Florida Red Tide Mitigation and Technology Development Initiative Technical Advisory Council Public Meeting Thursday, November 17th 2022, 2:00pm – 4:00pm EST

In-person Attendance: Dr. Michael P. Crosby, Dr. James Powell, Dr. Katherine Hubbard, Dr. Sherry Larkin, David Whiting, Kevin Claridge, Amber Bankes, Liz Longstreet, Katherine Felch, *no public attendees joined via zoom*.

Meeting Minutes:

Welcome, Webinar Meeting Logistics, & Agenda Overview

- Welcome remarks by Dr. Crosby
- Kevin Claridge roll call and reviewed the agenda for this meeting.

Red Tide Initiative Overview

- Reminder of statute, contract, reporting requirements and legislative intent. Focus this time on regulatory oversight and commercialization
- Update on the Red Tide Facility and the busy year ahead with facility reservations booked through spring. New challenge is making sure we can keep up with culture which is a good challenge to have.
- Current progress which has covered 200+ potential mitigation compounds examined for tiered testing, 4 RFP's, 4 webinars, 5 TAC meetings, 100+ proposals reviewed, 25+ projects underway, 20+ funded external partners, etc. The main current focus is Science to Commercialization, with approximately a dozen promising tools and technologies pending
- A special thanks to Meghan @ FWC for support, considering all it takes to review our reports, invoices, etc.
- Current project reports are being updated and will be posted online shortly
- Dr. Crosby poses the question of whether future RFPs will be effective and/or necessary, asking for for TAC feedback. We have now done some "significant off-ramping" for things that did not pan-out after good effort. Some projects were terminated after testing and learning. Going forward, the PIs know that funding is limited and will terminate. The focus now needs to be scalability, engineering, how do you manufacture enough compounds? How will we be ready when we get a call from Tallahassee saying "where's the product?" Things to consider as we start to limit smaller projects and focus on the continuation of larger ones.
- Review of "Year 1" Projects, as listed in the slides
- Review of "Year 2" Projects, as listed in the slides
- Review of "Year 3" Projects, as listed in the slides

- Review of "Year 4" Projects, as listed in the slides. Projects that are new to the board, highlighted in red, including Greenworld Environmental, Southwest Research Institute, Florida Institute of Technology, Heartland Energy Group, University of South Florida, and a new project with Dr. Cynthia Heil from Mote. These were not covered at the last redtide workshop and were given a little more detail to the TAC.
- Highlight of "promising mitigation tools"
- Thank You to all current partners, which grows each time we share it with the TAC. Listed all research partners for the last 3 years.

Looking Ahead

- 2023 Governor, Legislature, Agency Reports
- Moving Projects from Tier 3 to Tier 4
- More socialization of research progress
- Building off of the August 2022 workshop, with a higher focus on permitting, compliance and commercialization
- How do we get the cities and municipalities more involved?
- Introduction of the US Harmful Algal Bloom Control Technologies Incubator, which we have been awarded by way of University of Maryland, funding from NOAA. The incubator really focuses on Tiers 1 & 2, whereas the initiative will do all Tiers 1-4.

Public Comments: None

Final Council Member Questions/Remarks:

- Dr. Powell questioning scalability and how we will manage funding?
 - O Dr. Crosby's feedback is that we need to get off-shore, in the Gulf, Sarasota Bay, Tampa Bay. The problem is engineering. This will require (examples: floating platforms, technologies that can be submerged, air flown, human driven or even autonomous). We have already seen potential but in order to size-up, we will need to engage with more private companies.
- Dr. Larkin would like to see a summary of projects by year, including engineering, costs, permitting, public perception, etc. Feels like more introduction needs to be done with the public, increasing community engagement.
- Dr. Hubbard mentioned some studies having ecosystem impacts more built in than others. To which Kevin mentioned the start of FWC assistance in setting up a process for wildlife, etc. Meghan would like Kate's assistance in getting that setup. Tabled for now.
- Dr. Powell asked how far along are any of these projects if we were to have a red tide bloom (soon)?
 - Dr. Crosby highlighted 2 technologies that can do land-based testing and potentially smaller canals. Smaller scalability. Again, this is why it's very important to pivot to the larger scalability with the next 2 years of the initiative.

The new US HAB Incubator may help with this but we have an obligation to the initiative.

- Dr. Larkin addressed due diligence to the to the public and to politicians...
 - O Dr. Crosby agrees and states it is up to us to relay the message about science based effort. Maybe a stand-alone public communication is needed soon. Also made mention that he has talked to the governor and the state and we need to come together on permitting issues. We will also bring in federal partners. The state is committed to assisting us and the right leadership is in place and on board.
 - o Dr. Powell gave "kudos" to Mote as this is the first initiative to take on the permitting task.

Discussion of next meeting being in the Spring of 2023 or during the redtide workshop over the summer.

Adjourned – 3:30 p.m.

A copy of the PowerPoint Presentation can be provided by contacting Kevin Claridge at kclaridge@mote.org or via our Mote webpage https://mote.org/research/centers-of-excellence/red-tide-initiative/technology-advisory-council/