

# Harmful Algal Bloom Task Force Meeting Minutes

Thursday, September 19, 2019 (10:00am-3:00pm EDT)

Location: FWC-FWRI, 100 8<sup>th</sup> Ave SE, St. Petersburg, FL 33701

## Attendees

**TF Members:** Jill Fleiger, David Whiting, Leanne Flewelling, Rhonda Watkins, Duane De Freese, Charles Jacoby, Andy Reich, Quay Dortch, Sherry Larkin, Don Anderson

**Presenters:** Gil McRae, Jan Landsberg, Bud Vielhauer, Kate Hubbard, Lisa Krimsky

**Afternoon Facilitator:** Caroline Gorga

**Regrets:** Barb Kirkpatrick

## Meeting Minutes

Welcome and introductions (10-10:21)

- Gil McRae, Director FWC-FWRI welcomed Task Force
- [Members of the Task Force](#) gave brief self-introductions including their affiliations and experience/roles with various HAB issues in Florida
- Gil McRae welcomed FWC Executive Director Eric Sutton who gave introductory remarks
- Gil McRae welcomed Tom Frazer, Chief Science Officer, State of Florida who gave introductory remarks
- Gil McRae introduced FWC General Counsel Bud Vielhauer to give an overview of open meetings and public records requirement in the State of Florida

Presentation (10:22-10:34)

- Bud Vielhauer gave presentation “[Sunshine Law & Public Rights to Access](#)”
- Questions:
  - o None from the members of the Task Force. Bud will be available as legal support for the Task Force

Presentation (10:35-11:16)

- Gil McRae presented on [HAB Task Force governance and guidance](#)
- Proposed Governance items for Task Force to adopt:
  - o Governance, Chair as Leanne Flewelling
  - o Members serve voluntarily without terms, reviewed periodically as needed
  - o Quorum of 8 members
  - o Motions by consensus or 75% of present members

- Questions from the Task Force:
  - o Can a quorum be established through telecommunications? Yes, keep in mind such communications must be open to public
- Gil McRae asked if any opposition to proposed items.
- None from Task Force. Proposed governance was adopted.

Meeting turned over to Chair Leanne Flewelling, Chair welcomed Gil to return and present further on guidance of HAB Task Force.

- Gil McRae reviewed [F.S. 379.2271](#) and background of the HAB Task Force, more recent related initiatives under legislated governance of Executive Order 19-12 and SB 1552 [F.S. 379.2273](#). Eric Sutton pointed out continued funding requests to legislature forthcoming.
- Questions from the Task Force:
  - o Don Anderson asked for clarity on requested funding for the Task Force.
    - Gil clarified funding this year is one-year Task Force appropriation but will be seeking recurring funding for operations and support of recommended priorities.
  - o Duane De Freese asked if there was any direction given from the Governor for reporting Task Force recommendations, and how recommendations might relate to current recurring funding requested from legislature.
    - Gil noted we will discuss further but reporting/recommendations should be fact-based and related to next slides.
- Gil McRae presented proposed long-term general focal areas for the Task Force to adopt.
- Questions from the Task Force:
  - o Don Anderson asked if the Task Force has any oversight to evaluate the work being done by FWC and Mote Marine Laboratory (MML) on related initiatives
    - Gil McRae noted there is no limit to what the Task Force can comment on. Initiatives overseen by FWC provide a connection, and if the Task Force want to engage in recommendations it is welcomed and encouraged.
  - o Dave Whiting asked for confirmation of his understanding that the HAB Task Force is the larger body of broad tasks under which baskets of other specific initiatives fall.
    - Gil McRae confirmed this characterization.
  - o Quay Dortch noted in order for the Task Force to properly determine focal areas and specific recommendations, members require more information on the other initiatives before they can act.
- The Task Force recommended language changes to be captured and revised version to be brought forward by the Chair for adoption in the afternoon portion of the meeting.

- Gil McRae proposed timeline of near-term objectives for the Task Force.
- Questions/Comments from the Task Force:
  - o Duane De Freese noted there is an opportunity in a very short timeline to make recommendations now on the items we know, such as nutrients, to provide some general scientific guidance to the Governor and legislature now to help them now with decisions allocating resources, and ensuring recurring funding lines receive the proposed annual appropriations.
  - o Don Anderson agreed further noting there is good opportunity to move forward as well as interest on control methods.
  - o Leanne Flewelling replied MML initiative does address control for red tide, but Task Force could discuss other HABs.
  - o Quay Dortch noted NOAA funds numerous projects and there is a lack of funding for needed scientific cruises that could be added now to the recommendations of legislature. Further inquired how her daily work with NOAA allocating related research funds is impacted by Task Force role of the Sunshine.
- Gil McRae captured Task Force comments as analyzing and reviewing the current funding structure and distributions for HAB research and making recommendations to legislature as a reasonable purvue of the Task Force.
  - o Andy Reich noted as the Task Force develops priority needs they must address health impacts as a unifying topic of public health as a top concern of the public.
  - o Duane made a process suggestion of what do we do for setting broad recommendations, and also address immediate needs. Do a one-page dispatch for the latter to legislature of priority items already knowledgeable about for immediate consideration (with state budget funding in review and consideration now).
- Gil McRae noted the conversation did not voice any opposition to the Task Force proposed timeframe and priority focus of red tide in the short-term, and confirmed acceptance of this timeline with consideration of discussion of the Task Force for priority document out to legislature.

Chair invited Jan Landsberg FWC-FWRI to present on the origins and outcomes of the first HAB Task Force.

Presentation (11:17-11:35)

- Jan Landsberg Presented “[History of the Harmful Algal Bloom Task Force](#)” (11:17-11:35)
- Questions:
  - o None from the Task Force

Chair invited Dr. Kate Hubbard who leads HAB group at FWC-FWRI to present.

Presentation (11:35-11:49)

- Kate Hubbard presented “[An Overview of Florida’s Marine HABs](#)”
- Questions:
  - o None from the Task Force

Chair reviewed proposed agenda for afternoon for Task Force members. Asked for any additions, none, consensus on afternoon agenda.

Break for lunch (12-1pm)

Chair welcomed everyone back and did housekeeping. (1:00-1:14)

- Chair brought forward draft of proposed Task Force focal areas, with consideration of long-term nature of their role not short-term outcomes.
  1. Work with the Blue Green Algae Task Force to identify and prioritize actions that will reduce excess nutrient loading to our freshwater and coastal systems.
  2. Assess knowledge, make prioritized recommendations, and evaluate current policies and procedures to mitigate public and ecosystem health impacts due to HABs, including agency roles and responsibilities.
  3. Evaluate and make prioritized recommendations for applied research into the biology and ecology of harmful algal bloom species; fate of toxins; detection, tracking, modeling, and prediction; economic impacts; public and ecosystem health; and control and mitigation of blooms.
  4. Evaluate current cooperative response efforts involving state, federal, and local government, and other partners and make recommendations for improved coordination and communication regarding HABs and their effects.
- The Task Force requested further recommendations be captured, and amended version be reviewed and finalized for adoption at the next meeting.
- Chair put forward recommendation, no objection from Task Force.

Chair invited speaker Lisa Krinsky to present.

Presentation “[Florida Harmful Algal Bloom State of the Science Symposium](#)” (1:15-1:30)

- Questions
  - o None from the Task Force

Chair gave an overview of some of the progress made in red tide science and how it's been applied to management and communications since the Task Force initiated (1:30-1:40)

- Increase in [red tide monitoring](#) , samples greater than 12,000 in 2018
- Improved online communications and technologies to provide [red tide status reports](#) and maps, which include information such as daily sampling information
- Progress made on predictive models, such as USF model predicting red tide blooms based on ocean currents, includes surface and bottom [red tide transport forecasts](#)
- [NOAA forecast](#) includes red tide respiratory irritation
- [Beach Conditions Reporting System](#) which is now available as an app, goal is to grow to have available for continued twice daily updates but on all beaches every day.
- Improvements in toxin monitoring and neurotoxic shellfish poisoning (NSP), including approved ELISA screening/testing methods and LC-MS in development/review.
- Citizen science opportunities such as [volunteer red tide monitoring program](#) and [HABScope](#) .

Chair introduced Caroline Gorga as session facilitator (1:40-1:45)

- Caroline Gorga outlined framework for afternoon Task Force discussion of *Karenia brevis* to identify information gaps and needs in Public Health, Management, and Response and Communications. Task Force agreed to table Research discussion to next meeting pending forthcoming State of the Science Symposium synthesis report.
- Caroline Gorga reviewed 1999 Task Force White Paper recommendations as example of outcomes membership is aiming for. Reiterated goal today is to compile an initial list of potential priority areas in each discussion topic for compiling for review, revisions and finalizing recommendations at the next meeting.

Discussion of Public Health (1:45-2:10)

- Task Force reviewed and discussed identified needs from State of Science Symposium and made additions for potential priority needs.
  - o Identified items for discussion and prioritization at next meeting:
    - Improve knowledge of short- and long-term human health impacts including chronic, low-level exposure to toxins (aerosols and seafood)
    - Identify risk for susceptible subpopulations
    - Determine dose response to people from brevetoxin aerosols
    - Determine/conduct cost-benefit analysis for each area
    - Develop communications as mitigation strategy for Public Health with clear connectedness between communications to reduce exposure risk (see communications)
    - Determine how extreme events test our knowledge
    - Evaluate physical, mental and social health risk for public at large and those implementing control strategies

- Evaluate exposure or incidence rates for skin rashes, mucus membranes, dermatological effects
- Task Force further discussion:
  - One study of a Sarasota hospital noted increased ER visits during bloom events for gastro intestinal issues. Is this due to fish or other seafood consumption? Respiratory exposure? How to capture as most are unreported because they self-resolve – challenges capturing with exposure-diagnosis-reporting chain.
  - Noted economic studies are being funded by NOAA/GCOOS to determine impacts of last bloom, forthcoming data will inform discussion

#### Discussion of Management (2:10-2:25)

- Task Force reviewed and discussed identified needs from State of Science Symposium and made additions for potential priority needs.
  - Identified items for discussion and prioritization at next meeting:
    - Identify what technologies are mature enough to incorporate into auto or semi-automated monitoring, and data analytics
    - Determine regulatory needs for control and mitigation applications for both management response and emergency event response plan coordination. With lack of framework, process needed for pre-vetting technology prior to event, a permit that doesn't exist.
    - Develop comprehensive statewide response plans.
    - Determine coastal watershed investment/restoration that would reduce the occurrence, duration and severity of future blooms.
    - Correlate research priorities with end use.

#### Discussion of Response and Communications (2:25-2:33)

- Task Force reviewed and discussed identified needs from State of Science Symposium and made additions for potential priority needs.
  - Identified items for discussion and prioritization at next meeting:
    - Determine target audience (public, business, medical professional, regions,...) of all this information; the best format and method to communicate this information (use the right tool e.g., social media, in-person, ...)
    - Develop communications for both short- and long-term needs (during the year, and during events)
    - Ensure consistent messaging statewide with local level coordination, avoid miscommunication, how to deal with misinformation.
    - Develop long-term educational campaign

- Determine via focus groups to test messages and information needs, and communication methods with consideration of target audience including regions
- Determine via social science study, what the public really wants (e.g., water quality or Karenia control, nutrient reduction)
- Develop education and increase awareness of human activities that contribute to nutrient releases
- Develop multi-lingual outreach materials

Chair thanked the Task Force and opened the Public Comment period, inviting registered speakers one at a time.

Public comment period (2:34-2:55)

- Speaker 1 – Ward Clayton, Selvig Environmental from Jacksonville, FL. Thanked the Task Force and introduced colleague Sean to talk about a product they have developed that they think can help with Red Tide - a natural photosynthetic microorganisms they current use in various bioremediation applications. Provided a [handout about the product](#). Asked for some guidance on how to interact with Task Force under the Sunshine law.
- Speaker 2 – Rachael Curran staff attorney with Center for Biological Diversity. Asked the Task Force to look at specific industries contributing to nutrient loading in Florida's water that may impact bloom development. Specifically phosphate mining, and its potential impacts on blooms. Provided [copies of petition](#).
- Speaker 3 – Andre Mele with Suncoast Water Keeper. Noted they are a science driven organization that takes science and tries to translate it into policy through lobbying efforts. Expressed concerns around statement “naturally occurring”, feels that although blooms are naturally occurring he thinks they are increasing. He was very encouraged by the Task Force member statement “communication is mitigation” strategy, and feels the public is hugely misinformed particularly from social media. Noticed in the original Task Force membership public organizations were involved and encourages consideration of including this representation again on this iteration/work of the current Task Force. Stated the 900lb gorilla in Florida is nutrients – specifically key issues/sources of raw sewage (municipal), septic systems (determine accuracy of this claim), big agriculture, and development (lawn fertilizer, golf courses – straight sources of direct nutrients going into the water). Stressed need for BMPs enforcement with targeted water sampling.

- Speaker 4 – Karen Steidinger via Kate Hubbard FWC, asked the Task Force to consider “Based on what you know about red tide dynamics, what do you think is the most needed approach for monitoring, management and mitigation?”

Chair discussed action items and timeframe for next meeting

- Next meeting will tentatively be scheduled late November or early December, followed by a March meeting.
  - o Task Force requested longer meetings with earlier start.
- Action items:
  - o Distribute State of Science Symposium Synthesis report once available to inform discussion/review of research priority needs and information gaps.
  - o Provide revised Focal Areas for comment and HAB State of the Science identified Research needs for consideration prior to the next meeting
  - o Provide meeting materials with background information on other related initiatives mentioned including the Mote Marine Laboratory led Florida Red Tide Mitigation & Technology Development Initiative, and forthcoming recommendations of the Blue-green Algae Task Force
  - o Task Force members email agenda items for next meeting to Meghan Abbott.
- Other Information Items
  - o Task Force noted a key funded initiative Florida Ocean Alliance
  - o The Florida Sea Grant State of the Science Symposium organizers will also be putting forth a stakeholder survey on similar topics, information forthcoming
  - o Chair will send Task Force poll for next 2 meeting dates Nov/Dec and March

Closing Remarks

Adjourn 2:53 p.m.