, under Errol's direction, the group mapped out their professional networks and used their newly gained knowledge to identify opportunities to employ and expand upon already existing contacts. The participants learned about the various roles individuals play within networks and how these varying types of networks interact.

Errol introduced the concept of "closing the triangle," and the group was given time to reflect on ways they can use this skill within their own networks. He guided the participants in identifying opportunities to use this technique, as well as how to think about their networks in a new light. While in the conference room, the group worked together to find ways to bridge the gap between existing contacts and new professional contacts who may be able to assist them with the next step in their careers.

The highly interactive workshop allowed the group to get to know each other and immediately test out their new networking skills, which I'm sure was put to use by those who attended the Summit! Given the great success of this program, The Coastal Society hopes to offer similar programs at future events!





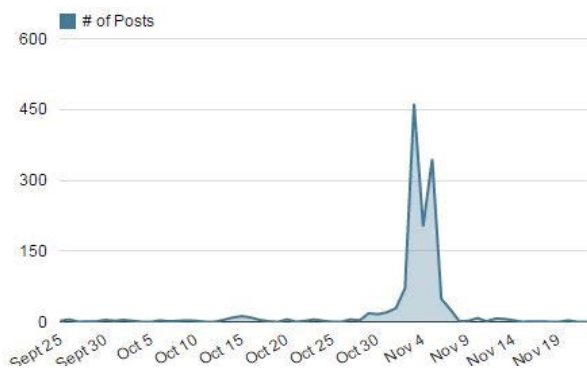
## Getting Social at Summit 2014

by Caitlyn McCrary

Amidst the many amazing sessions, stimulating plenaries, and interesting participants, RAE and TCS worked hard to incorporate social media into the Summit. Long before everyone gathered outside of Washington, D.C., people were using the hashtag #RAETCS14 to start the conversation on Twitter, Facebook, Instagram, and LinkedIn.

Once the Summit began, activity on the hashtag took off! Between October 20 through November 18 there were 1,290 posts from 320 users which gave the Summit a total reach of 423,480 users (this number symbolizes the number of individual social media users that could have seen the posts) and a potential of over 3,400,000 impressions (the number of times users saw posts using the hashtag).

### Timeline



Summit attendees utilized Twitter, Facebook and Instagram to share their thoughts, photos, and general musings about the conference. At the Summit, large TV screens showed the TagBoard feed, a social media hashtag tracking site that displays all posts using the Summit hashtag from any social media site. Attendees waited patiently to see their posts show up on the screen and enjoyed watching to see what others posted.

The Coastal Society's social media accounts grew due to increased engagement at the Summit. Before the Summit, TCS' Twitter account had 650 followers and gained 60 followers during the week while potentially reaching 14,874 individual users.

The most popular tweet from the TCS account was:

**The Coastal Society @CoastalSociety**  
 "Blue Room promotes Blueprint! Watch @NOAAHabitat's Video Skit and learn more at the brown bag lunch <http://youtu.be/wSG6c486EKI> #RAETCS14"

On Facebook, the TCS page gained 6 likes over the course of the week with a potential reach of 435 users. The best post from the Summit was:

The Coastal Society, October 31 at 7:30am  
 "Have you registered for a workshop? There are some great ones in store at #RAETCS14 like our networking for professionals workshop!"  
 All of the posts from all attendees at the Summit can be seen in our [Storify](#). Here's a sample!

**Ocean Frontiers Film** @Ocean\_Frontiers  
 Learn to use @Ocean\_Frontiers to inspire ppl about #oceanplanning at #RAETCS14 11/4 at 4p. C U there! @CoastalSociety raetcs14.sched.org/event/96517f12...  
 5:08 PM - 30 Oct 2014  
 RAETCS14: Ocean Frontiers II: A New England Story...  
 View more about this event at RAETCS14  
 Sched.org @sched  
 2 RETWEETS 4 FAVORITES

**Jane Harrison** @GreatLakes.Jane  
 Climate change, overdevelopment, contaminants+ Keynote address on resilient communities by social scientist Dr. Susanne Moser #RAETCS14  
 8:53 AM - 3 Nov 2014  
 2 RETWEETS 4 FAVORITES

**Hank Hodde** @hankhodde  
 Just learned that a church in Norfolk, VA has a tide chart on their website due to local flooding impacts. #SLR #climateimpacts #RAETCS14  
 2:21 PM - 3 Nov 2014  
 5 RETWEETS 3 FAVORITES

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**Ann DeSanctis**  
@annabelli137

The rain held off for our amazing wetland workday vol event for #RAETCS14 with @chesapeakebay and @RAEstuaries! #aws

4:31 PM - 1 Nov 2014

4 FAVORITES

## Successful Networking at the Summit

by Kaitlyn E. Cox

Thanks to Roger Williams University School of Law Marine Affairs Institute, a partnership of the law school, Rhode Island Sea Grant, and the University of Rhode Island, I was given the opportunity to attend the RAE/TCS joint conference held at National Harbor. As a student, any opportunity to attend a conference is great and this one did not disappoint! This year's RAE/TCS joint Summit drew a very large attendance and featured numerous concurrent sessions and workshop offerings. These provided an excellent opportunity to interact with marine community professionals from a variety of backgrounds.

On my first day at the conference, I attended the "Weaving Your Coastal Network" workshop. As someone about to begin my career, the workshop provided me with guidance for establishing and fostering connections with other professionals. The workshop proved to be a beneficial way to start the conference, since as a student, it is sometimes intimidating to approach people one has only encountered by reading their work or admiring their research from afar. As the conference continued, my new workshop network allowed me to engage with my new colleagues from the workshop before and after sessions and at the Expo Hall over coffee. Attending the conference also gave me the chance to meet alumni from my graduate program and discuss their careers and get their advice.

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**Caitlyn McCrary**  
@CaitlynMcCrary

Giving a face to #coastal and #estuary science and management. What an interesting interview! #RAETCS14

3:17 PM - 4 Nov 2014

1 RETWEET 1 FAVORITE

Caitlyn McCrary is an outreach specialist with The Baldwin Group at NOAA's Office for Coastal Management. She is currently the Communications Committee chair and was the chair of the marketing committee for the Summit.





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As a recent graduate of Roger Williams University School of Law and a current Master's student in the University of Rhode Island Master of Marine Affairs Program, the conference gave me a chance to relate classroom learnings back to coastal community issues in the real world. From academic to industry representatives, the conference brought together a broad spectrum of professionals working on diverse issues related to the ocean and coasts. Hearing about the work and experience of such a wide array of professionals inspired me and allowed me to return home to my research with renewed energy.

I encourage any student to seize the opportunity to attend a RAE and/or TCS event. They are an excellent way not only to introduce yourself to new people in our field, but also to excite and motivate you!

Kaitlyn graduated from Roger Williams University School of Law in May and is currently completing her Master's at the University of Rhode Island in the JD/MMA joint-degree program between the two universities. Kaitlyn also has been a law fellow with Rhode Island Sea Grant.

## TCS Education Committee's Mentoring Panel at the TCS/RAE Summit

by Erika Washburn

The Coastal Society's Education Committee facilitated a special mentoring panel at the Summit for students and young and mid-career professionals. Featured were three speakers whose experience ranged across fields and disciplines and who have successfully navigated very different career paths in the coastal field. In "Work on the Edge," Dr. Susanne Moser shared her experience in forming and developing a successful research and consulting practice focusing on climate adaptation, resilience, decision support and communication in support of social change. Ms. Jill Farrell shared her experiences developing a Community Impact Program for the Piscataqua Region Estuaries Partnership, featuring a story of joining forces for clean water with local breweries. Finally, Mr. Murray Fisher described the development of the highly successful New York Harbor School and New York Harbor Foundation, telling the story of the ongoing and very exciting Billion Oyster Project.

All three panelists shared reflections of how their passion and ideas took them on unexpected career paths, complete with stories of interesting twists and turns. The value of internships, fellowships and unanticipated opportunities was commonly expressed. The role of mentors and advisors and importance of finding such people was discussed. Dr. Moser answered questions about the financial realities of independent consulting and described the incredible juggling act that consultants must maintain to both acquire new work and successfully complete ongoing contracts. Mr. Fisher described his experience in the world of fundraising, and the challenges of building a special place-based program for inner city youth. Ms. Farrell described the creativity and open-mindedness required in approaching the private sector and the positive reception and synergy revealed in doing so by a true cross section of the community.

Finally, the panelists reflected on the seemingly serendipitous events that present themselves and how recognizing these helped to solve challenges and deliver success. Mr. Fisher's story of former President Clinton's visit to the Harbor School stood out: in need of access to the dock for Mr. Clinton, his security personnel cut open a fence which had literally served as a physical barrier for the Harbor School students, thereby permanently solving the students' dock access issue! Serendipity aside, the panelists shared that though frequently in the midst of unclear paths, reflecting on the choices made and success developed all made sense afterwards. In the end, each panelist's passion and motivation continues to sustain them in crafting successful career paths.

Summit participants who attended the mentoring panel continued to share positive reflections with the Education Committee organizers throughout the rest of the Summit. The range of stories shared, the diversity of backgrounds and training and the very different career paths were inspiring to hear. Given this reaction, the Education Committee highly recommends making this type of mentoring panel a permanent feature of The Coastal Society's gatherings!

Dr. Erika Washburn is the Manager of the Lake Superior National Estuarine Research Reserve in Superior, Wisconsin. An anthropologist at the headwaters of the Great Lakes, she invites all TCS members to visit the shores of Lake Superior and the Twin Ports community. And for those who dare to visit in the winter, she will happily buy you a beer at The Anchor Bar!



© Kristen Fletcher

Scenes from the TCS-RAE Summit November 1 - 6, 2014



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## TCS Awards



**Partnership Award:**

**Restore America's Estuaries**

*For their willingness to pursue creative solutions to support coastal management and The Coastal Society's mission.*



**Distinguished Service Award:**

**Lisa Schiavinato, President**

*For unwavering commitment and dedication to The Coastal Society, and her service as President 2011, 2012, and 2014.*



**Distinguished Service Award:**

**Jeff Smith, Past Treasurer**

*For his commitment to The Coastal Society's mission and vision over two terms as Treasurer. (not pictured)*



**President's Award:**

**Chris Ellis, Board of Directors**

**Brian Smith, Board of Directors**

*For exceptional service to The Coastal Society and commitment to coastal leadership development and to professional development of coastal management professionals at all career levels.*



**Robert W. Knecht Award for Professional Promise:**

**Caitlyn McCrary,  
Communications Committee Chair**

*A rising professional in the field of coastal and ocean management who best emulates vigor, dedication, vision, and generosity of Robert W. Knecht.*



Left to Right:  
 Jeff Smith, Julia Wyman,  
 Caitlyn McCrary,  
 Lisa Schiavinato, Kristin Fletcher,  
 Chris Ellis, and Jeff Benoit.

## Student Awards



### Thomas Bigford Award

Best Student Presentation:

Katherine Johnson,  
 University of Maryland

Best Student Poster:

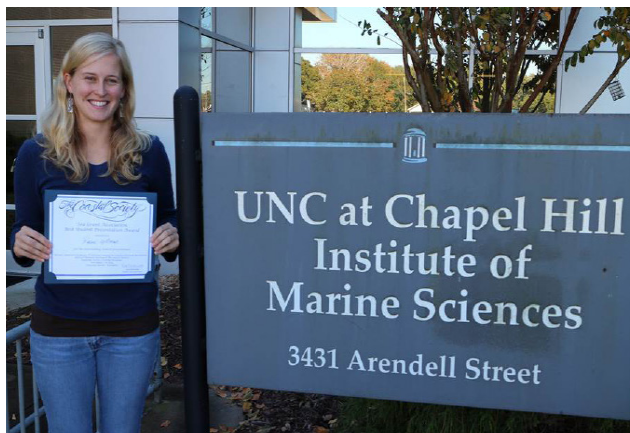
Andrew Dolan,  
 Sacred Heart University  
 (not pictured)



### Sea Grant Association Award

Best Student Poster:

Chandra Richards,  
 University of California-  
 Berkeley



### Sea Grant Association Award

Best Student Presentation:

Rachel Gittman,  
 University of North Carolina  
 at Chapel Hill



## The 2014 Summit: Coming Home

by Kristen M. Fletcher

Working on and attending the 2014 Coastal Restoration Summit hosted by The Coastal Society and Restore America's Estuaries was a bit like coming home.

After 16 years of going into an office every day to work in the ocean and coastal law and policy field, in January of 2013, I found myself living on the West Coast, having moved with my family, and using the “c” word--I became a consultant. And, after almost two decades of lawyer jokes (yes, I'm one of those, too), I discovered an entirely new set of consultant jokes.

I recognize that during those 16 years I was lucky. Yes, I've worked hard and networked and put in the extra hours, days and weeks. But I was lucky to hold jobs that allowed me to learn, experience and grow and to build a network of professionals, some of whom I turned to during the transition for advice, recommendations, and sometimes just a kind ear to listen. Many of those I knew through TCS --an organization that I joined as a young professional just one year into my career.

In the fall of 2013, still in the midst of some heavy doubts, I eagerly agreed to serve as a lead for TCS on the Summit. I didn't realize it at the time but I was grasping the opportunity to ground my new professional experiences within an organization whose members knew me as an attorney, researcher and writer, director, and past-president. It's clear to me now that I was ready to grow wings and fly a different path in my career; it's also true that professional roots--like those that TCS offers--are equally as important. During a critical time, TCS rooted me to a network of colleagues that believe in advancing ocean and coastal management and protecting and conserving coastal and marine resources. It is also a network of professionals that care just as much about the people doing the work as the work itself.

That was obvious at the Summit. From November 1 through November 6, I rounded corners and broke into smiles as I found myself face to face with colleagues from wetland scientists to fisheries extension agents, from legislative staffers to environmental engineers, all eager to hear about my new professional experiences. It was a chance to renew relationships, to visit with former students who are now my peers, and to compare experiences

with peers who are also going through “a professional transition.” The Summit was an opportunity to learn about the most recent research, the organizations and companies that are conducting groundbreaking work, and to hear the debates about the best strategies to manage coasts and estuaries. It was also a chance for TCS to partner with Restore America's Estuaries on a joint conference and to combine restoration and coastal management in a meaningful and integrative way over six days of workshops, plenaries, concurrent sessions and networking events. The TCS biennial conference is the wings of TCS while the organization and its members are the roots. If you were unable to attend the Summit, I encourage you to visit the website and view the exciting program - there's a lot to discover. If you are not yet a TCS member or have not renewed your TCS membership, I encourage you to consider joining or renewing as there's a wealth of information, unique perspectives and colleagues that are always welcoming. It is, for me, a bit like coming home.

Kristen Fletcher is Principal of Fletcher Coastal Consulting and Kristen M. Fletcher Photography in Pacific Grove, California where she works with the public and private sectors to advance ocean and coastal law and policy and with Monterey County nonprofit organizations as a photographer. During her career, she has proudly served TCS as a Past-President, Board Member, Conference Chair, Program Chair and 2014 Summit Co-Lead.

## What Does TCS Mean to You?

by Mary E. Allen

For me, The Coastal Society means “family.” Over the past three years, I have had the opportunity to engage with many graduate students and coastal professionals. Many of the friendships and professional connections I have formed can be attributed to TCS. As Vice President of the TCS-ECU Student Chapter, I have been able to develop and enhance my leadership and communication skills. Our chapter has become a strong community of diverse graduate students and faculty members, and we hope to strengthen our connections with other TCS student chapters.

I have also had the chance to work with TCS on the national level by managing the TCS website and serving on the communications committee. Throughout my experience, I have met and interacted with many coastal professionals. As a student, this type of opportunity is

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hard to come by. Volunteering for TCS also led me to work with the Summit marketing committee in developing the Blue Room and social media. In this experience, I was very privileged to work with members of TCS, Restore America's Estuaries, and the Chesapeake Bay Foundation.

My experience surrounding the Summit is when I realized the true value of TCS. Volunteering on these committees has allowed for me to connect with professionals on a personal level, and to strengthen the connections I already have. While attending the Summit, I reconnected with past colleagues whom I had not seen since I was an undergraduate at Texas A&M. This is when I realized that the Summit had brought past, present, and future members of my "coastal family" together. As coastal professionals, we are all connected, one way or another. The Coastal Society is how we form and strengthen our relationships, learn from other members, and grow as a coastal family.

Mary E. Allen is a Coastal Resources Management PhD student at East Carolina University, and currently serves as Vice President of the ECU Student Chapter. She is also a member of the TCS Communications Committee.

## My Summit Experience

by Michael Flynn

I probably should not have gone to the RAETCS 2014 Summit if I did not want to attend a monumental event, but I did! I could not have been happier with my decision to not only attend, but also participate as a summit planning committee member. For many of the attendees, the Summit began on November 1st and concluded on the 6th, but for a few it began more than a year ago, as I looked through my folder and saw notes for the "Summit Planning Team call" on October 29th and the "Summit kick-off fund raising call" on November 20th, 2013. This has been my second time volunteering for the conference planning committee, and it has enhanced my experience at the actual event immensely both times. The first time led to my eventual enrollment at East Carolina University, after helping TCS 23 in 2012 with Dr. Hans Vogel song and Dr. Dave Loomis, faculty of the Coastal Resources Management PhD program.

The second time provided an opportunity to develop the summit scheduling application with Stephanie Hines, from Capital Meeting Planning Inc. This most recent endeavor

not only taught me how to efficiently collaborate with people who are hundreds and thousands of miles away, but also introduced me to web development. I really enjoyed taking on a new task and learning a new skill, but what I enjoyed most about working on the scheduling app was the grasp of the program it provided. Even though some of the chores were monotonous like bolding and italicizing font in the program--I continued through to completion because of motivating moments. Those moments came when I would learn of some really exciting research that was going to be presented; or I would recognize someone's name that I had previously worked with while I was at the Stockton College Coastal Research Center, or interacted with at past conferences and looked forward to continuing conversations.

The yearlong build-up of preparation led to fervent anticipation for RAETCS14. This feeling was not solely my own, but one that was shared with other committee members as well. I was eager to present, moderate, and attend numerous sessions. Four other students from ECU were also traveling to National Harbor to present their research, and we practiced our presentations in front of classmates on the Friday before the Summit. We received some great feedback, but the real input came from presenting at the actual event, where working professionals and practitioners were able to provide constructive criticism of the material based on years of experience and expert knowledge. In my opinion, this is one of the greatest benefits of attending the Summit (as a student and young professional anyway). For a few days, attendees have access to hundreds of people who are not only interested in similar topics, but might actually be the expert on that topic. This gives attendees the opportunity to have a discussion about an adversity they might be faced with that could result in a solution. The Summit also presented an opportunity to form new relationships and partnerships that are mutually beneficial. I have personally benefited recently by meeting students at other academic institutions who are working on similar issues. We have been exchanging relevant literature and techniques that have helped to improve our research.

Even though the Summit has been over for a month, the benefits of volunteering to plan and of attending will last a lifetime. I look forward to volunteering to help plan the next conference and would encourage you to get involved in a way that would serve you and TCS best.

Michael Flynn is a Coastal Resources Management PhD student at East Carolina University, and currently serves as the President of the ECU Student Chapter. Seas the day!



## Warming Gulf of Maine Waters Bring Changes to Fisheries

In the vast gulf that arcs from Massachusetts's shores to Canada's Bay of Fundy, cod was once king. Today, the population has collapsed. Last month, regulators effectively banned fishing for six months while they pondered what to do, and next year, fishermen will be allowed to catch just a quarter of what they could before the ban. But a fix may not be easy. The Gulf of Maine's waters are warming – faster than almost any ocean waters on earth, scientists say – and fish are voting with their fins for cooler places to live. That is upending an ecosystem and the fishing industry that depends on it.

Regulators this month canceled the Maine shrimp catch for the second straight year, in no small part because shrimp are fleeing for colder climes. Maine lobsters are booming, but even so, the most productive lobster fishery has shifted as much as 50 miles up the coast in the last 40 years. Black sea bass, southerly fish seldom seen here before, have become so common that this year, Maine officials moved to regulate their catch. Blue crab, a signature species in Maryland's Chesapeake Bay, are turning up off Portland.

In decades past, the Gulf had warmed on average by about one degree every 21 years. In the last decade, the average has been one degree every two years. "What we're experiencing is a warming that very few ocean ecosystems have ever experienced," said Andrew J. Pershing, the chief scientific officer for the Gulf of Maine Research Institute here. There is a human toll as well. Cod-fishing restrictions have ravaged, at least temporarily, the community of day boats – the ones owned by small-business fishermen, with smaller boats and incomes than corporate trawler fleets – that defined New England for centuries. Scientists are not yet predicting that Maine lobsters will go the way of the cod. But they say the very idea should prompt the fishermen and regulators alike to plan for change before it arrives.

Excerpted from: <http://www.nytimes.com/2014/12/15/us/waters-warm-in-gulf-of-maine-and-cod-catch-ebbs.html>

## Mangroves & Carbon Storage

Better protecting the world's fast-disappearing mangroves could have big economic, social and environmental benefits, experts said at the U.N. climate talks in Lima this week. Besides protecting shorelines from extreme weather and providing fish a safe place to breed, man-

groves could play a big role in trapping climate-changing carbon emissions, something that has so far been largely overlooked, they said. The world needs to ensure that, at both national and international levels, "mangroves have a place in REDD+ (Reducing Emissions from Deforestation and Forest Degradation) strategies and other low carbon development strategies such as National Appropriate Mitigation Actions (NAMAs)," said Achim Steiner, the U.N. Environment Program's executive director. Right now, an absence of a carbon finance mechanisms for mangroves and a lack of policy to support mangrove ecosystems - as well as widespread losses of mangroves themselves - mean hundreds of billions of dollars' worth of potential benefits are being lost, the experts said.

As mangroves are cleared at a rate three to five times faster than other forests, according to UNEP estimates, those losses are particularly felt in developing countries where most mangroves are located, including Bangladesh, India, Pakistan, Sri Lanka, Kenya, Senegal, West Bengal, Vietnam and Sumatra. A joint report by UNEP and the Center for International Forestry Research (CIFOR), launched in Lima, estimates the economic cost of the destruction of carbon-rich mangroves worldwide at \$42 billion annually. The UNEP report argues that while policymakers and financial markets are beginning to take action, more needs to be done to hammer out methodologies for carbon accounting for mangroves and other coastal wetland ecosystems. That would help conserve mangroves and increase their profile in the U.N.-led REDD+ program and within the United Nations Framework Convention on Climate Change (UNFCCC), the report said. Excerpted from: <http://planetark.org/wen/72604>

## Climate Deal Commits Every Nation to Limiting Emissions

International negotiators reached a climate change agreement that would, for the first time in history, commit every nation to reducing its rate of greenhouse gas emissions. But the deal still falls far short of its stated goal of averting the dangerous and costly early impact of global warming. The agreement reached by delegates from 196 countries establishes a framework for a climate change accord to be signed by world leaders in Paris next year. It requires every nation to put forward, during the next six months, a detailed domestic policy plan to limit its emissions of planet-warming greenhouse gases from burning coal, gas, and oil. Those plans would form the basis of the accord to be signed next December and enacted by 2020. That basic structure represents a breakthrough in the im-



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passee that has plagued the United Nations' 20 years of efforts to create a serious global warming deal. On its own, the political breakthrough will not achieve the stated goal of the deal: to slow the rate of global emissions enough to prevent the atmosphere from warming more than 3.6 degrees Fahrenheit over the preindustrial average. Scientists estimate that the aggregate impact of the commitments would reduce emissions at half the level necessary to prevent that 3.6-degree increase. To prevent the temperature increase, emissions would have to be reduced by double the amount called for in the accord.

Delegates here widely acknowledged that the catalyst for the deal was a joint announcement last month in Beijing by President Obama and President Xi Jinping of China that the world's two largest greenhouse gas polluters would limit their emissions. That move appeared to break the 20-year impasse in climate talks — particularly a longstanding insistence by developing nations that they not be required to make emissions cuts while they still had populations in poverty. The environment minister of India, the world's third-largest carbon polluter, praised the deal.

While all countries will be required under the Lima Accord to submit plans to reduce emissions, the nature of the plans can be different according to the size of their economies. Under the accord's terms, by November 2015, once all countries have put forward their plans for limiting emissions, scientists and statisticians will add up the numbers to determine exactly how far they are from preventing the 3.6-degree temperature increase. That figure will form the start of another round of negotiations. Excerpted from: <http://www.bostonglobe.com/news/world/2014/12/14/deal-salvaged-climate-talks-peru/Wg0eRObZW7g36bBv8sS1ul/story.html>

### Trash Talk: 269,000 Tons of Plastic Litter Choke World's Oceans

There are plastic shopping bags, bottles, toys, action figures, bottle caps, pacifiers, tooth brushes, boots, buckets, deodorant roller balls, umbrella handles, fishing gear, toilet seats and so much more. Plastic pollution is

buckets, deodorant roller balls, umbrella handles, fishing gear, toilet seats and so much more. Plastic pollution is pervasive in Earth's oceans. Researchers recently unveiled what they called the most scientifically rigorous estimate to date of the amount of plastic litter in the oceans — about 269,000 tons — based on data from 24 ship expeditions around the globe over six years. "There's much more plastic pollution out there than recent estimates suggest," said Marcus Eriksen, research director for the Los Angeles-based 5 Gyres Institute, which studies this kind of pollution.

Ninety-two percent of the plastic comes in the form of "microplastic;" particles from larger items made brittle by sunlight and pounded to pieces by waves, bitten by sharks and other fish or otherwise torn apart, Eriksen said. The researchers said plastic litter enters the oceans from rivers and heavily populated coastal regions as well as from vessels navigating shipping lanes. Larger plastic objects, abundant near coastlines, often float into the world's five subtropical gyres — big regions of spinning currents in the North and South Pacific, North and South Atlantic and Indian Ocean. In the middle of these gyres, plastic trash



A beach in the Azores (Credit: Marcus Eriksen)

has accumulated into huge "garbage patches" that act as "giant blenders — shredders that eviscerate plastic from large pieces to microplastics," Eriksen said. The study, based on data from expeditions to all five subtropical gyres, coastal Australia, the Bay of Bengal and the Mediterranean Sea, estimated that there are 5.25 trillion particles of plastic litter. Tiny plastic particles, down to the size of a sand grain, have fanned out through the oceans and reach even remote polar regions. The researchers said the particles readily absorb chemical pollutants like PCBs, DDT and others, and these toxins enter marine food webs when ingested by fish and other sea creatures. Excerpted from: <http://planetark.org/wen/72598>

### Saving the Louisiana Coast?

Southeastern Louisiana might best be described as a layer cake made of Jell-O, floating in a swirling Jacuzzi of steadily warming, rising water. Scientists and engineers



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must prevent the Jell-O from melting, while having no access to the Jacuzzi controls. This part of Louisiana is sinking at one of the fastest rates on the planet as the Gulf is rising. Already, 2000 square miles have sloughed into the Gulf. At current rates, New Orleans could be left on a razor-thin sliver of land extending into the open Gulf, battered by storms rolling over the watery graves of unprotected communities. The economic effects will reverberate across the nation as the seas swamp half of the nation's refineries and pipeline. The country's largest port, an economic door to 31 states, would be vulnerable to storms, causing shutdowns that might cost the nation an estimated \$300 million/day. Louisiana has responded with the Master Plan for the Coast, an unprecedented effort to build and preserve up to 800 square miles of wetlands and barrier island and to construct miles of levees over the next half century.

The plan? Use the mud and sand in the river to rebuild the delta. The restoration plan calls for spending \$4 billion on diversions to build and preserve 300 square miles of land and \$20 billion on slurry pipelines that will result in 200 square miles. If scientists manage to navigate all of the potential pitfalls, they'll still need to make sure the shipping channel to the nation's largest port remains open. That will limit how much water can be sent to resuscitate dying wetlands. Enough water must remain in the river to allow massive ships to pass. Excerpted from: <http://projects.propublica.org/larestoration/>

### Whale Alert App

Slow-moving whales are vulnerable to ship strikes, since feeding and migration areas overlap with shipping lanes. The public and mariners on the West Coast now can use an app to help decrease the risk of injury or death to whales from ship strikes and report whales in distress to authorities. Whale Alert helps reduce the chance of fatal ship strikes by large vessels by displaying active whale management areas, required reporting areas, recommended routes, areas-to-be-avoided and near real-time warnings in shipping lanes along both coasts of the United

States and Canada. This information allows vessel operators to avoid collision with whales by slowing down and heightening their visual awareness. Whale Alert now supports reporting of whale sightings by the maritime community and the broader public. This information is shared in real-time with leading whale researchers and state and federal management authorities. In some cases, whale sightings will trigger confirmation "over-flights" by the National Marine Fisheries Service (NMFS) or the United States Coast Guard (USCG) who will then determine whether or not temporary speed restrictions should be created (Dynamic Management Areas). Whale Alert 2.0 features include a growing roster of whale protection zones and speed recommendations including:



Lake Hermitage Marsh Creation project  
(Louisiana Coastal Protection and Restoration Authority)

- \* NOAA Atlantic Seasonal Management Areas
- \* NOAA Atlantic Dynamic Management Areas
- \* NOAA Atlantic MSR Boundaries
- \* NOAA Atlantic Recommended Routes
- \* NOAA & IMO Atlantic designated Areas-to-be-Avoided
- \* NOAA & IMO Traffic Separation Schemes (San Pedro and Santa Barbara Channels)
- \* NOAA & IMO Traffic Separation Scheme (San Francisco)
- \* Near Real-time Boston-area

Acoustic Whale Detection Buoys (for Right Whales only)  
 \* Dynamic Management Areas via Internet or AIS over WIFI  
 \* Seamless U.S. Nautical Raster Charts \* GPS Position Tracking & Alert for Entering Mgmt Areas \* Whale sighting recording support (form, camera functions) \* Automatic posting of sightings data to central research database

Whale Alert is a collaboration of government agencies, academic institutions, non-profit conservation groups and private sector companies, : Bioacoustics Research Program at the Cornell Laboratory of Ornithology, Boston Harbor Pilots, Center for Coastal and Ocean Mapping at the University of New Hampshire, Conserve.IO, Excelerate Energy, EOM Offshore, Gaia GPS, International Fund for Animal Welfare, Massachusetts Port Authority, NOAA Fisheries Service, NOAA National Marine Sanctuaries, , National Park Service, Cape Cod National Seashore, Point Blue Conservation Science, NYK Line (North America), United States Coast Guard and the Woods Hole Oceanographic Institution. Download the Whale Alert App. It's free; there's a version for iOS now, and Android is coming soon.



## Duke University

The Duke University Chapter held the 14th Annual Neuse Riverkeeper Sprint Triathlon this past September at the Duke Marine Lab. The weather was beautiful and the triathlon raised over \$2,500 for the Neuse Riverkeeper Foundation. Since the completion of the triathlon, we have hosted monthly speakers to discuss marine issues. Most recently our chapter hosted James F. Bennett from the U.S. Bureau of Ocean Energy Management to give a talk on risk assessment and NEPA. The Duke Chapter also traveled to Washington, DC in November for the RAE/TCS Summit. The conference was fantastic and a great opportunity to learn from working professionals. Looking forward, next semester kicks off with a Blue Drinks networking event in Beaufort, NC. It's a fun way to gather community and university members to discuss coastal and marine issues.

## East Carolina University

The East Carolina University (ECU) Chapter convened their first monthly meeting of the 2014 fall semester on August 29th, 2014. Although a few previous members did not return because their research had taken them away from Greenville, we welcomed three new members from the Coastal Resources Management PhD Program, one member from the Sustainable Tourism Master's Program, and two undergraduates in the Biology Program, for a total roster of 23 members. We participated in ECU's Get-A-Clue on September 12th, which is an organization fair designed to showcase student organizations and help with recruitment. Undergraduates were the primary audience



Left to Right: Alyson Lewis (Treasurer), Mary Allen (Vice President), Jennifer Jones (Past President), and Tom Garcia.

during the event, and a few attended our following meeting. Our chapter is still primarily composed of graduate students, but establishing an undergraduate chapter is something we are interested in. On October 1st, Jean Michel Cousteau was the featured speaker for the Voyages of Discovery Lecture Series on campus, and many of our members and faculty attended the sold out presentation. It was an exciting and relevant lecture, as the majority of our members are Coastal Resources Management PhD students, and they had the opportunity for personal conversations with Mr. Cousteau.

Five of our members traveled north during the first week of November to attend and present at the RAE/TCS14 Summit. We enjoyed many of the excellent presentations given during that week, and the conversations that occurred in between with both professionals and fellow students. We have recently been focusing on organizing the 2nd Annual Oyster Roast in partnership with the ECU chapter of the American Fisheries Society. The event will be held on January 24th from 5-9pm at the Estuarium in Little Washington, NC. Tickets are currently on sale for \$20 until the New Year, and will be \$25 afterwards. The Martin County Ramblers will provide entertainment and students will showcase their research through poster presentations, in addition to the delicious food and beverage that will be offered. If you are interested in attending or presenting you can contact Michael Flynn at [flynnmi13@students.ecu.edu](mailto:flynnmi13@students.ecu.edu).

## Eckerd College

The Eckerd College Chapter is off to a great start for the semester. So far we have had two guest speakers who offered very interesting presentations. The first speaker, Randy Blankinship, the Southeast Branch Chief with the National Marine Fisheries Service's Highly Migratory Species Management Division described how highly migratory species of fish are managed at the federal level. Our second speaker of the semester was Alexis Jackson, who is currently a KNAUSS fellow working in Silver Springs, Maryland, also with the same division as Dr. Blankinship. She spoke not only about her research, but her education and career decisions that lead to her receiving this prestigious fellowship. We hope to continue having some great speakers next semester, as well as expanding to some outdoors activities such as cleaning up a local estuarine nature preserve, and educating its visitors on ocean-friendly practices.

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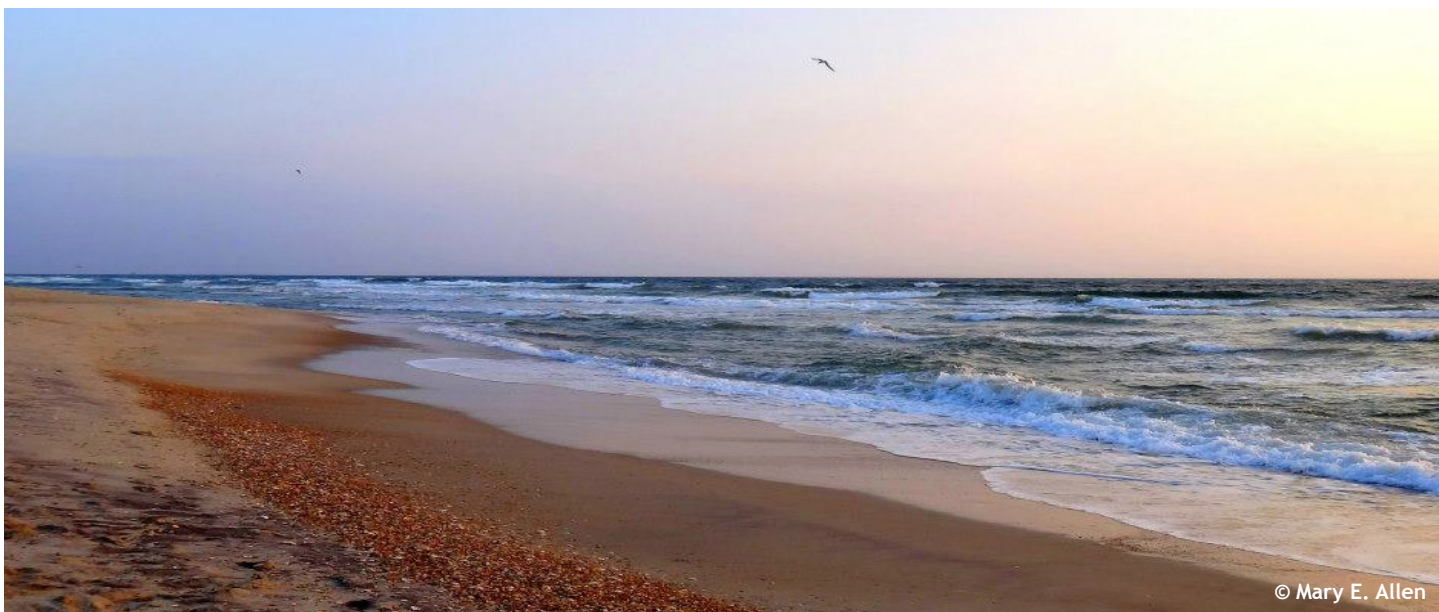
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## University of Rhode Island

Greetings from Kingston, Rhode Island! This fall, the University of Rhode Island (URI) Chapter welcomed approximately fifteen new members to the local chapter and national organization. URI TCS members have enjoyed a great run of guest speakers with presentations from Dr. Carlos Garcia-Quijano on fishermen perspectives in Puerto Rico, Dr. Jesper Raakjaer on innovative fisheries management in the European Union, and presentations by URI Master’s Degree students on their thesis work, which varies from environmental education effectiveness surveys, to human uses spatial analysis, Dominican Republic fisher perspectives, Plum Island Beach fisher perspectives, and European Union maritime policy analysis. In September, URI TCS collaborated with Save the Bay to take part in International Beach Clean-up Day! After that event, we held a beach clean-up at Bass Rock in Narragansett, Rhode Island. URI TCS has an ongoing contract with the town and has a sign designating who takes care of the beach (see photo)! Our chapter just finished a successful t-shirt and sweatshirt fundraiser and is looking forward to seeing the logo on campus and around town. This coming spring, we have many events in the works including a Marine Policy Practitioner Lecture Series, another Bass Rock Beach clean-up, and a day trip to Block Island. We hope your 2015 gets off to a happy and healthy start!



URI TCS Co-presidents Anna Antonova and Alanna Casey taking a break to point out the TCS sign during a beach cleanup day at Bass Rock Beach in Narragansett, Rhode Island.



© Mary E. Allen



## The Coastal Society

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[www.thecoastalsociety.org](http://www.thecoastalsociety.org)

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