

# CERF 2013

Toward Resilient Coasts and Estuaries, Science  
for Sustainable Solutions  
3-7 November 2013  
Hotel Mission Valley San Diego  
Town & Country Convention Center  
San Diego, CA



CERF2013  
SAN DIEGO CALIFORNIA

## **Preliminary Poster Program**

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## **Schedule**

*September 16, 2013*

**This preliminary program is intended for planning purposes only.  
For additional updates as the conference approaches, please visit:  
<http://www.sgmeet.com/cerf2013>.**

## **Monday, November 4, 2013 (5:00–7:00PM, Grand Hall)**

### **SCI-001P BRIDGING THE GAP BETWEEN EUTROPHICATION ASSESSMENT FRAMEWORKS AND NUTRIENT WATER QUALITY CRITERIA (POSTERS).**

**Santell, Stephanie;** Crawford, Tiffany; Kaufman, Galen; Hagy, James; Oliver, Jacques; Decker, Ed. Advancing the science for developing numeric nutrient criteria for estuarine and coastal waters.

**Gutierrez, Francisco Jose;** Torres, Maria del Rocio; Castañeda, Ofelia. Trophic state of coastal lagoons of the Veracruz State, Mexico (Gulf of Mexico) related to watershed land cover.

### **SCI-002P COMPARATIVE UNDERSTANDING OF ESTUARINE EUTROPHICATION TIPPING POINTS AND RESTORATION TRAJECTORIES (POSTERS).**

**Gonzalez-De Zayas, Roberto;** Merino-Ibarra, Martin; Castillo-Sandoval, Fermin S.; Valdespino-Castillo, Patricia M.; Guimaraes Bermejo, Mayrene. Coexisting alternative stable states at a tropical coastal lagoon (Laguna Larga, Cuba) under eutrophication and hydromorphological stresses.

**Page, Heather N.;** Posey, Martin H.; Alphin, Troy D. Particle Overload! The Eastern oyster's role in biogeochemical cycling under chronic exposure of sediment and nitrate.

**Alers-Garcia, Janice;** Greene, Richard M.; Hagy, James D.; Whitlock, Steve; Yuan, Lester L. Approaches to ensure protection of downstream estuaries from nutrient pollution.

**De Santiago, Kevin;** Beseres Pollack, Jennifer. Response of macrobenthic communities to varying land uses in Oso Bay, Corpus Christi, Texas.

**Browne, James P.;** Vanek, John P.; Personius, Casey L. Differences among salt marsh ditch edges and peat strength when exposed to a spatial gradient in nitrogen concentration over an interval of decades.

### **SCI-005P NUTRIENT FLUXES AND NUTRIENT ACCOUNTING IN COASTAL CATCHMENTS AND WATER BODIES: METHODS AND APPLICATIONS (POSTERS).**

**Stecher, Hilmar A.;** McKane, Robert B.; Brookes, Allen; DeWitt, Theodore; Brown, Cheryl; Kaldy, James E. Development of an ecohydrological salt marsh model.

**Fischer, Sarah J.;** Ullman, William J.; York, Joanna K. Seasonal patterns of  $\delta^{15}\text{N}$  and  $\delta^{18}\text{O}$  of  $\text{NO}_3^-$  in the Murderkill River Watershed and Estuary, DE.

**Talavera, Ana L.;** Sanchez, Alberto; Ortiz, Concepcion. Stable isotopes of nitrogen in green turtle (*Chelonia mydas*) from a foraging area at the Mexican Caribbean.

**Hernandez, Oscar G.;** Herzka, Sharon Z.; Camacho-Ibar, Victor F. Characterization of short-term nitrogen sources for seagrasses and macroalgae in a lagoon subject to coastal upwelling events based on stable isotopes of nitrogen.

**Yactayo, Guido.** Chesapeake Bay Program Watershed Model Simulations using NLDAS-II Precipitation & Meteorological datasets.

**SCI-007P TRANSLATIONAL SCIENCE: THE COMPLEXITIES OF WATERSHED AND ESTUARINE RESTORATION EFFORTS (POSTERS).**

**Newcomer, Tamara A.;** Kaushal, Sujay S.; Mayer, Paul M.; Groffman, Peter M.; Grese, Melissa M. Effects of integrated stormwater management and stream engineering on watershed nitrogen retention.

**Dolan, Tara;** Serafy, Joseph. Effect of season and scale on power to detect change in mangrove fish assemblages of a converted estuary.

**Carlson, Emily A.;** Greene, Corrieh; Rice, Casimir. Comparing salmonid, benthic, and forage fish response to restoration and predicting composition of fish species at proposed restoration sites.

**SCI-008P PAST AND PROBABLE FUTURE IMPACTS OF A RISING SEA ON DIFFERENT GEOMORPHIC ENVIRONMENTS (POSTERS).**

**Etheridge, Sherer B.;** Christian, Robert R.; Brinson, Mark M. *Juncus roemerianus* patch stability and community shifts across a marsh.

**Poppe, Katrina;** Rybczyk, John M. An ecogeomorphic field and hybrid modeling approach to predicting a coastal wetland response to sea level rise.

**Almukaimi, Mohammad;** Dellapenna, Timothy. Enhanced land subsidence and sediment dynamics in Galveston Bay-Implications for geochemical processes and fate and transport of contaminants.

**SCI-013P MARSHES, STORMS, AND SEA LEVEL RISE: SYNTHESIS OF ECOLOGIC, GEOMORPHIC, AND GEOSPATIAL ANALYSES (POSTERS).**

**Young, Chanel J.** A snail's pace: Density, movement, and food choice of the marsh periwinkle.

**Corman, Sarah S.;** Ivens-Duran, Morgan; Bertness, Mark D.; Davey, Earl; Deegan, Linda A.; Leslie, Heather M. Flowering and biomass allocation in the salt marsh foundation species *Spartina alterniflora*.

**Walters, Linda;** Solomon, Joshua; Donnelly, Melinda; Sacks, Paul. Sea level rise: field simulations with the intertidal oyster *Crassostrea virginica*.

**Freeman, Chase M.;** Thorne, Karen; Takekawa, John; Guntenspergen, Glenn; Buffington, Kevin; MacDonald, Glen; Ambrose, Rich; Ganju, Neil; Dugger, Bruce. Assessing the effects of sea-level rise of Pacific coast tidal marsh ecosystems along a latitudinal gradient.

**McLenaghan, Natalie;** Alber, Merryl; Alexander, Clark. Shoreline stabilization under shifting seas:

Urbanization trends and upland connectivity in salt marsh ecosystems.

**Garvis, Stephanie K.;** Weishampel, John F. Seagrass habitat suitability modeling under varying sea level rise scenarios in the Northern Gulf of Mexico.

**Howard, Rob;** Allen, Tom; Covi, Michelle. North Carolina Coastal Atlas: a tool for estuarine research and communication.

**Eulie, Devon O.;** Corbett, Reide; Walsh, John P.; Mulligan, Ryan P. Estuarine shoreline dynamics: Insights from the Albemarle-Pamlico estuarine system, North Carolina, U.S.A.

**Hackney, Courtney T.;** Avery, Brooks. Tidal wetland community response to varying levels of flooding by saline water.

#### **SCI-015P ACIDIFICATION AND HYPOXIA IN ESTUARIES (POSTERS).**

**Afonso, Gelies L.;** Caffrey, Jane M. Influence of environmental factors on diversity and abundance of meiofauna in three Florida estuaries.

**Song, Jinil;** Yoon, Byung-il; Kim, Jongwook; Woo, Seung-Buhm. Spatial and temporal variability of bottom dissolved oxygen concentration in Youngsan Reservoir, South Korea.

**Burrell, Rebecca;** Keppel, Andrew; Clark, Virginia; Breitburg, Denise. A LabVIEW-based automated control system for flow-through diel-cycling hypoxia and pH experiments, and overview of effects on the eastern oyster.

**Stoffel, Heather;** Coupland, Catherine; Oviatt, Candace; Kiernan, Susan; Requentina, Edwin. Characterizing hypoxic events as an assessment tool for managers within Narragansett Bay, RI.

**Basch, Larry;** Helms, Alicia; DeMarzo, Adam; Rumrill, Steve. Variation in pH at multiple scales and addition of continuous pCO<sub>2</sub> measurements in the South Slough estuary, Oregon.

**Chen, Jianfang;** Wang, Bin; Jin, Haiyan; Li, Hongliang; Wang, Kui. Biogeochemical processes of the formation of hypoxia water off the Changjiang Estuary.

**Lane, Hillary A.;** Paynter, Kennedy T.; Miller, Thomas J. Acidification impacts growth per molt and hardening time of juvenile blue crab *Callinectes sapidus*.

#### **SCI-024P Strategies for Mentoring in Coastal and Estuarine Science (POSTERS)**

Boettcher, Anne; Turrens, Julio; **Patterson, Heather**. Undergraduate Research: Opening Doors and Windows.

**Hatch, Marco B.** American Indian student-driven research at the Salish Sea Research Center.

#### **SCI-027P UNRAVELING THE "BLACK BOX" OF MIGRATION WITH NOVEL METHODS (POSTERS).**

**Limburg, Karin E.;** Wuenschel, Mark J. Phylogenetic constraints on elemental uptake in flounder otoliths: aid to interpreting migration and other life history events.

**Gieseking, Melissa W.;** Rechimuth, Jessica. Do they stay or do they go? A study of site fidelity among *Mugil cephalus* and *Mugil curema* along the mid-South Atlantic Bight.

Benjamin, Joseph R.; **Wetzel, Lisa A.;** Martens, Kyle D.; Larsen, Kimberly; Connolly, Patrick J. Spatio-temporal variability in movement, age, and growth of mountain whitefish (*Prosopium williamsoni*) in a river network based upon PIT tagging and otolith chemistry.

**Bush, Eva;** Cook, Jon; Ikemiyagi, Naoaki; Ramos, Georgia; Hobbs, James. Otolith strontium isotope life history reconstructions of Delta Smelt, *Hypomesus transpacificus*.

**Thompson, Christine M.;** North, Elizabeth W.; Schlenger, Adam J. Raman spectroscopy as a technique to study bivalve larvae.

#### **SCI-029P BIO-OPTICAL TECHNIQUES FOR IN SITU PLANKTON RESEARCH: WHERE ARE WE NOW? (POSTERS).**

**Novoa, Stéfani;** Wernand, Marcel. Citizen science, smartphones and the color of natural waters.

**Travis, Nicole M.;** Parker, Alexander E.; Wilkerson, Frances P.; Dugdale, Richard C. PhytoFlash™ active fluorescence probe: applications in a turbid estuary, San Francisco Bay, CA.

#### **SCI-031P TROPHIC SUBSIDIES IN COASTAL ECOSYSTEMS: IMPLICATIONS FOR COASTAL MANAGEMENT (POSTERS).**

**Strong, Shannon E.;** Wilkerson, Frances P.; Parker, Alexander E. Nitrogen and chlorophyll a flux between a restored tidal marsh and an adjacent bay in the San Francisco Estuary.

#### **SCI-034P PLANKTONIC FOOD WEBS IN AN ERA OF GLOBAL ENVIRONMENTAL CHANGE (POSTERS).**

McLaughon, Benjamin D.; **Kimmel, David G.;** Wetz, Michael; Cira, Emily; Paerl, Hans. Spatial and temporal variability of the mesozooplankton community in relation to the chlorophyll maximum of the Neuse River Estuary, North Carolina USA.

**Elliott, David T.;** Bukaveckas, Paul A. Temporal dynamics of the dominant zooplankton in the tidal-freshwater James River (1986-2002 and 2013).

**Hurley, David;** Johnson, Zackary . Effect of temperature on *Prochlorococcus* growth rate and carbon uptake.

**Lichti, Deborah A.;** Rinchar, Jacques; Kimmel, David G. You are what you eat: determining the zooplankton fatty acid composition in western Albemarle Sound and Chowan River, North Carolina.

#### **SCI-036P PERCEPTIONS OF ENVIRONMENTAL MODELS AND STAKEHOLDER PARTICIPATION (POSTERS).**

**Turner, Elizabeth;** Fitzpatrick, James. Scenario-based forecasts in support of regional coastal management.

**SCI-037P TRANSFERABILITY OF MODELS FOR PREDICTING ECOSYSTEM SERVICES (POSTERS).**

**Sweatman, Jennifer L.;** Fourqurean, James. Light availability and benthic community structure in the Florida Keys.

**Dantin, Darrin;** Teague, Aarin; Russell, Marc; Harwell, Matthew; Almario, Alex; Harvey, James; From, Andrew. Hydrologic connections and landscape metrics to advance ecosystem goods and services in the Tampa Bay watershed.

**SCI-041P RESILIENCE IN COASTAL ECOSYSTEMS: IMPACT OF STRESSORS ON RESILIENCE, STABILITY, AND RECOVERY IN COMMUNITIES DOMINATED BY SEAGRASS OR BENTHIC ALGAE (POSTERS).**

**Rostin, Liis;** Martin, Georg. Short- and longterm effects of mechanical disturbance of shallow hardbottom benthic communities in NE Baltic Sea.

**Foley, Jessica L.;** Harris, Lora A. The effects of local environmental conditions on the specific growth rates of eelgrass seedlings and seed germination.

**Landry, J. Brooke;** Golden, Rebecca; Karrh, Lee; Lewandowski, Mark. The effects of hardened shorelines on SAV in the Chesapeake and Maryland Coastal Bays.

**Voigt, Erin;** Hovel, Kevin. The effect of structural complexity on the interaction strength of key consumers in a temperate seagrass ecosystem.

**DeYoe, Hudson R.;** Kowalski, Joseph L.; Pulich, Warren M. Freshwater inflow impacts on seagrasses in a subtropical lagoon.

**Hunt, Natalie G.;** Caffrey, Jane M.; Smith, Ashlynn; Fugate, Beth. Seasonal changes of water column chlorophyll a, nutrients and epiphyte biomass in restored and native seagrass beds in Pensacola, FL.

**Ferrier, Lisa;** Gaeckle, Jeffrey; Short, Fred. SeagrassNet: Seasonal monitoring of two seagrasses, *Zostera marina* and *Zostera japonica*, at Dumas Bay, Washington.

**Celebi, Billur;** Ceden, Tiffany; Zimmerman, Richard C.; Hill, Victoria J. The long term impacts of increasing dissolved CO<sub>2</sub> concentration on leaf optical properties in eelgrass *Zostera marina* L.

**Zimmerman, Richard C.;** Hill, Victoria J.; Smith, Miranda; Jinuntuya, Malee. Impact of climate warming and ocean carbonation on eelgrass (*Zostera marina* L.)

**SCI-042P RESILIENCE IN COASTAL ECOSYSTEMS: EVALUATING AND CONSERVING RESILIENCE IN INDO-PACIFIC COASTAL MARINE HABITATS (POSTERS).**

**Gwak, Woo Seok;** Park, Jun Su; An, Soon Mo. Importance of estuarine habitats for larval and juvenile fishes in Danghang bay, Korea.

**Hori, Masakazu;** Hamaoka, Hideki; Shimabukuro, Hiromori; Nakaoka, Masahiro; Yoshida, Goro; Hamaguchi, Masami. Trade-offs between provisioning and regulating services in seagrass ecosystem.

**SCI-044P ENGINEERING WITH NATURE: STRIVING FOR SUSTAINABLE, MULTI-OBJECTIVE COASTAL INFRASTRUCTURE (POSTERS).**

**Conley, Keats R.;** Sutherland, Kelly R. Substrate selection preferences by planulae of the Pacific sea nettle, *Chrysaora fuscescens*.

**SCI-045P DISTURBANCE AND STRESSOR IMPACTS ON MICROBIAL COMMUNITIES AND BIOGEOCHEMICAL FEEDBACKS (POSTERS).**

**Tyrell, Abigail S.;** Feinman, Sarah G.; Bowen, Jennifer L. The effects of decreased microbial diversity on nitrogen cycling in experimental mesocosms.

**Drennen, Chanda;** Engel, Annette; Turner, R. Eugene. Response and recovery of microbial communities in Louisiana coastal marshes after the Deepwater Horizon spill and the possible implications for marsh erosion.

**SCI-047P DRIVERS AND ECOLOGICAL EFFECTS OF HYPOXIA IN COASTAL UPWELLING SYSTEMS (POSTERS).**

**Booth, J. Ashley T.;** Woodson, C. Brock; Micheli, Fiorenza; Weisberg, Steve B.; Sutula, Martha; Bograd, Steven; Steele, Alex; Schoen, Julia. Patterns of declining oxygen content along the southern California coast.

**Sato, Kirk;** Navarro, Michael; Nam, SungHyun; Takeshita, Yuichiro; Ballard, John; Hernandez Lopez, Elvira; Neira, Carlos; Grupe, Benjamin; Levin, Lisa; Frieder, Christina. Temporal responses of benthic metazoan communities in persistent hypoxic and hypercapnic environments along San Diego's continental margin.

**Hernandez Lopez, Elvira;** Neira, Carlos; Mendoza, Guillermo; Frieder, Christina; Levin, Lisa A. Meiofauna community response to low oxygen concentration along the San Diego Margin.

**SCI-054P EXPLORING APPROACHES TO UNDERSTANDING DECISION MAKERS' SCIENCE NEEDS (POSTERS).**

**Yee, Susan H.;** Fulford, Richard S.; Carriger, John; Russell, Marc. Linking community values to scientific assessment of decision options with structured decision making.

**Leonard, Lynn;** Dorton, Jennifer. Approaches to understanding and meeting the needs of decision makers in the Carolinas.

**Kitting, Christopher L.;** Furuya, Shoko. Approaches to scale up ecosystem resource restoration and scale down total consumption by humans, as with fresh water supplies around San Francisco Estuary.

**SCI-056P SCIENCE COMMUNICATION STRATEGIES FOR ECOSYSTEM-BASED MANAGEMENT (POSTERS).**

**Munoz, Gabriela;** Boicourt, Kate; Nyman, Robert. The State of the Estuary: Communicating environmental health and trends to the interested public.

**Commagere Hijuelos, Ann;** Galinski, Andrea; Marshall, Taylor; Parsons-Richards, Carol; Peyronnin, Natalie; Raynie, Rick; Reed, Denise; Speyrer, Nick. Louisiana's coastal report card: concept and approach.

**SCI-062P GLOBAL PATTERNS OF PHYTOPLANKTON DYNAMICS IN ESTUARINE AND COASTAL ECOSYSTEMS (POSTERS).**

**Stark, Kimberle;** Hannach, Gabriela. Puget Sound weather, phytoplankton, and nutrients: who's driving this train?

**Chen, Changping;** Xu, Hualin; Gao, Yahui; Li, Qingyu; Qian, Ling; Zheng, Minhua. Variations of phytoplankton community in Shenzhen Bay, China.

**Martin, Charles;** Kress, Erica; Schraga, Tara; Cloern, James E. Seasonal patterns of three key phytoplankton species in San Francisco Bay.

**Flood, Stacie;** Burkholder, JoAnn; Cope, W. Gregory. Comparative ecotoxicology of benign and toxigenic estuarine phytoplankton responses to an agricultural herbicide.

**Boyette, Adam D.;** Redalje, Donald G. Primary productivity along the river-dominated shoreline of the Bay of Saint Louis estuary, Mississippi: temporal and spatial variability.

**SCI-064P HYDRODYNAMICS AND SEDIMENT DYNAMICS IN ESTUARIES AND COASTAL SEAS (POSTERS).**

**Brown, Jenny;** Bolaños, Rodolfo; Howarth, Michael; Souza, Alejandro. Extracting sea level residual from short time series in tidally dominated estuarine environments.

**Souza, Alejandro J.;** Burchard, Hans. A comparison on the prediction of tidal mixing fronts using the nondimensional Simpson and Hunter parameter and the Stokes number.

**Woo, Han Jun;** Kang, Jeongwon; Lee, Jun-Ho; Jeong, Kap-Sik. Seasonal changes of sedimentary environment at the macrotidal flat in Gomso Bay, west coast of Korea.

**Blair, Emily;** Schroeter, Steve; Page, Mark; Deza, Andres; Patonai, Katalin; Elwany, Hany. Novel use of an Acoustic Doppler Current Profiler to reconstruct long-term tidal prism measurements in a small Southern Californian tidal lagoon.

**Williams, Joshua R.;** Dellapenna, Timothy; Lee, Guan-hong. Geomorphological responses to anthropogenic alterations within the Nakdong and Yeongsan Estuaries, South Korea.

**Tenorio-Fernández, Leonardo;** Gómez-Valdés, José; Enríquez, Cecilia; Treviño, Cesar; Mariño-Tapia, Ismael; López-Aguilar, Korinthia. Tides and tidal currents in a coastal lagoon of the Gulf of Mexico.

**Garwood, Jessica C.;** Hill, Paul S. Seasonal and biofilm effects on sediment erosion and sorting in an intertidal mudflat in the Bay of Fundy, Canada.

**Yoon, Byung il;** Woo, Seung-Buhm; Kim, Jong-Wook; Song, Jin il. The characteristics of along-channel salinity distribution in a macrotidal estuary, Gyeonggi Bay, South Korea: Field measurements and numerical model results.



**White, David A.** Climate change characteristics of warming and weather extremes the focus of intra- and inter-annual change in wetland plant biomass within the Mississippi River delta, Louisiana, among other environmental parameters.

Cartwright, Grace M.; **Friedrichs, Carl T.** Sediment settling velocity from ADVs and settling tubes: agreement over a range of particle types and hydrodynamic conditions.

**Allen, Kerri A.;** Leonard, Lynn A. Physical effects of oyster reef rugosity: flume and field studies in a low-flow intertidal environment.

**Valle-Levinson, Arnoldo;** Schettini, Carlos Augusto Franca; Truccolo, Eliane. Response of a subtropical stratified estuary to river pulses.

**Truccolo, Eliane C.;** Schettini, Carlos A.; Almeida, Luiz E.; Valle-Levinson, Arnoldo. Depicting short events of river discharge on tidal signal using wavelets.

**Chant, Robert.** Moored observations of tidal and spring neap variation in stratification and exchange flow across six estuaries.

**Horwitz, Rachel;** O'Donnell, James. Model and observations of eastern Long Island Sound.

**Sanay, Rosario;** Perales-Valdivia, Héctor. Effect of temporal variations of river discharge and wind-stress on the position of salt wedge in a micro-tidal river mouth.

**Miller-Corbett, Cynthia;** Simley, Jeffrey. Linear-Referenced coastal geomorphology in the U.S. Geological Survey National Hydrography Dataset.

#### **SCI-066P INTEGRATING SCIENCE AND MANAGEMENT TO BENEFIT ESTUARINE AND COASTAL ECOSYSTEM RESTORATION (POSTERS).**

**Wishnek, Benjamin;** Adamus, Paul; Bridgeland, Bill. Avian response to tidal salt marsh restoration at Bandon Marsh National Wildlife Refuge in southern Oregon.

**Dalrymple, D. Joseph;** Carmichael, Ruth H. Effects of ontogeny on bioremediation capacity of oysters.

**Viola, Sloane;** Hubbard, Dave; Dugan, Jenifer; Schooler, Nicholas. Burrowing in beach fill: implications for recovery of sandy beach ecosystems.

Coldren, Sharon L.; Reed, Patricia C.; **Gray, Sarah C.** A model of science-driven, community-based efforts to mitigate watershed erosion and land-based sedimentation to coral reefs in Coral Bay, US Virgin Islands.

**Sears, Whitney;** Gray, Sarah C.; Sturtevant, Lindsay; Hastings, Zoe C.; Kolupski, Megan L.; DeGrood, Amalia. Assessing the impact of watershed development and restoration on land-based (terrigenous) sedimentation in coastal bays with coral reefs in St. John, US Virgin Islands.

**Teague, Ruby;** Harrington, Robert; Gray, Sarah C.; Hsieh, Yi-Chen. The impact of watershed development on turbidity (TSS) in bays with coral reefs, US Virgin Islands.

**Fris, Rebecca;** Schlafmann, Debra. Providing science to southern California natural resource managers in the face of climate change: Products of the California Landscape Conservation Cooperative.

**SCI-067P INTERACTIONS OF BIVALVE AQUACULTURE AND ESTUARINE BIOGEOCHEMICAL PROCESSES (POSTERS).**

**Emery, Kyle A.;** Rheuban, Jennie E.; Pace, Michael L.; McGlathery, Karen J. The carbon sink potential of shellfish aquaculture.

**Ray, Nicholas;** Terlizzi, Daniel; Kangas, Patrick. Upstream and downstream water quality near an oyster aquaculture facility.

**Kuschner, Michael A.;** Brush, Mark J. Modeling the effect of hard clam (*Mercenaria mercenaria*) aquaculture on system-level processes within Cherrystone Inlet, VA.

**Dodd, Luke F.;** Piehler, Michael F.; Grabowski, Jonathan H. Predator effects on oyster filtration.

**Ayvazian, Suzanne;** Carey, Joanna; Hancock, Boze; Brown, Steven; Fulweiler, Robinson W. Oyster reef restoration and aquaculture impacts on denitrification and the benthic community.

**SCI-073P MARINE DEBRIS MONITORING AND ASSESSMENT: RESEARCH TO GUIDE PREVENTION (POSTERS).**

Krimsky, Lisa; **Watson, Mallory;** Lipshultz, Zach. Application of a marine debris reporting system to target removal efforts along the Florida Keys Reef Tract.

**Slacum, H. Ward;** Methratta, Lisa; Dew-Baxter, Jodi; Corbin, Ryan. An assessment of marine debris on beaches and adjacent ocean surface waters of the mid-Atlantic Bight using standardized sampling protocols.

**Sleight, Victoria A.;** Thompson, Richard C.; Henry, Theodore B. Assessing the bioavailability of microplastic-adsorbed contaminants using larval zebrafish (*Danio rerio*).

**SCI-074P SOUTH AND CENTRAL AMERICAN ESTUARIES AND COASTS (POSTERS).**

**Branyon, Jacqueline M.;** Valle Levinson, Arnaldo. Salt water intrusion at a point source of submarine groundwater discharge in a reef lagoon.

**Möller, Osmar O.;** Abe, Marcos P.; Odebrecht, Clarisse; Abreu, Paulo C.; Vieira, João P.; Garcia, Alexandre M. The seasonal, interannual and longer term variability of the circulation of Patos lagoon and associated processes.

**Morales, Sara M.;** Cortes, Octavio; Ramírez, Javier; Herrera-Silveira, Jorge A. Assessment of the trophic status of costal ecosystems in the Gulf of Mexico and Caribbean (Mexican sides).

**Liu, Kam-biu;** McCloskey, Terrence A.; Kennedy, Lisa M. A 3,400-year history of environmental changes and extreme events from a hypersaline lake on the southwestern coast of the Dominican Republic.

**López Angarita, Juliana;** Hawkins, Julie; Tilley, Alexander; Roberts, Callum. Mangroves in the Eastern Tropical Pacific: the forgotten interface between land and ocean.

**SCI-075P1 ECOLOGY OF COASTS AND ESTUARIES: ECOSYSTEMS (POSTERS).**

**Port, Alex;** Bryan, Karin R.; Pilditch, Conrad A.; Bischof, Kai; Hamilton, David P. Using simple models to understand estuarine macroalgae blooms.

**Howard, Rebecca J.;** Wells, Christopher J.; Michot, Thomas C. Coastal marsh resiliency following disturbance associated with seismic exploration for oil and gas reserves.

**Fitzgerald, Megan C.;** Whitcraft, Christine; Allen, Bengt J. The relationship between biodiversity and ecosystem function in a coastal wetland.

**Robuck, Anna R.;** Mallin, Michael A.; McIver, Matthew R. The impacts of urban, suburban, and rural stormwater runoff on selected metabolic processes within Southeastern North Carolina tidal creeks.

**Potter, Elaine E.;** Swanson, J. D.; Thornber, Carol S. Ploidy analysis of the bloom forming macroalgal genus *Ulva* using flow cytometry in Narragansett Bay, RI.

**Remington, Thomas;** Searcy, Steven. Settlement patterns of Spotted sand bass, *Paralabrax maculatofasciatus* to Mission Bay, San Diego, CA.

**Schoenbaechler, Caimee A.;** Guthrie, Carla G.; McEwen, Tyler J. Drought and low inflow conditions in Texas estuaries: Observations from the record-breaking drought of 2011.

**Stachelek, Joseph;** Madden, Christopher J. High density spatial mapping of water quality patterns reveals impacts of freshwater inputs in Florida Bay, USA.

**Van Diggelen, Amanda D.;** Montagna, Paul A. Is salinity variability a benthic disturbance?

**Vander Woude, Andrea J.;** Mason, Doran M.; Zhang, Hongyan; Stow, Craig A.; Adamack, Aaron T.; de Mutsert, Kim; Pierson, James; Brandt, Stephan; Roman, Michael. An Atlantis Ecosystem-Based approach to model effects of hypoxia on the food web of the northern Gulf of Mexico.

**Willis, Jonathan M.;** Hester, Mark W. Mesocosm assessment of *Spartina alterniflora* growth responses to weathered Macondo well oil applied to aboveground tissues and soil.

**Zhang, Hongyan;** Mason, Doran M.; Stow, Craig A.; Adamack, Aaron T.; Brandt, Stephen; Zhang, Xincheng; Kimmel, David; Roman, Michael; Boicourt, William; Ludsins, Stuart. Impact of hypoxia on habitat quality of pelagic fishes in the northern Gulf of Mexico.

**SCI-075P2 ECOLOGY OF COASTS AND ESTUARIES: NUTRIENTS AND PHYTOPLANKTON (POSTERS).**

**Rothenberger, Megan B.;** Swaffield, Thomas; Calomeni, Alyssa; Cabrey, Carolyn. Fifty years later: re-examining the cultural eutrophication problem in Raritan Bay, NJ using environmental monitoring and multivariate ordination techniques.

Joo, Hui Tae; Kang, Jae jung; Park, Jung Woo; Lee, Sang Heon; **Lee, Jang Han.** Seasonal macromolecular

compositions of phytoplankton in the Gwangyang Bay, South Sea of Korea.

**Lee, Sang Heon;** Lee, Jang Han; Joo, Hui Tae; Park, Jung Woo; Kang, Jae Jung. Seasonal variation of phytoplankton productivity in the Gwangyang Bay, Southern Coastal Sea of Korea.

**Liu, Xin;** Xiao, Wupeng; Wang, Lei; Zhong, Chao; Huang, Bangqin. Seasonal quasi-climatological variations of phytoplankton community structure in the East China Sea.

**Li, Hongliang;** Chen, Jianfang; Jin, Haiyan; Yu, Xiaoguo; Wang, Kui; Huang, Daji; Wang, Bin; Zhuang, Yanpei. Isotope constraints on particulate organic carbon source and biogeochemical process in the East China Sea.

**Cai, Lizhe;** Fu, Sujing; Wu, Chen; Zhuo, Yi; Chen, Xinwei; Li, Xiang; Rao, Yiyong. Study of meiofauna in Zhanjiang Mangrove in Guangdong, China.

**Younan, Lawrence.** Determination of phytoplankton groups using Turner Designs' PhytoFind.

**Bredvik, Jessica;** Graham, Suzanne; Boerger, Christiana; Lattin, Gwen; Zellers, Ann. Spatial and temporal distribution and abundance of ichthyoplankton from 2012-2013 in San Diego Bay.

**Salvador, Bianca;** Bersano, José G. Zooplankton composition and abundance in a subtropical estuary (Paranaguá Bay, Southern Brazil).

Nascimento, Lorena S.; Salvador, Bianca; **Bersano, José G.** Hydromedusae in the surf zone of a subtropical sandy beach (Pontal do Sul, Southern Brazil).

**Dettmann, Edward H.** Relationships between concentrations of phytoplankton chlorophyll *a* and total nitrogen in ten U.S. estuaries.

**Herrera-Silveira, Jorge A.;** Merino, Fany; Aguilar, Ana; Moreno, Iliana; Okolodkov, Yuri; Hernández-Almeida, Oscar U.; Cruz-Trejo, Giuliana I. Harmful algal blooms in the northern Yucatan Peninsula.

**Moon, Cyle R.;** Litton, Gary M.; Brunell, Mark S.; Estiandan, Monica; Stringfellow, William T. Zooplankton-phytoplankton interactions in the San Joaquin River, CA.

#### **SCI-075P3 ECOLOGY OF COASTS AND ESTUARIES: ORGANISMS (POSTERS).**

**Coleman, Austin L.;** Mannix, Sierra; Hammack, April; Reichmuth, Jessica; Abdulovic-cui, Amy. Successfully sequencing swimming crab mitochondrial DNA: Diversity of blue crabs and speckled crabs of the southeastern Atlantic coast.

**Pelletier, Marguerite C.;** Frithsen, Jeffrey. Use of historic data to understand benthic community changes in Narragansett Bay.

**Thomas, Roger L.;** Kreeger, Danielle A.; Mills, Melanie; Cole, Priscilla; Butler, Lance. Freshwater mussel diversity and abundance versus depth in the tidal Delaware Estuary.

**Gut, Jennifer A.;** Reichmuth, Jessica M.; Curran, Mary Carla. Abundance and distribution of fishes at

estuarine and coastal sites near the mouth of the Savannah River, Georgia.

**Tremont, Rachel M.;** Harding, Juliana M.; Allen, Dennis M. Is there an advantage to being early? Lessons from temperate reef fish larvae.

**Buchsbaum, Robert N.;** Clark, Wesley A. Selection of estuarine feeding habitats by snowy and great egrets in the Plum Island Sound estuary, northeastern Massachusetts.

Hosack, Geoff; Bosley, Katelyn; **Dumbauld, Brett.** Use of intertidal oyster aquaculture, eelgrass and unstructured habitats by juvenile salmon in Willapa Bay, Washington.

**Dillon, Kevin S.;** Peterson, Mark S. Elucidating food web dynamics of artificial oyster reefs in Mississippi Sound.

Virnstein, Robert; **Chamberlain, Robert;** Hanisak, M. Dennis. Testing whether the lack of seagrass recovery is recruitment limited in Indian River Lagoon, FL.

#### **SCI-075P4 ECOLOGY OF COASTS AND ESTUARIES: SEAGRASS (POSTERS).**

**Genazzio, Melissa A.;** Durako, Michael J. Diurnal variation in photochemical efficiency of *Thalassia testudinum*, turtle grass, in response to short-term changes in light availability.

**Bosley, Katelyn M.;** Dumbauld, Brett; Copeman, Louise. Identification of thalassinidean shrimp food sources in an Oregon estuary using fatty acid analysis and stable isotope ratios (C,N,S).

**McElroy, Thomas;** Smith, Teresa; Araujo, Lucianna; Mutchler, Troy. Population genetic structure and spatial delineation of the seagrasses *Thalassia testudinum* and *Halodule wrightii* in the Gulf of Mexico near the Florida and Alabama coastlines.

**Park, Sang Rul;** Lee, Kun-Seop; Kang, Yun Hee; Kim, Sangil. Carbon, nitrogen, and phosphorus incorporation by the intertidal seagrass *Zostera japonica* in the intertidal zone.

**Sherman, Kate;** Ryan, Andrew; Berry, Helen; Ferrier, Lisa; Bailey, Allison; Kenny, Matt. Marine Vegetation Atlas: An ArcGIS server application for sharing and exploring eelgrass and kelp data in Washington.

**De Carion, Denise P.;** Durand, John R.; Hobbs, James A.; Young, Matthew J.; Jeffres, Carson A.; Perales, Kousei M.; Montgomery, Jacob R.; Berridge, Kathleen A.; Williamson, Brian O.; Sih, Andrew; Moyle, Peter B. Tidal movements of Sacramento splittail in a remnant tidal marsh.

**Durant, Daisy;** Raposa, Kenneth B. Predicting the effects of climate change on *Hemigrapsus sanguineus* populations in intertidal cobble beaches.

**Lord, Joshua;** Whitlatch, Robert. Space race: geographic and temperature-induced changes in fouling communities.

**Ries, Thomas; Bell, Susan.** Lost River Preserve - Habitat Restoration Assessment - Vegetative and Nekton Sampling.

**Visser, Jenneke M.;** Soukahn, Bobby W. Salinity and fertilization effect on growth and biomass of *Typha domingensis*.

**SCI-079P SOCIO-ECONOMIC SCIENCES FOR COASTS AND ESTUARIES (POSTERS).**

**Aven, Allen;** Carmichael, Ruth H.; Ingram, Dianne. Correcting spatial bias in wildlife citizen-surveys: Integrating manatee sighting reports with GPS tag data.

**Leuchanka, Natallia;** Paolisso, Michael; Wainger, Lisa; Needelman, Brian; Johnson, Katherine J.; Land, Sasha; Tjaden, Robert; Leason, Diane. Socio-economic assessment and coastal marsh resilience on the Chesapeake Bay.

## **Wednesday, November 6, 2013 (5:00–7:00PM, Grand Hall)**

### **SCI-004P ALTERNATIVE NUTRIENT MANAGEMENT STRATEGIES: CREATIVE SOLUTIONS TO A COMPLEX PROBLEM (POSTERS).**

**Lemon, Mary Grace T.;** Posey, Martin H.; Mallin, Michael A.; Alphin, Troy D. Oyster filtration versus passive structural impacts of *Crassostrea virginica* reefs on removal of particulates.

### **SCI-009P ADAPTING TO SEA LEVEL RISE: LOCAL COMMUNITIES AND THEIR CRITICAL INFRASTRUCTURE (POSTERS).**

**Boicourt, Kate;** Lehmann, Zachary; Munoz, Gabriela; Nyman, Robert. Case studies in sea level rise planning: public access in the NY-NJ Harbor Estuary.

**Bourassa, Cristina;** Crooks, Jeff; Goodrich, Kristen. Temporal Investigations of Marsh Ecosystems (TIME).

**Fuller, Roger N.;** Grossman, Eric; Ferdaña, Zach; Flessner, Laura; Guannel, Greg; Horne, Peter. Tidal wetlands as protective green infrastructure: a new decision support model to guide community investment in green and grey infrastructure.

### **SCI-010P CITIES ON THE COAST: PRESENT AND FUTURE CHALLENGES, WITH LESSONS LEARNED FROM SUPERSTORM SANDY (POSTERS).**

**Yáñez-Arancibia, Alejandro;** Day, John W.; Reyes, Enrique. Climate change and hurricanes in the Gulf of Mexico: ecological and socio economic implications.

### **SCI-011P STORM EFFECTS ON ESTUARIES: HURRICANE IRENE, TROPICAL STORM LEE, AND SUPERSTORM SANDY (POSTERS).**

**Poirrier, Michael;** Dunn, Crystal; Caputo, Claire; Flowers, George; Adams, Jordan. Rangia clam decline in Lake Pontchartrain: Effects of enhanced storm surges due to sea level rise, an increase in the frequency and severity of hurricanes and marsh and barrier island loss.

### **SCI-012P SENTINEL SITES: A NATIONAL NETWORK TO MONITOR SEA LEVEL IMPACTS (POSTERS).**

**Stagg, Camille L.;** Sharp, Leigh Anne; McGinnis, Thomas; Snedden, Gregg. Submergence Vulnerability Index development and application to Coastwide Reference Monitoring System sites and Coastal Wetlands Planning, Protection and Restoration Act projects.

### **SCI-014P DRIVERS AND CONSEQUENCES OF NEARSHORE OCEAN ACIDIFICATION (POSTERS).**

**Shukla, Priya;** Edwards, Matthew S. Characterizing the effects of climate change on photosynthesis for embryonic and juvenile sporophytes of *Pterygophora californica* and *Laminaria farlowii*.

**Coupland, Catherine;** Stoffel, Heather; Oviatt, Candace; Kiernan, Sue; Requentina, Edwin. Examining ocean acidification in estuarine waters using the Narragansett Bay Fixed Site Monitoring Network.

**Basilio, Anthony;** Searcy, Steven; Reynolds, Nathalie. The effects of elevated CO<sub>2</sub> concentrations on prey capture, growth and mortality in larval white seabass (*Atractoscion nobilis*).

**Ávila López, M.Carmen;** Hernández-Ayón, J.Martín; Norzagaray López, Orión; Camacho Ibar, Víctor F.; Huerta Díaz, Miguel A.; Siqueiros Valencia, Arturo. Contribution of seagrass and upwelling events on the CO<sub>2</sub> system variability for a Mediterranean coastal lagoon.

**Cho, Jin Hyung;** Shin, Dong-Hyeok; Kum, Byeong-Cheol; Jang, Seok. Geochemical monitoring of gas composition and fluxes with oxygen demand at CCS Site in southwestern East Sea of Korea.

**McGrath, Triona;** Cave, Rachel R.; McGovern, Evin; Kivimae, Caroline. Total alkalinity in Irish estuarine and coastal waters.

**Salisbury, Joseph;** Vandemark, Douglas. Understanding processes controlling Omega at the UNH CO<sub>2</sub> buoy site using a decade of high frequency observations.

#### **SCI-019P EXTENDING ACIDIFICATION MODELING FROM THE OCEAN TO ESTUARIES (POSTERS).**

**Phillips, Jennifer C.** Using expert judgments to evaluate the prospects for Great Lakes CO<sub>2</sub>-driven acidification.

#### **SCI-020P ACIDIFICATION OBSERVING NETWORKS AND DATA SHARING (POSTERS).**

Subramanian, Vembu; **Hernandez, Debra;** Porter, Dwayne; Cothran, Jeremy; Ramage, Dan; Dorton, Jennifer. Southeast Coastal Ocean Observing Regional Association Data Management System: Fostering data access and visualization of coastal ocean observations in the Southeast US.

**Dunkley, Jamie F.;** Woodson, C. B.; Monismith, Stephen G.; Crowder, Larry; Caldwell, Margaret; Kirkwood, William; Walz, Peter. Science and policy objectives for a new ocean observing platform on the south shore of Monterey Bay.

**Mayorga, Emilio;** Newton, Jan; Tanner, Troy; Blair, Rick; Risien, Craig; Seaton, Charles. Addressing multiple marine data needs from local to national scales: The NANOOS/IOOS regional case illustrated with ocean acidification applications.

#### **SCI-021P DYNAMICS, IMPACTS, OR CONTROL OF INVASIVE SPECIES (POSTERS).**

**Obaza, Adam;** Williams, Jonathan. The fouling community assemblage of overwater structures within the Southern California Bight.

**Sorensen, Kara;** Swope, Brandon; Kirtay, Victoria; Harris, Leslie; Phillips, Tony; Bredvik, Jessica; Graham, Suzanne. Marine Ecologic Index Survey of San Diego Bay July 2011.

**Bulthuis, Douglas A.;** Bohlmann, Heath; Burnett, Nicole; Shull, Suzanne. Seasonal growth of two seagrasses with overlapping distribution in the Pacific Northwest: The non-native eelgrass, *Zostera japonica* and the native eelgrass, *Zostera marina*.



**Young, David R.;** Clinton, Patrick J.; Specht, David T.; Mochoncollura, TChris. Has the exponential expansion of the invasive dwarf eelgrass *Zostera japonica* in Yaquina Estuary, Oregon impacted the distribution of the native eelgrass *Zostera marina*?

**Reisalu, Greta;** Herkül, Kristjan; Pärnoja, Merli. Habitat differentiation of sympatric native and invasive gammarids (Crustacea, Amphipoda).

**Wong, Melisa C.;** Dowd, Michael. Towards an ecosystem model for predicting effects of invasive colonial tunicate fouling on eelgrass (*Zostera marina*) growth.

**Bisson, Beth;** Eberhardt, Alyson; Pederson, Judith. A regional approach to preventing the invasion of the Chinese mitten crab in the Gulf of Maine.

**Guerra, Vanessa;** Cohen, C. Sarah. Population genetic diversity of *Ciona intestinalis* sp. A on the Pacific coast of America.

**Britton, David K.;** Thompson, Jonathan; Pasko, Susan; Patterson, Mathew. HACCP: Hazard Analysis and Critical Control Point planning—A risk management tool and its use to decrease the movement of invasive species.

**Durand, John R.** Presence of submerged aquatic weed *Egeria densa* is a function by water depth and flow.

**Brown, Christopher;** Scianni, Chris; Nedelcheva, Raya; Thompson, Jonathan; Dobroski, Nicole . What's the GIS? Using GIS to track the compliance of ballast water management in California.

**Nedelcheva, Raya;** Thompson, Jonathan; Scianni, Chris; Brown, Christopher; Dobroski, Nicole. Hitchhikers guide to shipping – Vessel traffic and their nonindigenous species management practices at northern California ports.

**Scianni, Chris;** Brown, Christopher W.; Nedelcheva, Raya; Thompson, Jonathan; Dobroski, Nicole. The hull nine yards: a complete look at biofouling management, hull husbandry practices, and voyage characteristics of vessels operating in California.

**Thompson, Jonathan;** Nedelcheva, Raya; Scianni, Chris; Brown, Christopher; Dobroski, Nicole. Hitchhikers guide to shipping – Vessel traffic and their nonindigenous species management practices at southern California ports.

**Reyns, Nathalie;** Martinez, David; Tracy, Brianna. The effects of environmental conditions on growth rates of the invasive ascidian *Botrylloides violaceus* in a southern California bay.

**Sutton, Hope.** Assessing effectiveness of management of a non-native predator in a coastal protected area in North Carolina.

**SCI-022P RESTORING WETLAND FUNCTION BY CONTROLLING INVADERS: SPARTINA AND PHRAGMITES (POSTERS).**

Feinstein, Laura; Thornton, Whitney; **Hann, Courtney**; Grosholz, Ted. How do edaphic characteristics influence native Pacific Cordgrass restoration success across tidal elevations?

**SCI-023P THE RELEVANCE OF BIOLOGICAL INVASIONS ON ECOSYSTEM FUNCTIONING (POSTERS).**

**Toothman, Byron R.**; Duernberger, Kimberley A. Denitrification within drifting mats of *Gracilaria vermiculophylla*.

**Holzer, Kim**; Carney, Jenny; Minton, Mark; Miller, Whitman; Ruiz, Greg. A tale of three coasts: Temporal and spatial variation in ballast water management to reduce invasion risk.

**SCI-025P RESEARCH AND THE CLASSROOM: CONNECTIONS BETWEEN SCIENTISTS AND EDUCATORS (POSTERS).**

**Cameron, Marina R.**; Lerczak, James; Lemagie, Emily. Introducing flow modeling at a younger age - a video for numerical modeling concepts in high school.

**Cammarata, Kirk V.**; Mozzachiodi, Riccardo. A marine microbiome application for the undergraduate molecular biology laboratory.

**SCI-026P GENOMIC TOOLS IN MARINE ECOSYSTEM MONITORING AND ASSESSMENT, WITHIN OCEAN POLICY LEGISLATION AND GOVERNANCE (POSTERS).**

Aylagas, Eva; **Rodriguez-Ezpeleta, Naiara**; Borja, Ángel. Genomic resources of the AZTI's Marine Biotic Index species: an endeavor in facilitating monitoring and assessment in marine waters.

**SCI-028P ECOLOGICAL TRACERS IN COASTAL ECOSYSTEMS: PATH TO SUSTAINABILITY (POSTERS).**

**Gaeckle, Jeffrey L.**; Stowe, Jessica; Kreamer, Kiri. The assessment of nutrient, metal, and organic contaminant concentrations in eelgrass (*Zostera marina* L.) in Puget Sound, WA (USA): A project overview.

**Anders, Robert**; Fisher, Robert N.; O'Leary, David; Futa, Kyoto; Danskin, Wesley R. Evidence for a brackish to hypersaline paleodepositional environment, San Elijo Lagoon, California.

**McCormick, Mary**; Garza, Corey; Litvin, Steven Y. Intertidal foraging habits of fished and protected California Spiny Lobsters of Catalina Island, California.

**Pather, Santhiska**; Pfister, Catherine A.; Altabet, Mark A.; Post, David M. Ammonium cycling in the rocky intertidal: Remineralization, removal, and retention.

**SCI-030P Shifting Technology Paradigms: A Case for Innovation by Way of Collaboration (POSTERS)**

**Clark, Ryan**; Willson, Clinton S.; Raynie, Richard. Louisiana's Coastal Innovation Partnership Program: Incorporating innovations into project implementation.

#### **SCI-035P NUMERICAL MODELING OF ESTUARINE AND COASTAL SYSTEMS (POSTERS).**

**Kim, Jong Wook;** Yoon, Byung Il; Song, Jin Il; Woo, Seung Buhm. A numerical study of relationships between freshwater discharge and horizontal isohaline in Yeoungsan River Estuary, South Korea.

**Irby, Isaac;** Friedrichs, Marjy; Feng, Cathy; Hood, Raleigh; Friedrichs, Carl. Skill assessment of multiple models in the Chesapeake Bay.

**Mao, Miaohua;** Xia, Meng. Application of unstructured wave model to Lake Michigan and its tributary Grand Haven.

**LaBone, Elizabeth;** Justic, Dubravko; Rose, Kenneth; Wang, Lixia; Huang, Haosheng. Modeling the effects of hypoxia on fish movement in the Gulf of Mexico hypoxic zone.

**Rubio, Juan C.;** Solana, Elena; Uzeta, Olga; Rivas, David A. Secondary production of the benthic community associated with *Zostera marina* in Punta Banda coastal lagoon, Ensenada, Baja California, Mexico.

**Marvan, Fernando G.;** Navarro-Olache, Luis F.; Flores-Vidal, Xavier; Ruiz de Alegria, Amaia A.; Gil-Silva, Eduardo; Espinoza-Lagunes, Carla. Short term morphodynamics of the Punta Banda coastal lagoon, Ensenada, Baja California.

**Marina, Tomás I.;** Herrera-Silveira, Jorge A.; Medina-Gómez, Israel. An application of an NPZ Model to a coastal upwelling ecosystem in the Yucatan Peninsula, Mexico.

#### **SCI-038P Enriching Our Coasts: The Past, Present, and Future of Fertilization Studies as a Management Guide (POSTERS)**

**Davis, Traci S.;** Reyes, Enrique; Christian, Robert R.; Ardon, Marcelo; Miller, Richard L. Multi-scale investigation of aboveground biomass response to agricultural density in coastal marshes.

**Wejrowski, Mark;** Reyes, Enrique. Response of a *Spartina patens*-dominated oligohaline marsh to nitrogen enrichment in coastal North Carolina, USA.

#### **SCI-039P SYNTHESIS RESEARCH IN ESTUARINE AND COASTAL SCIENCE: FOCUS ON PROCESS AND APPLICATION (POSTERS).**

**Murrell, Michael C.;** Hagy, James D.; Aukamp, Jessica A.; Beddick, David L.; Craven, William G.; Duffy, Allyn E.; Jarvis, Brandon M.; Marcovich, Dragoslav T.; Yates, Diane F. Environmental drivers of variability in estuarine metabolism gleaned from in situ and experimental measurements at paired sites in a warm temperate Pensacola Bay, Florida.

#### **SCI-040P SYNTHESIS RESEARCH IN ESTUARINE AND COASTAL SCIENCE: A SESSION IN HONOR OF SCOTT W. NIXON (POSTERS).**

**Dean, Britt L.;** Brush, Mark J.; Anderson, Iris C. Modulation of watershed nutrient loads by tidal creek ecosystems on Virginia's Eastern Shore.

**Kornis, Matthew S.;** Breitburg, Denise L.; Davias, Lori A.; Heggie, Keira; Soulen, Heather L.; Seitz, Rochelle D.; Bilkovic, Donna M.; Balouskus, Richard G.; Targett, Timothy E.; King, Ryan S.; Giordano, Steven D.; Uphoff, James H. Connecting the abundance of estuarine macrofauna in nearshore habitats to land use and shoreline alteration: a cross-system comparison of Chesapeake subestuaries and Delaware coastal bays.

**SCI-043P Resilience in Coastal Ecosystems: Resiliency of Coastal and Marine Ecosystems and the Services They Provide (POSTERS)**

**Carrion, Steven A.;** Wall, Chuck; Rabalais, Nancy N. Examining long-term impacts of the Deepwater Horizon Oil Spill on infaunal communities in Terrebonne Bay.

**Garmestani, Ahjond;** Shuster, William; Odom Green, Olivia. Adaptive management of urban watersheds.

Pruett, Catherine; **Ellingson, Kami.** Restoration of a coastal estuarine ecosystem: a tool to increase hydrologic storage capacity and ecological resilience.

**SCI-046P SYNERGISTIC EFFECTS OF CLIMATE AND LAND-USE CHANGE ON ESTUARINE AND COASTAL SYSTEMS (POSTERS).**

**Rice, Karen C.;** Hirsch, Robert M.; Bennett, Mark R. Spatial and temporal trends in runoff at long-term stream gauges and implications for climate change effects in Chesapeake Bay watershed.

**Al-Hamdan, Mohammad Z.;** Estes, Maurice G.; Mooney, Douglas D.; Richardson, Norman A.; Schuetter, Jared M.; Wightman, Jennifer L. Evaluating the impacts of land cover, land use, and climate change on water quality in Weeks Bay, Alabama.

**Kowalski, Joseph L.;** DeYoe, Hudson R.; Zimba, Paul; Cammarata, Kirk; Parsons, Jason. Effects of hyposalinity on photosynthesis, respiration, and ion concentration on the seagrass *Halodule wrightii* Aschers. (shoal grass) in a microcosm study.

**Fisher, Kelsey;** Price, Lynn; Hayes, Ken; Wetz, Michael. Phytoplankton and nutrient dynamics in an urbanizing, eutrophic subtropical estuary (Oso Bay, Texas).

**SCI-048P CLIMATE CHANGE AND SPECIES INTERACTIONS: IMPLICATIONS FOR ECOSYSTEM FUNCTIONS AND SERVICES (POSTERS).**

**Peart, Samantha M.;** Arellano, Shawn M. Analysis of shells and swimming behavior of *Olympia* oyster larvae exposed to ocean acidification.

**French, Emily;** Moore, Kenneth A. The effects of recent seagrass species change on habitat structure and function.

**Noto, Akana E.;** Shurin, Jonathan B. Sea-level rise impacts on salt marsh communities: the effect of a dominant plant species.

**Herlan, James J.;** Rogers, Caroline S. Shading may reduce bleaching of corals thriving in a mangrove ecosystem.

Reichmuth, Jessica; **Best, Charles F.;** Bates, Christopher. Bacteria, biofilms, and bait fish: An investigation of marine biofilms found on two species of forage fish along the Southeastern US.

#### **SCI-049P COASTAL AND ESTUARINE CARBON CYCLING (POSTERS).**

**Gatland, Jackie R.;** Santos, Isaac; Maher, Damien; Duncan, Tahlia; Eler, Dirk. Carbon dioxide and methane dynamics within a tidal freshwater creek draining lowland acid sulphate soils following a flood event.

**Doughty, Cheryl;** Langley, Adam; Chapman, Samantha. Climate-induced expansion of the Florida mangrove-marsh ecotone: implications for wetland carbon storage.

**White, Caitlin L.;** Piehler, Michael F.; Couper, Lisa I.; Thompson, Suzanne P. Assessing impacts of land use on coastal stream metabolism.

**Walker, Julie E.;** Tanner, Christopher E. Is seagrass the solution? The effect of eelgrass on Eastern oyster biomineralization.

**Brannon, Elizabeth;** Kroeger, Kevin; Pohlman, John; Green, Adrian; Ganju, Neil; Valtierra, Serena Moseman. Investigating time variations in DOC concentrations for salt marsh carbon budgets: Testing continuous FDOM measurements as a proxy.

**Zhao, Yong;** Raymond, Peter A. High frequency monitoring of DOC and DIC between a salt marsh and Plum Island Sound.

Darjany, Lindsay; Whitcraft, Christine; **Dillon, Jesse.** Characterization of microbial carbon cyclers in a Southern California salt marsh using DNA stable isotope probing.

#### **SCI-052P ASSESSING COASTAL CONDITION USING NATIONAL, REGIONAL, AND STATE MONITORING PROGRAMS (POSTERS).**

**McGinnis, Tommy;** Sharp, Leigh A.; Weifenbach, Dona. Analytical data tools employed by Louisiana's Coastwide Reference Monitoring System.

**Parsons Richards, Carol;** Raynie, Richard C.; Pahl, James W.; Khalil, Syed; Haywood, Edward; Weifenbach, Dona; Peyronnin, Natalie. System-Wide Assessment and Monitoring Program (SWAMP).

Kreeger, Danielle; Padeletti, Angela; **Cheng, Kurt;** Maxwell-Doyle, Martha. Comparison of coastal wetland condition among sub-watersheds of the Delaware Estuary that were assessed with the Mid-Atlantic Tidal Rapid Assessment Method.

**Blackhart, Kristan;** Esselman, Peter. A standardized framework to assess the condition and stresses of estuary ecosystems at regional scales: A case study of the northern Gulf of Mexico.

**SCI-061P COMPARATIVE APPROACHES TO HORSESHOE CRAB ECOLOGY AND CONSERVATION IN NORTH AMERICA AND SOUTHEAST ASIA (POSTERS).**

**Cheng, Helen;** Watson, Winsor H. Evaluating the spawning activity of the American horseshoe crab (*Limulus polyphemus*) in Great Bay Estuary, New Hampshire, USA.

**Shin, Paul;** Chu, Vicky; Cheung, Siu Gin. Analysis of trophic relationship of juvenile Asian horseshoe crabs on a nursery beach in Hong Kong.

**Hieb, Elizabeth E.;** Baggett, Jacy D.; Aven, Allen M.; Carmichael, Ruth H. Effects of sediment type and tank shape on horseshoe crab growth and survival in culture.

**Colon, Christina P.;** Botton, Mark L. Quantifying the effects of a beach nourishment project on horseshoe crab (*Limulus polyphemus*) spawning activity, egg deposition, and juvenile habitat on Plumb Beach, Brooklyn, New York.

**Gibson, Daniel G.** Seven fat years and seven lean years: Variations in recruitment of juvenile *Limulus polyphemus* in a Massachusetts salt marsh over a thirty-five year span.

Behera, Satyaranjan; Choudhury, B. C.; **Bhadury, Punyasloke.** Population status of Horseshoe Crabs along the East Coast of India- a case study from Odisha.

**Iwasaki, Yumiko;** Tanacredi, John T.; Lundstrom, Andrew P.; Portilla, Sixto E. Investigation into the effect of simulated predation on molting behavior of captive juvenile Atlantic horseshoe crabs, *Limulus polyphemus* (Lineaus 1758).

**Kronstadt, Stephanie.** Effect of chemical and physical cues on the metamorphosis of the American horseshoe crab *Limulus polyphemus*.

**SanRomán, Diane M.** The American Horseshoe Crab, *Limulus polyphemus*: Photos of their survival and impairing life events.

**SCI-063P ICOL, TOCE, AND OTHER BAR-BUILT ESTUARIES (POSTERS).**

**Mahon, Hillary C.;** Harris, James O. Effect of salinity on growth of juvenile Yarra pygmy perch (*Nannoperca obscura*: Percichthyidae).

**Nylen, Daniel;** Largier, John. Hydrology of a prototypical, small bar-built estuary: Scott Creek (CA).

**SCI-065P RECENT ADVANCES TO UNDERSTAND THE CONTINUING EVOLUTION OF THE SAN FRANCISCO BAY ECOSYSTEM (POSTERS).**

**Sommer, Ted;** Mejia, Francine. A place to call home: A synthesis of delta smelt habitat in the upper San Francisco Estuary.

**Lee, Jamie;** Parker, Alexander E.; Wilkerson, Frances P. Nitrogen uptake kinetics of *Microcystis aeruginosa* in the San Francisco Estuary Delta, CA.

**Johnson, Allison N.;** Parker, Alex E.; Wilkerson, Frances P. Climate change effects on cyanobacteria blooms in the San Francisco Delta.

**Kress, Erica;** Cloern, James E.; Schraga, Tara. Measurements and potential significance of urea as a nitrogen source for HAB species in San Francisco Bay, California: a one year pilot study.

**Parker, Alexander E.;** Dugdale, Richard C.; Wilkerson, Frances P.; Hogue, Victoria; Blaser, Sarah B.; Pimenta, Adam R.; DuBose, Melissa; Lorenzi, Allison. Insights into phytoplankton and nutrient interactions in Central San Francisco Bay, CA through a decade of observation.

**Blaser, Sarah B.;** Wilkerson, Frances P.; Parker, Alexander E.; Dugdale, Richard C. Is urea a water quality concern in the San Francisco Estuary?

**Dunlavey, Eric;** Yigzaw, Simret; Ervin, James. Fifty years of improving water quality in Lower South San Francisco Bay.

**Windham-Myers, Lisamarie;** Drexler, Judith Z. Tidal marsh vertical accretion processes in the San Francisco Bay-Delta: are our models underestimating the historic and future importance of plant-mediated organic accumulation?

#### **SCI-068P ESTUARINE SHALLOWS: BIOPHYSICAL INTERACTIONS (POSTERS).**

**Zarama, Francisco;** Zeller, Robert; Weitzman, Joel; Koseff, Jeffrey. Development of turbulence downstream of shallow submerged vegetation.

**Housego, Rachel;** Rosman, Johanna. Investigating feedbacks between sediment dynamics and oyster reef growth using an idealized 1-d model.

**Rosenzweig, Itay;** Koseff, Jeffrey R. Response of surface turbulence statistics to a submerged canopy.

**Gilson, Gina G.;** Schalles, John F.; O'Donnell, John P.; Brennan, John. Quantifying spatial variability of microbenthic algae using optical reflectance measurements.

**He, Jianzhang;** Yin, Kedong. Effects of topography on the formation of low oxygen waters in Pearl River estuarine coastal waters.

**George, Doug;** Lowe, Jeremy; Vandebroek, Elena; Kunz, Damien; Quiroga, Pablo; Latta, Marilyn; Boyer, Katharyn. Evolving the bed - physical and geomorphic processes of the San Francisco Bay Living Shorelines: Nearshore Linkages Project.

#### **SCI-069P ESTUARINE SHALLOWS: MONITORING, MODELING, AND MANAGING (POSTERS).**

**Cerco, Carl F.;** Noel, Mark R.; Linker, Lewis. Monitoring, modeling, and managing in the shallow-water regions of Chesapeake Bay.

**Green, Lauri;** Gawlik, Dale E.; Lapointe, Brian; Calle, Leonardo. Development of seagrass distribution model to assess wading bird resource selection within the Great White Heron National Wildlife Refuge, Florida Keys.

**Duffy, Allyn;** Schaeffer, Blake A.; Le, Chengfeng. The use of a MODIS band-ratio algorithm versus a new hybrid approach for estimating colored dissolved organic matter (CDOM).

**Pelc, Carey E.;** Gallegos, Charles L. Spatial patterns in optical properties and diffuse attenuation coefficients in Delmarva Coastal Bays.

**Myers, Joseph A.;** Buskey, Edward J. Using high spatial resolution sampling to validate the locations of permanent water quality monitoring stations within the Mission-Aransas Estuary.

**Heggie, Keira;** Kornis, Matthew S.; Davias, Lori; Breitbart, Denise L. Effects of anthropogenic shoreline hardening and watershed land use on condition indices of three fish species.

**Baine, Gary C.;** Johnson, Zoe E.; Williams, Emily; Hale, Quarail; Hartnett, Casey; Lutterschmidt, William; Alford, John; Wozniak, Jeffrey; Swim, Edward. Using mathematical models to simulate coastal marsh hydrology and primary production.

#### **SCI-070P MICROBIAL ECOLOGY: PROCESSES, LINKAGES, AND ECOSYSTEM FEEDBACKS (POSTERS).**

**Hester, Eric;** Rohwer, Forest. ARMS: Assessing global microbial diversity through standardized sampling.

**Cheng, Bingran;** Biddle, Jennifer F. Variations of archaeal communities in sediments of coastal Delaware.

**Song, Bongkeun;** Carini, Steve; Arfken, Ann; Lisa, Jessica; Duernberger, Kimberly; Tobias, Craig. Structural and functional adaptation of anammox and denitrifying communities to seawater intrusion in a tidal freshwater ecosystem.

**Nash, Jessica;** Ortmann, Alice; Jones, Jessica. *Vibrio cholerae* abundance and diversity is influenced by environmental factors in Mobile Bay, Alabama.

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#### **SCI-071P GEOLOGICAL AND BIOGEOCHEMICAL PROCESSES IN THE SEDIMENTS AND SOILS OF COASTAL WETLANDS (POSTERS).**

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**SCI-072P MANGROVE EXPANSION INTO SALT MARSH HABITATS: CAUSES AND CONSEQUENCES (POSTERS).**

**Osland, Michael J.;** Day, Richard H.; Enwright, Nicholas; Doyle, Thomas W.; Stagg, Camille L. Climate change and tidal wetland foundation species: thresholds, resilience, and alternative stable states in the northern Gulf of Mexico.

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**Martin, Rose M.;** Moseman-Valtierra, Serena M. Manipulative experiments test effects of invasive *Phragmites australis* and nitrogen enrichment on greenhouse gas fluxes.

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#### **SCI-077P ESTUARINE RESTORATION: SCIENCE AND POLICY (POSTERS).**

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**Wrathall, Carly;** Lundholm, Jeremy; van Proosdij, Danika. Assessment of primary productivity in the Windsor Salt Marsh.

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**SCI-078P POLICY AND MANAGEMENT OF COASTS AND ESTUARIES (POSTERS).**

**Zenha, Jose H.** The Tagus estuary case, Lisbon, Portugal.

**Ibanez, Atziri;** Migliori, Michael. NOAA's National Estuarine Research Reserves - Addressing management needs through civic science engagement.

**Haywood, Edward;** Khalil, Syed M.; Raynie, Richard C. Tools for managing sediment in Louisiana.

**Courtenay, Simon.** The Canadian Watershed Research Consortium: developing monitoring frameworks in support of cumulative effects assessment.

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**SCI-079P Socio-Economic Sciences for Coasts and Estuaries (POSTERS)**

**Freitag, Amy.** Ebb and flow: Defining rules of engagement for collaborative research in coastal water quality.