

**MONDAY, FEBRUARY 6, 2023**

**7:30 a.m. to 5:00 p.m.**

Crystal Promenade

**REGISTRATION CHECK-IN**

**7:30 a.m. to 5:00 p.m.**

Topaz

**SPEAKER READY ROOM**

**8:30 to 11:30 a.m.**

Emerald Salon One

**SPECIAL INTEREST MEETING: MAPPING COASTAL INUNDATION: KEEPING CURRENT WITH NEW DATA, TOOLS, AND TRENDS**

Emerald Salon Two

**SPECIAL INTEREST MEETING: HIGH-RESOLUTION LAND COVER 101: WHAT IS IT? WHERE IS IT? AND HOW DO YOU USE IT?**

**9:00 to 11:30 a.m.**

Emerald Salon Three

**SPECIAL INTEREST MEETING: MITIGATION PLANNING POLICY UPDATES AND HOW TO SUPPORT TRIBAL MITIGATION PLANNING**

**1:00 to 4:00 p.m.**

Emerald Salon One

**SPECIAL INTEREST MEETING: COASTAL FLOODING AND INUNDATION INFORMATION AND SERVICES AT CLIMATE TIMESCALES TO REDUCE RISK AND IMPROVE RESILIENCE**

Emerald Salon Two

**SPECIAL INTEREST MEETING: CMECS UPDATES AND APPLICATION: UNDERSTANDING DATA, TOOLS, TECHNICAL LIMITS, AND POSSIBILITIES**

Emerald Salon Three

**SPECIAL INTEREST MEETING: NEXT GEN TRIBAL ENGAGEMENT COMMUNITY OF PRACTICE**

**5:30 to 7:30 p.m.**

Crystal A, B, C

**EXHIBITOR RECEPTION**

**TUESDAY, FEBRUARY 7, 2023**

**7:30 a.m. to 5:00 p.m.**

Crystal Promenade

**REGISTRATION CHECK-IN**

**7:30 a.m. to 5:00 p.m.**

Topaz

**SPEAKER READY ROOM**

**8:00 a.m. to 3:00 p.m.**

Crystal A, B, C

**EXHIBITS**

**8:00 to 8:30 a.m.**

Crystal A, B, C

**COFFEE**

**8:30 to 10:00 a.m.**

Emerald Ballroom

**WELCOME AND KEYNOTE PLENARY: WHAT IS DATA-ENABLED TRIBAL NATION BUILDING AND WHY DOES IT MATTER?**

**Moderator**

**and ASFPM Welcome:** Chad Berginnis, Executive Director, Association of State Floodplain Managers (ASFPM)

**NOAA Welcome:** Zachary Penney, Ph.D., Senior Advisor on Fisheries and Tribal Engagement, NOAA

**Keynote Address:** James Rattling Leaf, Sr., Global Indigenous Consultant and Principal, Wolakota Lab, LLC

Tribal Nations require sound information to inform their governance, ensure the health and welfare of their citizens, and plan for an uncertain future. While this is true of all governments, Tribal leaders and managers face particular challenges in gaining access to, interpreting, utilizing, managing, and protecting data. Limited resources, fragmented and stove-piped federal programs supporting narrowly defined activities, lack of well-established and understood policies (Tribal and other) to protect the sovereignty of these data, and similar obstacles remain significant issues.

This presentation will discuss how Tribal worldviews challenge Western notions of relationality and ownership and how Tribes have been subject to the long history of extraction and exploitation. Also, the presentation will discuss how Indigenous data sovereignty derives from the inherent right of Native nations to govern their peoples, lands, and resources, which is acknowledged in treaties and other legal mechanisms negotiated on a nation-to-nation basis with settler-colonial governments.

**10:00 to 10:30 a.m.**

Crystal A, B, C

**BREAK**

**10:30 a.m. to Noon**

**CONCURRENT SESSIONS**

Opal

**BRINGING TRIBAL COMMUNITY PRIORITIES TO COASTAL MANAGEMENT**

**Coastal Geospatial Projects to Address Alaska’s Environmentally Threatened Community Needs**

Jacquelyn Overbeck, NOAA Office for Coastal Management

**Shinnecock’s Changing Peninsula: Protecting the Homeland**

Shavonne Smith, Shinnecock Tribe

**Bureau of Indian Affairs Geospatial Resources and Tribal Climate Needs**

David Vogt, Sara Hedrick, Timothy Suto, and Caroline Rouwalk, Bureau of Indian Affairs

Emerald Salon One

**COASTAL INUNDATION DATA AND MODELING**

**Flood Prediction and Inundation Mapping at Large Scales Using a Multidisciplinary Machine Learning Approach**

Chris Mack, Stantec Consulting Services

**Study Design: Coupling Engineering Modeling and GIS Analysis Tools to Forecast Future Coastal Hazards and Mitigation**

Erin Benford and Eric Kencel, AECOM

**Combing Multiple Surveying Techniques and Datasets to Construct an Integrated High-Resolution Topobathymetric Digital Elevation Model for Pu’uhonua O Hōnaunau National Historical Park in Hawaii**

Jeff Irwin, Jeff Danielson, Dean Gesch, and Monica Palaseanu-Lovejoy, U.S. Geological Survey

**Creating Employment Statistics in Inundation Zones to Analyze and Communicate Risk**

Ravi Chittilla, CSS at NOAA Office for Coastal Management

Emerald Salon Two

**OCEAN PLANNING**

**Modeling Protected Species Distribution and Habitats to Inform Siting and Management of Pioneering Ocean Industries**

Alyssa Randall, CSS at NOAA National Centers for Coastal Ocean Science; Nicholas Farmer and Jessica Powell, NOAA National Marine Fisheries Service; James Morris, NOAA National Centers for Coastal Ocean Science; Melissa Soldevilla, NOAA National Marine Fisheries Service; Lisa Wickliffe, Jonathan Jossart, Jonathan MacKay, and Gretchen Bath, CSS at NOAA National Centers for Coastal Ocean Science; Penny Ruvelas, Laura Gray, Jennifer Lee, Wendy Piniak, Lance Garrison, and Robert Hardy, NOAA National Marine Fisheries Service; Kristen Hart, U.S. Geological Survey; Chris Sasso, Lesley Stokes, and Kenneth Riley, NOAA National Marine Fisheries Service

**Spatial Modeling to Inform Wind Energy Siting in the Gulf of Mexico**

James Morris, NOAA National Centers for Coastal Ocean Science; Jessica Carlton, Rabiya Dar, Brian P. Free, Jonathan A. Jossart, Alyssa L. Randall, and Jennifer L. Wright, CSS at NOAA National Centers for Coastal Ocean Science

**A Precision Siting Modeling Approach to Inform Ocean Energy and Offshore Aquaculture Development**

Jonathan Jossart, Alyssa Randall, Jonathan MacKay, and Lisa Wickliffe, CSS at NOAA National Centers for Coastal Ocean Science; Kenneth Riley and James Morris, NOAA National Centers for Coastal Ocean Science

**Understanding Multiuse Conflicts in the Outer Continental Shelf Using the Marine Minerals Information System (MMIS)**

Alexa Ramirez, NV5 Geospatial; Kerby Dobbs and Lora Turner, BOEM

Emerald Salon Three

**MONITORING AND MAPPING HABITATS**

**The Next Wave in Coastal Mapping**

Mark Safran and Emily Klipp, Dewberry Engineers, Inc.

**Leveraging Nature-Based Climate Solutions and Emerging GeoTools: Blue Carbon Inventories, Maps, and More**

Adrian Laufer, Sea and Shore Solutions, LLC

**How Land Use and Land Cover Mapping Can Save Water**

Andrew Brenner, NV5 Geospatial; Jazmine Molloy, Eagle Aerial Solutions; Tim Marcella, Kelsey Watkins, and Chris Wiggins, NV5 Geospatial

**Updates to the Environmental Sensitivity Index (ESI) Datasets**

Nicolle Rutherford, Robb Wright, and Shane O’Neal, NOAA Office of Response and Restoration

**Noon to 1:30 p.m.**

Crystal A, B, C

**EXHIBITOR LUNCHEON**

**1:30 to 3:00 p.m.**

**CONCURRENT SESSIONS**

Opal

**STORM EVENT PREPARATION AND RESPONSE**

**Collaborative Tool Development to Support Alaska Native Communities: Application during Response to Typhoon Merbok**

Edward Plumb, NOAA National Weather Service; Richard Buzard, University of Alaska Fairbanks; Nicole Kinsman, Jonathan Christ, and Scott Berg, NOAA National Weather Service; Jaci Overbeck, NOAA Office for Coastal Management

**ESRI ArcGIS Field Map Mobile Applications for Typhoon Merbok High Water Mark Survey in Alaska**

Nathan Wardwell, JOA Surveys, LLC

**NOAA National Geodetic Survey’s Emergency Response: Hurricane Ian**

Maryellen Sault, Jason Woolard, Jon Sellars, and Mike Aslaksen, NOAA National Geodetic Survey

**Empowering Communities with Sensors and Data to Prepare for Future Floods**

Jamie Carter, NOAA Office for Coastal Management; Hannah Baranes, Gayle Bowness, and David Reidmiller, Gulf of Maine Research Institute; Brandon Raymond and Sheila Warren, U.S. Army Corps of Engineers; Peter Slovinsky, Maine Geological Survey; Kevin Deneault and Julie Rosenbach, City of South Portland; Sue Baker, Maine Floodplain Management Program

Emerald Salon One

**COASTAL INUNDATION DATA AND TOOLS**

**Coastal Inundation Information and Services at Climate Timescales**

Doug Marcy, William Brooks, Heidi Stiller, and Jamie Carter, NOAA Office for Coastal Management; William Sweet, NOAA National Ocean Service; Audra Luscher, NOAA

Center for Operational Oceanographic Products and Services; Mark Osler, NOAA  
National Ocean Service

**National Ocean Service Coastal Inundation Dashboard**

Paul Fanelli, NOAA Center for Operational Oceanographic Products and Services

**NOAA's Experimental Potential Coastal Flood Impact Mapping for Effective Decision-Making**

Matt Pendleton, Lynker at NOAA Office for Coastal Management; Laurie Hogan, NOAA  
National Weather Service; Doug Marcy, NOAA Office for Coastal Management

**Coastal Flood Analysis Using Global Mapper**

Amanda Lind and Jenna Nelson, Blue Marble Geographics

Emerald Salon Two

**SHORT AND SWEET: LOCAL APPLICATIONS OF GEOSPATIAL TECHNOLOGIES**

**How High is that Seawall?**

Robert Hauck, City of Charleston, South Carolina

**Tree Canopy and Heat in the City of Charleston**

Casey Conrad, City of Charleston, South Carolina

**Incorporating Equity and Climate Change Criteria into Maryland Land Protection**

Sabine Bailey, The Nature Conservancy and Maryland Department of Natural Resources

**Geospatial Technologies Supporting Natural and Cultural Heritage Tourism along the Great Lakes in Wisconsin**

David Hart, University of Wisconsin Sea Grant Institute

**Coastal Restoration Toolkit**

Elsa Schwartz, Restore America's Estuaries

**Developing Digital Twin Geovisualizations for Enhanced Communication of Flood Hazard Risk**

George McLeod, Old Dominion University; Keith VanGraafeiland, Esri; Yin-Hsuen Chen,  
Blake Steiner, and Chris Davis, Old Dominion University

**An Interactive Map Visualizing Decadal-Scale Changes to Coastal Dunes Across North Carolina**

Alexander Seymour and Kara Doran, U.S. Geological Survey

Emerald Salon Three

**CASE STUDIES OF LAND COVER DATA APPLICATIONS**

**High-Resolution Coastal Land Cover for the Nation, the Next Generation Now**

Nate Herold, NOAA Office for Coastal Management

**High-Resolution Land Cover for the Nation**

Brandon Palin, Ecopia AI

**An Online Tool to Assess the Health of Small Watersheds in Connecticut Using 1 Meter C-CAP Land Cover**

Chester Arnold and Qian Lei-Parent, University of Connecticut; Paul Stacey, Footprints in the Water, LLC; Emily Wilson, David Dickson, and Cary Chadwick, University of Connecticut

**Critical GIS Data for Habitat Restoration and Conservation Projects in the Great Lakes – Wisconsin’s One Map Project**

Jim Giglierano, Wisconsin Department of Administration

**3:00 to 4:30 p.m.**

Crystal D, E, F

**TOOLS SHOWCASE**

**Virginia’s Coastal Resilience Master Plan Web Explorer**

Brian Batten, Mat Mampara, Ravi Pavuluri, Seth Lawler, Siva Selvanathan, Eric King, and Alec Brazeau, Dewberry

**USGS Coastal Change Hazards Tools**

Kara Doran, Alexander Nereson, Emily Himmelstoss, and Andrea O’Neill, U.S. Geological Survey; Richard Snell, Cherokee Nation System Solutions contracted to the U.S. Geological Survey

**The Northeast Ocean Data Portal: Data and Maps for Ocean Planning**

Jenna Ducharme, RPS; Emily Shumchenia and Nicholas Napoli, Northeast Regional Ocean Council; Kelly Knee, Jeremy Fontenault, and Stephen Sontag, RPS; Peter Taylor, Waterview Consulting

**What’s Your Water Level**

Nicole Elko, American Shore and Beach Preservation Association; Brian Glazer, University of Hawai’i; Debra Hernandez, Southeast Coastal and Ocean Observing Regional Association

**Enabling Geospatial Analysis and 3D Visualization for Raw ADCIRC Files**

Jason Fleming, Seahorse Coastal Consulting

**FEMA Region 1 Coastal Erosion Hazard Map**

Carson Hauck and Marlee Newman, CDM Smith

**A Spatial Assessment of the NOAA National Water Level Observation Network**

Tigist Jima, Lynker at NOAA Center for Operational Oceanographic Products and Services; Laura Rear McLaughlin, Greg Dusek, Aisha Haynes, and Caiti Guerin, NOAA Center for Operational Oceanographic Products and Services

**High Tide Flooding Outlooks Get a Geospatial Facelift**

Analise Keeney, NOAA Center for Operational Oceanographic Products and Services

**New Methods to Understand Flood Risk and Build Equitable Community Resilience**

Shelly Klose, True Flood Risk, Inc.

**USGS Coastal Change Hazards Guided Discovery Hub**

Erika Lentz, Amanda Cravens, and Emily Himmelstoss, U.S. Geological Survey; Richard Snell, Cherokee Nation System Solutions contracted to the U.S. Geological Survey

**Strategic Conservation Assessment: A Geospatial Tool Suite for Land and Habitat Management in the Gulf of Mexico Coastal Region**

Yong (Ethan) Liang, Kristine Evans, and Sathish Samiappan, Mississippi State University; Amanda Sesser, Shannon Westlake, and Todd Hopkins, U.S. Fish and Wildlife Service; Anthony Collini, Mississippi State University

**AccessAIS – Delivering the Nation’s Data in the Cloud**

Ken Logsdon, Dewberry; Dave Stein, NOAA Office for Coastal Management; Jesse Brass, CSS at NOAA Office for Coastal Management

**Web Application for the New York State Flood Information Decision Support System**

Juan Martinez, Kytt MacManus, and Gregory Yetman, Columbia Climate School

**Nearshore Management Prioritization Tool and Web Map Application**

Brian McTeague, Squaxin Island Tribe’s Natural Resources Department

**U.S. Coastal Inundation Impacts Viewer**

Keith VanGraafeiland and Craig McCabe, Esri; George McLeod, Old Dominion University



**WEDNESDAY, FEBRUARY 8, 2023**

**7:30 a.m. to 5:00 p.m.**

Crystal Promenade

**REGISTRATION CHECK-IN**

**7:30 a.m. to 5:00 p.m.**

Topaz

**SPEAKER READY ROOM**

**8:00 a.m. to 3:00 p.m.**

Crystal A, B, C

**EXHIBITS**

**8:00 to 8:30 a.m.**

Crystal A, B, C

**COFFEE**

**8:30 to 10:00 a.m.**

Emerald Ballroom

**PLENARY PANEL: TRIBAL AND FEDERAL GOVERNMENT PARTNERSHIPS**

**Moderator:** Shavonne Smith, Director, Shinnecock Environmental Department, Shinnecock Tribe

**Panelists:**

Paul M. Scholz, Deputy Assistant Administrator for NOAA's Ocean Service and Coastal Zone Management

John Mosley, Pacific Regional Geospatial Coordinator, Bureau of Indian Affairs

Nicole Bartlett, North Atlantic Regional Coordinator, NOAA

Jacquelyn Overbeck, Alaska Regional Geospatial Coordinator, NOAA Office for Coastal Management

Tribes and indigenous people represent an important part of the coastal management community and the relationship between these citizens and the federal government is increasingly active and productive. NOAA and the Bureau of Indian Affairs are enhancing existing and forming new partnerships with these communities as they strive to manage coastal resources. Addressing the unique geospatial needs of these communities is an important part of the effort. This morning's plenary panel will discuss these topics and offer insights into challenges and opportunities for all of us to consider.

**10:00 to 10:30 a.m.**

Crystal A, B, C

**BREAK**

**10:30 a.m. to Noon**

**CONCURRENT SESSIONS**

Opal

**ENGAGING USERS IN DATA AND TOOL DEVELOPMENT**

**User Needs Assessment for Future Coastal Inundation Information and Tools**

Cayla Dean, Ocean Associates, Inc. at NOAA Center for Operational Oceanographic Products and Services; Brenna Sweetman, NOAA Office for Coastal Management

**Filling the Gaps in Alaska: Water Level Collaboration and Advancing VDatum**

Leslie Jones, Alaska Geospatial Office; Jacquelyn Overbeck, NOAA Office for Coastal Management

**Using Citizen Science to Track Coastal Trash**

Wes Shaw and Chris Rae, Blue Urchin, LLC

**Integrating and Expanding Community with ArcGIS Hub**

Drew Stephens, CPC, Inc.

Emerald Salon One

**PRIORITIZATION TOOLS FOR ASSESSING AND ENHANCING COASTAL RESILIENCE**

**Harnessing Energy on Alaska Coastal Mapping Initiatives to Support Resilience Coastal Communities**

Nadine Doiron, Alaska Geospatial Office

**The Alaska Coastal Mapping Strategy and a Supporting Case Study of NOAA's Coastal Mapping Program in Southeast Alaska**

Colin Cooper, NV5 Geospatial

**A Tool for Assisting Prioritization of Nature-based Coastal Resilience Projects in the Great Lakes**

Sue Hoegberg and Ashley Gordon, Dewberry; Lara O'Brien, Lynker at NOAA Office for Coastal Management; Jeff Gangai, Dewberry

**Digital+Analog: Advancing the South Atlantic Salt Marsh Initiative by Blending Digital Geotools with Participatory GIS Approaches to Create Comprehensive and Inclusive Geodata on Combined Human and Natural Coastal Systems**

Mike Wissner, Jessie Mandirola, and Lora Clarke, The Pew Charitable Trusts

Emerald Salon Two

**DATA PRODUCTS FOR MARINE SPATIAL PLANNING**

**Is There any Space Left in the Ocean? A National Exclusion Layer to Inform Siting of New Ocean Industries**

James Morris, NOAA National Centers for Coastal Ocean Science; Andrew Shamaskin, CSS at NOAA National Centers for Coastal Ocean Science; Karina Khazmutdinova, Axion Data Science; Robert Bochenek, Brian Stone, Trevor Golden, Kyle Wilcox, Adrienne Canino, Aidan Lewis, and Ken Bailey, NOAA

**Wave Climatology Summary Products from 30-year Wave Hindcast Model Data**

Jeremy Fontenault, Tayebah TajalliBakhsh, John Speers, and Matthew Bernardo, RPS; Daniel Martin, CSS at NOAA Office for Coastal Management; Dave Stein, NOAA Office for Coastal Management

**Regional Ocean Spatial Modeling for Siting Wind Energy: How NOAA is Supporting BOEM and Conserving NOAA Trust Resources**

James Morris, NOAA National Centers for Coastal Ocean Science; Jessica Carlton, Rabiya Dar, Brian P. Free, Jonathan A. Jossart, Alyssa L. Randall, and Jennifer L. Wright, CSS at National Centers for Coastal Ocean Science

**Development of Commercial Fishing Activity Data Products for the Northeast and Mid-Atlantic**

Jeremy Fontenault, RPS; Nick Napoli, Northeast Ocean Council

Emerald Salon Three

**EMERGING TECHNOLOGIES FOR ELEVATION DATA AND MODELING**

**The USGS 3D Elevation Program Next Generation**

Cindy Thatcher, U.S. Geological Survey

**Analysis Ready Elevation Data – USGS 3DEP and the National Map**

Rob Dollison and Jason Stoker, U.S. Geological Survey

**Coastal National Elevation Database – Enhanced Transitional Blending between Disparate Bathymetric and Nearshore Elevation Models**

W. Matthew Cushing and Dean Tyler, U.S. Geological Survey

**The USGS Coastal National Elevation Database: Integrated Topobathymetric Models and Applications for the U.S. Coastal Zone**

Jeffrey Danielson, Monica Palaseanu-Lovejoy, Dean Gesch, W. Matthew Cushing, Dean Tyler, and Jeffrey Irwin, U.S. Geological Survey

**Noon to 1:30 p.m.**

Crystal A, B, C

**NETWORKING LUNCHEON**

**1:30 to 3:00 p.m.**

**CONCURRENT SESSIONS**

Opal

**THE NEW BLUE ECONOMY: APPLICATION OF OCEAN AND COASTAL DATA AND TECHNOLOGY ACROSS SECTORS TO SUPPORT DECISION-MAKING – A PANEL DISCUSSION**

Moderator: Paul M. Scholz, Deputy Assistant Administrator for NOAA's Ocean Service and Coastal Zone Management

Panelists: Debra Hernandez, Director, Southeast Coastal Ocean Observing Regional Association  
Gerhard Kuska, Director, Mid-Atlantic Regional Association Coastal Ocean Observing System  
Carl Gouldman, Director, NOAA Integrated Ocean Observing System

Emerald Salon One

**ASSESSING COASTAL INUNDATION IMPACTS**

**Assessing Sea Level Rise Vulnerabilities**

Keith VanGraafeiland and Craig McCabe, Esri; George McLeod, Old Dominion University

**A Bluff Erosion Potential Index for the Pennsylvania Lake Erie Coast**

Sean Rafferty, Pennsylvania Sea Grant College Program; Anthony Foyle and Mike Naber, Penn State Behrend

**Sea Level rise in the South Salish Sea Story Map**

Brian McTeague, Squaxin Island Tribe

**Real Time Model Guidance and Decision Support for Coastal inundation**

Jason Fleming, Seahorse Coastal Consulting

Emerald Salon Two

**SHORT AND SWEET: DATA AND VISUALIZATIONS FOR COASTAL MANAGEMENT**

**JALBTCX Quick Response Toolbox**

Ashley Elkins, US Army Corps of Engineers

**Coastal Habitat Evolution and Sedimentation Measured with Historic Lidar and Aerial Imagery in Port Royal Sound, Beaufort County, South Carolina**

Keil Schmid, Geoscience Consultants, LLC

**LiDAR Shoreline Extraction for Coastal Management Applications**

Claire Babineau, Joby Czarnecki, and John Cartwright, Mississippi State University

**Accelerated Conservation and Restoration through Multi-Objective Targeting**

John Wolf, Scott Phillips, and Ken Hyer, U.S. Geological Survey

**A Geospatial Tool to Identify and Classify the Impacts of Sea Level Rise on Transportation Networks**

Kate Grala and John Cartwright, Mississippi State University

**GeoVisualization for Coastal Inundation**

John Cartwright, John van der Zwaag, and Kate Grala, Mississippi State University

**Visualizing the Impacts of Sea Level Rise in 3D**

Craig McCabe and Keith VanGraafeiland, Esri; George McLeod, Old Dominion University

Emerald Salon Three

**EMERGING TECHNOLOGIES FOR REAL-TIME DATA APPLICATIONS**

**Importance of Near Real-Time Data Processing for Topo-bathymetric Lidar Operations**

Karen Hart and Nathan Hopper, Woolpert

**Real Time Flood Forecasting**

Brian Mayfield and Mark Topping, WGI Geospatial

**Applying Technology to Inform Drivers of Flooded Roads in Real-Time**

Mark Slauter, FloodMapp; Kyle Spence, City of Norfolk, Virginia

**“Will Flooding Impact me Today?” TIDEeye Can Help!**

Robert Hauck, City of Charleston

**3:00 to 4:30 p.m.**

Crystal D, E, F

**TOOLS SHOWCASE**

**OceansMap: A Data Ecosystem Supporting Collaboration and Decision-Making**

Jenna Ducharme and Kelly Knee, RPS

**Disaster Management and Visualization of Spatial Data: USGS Event Support Maps and Multi-agency High Water Mark Planning Dashboard**

Xan Fredericks, Lance Clampitt, Chris Cretini, Eliza Gross, and Cyndi Rachol, U.S. Geological Survey

**Using ArcGIS GeoPlanner to Visualize the Cumulative Impact of Green Stormwater Infrastructure**

David Hart and Scott McComb, University of Wisconsin Sea Grant Institute; Gabriel Wilkins, University of Wisconsin-Madison

**Indigenous Communities in the Coastal Realm**

Brandon Krumwiede, NOAA Office for Coastal Management

**Forerunner: Resilience through Smarter Floodplain Management**

Susanna Pho and Owen MacNeill, Forerunner

**QNSPECT: A QGIS Plugin to Estimate Nonpoint Source Pollution and Erosion over a Watershed and Compare Land-Use and Climate Change Impacts on Pollution and Erosion**

Abdul Raheem Siddiqui, Ian Todd, and James Parker, Dewberry

**BOEM's Enhanced ESPIS**

Alexa Ramirez, NV5 Geospatial; Jonathan Blythe, BOEM ESP

**Tools and Visualizations for Assessing and Communicating Sea Level Rise and Coastal Flood Risk**

Dan Rizza and Kelly Van Baalen, Climate Central

**Adapting Stormwater Management for Coastal Floods**

Brenna Sweetman, NOAA Office for Coastal Management

**GeoCoast Tools**

John van der Zwaag and John Cartwright, Mississippi State University

**Demonstration of the NWS Eastern Region Coastal Flood Webpage with Potential Coastal Flood Extent Overlays**

Nelson Vaz, Jeff Orrock, Laurie Hogan, Donald Dumont, James Notchey, Chris Birchfield, and Kirk Lombardy, NOAA National Weather Service

**The Mid-Atlantic Ocean Data Portal**

Avalon Bristow and Nick Napoli, MARCO; Karl Vilacoba and Tony MacDonald, Monmouth University Urban Coast Institute; John Bognar, Richard Lathrop, and Jim Trimble, Rutgers University Center for Remote Sensing and Spatial Analysis (CRSSA); Ryan Hodges, Ecotrust; Corrie Curtice, Duke University Marine Geospatial Ecology Lab; Jeff Herter, New York State Department of State

**U.S. Interagency Elevation Inventory**

Kirk Waters, NOAA Office for Coastal Management; Rebecca Mataosky, CSS at NOAA  
Office for Coastal Management

**7:00 to 10:00 p.m.**

Joseph P. Riley, Jr. Ballpark, 360 Fishburne Street

**SPONSOR RECEPTION**

**THURSDAY, FEBRUARY 9, 2023**

**8:00 a.m. to 12:30 p.m.**

Crystal Promenade

**EVALUATION COMPLETION AND TOWEL PICK-UP**

**8:00 to 11:00 a.m.**

Topaz

**SPEAKER READY ROOM**

**8:30 to 9:00 a.m.**

Crystal Promenade

**COFFEE**

**9:00 to 10:30 a.m.**

**CONCURRENT SESSIONS**

Crystal AB

**PREPARING FOR INUNDATION IN COASTAL VIRGINIA**

**Harnessing Data to Create a Call for Action for Virginia's Coastal Master Plan**

Brian Batten, Johanna Greenspan-Johnston, Seth Lawler, Mat Mampara, Alex Brazeau, Eric King, Ravi Pavuluri, Alaurah Moss, Joel Plummer, and Jeff Gangai, Dewberry

**Highs and Lows of Low-Relief Coastal Inundation: Hydro-correction, Topobathy Models, and Hypsometry in Hampton Roads, Virginia**

Thomas Allen, George McLeod, and Yin-Hsuen Chen, Old Dominion University

**Resilient Design Guidelines for Hampton Roads**

Benjamin McFarlane, Hampton Roads Planning District Commission

**Estimating the Economic Impact of Sea Level Rise in Coastal Virginia, a GIS-Based Approach**

George McLeod and Yin-Hsuen Chen, Old Dominion University

Crystal C

**SHORT AND SWEET: MODELING AND MAPPING IN THE COASTAL ZONE**

**Continuously-Updated Digital Elevation Models to Support Coastal Inundation Modeling**

Christopher Amante, Matthew Love, Kelly Carignan, Michael MacFerrin, Elliot Lim, and Kelly Stroker, NOAA National Centers for Environmental Information

**Building the United States National Bathymetry**

Katrina Wyllie, Glen Rice, and Kyle Ward, NOAA Office of Coast Survey; Phuntsok Geleg, Lynker at NOAA Office of Coast Survey; Casiano Koprowski, SFI; Barry Gallagher and



Miya Pavlock, NOAA Office of Coast Survey; Bill Shi, Lynker at NOAA Office of Coast Survey; Kurt Brown, NOAA Office of Coast Survey

**Coastal Mapping with PlanetScope Data**

Corbin Kling, Katie Salvaggio, and Erik Friesen, Planet Federal

**Database of Topo-bathy Cross-shore Profiles and Characteristics for the U.S. Atlantic and Gulf of Mexico Sandy Coastlines**

Rangley Mickey and Davina Passeri, U.S. Geological Survey

**A GIS Database for Wastewater Facilities and Outfalls to Support Ocean Planning**

Tara Franey and Jeremy Fontenault, RPS; Daniel Martin, CSS at NOAA Office for Coastal Management; Lisa Wickliffe, CSS at NOAA National Centers for Coastal Ocean Science

**Potomac River 2 Topo/Bathymetric Non-tidal Lidar Collection**

Roger Barlow, Jeff Danielson, and John Young, U.S. Geological Survey

**Space-Based Coastal Profiling**

Kyle Goodrich, TCarta Marine LLC

Crystal D

**ASSESSMENT TOOLS FOR PREDICTING INFRASTRUCTURE IMPACTS FROM FLOODING**

**FIMAN-T Surge: Predictive Statewide Coastal Inundation Mapping for Road Networks**

Matthew Dudley, ESP Associates, Inc.; Kurt Golembesky, North Carolina Department of Transportation

**A Tool for Probabilistic Assessment of Damage to Residential Structures from Coastal Erosion**

Jeff Gangai and Joel Plummer, Dewberry; Lauren Schmied and Betsy Hicks, FEMA

**Resiliency, Climate Change, and Sea Level Rise: Success Stories from the U.S. Navy's Naval Facilities Engineering Systems Command**

Paul Braun, Axim Geospatial

**Geiger-Mode Lidar Capabilities and How it Can Help Predict Infrastructure Impacts from Flooding**

Matthew Falter, VeriDaaS Corporation

**10:30 to 11:00 a.m.**

Crystal Promenade

**BREAK**

11:00 a.m. to 12:30 p.m.

**CONCURRENT SESSIONS**

Crystal AB

**DATA AND TOOLS FOR ASSESSING COASTAL RESILIENCY**

**Coastal Change Likelihood – A Synthesis of Factors that Drive Future Coastal Change**

Travis Sterne, Elizabeth Pendleton, Erika Lentz, and Rachel Henderson, U.S. Geological Survey

**A Geospatial Coastal Resilience Assessment for the United States**

Greg Dobson, Ian Johnson, and Jessica Orlando, University of North Carolina Asheville's NEMAC; Kristen Byler, National Fish and Wildlife Foundation; Bridget Lussier, Lynker at NOAA Office for Coastal Management

**The Community Resilience Guide: A Resource for Reducing Repetitive Flood Losses and Enhancing Coastal Resilience**

Eleanor Rappolee, Association of State Floodplain Managers

**Evaluating Socioeconomic Indicators for Coastal Resilience**

Brenna Sweetman, Kate Quigley, and Chris Ellis, NOAA Office for Coastal Management

Crystal C

**MARINE SPATIAL PLANNING DECISION-SUPPORT TOOLS**

**Development and Application of Advanced Decision Support Tools for Coastal Sand Resources: A Case Study from Bogue Banks, North Carolina**

Lisa Wickliffe, Hannajane Prichett, Ashley Reade, Alexa Ramirez, Kurt Baker, Rudi Rudolph, Dave Bernstein, Chris Freeman, and Cherie Jarvis, NV5 Geospatial

**Southeast Marine Mapping Tool: Increasing Access to Regional Ecological Data to Help Inform Offshore Ocean Use Decisions**

Marta Ribera, Mary Conley, Erik Martin, and Mark Anderson, The Nature Conservancy

**Alabama Offshore Sediment Resources Inventory**

David Tidwell and Stephen Jones, Geological Survey of Alabama

**Who Should I Talk To? The West Coast Blue Pages Tool and Better Ocean Planning**

John Hansen, West Coast Ocean Alliance

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**GEOSPATIAL TOOL USE CASES**

**The Sea Level Rise Planning Guide: Fostering Local Capacity for Sea Level Rise Adaptation Planning on the Oregon Coast**

Carl Hendrickson, Meg Reed, Christine Shirley, and Tanya Haddad, Oregon Department of Land Conservation and Development

**QNSPECT: The Next Generation Nonpoint Source Pollution and Erosion Comparison Tool**

Shan Burkhalter, Lynker at NOAA Office for Coastal Management; Jamie Carter, NOAA Office for Coastal Management

**Efficiency in Realtime GIS Project Management Tools**

Dave Neff, Woolpert

**Linking NOAA Line Office through Web-based Geo Application Code**

Jay Coady, NOAA Office of Response and Restoration; Kari Sheets and Nipa Parikh, NOAA National Weather Service; Robb Wright, NOAA Office of Response and Restoration

Crystal EF

**HABITAT CONSERVATION USING IMAGERY ANALYSIS**

**Remote Sensing Applications to Support Large-Scale Riverine and Floodplain Assessment and Monitoring**

Mischa Hey, NV5 Geospatial

**High-Altitude Topographic and Bathymetric Lidar Sensor Field Test Plan and Results**

Nathan Hopper, Woolpert

**Using Hyperspectral Remote Sensing for Manoomin (Wild Rice) Habitat Mapping and Restoration in the Great Lakes**

Lara O'Brien, Lynker at NOAA Office for Coastal Management; Brandon Krumwiede, NOAA Office for Coastal Management