



Minimizing Georgia's Risk,
Maximizing Georgia's Future
Climate Conference

August 12-13, 2021
Jekyll Island, Georgia

Made with
Recycled Paper



CoastalGaDNR.org



August 12, 2021



COASTAL RESOURCES DIVISION
ONE CONSERVATION WAY • BRUNSWICK, GA 31520 • 912.264.7218
COASTALGADNR.ORG

MARK WILLIAMS
COMMISSIONER

DOUG HAYMANS
DIRECTOR

Hello and welcome to coastal Georgia, a place of unique beauty, rich cultural heritage, and abundant natural resources. Our beaches are unspoiled treasures whose visitors provide substantial economic impact to local communities. Our lush marshes are some of the most productive and diverse ecosystems on earth, performing invaluable ecological services. And numerous tabby ruins offer a glimpse into our history.

We are pleased to host the “GEORGIA CLIMATE CONFERENCE 2021, MINIMIZING GEORGIA'S RISK, MAXIMIZING GEORGIA'S FUTURE.” We hope it will provide a forum for effective information exchange and perhaps strengthen partnerships or maybe create new ones so that we can all maximize limited fiscal and human resources.

Climate change is arguably the greatest environmental challenge of our time and requires an immediate reduction in vulnerability to changing weather patterns. Sea level rise is occurring at an alarming rate and Georgia's coast, due to its topography and location within the South Atlantic Bight, will be among the first to feel its effects. Through focused research, community engagement, and on-the-ground infrastructure modification, the Department of Natural Resources and partners are working to make Georgia resilient to the predicted effects of a changing climate. This conference is but a piece of a much larger puzzle, that when solved, will benefit not only ourselves, but many generations into the future.

While attending the conference, we hope you find some time to relax and see Jekyll Island: visit the Mosaic, St. Andrews Park, the Sea Turtle Center, the Clam Creek fishing pier, Summer Waves or perhaps Driftwood Beach, where you will get a good look at what remains of the Golden Isles' near-miss, the capsized *M/V Golden Ray*. Crews are working hard to limit its impact and safely remove the wreck by the end of 2021. It makes for good dinner conversation. And it goes without saying, thank you for attending.

The DNR Coastal Resources Division's mission is to balance coastal development and protection of the coast's natural assets, socio-cultural heritage, and recreational resources for the benefit of present and future generations.

Sincerely,

Doug Haymans

Director, Coastal Resources Division



Planning Committee & Session Moderators

This conference would not be possible without the expertise and contributions of the following team:

Jill Andrews - GADNR CRD
Jaynie Gaskin - GADNR CRD
Kelly Hill - GADNR CRD
Jennifer Kline - GADNR CRD
Kathy Knowlton - GADNR CRD
Jan Mackinnon - GADNR CRD
Colby Pepper - GADNR CRD
Beth Tasciotti - GADNR CRD
Cate Williams - GADNR CRD
Eamonn Leonard - GADNR WRD
Doug Samson - GADNR WRD
Jacob Thompson - GADNR WRD
Meghan Angelina - GADNR CRD/GA Sea Grant
Lindy Betzhold - NOAA OCM
John McCombs - NOAA OCM
Ashby Nix Worley - The Nature Conservancy
Ben Carswell - Jekyll Island Authority
Kevin Smith - Thomas & Hutton
Jennifer Roach - Thomas & Hutton
Charles McMillan - Georgia Conservancy

Katherine Moore - Georgia Conservancy
Clark Alexander, PhD - University of Georgia
Blair Beasley - Drawdown Georgia
Jill Gambill - University of Georgia
Shana Jones - University of Georgia
Courtney Reich - Goodwyn Mills Cawood
Scott Pippin - University of Georgia
Rachel Usher - Georgia Climate Project
Daniel Rochberg - Georgia Climate Project
Nick Johnson - Georgia Conservancy
Stella Kim - GA Emergency Management Agency
Chandra Farley - Partnership for Southern Equity
Marilyn Brown - Georgia Institute of Technology
David Eady - Georgia Institute of Technology
Tony Giarrusso - Georgia Institute of Technology
Christi Lambert - The Nature Conservancy
Jessica Warren - University of Georgia
Marshall Shepherd, PhD - University of Georgia
Jennette Gayer - Environment Georgia
Mark McClellan - Georgia Forestry Commission

Agenda Key

Title - Room (Moderator)

 Agriculture & Forestry	 GIS	 Private Partnerships
 Business & Industry	 Habitat & Impacted Species	 Health
 Communications	 Invasive Species	 Research
 Drawdown Georgia	 Law & Policy	 Resiliency & Adaptation
 Education	 Living Shorelines	 State Efforts
 Emergency Preparedness	 Local Government	 Utilities
 Equity & Inclusion	 Marine Fisheries	 Weather & Climate
	 Media	

Minimize Georgia's Risk, Maximizing Georgia's Future

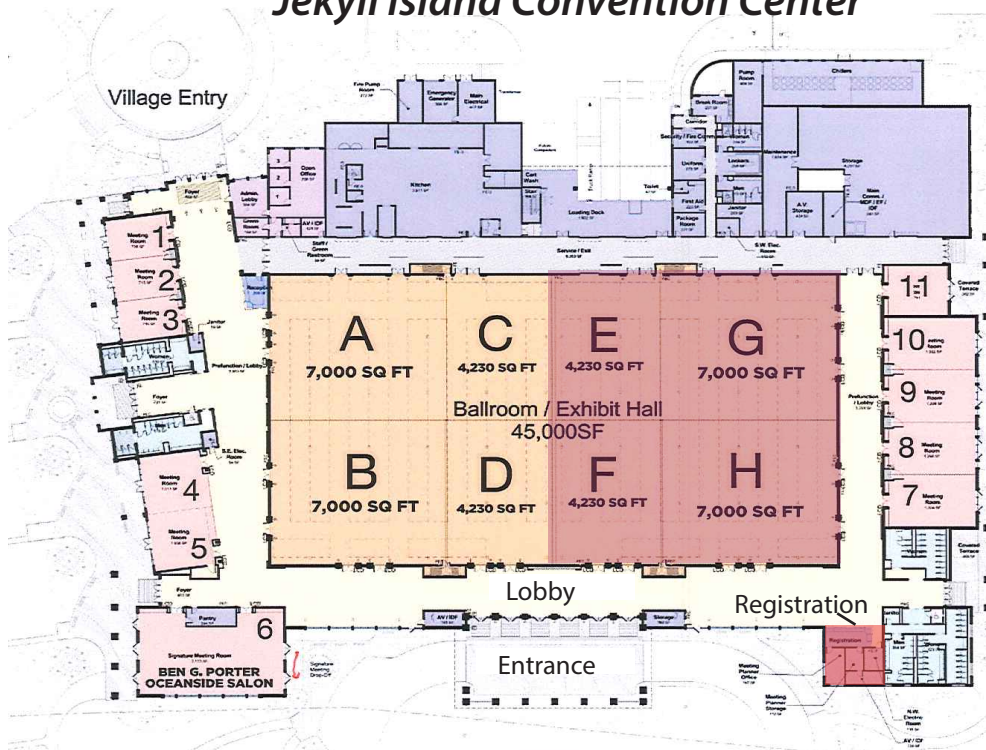
Climate Conference Agenda Summary

Thursday
August 12, 2021

Friday
August 13, 2021

Time	Event	Location
7:30am - 8:30am	Registration	Registration Desk
8:30am - 9:00am	Welcome Address	Ballroom E-H
9:10am - 10:40am	Concurrent Session 1	See Concurrent Session 1
10:40am - 11:00am	Networking Break	Lobby
11:00am - 12:30pm	Concurrent Session 2	See Concurrent Session 2
12:30pm - 2:00pm	Keynote Luncheon	Ballroom E-H
2:00pm - 3:30pm	Concurrent Session 3	See Concurrent Session 3
3:30pm - 4:00pm	Networking Break	Lobby
4:00pm - 5:30pm	Concurrent Session 4	See Concurrent Session 4
5:30pm - 9:00pm	Poster Session	Lobby
Time	Event	Location
8:00am - 8:30am	Welcome Address	Ballroom E-H
8:30am - 10:00am	Concurrent Session 5	See Concurrent Session 5
10:00am - 10:30am	Networking Break	Lobby
10:30am - 12:00pm	Concurrent Session 6	See Concurrent Session 6
12:00pm - 1:30pm	Keynote Luncheon	Ballroom E-H
1:30pm - 3:00pm	Concurrent Session 7	See Concurrent Session 7
3:00pm - 4:30pm	Conference Synthesis	Ballroom E-H

Jekyll Island Convention Center








Atlantic Ocean

Beachview Drive








Thursday - August 12, 2021






Concurrent Session 1

	Marine Fisheries I	Room 4/5
	Local Government I	Room 7-10
	GIS I	Oceanside Salon
	Resiliency & Adaptation	Ballroom A
	Equity & Inclusion	Ballroom B





Concurrent Session 2

	Marine Fisheries II	Room 4/5
	Local Government II	Room 7-10
	GIS II	Oceanside Salon
	Drawdown Georgia	Ballroom A
	Emergency Preparedness	Ballroom B

Concurrent Session 3

	Marine Fisheries III	Room 4/5
	Local Government III	Room 7-10
	Communications	Oceanside Salon
	Utilities	Ballroom A
	Media	Ballroom B

Concurrent Session 4






	Local Government IV	Room 7-10
	Habitat & Impacted Species	Ballroom A
	Education	Ballroom B
	GIS Tools Café	Ballroom C/D

Friday - August 13, 2021






Concurrent Session 5

	Agriculture & Forestry	Room 4/5
	Research I	Room 7-10
	Private Partnerships	Oceanside Salon
	States Efforts I	Ballroom A
	Business & Industry	Ballroom B

Concurrent Session 6

	Living Shorelines	Room 4/5
	Local Government V	Room 7-10
	Invasive Species	Oceanside Salon
	States Efforts II	Ballroom A
	Law & Policy I	Ballroom B

Concurrent Session 7

	Research II	Room 4/5
	GIS III	Room 7-10
	Health	Oceanside Salon
	Weather & Climate	Ballroom A
	Law & Policy II	Ballroom B

Continuing Education Units

The 2021 Climate Conference is providing continuing education units (CEUs):

- **Certified Planners** with the American Planning Association (APA) will receive 1.5 credits per individual session attended.
- **Certified Floodplain Managers (CFM)** with the Association of State Floodplain Managers (ASFPM) will receive 10.5 credits for attending the entire conference. FM's must obtain a certificate of completion and the self-reporting form from the registration desk.
- **Attorneys** with the Georgia Bar Association (GBA) will receive 3 credits for attending the entire conference. Please check in at the registration desk to ensure the conference host submits your name appropriately to the GBA.
- **Professional Engineers (PE)** will self-report the total attending hours to the Georgia Secretary of State. Please obtain your certificate of completion at the registration desk.

Minimizing Georgia's Risk, Maximizing Georgia's Future

Climate Conference Agenda

Thursday, August 12, 2021

Concurrent Session #1 – 9:10am - 10:40am



Marine Fisheries I – Room 4/5 (Kathy Knowlton)

Climate effects on oysters may be subtle and indirect: temperature and its role on oyster disease and juvenile mortality – **Jeb Byers, PhD**, University of Georgia

White shrimp in a changing climate – **Mike Kendrick, PhD**, South Carolina Dept. of Natural Resources

The benthic fish community of Gray's Reef National Marine Sanctuary and recent examples of tropicalization – **Roldan Muñoz, PhD**, NOAA Fisheries



Local Government I: Resilience Initiatives– Room 7-10 (Kelly Hill)

Glynn County Shoreline Protection Plan: A Shoreline Assessment and Sea Level Rise Response and Implementation Plan – **Robert Brown, PhD**, Goodwyn Mills Cawood

Tybee Island's Resilience Initiatives: Taking an Integrative Approach to Climate Change – **Shawn Gillen, PhD**, City of Tybee Island

Coastal Incentive Grants and Other Municipal Funding Opportunities – **Garrow Alberson**, City of Brunswick



Local & Regional GIS Efforts – Oceanside Salon (Tony Giarrusso, Colby Pepper)

Identifying Resilient Coastal Sites for Conservation in the South Atlantic: Georgia Focus – **Analie Barnett**, The Nature Conservancy

Sea Level Sensors on the Georgia Coast – **Kim Cobb, PhD**, and **Russell Clark, PhD**, Georgia Institute of Technology

Georgia Now and Forever Land Cover Project – **Nick Johnson**, Georgia Conservancy and **Tony Giarrusso**, Georgia Institute of Technology



Resiliency & Adaptation – Ballroom A (Ashby Nix Worley)

Supporting Resilient Shorelines through Regional Sediment Management – **Clay McCoy**, U.S. Army Corps of Engineers

Engineering With Nature: Overview and Example Projects – **Jeffrey K. King, PhD**, U.S. Army Corps of Engineers

Resilient Coastal Forests of Georgia – **Matthew Lee**, Green Infrastructure Center

Adaptation Strategies in Georgia's Coastal National Parks – **Rebecca Beavers**, National Park Service/Climate Change Response Program

Implementing Community-Driven Adaptation Strategies – **Megan DeRosiers**, One Hundred Miles



Minimizing Georgia's Risk, Maximizing Georgia's Future

Climate Conference Agenda

Thursday, August 12, 2021

Concurrent Session #1 – continued



Climate Equity & Inclusion Panel – Ballroom B (Chandra Farley)

Bless Dupeh, Georgia Southern University

Chandra Farley, Partnership for Southern Equity

Felicia Davis, HBCU Green Fund/BWR

Mildred McClain, PhD, Harambee House/Citizens for Env. Justice

Fatemeh Shafiei, Spelman College

Na'Taki Osborne Jelks, Spelman College

Lindsay Harper, Arm in Arm

Concurrent Session #2 – 11:00am - 12:30pm



Marine Fisheries II – Room 4/5 (Kathy Knowlton)

Assessing the vulnerability of marine finfish and invertebrate species to climate change in the southeastern U. S. – **Michael L. Burton**, NOAA Fisheries

Into the Anthropocene: why Natural Resource Agencies must adapt to changing conditions – **Bob Glazer**, Florida Fish and Wildlife Conservation Commission

Movements of blacknose, finetooth, and sharpnose sharks in the US South Atlantic: establishing migration benchmarks to assess future climate impacts. – **Bonnie Ahr**, Herndon Solutions Group, LLC



Local Government II: Planning for Sea Level Rise – Room 7-10 (Kelly Hill)

Septic Systems and Sea Level Rise: A Modeling Approach and its Management Implications to Assess Septic Systems Vulnerability in Coastal Georgia – **Nahal Hoghooghi**, University of Georgia

Chatham County Sea Level Rise Study – **Courtney Reich**, Goodwyn Mills Cawood, **Jason Evans, PhD**, Stetson University and **Michael Blakely**, Chatham County

Camden County 'Rise Ready' Coastal Resilience Project – **Scott Brazell**, Camden County



National Efforts Utilizing GIS – Oceanside Salon (Colby Pepper)

NOAA's Digital Coast: More than Just Data – **Doug Marcy**, NOAA Digital Coast

Communicating Sea Level Rise and Coastal Flood Risk with Online Tools and Visualizations – **Dan Rizza** and **Kelly Van Baalen**, Climate Central

The National Spatial Reference System Modernization – **Scott Lokken**, NOAA National Geodetic Survey

Thank you to our sponsors:



Marine Extension and
Georgia Sea Grant
UNIVERSITY OF GEORGIA



Institute for Resilient
Infrastructure Systems
UNIVERSITY OF GEORGIA

Minimizing Georgia's Risk, Maximizing Georgia's Future

Climate Conference Agenda

Thursday, August 12, 2021

Concurrent Session #2 – continued



Drawdown Georgia – Ballroom A (Marilyn Brown)

Overview of the Drawdown Georgia Goals and Research Agenda – Marilyn Brown, Georgia Institute of Technology

Drawdown Georgia for Congregations – Codi Norred, Georgia Interfaith Power and Light

Beyond Carbon: Advancing Racial Equity for a more Sustainable Georgia – Nathaniel Smith, Partnership for Southern Equity

White Oak Pastures: Radically Traditional Farming – Jenni Harris, White Oak Pastures



Emergency Preparedness – Ballroom B (Stella Kim)

Our future State: GEMA/HS Natural Hazard Mitigation Investment – Jack Krolkowski, Georgia Emergency Management Agency / Homeland Security

The future impacts to Georgia's coastline from Floods and Hurricanes within a Changing Environment – Shane Hubbard, PhD, University of Wisconsin

Catalyzing Resilient Recovery– April Geruso, Hagerty Consulting

Concurrent Session #3 – 2:00pm - 3:30pm



Marine Fisheries III – Room 4/5 (Kathy Knowlton)

The impacts of a changing climate on cobia – Dan Crear, PhD, National Marine Fisheries Service

Changes in fish distributions and migrations in response to warming winter temperatures – Phil Stevens, PhD, Florida Fish and Wildlife Conservation Commission

Signs of range expansion for some subtropical estuarine sportfishes along the southeastern US Atlantic coast – Matt Kimball, PhD, University of South Carolina



Local Government III: Partnerships for Resiliency – Room 7-10 (Kelly Hill)

Making the Case and Building the Base: Advancing Resilience in Broward County, Florida – Jennifer L. Jurado, PhD, Broward County, FL

A Private Sector Perspective on Resilience Networks – David Johnston, Hamilton Advisors, LLC

Building a Coastal Empire Resilience Network (CERN) – Jackie L. Jackson, Chatham County–Savannah Metropolitan Planning Commission and Shana Jones, University of Georgia



Minimizing Georgia's Risk, Maximizing Georgia's Future

Climate Conference Agenda

Thursday, August 12, 2021

Concurrent Session #3 – continued

The Changing Climate of Climate Communications Panel – Oceanside Salon (Ashby Nix Worley)

Chelsea Sawyer, Chatham Emergency Management Agency

Rachel Usher, Georgia Climate Project

Jill Gambill, University of Georgia Marine Extension/GA Sea Grant

Corina Newsome, Georgia Audubon



Reducing Carbon Emmissions in GA's Energy Sector – Ballroom A (Blair Beasley)

Southern Company Research and Development: A Path to Net Zero – **John Northington**, Southern Company

Georgia's EMCs: Strides Toward Carbon Reduction – **Jeff Pratt**, Green Power EMC

Fueling a Sustainable Future: Natural Gas Decarbonation Oppurtunities– **Joanna Mello**, Southern Company Gas/Atlanta Gas Light



Media & Climate Change Scientists: Building Better Relationships Panel – Ballroom B (Tyler Jones)

Emily Jones, Georgia Public Broadcasting

Jim Bruggers, Inside Climate News

Mark Johnson, University of Georgia

Marshall Shepherd, PhD, University of Georgia

Concurrent Session #4 – 4:00pm - 5:30pm



Local Government IV: Unique Approaches to Resiliency – Room 7-10 (Kelly Hill)

Enhancing Coastal Resilience with Green Infrastructure: Guidance, Model Ordinances, and Tools– **Shana Jones** and **Scott Pippin**, University of Georgia

Local Government Sustainability Initiatives – **Andrew Saunders**, Athens-Clarke County

Green Infrastructure Jobs– **Nick Deffley**, City of Savannah and **Jill Gambill**, University of Georgia Marine Extension/GA Sea Grant



Habitat & Impacted Species – Ballroom A (Jacob Thompson, Jaynie Gaskin)

Long-term change in Georgia marshes – **Merryl Alber, PhD**, University of Georgia and Georgia Coastal Ecosystems Long Term Ecological Research Network (LTER)

Prioritization of vulnerable species under climate and land use change in Georgia's coastal plain – **Nate Nibblelink, PhD**, University of Georgia

More than wind or waves: Hurricanes impact on ocean chemistry – **Scott Noakes, PhD**, University of Georgia

How much is too much? Interactive effects of global climate change stressors on a habitat-forming temperate coral – **Danny Gleason, PhD**, Georgia Southern University

Minimizing Georgia's Risk, Maximizing Georgia's Future

Climate Conference Agenda

Thursday, August 12, 2021

Concurrent Session #4 – continued



Education – Ballroom B (Cate Williams)

Stormwater Education: Knowing Flood Hazards from Land and Sea – **Angela Bliss, PhD**, Chatham County Department of Engineering

Improving and understanding flood hazard communication in Coastal Georgia – **Meghan Angelina**, GADNR Coastal Resources Division/GA Sea Grant

Teaching Place-Based Climate Change Phenomena – **Robin McLachlan, PhD**, College of Coastal Georgia



Tools Cafe – Ballroom C/D (Colby Pepper) *Tools Cafe will remain open until 6:00 pm

The Georgia Low Impact Solar Siting Tool – **Amy Gutierrez**, The Nature Conservancy

Georgia Wetlands Restoration Access Portal – **Tony Giarrusso**, Georgia Institute of Technology

Camden County "Rise Ready" Web Tools – **Ashby Nix Worley**, The Nature Conservancy

The Georgia Coastal Hazards Portal – **Clark Alexander, PhD**, University of Georgia

Enhancing Coastal Resiliency with Green Infrastructure – **Shane Hubbard, PhD**, University of Wisconsin

En-ROADS Climate Change Policy Simulation Model – **Laura Iyer**, En-ROADS

Environmental Quality Report Widget & Web App for Developments of Regional Impact in Coastal Georgia – **Megan Hunnicutt & Heather Cummings**, Coastal Regional Commission

Sea Level Rise Sensors on the Georgia Coast – **Kim Cobb, PhD**, and **Russell Clark, PhD**, Georgia Institute of Technology

Georgia Now and Forever Land Cover Project – **Nick Johnson**, Georgia Conservancy

Poster Session – 5:30pm - 9:00pm, Lobby

The poster session will feature a range of climate topics from over 30 presenters and 18 different affiliations. Please also remember to stop by our exhibitor tables, which will be dispersed throughout the lobby.

Thank you to our sponsors:



moffatt & nichol



Goodwyn Mills Cawood



CoastalGaDNR.org

Minimizing Georgia's Risk, Maximizing Georgia's Future

Climate Conference Agenda

Friday, August 13, 2021

Concurrent Session #5 – 8:30am - 10:00am



Agriculture & Forestry – Room 4/5 (Jessica Warren, Mark McClellan)

Climate variability impacts on community tree health care – **Jason Gordon**, University of Georgia

Climate Trends in Georgia and Their Impact on Agriculture – **Pam Knox**, University of Georgia

Resilient Southern Forests in a Changing Climate – **Leslie Bobby**, Southern Regional Extension Forestry



Research I – Room 7-10 (Clark Alexander)

Pragmatic Approaches for Managing Conventional and Natural Infrastructure Under Climate Change and Land Use Uncertainty – **Brian Bledsoe, PhD**, University of Georgia

Ship Wake in the Savannah River and Possible Avenues for Mitigation – **Alexandra Muscalus**, Georgia Institute of Technology

Predicting Species and Habitat Vulnerability to Climate Change for Coral Cays – **Chester Jackson, PhD**, Georgia Southern University

A New Climate Strategy for Sanctuaries – **Stan Rogers**, Grays Reef National Marine Sanctuary



Public & Private: Bridging the Gap – Oceanside Salon (Jennifer Roach)

The need for greater diversity of professionals incorporating climate change into their work; Bringing climate change considerations into day-to-day work, projects, clients, and companies – **Jon Phillipsborn**

Private sector consulting work with Tybee – **Alan Robertson**, AWR Strategic Consulting

Current T&H initiatives for public and private sector clients with project examples – **Kevin Smith** and **Jennifer Roach**, Thomas & Hutton

Thank you to our sponsors:



Georgia Power

Minimizing Georgia's Risk, Maximizing Georgia's Future

Climate Conference Agenda

Friday, August 13, 2021

Concurrent Session #5 continued



State Efforts I: Building Resilience Through State Policies & Guidance – Ballroom A (Jill Andrews)

Mitigation Planning: Planning for a More Resilient Georgia – **Alan Sloan**, Georgia Emergency Management Agency/Homeland Security

How Climate Goals may impact energy planning in the future– **Tim Echols**, GA Public Service Commission

State Wildlife Action Plan – **Jason Lee**, GADNR Wildlife Resources Division

Where to Nest? Managing for beach nesting birds in an era of climate change and Sea Level Rise – **Tim Keyes**, GADNR Wildlife Resources Division

Enhancing Coastal Resiliency with Green Infrastructure – **Kelly Hill**, GADNR Coastal Resources Division

Disaster Recovery Resilience on a Regional Scale– **Jennifer Kline**, GADNR Coastal Resources Division



The Business Case for Climate Action – Ballroom B (David Eady)

Convergence and Innovation around Climate Action – **Denise Quarles**, Siemens, Southeast Region

Innovation and Investment in Decarbonization – **Ira Pearl**, Cox Enterprises

Climate Action as a Strategic Delineator – **Burt Fealing**, Southwire Company

On Track for Lower Emissions – **Josh Raglin**, Norfolk Southern

Concurrent Session #6 – 10:30am - 12:00pm



Living Shorelines – Room 4/5 (Christi Lambert)

Design and Construction of Living Shorelines in Georgia – **Tom Havens**, Coastal and Civil Engineering

Can ribbed mussels be incorporated into living shorelines in Georgia? – **John Carroll, PhD**, Georgia Southern University

Living Shorelines: From pluff mud to policy – **Jan Mackinnon**, GADNR Coastal Resources Division

Living shorelines: A Landowner's Perspective – **Scott Coleman**, Little St. Simons Island and **Stephanie Knox**, St. Simons Land Trust

Terrestrial LiDAR monitoring of Little Cumberland Island's living shoreline – **Chester Jackson, PhD**, Georgia Southern University



Local Government V: 100% Clean & Renewable Energy Cities Initiative Panel – Room 7-10 (Jennette Gayer)

Nick Deffley, City of Savannah

Shelby Buso, City of Atlanta

Andrew Saunders, Athens-Clarke County



Minimizing Georgia's Risk, Maximizing Georgia's Future

Climate Conference Agenda

Friday, August 13, 2021

Concurrent Session #6 continued



Invasive Species – Oceanside Salon (Eamonn Leonard)

Northern migration of Invasive Plants from Florida – **Jessica Spencer**, U.S. Army Corps of Engineers

Invasive Reptiles & Amphibians and Climate Change – **Hardin Waddle**, U.S. Geological Survey Gainesville

New technology tools to predict range expansion – **Chuck Barger**, University of Georgia



State Efforts II – Ballroom A (Jill Andrews)

Technical Modern Solutions to Old Monitoring Problems – **Colby Pepper**, GADNR Coastal Resources Division

Beach Management: Providing Technical Assistance to the City of Tybee Island – **Deb Barrerio**, GADNR Coastal Resources Division

The Coastal Incentive Grant Program – **Beth Tasciotti**, GADNR Coastal Resources Division

Incorporating Resilience on CDBG-DR Projects – **Kathleen Tremblay**, GA Dept of Community Affairs

Monitoring Coastal Wetlands – **Jaynie Gaskin**, GADNR Coastal Resources Division

The Climate Experience – **Meghan Angelina**, GADNR Coastal Resources Division/GA Sea Grant



Law & Policy I: Resilience Issues for Vulnerable Communities – Ballroom B (Shana Jones)

Protecting Housing Pre-and Post-Disaster: Linger Lessons from this Century's Major Hurricanes – **John Travis Marshall**, Georgia State University

Muddy Waters: Sea-Level Rise and Septic Systems in Georgia – **Scott Pippin** and **Katie Hill**, University of Georgia

The Vulnerable Coastal Communities Initiative – **Frank S. Alexander**, Emory Law School and **Stephanie Earl**, Vulnerable Coastal Communities Initiative

Resilience & Equity: How Do We Build Sustainable Communities? – **Jazz Watts**, Vulnerable Coastal Communities Initiative

Addressing Heirs Property: Tools for Unlocking Equity, Mitigating Against Climate Disasters, and Increasing Community Resiliency – **Skipper StipeMaas** and **Delene Porter**, Georgia Heirs Property Law Center, Inc

Thank you to our sponsors:



Atlanta Gas Light

Minimizing Georgia's Risk, Maximizing Georgia's Future

Climate Conference Agenda

Friday, August 13, 2021

Concurrent Session #7 – 1:30pm - 3:00pm



Research II – Room 4/5 (Clark Alexander)

Salt Marsh Sustainability and Functioning in a Changing Georgia Seascape – **Amanda Spivak, PhD**, University of Georgia

Building Resilience Capacity Through Restoration of Urban Salt Marshes in Partnership with Underserved Communities – **Joel Kostka, PhD**, Georgia Institute of Technology

Towards understanding flood hazard reduction of natural and nature-based features – **Hithaishi Hewageegana, PhD**, University of Georgia

Dynamics of Georgia's managed shorelines: A Tybee Island case study – **Clark Alexander, PhD**, University of Georgia



State Efforts Utilizing GIS – Room 7-10 (Colby Pepper)

The Georgia Wetlands Restoration Access Portal – **Tony Giarrusso**, Georgia Institute of Technology

Enhancing Coastal Resiliency with Green Infrastructure – **Shane Hubbard, PhD**, University of Wisconsin

The Fetch Tool – **Chester Jackson, PhD**, Georgia Southern University



Climate & Health – Oceanside Salon (Rachel Usher)

Training and Education for Healthcare Providers in a Climate Crisis – **Becca Philipsborn, MD**, Emory University

The Impact of Climate Change and Emissions Control on Future Ozone Levels in the US – **Yang Liu**, Emory University

Climate Changes Health: Extreme Weather in Georgia – **Arie Manangan**, Centers for Disease Control and Prevention

Climate Change and its Impact on Ragweed Pollen and Seasonal Allergies – **Linda Walden, MD**, Georgia Clinicians for Climate Action



Weather & Climate – Ballroom A (Marshall Shepherd)

Attitudes Towards Climate Change and Scientific Stories from Students at the University of North Georgia – **Jamie Mitchum**, University of North Georgia

Georgia's Climate Vulnerability - A county scale analysis – **Marshall Shepherd, PhD**, University of Georgia

Climate Trends in Georgia and Their Impact on Agriculture – **Pam Knox**, University of Georgia

Developing Climate Literacy in a General Education Science Class – **Shaunna Donaher**, Emory University



Minimizing Georgia's Risk, Maximizing Georgia's Future

Climate Conference Agenda

Friday, August 13, 2021

Concurrent Session #7 continued



Law & Policy II: Resilience Issues for Vulnerable Communities – Ballroom B (Scott Pippin)

Takings Issues: Lessons Learned from Recent Flooding Cases – Mandi Moroz, Troutmen Pepper

Marsh Migration as Sea-Levels Rise: Legal Implications – Bob Sherrier, Southern Environmental Law Center

Shoreline Stabilization in Southeastern Shorescapes: The Neighbor Effect – Shana Jones, University of Georgia and **Robert Hillyer**, University of Georgia/GA Sea Grant

Living Shorelines: Oysters, User Conflicts, and Opportunities – Hunt Revell and Varad Dabke, University of Georgia/GA Sea Grant

Conference Synthesis – 3:00 pm - 4:30 pm

Thank you to our sponsors:

The Nature
Conservancy



nature.org

Brighter
SUSTAINABLE &
IMPACT INVESTING

Minimizing Georgia's Risk, Maximizing Georgia's Future

Introducing our Keynote Speakers

Welcome - Thursday, August 12, 2021 8:30 am



REPRESENTATIVE LYNN SMITH, CHAIR, STATE HOUSE NATURAL RESOURCES COMMITTEE

Representative Lynn Smith was first elected to serve in the House of Representatives in 1996 and took office shortly thereafter, in 1997, and currently serves as chair of the House Natural Resources and Environment Committee. Other committee assignments include Appropriations, Legislative and Congressional Reapportionment, and Rules.

Promoting sound environmental policies that protect the environment as well as the economy of Georgia, Representative Smith is the author of several legislative bills that have become law and, most recently, championed the Water Stewardship Act, the creation of the Regional Water Plans, and revisions to the Brownfield Act.

In 2014, Representative Smith was elected vice chair of the Southern Legislative Conference (SLC) of The Council of State Governments' Energy and Environment Committee and, subsequently, elected chair of the committee in 2016, serving in this role through the 72nd Annual Meeting in 2018. Representative Smith also is a 2013 alum of the SLC Center for the Advancement of Leadership Skills program. Representative Smith earned her bachelor's degree in education from the University of Georgia and is a former educator, having taught both French and History. In addition, Representative Smith and her late husband, Charlie, were the owners of Murray Printing Company before selling the business in 2008. Representative Smith and Charlie were married in 1967 and have two daughters and two grandsons. Representative Smith attends Central Baptist Church and resides in Newnan.

Full biography can be found at GeorgiaClimateConference.org

Thank you to our sponsors:



Minimizing Georgia's Risk, Maximizing Georgia's Future

Introducing our Keynote Speakers

Luncheon - Thursday, August 12, 2021 12:30 pm



ROY RICHARDS, JR **CHAIRMAN, SOUTHWIRE COMPANY**

He began serving on corporate and non-profit boards in his early twenties, and took over his family's manufacturing company at age 28. He still chairs it today (Southwire: \$5BUSD+ revenues and 6000+ employees). His professional experience has been in general management of companies big and small, and board leadership, where he enjoys the challenges and opportunities that come with making all kinds of organizations successful. He teaches business students about the governance of family, early stage and mature companies because he wants to show them how to deal with challenges they will later face as leaders. He also cares deeply about climate change and preservation of the natural world, and his philanthropic work is almost all focused there. He recently helped found an environmental advocacy non-profit to protect Georgia's coastal land and waters (onehundredmiles.org), created a private fund to finance high priority land conservation in the southeastern US (terrahconservationcapital.com), and started and run a venture fund for climate change communications initiatives (1earth.fund). He has been coming to the Georgia Coast for more than sixty years.

Luncheon - Friday, August 13, 2021 12:00 pm



MAYOR VAN R. JOHNSON, II **CITY OF SAVANNAH**

Purpose, Passion and People are the core principles that guide and drive the life of the Honorable Van R. Johnson, II, the 67th Mayor of the City of Savannah, GA. Born and raised in Brooklyn, NY, but with strong Savannah roots, Mayor Johnson is a graduate of the New York City Public School System and has earned undergraduate and graduate degrees from Savannah State and Georgia Southern University. As a former radio talk show host, political commentator and former author of local weekly columns, Mayor Johnson has distinguished himself as an independent, thoughtful and passionate voice on current events. As a nationally certified Human Resources and Georgia certified Law Enforcement professional, Mayor Johnson has utilized his unique skill set as a sought-after trainer, speaker and consultant in these areas. During his tenure on Council, Mayor Johnson has served as Mayor Pro Tem and Vice Chairman. He has consistently used this sacred platform to advocate on behalf of the least, the last and the lost and to promote inclusion and equity for all of Savannah's citizens. He is a graduate of Leadership Savannah and Leadership Georgia.

Full biography can be found at GeorgiaClimateConference.org

Minimizing Georgia's Risk,
Maximizing Georgia's Future

Thank you to our sponsors:

the RAY C.
ANDERSON
foundation TM




Georgia

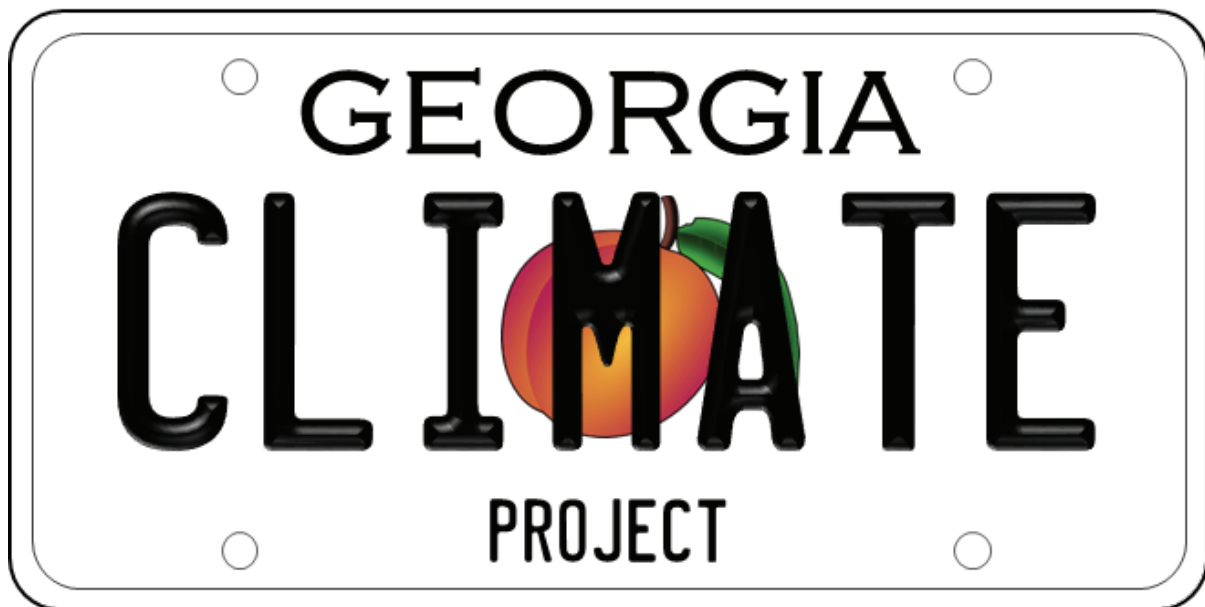
CONSERVANCY

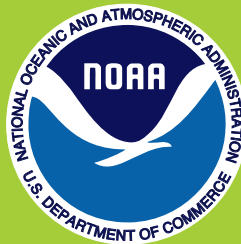


CoastalGaDNR.org

Minimizing Georgia's Risk,
Maximizing Georgia's Future

Thank you to our sponsors:





This conference was hosted by the Georgia Department of Natural Resources Coastal Resources Division under grant award #NA17NOS4730147 to the Department of Natural Resources from the Office for Coastal Management, National Oceanic and Atmospheric Administration. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of OCM or NOAA.