



Working Group Meeting
Wednesday, October 19, 2016
1:00 PM – 3:00 PM ET
2:00 PM – 4:00 PM AT

Briefing Book

Table of Contents

Meeting Agenda	3
- Follow Up from June 2016 Policy Sessions (Briefing Note)	4
- Table Summarizing GOMC Opportunities from June 2016 Meeting.....	5
- Selecting a US Scientific Representative (Briefing Note).....	8
- Process for Selecting US Scientific Representative	9
- Position Description for US Scientific Representative	10
- Selection Form – US Scientific Representative.....	12
- Candidate Profiles – US Scientific Representative.....	13

Meeting Call-in and Webex Information

Conference Call Access Information

Call In: 1 866-506-7697

Passcode: 9500660#

Webex Information

Webex Login Details: ----- Meeting Number: 744921075 Meeting Passcode: 4927573

Meeting Host: MS ADRIANNE R HARRISON Join Instructions for Instant Net Conference: 1. Join the meeting now:

<http://www.mymeetings.com/nc/join.php?sigKey=mymeetings&i=744921075&p=4927573&t=c> 2. Enter the required fields. 3. Indicate that you have read the Privacy Policy. 4. Click on Proceed. Audio is through the conference line.

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Gulf of Maine Council on the Marine Environment
 October 19, 2016 • Working Group Meeting • Briefing Book

GOMC Working Group Meeting DRAFT Agenda • Wednesday, October 19, 2016 1:00 PM – 3:00 PM ET / 2:00 PM – 4:00 PM AT		
2:00 PM AT	Welcome, Introductions, and Overview of Objectives for the Meeting <i>Peter McLaughlin, Working Group Chair</i> <i>NB Department of Environment and Local Government</i>	
2:05 PM	GOMC Discussion Items from June 2016 Policy sessions Working Group members will provide updates regarding policy issues raised during the June 2016 GOMC meeting. <ul style="list-style-type: none"> ➤ Marine Debris ➤ Coastal Resiliency ➤ Gulf of Maine Mapping Initiative (GOMMI) ➤ Others (If needed) 	✓ For Information ✓ Internal ✓ For Direction <i>Briefing Note: pp. 4-7</i>
2:35 PM	Work Plan and Other Updates Working Group members will provide optional quick updates regarding GOMC work plans or other business.	✓ For Information ✓ Internal
2:50 PM	Planning for December Council / Working Group Meeting <ul style="list-style-type: none"> ➤ Logistics ➤ Potential agenda items 	✓ For Information ✓ Internal ✓ For Direction
3:00 PM	Selecting a US Scientific Representative Working Group will discuss nominated candidates for US Scientific Representative to the GOMC. <ul style="list-style-type: none"> ➤ <u>Goal</u>: Identify top three candidate in order of preference 	✓ For Decision <i>Briefing Note: pp.8-20</i>
4:00 PM	Adjourn	

Gulf of Maine Council on the Marine Environment Meeting Briefing Note					
Title of Agenda Item: Follow Up from Policy Sessions at the GOMC June 2016 Meeting					
Submitted by: Peter McLaughlin and Joan LeBlanc					
Type of Item (place X in appropriate box)	For Decision	For Direction	x	For Information	For Information
				x	(Internal GOMC)
Background (required):					
<p>During the June 2016 GOMC meeting, Council and Working Group members participated in several policy sessions identifying a range of potential initiatives for future GOMC focus. Since that time, Secretariat Team members have been discussing next steps and other outcomes from the sessions. To help facilitate follow up efforts, J. LeBlanc prepared a table summarizing the potential GOMC opportunities identified during the June meeting.</p>					
Actions, Outcomes or Decisions Requested:					
<ul style="list-style-type: none"> • Working Group members will provide updates and discuss next steps related to some of the potential GOMC initiatives identified in June 2016. Items identified for discussion / update during the October meeting include: <ul style="list-style-type: none"> ○ Marine Debris ○ Coastal Resiliency ○ Gulf of Maine Mapping Initiative (GOMMI) ○ Others (if needed) 					
Supporting Documentation (If applicable, list additional documents included in the Briefing Book following this Briefing Note):					
<ul style="list-style-type: none"> • Tracking GOMC Opportunities Identified During June 2016 Policy Sessions, <i>pp. 5-7</i> 					

Gulf of Maine Council on the Marine Environment
 Tracking GOMC Opportunities Identified during June 2016 Policy Sessions (Updated August 28, 2016)

GOMC Opportunity / Potential Initiative	Lead / Partners	Status / Next Steps
<p><u>ESIP Benchmarking</u> Utilize ESIP ICUC APP as a benchmark for tracking coastal erosion sites in each jurisdiction. Tie to existing beach profiling / coastal erosion modeling programs. Also add erosion sites to ESIP monitoring database. Link King Tide Event to ICUC APP Establish one ICUC location in each jurisdiction for the King Tide event.</p>	<p><u>Lead:</u> ESIP <u>Partners:</u> USGS, NOAA, Geological Survey Canada, each jurisdiction <u>Leads:</u> ESIP / Climate Network <u>Partners:</u> all jurisdictions <u>Lead:</u> ESIP <u>Partners:</u> all jurisdictions</p>	<p>Determine whether this initiative can be incorporated into ESIP work plan for this year or next. Determine whether this initiative can be incorporated into ESIP work plan for this year or next. Determine whether this initiative can be incorporated into ESIP work plan for this year or next. Jurisdictions select sites and work with ESIP on implementation.</p>
<p><u>ESIP ICUC APP</u> Develop two new sites in each jurisdiction utilizing funds provided by Susan Russell-Robinson. <u>Shoreline Management Strategy</u> Explore range of potential techniques for shoreline management, assessing living shoreline demonstration projects, and developing fact sheets regarding living shorelines. <u>Vulnerability Assessment Criteria</u> Explore opportunities to develop consistent criteria for vulnerability assessments.</p>	<p><u>Lead:</u> ESIP <u>Partners:</u> jurisdictions <u>Lead:</u> Becca Newhall <u>Lead:</u> Becca Newhall</p>	<p>Identify lead. Identify priorities and geographic area to be covered. Determine where GOMC can add value. Becca to coordinate call to explore further. Becca to coordinate call to explore further</p>
<p><u>Longer Term Opportunities for Protecting Coastal Infrastructure</u> > Promote collection of baseline underwater mapping, topo and bathymetry in US and Canada > Structure coastal green infrastructure programs on the Canadian side to complement US side > Promote consistent / seamless shoreline data. Data collection methods should be the same or at least the outcomes measured on the same scale. > Improve use of ESIP. Change from a depository for data to one stop shopping for managers to make decisions. > Understand vulnerability – shoreline vulnerability will be different than upper watershed. > Develop overarching strategy / process for understanding cumulative impacts. > Encourage tools that focus on regional scale.</p>	<p><u>Leads:</u> DOI, DFO, NB, NS, ESIP</p>	<p>Explore and identify appropriate long-term initiatives for GOMC.</p>

Gulf of Maine Council on the Marine Environment
 October 19, 2016 • Working Group Meeting • Briefing Book

Gulf of Maine Council on the Marine Environment
 Tracking GOMC Opportunities Identified during June 2016 Policy Sessions (Updated August 28, 2016)

GOMC Opportunity / Potential Initiative	Lead / Partners	Status / Next Steps
<p><u>Coastal Infrastructure Inventory</u> Develop inventory of the types and extent of coastal infrastructure in the Gulf of Maine. Start with Department of Homeland Security – 10 types of critical infrastructure.</p>	<p>Lead: TBD</p>	<p>Identify lead and determine GOMC interest and next steps.</p>
<p><u>Host a Simulation Disaster (Hurricane Scenario) for Impact on Coast</u> Exercise would be similar to drills for earthquake or oil spill response. Goal would be to identify and raise awareness about infrastructure issues / risks / vulnerabilities facing the Gulf of Maine.</p>	<p>Leads: TBD</p>	<p>Identify lead. Identify GOMC niche around building resiliency as part of emergency response in the Gulf of Maine.</p>
<p><u>Habitat Sustainability</u> Habitat sustainability is an important emerging area of focus for the Gulf of Maine Council.</p>	<p>n/a</p>	<p>Continue discussion to identify future opportunities and areas of focus for GOMC. Engage US Fish and Wildlife Service and the Nature Conservancy in GOMC future efforts to promote sustainable habitat in the Gulf of Maine.</p>
<p><u>Coastal and Ocean Acidification Science Symposium</u></p>	<p>Leads: Rob Stephenson, Ellen Mcray, Theresa Torrent, Bill Whitman</p>	<p>Explore opportunities for a science symposium in collaboration with RARGOM.</p>
<p><u>Coastal and Ocean Acidification Education / Awareness</u></p>	<p>Leads: Theresa Torrent, Don Hudson</p>	<p>Identify opportunities for GOMC to build upon existing education and awareness around ocean acidification, such as NECAN education and outreach efforts, and New England Ocean Science Education Collaborative (NEOSEC) summit on ocean literacy.</p>
<p><u>Coastal and Ocean Acidification Inform Agency Efforts</u></p>	<p>Lead: tbd</p>	<p>Identify GOMC priorities around ocean acidification and use those to influence agency supported efforts. For example, DFO's expanded focus on climate change could incorporate GOMC priorities.</p>

Gulf of Maine Council on the Marine Environment
 Tracking GOMC Opportunities Identified during June 2016 Policy Sessions (Updated August 28, 2016)

GOMC Opportunity / Potential Initiative	Lead / Partners	Status / Next Steps
<p><u>Geologic Mapping of Seafloor</u></p> <ul style="list-style-type: none"> ▪ <u>Long term:</u> Reinvigorate GOMC's Gulf of Maine Mapping Initiative Committee, Gulf of Maine Council. Host workshop about future of seafloor and nearshore mapping using remote sensing. Develop a plan for mapping. ▪ <u>Short term:</u> 1) Exchange information about current eelgrass extent, studies about causes of loss of eelgrass, and sources that contribute to ESIP Aquatic Habitat Indicators, 2) U.S. SEASKETCH: Conduct a review of the content objects and holdings to expand to more fully represent data related to seafloor mapping in the Gulf of Maine. 	<p>Leads: Walter Barnhardt – USGS, Vladimir Kostylev- Geological Survey of Canada Partners: Jurisdictions, NOAA</p>	<p>Incorporate Jurisdictional and other GOMC feedback into draft work plan prepared by Vlad and Walter.</p>
<p><u>Marine Debris</u></p> <p>Explore opportunities for GOMC to reinvigorate focus on marine debris issues as follow up to NOAA workshop last December. Potential areas of focus include reclaiming fishing gear, microplastics, and educating the fishing industry.</p>	<p>Leads: Becca Newhall, Theresa Torrent</p>	<p>Becca and Theresa will explore opportunities to develop a targeted GOMC initiative</p>
<p><u>Gulf of Maine Symposium</u></p> <p>Robert Stephenson identified the need for a GOM synthesis symposium. The symposium could be a collaborative effort with RARGOM. GOMC members expressed interest in a symposium and discussed potential topics such as: 1) <u>Climate Change</u> – scientific needs, capacity to adapt, ocean acidification, or 2) <u>Coastal Prosperity</u> – economic, public health, social justice impacts</p>	<p>Leads: Robert Stephenson, Theresa Torrent, others TBD</p>	<p>Further explore potential for a Gulf of Maine Symposium. See also proposal for symposium focused on coastal and ocean acidification.</p>

Gulf of Maine Council on the Marine Environment Meeting Briefing Note				
Title of Agenda Item: Selecting a US Scientific Representative				
Submitted by: Peter McLaughlin and Joan LeBlanc in collaboration with Secretariat Team				
Type of Item (place X in appropriate box)	For Decision	x	For Direction	For Information <small>(internal GOMC)</small>
				For Information <small>(External)</small>
Background (required):				
<p>As a follow up to the June 2016 joint Council / Working Group meeting, the Working Group Chair, Council Coordinator, and Secretariat Team have been facilitating the process for selecting a US Scientific Representative to the GOMC. Since June, the following steps have been completed:</p> <ul style="list-style-type: none"> • During August, the Secretariat Team approved a process for selecting a US Scientific Representative. • In September, the Secretariat Team approved a position description. • Since June, Council and Working Group members have been identifying candidates for consideration. • Eight candidates have been nominated and will be discussed during the October 19 Working Group meeting. • A list of candidates and one-page profiles are included in this briefing book. <p>During the October 19, 2016 Working Group meeting, Working Group members will discuss candidates for the GOMC US Scientific Representative position and select a top candidate for recommendation to the Council. In order to help inform the discussion and to provide an opportunity for those who won't be on the call to provide input, Working Group and Council members are asked to provide advance rankings of the candidates. These rankings will help inform the discussion and selection of a candidate but will not be the deciding factor. Selection of a candidate for recommendation will be made via consensus during October Working Group call. A summary of advance rankings submitted will be provided during the call.</p>				
Actions, Outcomes or Decisions Requested:				
<ul style="list-style-type: none"> • <u>In advance of the meeting:</u> Council and WG are asked to provide advance input by completing and emailing selection ranking form to J. LeBlanc prior to WG meeting. This will be particularly useful for any Council or WG member who would like to provide input but cannot join the call. • <u>During the meeting:</u> Working Group members are asked to discuss candidates for the US Scientific Representative position in order to reach a consensus on the first, second and third choice candidate for the position. 				
Supporting Documentation (If applicable, list additional documents included in the Briefing Book following this Briefing Note):				
<ul style="list-style-type: none"> • Process for Selecting US Scientific Representative to GOMC, <i>p. 9</i> • Position Description for US Scientific Representative. <i>pp. 10-11</i> • List of Candidates for US Scientific Representative – Candidate Selection Form, <i>p. 12</i> • Brief Profiles for Each Candidate, <i>pp. 13-20</i> 				

Gulf of Maine Council
Process for Selecting US Scientific Representative
August 2016

For discussion during August Secretariat Team meeting.

- *This process was developed to support the goal of approving a new US scientific representative to the GOMC at the December 2016 meeting.*
- *Confidentiality: Council / WG members are asked to keep the list of candidates confidential so that a candidate will only know they are being considered if / when an invitation to join the Council is extended.*
- *The timeline will be adjusted if additional time is needed.*

DRAFT Process for Selecting US Scientific Representative to GOMC	
Action	Timing
➤ Secretariat Team develops suggested guidance for search / selection process	July
➤ Secretariat Team develops process for selecting candidates	August
➤ Secretariat Team develops draft job description <ul style="list-style-type: none"> ○ circulate to WG and Council for approval 	August / September
➤ Council and Working Group develop list of potential candidates <ul style="list-style-type: none"> ○ Include background information for each candidate 	July / August / September
➤ Circulate list of candidates to Council / WG for feedback in advance of October WG meeting <ul style="list-style-type: none"> ○ Council / WG members will be asked to rank candidates in order of preference ○ Council WG members will be asked to identify any issues of concern 	September / October
➤ Discuss candidate list and identify top (3 or more) candidates during October Working Group meeting <ul style="list-style-type: none"> ○ Reach consensus to determine order of candidates (1st choice, 2nd choice, etc.) ○ Circulate list of top candidates to Council / WG to confirm that there are no outstanding issues of concern 	October
➤ Extend invitation to join Council to top candidate (provide candidate with job description) <ul style="list-style-type: none"> ○ If candidate accepts, move to next action step ○ If candidate declines, extend invitation to next candidate 	October / November
➤ Council will be asked to approve recommended candidate at December meeting	December



FINAL Position Description

US Scientific Representative to the Gulf of Maine Council

About the [Gulf of Maine Council](#)

The Gulf of Maine Council (GOMC) was established in 1989 by the governments of Maine, Massachusetts, New Hampshire, New Brunswick, and Nova Scotia to promote a healthy Gulf of Maine ecosystem. Since that time, provincial and state leaders have been working together with federal partners and non-governmental organizations toward the following binational efforts.

- Facilitate integrated watershed, coastal and ocean management by fostering an ecosystem-based management approach. The Council works to ensure decision-makers possess the necessary information to manage human effects on the ecosystem, to preserve ecological integrity and to sustain healthy human communities.
- Enable the region's states, provinces and federal government member agencies to become more effective stewards of the Gulf of Maine watershed by working together in a regional forum.
- Develop and sustain strong partnerships between and among government agencies and with local and regional organizations to enhance and leverage opportunities for addressing issues of concern in the Gulf of Maine watershed.

Recent GOMC Initiatives

Gulf of Maine Council initiatives may include long-standing efforts to promote environmental health or shorter-term projects that support the organization's goals and priorities. Some of the Gulf of Maine Council's major initiatives include:

- **Climate Network** convenes leaders from Canadian federal and state agencies, US federal and state agencies, academics, tribes, and non-governmental groups in order to bring the latest climate change science, impacts, and adaptation information to communities in the Gulf of Maine watershed.
- **EcoSystem Indicator Partnership (ESIP)** is developing indicators for the Gulf of Maine and integrating regional data for a new Web-based reporting system for marine ecosystem monitoring. Activities of ESIP center on convening regional practitioners in six indicator areas: coastal development, contaminants and pathogens, eutrophication, aquatic habitat, fisheries and aquaculture, and climate change.
- **State of the Gulf of Maine Report** is a modular, living document made up of a context document and a series of theme or issue papers pertaining to the Gulf of Maine ecosystem, bordered by the northeastern United States and the Canadian Maritime Provinces
- **Coastal and Marine Spatial Planning** investigates and makes recommendations on roles/activities for the Council in coastal and marine spatial planning and tracks and exchanges information on CMSP policies and activities on both sides of the border.

- **Gulfwatch Contaminants Monitoring** oversees sentinel species monitoring program and directs the selection of sites and sampling parameters, and it assesses human and environmental health issues and implements contaminant-monitoring efforts in the Gulf of Maine.

GOMC Meetings / Commitments

- The Council meets in-person on an annual basis to promote networking around Gulf of Maine priorities, and to provide direction for the Gulf of Maine Council work plan and initiatives. Annual in-person meetings usually take place over the course of two days during June. Meeting location alternates annually between Canada and US when feasible, and is held in collaboration with Working Group when appropriate to enhance networking and collaboration. Council may choose to utilize a portion of the annual meeting to host a workshop or other networking event.
- A second virtual Council / Working Group meeting usually takes place during December.
- Council members are also welcome to participate in planning efforts throughout the year by attending conference call meetings of the Working Group and Secretariat Team, and / or participating in Gulf of Maine Council initiatives.

About the Position

In accordance with the Gulf of Maine Council's Terms of Reference, the Council can appoint one senior representative of the scientific community from each country. The US and Canadian science representative positions are two-year renewable appointments to the Council.

Qualifications

- Expertise coincides with some aspect of Gulf of Maine Council work
- Area of research is focused on the Gulf of Maine watershed
- Demonstrated interest in the links between science and management
- Demonstrated success in multi-disciplinary science
- Understands the 'culture' of the Gulf of Maine
- Candidate is recognized as a scientific leader in the Gulf of Maine region

Responsibilities

- As a member of the Council, science representatives are expected to actively participate in the Council's work, including participation in Council meetings, offering expertise and advice around scientific validity and applicability.
- Coordinate with GOMC's Canadian science representative to review emerging and relevant topics for consideration by the GOMC.

Please Note: This is a voluntary position with no compensation. Council members are responsible for paying for travel expenses on their own or by securing support from their agency.

Additional Information about the Gulf of Maine Council

- A GOMC Reference Guide including terms of reference, structure and other organizational information is available at: <http://www.gulfofmaine.org/2/wp-content/uploads/2015/12/GOMC-Reference-Guide-December-2015.pdf>
- More information about GOMC initiatives is available at: <http://www.gulfofmaine.org/2/about-the-council/committees/>
- Approved work plans for active Gulf of Maine Council initiatives are available at: <http://www.gulfofmaine.org/2/wp-content/uploads/2015/12/GOMC-2015-2017-Work-Plan.pdf>

PLEASE FILL OUT THIS FORM AND EMAIL TO jleblanc@gulfofmaine.org by Wednesday, October 19, 10:00 AM ET / 11:00 AM AT. Thank you.

2016 Candidates for GOMC US Scientific Representative - Selection Form

During the October 19, 2016 Working Group meeting, Working Group members will discuss candidates for the GOMC US Scientific Representative position and select a top candidate for recommendation to the Council. In order to help inform the discussion and to provide an opportunity for those who won't be on the call to provide input, Working Group and Council members are asked to provide advance rankings of the candidates. These rankings will help inform the discussion and selection of a candidate but will not be the deciding factor. Selection of a candidate for recommendation will be made via consensus during next week's call.

Name of Reviewer (please include your name here):

Please review the bios provided for the eight candidates. Use the table below to rank the nominees from 1-8, with 1 being your first choice.

Candidates Nominated for US Science Rep Position			
Name	Affiliation (s)	Nominated by	Rank from 1-8 with 1 being your first choice
Darron Collins, President	College of the Atlantic	Ellen Mecray	
Michael Fogarty, Adjunct Associate Scientist	Woods Hole Oceanographic Institution NOAA Fisheries Service / Northeast Fisheries Science Center	Peter Wells	
Madeleine Hall-Arber	MIT Sea Grant College Program	Peter Wells	
Judith McDowell	Woods Hole Oceanographic Institution	Peter Wells	
Andrew Pershing	Gulf of Maine Research Institute	Judith McDowell via Betsy Nicholson	
Judy Pederson	MIT Sea Grant	NE Sea Grant Directors via Betsy Nicholson	
Andrew Rosenberg	Union of Concerned Scientists (current) NOAA / NMFS (former)	Ellen Mecray	
Jeffrey Runge	Gulf of Maine Research Institute and University of Maine	Theresa Torrent	

Comments (optional):

Please include any comments below that you would like to provide. This would be particularly helpful for anyone who cannot participate in the call but would like to provide insights regarding any of the candidates. Your comments will be shared during the Working Group call.

GOMC US Scientific Representative - Candidate Profiles

Darron Collins
President of the College of the Atlantic, Bar Harbor, Maine



Background

Collins earned his Ph.D. from Tulane University studying [ethnobotany](#) in Guatemala, has researched the [Deepwater Horizon disaster](#) in the Gulf of Mexico, and has worked on leopard conservation on the Russia-North Korean border. He also has taught at Oglethorpe University in Atlanta. Collins has also served as a World Wildlife Fund managing director in the Amur River region of northeast Asia and as a senior advisor to the environmental organization's CEO, and has helped lead the group's outreach efforts. While at WWF, Collins helped raise more than \$10 million in grants and donations, according to COA. As a former College of the Atlantic student, Collins received a Barry M. Goldwater Scholarship and a Watson Foundation Fellowship. As a Watson fellow, Collins studied the environmental and social impacts of hydroelectric dams in Latin America. Collins is an avid fly-fisherman, mountain biker, and trail marathon runner, according to the college.

Education:

- B.A. College of the Atlantic, 1992
- Masters and Ph.D. Tulane University, 2001.

Link to Additional Information (if available):

<https://www.coa.edu/about/administration/president/>

GOMC US Scientific Representative - Candidate Profiles

**Michael Fogarty, Adjunct Associate Scientist
Woods Hole Oceanographic Institute, Woods Hole, MA
and NOAA Fisheries Service, Northeast Fisheries Science Center**



Background:

Michael Fogarty started life far from the ocean, in Fairbanks, Alaska. His parents, New England natives, eventually returned to Rhode Island, where he became fascinated with sea life and embarked on a career in marine biology. He received a doctorate from the University of Rhode Island and came to the Northeast Fisheries Science Center in 1980, where he studies changes in marine ecosystems in response to fishing. He has served on numerous national and international panels and committees including the Scientific Steering Committee of the U.S. GLOBEC program, which he chaired from 1997-2002, the Global Ocean Observation System (GOOS) Steering Committee, and the Coastal Ocean Observation Panel of GOOS.

Education:

Ph.D. University of Rhode Island.

Link to Additional Information (if available):

<http://www.whoi.edu/oceanus/feature/michael-j--fogarty>

GOMC US Scientific Representative - Candidate Profiles

Madeleine Hall-Arber, Anthropologist
MIT Sea Grant College Program



Background:

Madeleine Hall-Arber, Ph.D., has focused her research on fishing communities since 1975, when she devoted her summer fieldwork as a Brandeis University graduate student to going out on the commercial fishing vessels of Provincetown, Massachusetts. The goal of her research on the impacts of regulatory change on fishing communities is to help managers and the communities identify ways to mitigate the impacts of management decisions. Her published work on New England fishing communities serves as the basis for describing the human environment for several fishery management plans. Hall-Arber also works closely with fishing industry members on collaborative research projects.

Current Projects

[Herring Management in the Northeast](#)
[Cape Ann Fresh Catch](#)- A community supported fishery
[Trade Adjustment Assistance Training for Lobstermen](#)
[Identifying Offshore Space-Use Conflicts](#)
[Developing a Methodology and Indicators for Evaluating Catch Shares](#)

Education:

Ph.D. Anthropology, Brandeis University
M.S. Folklore, University of California, Berkeley
B.A. Social Science, Phi Beta Kappa, University of California, Berkeley

Link to Additional Information (if available):

http://seagrants.mit.edu/people_desc.php?usrID=308

GOMC US Scientific Representative - Candidate Profiles

**Judith McDowell, Senior Scientist
Woods Hole Oceanographic Institution**



Background:

Judith McDowell is a senior scientist in the Biology Department at the Woods Hole Oceanographic Institution. She also serves as director of the Woods Hole Sea Grant Program and as associate dean at WHOI. Her research focuses on the physiological ecology of marine animals and the effects of chemical contaminants on the marine environment. She has participated in numerous national and international committees and workshops dealing with marine pollution, including the National Research Council, Committee on Oil in the Sea, and the Advisory Committee on the Marine Environment for the International Council for Exploration of the Seas. She has supervised 14 graduate students and postdocs.

Education:

- B.S. Stonehill College, 1969, Biology/Chemistry
- M.S. University of New Hampshire, 1971, Zoology
- Ph.D. University of New Hampshire, 1974, Zoology

Link to Additional Information (if available):

<http://www.whoi.edu/oceanus/feature/judith-mcdowell>

GOMC US Scientific Representative - Candidate Profiles

**Andrew Pershing, Chief Scientific Officer
Gulf of Maine Research Institute**



Background:

Andy took over as GMRI's Chief Scientific Officer in 2014 and continues to run the Ecosystem Modeling Lab. Prior to becoming CSO, Andy had a joint appointment as a faculty member in the University of Maine School of Marine Sciences and as a research scientist at GMRI. His research focuses on the causes and consequences of changing conditions in the Gulf of Maine, and he is an expert on how climate variability and climate change impact the ecosystems in the northwest Atlantic. He uses a variety of techniques, including analysis of past changes in the physical and ecological conditions, as well as advanced mathematical and computer models of how marine populations change through time. Andy has worked primarily on zooplankton, especially rice grain-sized crustaceans called copepods, but he has also studied lobsters, herring, cod, salmon, bluefin tuna, and right whales. He is actively involved in regional efforts to understand and adapt to climate change. Primary research interests are climate variability and change, ecosystem modeling, dynamics of coupled natural and human systems. Pershing also services as GMRI representative to Regional Association for Research in the Gulf of Maine (RARGOM), and as scientific advisor to NOAA's North Atlantic Regional Climate Team.

Education:

- Ph.D., Ecology and Evolutionary Biology, Cornell University
- Sc. B., Aquatic Biology, Brown University

Link to Additional Information (if available):

<http://www.gmri.org/about-us/who-we-are/staff/andrew-pershing-phd>

GOMC US Scientific Representative - Candidate Profiles

Judy Pederson
MIT Sea Grant College Program



Background:

Dr. Pederson coordinates the Gulf of Maine Regional Ocean Science Initiative and compiled and edited the 2009 Gulf of Maine Strategic Ocean Science Plan. An international expert on marine invasive species, her research focuses on the “biopollution” of marine bioinvasions in near-shore and offshore areas of the Gulf of Maine and Georges Bank. In addition to her research over the past 20 years, Pederson has further contributed to water-quality monitoring, clean-up efforts in Boston Harbor and other areas of Massachusetts, and the disposal of contaminated marine sediments. Prior to joining MIT Sea Grant in 1995, Pederson worked as a coastal ecologist at the Massachusetts Office of Coastal Zone Management.

Projects include:

- [Marine Introduced Species](#)
- [Marine Invader Tracking and Information System \(MITIS\)](#)
- [Gulf of Maine Regional Ocean Science Initiative](#)

Education

Ph.D. (S. Johnson, W. Johansen), Biology (Marine Ecology), Clark University, 1980

M.S. Zoology (Physiology), Syracuse University, 1967

B.A. in Science Education (Biology) Indiana University of Pennsylvania, 1963

Link to Additional Information (if available):

http://seagrant.mit.edu/people_desc.php?usrID=314

GOMC US Scientific Representative - Candidate Profiles

Andrew Rosenberg
Director, Center for Science and Democracy
Union of Concerned Scientists
NOAA / NMFS (former)



Background:

Andrew A. Rosenberg is director of the Center for Science and Democracy at the Union of Concerned Scientists. He has more than 25 years of experience in government service and academic and non-profit leadership. He is the author of scores of peer-reviewed studies and reports on fisheries and ocean management and has published on the intersection between science and policy making.

Dr. Rosenberg previously served as northeast regional administrator of the National Marine Fisheries Service at the National Oceanic and Atmospheric Administration, where he negotiated recovery plans for New England and mid-Atlantic fishery resources, endangered species protections and habitat conservation programs. He later became deputy director of the service.

Dr. Rosenberg is also the convening lead author of the oceans chapter of the U.S. Climate Impacts Advisory Panel. He is a member of the National Academy of Sciences' Ocean Studies Board and the U.S. Commission on Ocean Policy. He is also a professor of natural resources and the environment at the University of New Hampshire, where he previously served as dean of the College of Life Sciences and Agriculture.

Education:

Dr. Rosenberg received his Ph.D. in biology from Dalhousie University in Halifax, Canada and previously studied oceanography at Oregon State University and fisheries biology at the University of Massachusetts.

Link to Additional Information (if available):

<http://www.ucsusa.org/about/staff/staff/andrew-rosenberg.html#.WAE0Zsn7PZc>

GOMC US Scientific Representative - Candidate Profiles

Jeffrey Runge
Gulf of Maine Research Institute, and
University of Maine



Background:

Jeff joined GMRI in 2006 through a joint appointment as a faculty member in the University of Maine's School of Marine Sciences and Research Scientist at GMRI. For fifteen years he worked for Fisheries and Oceans, Canada, at the Institut Maurice Lamontagne in Mont-Joli, Quebec, where he headed a research section studying secondary production and fisheries recruitment processes in coastal waters of eastern Canada. Jeff is interested in the linkages between climate, ocean ecosystem productivity and recruitment into the fisheries. He was research professor in the Institute for the Study of Earth, Oceans and Space at the University of New Hampshire before coming to GMRI and has been involved in research associated with both the Canadian and U.S. GLOBEC (Global Ocean Ecosystem Dynamics) programs. Currently, his research focuses on the measurement and ecosystem role of variability in production of zooplankton, including larvae of commercially harvested fish and invertebrates, in the Gulf of St. Lawrence and in the Gulf of Maine.

Education:

- Killam Post-Doctoral Fellow, Dalhousie University
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Link to Additional Information (if available):

<http://www.gmri.org/about-us/who-we-are/staff/jeffrey-runge-phd>