Partnership's Tidal and Nontidal Monitoring Networks: Programming, Budgets and Priorities

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USGS@CBPO

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Management Board Meeting

USGS science for a changing world

Chesapeake Bay Program
A Watershed Partnership

Overview

- Updates and summary on the tidal and non-tidal monitoring networks following detailed monitoring network reviews held with each of the seven watershed jurisdictions during 2012
- Highlights of the latest monitoring network budgets and implications for 2013 (and beyond)
- Discussion of the monitoring networks' management objectives looking down the road and aligning network budgets with the partnership's priorities

Partnership Meetings: 2012 Summary Snapshot

Programming status/future interests	MD	VA	DE	WV	PA	NY	DC
2009-2013 Establish and maintaining new sites in the watershed							
Reinstate phytoplankton monitoring support in the Bay	Tidal						
Support recalibration of the benthic IBI for the Bay assessments	Tidal	Tidal					
New watershed long term water quality monitoring network sites supporting the TMDL	1	≤5 2° to 1°	1 BMP	4-5		5-6	
Address funding for programming challenges (e.g. aging boat fleet, rising gas costs, QA support, NELAC stds raise lab costs, nontraditional partner support, analyses, threatened gages, etc)	Tidal + NT	Tidal + NT	NT	NT	NT	NT	NT
Interagency site swaps to improve monitoring efficiency					NT		
Stream health stressor id analyses		NT					

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Interagency site swaps to improve monitoring efficiency	Spring 2013: Coordination meetings are underway between USGS and SRBC.						
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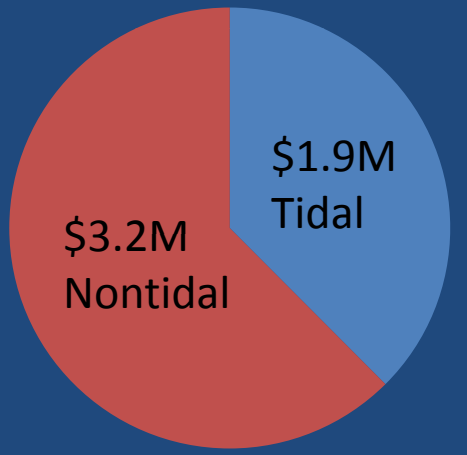
Interagency site swaps to improve monitoring efficiency	Coordination is underway between USGS and SRBC on the path forward.						
Stream health stressor id analyses	ICPRB completed an exploratory analysis in 2012.						

Highlights of the Latest Water Quality Monitoring Program Budgets

Our CBPO Investment is leveraged by the Clean Water Act Grants Bringing Matching Program Dollars, expanding the programming.

2012 CBPO Investment in Tidal and Nontidal Monitoring

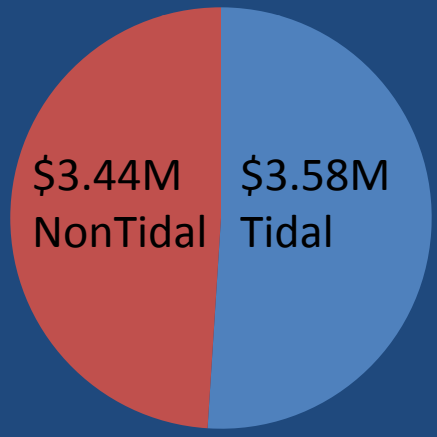


CBPO Tidal Mor Investment

CBPO NTN Mon Investment

Clean Water Act 117 grant Translator
50% Match 117e
Min 5% Match 117d

Resulting 2012 grant supported Tidal and Nontidal Monitoring



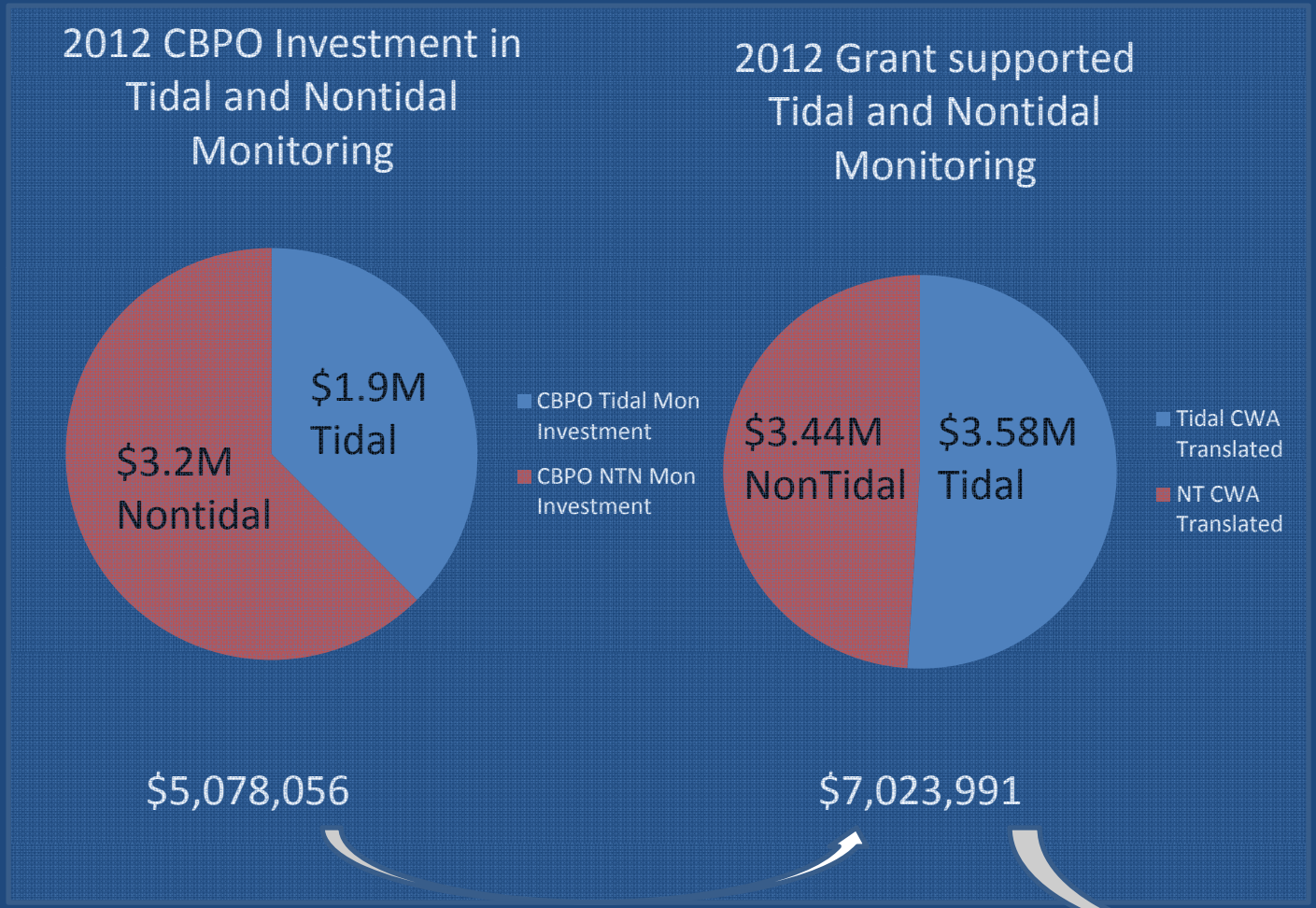
Tidal CWA Translated

NT CWA Translated

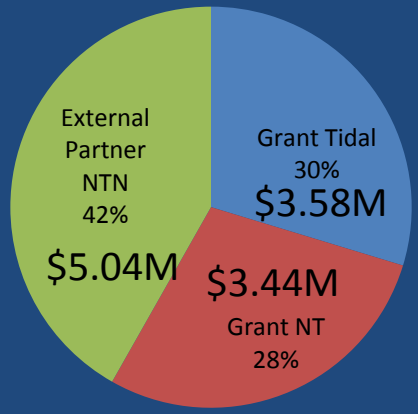
$5,078,056 → $7,023,991

Investment benefit: Nearly $2M

Our CBPO $5M Tidal+NTN Monitoring Program is more like a $12M Bay&Basin WQ Monitoring Program



2012 Grant support
+
Estimated Partner Contribution

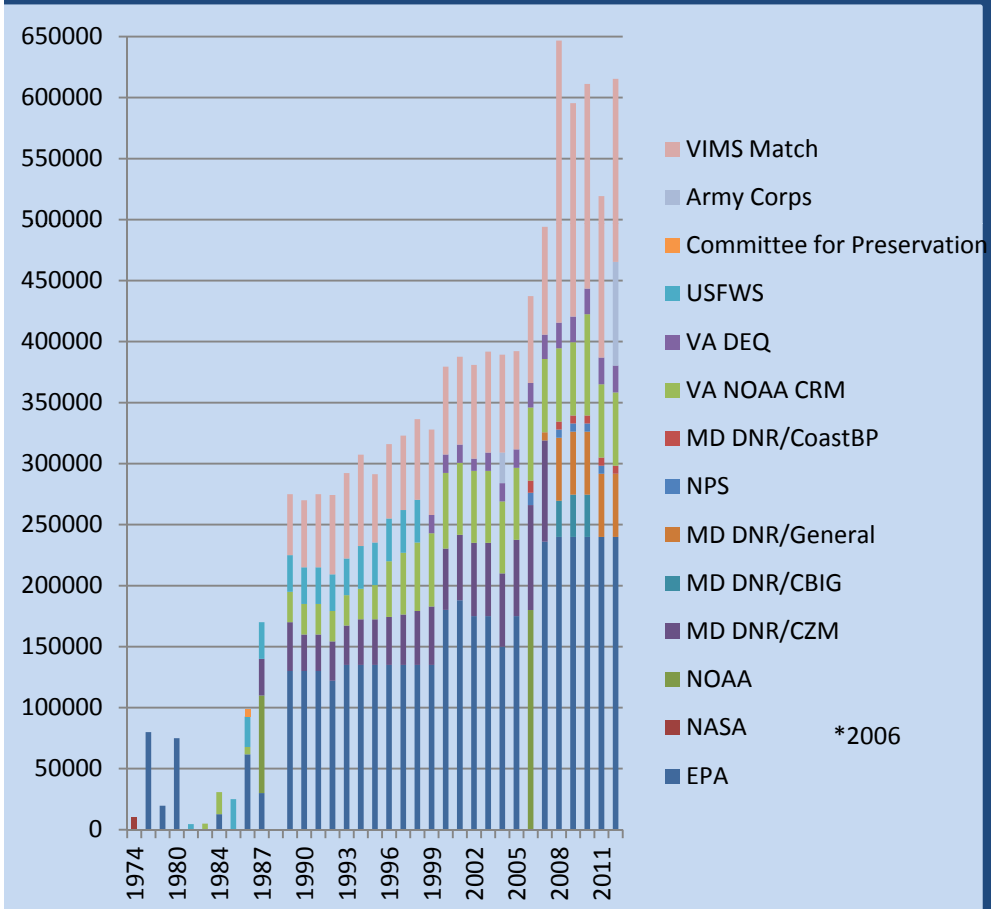


~$12,000,000

Grant Vehicle Match Translation Benefits (~2M)

Partnering Benefits ~5M

Factors Affecting Chesapeake Bay Monitoring Program Support: Near, Mid and Long Term



SAV Program Funding History

SAV Program Example

- Near term challenge: EPA-funding support declined coincident with continued declining State support: Shortfall in 2013
- Mid-long term challenges: Increased costs coupled with very intermittent non-EPA federal partner contributions

Factors Affecting Chesapeake Bay Monitoring Program Support: Near, Mid and Long Term

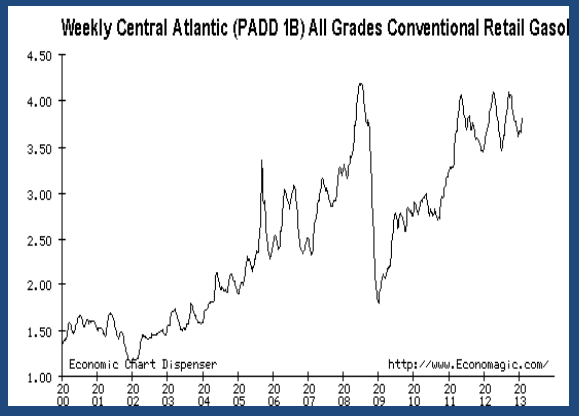
SAV Program Funding History

SAV Program Example

- Near term challenge: EPA-funding support declined coincident with continued declining State support: $279K shortfall in 2013
- Mid-long term challenges: Increased costs coupled with very intermittent non-EPA federal partner contributions

Additional Factors Impacting Tidal and Nontidal Water Quality Monitoring Program Funding Support Today

Chesapeake Bay Program
A Watershed Partnership



- EPA CBP funding challenges under sequester
- Changes under new grant competitions
  - EPA's NTN investment tripled in 2010
  - SAV aerial survey support decreased in 2013
- Boat fleet: aging/offline (fire)
- Fuel costs – a 2.5x increase in <10 yrs.
- Lab costs - NELAC Standards increases sample costs
- Scales of the Economy –
  - Recession impacts – e.g. MD phytoplankton costs lost
  - Sequester impacts – e.g. NY lab costs lost April 2013
  - Annual budgets – e.g. threatened stream gages (example: Unadilla, NY flow gage station)
- Adapting to CBP Partnership management priorities
  - 2000-03: End zooplankton and initiate Shallow Water
  - 2009: Focus on tidal delisting and assessing watershed management effectiveness

Reaffirming our Monitoring Realignment Priorities

Historical Strategic Adjustments to CBP Long term Water Quality Monitoring Programming

- 2000-04
  - Discontinued toxics monitoring
  - Zooplankton monitoring converted into Shallow Water Monitoring Program
  - Nontidal Network was established with signing of MOU
- 2009
  - Management Board's monitoring realignment decisions produced:
    - a streamlined tidal Bay monitoring network
    - an enhanced watershed monitoring network
    - enhanced data analysis/interpretation support

Monitoring Realignment Monitoring Priorities to Support Management Endpoints: Management Board 2009

- *The removal of tidal segments of the Bay from the impaired waters list (delisting) and…*

- *Determining the effectiveness of our management actions…*

are the responsibilities of the partnership and should be the priorities of the monitoring program.

Today's Decisions/Directions
In light of factors affecting support of the Partnership's Monitoring Networks

- Today's Management Board Meeting
  - Decision: Reaffirm or modify Monitoring Program Goals established by the Management Board in November, 2009 during the Monitoring Realignment process
  - Action: Request information from STAR WGs needed to be prepared to make 2013 funding decisions at the June MB mtg on a likely need for adjusting funding allocations within and between the tidal and non-tidal monitoring networks

Future Decisions/Directions
In light of factors affecting support of the Partnership's Monitoring Networks

- June Management Board Meeting
  - Decision: Select an option from those presented by the STAR WGs (Tidal Monitoring and Analysis; Nontidal Monitoring) for rebalancing the allocation of EPA CBP funding between the tidal and nontidal water quality monitoring networks.
  - Action: Provide direction to STAR and its WGs on information needed to make future (2014) decisions on longer term strategies for sustaining funding for the networks.

Future Decisions/Directions

In light of factors affecting support of our Monitoring Program efforts

- Midterm: Fall 2013 Management Board Meeting
  - Decisions: Work to close out responses to actions from the Monitoring Realignment process; agree on a path forward for funding the monitoring networks in 2014 and 2015.
- Longterm: Fall 2014 Management Board Mtg
  - Decision: Approval of funding strategy for sustaining the integrity of the CBP Partnership's monitoring networks well beyond 2015 supporting water quality standards assessments in the Bay, targeting restoration actions, and evaluating the effectiveness of management actions in the watershed.