US-IOOS/COMT Estuarine Hypoxia Nowcast/Forecast Product: Stakeholder Identification and Feedback

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The Estuarine Hypoxia component of the U.S. Integrated Ocean Observing System (US-IOOS) Coastal and Ocean Modeling Testbed (COMT) is evaluating existing hydrodynamic and water quality models used or likely to be used for operations and/or for regulation in the Chesapeake Bay and other, similar estuarine environments. The outcomes of this work are expected to help with the development of operational hypoxia forecast capabilities for the Bay.

As a proof-of-concept, the ChesROMS hydrodynamic model, linked to a 1-term constant respiration equation for dissolved oxygen (DO), is presently being used to produce realtime now-casts and short-term (3-day) forecasts of DO for the Chesapeake Bay Mainstem which are being posted live to the internet.

To date, the COMT Estuarine Hypoxia team has facilitated two meetings with Chesapeake Bay citizen stakeholders in order to explore potential applications of our estuarine DO nowcast/forecast products in support of recreational and commercial fishing. A smaller Stakeholders Focus Group meeting was held at Virginia Institute of Marine Science (VIMS) in December 2015, and a larger Stakeholders Workshop was held at VIMS in April 2016.

This presentation reviews the insights gained at these two stakeholder meetings regarding the interests of members of the public who are most likely to utilize the COMT Estuarine Hypoxia Forecast Product, how these stakeholders might apply these products to improve the efficiency and success of their fishing activities, and what forecast presentation formats are most useful to these stakeholders. This presentation will also summarize the current state and functionality of Hypoxia Forecast Product.