

A report to the Chesapeake Bay Program Office on addressing a \$0.944M shortfall in monitoring funds for FY2013 and beyond

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Analysis and Reporting team (STAR)

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Approach

Contributors

- STAR
- TMAW
- NTW

Expected feedback mechanisms

- CBPO
- Goal Teams- WQGIT
- Management Board
- STAC

Deliberative options for reductions

Option	Tidal	Nontidal	GAP
1, Proportional, but Tidal cut too big	\$254,000	\$690,000	\$0
2, Nontidal rollback, Tidal cut	\$55,000	\$700,000	\$189,000
3, Option 2+ loss of phytoplankton and 2 more nontidal stations	99,000	\$805,000	\$40,000
4, Option 3 + Maryland nontidal station	99,000	\$835,000	\$10,000

Reduction Option 1

	<u>Tidal</u>	<u>Nontidal</u>
Amount (Tot=944,000) (Gap=\$0)	\$254,000	\$690,000
Action	<ul style="list-style-type: none"> • Virginia (\$134K) <ul style="list-style-type: none"> • Summer only monitoring • Reduce nutrients to a small subset of current efforts • Maryland (\$120K) <ul style="list-style-type: none"> • Cut 3 winter cruises, • Lose staff • Lose lab support 	<ul style="list-style-type: none"> • 13 station reduction* • MD-3, PA-3, VA-2, DC-2, NY-2, WV-1 • 44% reduction in 2010-12 monitoring expansion support . • Target source sectors impacted <ul style="list-style-type: none"> • Urban • Agriculture <p>* (The list of stations cut TBD by NTW)</p>
Impact	<ul style="list-style-type: none"> • Can not meet commitments for water quality standards • Inability to sample full Bay for criteria assessment. • Loss of response monitoring capabilities • Requires revised protocols • Monitoring program sustainability in question 	<ul style="list-style-type: none"> • Loss long-term trend information at 5 locations with greater than 10 years of history. • Loss of trend and load assessment capabilities in key settings needed for TMDL and Mid-point assessment • Inability to strengthen WSM for targeted source sectors

Reduction Option 2

	<u>Tidal</u>	<u>Nontidal</u>
Amount (Tot=\$755,000) (Gap=\$189,000)	\$55,000	\$700,000
Action	<ul style="list-style-type: none"> • Virginia (\$27.5K) Maryland (\$27.5K) <ul style="list-style-type: none"> • Eliminate January cruise • Eliminate nutrients from 2 summer cruises • Eliminate planned benthic analysis 	<ul style="list-style-type: none"> • 14 station reduction* • MD-3, PA-4, VA-2, DC-2, NY-2, WV-1 • 44% reduction in support for expanded monitoring. • Target Source Sectors affected <ul style="list-style-type: none"> • Urban • Agriculture <p>* (The list of stations cut TBD by NTW)</p>
Impact	<ul style="list-style-type: none"> • 2017 mid-point evaluation will not include a reevaluation of benthic IBI-derived reference curves for dissolved oxygen assessment • Loss of critical data linking winter production with summer oxygen conditions • Reduced ability to the strengthen the Bay water-quality model 	<ul style="list-style-type: none"> • Loss long-term trend information at 5 locations with greater than 10 years of history. • Loss of trend and load assessment capabilities in key settings needed for TMDL and Mid-point assessment • Inability to strengthen WSM for targeted source sectors

Reduction Option 3

	<u>Tidal</u>	<u>Nontidal</u>
Amount (Tot=\$765,000) (Gap=\$179,000)	\$99,000	\$805,000
Action	<ul style="list-style-type: none"> • Virginia (\$71K) Maryland (\$28K) • Eliminate January cruise • Eliminate nutrients from 2 summer cruises • Eliminate planned benthic analysis • VA reduces phytoplankton monitoring 	<ul style="list-style-type: none"> • 17 station reduction • MD-3, PA-5, VA-3, DC-2, NY-2, WV-2 • 51% reduction in support for expanded monitoring. • Target Source Sectors affected <ul style="list-style-type: none"> • Urban • Agriculture
Impact	<ul style="list-style-type: none"> • 2017 mid-point evaluation will not include a reevaluation of benthic IBI-derived reference curves for dissolved oxygen assessment • Loss of critical data linking winter production with summer oxygen conditions • Reduced ability to the strengthen the Bay water-quality model 	<ul style="list-style-type: none"> • Loss long-term trend information at 6 locations with greater than 10 years of history. • Loss of trend and load assessment capabilities in key settings needed for TMDL and Mid-point assessment • Inability to strengthen WSM for targeted source sectors

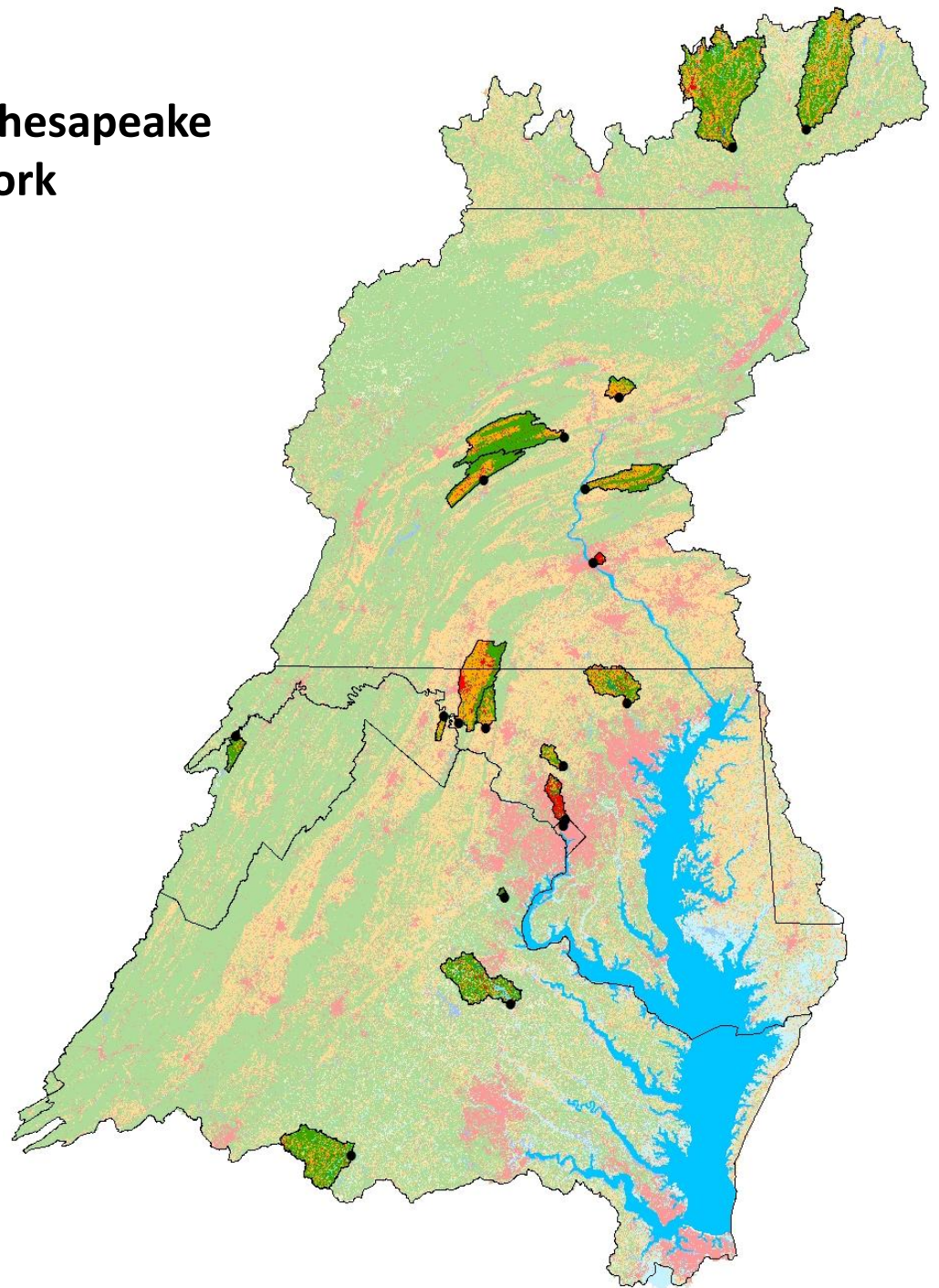
Reduction Option 4

	<u>Tidal</u>	<u>Nontidal</u>
Amount (Tot=\$934,000) (Gap=\$10,000)	\$99,000	\$835,000
Action	<ul style="list-style-type: none"> • Virginia (\$71K) Maryland (\$28K) • Eliminate January cruise • Eliminate nutrients from 2 summer cruises • Eliminate planned benthic analysis • VA reduces phytoplankton monitoring 	<ul style="list-style-type: none"> • 18 station reduction • MD-4, PA-5, VA-3, DC-2, NY-2, WV-2 • 53% reduction in support for expanded monitoring. • Target Source Sectors affected <ul style="list-style-type: none"> • Urban • Agriculture
Impact	<ul style="list-style-type: none"> • 2017 mid-point evaluation will not include a reevaluation of benthic IBI-derived reference curves for dissolved oxygen assessment • Loss of critical data linking winter production with summer oxygen conditions • Reduced ability to the strengthen the Bay water-quality model 	<ul style="list-style-type: none"> • Loss long-term trend information at 6 locations with greater than 10 years of history. • Loss of trend and load assessment capabilities in key settings needed for TMDL and Mid-point assessment • Inability to strengthen WSM for targeted source sectors

Proposed Station Cuts to the Chesapeake Bay Nontidal Monitoring Network

Characteristics of losses

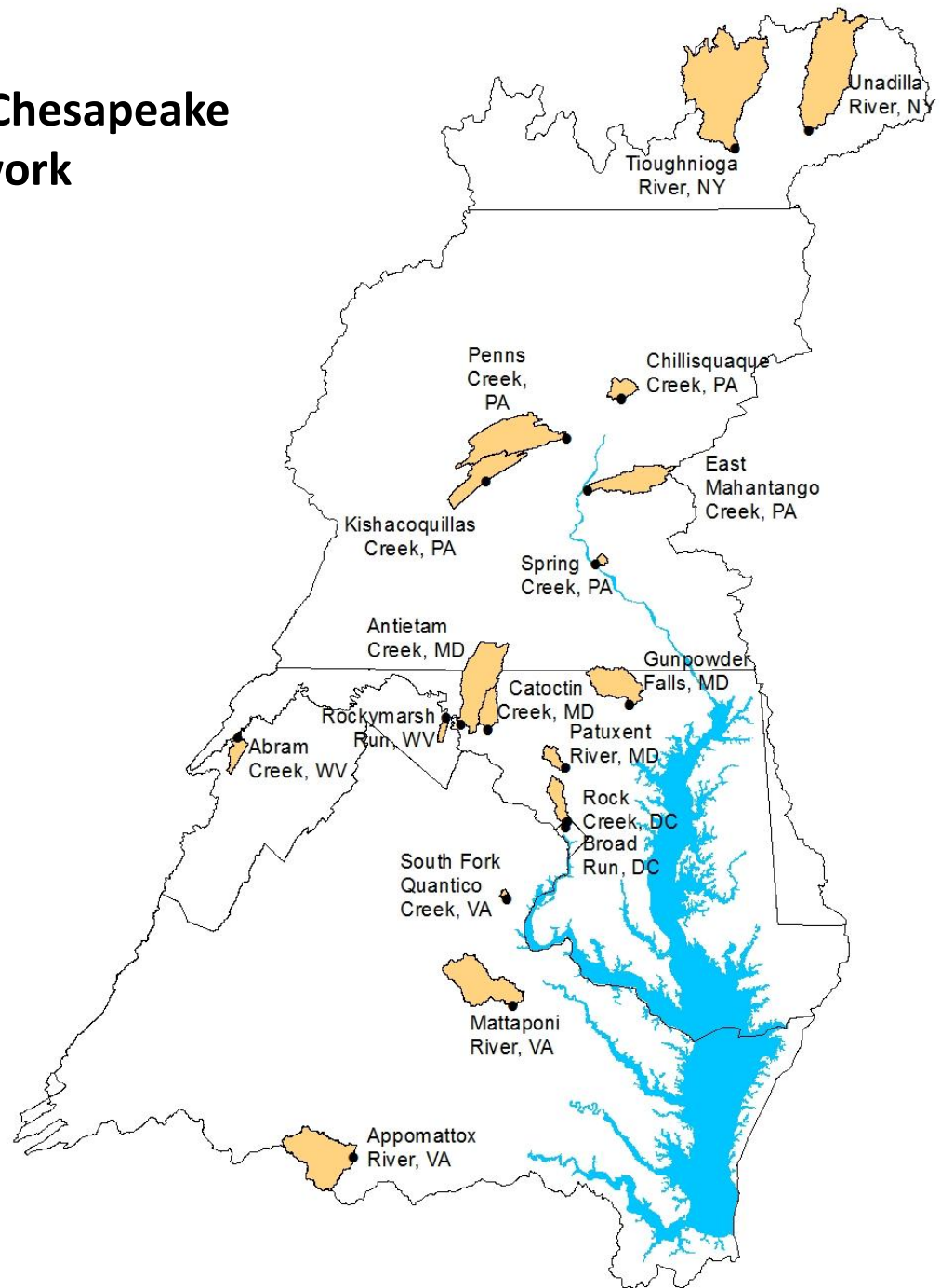
- 3 urban watersheds in MD and PA, and an urbanizing watershed in Virginia
- 4 long term monitoring stations in Maryland and 2 in Virginia
- 2 key watersheds in New York
- 3 key agricultural watershed in PA, MD, and WV
- a unique reference station in the piedmont of Virginia
- only station included to characterize mining disturbed lands in WV



Proposed Station Cuts to the Chesapeake Bay Nontidal Monitoring Network

Cuts By Jurisdiction

- Maryland-4
- Pennsylvania – 5
- Virginia 3
- District of Columbia- 2
- New York -2
- West Virginia- 2



- Request that the Management Board consider the options that have been presented and make a recommendation for moving forward.
- Possibility that EPA and USGS may have funding to offset some of the proposed cuts.

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