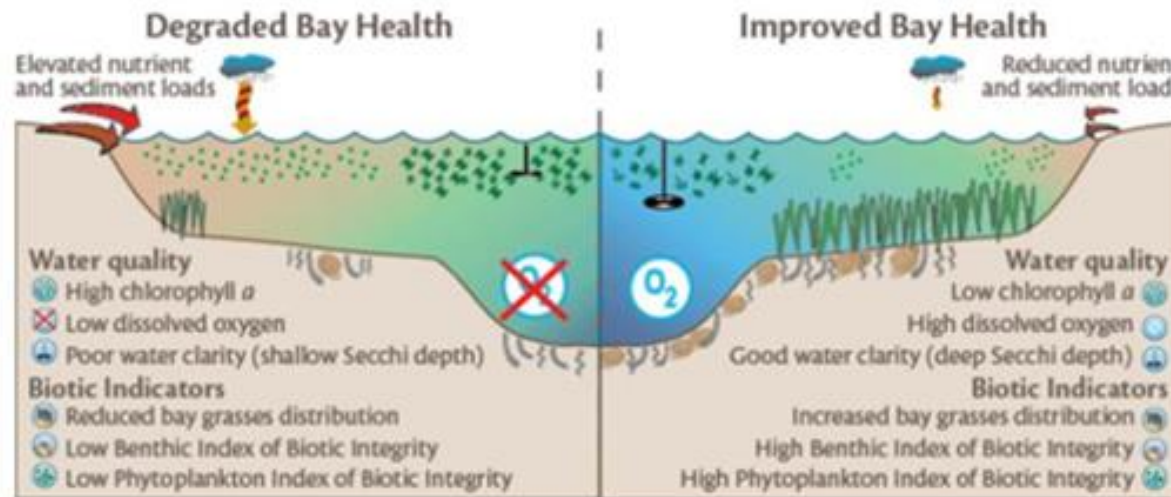


Beyond 2025: Outcome Assessment Process

Your input is important 😊



Peter Tango, Breck Sullivan, August Goldfischer

Criteria Assessment Protocols WG

12/18/2024

**Considering the Watershed Agreement outcome updates,
the BIG QUESTION the GITs and workgroups are being asked
to address:**

**"What advice do you have for the Management Board on
how to consolidate, reduce, update, remove, replace or
add new outcomes?"**

**Considering the Watershed Agreement outcome updates,
the BIG QUESTION the GITs and workgroups are being asked
to address:**

**"What advice do you have for the Management Board on
how to consolidate, reduce, update, remove, replace or
add new outcomes?"**

*It seems for now that **goals** will remain the same in the Beyond 2025 updated version of the Watershed Agreement*

Water Quality Goal

CHESAPEAKE BAY WATERSHED AGREEMENT

“Reduce pollutants to achieve the water quality necessary to support the aquatic living resources of the Bay and its tributaries and protect human health.”



Photo by Will Parson/Chesapeake Bay Program

Water Quality Standards Attainment and Monitoring Outcome



Outcome

Continually improve our capacity to monitor and assess the effects of the management actions being taken to implement the Bay TMDL and improve water quality. Use monitoring results to report annual progress being made in attaining water quality standards and trends in reducing nutrients and sediment in the watershed.



Chesapeake Bay Program Beyond 2025 Evaluation

Final Report

Prepared for
Chesapeake Bay Program
Beyond 2025 Steering Committee

Prepared by:
Eastern Research Group,
Concord, MA

June 18, 2024



Beyond 2025 “SMART” Outcome Assessment

WQSAM Outcome:

Epic fail for the “SMART” test

Outcome	ERG Comments	S	M	A	R	T	Overall
Water Quality Standards Attainment and Monitoring Outcome - Continually improve the capacity to monitor and assess the effects of management actions being undertaken to implement the Bay TMDL and improve water quality. Use the monitoring results to report annually to the public on progress made in attaining established Bay water quality standards and trends in reducing nutrients and sediment in the watershed.	The outcome statement contains no specific or measurable elements and does not have a timing. Additionally, the second aspect (report annually) represents an output.	x	x			x	x

WQSAM Outcome: Epic fail for the “SMART” test

Outcome	ERG Comments	S	M	A	R	T	Overall
Water Quality Standards Attainment and Monitoring Outcome - Continually improve the capacity to monitor and assess the effects of management actions being undertaken to implement the Bay TMDL and improve water quality. Use the monitoring results to report annually to the public on progress made in attaining established Bay water quality standards and trends in reducing nutrients and sediment in the watershed.	The outcome statement contains no specific or measurable elements and does not have a timing. Additionally, the second aspect (report annually) represents an output.	X	X			X	X



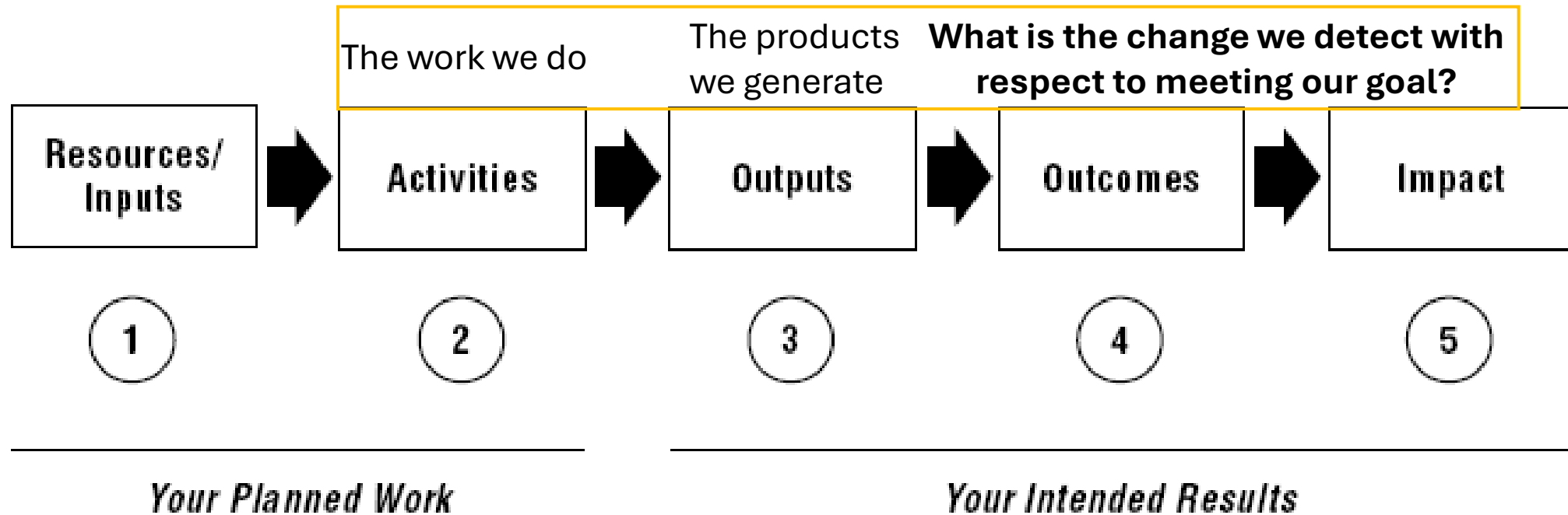
Lessons Learned Report: “SECRET SAUCE”: What makes a good outcome?

- Clear in its objective
- Measurable
- Monitoring program that supports/reinforces the outcome
- Partner commitment
- Resources identified and/or available to support the efforts necessary to achieve the outcome
- Centered around people & living resources (not solely water quality)



Logic Model Definition

A systematic and visual way to present and share your understanding of the relationships (linkages) among the resources you have to operate your program, the activities you plan, and the results, outcomes or impacts you hope to achieve.



Big Question:

"What advice do you have for the Management Board on how to consolidate, reduce, update, remove, replace or add new outcomes?"

First: Does anyone feel we should keep the same language for our outcome going forward?

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"What advice do you have for the Management Board on how to consolidate, reduce, update, remove, replace or add new outcomes?"

First: Does anyone feel we should keep the same language for our outcome going forward?

Second: Does anyone feel we already have a SMART outcome?

TIMELINE for outcome assessment:

- **December 11: Monitoring Team kick-off on to understand program needs of outcome assessment**
- **TB updated:** Outcome assessment materials due
- **TB updated:** Present to the MB

TEMPLATE: OUTCOME ASSESSMENT



1. Review outcome, answer big question
2. Is outcome SMART?
3. Challenges & opportunities for achieving the outcome
4. How does/could outcome relate to Bay Agreement mission?
5. Timescale for completing outcome(5, 10, 15 years) Incremental step or final outcome?
6. Resources needed to achieve outcome (high, med., low) & availability of resources
7. Risk of removing or changing the outcome?
8. What value added by having CBP work on outcome?
9. How does outcome benefit the public? Does it reflect public input already received & have potential to galvanize public engagement?

*Two-pager

*First 2 questions required

TEMPLATE: OUTCOME ASSESSMENT



1. Review outcome, answer big question: Update outcome
2. Is outcome SMART? Not yet 😊
3. Challenges & opportunities for achieving the outcome – many outlined in the Reaching 2025 report work.
4. How does/could outcome relate to Bay Agreement mission?
5. Timescale for completing outcome(5, 10, 15 years) Incremental step or final outcome?
6. Resources needed to achieve outcome (high, med., low) & availability of resources
7. Risk of removing or changing the outcome?
8. What value added by having CBP work on outcome?
9. How does outcome benefit the public? Does it reflect public input already received & have potential to galvanize public engagement?

Can we breakout the outcome to create multiple outcomes that align with the goal?

- We have many complementary images of what this means. Can we write outcomes more in line with the goal of reducing pollutants and achieving water quality:

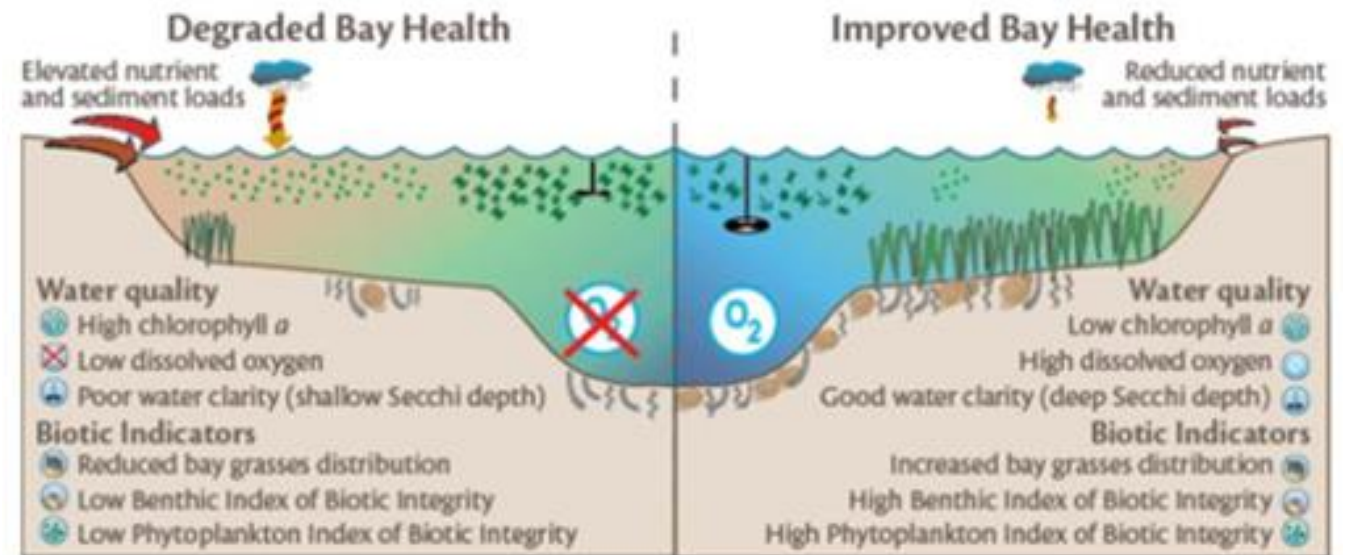
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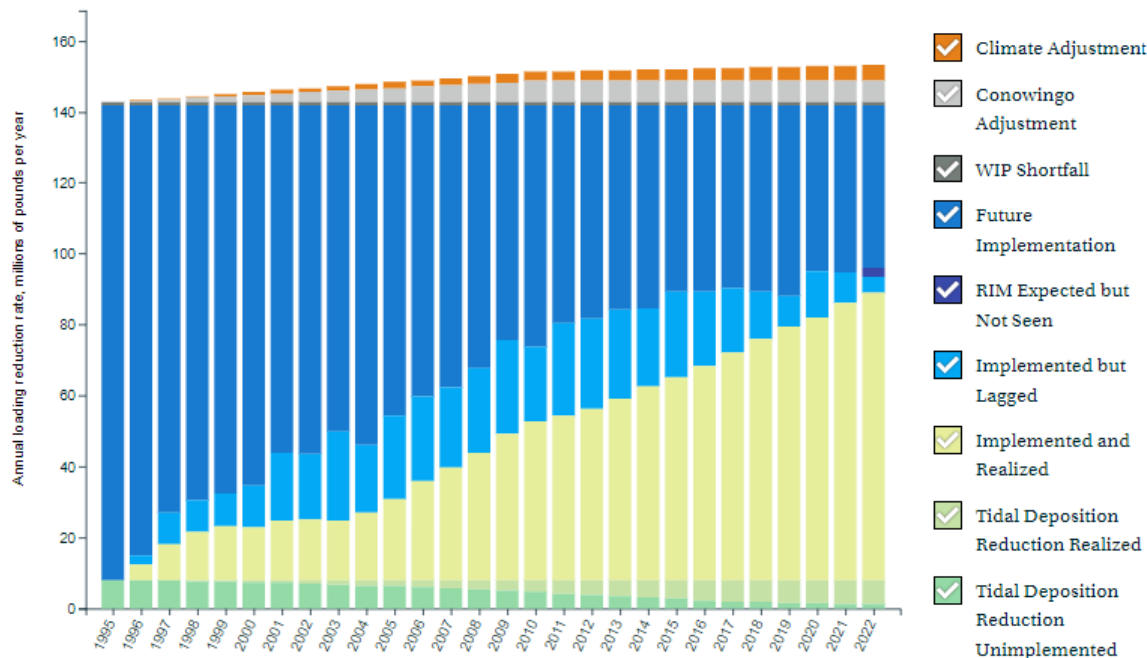
Photo by Will Parson/Chesapeake Bay Program



Watershed: e.g., Meet (flow adjusted?) nitrogen, phosphorus and sediment loading targets? (Do we use the TMDL indicator as our assessment tool?)

Bay TMDL Indicator: Total Nitrogen

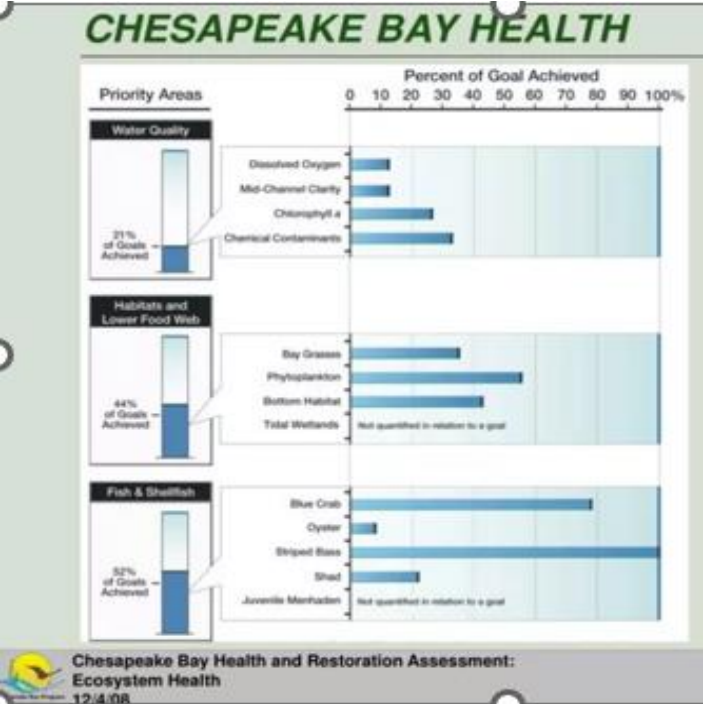
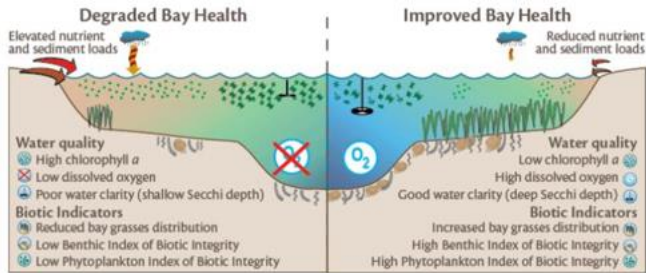
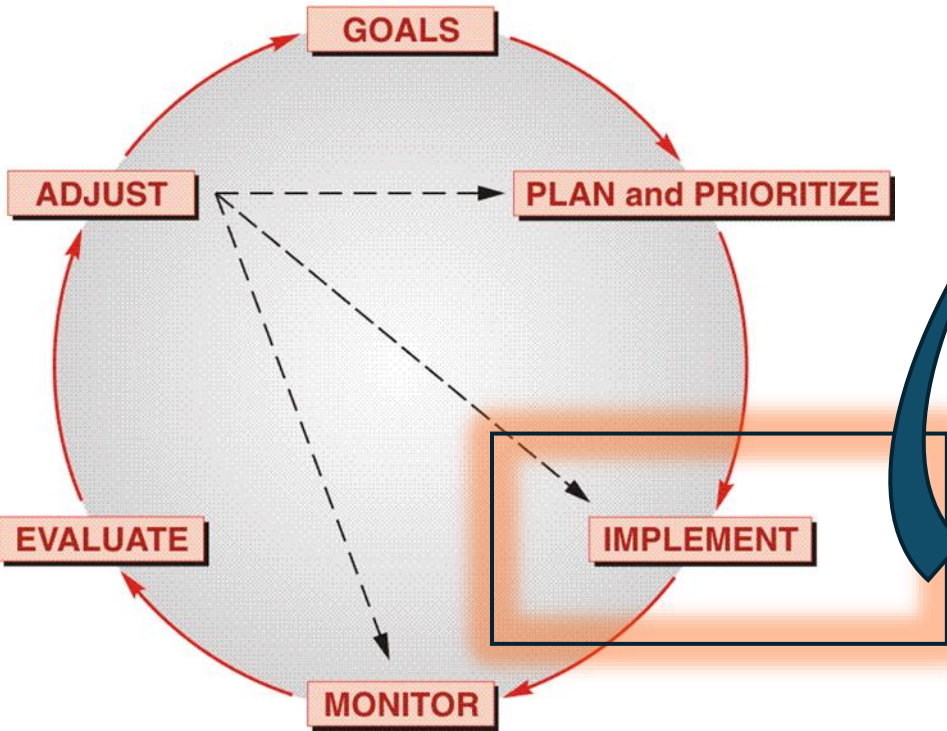
This indicator combines monitored and modeled data to estimate the progress of annual pollution loading rate reductions since 1995 in response to implemented management practices.

[VIEW CHART](#) [VIEW TABLE](#)

Tidal outcome: Multimetric assessment of meeting a set of endpoints, not just DO, clarity and chlorophyll – do we include toxics, do we include specific HAB or human generated toxics in a tidal water quality outcome? Is that an opportunity to merge something in the existing agreement. Do we merge with SAV. Or do all these endpoints need individual outcomes? (e.g., a D.O. outcome, a water clarity outcome, a chlorophyll outcome, etc.

ADAPTIVE MANAGEMENT FOR ECOSYSTEM DECISION MAKING

[Modified from Williams and others (2007) and Levin and others (2009)]



Can we think about all our products showing station to baywide change and create a better outcome statement?

- Baytrends
- Varied analyses from publications that inform change over time (i.e., nutrient limitation, criteria attainment, attainment deficit, attainment buffers, etc.)

To be continued in January 2025...

Safe and Happy Holidays everyone!

Cheers,
Peter 😊