

Council / Working Group Meeting Monday, December 7, 2015

Briefing Book

Virtual Meeting with Regional Sites

NH Dept. of Environmental Services

Pease International Tradeport 222 International Drive, #175 Portsmouth, New Hampshire

Environment Canada

Queen Square 15th Floor 45 Alderney Drive, Boardroom 1524 Dartmouth, Nova Scotia

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MEETING AGENDA

	Joint Council / Working Group Meeting • Monday, December 7, 2015	
EASTERN TIME	GOMC Council Meeting - Welcome, Introductions and Overview of Meeting C)bjectives
10:00 AM	Rene Pelletier, GOMC Council Co-Chair, NH Department of Environmental Service	=
10:05 ам	Consent Agenda	✓ For Decision
	 Draft June 2015 Council Meeting Record of Decisions, pp. 4-9 Proposed GOMC Post 25th Anniversary Logo Update, p. 10 	pp. 4-10
10:10 AM	Roundtable Forum	✓ For Information
10:10 AM	Council / WG members highlight key jurisdictional issues or news for	1 To morniation
	networking purposes	
10:30 AM	Check-in Regarding GOMC Framework	✓ For Direction
	Council and Working Group members provide feedback regarding the new GOMC framework approved in June 2015.	
10:50 ам	GOMC Reference Guide and Proposed Edit to TORs	✓ For Decision
	Council / WG are asked to approve proposed edit to GOMC Terms of	
	Reference (TORs) membership language to create consistency with the 1992	
	GOMC Amended Agreement. Council / WG are asked to approve the Draft Reference Guide for posting on GOMC website.	p. 11
44.00		✓ For Information
11:00 AM	GOMA / GOMC Transition Cindy Krum, Executive Director, GOMA	✓ Internal pp. 12-13
11:15 AM	Approval of Draft GOMC Work Plan	✓ For Decision
	Joan LeBlanc will provide a quick overview of the July 2015 – June 2017 GOMC Work Plan. Council / WG are asked to approve Draft Work Plan.	p. 14
11.25		γ. 14 ✓ For Information
11:25 РМ	Progress Implementing GOMC Work Plan Working Group members will provide brief updates regarding progress in	✓Internal
	achieving Work Plan initiatives since June 2015.	p. 14-27
12:00 РМ	Break for Lunch	
1:20 PM	Progress Implementing GOMC Work Plan (continued)	✓ For Information
	Working Group members will provide brief updates regarding progress in	✓Internal
	achieving Work Plan initiatives since June 2015.	p. 14-27
2:00 PM	GOMC Plans for June 2016 Meeting and Awards Ceremony	✓ For Direction
	Steve Couture and Peter McLaughlin will provide an update regarding	✓ For Information ✓ Internal
	proposed plans for the June 7-8, 2016 GOMC meeting and awards ceremony in New Brunswick.	p. 28
2:15 PM	Coastal Resiliency Efforts in New Hampshire	✓ For Information
2.13 PW	Regional experts will highlight latest efforts of the NH Coastal Risks and Hazards Commission.	✓External
	Cliff Sinnott, Executive Director, Rockingham Planning Commission (5 min.)	
	Julie Labranche, Sr. Planner, Rockingham Planning Commission (15 min.)	
	 Sherry Godlewski, Environmental Program Manager, NH DES (15 min.) Q&A (10 min.) 	
3:00 PM	Closing Remarks / Adjourn	

DRAFT Record of Decisions

June 17-18, 2015 · Joint Council / Working Group Meeting · Portsmouth, NH

Meeting Participants

Jennifer Anderson, National Oceanic and Atmospheric Administration; Bill Appleby, Environment Canada; Priscilla Brooks, Conservation Law Foundation; Rob Capozi, New Brunswick Department of Environment and Local Government; <u>Bruce Carlisle</u>, Massachusetts Office of Coastal Zone Management; Mel Cote, US Environmental Protection Agency; Steve Couture, New Hampshire Department of Environmental Services; Tim Hall, Fisheries and Oceans Canada; Don Hudson, Chewonki Foundation; Rhea King, Fisheries and Oceans Canada (via teleconference); Cindy Krum, GOMA Executive Director; Joan LeBlanc, GOMC Council Coordinator; Kathleen Leyden, Maine Department of Agriculture, Conservation and Forestry; Peter McLaughlin, New Brunswick Department of Environment and Local Government; Ru Morrison, NERACOOS; Rebecca Newhall, National Oceanic and Atmospheric Administration; Betsy Nicholson; National Oceanic and Atmospheric Administration; Bruce Osborne, Nova Scotia Fisheries and Aquaculture; Kathryn Parlee, Environment Canada; Rene Pelletier, New Hampshire Department of Environmental Services; Christophe Rivet, Environment Canada; Ann Rodney, US Environmental Protection Agency; Susan Russell-Robinson, US Department of Interior; Jack Schwartz, MA Division of Marine Fisheries; Lee Sochasky, New Brunswick; Robert Stephenson, Fisheries and Oceans Canada (via teleconference) Theresa Torrent, Maine Department of Agriculture, Conservation and Forestry; Prassede Vella, Massachusetts Office of Coastal Zone Management; Bill Whitman, Nova Scotia Fisheries and Aquaculture; and <u>Jack Wiggin</u>, Urban Harbors Institute.

Guest Speakers: Cassie Stymiest, NERACOOS / NECAN; and Christine Tilburg, ESIP Program Manager

Opening Remarks

Rene Pelletier welcomed Council and Working Group members to New Hampshire and outlined objectives for the two day meeting.

Consent Agenda

The following consent agenda items were accepted:

- April 2015 Council meeting summary
- April 2015 Working Group meeting summary
- ➤ May 2015 CAC meeting summary
- Climate Network Update
- GOMA / GOMC Finance / Budget Update

Draft GOMC Framework

Steve Couture and Joan LeBlanc provided an overview of the draft GOMC Framework. Throughout the 2014 / 2015 GOMC Secretariat Year, the Council Advisory Committee, Council and Working Group worked together to conduct an organizational assessment facilitated by Steve Couture and Joan LeBlanc. To ensure adequate involvement and feedback, the Council Advisory Committee met six times, the Working Group met six times, and the Council met three times. The proposed GOMC Framework reflects recommendations and feedback provided by all parties throughout the year.

During meetings this spring, Council and Working Group members expressed support for the proposed GOMC Framework. In preparation for the June 2015 meeting and decisions, Joan and Steve prepared draft Terms of Reference (TORs) for the Council, Working Group and Secretariat Team, reflecting recommendations made during the 2014-2015 GOMC organizational assessment process.

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Joan reviewed organizational charts, key highlights, and scenarios for a base-line and broader approach to provide detail about how the proposed framework would work during a two-year leadership cycle. The proposed Terms of Reference, organizational charts and highlights for the new GOMC framework are available in the Briefing Book for the June 2015 meeting at: http://www.gulfofmaine.org/2/gomc-home/council-meetings/

Key Decisions / Action Items

- Council and Working Group members approved the proposed GOMC Framework.
 - Existing language regarding scientific advisors, and tribal representatives on the Council was retained
- Council and Working Group members approved the proposed Terms of Reference for Council, Working Group and Secretariat (with minor edits)
 - Clarify intent to shift meeting location between Canada and the US annually
 - Add language noting that NGOs can chair GOMC initiatives
- Joan LeBlanc will revise Terms of Reference per edits discussed at the meeting
- ➤ Joan LeBlanc will prepare GOMC Reference document including the new Terms of Reference, additional resource materials, and other TORs that are not being updated at this time
- Next one to two years will serve as a pilot for implementation of the new GOMC Framework
- Council and Working Group approved the following definition for consensus:
 - "General agreement, characterized by the absence of sustained opposition to substantial issues by any Council member and by a process that involves seeking to take into account the views of all parties concerned and to reconcile any conflicting arguments. Consensus need not imply unanimity."
- Council and Working Group supported recommendations to maintain and enhance linkages with the Regional Association for Research on the Gulf of Maine (RARGOM).
 - GOMC will identify and follow up on opportunities to influence the subject matter for RARGOM's next symposium
 - GOMC will provide input in planning of RARGOM fall meeting and get feedback from RARGOM's fall meeting at the following GOMC meeting
 - Council / Working Group recommended \$100 in support for RARGOM symposium (decision was referred to Secretariat)
- Council and Working Group members identified the potential benefits of adding an economic advisor to the Council in the future

Roundtable Forum

Council and Working Group members provided updates regarding projects, initiatives and other jurisdictional, federal agency, or NGO news relevant to the Gulf of Maine. As a reminder, the following upcoming event was noted:

2015 RARGOM Annual Science Meeting

How is the timing of all things changing in the Gulf of Maine?

October 14, 2014, Red Hook Brewery, Portsmouth, New Hampshire

Additional information about the RARGOM meeting and opportunities to submit papers or talks is available at: http://www.rargom.org/annualsciencemeeting

The following personnel changes affecting GOMC were announced:

- Rhea King has replaced GOMC Councilor David Millar.
- ➤ Heather Breeze will replace Tim Hall on the Working Group.
- Glen Hebert will replace Tim Hall on CMSP.
- Peter McLaughlin will replace Rob Capozi on the Working Group.
- Rob Capozi will join the Climate Network.

GOMA / GOMC Report on Finance and Budget

Cindy Krum provided a brief update regarding GOMA and GOMC financial status and budget issues.

- Because GOMC is moving into a period of reduced budget, GOMA approved using a portion of net assets in the coming year to cover operating expenses as significant capacity will be needed to close out contracts and conduct a full audit because expenses will exceed \$500k.
- A potential \$7 to 10k excess is expected at end of year.
- In December, GOMA will propose a 'path forward' in light of reduced funding.
- GOMA board approved proposed Scopes of Work for contractors.
- ESIP and Climate Network have the highest levels of funding moving into the next year.

Developing GOMC Two-Year Work Plan

Steve Couture and Joan LeBlanc provided an overview of the process for developing the GOMC two-year work plan. Project leads submitted proposed work plans for GOMC initiatives and provided an overview of their plans to Council and Working Group. Council and Working Group members participated in a series of workshops with break-out groups to discuss the proposed work plans and provide detailed feedback to project leads.

Key Decisions / Action Items

- Council and Working Group reaffirmed the goals and outcomes developed in the 2012-2017 GOMC Action Plan.
- Council and Working Group noted that discussion about the timing, scope and length of years covered by the next GOMC Action Plan should be included on a future meeting agenda.
- > GOMC made the following decisions regarding proposed work plans (project leads were asked to track and follow up on recommended changes):
 - o Climate Network: Approved. Bill Appleby will reorganize according to committed activities vs. those that need funding.
 - o ESIP: Approved. Plan will be revised over next month to reflect decisions from June 2015 ESIP Annual Meeting.
 - o Gulfwatch: Request for \$ from GOMC was denied. GOMC supported a revised work plan for Gulfwatch focused on next steps including pursuit of funding (detail is provided below as Gulfwatch project lead was not in attendance on day 2 of the meeting).
 - Gulf of Maine Opportunity Connection: Approved. Becca Newhall will revise work plan to reflect recommended approach.
 - o Sustainable Communities: Approved. Theresa Torrent will revise work plan.
 - o Coastal and Marine Spatial Planning: Approved. Betsy Nicholson will revise work plan as recommended.
 - o GOMC Awards: Approved. No revisions.

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- State of the Gulf Watershed Status Paper: Approved. No revisions. Tim Hall noted that this will be the final product for the State of the Gulf Project.
- o GOMC Outreach: Approved. Theresa Torrent will revise as recommended.

Next Steps for Developing GOMC Two-Year Work Plan

- Project leads are asked to revise and resubmit updated work plans to Council Coordinator by July 15th
- Working Group members are encouraged to submit additional work plans to reflect planned activities such as the Geotour, GOMC website updates, and outreach associated with the Facing Change document. These should also be submitted to Joan LeBlanc by July 15th.
- Council / Working Group members are welcome and encouraged to submit additional proposed GOMC initiatives at any time throughout the two year leadership period. Proposed new GOMC initiatives will be reviewed via email or at an upcoming Council meeting.
- ➤ Joan LeBlanc and Steve Couture will schedule a call with Gulfwatch Committee to discuss opportunities for revising and prioritizing proposed Work Plan as summarized below.
- > Joan LeBlanc will compile individual project work plans into one GOMC Two Year Work Plan

Gulfwatch Workplan – Potential Next Steps

GOMC recommends that Gulfwatch Committee consider preparing a revised work plan as follows:

Track 1 (Short-Term)

- Develop user friendly one-pager highlighting the value of Gulfwatch (work with Susan / Lee)
- Check on status of commitments and relationships for in-kind support from all jurisdictions and federal agencies
- Identify next tasks with proposed budget (analysis and reporting for samples already collected)

Track 2 (Long-Term)

- Convene 'enhanced' Gulfwatch Committee with broader membership / added expertise as needed
- Identify tasks and develop budget for future Gulfwatch Program. Consider options such as:
 - o Continue current program with broader outreach
 - o Focus on new sampling of emerging contaminants
 - o Transition program to a different non-GOMC owner
 - o Identify opportunities to retain / increase relevance of program to jurisdictions
- Prioritize work plan tasks to ensure that funding focuses first on closing out existing analysis,
 reporting and outreach
- Utilize previous studies such as the new EIUI report but do not target new funding toward program evaluations

For both short and long-term work plan items, GOMC recommended working closely with US Department of Interior (Susan Russell-Robinson) and NB Department of Environment and Local Government (Peter McLaughlin) to explore potential funding opportunities.

The following individuals expressed interest in working with an expanded Gulfwatch Committee to identify next steps and potential funding opportunities: Theresa Torrent, Ru Morrison, Susan Russell-Robinson, Cindy Krum, Lee Sochasky, and Peter McLaughlin.

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GOMC Awards Reception

Rene Pelletier thanked the Maine Coastal Program for providing funding and support for a very successful and well-attended 2015 awards program.

Ecosystem Indicator Partnership (ESIP) Moves into ESIP 2.0

ESIP Program Manager Christine Tilburg provided an update regarding ESIP's current status and plans to move into a next phase where they will utilize an ecosystem services approach vs. themes. Future plans include development of an APP to collect photos that will allow view of site changes over time. Council and Working Group members were asked to provide feedback regarding priority issues related to the GOMC Action Plan. ESIP will follow up with GOMC once they incorporate feedback from their June 2015 annual meeting as well as input from Council and Working Group members. A copy of ESIP's presentation is available at: http://www.gulfofmaine.org/2/gomc-home/council-meetings/

Environmental Information: Use and Influence (EIUI)

Tim Hall provided an update regarding EIUI efforts and proposed projects. EIUI (via Betrum McDonald and / or Peter Wells) will be taking on the GOMC as a partner organization during the upcoming year. Both ESIP and NERACOOS expressed interested in working in partnership with EIUI to evaluate their programs. EIUI has recently completed several projects including a case study of the Gulfwatch program that recommended making the program more adaptable and increasing accessibility of monitoring results.

Key Decisions / Action Items

- ➤ GOMC supports continued collaboration with EIUI.
- > EIUI will get in touch with Joan LeBlanc to follow up on GOMC involvement in the coming year.
- > ESIP and NERACOOS expressed interest in being considered for case studies by EIUI.

Sentinel Monitoring for Climate and Ecosystem Change

Prassede Vella provided an update regarding the Sentinel Monitoring for Climate and Ecosystem Change program. A copy of Prassede's presentation is available at: http://www.gulfofmaine.org/2/gomc-home/council-meetings/

Key Decisions / Action Items

➤ GOMC recommended clarifying the overlap and differences between ESIP and the NROC-NERACOOS Integrated Sentinel Monitoring Network (ISMN) so the GOMC can identify if / where there is a risk of redundancy between existing ESIP activities and proposed ISMN activities.

Northeast Coastal Acidification Network (NECAN) initiatives

Cassie Stymiest, Program Manager for NERACOOS and NECAN Coordinator provided a summary of recent initiatives from the Northeast Coastal Acidification Network (NECAN). A copy of Cassie's presentation is available at: http://www.gulfofmaine.org/2/gomc-home/council-meetings/

GOMC Plans for 2015-2017 Secretariat Year

Steve Couture summarized proposed plans for leadership and meetings during the upcoming Secretariat year.

Key Decisions / Action Items

New Hampshire will continue as Secretariat for 2015 / 2016

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- Pending a formal response, New Hampshire has requested that NOAA act as co-chair for the 2015 / 2016 year
- New Hampshire and New Brunswick will confer during the year and provide recommendation to Council for leadership for 2016/ 2017
- Next in-person Council / WG meeting will take place in June 2016
- Council will have a mid-year check-in via teleconference
- ➤ Working Group will meet three to four times during 2015 / 2016
- > The Secretariat Team will hold monthly conference calls for the first six months of the year
- ➤ Meeting structure for 2016 / 2017 has not yet been determined
- Council / Working Group members noted that evaluation will be important to see if GOMC delivers on commitments in work plan
- Next year will be a test case of the GOMC's ability to be flexible and nimble while operating within the new framework

Record of decisions prepared by Joan LeBlanc, GOMC Council Coordinator

The Briefing Book and additional reference documents for this meeting are available at: http://www.gulfofmaine.org/2/gomc-home/council-meetings/

Gulf of Maine Council on the Marine Environment Meeting Briefing Note

Title of Agenda Item: GOMC Logo Update

Submitted by: Susan Russell-Robinson, Kathryn Parlee, Joan LeBlanc

Type of Item (place X	For Decision	Х	For Direction	For Information	For Information	
in appropriate box)				(internal GOMC)	(External)	

Background:

In celebration of the Gulf of Maine Council's 25th Anniversary a special logo was designed (as shown on front cover of this briefing book). Significant time and effort went into the overall design concepts for the logo with the idea that a similar version would be developed once the 25th Anniversary year came to a close. Secretariat Team recommends that GOMC adopt the logo below with a revised tagline at the December 2015 meeting. The proposed new tagline highlights GOMC's unique value as a binational organization.



Actions, Outcomes or Decisions Requested:

Council and Working Group are asked to consider approving the proposed GOMC logo update

Supporting Documentation (If applicable, list additional documents included in the Briefing Book following this Briefing Note):

n/a

Gulf of Maine Council on the Marine Environment Meeting Briefing Note

Title of Agenda Item: Draft GOMC Reference Guide and Proposed Edit to TORs

Submitted by: Steve Couture and Joan LeBlanc

Type of Item (place X	For Decision	Х	For Direction	For Information	For Information
in appropriate box)				(internal GOMC)	(External)

Background (required):

At the June 2015 Council Meeting, GOMC approved a revised framework along with Terms of Reference for the Council, Secretariat Team, and Working Group. This fall, Council Coordinator Joan LeBlanc prepared a Draft Reference Guide to provide a resource for incoming Council and Working Group members. The Reference Guide includes approved Terms of Reference, GOMC founding documents, and other resources.

While reviewing the draft Reference Guide, Secretariat Team members recommended adjusting the GOMC Terms of Reference approved in June 2015 to make the membership section (see page 4 in the GOMC Reference Guide) more consistent with the 1992 GOMC Amended Agreement. The following edit is proposed for consideration:

Proposed revision for the first sentence in the membership section of the GOMC Terms of Reference (additional new wording is underlined):

"Each Governor and Premier appoints up to two cabinet level or senior level government representatives and up to two non-governmental representatives so long as the total number of jurisdictional representatives is no more than three."

Actions, Outcomes or Decisions Requested:

- > Council and Working Group members are asked to review and approve the proposed edit to the membership section of the GOMC Terms of Reference.
- > Council and Working Group members are asked to review and approve the GOMC Reference Guide which will be posted on the GOMC website. This document will be updated on an as needed basis.

Supporting Documentation:

The Draft GOMC Reference Guide was distributed with meeting materials and is available on the GOMC website with materials for the December 2015 meeting at: http://www.gulfofmaine.org/2/gomchome/council-meetings/

Gulf of Maine Council on the Marine Environment Meeting Briefing Note

Title of Agenda Item: Gulf of Maine Association Transition

Submitted by: Cynthia Krum, GOMA Executive Director

Type of Item (place X	For Decision	For Direction	For Information	Χ	For Information	
in appropriate box)			(internal GOMC)		(External)	

Background (required):

The Gulf of Maine Association Fiscal Year (FY) budgets, including fiscal agent services, have decreased from approximately \$1,350,000 in FY 14-15 to \$800,000 in FY 15-16 to a predicted \$350,000 in FY 16-17. Due to this trend, the Gulf of Maine Association needs to reduce contractor level of effort and fees. The Gulf of Maine Association Executive Director contract for the next six months will be reduced by 62%. The recommendation is that GOMA moves toward a fiscal agent type relationship with the Gulf of Maine Council. The attached table shows which tasks would be handed over to move in this direction.

A table highlighting tasks to be transferred from GOMA Executive Director to GOMC is included in the briefing book following this briefing note.

Scopes of service for January 2016 through June 2016 for the GOMA Executive Director, GOMA Bookkeeper and the GOMC Council Coordinator have been revised to reflect these changes. The Scopes of Services document is available along with the December 2015 GOMC meeting materials at: http://www.gulfofmaine.org/2/gomc-home/council-meetings/

Possible Activities / Next Steps (optional):

The Gulf of Maine Association meeting will be held on December 14 at 12:00 EST via teleconference. The Working Group and Council will be Cc'd on the materials for this meeting and are welcome to join the call. Documents for that meeting will include a revised FY 14-15 budget and budget predictions for FY 16-17 and FY 17-18. The Gulf of Maine Association contractor scopes of work will also be provided prior to the call.

Actions, Outcomes or Decisions Requested (optional):

n/a

Supporting Documentation (If applicable, list additional documents included in the Briefing Book following this Briefing Note):

- GOMA Executive Director Tasks for Transfer to GOMC, p. 13
- An updated GOMA / GOMC Scopes of Work document, including the revised scopes for GOMA Executive Director, GOMA Bookkeeper, and GOMC Council Coordinator, is available with the GOMC meeting materials at: http://www.gulfofmaine.org/2/gomc-home/council-meetings/

	GOMA Executive Director Tasks fo	or Transfer to GOMC	
Task		Responsible Party	Comments
	Committee Assistance for Funded Work: 1. Oversee Contractor Selection for new funding sources if not predetermined in funding proposal. 2. Recruit and decide on new Contract Managers if committee co-chair cannot provide service. 3. Oversee Contract Managers preparation of documents for contracts (scope of work, contract amount, start-end date, signatory for contract) and submit to GOMA ED.		
	Provide project based Contractor Scope of Services document in coordination with next fiscal year budgets. In coordination with Contract Managers, prepare requests for extensions to grantors and provide to GOMA ED for submittal.	Council Coordinator	Additional funding for January - June only is up to \$4,000.
	Fund Development: 1. Track funding opportunities, project development and complete proposal preparation. 2. Provide Proposal Alert to GOMA ED to send to Secretariat Team. 3. Submit to GOMA ED for review and final submittal.	Committees	GOMA ED will provide document with requirements and guidelines for proposal preparation.
	Prepare Narrative and Final Progress Reports for funded projects and submit to GOMA ED	Appropriate contractor	Will be added to contractor SOW. They already assist, this adds full responsibility.
	Tracking of in-kind match and submittal to GOMA ED	Appropriate Contractor	

Gulf of Maine Council on the Marine Environment Meeting Briefing Note

Title of Agenda Item: GOMC 2015 Work Plan Approval and Progress

Submitted by: Steve Couture, Rebecca Newhall, Joan LeBlanc, Working Group members

Type of Item (place X	For Decision	Х	For Direction	For Information	Х	For Information
in appropriate box)				(internal GOMC)		(External)

Background (required):

At the June 2015 GOMC meeting, Council and Working Group participated in an interactive workshop to develop the 2015-2017 Work Plan. Working Group members presented draft two-year work plans and listened to feedback from Council and Working Group members. Following the June 2015 meeting, several work plans were updated to incorporate feedback and then organized into a Draft GOMC 2015-2017 Work Plan.

As part of the December 7th GOMC meeting, Working Group members will provide brief updates highlighting progress implementing the Gulf of Maine Council initiatives included in the Work Plan. A tentative schedule is included below.

Morning session: 11:25 AM - 12:00 PM

- Climate Network (including King Tides Project) (20 minutes)
- ➤ Tidal Crossings Workshop (10 minutes)
- Coastal and Marine Spatial Planning (CMSP) (2.5 minutes)
- Gulf of Maine Connector (2.5 minutes)

Afternoon Session: 1:20 PM - 2:00 PM

- EcoSystem Indicator Partnership (ESIP) (15 minutes)
- State of the Gulf (Watershed Status Theme Paper) (2.5 minutes)
- ➤ GOMC 2016 Awards Program (2.5 minutes)
- ➤ GOMC GeoTour (2.5 minutes)
- ➤ Gulfwatch (10 minutes)
- Sustainable Communities (2.5 minutes)
- ➤ GOMC Outreach Projects (5 minutes)

Actions, Outcomes or Decisions Requested:

- Council and Working Group members are asked to approve the Draft GOMC 2015-2017 Work Plan. Once approved, the Work Plan will be posted on the GOMC website.
- > During the December 2015 meeting, project leads will provide brief updates on progress of implementing work plan initiatives during the past six months.

Supporting Documentation:

- > DRAFT GOMC 2015-2017 Work Plan. A copy of the Draft 2015-2017 Work Plan was distributed with meeting materials and is available on the GOMC website at: http://www.gulfofmaine.org/2/gomchome/council-meetings/
- > A Briefing Note regarding the Tidal Crossings Workshop is included on page 15 of this Briefing Book.

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Gulf of Maine Council on the Marine Environment Meeting Briefing Note

Title of Agenda Item: Tidal Crossings Assessment Workshop

Submitted by: Becca Newhall

Type of Item (place X	For Decision	For Direction	For Information	For Information	Х
in appropriate box)			(internal GOMC)	(External)	

Background (required):

The Gulf of Maine Council collaborated with the North Atlantic Landscape Conservation Cooperative (NALCC) and the Northeast Regional Ocean Council (NROC) to host a Tidal Crossings Assessment Workshop in Portsmouth, NH during September 2015. Over 40 participants came from the Gulf of Maine, Southern New England, New York, and Washington State. The first part of the meeting was spent learning about tidal crossing efforts in the jurisdictions and the North Atlantic Aquatic Connectivity Collaborative. This was followed by a deep dive into understanding the questions for assessing a culvert related to aquatic passage, habitat, and infrastructure. Support for the meeting was provided by NOAA and the New Hampshire Coastal Program.

Possible Activities / Next Steps (optional):

- New Hampshire Coastal Program is working with The Nature Conservancy to build off of the results of the workshop for the states tidal crossing protocol. The planning committee will regroup mid-year to determine any timely next steps.
- All participants at the meeting were invited to join the LCC's North Atlantic Aquatic Connectivity Collaborative effort.

Actions, Outcomes or Decisions Requested (optional):

n/a

Supporting Documentation:

Materials from the Tidal Crossings Assessment Workshop are available via the following links:

- agenda
- participant list
- notes
- State Roundtable Presentations or Handouts: <u>Maine</u>, <u>Massachusetts</u>, <u>Rhode</u>
 <u>Island</u>, <u>Connecticut</u>, <u>New York</u>, <u>Nova Scotia</u>, <u>Washington</u>

The agenda, participation list and workshop notes are also included in this briefing book, pp. 16-27.







Tidal Crossings Assessments Workshop

September 10, 2015

New Hampshire DES 222 International Drive, Suite 175 Portsmouth, NH 02801

Directions: http://des.nh.gov/contactus/documents/directions to pease office.pdf Webex: https://epa.connectsolutions.com/tidalcrossing/ (requires adobe)

Call-in: 866-506-7697; Code: 9500660

AGENDA

Time	
8:45	Arrive and Network
9:00	Welcome and Setting the Stage - Steve Couture, NH DES Meeting Objectives
	Sharing of information regarding jurisdictional efforts on developing protocols for assessing tidal crossings Enhance understanding of how management questions can be addressed through tidal crossing assessments Scope interest and agree to develop regional tidal crossing protocols
9:15	Introductions
9:35	Overview of Management Questions – Becca Newhall, NOAA Facilitated discussion to identify the management questions that a tidal crossing assessment should address.
10:15	Break

10:30	Roundtable of Tidal Crossing Initiatives Underway - Regina Lyons, EPA
	 Summaries of efforts underway: Maine: Charles Hebson, Maine DOT New Hampshire: Kevin Lucey, NH Coastal Program Massachusetts: Steve Block, NOAA Restoration Center Rhode Island: Caitlin Chaffee, RI CRMC Connecticut: Peter Francis, CTDEEP New York: Nicole Maher, TNC (in collaboration with Josh Thiel, NY DEC) Nova Scotia: Steve Conway, Nova Scotia Dept. of Environment New Brunswick: Peter McLaughlin, NB Dept. of Environment and Local Government North Atlantic Aquatic Connectivity Collaborative (NAACC): Scott Jackson, UMass
	In-depth look at: ■ Washington State: Doris Small, WA Department of Fish and Wildlife
12:00	Networking Lunch (lunch provided)
1:00	Breakout Groups: In-Depth Look at Evaluation Criteria and Assessment Parameters for Tidal Crossings - Kevin Lucey, NH DES and Peter Steckler, NH TNC
	Overview and discussion of potential evaluation criteria and their relevant assessment parameters. Virtual Site Tours in breakout groups to identify which evaluation criteria are useful, necessary, and/or appropriate to answer management questions. Questions to consider when thinking about parameters: • What attributes are necessary to evaluate in the field in order to characterize impacts of a tidal crossing structure on aquatic organism passage, tidal marsh habitat, flooding, resiliency, etc? • Are the parameters realistic, measurable, time intensive, expensive? • Should the collection of field parameters be phased? What parameters are appropriate for Phase I and Phase II? • What level of expertise is required for field evaluation of each of the parameters: Volunteers, interns, professionals? • What evaluation criteria can be applied to rank and prioritize sites? • Aside from more frequent fluctuations in water levels, how should assessment (timing, salinity considerations) differ in a tidally influenced system versus non-tidal systems?
2:30	Break
2:40	Continue Breakout Groups: In-Depth Look at Evaluation Criteria and Assessment Parameters for Tidal Crossings
3:30	Next Steps – Steve Couture, NH DES
	Discussion on outcomes from this meeting and how to move forward (Regional protocol? Regional technical workgroup?) How this group can support the North Atlantic Landscape Conservation Cooperative plans for a tidal component to the existing NAACC protocol
4:00	Wrap-up

NROC/GOMC/NALCC Tidal Crossing Workshop September 10 2015

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Dav-c	Dav-of Registration:	tion:				

of 2

Tidal Crossings Assessments Workshop

September 10, 2015 New Hampshire DES 222 International Drive, Suite 175 Portsmouth, NH 02801

Action Items and Minutes

Action Items

- A summary of the meeting, presentations made available
- Regroup of NROC, LCC, etc. to determine next steps given the input

Roundtable of Tidal Crossing Initiatives Underway

Maine (ppt) – Judy Gates, Maine DOT and Matt Craig, Casco Bay Estuary Project

- They did a big project in 1999-2002 with volunteers; mostly freshwater; started differentiating tidal crossings in 2012, so far are 160+, Maine Road Stream Crossing Manual - Alex Abbott
- ME's stream habitat and database viewer doesn't have all the info necessary for restoration prioritization for tidal streams
- State doesn't have funding/capacity to have a tidal restoration staff, nor do they prioritize projects, etc. Casco Bay Estuary Program did assessment of tidal restrictions in 2012
- Need state wide restoration program to assess and prioritize tidal restrictions and their restoration – & to build relationships with landowners to foster interest in investment

Massachusetts (ppt) - Steve Block, NOAA Restoration Center

- All tidal restrictions are mapped in an atlas (inc. ownership, size of potential upstream habitat to be restored, maps, field verification)
- Restored 85 salt marshes by replacing undersized culverts
- Frequent challenges (septic systems, regulatory compliance, low-lying property, protection of species, erosion of creek channels, abutter impact, invasive species, tide gate function)
- Deed restrictions in 1970s for salty wetlands no changes in hydrology, even w. ecological benefit. Needs to go through courts, not just wetlands act.
- Lisa Berry Engler- MA CZM doing tide gate assessment and inventory for NOAA/NOS/OCM from NH to Provincetown (not South coast) done by spring 2016. Will have web tool.
- Much assessment can happen in office given wealth of info (LIDAR, tide gauge info, etc.)

Rhode Island (pdf) - Caitlin Chafee, Coastal Resources Management Council

- Their efforts have been spearheaded by Save the Bay, focused on habitat restoration, created a rapid assessment protocol (Save the Bay method on Habitat Restoration Portal)
- Have a state restoration trust fund (\$4M/yr?); great for providing state match; 250K/yr for restoration
- Have done marsh migration modeling, using SLAMM and LIDAR, statewide; both with protection off and on to estimate marsh migration potential
- STORMTOOLs can also be used to identify at risk culverts and crossings
- Lessons learned: Roadblocks- elevation, subsidence, conversion of marsh to open water (Gooseneck Cove), plan for SLR, public safety risks w structures
- RI lacks a detailed database on tidal crossings; this is a gap for the state

Connecticut - Pete Francis, Department of Energy and Environmental Protection

- No coordinated program across the state
- Mosquito program, DOT, Enviros all have different databases
- Municipalities don't want to restore b/c they don't believe the hydrological predictions re: postrestoration water levels- concerns re: low lying streets
- Bigger structure size isn't always better. Perspective was provided by SLAMM results so careful evaluations of marsh capital prior to any restoration is essential. Rate of return of the tides must also be controlled.

New York - Nicole Maher, The Nature Conservancy

- TNC has some internal funds for tidal crossing inventory assessment, so want to sync up with any regional efforts.
- Previously have used Maine's Return to Tides protocol
- They are looking for overlap in municipal interests w. marsh migration.
- Primarily focused on marsh migration, not fish passage but looking to include fish passage Roadblocks – landowners concerns with higher sea levels, storm surge, increased flooding

Nova Scotia (ppt) - Steve Conway, Nova Scotia Department of Environment

- They moved to a notification system (after the fact of construction) instead of a permit system Huge portion of NS is tidally influenced, nowhere is >30 mi from coast
- Watercourse Alteration Program has no specific consideration of tidal influence DOT biggest client, for road infrastructure and tidal impacts/storm surge
- They are focused on preventing erosion
- NS has >5X tidal restrictions as New England
- Tidal hydropower structures were ripped apart inadequate design for their conditions

New Brunswick (on phone) - Peter McLaughlin - Department of Environment and Local Government

- Now have ice-free zones and the roads are not as protected from waves during winter as previously
- Online atlas for tidal crossings, DOT using it
- Inventory, 76 control structures, 2 dams, lots of agricultural land being protected
- Eric Hutchins- lots of the dikes in NB and NS are in agricultural reserve that may convert to salt marsh w. SLR- may have an increase in migratory bird habitat value
- Have lots of infrastructure that is very old, may need replacement

North Atlantic Aquatic Connectivity Collaborative (NAACC) - Scott Jackson, University of Massachusetts, Amherst

- LCC has been working to bring state reps together to collaborate on their parallel developed methodologies that are used in each state
- Have been working on the aquatic connectivity issue since 2000
- Alex Abbott evaluated New England crossing assessment protocols and NAACC merged them to become the NAACC protocol which is rapid, field based, and primarily focused on aquatic organism passage after feedback from core group
- Working group, advisory committee, 80 participants from 13 states

- Existing non-tidal module aims to characterize typical low flow conditions (challenge for tidal systems is when in the tidal cycle to assess)
- How to deal w. vastly different systems- tidal creeks (little freshwater influence), vs freshwater tidal systems (e.g. Hudson is tidally influenced up to Albany) vs streams that flow to the ocean directly (CT River, Merrimack Rivers?)
- For their existing protocol, there is a system online database, score for connectivity value, map viewer, crossings data available for download, system of coordination and prioritization, way to centrally house the data to connect the 13 states

Washington- Doris Small and Padraic Smith, Department of Fish and Wildlife Large river systems here-Columbia R, Puget Sound, 3000 mi coastline Ecosystem restoration is the goal

- Juvenile salmon move in and out of salt marshes w just inches of water depth (at lead of flood and tail end of ebb tides)
- 26 fish species are listed, their focus is entirely on passage, not fish access to habitats
- Current criteria are based on capabilities of a 6" trout
- Elwha R. restoration (dam removal) have restored 70 aces of marsh so far They can't regulate tide gates
- They don't yet have standards for tidal culvert crossings
- Judicial ruling that they must repair/replace culverts that impair salmon runs- does not include bridges or other crossing structures beyond culverts
- 978 culverts, need 340M a year to assess culverts, got 36M from state funds State lands in the Columbia R watershed must be done by Oct 2016
- Have had agreement between state DFW and DOT to use the same numerical ranking system since 1991 (failure to meet fish passage criteria are the first cut in the prioritization process)
- Prioritization scheme is greatest benefit projects get done first w available funding
- Have an equation for fish passage that is species dependent, scoring that includes percent barrier, cost modifier (inexpensive can compete w really expensive ones), ESA status, production potential of upstream habitat to produce fish
- Have exceedance flow criteria but didn't know how to deal w. it wrt constantly changing water levels in tidal vs non-tidal systems.
- Have used proxies of MLLW and MHHW as their 10% exceedance values
- Correigh Greene has done their literature review, have over 100 refs thus far and are looking to add gray literature. Looking to collaborate on lit review and determine information gaps
- Always good to maintain a wish list of restoration sites based on ecological integrity but recognize that most restorations are based on infrastructure concerns

In-Depth Look at Evaluation Criteria and Assessment Parameters for Four Tidal Crossings

(See related workshop materials prepared by NH TNC and Coastal Program for description of each crossing as well as a table of draft assessment criteria)

1. Crossing Ratio

- a. This is a very quick and dirty assessment
- b. Scour holes don't always indicate restriction
- c. No correlation between indicators observed from aerial photos and whether a restriction exists or not

- d. Channel width are difficult to measure and not necessarily indicative of restriction
- e. Can be hard to find source for but include natural river width vs. channel, thread width/flood plain
- f. Note impact to upstream restrictions
- g. You might not want to do channel width at this site the mathematical # might not give the meaning you want - would need to measure un-restricted marshes, at ~100 sites before being able to develop a meaningful number
- h. What is the equivalent for "bankful width"? Can MHW be used as a surrogate for bankful?
- i. Cross section may not work if there is a lot of scouring, but also how do you define /categorize scouring?
- j. In freshwater culvert assessment protocols, the size of a scour pool is quantified. For instance a scour pool is 'large' if it's twice as wide or twice as deep.

2. Erosion classification

- a. Downstream lobe of marsh indicated there aren't any velocity issues
- b. Sometimes scour is needed to keep the culvert from filling in where you have eroding banks or beaches
- c. Need to look at in field to determine depth of pool
- d. Definition of numbers are unclear (significant vs. major)
- e. Do you need a lot of detail or can you just say "dumbbell effect" to qualify?
- f. Need guidance on what is considered pooling how much wider than a reference stream? (ex. 2X the normal width?)
- g. Add in sediment transport/sediment source

3-1. Fish passage (mid-tide velocity classification)

- a. Openness criteria are important for turtles
- b. ? re: velocities based on mummichog access to high marsh
- c. Velocity should be based on fish species that are/should be present and regionally specific (e.g. not focused on salmonids as the WA literature review likely is).
- d. Assessment should be over time: impact of moon, conducted at mid-tide
- e. Check speed outside crossing to determine which fish species to include (which fish could be there to start with) based on flow regime
- f. How is mid-tide defined? what to measure, where in the water column? Maybe there should be a desktop assessment of the timing of tides first since multiple trips to the site may not be realistic

3-2. Fish passage (mid-tide velocity indicators)

- a. Suggest measuring depth of water thru culvert at low and mid-tide
- b. Assess whether invert perched at multiple tides (spring, neap)?
- c. Obtain representative depths up and down stream
- d. Describe sediment layering (add descriptive classification criteria for this?)

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4. Vertical capacity of crossing structure

- a. ? Do we want these values to scale with tidal range (if primarily basing our assessment on habitat value)
- b. When basing primarily on transportation/structural considerations, leave this estimate as an empirical value
- c. Use percent related to size instead of absolute numbers need more space when close to coast to accommodate storm surge
- d. Need to know side of opening and type
- e. For prioritizing use scores obtained at mean high tide
- f. Should look at percent of structure that is submerged instead of just meters

5. Inundation risk to roadway

- a. Take out wrack lines from criteria, use staining to look for MHW
- b. Add in 100 yr storm event (w. various SLR scenarios)
- c. Need a classification system on staining
- d. Verify with local knowledge
- e. Think about potential access alternatives rerouting
- f. Consider impact of changes to other structures
- g. Need to consider both upstream and downstream risk
- h. Both the velocity and the amount of water matter for inundation risk, scouring vs. small erosion (may be result of inundation, maybe storm water, maybe both?)
- i. Might want to add a measure for other transportation inundated (more than just roads) / # of structures inundated

6. Inundation risk to low lying non-transportation infrastructure

- a. Hard to assess impacts to septic systems w. aerials
- b. Add category for the \$ value of the property, broaden categories for a higher # of structures (0-2, 2-5, 6-10 etc.) or alternatively simplify categories to None/Some/Many.
- c. Change wording to infrastructure/property when considering septics, salt marsh hay harvest etc. - Change heading to "Inundation Risk to Low-Lying, non-Transportation Developed Environment"
- d. This is difficult to assess in the field, add a desktop component w. LIDAR to make a first cut
- e. Add criteria for impacts to the developed environment (e.g. score 0 for public ownership, 1 for private). Also add multiplier for property value from tax maps
- f. What about non-road transportation infrastructure (ex. rail), where are they considered (#5 considers roads, this one considers non-transportation
- g. How to evaluate, current risk vs. risk if structure was removed
- h. Identify number of abutting property owners. NHDES can't issue a permit for restoration if it will affect abutting properties.
- i. In a Phase II, conduct a complete site reconnaissance

7. Salt marsh migration potential

- a. Want to know if there is accommodation (elevation) space w. SLR between the structure and upstream habitat
- b. Change categories to no, little, ample migration opportunity
- c. Multiply by elevation of the restored habitat w. higher weights for high marsh habitat vs low marsh habitat as a phase II
- d. Understand present condition
- e. Septic issues related to dealing with restoration
- f. Tradeoffs in tidal flow long and short term
- g. Need to assess in the field as well (not just SLAMM), actual conditions or monitoring overtime may prove to be different than what the model output said
- h. Are their marsh tipping points to look for?
- i. Also want to ground truth the NWI information if that is being used, NWI may be too coarse and not accurate for the site
- j. Use both acreage and percent increases

8. Vegetation comparison

- a. Expand to include more than veg, need some criteria for wildlife, other organisms
- b. Unclear if the terminology refers to expansion of unvegetated pannes due to waterlogging
- c. Need separate scoring for fresh water vs salt tolerant veg
- d. Change categories to similar, different, much different
- e. Add in field verification to classification
- f. Indicator of other stressors
- g. Change question to specifics (e.g. noting dominant vegetation and indicators)
- h. Remove slightly different class (score 2)

9. Crossing condition

- a. Are bridges adequate for emergency vehicles
- b. Measure width of cracks?
- c. Model hydrology for bridge deck, there are requirements for water to come no closer than 1m to bridge deck also measuring to mean high? What about storms?
- d. Categories could reflect good vs. bad and then how bad –there is no difference if it is good vs. excellent if it's not rated critical or poor, it's OK
- e. Need to consider alignment /angle –especially in replacement, increasing or decreasing size at the same angle/alignment (vs. a different one) could affect the impacts
- f. Looking a deposit of wrack material could be an indicator but it would be tough to develop indices, also Phragmites vs. wrack?
- g. Ice impoundments also a consideration but not sure how it would be an indicator
- h. Scott Jackson recommended using the Federal Highways Photographic Indication of Condition

10. Landscape position

- a. Proximity to septic (and impact of SLR)
- b. Location in regional landscape

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Larger Discussion/Take Home Points

- Lots of back office GIS work (phase 1) should take place in advance of fieldwork (phase 2) and classification
- #1 issue is the inundation risk parameter (#6) from criteria table
- Method using DEMs to determine whether a tidal restriction occurs is w. existing conditions on and off in SLAMM?
- Channel widths are difficult to measure, hard to be consistent w. measurements, so may not be
 as indicative of tidal restriction; most of the sites have been manipulated, so they aren't really
 looking at an equilibrium system, so it's hard to tell if the current conditions are from the
 crossing or from some historical event
- Add more factors, storm surge (saltwater), 100 yr storm event (freshwater), and sediment dynamics (marsh migration)
- Deal w. issues of fish access vs passage- adults returning to spawn have better swimming capabilities than juveniles
- -Add unknown to each classification criteria and if checked, it bumps the value to the next highest level (more weight toward replacement)

Wrap up

How do we move forward? Pursue a regional protocol?

- NALCC will facilitate regional approaches, NAACC will help with this Eric Hutchins offered to be on review team for NH protocol
- Nicole- anticipate engaging stakeholders at each site, local municipalities may have a list of needs before they buy in
- Ellen- DOTs have a different list of criteria (evacuation routes etc.). Check w. them thru this process.
- Matt- likes the buffet style approach re: diff parameters to assess dependent on objectives, make sure to revisit our list to see how they feed into mgmt. objectives (a la the GPAC process) and reference the GPAC protocols when thinking about what and how to assess
- Share the different protocols that were mentioned today to the group (e.g. Megan will share salt marsh integrity index)
- Scott- suggested technical working groups: salt marsh restoration, aquatic organism passage, public health and safety for infrastructure resilience), since the larger list of assessment criteria is overwhelming, then come back together as the larger group.
- Didn't touch on tide gates today, but that will be an increasing problem in the future, they have a huge failure rate- 9 of 10 gates fail. Parts break and there are no repairs, operations and maintenance plans need to be part of discussion

Who was not here?

More DOT folks, Emergency mgmt. community, engineers, hydrologists, climate modelers, sedimentologists, fisheries engineers

- Bare minimum have this group look at what is being developed in NH
- NH is working with DOT to make sure they are gathering the necessary criteria (is it an evacuation route?, etc.)
- If we help develop risk assessments for emergency management community, that would help with funding, and it achieves some of the mutually beneficial goals for habitat quality and infrastructure resilience.
 - o So that leads to focusing on SLR, 1% storms, etc.
 - o The reality is that DOT priorities are going to remain focused on structure condition; and appreciate that people in other sectors are as aware of the issues as we are
 - So look for sites where the two intersect...a structure is falling apart and it would provide a benefit to coastal management. But need to do the protocols/assessments to be ready to find those intersections.
- DOT has 3 yr work plans online, where you want to insert yourself is "at or before preliminary engineering". Appreciate that people in other sectors are as aware of the issues as DOT community is- it's more than habitat restoration

Suggested Resources

- Purinton, T.A. and D.C. Mountain. 1996. Tidal Crossing Handbook: A Volunteer Guide to Assessing Tidal Restrictions. Parker River Clean Water Association. 69 p.
- American Fisheries Society Fish bioengineering committee
- American Society of Civil Engineer's Environmental and Water Resource Institute database

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Gulf of Maine Council on the Marine Environment Meeting Briefing Note

Title of Agenda Item: GOMC 2016 Meeting Plans

Submitted by: Steve Couture, Peter McLaughlin, Rebecca Newhall, Joan LeBlanc

Type of Item (place X	For Decision	For Direction	Х	For Information	Х	For Information	
in appropriate box)				(internal GOMC)		(External)	

Background (required):

The following plans are proposed for the GOMC joint Council / Working Group June 2016 meeting:

- <u>Joint Council / Working Group Meeting</u>: Tuesday, June 7 and Wednesday, June 8, 2016
 The two-day meeting will include a site visit on Wednesday afternoon to view the Mactaquac Dam project in Fredericton, NB.
- GOMC 2016 Awards Ceremony: Evening of Tuesday, June 7, 2016
- Location: Fredericton, New Brunswick

Specific meeting and awards ceremony locations TBD.

Possible Activities / Next Steps (optional):

Secretariat Team will continue to develop plans for the June 2016 two-day meeting in New Brunswick.

Actions, Outcomes or Decisions Requested (optional):

• GOMC Council and Working Group will discuss and provide feedback regarding plans and potential agenda items for the June 2016 meeting in New Brunswick.

Supporting Documentation (If applicable, list additional documents included in the Briefing Book following this Briefing Note):

n/a