



Agenda

March 29-30, 2022

Westin Crystal City
Arlington, Virginia



2022 NATIONAL SALTWATER RECREATIONAL FISHERIES SUMMIT

We are witnessing unprecedented changes to the ocean environment as we emerge from extraordinary circumstances brought on by a global pandemic. The challenges resulting from these parallel occurrences are exceptional and compound pre-existing issues. For recreational fisheries to thrive, we must come together with a common purpose.

Recognizing this, the goals of the **2022 National Saltwater Recreational Fisheries Summit** include:

- Identify and investigate solutions to issues jointly identified as significant.
- Re-establish lines of communications that waned during the COVID-19 pandemic.
- Strengthen rapport and collaboration between the saltwater recreational fishing community, fishery managers, and scientists.
- Share knowledge and perspectives.

Each of the four sessions address these goals through presentations, expert panels, discussion, and break-out groups. The Summit organizers and members of the Steering Committee endeavored to include diverse speakers and panelists, both in geography and sector. In addition, breaks, meals, and the reception offer opportunities for connection and networking.

The anticipated overall **outcomes** for the Summit include:

1. A shared understanding of specific challenges, opportunities, and areas for collaboration.
2. Mutual commitments to work together on Summit outcomes and initiatives.
3. Identification of potential next steps to advance key issues.

MONDAY, MARCH 28, 2022

5:00-7:00 p.m. **Registration** **Jefferson Conference Room Atrium**
Check in early. *Please allow sufficient time to check in.*

TUESDAY, MARCH 29, 2022

7:00 a.m. **Registration and Breakfast** **Jefferson Conference Room Atrium**

8:00 a.m. **Opening Remarks*** **Jefferson Conference Room**
Russell Dunn, *National Policy Advisory for Recreational Fisheries, NOAA Fisheries*
Jessica Gribbon Joyce, *Principal, Tidal Bay Consulting*

8:20 a.m. **Keynote Speakers***
Whit Fosburgh, *President and CEO, Theodore Roosevelt Conservation Partnership*
Don Graves, *Deputy Secretary of Commerce, Department of Commerce (Pre-recorded video)*
Janet Coit, Esq., *Assistant Administrator for Fisheries, NOAA Fisheries*

8:45 a.m. **Reflections Since the 2018 Summit and the Path Forward***
 Russell Dunn, *National Policy Advisor for Recreational Fisheries, NOAA Fisheries*

9:15 a.m. **Break** **Jefferson Conference Room Atrium**

Session I: Climate Resilient Fisheries

The plenary part of this session covers a range of topics, including: the state of science on changing climate and oceans; tools, investments, and the importance of habitat for climate-resilient fisheries; on the water perspectives from the recreational fishing community; and climate scenario planning. Following the presentations, there will be an opportunity for audience questions. The **outcomes** for this session are:

1. Share current climate work and knowledge.
2. Listen to climate observations, experiences, concerns, and priorities from the recreational fishing community.
3. Understand the recreational community's vision for climate resilient fisheries.
4. Identify activities/strategies to achieve the vision.

9:30 a.m. **Plenary — Presentations and Discussion*** **Jefferson Conference Room**

MODERATOR: Janet Coit, Esq.
Assistant Administrator for Fisheries, NOAA Fisheries

Jon Hare, Ph.D. *Science and Research Director, Northeast Fisheries Science Center, NOAA Fisheries*

Richard Heap *Recreational Fisheries Advisor to several Federal and State Councils and Commissions; Port Commissioner (Oregon)*

David Sikorski *Executive Director, Coastal Conservation Association - Maryland*

Carrie Selberg Robinson *Director, Office of Habitat Conservation, NOAA Fisheries*

Kiley Dancy *Fishery Management Specialist, Mid-Atlantic Fishery Management Council (MAFMC)*

11:00 a.m. **Break-out Groups**
 After brief instructions, attendees will relocate to their respective rooms.
 Please attend the break-out group that corresponds to your region(s).

Mid-Atlantic Jefferson Room *right side, facing the front*

South Atlantic, Gulf Coast, and the Caribbean Jefferson Room *left side, facing the front*

New England Crystal V

Alaska, Hawaii, Guam and the Pacific Coast Crystal VI

12:00 p.m. **Lunch** **Jefferson Conference Room Atrium**

Session II: Balancing Ocean Uses

In the presentation part of this session, we will share agency, industry, and anglers' perspectives on offshore wind energy and marine aquaculture. There will be an opportunity for audience questions to better understand the status of what is happening on the water, and an opportunity for managers to learn from angler's first-hand experiences. The **outcomes** for this session are:

1. Shared understanding of current activity and plans regarding offshore wind energy and marine aquaculture.
2. Listen to experiences, concerns, and needs from the recreational fishing community.

1:00 p.m. **Plenary — Presentations and Discussion*** **Jefferson Conference Room**

MODERATOR: Robert Beal

Executive Director, Atlantic States Marine Fisheries Commission (ASMFC)

Brian Hooker	<i>Marine Biologist, Bureau of Ocean Energy Management (BOEM)</i>
Claire Richer	<i>Director, Offshore Wind, American Clean Power Association</i>
Danielle Blacklock	<i>Director, Office of Aquaculture, NOAA Fisheries</i>
Neil Sims	<i>Chief Executive Officer, Ocean Era</i>
Rick Bellavance	<i>President, Rhode Island Party and Charter Boat Association; Owner/Operator, Priority Fishing Charters; NEFMC Member</i>
Capt. McGrew Rice	<i>Owner, Hooked on Kona Fishing Charters</i>

2:30 p.m. **Break** **Jefferson Conference Room Atrium**



Panel Discussion

The panel part of this session includes a facilitated discussion and Q & A with an expert panel of representatives from BOEM, NOAA Fisheries, the states, as well as anglers. The panelists will discuss having a voice in the process as these industries expand, maintaining fishing opportunities, and understanding potential impacts. There will be an opportunity for the audience to interact with the panelists. The **outcomes** for this session are:

1. Identify strategies for stakeholder involvement with issues coordinated by multiple agencies.
2. Identify strategies and actions to maintain sustainable fishing opportunities.

2:45 p.m. **Plenary — Panel Discussion*** **Jefferson Conference Room**

MODERATOR: Robert Beal

Executive Director, ASMFC

Brian Hooker	<i>Marine Biologist, BOEM</i>
Danielle Blacklock	<i>Director, Office of Aquaculture, NOAA Fisheries</i>
Marcos Hanke	<i>Council Chair, Caribbean Fishery Management Council</i>
Rick Bellavance	<i>Owner/Operator, Priority Fishing Charters</i>
Jason McNamee, Ph.D.	<i>Deputy Director for Natural Resources, Rhode Island Department of Environmental Management</i>
Caren Braby, Ph.D.	<i>Marine Resources Program Manager, OR Department of Fish and Wildlife</i>

3:45 p.m. **Report from Break-out Groups***

We will hear from the rapporteurs from the climate-resilient fisheries break-out groups. Building on these recommendations and others from the balancing ocean uses session, we will facilitate a discussion around shared and cohesive next steps.

Jessica Gribbon Joyce, *Tidal Bay Consulting*
Break-out Group Rapporteurs

4:45 p.m.

Closing Remarks

Tim Sartwell, *Recreational Fisheries Specialist, NOAA Fisheries*
Jessica Gribbon Joyce, *Tidal Bay Consulting*

- 5:00 p.m. **Adjourn**
- 6:00 p.m. **Reception** **Jefferson Conference Room Atrium**
Join Summit attendees in the atrium for appetizers and a cash bar.

WEDNESDAY, MARCH 30, 2022

- 7:30 a.m. **Breakfast and Registration** **Jefferson Conference Room Atrium**
- 8:00 a.m. **Opening Remarks*** **Jefferson Conference Room**
 Tina Berger, *Director of Communications, ASMFC*
 Jessica Gribbon Joyce, *Principal, Tidal Bay Consulting*
- 8:15 a.m. **Guest Speaker***
 Spud Woodward, *ASMFC Chair*

Session III: Data Collection and Use

The presentation part of the data session will provide an overview of marine recreational fishery data collection, stock assessment, and catch monitoring processes, as well as the role that uncertainty plays in them. There will be brief presentations on each topic, followed by an opportunity for audience questions. The outcomes for this session are:

1. Improved understanding of current data collection, stock assessment, and catch monitoring processes.
2. Shared understanding of the data sources, appropriate uses of recreational data and their limitations, and role of uncertainty.

- 8:30 a.m. **Plenary — Presentations and Discussion*** **Jefferson Conference Room**
- MODERATOR:** Evan Howell, Ph.D.
Director, Office of Science and Technology, NOAA Fisheries
- Richard Cody, Ph.D. **Data Collection**
Chief - Fisheries Statistics Division, Office of Science and Technology, NOAA Fisheries
- Katie Drew, Ph.D. **Stock Assessments**
Stock Assessment Team Lead, ASMFC
- Luiz Barbieri, Ph.D. **Catch Monitoring**
Program Administrator, Fish and Wildlife Research Institute (FWRI), Florida Fish and Wildlife Conservation Commission (FWC)

- 9:45 a.m. **Break** **Jefferson Conference Room Atrium**



Panel Discussion

The panel discussion part of the data session will cover strategies for improving public confidence and participation in recreational fisheries data and data collection, as well as the potential roles of government, stakeholders, and new technologies in doing so. There will be an opportunity for the audience to interact with the panelists. The **outcome** for this session is:

1. Identify pathways to improving confidence in data, participation, and the potential role of outreach and electronic technology in doing so.

10:00 a.m. **Plenary — Panel Discussion*** **Jefferson Conference Room**

MODERATOR: Dave Donaldson

Executive Director, Gulf States Marine Fisheries Commission

Richard Cody, Ph.D. *Chief - Fishery Statistics Division, Office of Science and Technology, NOAA Fisheries*

Katie Drew, Ph.D. *Stock Assessment Team Leader, ASMFC*

Luiz Barbieri, Ph.D. *Program Administrator, FWRI, FWC*

Joshua DeMello *Fishery Analyst, Western Pacific Fishery Management Council*

Kenneth Haddad *Marine Fisheries Advisor, American Sportfishing Association*

Session IV: Management Reform, Flexibility and Optimum Yield

The first part of the management session will provide an overview of ongoing efforts to develop and apply management flexibility in the context of improving fishing opportunities and seeking to better understand the recreational fishing community's vision for management reform/flexibility. There will be an overview of the recent National Academy of Sciences review on the Marine Recreational Information Program (MRIP), followed by lightening talks, and an opportunity for audience questions. The **outcomes** for this session are:

1. Shared understanding of existing flexibilities and ongoing work to develop/utilize management flexibility.
2. Understanding constituent vision for management reform/flexibility.

11:15 a.m. **Plenary — Presentations and Discussion*** **Jefferson Conference Room**

MODERATOR: Barry Thom

Executive Director, Pacific States Marine Fisheries Commission

Michelle Duval *Principal, Mellivora Consulting; Member, National Academy of Sciences Committee on Recreational Fisheries Data and Management*

John Carmichael *Executive Director, South Atlantic Fishery Management Council*

Julia Beaty *Fishery Management Specialist, MAFMC*

Mike Burner *Deputy Director, Pacific Fishery Management Council*

Forrest Braden *Executive Director, Southeast Alaska Guides Organization*

Tony Friedrich *Vice President, American Saltwater Guides Association*

12:30 p.m. **Lunch**

The second part of the management session is intended to develop a common understanding of optimum yield (OY) as defined in statute, regulation, and in practice. We will then learn about anglers' perspectives on OY, human dimension aspects in considering OY, and the potential for OY to guide management from the Council/Commission perspective. After the presentations, there will be an opportunity for audience questions. The **outcomes** for this session are:

1. Initiate discussions with the recreational community around OY.
2. Shared understanding of OY in the statute and regulations.
3. Gain perspectives of anglers and managers on OY, while learning about human dimension aspects.

1:30 p.m. **Plenary — Presentations and Discussion*** **Jefferson Conference Room**

MODERATOR: Michael Ruccio

Division Chief, Office of Sustainable Fisheries, NOAA Fisheries

Marian Macpherson *Management and Program Analyst, Office of Sustainable Fisheries, NOAA Fisheries*

John Froeschke, Ph.D. *Deputy Director, Gulf of Mexico Fishery Management Council*

Mike Leonard *Vice President of Government Affairs, American Sportfishing Association*

Capt. Scott Hickman *Owner, Circle H Outfitters; Charter Fishermen's Association*

Jorge Holzer, Ph.D. *Associate Professor, Department of Agricultural and Resource Economics, University of Maryland*

2:30 p.m. **Break-out Groups**

Small groups discuss recreational management flexibility and OY, sharing insights across regions. The **outcomes** for this session are:

1. Understand anglers' visions of management reform, implementation challenges, and needed actions.
2. Understand anglers' perspectives of OY and how to advance its application as a tool to guide management.

Group 1 Jefferson Room *right side, facing the front*

Group 2 Jefferson Room *left side, facing the front*

Group 3 *Crystal V*

Group 4 *Crystal VI*

3:30 p.m. **Break** **Jefferson Conference Room Atrium**

3:45 p.m. **Report from Break-out Groups***

We will hear from the rapporteurs from the management reform/flexibility, and OY break-out groups. Building on these recommendations, we will facilitate a discussion around shared and cohesive next steps.

4:15 p.m. **Closing Panel*** **Jefferson Conference Room**

This panel of regional leadership from Commissions and NOAA Fisheries will share reflections and next steps.

MODERATOR: Russell Dunn, *NOAA Fisheries*

Jenni Wallace *Director, Office of Sustainable Fisheries, NOAA Fisheries*

Evan Howell, Ph.D. *Director, Office of Science and Technology, NOAA Fisheries*

Andy Strelcheck *Regional Administrator, Southeast Regional Office, NOAA Fisheries*

Ryan Wulff *Assistant Regional Administrator, West Coast Regional Office, NOAA Fisheries*

Robert Foy, Ph.D. *Director, Alaska Fisheries Science Center, NOAA*

Kristen Koch *Director of Science & Research, Southwest Fisheries Science Center, NOAA Fisheries*

Robert Beal *Executive Director, ASMFC*

5:00 p.m. **Adjourn**



2022 NATIONAL SALTWATER RECREATIONAL FISHERIES SUMMIT

Steering Committee Members

Trip Aukeman, FL

Coastal Conservation Association Florida

Luiz Barbieri, FL

Florida Fish and Wildlife Conservation Commission

Lucas Bissett, National / Gulf

American Fly-Fishing Trade Association

Kevin Blinkoff, NE-MA

On-the-Water

Forrest Braden, AK

Southeast Alaska Guides Organization

Chris Burrows, NC

Carolina Sportsman Magazine, SAFMC Dolphin and Wahoo Advisory Panel

Jamie Diamond, CA

Stardust Charters

Willy Goldsmith, National / NE-Mid-Atlantic

American Saltwater Guides Association

Richard Heap, Pacific NW

Pacific Fishery Management Council - Salmon Advisory Subpanel, Oregon Ocean Policy Advisory Council, and Port of Brookings Harbor Commission

Mike Leonard, National

American Sportfishing Association

Matt Ramsey, HI

Conservancy International, recreational representative on Western Pacific Fishery Management Council

Charlie Robertson, Gulf of Mexico

Gulf States Marine Fisheries Commission

David Sikorski, MD

Coastal Conservation Association Maryland



Speaker & Panelist Biographies

LUIZ BARBIERI

Luiz Barbieri, Ph.D., directs the Marine Fisheries Research Program for the Florida Fish and Wildlife Conservation Commission's Fish and Wildlife Research Institute, based out of St. Petersburg, FL. He has an extensive background in marine fisheries science and policy and serves as a key representative on several scientific advisory panels and committees including the Gulf States Marine Fisheries Commission, the Scientific and Statistical Committee (SSC) for the Gulf of Mexico Fishery Management Council, and as a senior advisor for the Fisheries Leadership & Sustainability Forum for the Nicholas Institute for Environmental Policy Solutions at Duke University. Dr. Barbieri served on two National Academies of Science studies on recreational fisheries survey methods and the use of recreational fisheries data for assessment and management. He holds a Bachelor of Science in Biology, a Master of Science in Biological Oceanography, and a Ph.D. in Marine Fisheries Science.

ROBERT E. BEAL

Robert E. Beal has been the Executive Director of the Atlantic States Marine Fisheries Commission since 2012. He has been with the Commission for almost 25 years and served as the Director of the Interstate Fisheries Management Program before his current role. As Executive Director, Mr. Beal guides the Commission's day-to-day operations and provides leadership to all of its programs – Interstate Fisheries Management, Science, Communications, Atlantic Coastal Cooperative Statistics Program, and Finance and Administration. He represents the Commission at meetings of the New England, Mid-Atlantic and South Atlantic Regional Fishery Management Councils and ensures Congressional support for the Commission and its member states. Mr. Beal has led the Commission's efforts to strengthen the states' partnerships with the National Marine Fisheries Service and other Interstate Commissions to garner support for issues of mutual interest. Bob earned his undergraduate degree in Landscape Architecture from the University of Maryland in 1992 and graduated with a Master of Science from Duke University in Fisheries, Coastal Environmental Management in 1995.

JULIA BEATY

Julia Beaty has been a Fishery Management Specialist with the Mid-Atlantic Fishery Management Council (MAFMC) since 2015. She is the MAFMC staff lead for the Recreational Reform Initiative, a project of MAFMC and the Atlantic States Marine Fisheries Commission, which considers improvements to management of the recreational summer flounder, scup, black sea bass, and bluefish fisheries. She is also the staff lead for black sea bass, chub mackerel, and offshore wind energy development. She holds a Bachelor of Science in Biology from Smith College, as well as master's degrees in both marine policy and marine biology from the University of Maine.

RICK BELLAVANCE

Captain Rick Bellavance is a lifelong Rhode Island resident and has been fishing recreationally and commercially for over 35 years. He owns and operates Priority Fishing Charters based in Point Judith. Capt. Bellavance is president of the Rhode Island Party and Charter Boat Association, which is a group of charter and party boat operators who work to promote the for-hire industry and collaborate with regulators and fishermen to develop sustainable and profitable fishery management practices for this industry. Capt. Bellavance is the vice-chair of the New England Fishery Management Council (NEFMC) and is a NEFMC liaison to the Mid-Atlantic Fishery Management Council and to the International Commission for the Conservation of Atlantic Tunas. He also serves on NOAA's Highly Migratory Species Advisory Panel and the South Atlantic Fishery Management Council's Dolphin/Wahoo Committee. He is the for-hire representative on the R.I. Coastal Resources Management Council's Fisherman's Advisory Board. He served as the fisheries representative for the Block Island Wind Farm and remains engaged in the state and federal permitting processes for renewable offshore energy development. He is a graduate of the Gulf of Maine Research Institute Marine Resources Education Program and earned his 100 Ton USCG Masters License in 1994.

DANIELLE BLACKLOCK

Danielle Blacklock is the Director of NOAA's Office of Aquaculture, where she oversees the aquaculture component of NOAA's sustainable seafood portfolio. She is responsible for providing the strategic vision for developing a strong marine aquaculture industry in the United States. Specifically, she leads the office's work on several distinct priority areas including regulation and policy, science, outreach, and international activities in support of U.S. aquaculture. Ms. Blacklock came to this position after serving in various roles within the agency for the past 10 years. Most recently, she served as a Senior Policy Advisor for Aquaculture. Prior to that, she was the Senior Advisor for Operations at Fisheries, providing advice and support to the Deputy Assistant Administrator for Operations. Ms. Blacklock received her master's degree in marine affairs from the University of Washington, and her bachelor's degree in marine science from the University of Maine.

CAREN BRABY

Caren Braby, Ph.D., is the Manager of the Marine Resources Program for the Oregon Department of Fish and Wildlife, providing strategic leadership on 'all things ocean' within the state of Oregon and across the West Coast. Dr. Braby and her staff build partnerships with industry, academic researchers, tribal governments, federal & state agencies, stakeholders, and elected officials to collaboratively define and achieve both economic and ecosystem resilience. Her work is grounded in both fishery and ecosystem stewardship, with particular focus on changing ocean conditions (including ocean acidification and hypoxia). As co-chair of Oregon's legislatively created Ocean Acidification and Hypoxia Coordinating Council and a member of the Pacific Fisheries Management Council, Dr. Braby is helping West Coast communities and fisheries develop successful strategies to adapt to and mitigate ocean change. She received her doctorate from Stanford University's Hopkins Marine Station and has conducted scientific research from estuaries to deep sea hydrothermal vents in the Pacific Ocean. Her career began by exploring West Coast tidepools, from the time she could first walk.

FORREST BRADEN

Forrest Braden has participated professionally in the recreational fishing industry since 1985, first in warm water fisheries off the coasts of California and Mexico and shifting to Alaska's cold water sport fisheries in 1995. He is the founder of True North Sport Fishing, which has offered guided trips for salmon and halibut in Southeast Alaska for 25 years. He is on the board of directors for the Southeast Alaska Guides Organization and has served as the Executive Director since 1998. In this position, he works with state and federal management agencies for the betterment of sport fishing regulation. His duties include fishery management proposal work, consultation, and industry advocacy. He serves on the International Pacific Halibut Commission's Management Strategy Advisory Board as the Alaska sport fishing representative, providing recreational perspectives in the continuing improvement of halibut fishery management. Mr. Braden participated in the development of the Recreational Quota Entity program designed to allow transfer of Pacific halibut allocation between the commercial and guided recreational fisheries through quota share purchase, and currently serves as an officer in the program's administration.

MIKE BURNER

Mike Burner is the Deputy Director of the Pacific Fishery Management Council (PFMC). Mr. Burner started with PFMC in 2002 and has served as a staff officer for groundfish, coastal pelagic species, ecosystem-based management, and salmon. He spent the first 10 years of his career working on Columbia River and ocean salmon fishery management issues with the Oregon Department of Fish and Wildlife. He has a Bachelor of Science in Biology from Lawrence University and completed the Boston University Marine Program. Mr. Burner and his wife, Lisa, live in Oregon wine country outside of Portland and produce three wine varieties under their own label.

JOHN CARMICHAEL

John Carmichael is the Executive Director of the South Atlantic Fishery Management Council, where he has worked since 2003. Prior to becoming the Executive Director in 2020, he served as the Program Manager for the SouthEast Data, Assessment, and Review (SEDAR) process and then as the Deputy Director for Science. Previous positions he held included serving as a stock assessment scientist with the North Carolina Division of Marine Fisheries (where he worked with striped bass, red drum, and river herring), a Fishery Management Plan coordinator with the Atlantic States Marine Fisheries Commission, and a biologist with the Maryland Department of Natural Resources. He received a Bachelor of Science in Fisheries and Wildlife from Virginia Tech and a Master of Science in Zoology from North Carolina State University.

RICHARD CODY

Dr. Richard Cody, Ph.D., spent more than 18 years with the Florida Fish and Wildlife Conservation Commission's (FWC) Marine Fisheries Research Section. While there, his involvement with the State of Florida's commercial and recreational fisheries-dependent monitoring programs spanned administrative and research roles. His association with NOAA Fisheries' Recreational Fisheries Information Program began in 1998 when Florida began conducting the Marine Recreational Fisheries Statistics Survey (MRFSS) and continued through the development of the Marine Recreational Information Program (MRIP). He has served on various commercial and recreational committees of the Atlantic Coastal Cooperative Statistics Program and the Gulf States Marine Fisheries Commission, as well as MRIP workgroups involved in the development of survey methods. In 2017, he left FWC to work more directly with MRIP in support of program management priorities. In 2020, he accepted the Division Chief position for Fisheries Statistics within the Office of Science and Technology, where he oversees the Commercial and Recreational Branches. Dr. Cody was born in Ireland and completed his undergraduate training at the University College Dublin. He received his master's degree from the University of West Florida and completed his doctoral studies at Louisiana State University on the ecology of intertidal fishes of the Canary Islands.

JANET COIT

Janet Coit was named the new Assistant Administrator for NOAA Fisheries in June 2021. She has worked on environmental issues, natural resource management, and stewardship for more than 30 years. Ms. Coit directed the Rhode Island Department of Environmental Management (DEM) for more than 10 years, where she focused on improving natural resource conservation, promoting locally grown food (including seafood), and addressing the climate crisis. She also chaired Rhode Island's Seafood Marketing Collaborative and worked with stakeholders to promote supplying seafood locally and abroad. Before joining Rhode Island DEM in 2011, Ms. Coit was the state director for The Nature Conservancy in Rhode Island for 10 years. Prior to that, she was counsel and environmental coordinator in the Providence office of the late Senator John Chafee and, subsequently, former Senator Lincoln Chafee. Coit also served as counsel to the U.S. Senate Committee on the Environment and Public Works, where she advised on national environmental policy. Ms. Coit graduated magna cum laude from Dartmouth College and holds a law degree from Stanford Law School.

KILEY DANCY

Kiley Dancy is a Fishery Management Specialist at the Mid-Atlantic Fishery Management Council (MAFMC), serving as the Fishery Management Plan coordinator for summer flounder since 2012. Ms. Dancy is also the MAFMC staff lead on the East Coast Climate Change Scenario Planning Initiative, leading a core team of representatives from East Coast fishery management organizations to explore jurisdictional and governance issues related to climate change and shifting fishery stocks. Originally from Michigan, Ms. Dancy received a Bachelor of Science in Biology from the University of Michigan and a Master of Environmental Management from Duke University. She lives in Delaware, where she enjoys spending time outside with her husband and daughter.

JOSHUA DEMELLO

Joshua DeMello grew up on the island of Oahu in a family of watermen, tagging along on spearfishing and outrigger canoe paddling trips between islands from a young age. This early introduction to the ocean, along with a need to ensure that he could continue to pass on this knowledge and carry on these traditions, led him to work with fishing communities to continue the sustainability of coral reef, precious coral, and crustacean fisheries. He has worked for nearly 20 years with fishing communities in Hawaii, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands. This includes over 10 years working as a Fishery Analyst with the Marine Recreational Information Program's Operations Team and as the Non-Commercial Fisheries Coordinator for the Western Pacific Regional Fishery Management Council. Mr. DeMello built up his knowledge at the University of Hawaii at Hilo, where he received a degree in marine science, and at the University of Southern California, where he received a Master of Public Administration degree. He continues his family's traditions of spearfishing, surfing, canoe paddling, and building papio boards with his wife and two teenage sons.

DAVE DONALDSON

Dave Donaldson has been working for the Gulf States Marine Fisheries Commission (GSMFC) for over 30 years. During his tenure, first as the Assistant Director and then as Executive Director, he has dealt with a variety of fisheries issues, including both fishery-independent (via the Southeast Area Monitoring and Assessment Program) and fishery-dependent (via the Fisheries Information Network) data collection and management tasks. The GSMFC's regional perspective has allowed Mr. Donaldson to interact and engage with a wide diversity of people, from recreational and commercial industry folks to state and federal personnel throughout the Gulf of Mexico, Atlantic, and Pacific regions, as well as U.S. Congressmen and their staffers. Because of this perspective, he has developed a unique outlook on the numerous fisheries issues facing our nation's fisheries scientists and managers.

KATIE DREW

Katie Drew, Ph.D., is the Stock Assessment Team Lead for the Atlantic States Marine Fisheries Commission (ASMFC). In the 12 years that she has worked there, she has been involved in stock assessments for many recreationally important species, including striped bass, bluefish, and weakfish. She is also a member of the ASMFC Recreational Technical Committee, which provides guidance on standards and best practices for recreational data collection on the Atlantic coast.

RUSSELL DUNN

Russel Dunn is the National Policy Advisor for Recreational Fisheries for NOAA Fisheries Service. As the national policy advisor, Russ works with the recreational fishing community to safeguard and enhance the significant benefits sustainable recreational fisheries afford coastal communities and the nation. He focuses high-level institutional attention on key angling priorities while serving as the national point of contact for the saltwater recreational fishing community and other federal agencies. Russ and his team led work to develop and adopt NOAA's National Saltwater Recreational Fisheries Policy, national and regional engagement plans, and a series of national summits focusing on saltwater recreational fisheries. Russ has 26 years of public and private sector experience in national and international marine fisheries policy.

MICHELLE DUVAL

Michelle Duval has over 20 years of diverse career experience in marine fisheries management at the state, interstate, and federal levels. Ms. Duval is currently the sole proprietor of Mellivora Consulting, providing services that include fisheries policy analysis, strategic planning, and stakeholder engagement. Prior to that, she served over ten years with the North Carolina Division of Marine Fisheries as the Executive Assistant for Councils. In that capacity, Ms. Duval was the state's designee on the South Atlantic Fishery Management

Council and the administrative proxy on multiple species management boards at the Atlantic States Marine Fisheries Commission. Before working for the State of North Carolina, she spent ten years at the Raleigh office of the Environmental Defense Fund on a variety of state and federal fisheries and coastal development issues. Ms. Duval received a Bachelor of Science in Biology from the University of Michigan and a Doctorate in Marine Ecology from Duke University.

WHIT FOSBURGH

Whit Fosburgh is the president and CEO of the Theodore Roosevelt Conservation Partnership (TRCP). Prior to coming to the TRCP in 2010, Mr. Fosburgh spent 15 years at Trout Unlimited, playing a critical role in the organization's evolution into a conservation powerhouse. Additionally, he served as fisheries director for the National Fish and Wildlife Foundation, was the chief environment and energy staff member for Senator Tom Daschle, and was a wildlife specialist for the National Audubon Society. In 2015, he was honored as the Conservation Partner of the Year by Bass Pro Shops, and he received the 2020 Fly Fishers International Conservation Award. Mr. Fosburgh grew up hunting and fishing in upstate New York and was a member of Team USA in the 1997 World Fly Fishing Championships. He has a Bachelor of Arts in Government from Georgetown University and a master's degree from the Yale University School of Forestry. He coached crew at the collegiate level for 15 years.

ROBERT FOY

Robert ("Bob") Foy, Ph.D., is the Science and Research Director of the Alaska Fisheries Science Center. The Alaska Fisheries Science Center collaborates and coordinates on groundfish bycatch and allocation issues with state or internationally managed recreational fisheries in Alaska. Dr. Foy joined NOAA Fisheries in 2007 as the Director of the Center's Kodiak Laboratory and Program Manager for the Shellfish Assessment Program. He led the program on assessment, biological, and ecological research of commercial crab species in Alaska. Dr. Foy earned a Bachelor of Science in Biology from the University of Michigan, as well as a Master of Science in Fisheries and a Doctorate in Oceanography, both from the University of Alaska.

TONY FRIEDRICH

Tony Friedrich is the Vice President and Policy Director for the American Saltwater Guides Association and is a lifelong advocate for marine conservation. He has over 20 years of experience in local, state, and federal marine issues. He holds a degree in economics from the University of Maryland. Mr. Friedrich has played a key role in major fisheries decisions in the Mid-Atlantic and across the country, including decisions relating to striped bass conservation, forage fish protection, habitat restoration, clean water advocacy, federal fisheries law, and various legislative efforts. Currently, Mr. Friedrich is a fisheries consultant working on policy and resource issues in the Gulf of Mexico, Florida, the Mid-Atlantic, and the Northeast. He lives on the Eastern Shore of Maryland with his wife and son and fishes every chance he gets.

JOHN FROESCHKE

John Froeschke, Ph.D., has been a fisheries biologist-statistician since joining the Gulf of Mexico Fishery Management Council in 2009 and was appointed Deputy Director in 2018. He earned his doctorate from Texas A&M University – Corpus Christi, where he worked on developing predictive models used to improve our understanding of environmental factors affecting fish distribution and abundance in the Gulf of Mexico. Prior to this, he completed a Master of Science in Biology at California State University, Northridge, and worked as fish biologist at Occidental College in Los Angeles. Dr. Froeschke worked as a scientific diver for several years, and he remains active as a recreational scuba diver and angler.

KEN HADDAD

While mostly retired, Ken Haddad currently serves as a part-time consultant on marine fisheries to the American Sportfishing Association, a trade association of tackle and related manufacturers, retailers, and associated industries. Mr. Haddad is a past Executive Director of the Florida Fish and Wildlife Conservation Commission (FWC) and was chairman of the Science Coordinating Group of the Everglades Restoration Task Force, a member of the Executive Committee of the Association of Fish and Wildlife Agencies, and was president of the Southeastern Association of Fish and Wildlife Agencies. He is also a former Commissioner of the Atlantic States Marine Fisheries Commission, former council member of the South Atlantic Fisheries Management Council and former director of the FWC Florida Fish and Wildlife Research Institute and Division of Marine Fisheries. He has a Bachelor of Science in Biology from Presbyterian College and Master of Marine Science from the University of South Florida College of Marine Science. He is an avid recreational fisherman, hunter, and equestrian.

MARCOS HANKE

Marcos Hanke is the Chairman of the Caribbean Fishery Management Council and an instructor of Fishery Resources at the University of Puerto Rico in Humacao. He has a Bachelor of Science in Marine Biology from Puerto Rico University (UPRH) and over 25 years of experience as both an inshore and offshore captain on the east coast of Puerto Rico. He is involved in multiple fishery-related educational initiatives and has a passion for sharing best fishing practices and new opportunities in fishing.

JON HARE

Jon Hare, Ph.D., is the Science and Research Director at the Northeast Fisheries Science Center (NEFSC). He earned a bachelor's degree in biology from Wesleyan University and a doctorate in oceanography from SUNY Stony Brook. He received a National Research Council Research Associateship in 1994 to work at the NOAA Beaufort Laboratory and was hired by NOAA in 1997. Dr. Hare moved to the NOAA Narragansett Laboratory in 2005, where he was appointed Oceanography Branch Chief in 2008 and Lab Director in 2012. He started as NEFSC Director in 2016 and is now located at the NOAA Woods Hole Laboratory. His research has focused on fisheries oceanography: understanding the interactions between the ocean environment and fisheries populations with an aim of contributing to fisheries assessment and management. Dr. Hare also examines the effect of climate change on fish and invertebrate population dynamics. This work involves coupling the output of global climate models with population models to simulate the effects of climate change on population dynamics. Recently, he has been working to support offshore wind energy development, while protecting and conserving wildlife and promoting sustainable fisheries. He is also interested in developing collaborative scientific and management frameworks to address complex environmental issues.

RICHARD HEAP

Richard Heap is a retired wildlife manager with 33 years of experience working for the Nevada Department of Wildlife. While there, he held positions as a Fish and Game Agent in Elko County, a Boating Safety Officer on Lake Tahoe, a Region 1 Wildlife Law Enforcement Supervisor, a Region 1 Manager, and an Agency Planner. He has a Bachelor of Science in Wildlife Management from the University of Nevada and is certified as an Angler Education Instructor in Oregon. Since retirement, he has served as the President of the Port of Brookings Harbor Commission, the chair of the Pacific Fishery Management Council Salmon Advisory Subpanel, the chair of the Oregon Department of Fish and Wildlife Restoration and Enhancement Board, and as the Sport Fishing Advisor for the Pacific States Marine Fisheries Commission. He also serves on the Executive Committee for Oregon's Ocean Policy Advisory Council and is a lifetime member of the Oregon South Coast Fishermen Club.

SCOTT HICKMAN

Captain Scott Hickman is the owner and operator of Circle H Outfitters and Charters. He is a full-time hunting and fishing guide with 35 years' experience specializing in Cobia, Snapper, Amberjack and King Mackerel trips. Capt. Hickman is actively involved on the Gulf of Mexico Fishery Management Council's Coral Advisory Panel (co-chair), its Individual Fishing Quota Ad Hoc Advisory Panel, and its Data Collection Advisory Panel. His top priority is finding solutions for a better sustainable charter business plan in the Gulf of Mexico. Capt. Hickman is a founding board member of the Charter Fisherman's Association and the Galveston Professional Fishermen's Association. He attended both Texas Tech University and Sam Houston State University, where he studied wildlife management and criminal justice. Capt. Hickman also served in the United States Marine Corps and Texas National Guard. He was recognized as the local and national Volunteer of the Year in 2016 for the National Marine Sanctuaries Program and received the Gulf and Caribbean Fisheries Institute's Peter Gladding conservation award in 2017. He has also served on Texas Sea Grant's Advisory Committee (Jan 2020-Dec 2023, chair 2021-2023) and the Gulf and Caribbean Fisheries Institute's Gladding Conservation Committee.

JORGE HOLZER

Jorge Holzer, Ph.D., is an associate professor in the Department of Agricultural and Resource Economics at the University of Maryland. His research interests are in the fields of natural resource economics, environmental economics, and applied microeconomics, with a particular focus on marine resources and the allocation of harvesting rights. His work ranges from the design of market-based mechanisms and conservation auctions to non-market valuation, especially in recreational fisheries. He is currently a member of the Mid-Atlantic Fishery Management Council's Scientific and Statistical Committee, a member of the Chesapeake Bay Program Sustainable Fisheries Goal Implementation Team, vice-chair of the Atlantic States Marine Fisheries Commission's Committee on Economics and Social Sciences, a member of the International Council for the Exploration of the Sea's Working Group on Economics, and an affiliate of Maryland Sea Grant.

BRIAN HOOKER

Brian Hooker is a native of Newport News, Virginia, and graduated from Lynchburg College with a Bachelor of Science in Environmental Science. After a short stint with the Virginia Institute of Marine Science planting seagrass in the Chesapeake Bay, Mr. Hooker joined the U.S. Peace Corps in Senegal as an Agroforestry Extension Agent. Upon his return, he earned a Master of Environmental Management from Duke University. He worked for 7 years with NOAA's National Marine Fisheries Service in various fishery management capacities including coordinating fishery management plans for golden tilefish, surf clams and ocean quahogs, horseshoe crabs, weakfish, Atlantic sturgeon, and American eel. Over the years, Mr. Hooker has worked closely with U.S. Fishery Management Councils with jurisdiction in the Atlantic and the Atlantic States Marine Fisheries Commission. He began working with the Bureau of Ocean Energy Management's (BOEM) Office of Renewable Energy Programs in 2010 to aid in the assessment and study of environmental impacts from offshore renewable energy along the U.S. Atlantic seaboard. His area of expertise at BOEM is around protected species, essential fish habitat, and commercial and recreational fishing. He now leads a team at BOEM that is responsible for Endangered Species Act and Magnuson-Stevens Fisheries Conservation Act consultations and National Environmental Policy Act assessments as subject matter experts for Atlantic offshore wind projects.

EVAN HOWELL

Evan Howell, Ph.D., is the Director of NOAA Fisheries' Office of Science and Technology. Most recently, he served as the Deputy Director for the Pacific Islands Fisheries Science Center, where he led research to better understand critical habitat and possible climate effects on highly migratory and protected species in the central North Pacific ecosystem. Dr. Howell has authored or co-authored more than 30 peer-reviewed

scientific papers and participated in eleven research missions with NOAA or research partners. During his 25 years with NOAA Fisheries, he has spent 15 years as an ecosystem scientist, three years leading IT and data management development to support scientific research, and seven years as an executive administrator.

KRISTEN KOCH

Kristen Koch has been the Science and Research Director of the Southwest Fisheries Science Center (SWFSC) since 2018. In this role, she provides executive-level oversight of science direction, planning, and execution of SWFSC 's programs providing science advice in support of fisheries and protected species management in the Southwest. Previously, Ms. Koch was the Deputy Science and Research Director of SWFSC from 2009 to 2018. Prior to her time at SWFSC, Kristen worked at NOAA Headquarters in Silver Spring, MD in various roles, including: Deputy Ecosystem Goal Team Lead (2007-2009) where she assisted in planning NOAA's \$1.5 billion ecosystem portfolio; Acting Deputy Director for the NOAA Fisheries Office of Sustainable Fisheries; NOAA Fisheries Directorate science program development (2006-2007); and Director of the Office of Scientific Support in the Office of Oceanic and Atmospheric Research (2004-2006), among others. She has received numerous awards from the Department of Commerce for her service at NOAA. An almost-native of San Diego, she graduated with a Bachelor of Arts from Mills College in California and a Master of Public administration from Columbia University.

MIKE LEONARD

Mike Leonard is the Vice President of Government Affairs at the American Sportfishing Association (ASA), based in Alexandria, Va. ASA is the sportfishing industry's trade association, providing the industry with a unified voice when emerging laws and policies could significantly affect sportfishing business or sportfishing itself. Mr. Leonard oversees ASA's public policy activities on a variety of natural resource and trade issues at the national, regional, and state levels. He serves on several advisory bodies to promote fisheries conservation and recreational fishing access, including the National Fish Habitat Partnership Board, the Center for Sportfishing Policy Government Relations Committee, and the Theodore Roosevelt Conservation Partnership Policy Council. He first joined ASA in 2009 as the association's Policy Fellow. He holds a master's degree in fisheries management from Auburn University and a bachelor's degree in fisheries science from Virginia Tech.

MARIAN MACPHERSON

Marian Macpherson has worked on fisheries management issues for NOAA in various capacities since 1996. Starting out as an attorney in the Office of the General Counsel for Fisheries in the year the Sustainable Fisheries Act was implemented, she participated in some of the seminal lawsuits defining our interpretation of overfishing requirements and national standards interactions, as well as novel challenges to fisheries management involving National Environmental Policy Act and Environmental Site Assessment claims. In 2003, she moved to the National Marine Fisheries Service's (NMFS) Office of Sustainable Fisheries (OSF), where she launched the Regulatory Streamlining Program that was designed to improve partnerships between NMFS and the Councils in addressing applicable laws. Since 2012, Ms. Macpherson has worked out of OSF's Policy and Guidance Department, leading team-based initiatives to develop national guidance on fishery management policy questions, such as NS1 interpretations. Ms. Macpherson is a New Orleans Saints fan and lives in Fairhope, Alabama, where she enjoys sailing a Sunfish and eating delicious Gulf seafood whenever possible. Ms. Macpherson has a LL.M in Environmental Law from George Washington University's National School of Law, a J.D. from Tulane Law School, and a B.A. in English from the University of the South.

JASON E. MCNAMEE

As Deputy Director and previously as Chief of the RI Department of Environmental Management's (RIDEM) Marine Fisheries Division, Jason McNamee has worked for over 20 years on environmental and fisheries matters. While with the Marine Fisheries Division, Dr. McNamee served as the principal investigator for the Narragansett Bay Juvenile Finfish Seine Survey. He is also active in the Atlantic States Marine Fisheries Commission as the lead delegate for Rhode Island and as a member of numerous management boards, technical committees, and stock assessment subcommittees. Dr. McNamee was appointed in 2013 to the New England Fishery Management Council's Scientific and Statistical Committee and served as chair of that committee for several years. He graduated from the University of Rhode Island in 1996 with a Bachelor of Science in Zoology. He received a Master of Science in Biological Oceanography in 2006 from the University of Connecticut and received a doctorate from the University of Rhode Island's Graduate School of Oceanography in their Biological Oceanography Doctoral program in 2018.

FREDERICK MCGREW RICE

Frederick McGrew Rice ("McGrew") is a sixth generation Scottish American born and raised in Hawaii. The Rice family came to the islands in 1838 as missionaries. His family has been involved in ranching and fishing all their lives. His grandfather, "Oskie," fished as an angler in the International Billfish Tournament in the 1950's and 60's. His father, Freddie, bought his first charter boat in Kona in 1968 and Capt. McGrew caught his first marlin with him when he was 9 years old. He grew up cattle ranching and fishing and chose fishing as his full-time profession. He worked as a crewman through high school and on weekends and vacations. In the 1908's, he was hired to travel to Australia, New Zealand, and Tahiti to fish tournaments for his clients. He started to work for his father in 1986 on the "Ihu Nui" as a crewman and part-time captain. When his father retired in 1991, Capt. McGrew became the captain of the "Ihu Nui" and has been fishing on the waters of the Kona Coast to this day!

CLAIRE RICHER

Claire Richer serves as American Clean Power's (ACP) Director for Offshore Wind. She focuses on offshore wind supply chains, vessels, fisheries, Coast Guard, maritime and other offshore wind regulatory issues. She manages ACP's Offshore Maritime Subcommittee and helps manage ACP's Fisheries Subcommittee to consolidate offshore wind company views into an industry position and then socializes those positions with regulatory agencies and Capitol Hill. Previously, she worked for U.S. Senator Ed Markey of Massachusetts for over four years. During that time, she focused on a variety of maritime and ocean issues on the Senate Commerce Committee, including offshore wind, fisheries, Coast Guard, and the Maritime Administration. Ms. Richer received a Bachelor of Arts in Environmental Policy & Analysis and in International Relations from Boston University. Outside of work, she enjoys backpacking, rowing, bicycle commuting, speaking French, and baking.

CARRIE SELBERG ROBINSON

Carrie Selberg Robinson is the Director of the Office of Habitat Conservation. She served as Deputy Director from 2015 to 2020. She was the NOAA Fisheries Chief of Staff from 2013 to 2015. She joined NOAA in 2005 as a legislative specialist after 5 years at the Atlantic States Marine Fisheries Commission. She participated in NOAA's Leadership Development Competencies Program and the National Conservation Leadership Institute. She has a bachelor's degree in environmental studies from Connecticut College and a Master of Environmental Management degree from Duke University.

MIKE RUCCIO

Mike Ruccio is the Domestic Fisheries Division Chief for the Office of Sustainable Fisheries at the NOAA Marine Fisheries Service headquarters in Silver Spring. His entire professional career has been in fisheries

management, starting as an onboard observer in the 1990s in the North Pacific and Bering Sea, then working for the Alaska Department of Fish and Game in both Dutch Harbor/Unalaska and Kodiak. Prior to working at headquarters, he worked at the Greater Atlantic Regional Fisheries Office, including many years as the lead policy analyst on summer flounder, scup, and black sea bass management issues. Mike enjoys recreational angling, but admits he was spoiled by the unfettered access to world class fishing in Alaska and doesn't get out to fish as much as he would like.

TIM SARTWELL

Tim Sartwell is a Recreational Fisheries Specialist with NOAA Fisheries Communications Office. Tim's expertise lies in recreational fisheries data and management and he works on the National Recreational Fisheries Initiative implementing NOAA's National Saltwater Recreational Fisheries Policy. Tim has played a key role in planning and executing numerous stakeholder engagement events and previously worked in the Office of Sustainable Fisheries. Prior to joining NOAA Fisheries, Tim was the project manager for the Atlantic Access Point Angler Intercept Survey, which collected marine recreational fisheries data on the Atlantic Coast and Puerto Rico. Tim is a lifelong recreational fisherman.

DAVID SIKORSKI

David Sikorski is the Executive Director of Coastal Conservation Association (CCA) Maryland. He is native Marylander, a passionate and experienced sportsman, and has been a tireless volunteer for CCA Maryland. As a longtime participant and current chair of the Government Relations Committee, Mr. Sikorski has a thorough understanding of the many issues that affect Maryland's fisheries. He is a member of the Striped Bass and Atlantic Menhaden Advisory Panels for the Atlantic States Marine Fisheries Commission, the chair of the Sport Fisheries Advisory Commission to the Maryland Department of Natural Resources, and has been a frequent attendee at Mid-Atlantic Fishery Management Council meetings in recent years. In his work with these councils and commissions, Mr. Sikorski has helped CCA Maryland protect striped bass, yellow perch, menhaden, and many other species of forage along our coast. Mr. Sikorski is also a former CCA Annapolis Chapter President and is deeply involved with CCA's oyster advocacy and habitat work.

NEIL SIMS

Neil Sims is the CEO of Ocean Era, a Hawaii-based mariculture company focused on expanding the environmentally sound production of the ocean's finest fish. Mr. Sims is a marine biologist with a Bachelor of Science from James Cook University and a Master of Science from the University of New South Wales, and has a professional commitment to "softening mankind's footprint on the seas". He worked in fisheries management and development in the South Pacific during the 1980s. He has been based in Kona since 1990, first working in pearl oyster hatchery development and pearl farming throughout Hawaii, the South Pacific, and Southeast Asia. Mr. Sims and Dr. Dale Sarver founded Kona Blue Water Farms in 2001, building a team that developed cutting-edge hatchery methods for 'difficult-to-rear' marine fish larvae, including snappers, groupers, and yellowtail/jacks. At Kona Blue Water Farms, they pioneered the first integrated hatchery and open ocean fish farm in the U.S. Ocean Era was later co-founded by Mr. Sims and Michael Bullock to continue this tradition, focusing on the global need for expanded production of high-value, marine finfish, and pursuit of "next generation" technologies, including remote offshore culture systems, more sustainable and scale-able feeds, and new species.

ANDY STRELCHECK

Andy Strelcheck is the Regional Administrator of NOAA Fisheries Southeast Regional Office, which oversees conservation and management of federally managed fisheries, protected resources, and habitat in the Southeast U.S., Puerto Rico, and the U.S. Virgin Islands. Prior to becoming the Regional Administrator, he served as the deputy regional administrator of NOAA Fisheries' Southeast Regional Office from March 2015

through August 2021. He began his career with NOAA Fisheries in 2004 as a fishery biologist, and from 2008 to 2015, he served as chief of the Limited Access Privilege Programs and Data Management Branch. In this capacity, he oversaw analytical work used to support management decisions made by three regional fishery management councils. Prior to his time at NOAA, Mr. Strelcheck worked as a biological scientist for the Florida Fish and Wildlife Conservation Commission. He earned his bachelor's degree in biological science from Florida State University, and a master's degree in marine science from the University of South Alabama.

BARRY THOM

Barry Thom recently accepted the role of Executive Director at the Pacific States Marine Fisheries Commission. Before his current role, he served at NOAA fisheries for 21 years, including 5 years as the Regional Administrator for the West Coast Region. He has worked extensively on salmon recovery and marine fisheries management on the West Coast. He is also an avid recreational fisherman and routinely fishes for salmon, halibut, rockfish, crab, tuna, and billfish.

JENNI WALLACE

Jenni Wallace joined NOAA's Office of Sustainable Fisheries in August of 2011. She currently serves as the acting Director of the Office of Sustainable Fisheries. In her acting Director role as well as in her permanent position as Deputy Director, she manages and leads fishery conservation and management activities to ensure sustainable fisheries through effective national and office-level programs and policies. She came to NOAA Fisheries in 2002 as a Presidential Management Intern. Ms. Wallace holds a Bachelor of Science in Marine Biology from Eckerd College and a Master of Environmental Management from Duke University.

A.G. WOODWARD

A.G. "Spud" Woodward retired in 2018 after 34 years with the Georgia Department of Natural Resources (DNR). He is the owner of a fish and wildlife management consulting and communications business and serves as Georgia's governor-appointed commissioner to the Atlantic States Marine Fisheries Commission, of which he is currently chair. Mr. Woodward is also serving a second term as a member of the South Atlantic Fishery Management Council. He is a member of the advisory boards of the Georgia Wildlife Federation and of Keep Brunswick-Golden Isles Beautiful. During his employment with Georgia DNR, Mr. Woodward served as a wildlife technician, a marine biologist, the Chief of Marine Fisheries, and the Director of the Coastal Resources Division. He was Georgia's administrative commissioner to the Atlantic States Marine Fisheries Commission for 16 years and agency representative on the South Atlantic Fishery Management Council for 3 years. Mr. Woodward has been a certified SCUBA diver since 1984, and a USCG-licensed vessel operator since 1995. He was a saltwater competitive angler from 1988 through 2000, participating in tournaments throughout the South Atlantic and Gulf of Mexico. He has contributed to over 200 articles about fishing, hunting, and conservation in both professional and popular publications.

RYAN WULFF

Ryan Wulff is the Assistant Regional Administrator for NOAA's West Coast Regional Office, with responsibility for the Sustainable Fisheries Division. Mr. Wulff is also the United States Deputy Commissioner to the International Whaling Commission and an alternate United States Commissioner to the Inter-American Tropical Tuna Commission. Prior to his current role, Mr. Wulff served as the California Delta Policy and Restoration Branch Chief for the West Coast Region. He also served that as the Senior Policy Advisor to the Under Secretary of Commerce for Oceans and Atmosphere on domestic and international protected resource and fisheries issues. Mr. Wulff has a bachelor's degree from Brown University and a Master of Science from Scripps Institution of Oceanography.



Climate Resilient Fisheries

Changing climate and ocean conditions are having significant impacts on the nation's valuable marine life and ecosystems, as well as the many communities and economies that depend on them. Scientists expect environmental changes such as warming oceans, rising sea levels, extreme events (e.g., hurricanes, floods, and droughts), and ocean acidification to increase with continued shifts in the planet's climate system. We are already witnessing changes in the distribution and productivity of fish stocks, disruptions to seasonal migratory patterns, and damage to shoreside infrastructure that create new challenges for fishery participants and managers.

These environmental changes impact every aspect of marine resource management at the state, regional and federal levels — from managing fisheries and aquaculture, to conserving protected resources and vital habitats. There is much at risk, economically, ecologically, and socially (or culturally). For example, outdoor recreation represented 1.8% of the United States national gross domestic product (GDP) in 2020, with boating and fishing ranking as the largest conventional outdoor activity for the nation as a whole (in terms of contribution to GDP) (BEA, Outdoor Satellite Account 2021). Coastal habitats provide important ecosystem services including, providing nursery areas for fish and protected species, and protecting people and property from storms and flooding. Preparing for and adapting to changing ocean conditions will help sustain the nation's valuable marine resources, fisheries, and coastal communities.

The plenary part of this session covers a range of topics, including: the state of science on changing climate and oceans; tools, investments and the importance of habitat for climate-resilient fisheries; on the water perspectives from the recreational fishing community; and climate scenario planning. After the opening presentations and discussion, we will break out into regional working groups to address the following questions:

- What are the recreational fishing community's key concerns about climate change impacts on fisheries?
- What does it mean to have climate-resilient fisheries?
- What is needed to achieve climate-resilient fisheries?
 - What information do we need?
 - What management tools or system(s) do we need to prepare and adapt?
- How can education/outreach and/or community science help advance climate-ready fisheries?

From this session we hope to share current climate knowledge, tools, and approaches and hear anglers' observations, experiences, concerns, and priorities related to changing ocean conditions and the marine recreational fishing community. From the break-out groups we hope to understand the recreational fishing community's vision for climate-resilient fisheries and develop activities or strategies to achieve the vision.



Additional Background Information

NOAA Fisheries Climate Change

<https://www.fisheries.noaa.gov/topic/climate-change>

NOAA Climate and Fisheries Initiative

<https://www.fisheries.noaa.gov/topic/climate-change#noaa-climate-and-fisheries-initiative>

ASMFC: Climate Change and its Impact to Atlantic Coast Fisheries Resource

<http://www.asmfc.org/fisheries-science/climate-change>

US National Climate Assessment Chapter on Oceans and Marine Resources

<https://nca2018.globalchange.gov/chapter/9/>

East Coast Climate Change Scenario Planning

<https://www.mafmc.org/climate-change-scenario-planning>





Balancing Ocean Uses

While the ocean may seem expansive and endless, many coastal areas are facing increasing demands for offshore space. Ocean spatial planning plays an increasingly important role in balancing the growing number of ocean users and uses. This session will dive deep into two of the rising ocean uses: offshore wind energy and marine aquaculture installations.

Offshore wind energy development has the potential to play an important role in U.S. efforts to combat the climate crisis and build a clean energy economy. In March 2021, the Administration set a goal of deploying 30 gigawatts of offshore wind energy by 2030 while protecting biodiversity and promoting cooperative ocean use. Many coastal states have set similar ambitious goals. Until recently, the majority of planning and activity has occurred in the Atlantic Outer Continental Shelf from Massachusetts to North Carolina. However, in October 2021, the Department of the Interior announced holding up to seven new offshore wind leases along the East Coast, in the Gulf of Mexico, and in Pacific waters, with the first of those new lease sales concluding in late February in the New York Bight.

Marine aquaculture (or ocean farming) allows the nation to build off of our success in wild-capture fisheries and is vital for supporting seafood production, year-round jobs, rebuilding protected species and habitats, and enhancing coastal economic resilience. Aquaculture is one of the most resource-efficient ways to produce protein and has helped improve nutrition and food security in many parts of the world. Currently, the United States imports 70 to 85 percent of its seafood, and nearly 50 percent of this imported seafood is produced via aquaculture.

It is critical to ensure planning, siting, and development of new projects minimize, or avoid, user conflicts and maintain our agency commitment to ocean stewardship. These new and expanding uses of marine waters require substantial scientific exploration, regulatory review, and monitoring while posing new challenges for fishery managers, scientists, recreational anglers, and other traditional ocean users. This panel will provide a shared understanding of the status of ocean wind energy development and marine aquaculture expansion, and opportunities for public engagement. We hope this session will allow the recreational fishing community to share their concerns and priorities to help safeguard recreational fishing opportunities.

In this session, we will share agency, industry, and anglers' perspectives on offshore wind energy and marine aquaculture. The first portion of this session includes presentations with an opportunity for audience questions to better understand the status of what is happening on the water and the opportunity for managers to learn from anglers' first-hand experiences. The second portion of this session includes a facilitated discussion and Q&A with an expert panel of representatives from the Bureau of Ocean Energy Management (BOEM), NOAA Fisheries, states, as well as anglers. The panelists will discuss having a voice in the process as these industries expand, maintaining fishing opportunities, and understanding potential impacts.



In this session, we hope to share and understand:

- What are the impacts recreational anglers are seeing on the water with these industries?
- What steps need to be taken to maintain sustainable recreational fishing opportunities?
- What are best practices for ensuring meaningful and robust involvement of recreational stakeholders in the process and how to agencies reach stakeholders?
- In situations where impacts to fishing cannot be avoided, are there preferred mitigation measures or best management practices?

Additional Background Information

BOEM Fishing Industry Engagement

<https://www.boem.gov/renewable-energy/fishing-industry-communication-and-engagement>

NOAA Fisheries Wind Page

<https://www.fisheries.noaa.gov/topic/offshore-wind-energy>

ASMFC Hot Topics

<http://www.asafc.org/habitat/hot-topics>

NOAA Fisheries Aquaculture Information

<https://www.fisheries.noaa.gov/topic/aquaculture>





Data Collection & Use

Successful fisheries management is dependent on the data collected about fishing activity. Saltwater recreational fishing is big business, supporting hundreds of thousands of American jobs and billions in sales. Abundant ocean fisheries are the engine that drives these economic benefits. A fundamental component of sustainably managing any fishery is understanding of fishermen's catches. More accurate and timely data will benefit fisheries stock assessments by improving the information used to manage them sustainably.

Understanding recreational catch depends on detailed and accurate data from the recreational fishing community. Recreational fishing surveys vary from region to region, state to state, and, in some cases, species to species. Generally speaking, in the federal system and most regional surveys catch rates — or the average number of fish caught per angler trip — are measured through in-person interviews, and effort — or the number of fishing trips anglers take — is measured through mail and telephone surveys. In many regions, electronic trip reports collect additional information about for-hire fishing activity. Estimation methods are complex but, at a high level, can be understood as multiplying catch rate by effort to estimate total recreational catch. Recreational catch estimates are just one of the many pieces of information fisheries managers must consider during their science-based decision-making process.

Stock assessments are the scientific foundation of successful and sustainable fishery harvest management. Stock assessments measure the impact of fishing on fish and shellfish stocks. They project harvest levels that maximize the number of fish that can be caught every year while preventing overfishing (removing too many fish), protecting the marine ecosystem, and where necessary, rebuilding overfished stocks. Each stock assessment produces a report that provides fishery managers with a scientific basis for setting sustainable harvest policies. For NOAA Fisheries and the eight regional fishery management councils, assessments are conducted to aid in the management of nearly 500 fishery stocks. Stock assessments are also conducted at the interstate and state levels for the species that predominantly reside in state waters.

The presentation portion of this data session will provide an overview of marine recreational fishery data collection, stock assessment, and catch monitoring processes, as well as the role that uncertainty plays in them. The panel discussion portion of this session will cover strategies for improving public confidence and participation in recreational fisheries data and data collection as well as the potential roles of government, stakeholders, and new technologies in doing so.



In this session, we hope to understand:

- How can confidence in and understanding of recreational fishing data be improved among the recreational fishing community?
- What role can NOAA Fisheries/Councils/Commissions/states play in increasing understanding of how recreational data are collected and used?
- What role can the recreational fishing community play in addressing misconceptions?
- How can participation in data collection be improved?
- What role can electronic reporting play, and what are the challenges?

Additional Background Information

NOAA Fisheries Marine Recreational Information Program

<https://www.fisheries.noaa.gov/topic/recreational-fishing-data>

ACCSP Recreational Fisheries Data

<https://www.accsp.org/what-we-do/recreational-fisheries/>

NASEM Data and Management Strategies for Recreational Fisheries with Annual Catch Limits

<https://www.nap.edu/read/26185/chapter/1>

NASEM Review of the Marine Recreational Information Program

<https://www.nap.edu/read/24640/chapter/1>





Management Reform, Flexibility & Optimum Yield

Developing recreational management measures that meet angler needs while ensuring that fisheries resources are not overfished nor experiencing overfishing has become increasingly complex. Major drivers in current efforts for recreational management reform include: concerns related to uncertainty and variability in the recreational fishery data, the need to change measures (sometimes annually) based on those data, the perception that measures are not reflective of current stock status, and that management measures don't always have the intended effect on overall harvest.

On December 31, 2018, the Modernizing Recreational Fisheries Management Act of 2018 (Modern Fish Act) was signed into law. While the law did not fundamentally change the Magnuson-Stevens Act, it did authorize fishery managers to use certain management approaches in recreational or mixed use fisheries that some consider alternative approaches to traditional poundage based catch limits. In practice, efforts to expand fishing opportunities by applying alternative management approaches are perceived as having limited success.

The first part of the management session will provide an overview of ongoing efforts to develop and apply management flexibility in the context of improving fishing opportunities and seeking to better understand the fishing public's vision for management reform/flexibility.

Further, as required by the Modern Fish Act, the recent review of NOAA Fisheries Marine Recreational Information Program (MRIP) by the National Academies of Science (NASEM) recommended the following:

NOAA Fisheries and the Councils should develop a process for engaging recreational fisheries stakeholders in a more in-depth discussion of optimum yield and how it can be used to identify and prioritize management objectives that are better suited to the cultural, economic, and conservation goals of the angling community.

This second part of this session can be viewed as a preparatory first step in the NASEM recommended process. It is intended to develop a common understanding of optimum yield (OY) as defined in statute, regulation, and in practice. We will then learn about anglers' perspectives on OY, human dimensions in considering OY, and the potential for OY to guide management from the Council perspective.

During the entire management discussion, we hope that these and similar questions will spark discussion:

- What does successful recreational fisheries management reform look like to you?
How can that vision be achieved?



- Has management flexibility been used in your region?
 - Has it been successful? If not, what has limited its success?
- What does OY look like for the recreational community in your region?
- What are the next steps the angling community and management partners should consider to advance recreational fisheries management and consideration of recreational OY perspectives?

Additional Background Information

NOAA Fisheries Management

<https://www.fisheries.noaa.gov/topic/sustainable-fisheries#management>

ASMFC Management

<http://www.asmfc.org/fisheries-management/program-overview>

MAFMC/ASMFC Recreational Management Reform

<https://www.mafmc.org/actions/recreational-reform-initiative>

NASEM The Use of Limited Access Privilege Programs in Mixed-Use Fisheries

<https://www.nap.edu/read/26186/chapter/1>

National Standard Guidelines

<https://www.fisheries.noaa.gov/national/laws-and-policies/national-standard-guidelines>

