



SHALLOW WATER MONITORING PROGRAM: TAKE 2.

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STAR MEETING

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BACKGROUND

- The shallow water monitoring program came to life circa 2005. Over \$500K investment annually.
- The work has coupled near shore continuous monitoring with surface water quality mapping efforts.
- The program planned to assess water clarity in all Chesapeake Bay segments which requires 3-year cycles of assessment. It is nearing completion of that cycle.

LOOKING AHEAD: ADAPTIVE MONITORING

- Considering the resources available, over the 13 years of the program, can we now adjust the shape of the program and invest these funds more strategically to meet existing and new priorities.
- **ACTION:** We are asking for insights on priorities that could be given consideration in reshaping the work of the Shallow Water Monitoring Program

FIRST THOUGHTS: SUGGESTIONS FOR A REVAMPED SWMP STRATEGY (GIVEN MORE LIMITED RESOURCES)

- **Focus monitoring on sentinel sites--** These sites would be selected based on their "representativeness" of the entire segment.
- **Target bay management segments for sampling** as opposed to a rotating basin approach.
- **Target deployment of ConMon to better understand** the linkage between deep water and shallow water **hypoxia**
- **Targeted use of a combination of targeted Dataflow and Conmon sampling to delineate segment sub-sections** which meet water quality standards.
- Dataflow datasets could be used to **find areas within segments that are not well-represented by the current complement of fixed stations.**
- *Status and trends could potentially be determined from samples collected at these locations. We may develop a statistical approach that allows us to predict the probability of a segment meeting its water clarity goal based on the information collected at its complement of sentinel sites.*
- *Segments could be targeted if existing datasets indicate they are meeting water clarity goals or are close to meeting them.*
- *Targeted ConMon deployments for (perhaps) the benefit of the conditional attainment approach for dissolved oxygen criteria.*
- *Additionally such an approach could be used to identify problem areas too. This could be used in a number of ways in addition to quantifying the degree of "passing or non-passing" standards and of course to quantify "improvements" which may occur first in some areas within segments or river systems.*
- *Stations could then be added to those areas, if resources allow.*

An abstract graphic on the left side of the slide, consisting of a network of white lines and small circles on a blue gradient background. The lines are vertical and horizontal, with some diagonal segments, and the circles are of varying sizes, resembling a circuit board or a neural network diagram.

AND NOW YOUR THOUGHTS...