Issues Resolution Committee (IRC) Topic:

How to Address Comments/Concerns Regarding a Toxic Contaminants Reduction Outcome in the Watershed Agreement?

Toxic contaminants continue to degrade fish and wildlife in the Bay and limit the amount of fish that people can consume, therein reducing the viability and value of the Bay's living resources. For example, Maryland recommends that the general population and women of childbearing age consume only one 8 ounce meal per month of the Bay's striped bass over 28" to avoid elevated exposure to PCBs. Children are advised to consume no more than 3 ounces every other month. The state advises no consumption of bluefish caught in the Bay over 15" due to PCBs. Virginia has similar consumption restrictions in its tidal waters. Headwater states have extensive fish consumption advisories due to mercury and PCB contamination. In 2010, the Chesapeake Bay Program (CBP) concluded that 72% of the Bay's tidal water segments were fully or partially impaired by toxic contaminants based on state 303(d) determinations. Concerns have emerged related to toxic contaminants in the watershed making fish more susceptible to health effects from bacteria and pathogens and contributing to intersex conditions and fish kills.

The CBP is required to address toxic contaminants under the Clean Water Act Section 117 authorization language. Reducing toxic contaminants was part of the water-quality goal of Chesapeake 2000 agreement. The CBP Executive Council adopted "Toxic 2000" to further enhance efforts to reduce the effect of toxic contaminants on living resources in the Bay. The EO 13508 strategy explicitly calls for outcomes related to contaminant reductions. Toxic contaminants need to be addressed to meet the overarching WQ goal "to achieve water quality necessary to support the aquatic living resources and protect human health" in the watershed. This goal cannot be achieved by addressing nutrients and sediment alone.

On July 12, 2013 the Management Board endorsed a toxic outcome related to monitoring and research:

- Adopted outcome*: Improve knowledge of the effects of contaminants of emerging concern on the health of fish and wildlife so future strategies can be considered.*

A second proposed outcome related to reducing inputs to the ecosystem of the Bay and its watershed has not been supported by all partners:

- Proposed outcome in question: *Identify and implement practices to reduce loadings of persistent bio-accumulative and toxic (PBT) contaminants and non-(PBT) contaminants that have an effect on the ecosystem resources and human health.*

Three partner jurisdictions have expressed concern about adopting the reduction outcome in spite of the provision that partners will have discretion regarding level of participation in management strategies. Concerns relate to: presumptions that current regulatory programs will achieve reductions thereby precluding a role for the partnership; adopting outcomes and strategies will create new tracking requirements; and future management strategies might involve large-scale efforts such as watershed-wide TMDLs.

Given that Toxic Contaminants are required by the Clean Water Act to be in the mission of the CBP, the IRC shall consider the following questions:

1. Which option below provides the most appropriate way for addressing contaminant reductions, including development and implementation of coordinated management strategies for options two and three?
2. What next steps are necessary to move the preferred option to the drafting team?
3. What is the best information for baseline conditions to be set?

4. Should the approved outcome on monitoring and research be integrated into one outcome that also addresses contaminant reductions?

Option 1: Outcome only focused on enhanced monitoring and research

The agreement would include the approved outcome "*Improve knowledge of the effects of contaminants of emerging concern on the health of fish and wildlife so future strategies can be considered"* but not address reduction of contaminants at this time.

Pros: Limits the scope of program management strategies and limits partner resource commitments. Outcome related to contaminant reductions could be added in the future.

Cons: Fails to reflect an intention to meet the CBP mission/vision elements of achieving a fishable Bay and is not protective of living resources; fails to achieve the broad WQ goal element of protecting human health; fails to fulfill legal requirement for a toxic contaminant strategy per CWA section 117; fails to meet commitments made in the EO 13508 strategy.

NOTE: Options 2-4 presume the outcome from option 1 above is adopted as a stand-alone outcome.

Option 2: A broad contaminant reduction outcome (the previously proposed reduction outcome)

- *Identify and implement practices to reduce loadings of persistent bio-accumulative and toxic (PBT) contaminants and non-(PBT) contaminants that have an effect on ecosystem resources and human health.*

Pros: Establishes a flexible framework for developing management strategies to reduce highest priority toxic contaminants; meets strategy objectives from CBP goals, CWA 117, and EO 13508. Additional information is provided as the associated monitoring and research outcome is carried out.

Cons: Leaves determination of priority contaminants to target for reduction to subsequent analyses. Some jurisdictions concerned about resource implications and believe contaminants are already addressed through existing management programs. Baseline information and monitoring for occurrence and change of contaminants groups is limited.

Option 3: A contaminant reduction outcome that targets a limited number of priority contaminants (e.g., PCBs and mercury) for which reductions are known to be needed

- *Identify and implement practices to reduce loadings of PCBs and mercury to the Bay and watershed.*

Pros: Limits scope of commitment for management strategies to the two contaminants most often driving human health risk and fish consumption advisories. Other priority contaminants for reduction could be identified in future outcomes. More information could be gained on other contaminant groups as the associated monitoring and research outcome is carried out. Baseline information for just two contaminant groups would be more attainable.

Cons: Excludes contaminants that are also known or expected to compromise the health of living resources and human health (e.g., organochlorine pesticides, polycyclic aromatic hydrocarbons, agricultural herbicides, biogenic hormones).

Option 4: A geographically-focused contaminant reduction outcome

- *Identify and implement practices to reduce loadings of contaminants in areas they have degraded fisheries, wildlife, and water-quality conditions.*

Pros: Limits scope and breadth of management strategies for contaminants to areas with documented impairments. The baseline information could be number of impairments due to toxic contaminants, which are identified by the jurisdictions every two years and information on fish advisors.
Cons: Will not address effects of contaminants that do not have water-quality standards. However, more information on these contaminants would be gained as contaminants as the associated monitoring and research outcome is carried out.