

Briefing on Recent Chesapeake Bay WQ Monitoring Networks Funding History and 2013 Shortfall: Part 1 of 2

Email from Nick DiPasquale to STAC/STAR/WQGIT/TMAW/Non-tidal Workgroup/SAV Workgroup Members July 3, 2013

STAC/STAR/WQGIT/TMAW/Non-tidal Workgroup/SAV Workgroup Members – First, my apologies for multiple postings. Second, I want to make absolutely clear that the Chesapeake Bay Program Office supports comprehensive and robust monitoring networks and I believe the information contained in this message and the attached chart will demonstrate. But the reality is, we are dealing with increased demands for funding and declining federal budgets resulting from sequestration. We will have some difficult choices to make. We will need your best thinking and your best efforts to address the challenges in both the near term and the long term.

This message and the attached chart provide a full funding history of the Partnership's monitoring networks and the clear dimensions of the funding challenges before us. In the coming month, we must collaborate on how best to address the current shortfall in funding the Partnership's tidal and non-tidal networks. And then in the coming 6-9 months, we must continue to work together to determine how we can sustain the Partnership's monitoring networks through 2025.

We—the states, the District, EPA, other federal agency partners, our universities, our river basin commissions, and others—have a long history of joint funding of our tidal (including SAV) and non-tidal monitoring networks. These water quality monitoring networks, which started as individual arrays of stations, became joint programs, and then transitioned into bay-wide and basinwide networks, have helped provide for the solid scientific foundation on which we have built our Bay and watershed restoration efforts. These monitoring networks will continue well into the foreseeable future, continuing to provide the best insights into the effectiveness of our individual and collective management implementation efforts directed towards restoring the Bay ecosystem and its surrounding and supporting watershed. But we have reached a point where we must look well down the road and come to terms with what are the dimensions of the bay-wide and watershed-wide monitoring networks which we can sustain for the coming decade.

Funding the Partnership's Tidal Monitoring Network

Since 1984, EPA, Maryland and Virginia have invested funding in and been conducting the coordinated Chesapeake Bay water quality and biological communities monitoring network. Over the past three decades, funding has increased incrementally to cover the expansion and reconfiguration of the network as well as increasing costs for fuels, salaries, and laboratory analyses. Through periodic reviews, there have been changes to the tidal monitoring network—both disinvestments (e.g. reduction in the number of cruises, elimination of zooplankton monitoring) and investments (e.g., expansion of the network into shallow-water habitats, emergency funding for storm-related assessments)—reflective of evolution of the Partnership's management driven information needs.

2009-2012 EPA funding and State matching funds for the Chesapeake Bay Water Quality Monitoring Program

We have also witnessed circumstances where component programs of the larger tidal monitoring network did not provide data and information of sufficient relevance to management decision making and eventually lost funding support of the partners—e.g., phytoplankton and zooplankton. These were balanced by living resource monitoring programs which established themselves as management relevant and have not only survived but thrived and have directly influenced the course of Bay restoration—baywide benthic monitoring program and the baywide SAV aerial and ground survey.

Virginia, Maryland, Virginia Institute of Marine Science (VIMS), and EPA have increased their funding investment over the 30+ year life of the bay-wide SAV aerial survey program. This program has supported not only one of the world's best long term records of SAV distribution and abundance, but the states' adoption of SAV and water clarity water quality standards, SAV plantings, and countless permitting decisions.

Maryland and Virginia funding of the Chesapeake Bay SAV Aerial Survey: 1984-2012

EPA funding of the Chesapeake Bay SAV Aerial Survey: 1974-2012

But the lack of long-term federal agency funding commitments combined with recent state and then EPA funding reductions has lead to a current funding shortfall.

Funding the Partnership's Non-Tidal Network

Until the non-tidal monitoring network MOU was signed in 2004, only the Partnership's river input monitoring program ensured coordinated non-tidal monitoring across jurisdictional boundaries. Monitoring of our free flowing streams and rivers was uncoordinated and not directed towards common objectives. Starting in 2004, EPA Chesapeake Bay Program funding for non-tidal monitoring went from zero to \$250,000, rising up to nearly \$2.8 million in 2012. (In addition, EPA revised its grant guidance over time to enable the jurisdictions to use Chesapeake Bay Implementation Grant funds and, recently, Chesapeake Bay Regulatory and Accountability Grant funds, to support monitoring in the Bay watershed.)

2009-2013 EPA funding investments in the tidal network, non-tidal network maintenance, and non-tidal network expansion (2011-2012)

In 2011 and 2012, EPA invested \$1,000,000 each year for expansion of the non-tidal monitoring network and enhanced data analysis support. An additional \$700,000 of one-time carry-over funds was also used to support network maintenance. During the same timeframe just as the Partnership decided at the conclusion of the Monitoring Realignment Action Team (MRAT) process to increase the investment in the non-tidal network, state and other federal agency partners were pulling back their tidal and non-tidal network funding, responding to the economic down turn and decreasing budgets. The Partnership lost funding for stream gaging stations in record numbers (and continues to do so). Some of our states could not fully fund their existing stations, so much of the initial MRAT driven reinvestment of tidal monitoring funds into the

non-tidal network were used to cover the funding dropped by other partners. Just recently New York had to withdraw its laboratory analysis funding for its stations in the Bay watershed as a result of loss of federal funds due to the sequestration. SRBC filled in for the short term, but may need to decommission a monitoring station for cost savings to support those laboratory analysis costs in the short term.

EPA funds have been used by the Non-Tidal Monitoring Network partners to fill such funding gaps so that partners would not lose these stations from the larger network, all at the same time as the Partnership was using those same EPA funds in building up the non-tidal network. There has been a million dollar increase in EPA's funding of the non-tidal monitoring network since 2010 (see attached two page briefing for details). But in the face of needing to cover the cut backs in funding by state and other federal agency partners and unanticipated costs of maintaining the network, that funding increase has not been enough to fully fund the continued operation of the full non-tidal network put in place by the end of 2012.

Supporting the Monitoring Networks Infrastructure

Over the history of the partnership, the partners have ensured there has been an infrastructure supporting the ongoing coordination of our monitoring networks and application of the resultant data and information in supporting shared decision making. EPA continues to support a number of positions which directly support the partnership's monitoring networks: a USGS monitoring coordinator, a USGS quality assurance officer, a University of Maryland data analyst, an Interstate Commission on the Potomac River Basin monitoring data manager, and two Chesapeake Research Consortium STAR staffers. EPA is actively working with our USGS partners on a shared position to help coordinate the Partnership's work on explaining the factors affecting observed trends in our tidal and non-tidal monitoring records.

EPA has also made financial commitments to ensuring the analysis and interpretation of the resultant monitoring data by our states, universities, river basin commissions, and USGS, with investment of over a half million dollars in data analysis every year.

Addressing the 2013 Monitoring Network Shortfall

Now in 2013 we are facing a significant shortfall in funding our tidal and non-tidal monitoring networks. This shortfall is the combined result of:

- Incremental decreases in monitoring funding coming from our state and federal agency partners;
- Using EPA monitoring funds to cover those funding shortfalls to ensure against permanent loss of network water quality and stream flow stations;
- Lack of consistent commitment of non-EPA federal agency funding to the SAV aerial survey program;
- The overall economic down-turn, increasing federal deficit, and the resultant sequestration; and
- Competing budgetary priorities within shrinking state and federal agency budgets.

The Partnership is faced with a shortfall of close to \$950,000 in fully funding its tidal and non-tidal water quality monitoring networks. This figure gets higher as we factor in covering existing and forthcoming further decreased in state and federal agency funding for non-tidal water quality and stream flow gaging stations. We are also facing a \$163,000 shortfall in funding for the baywide SAV aerial survey program.

Yes, we should have been planning better for the long term maintenance of our monitoring network in these past years, but our attention has focused on building our non-tidal network. And, yes, we did not fully anticipate the funding impacts of the economic down-turn on our state partners and the resultant federal government sequestration on funding of our shared monitoring networks.

I am asking for your help in doing what this Partnership is recognized around the world for doing—working together to solve difficult ecosystem restoration problems and put in place solutions that will sustain our restoration actions for the coming decade. We must put aside the finger pointing and collectively determine how to best close the existing gap in funding our networks in 2013.

Here's the sequence of meetings in which we will be working together up through the Partnership to reach agreement on addressing the existing 2013 shortfall in monitoring network funding:

- **July 8:** Water Quality Goal Implementation Team conference call (briefing on network shortfall and Partnership decision making process/schedule for addressing the shortfall)
- **July 10:** Tidal Monitoring and Analysis Workgroup meeting (reach closure on work underway on tidal network options to close the funding gap)
- **July 11:** Management Board meeting (briefing on network shortfall and Partnership decision making process/schedule for addressing the shortfall)
- **July 17:** Non-tidal Monitoring Workgroup meeting (reach closure on work underway on non-tidal network options to close the funding gap)
- **July 22:** Scientific, Technical Assessment and Reporting (STAR) Team meeting (integrating the full suite of tidal and non-tidal workgroup options into a set of preferred options for presentation to the Management Board for final decisions)
- **July 29:** STAR's preferred options distributed to Management Board and Water Quality Goal Implementation Team, with feedback requested from the Water Quality Goal Implementation Team members by August 5 so the Team's feedback can be presented to the Management Board
- **August 8:** Management Board meeting (presentation of STAR's set of preferred options for final decision by Management Board members on behalf of the larger Partnership)
- **August 12:** Water Quality Goal Implementation Team conference call (briefing on Management Board's decisions and next steps)

And then let's turn our collective attention towards determining what funding investments will be needed by the year 2025 to have sustained our tidal and non-tidal monitoring network over that 12 year time frame. We must recognize the new fiscal reality upon us will last well into the

future. We must work to re-shape our networks to continue to provide data and information to drive adaptation of our management actions as we respond to observed trends in water quality and biological communities. We must reach agreement on a long term funding strategy for our monitoring network which reflects the new fiscal reality and builds in the ability to respond to the ebbs and flows of actual funding levels from our individual partners over time.

Thank you in advance for your assistance. I know we can figure this out. Yours, in Partnership,
Nick

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