**DRAFT Work Plan to Prepare Summary Report on the Impact of Toxic Contaminants on the Chesapeake Bay and its Watershed by November 2012** (updated Feb 9, 2012)

*This work plan describes process, resources, and responsibilities for the preparation of a report by November 2012 that will characterize the extent and seriousness of impacts to Chesapeake Bay and its watershed from toxic contaminants.*

Need for November 2012 Report

* Required under Chesapeake Bay Executive Order (EO) Strategy: “EPA, DOI, and NOAA will work with state and local governments and stakeholders to expand understanding of the extent and seriousness of toxic contaminant problem in the Bay and its watershed and to develop contaminant reduction goals by 2013” (p. 37)
* Chesapeake Bay Program (CBP) partners had agreed to reduce impacts of toxic contaminants as part of Toxics 2000 Strategy
* New problems are affecting the Bay and its watershed including “intersex” conditions in fish.

Establishing an Action Team to Prepare the Report

The CBP has set up an action team under the Scientific, Technical Assessment and Reporting (STAR) group to prepare the report. The action team consists of a lead writer and writers contributing major chapters of the report. The action team is chaired by Greg Allen (EPA) and Scott Phillips (USGS) and its membership includes writers contributing to the report: Fred Pickney (USFWS); Mike Focazio, Vicki Blazer and Barnett Rattner (USGS), a representative from NOAA, Melanie Culp (EPA), Jamie Mitchell (Hampton Roads) and Ashlee Harvey (CRC). The action team will also have a small group of its members serve as an “editorial board” to help with the scope of the report and addressing comments received from reviewers. The editorial broad would contain representatives from the CBP Fisheries, Habitat, and Water-quality goal teams and the co-chairs of the action team. The primary role of the action team is to prepare a draft of the report, revise the report based on review comments, and finalize for release in November, 2012. The action team will interact with groups in the CBP to provide overviews of preliminary findings and get feedback and review of the report.

Suggested Major Elements for Report

Based on the outcomes of the October 20th 2011 workshop, the suggested major elements were developed. A more detailed draft outline is in the end of the work plan.

* Executive Summary
* Extent and seriousness of toxic contaminants with existing standards in the Bay and its watershed (based on State integrated assessment reports and other key summary documents)
  + Include summary of conditions both in the estuary and watershed
* Occurrence of additional contaminants of emerging concern
* Overview of biological impacts on fish
* Overview of impacts on wildlife
* Suggestions for improved monitoring and research
* Considerations for developing federal-state toxic reduction strategies
* Appendix of section: Progress toward Chesapeake 2000 Toxic Reduction Strategy

Resources to Prepare the Report

EPA, USGS, FWS, NOAA are contributing by preparing sections of the report (listed above) with Mike Focazio (USGS) and Greg Allen (EPA) being the co-leaders for the report.. An action team is being set up under STAR for these agencies to interact on the report. The action team has also invited the states and DC to be members and is still awaiting nominations. Greg Allen (EPA) and Scott Phillips (USGS) are also providing support by leading the action team. USGS will provide funding to its Science Enterprise Network (SPN) for editing and production of the final report.

Mike The diagram below shows the major entities involved in the development of the report and also discusses roles of reviewers and other entities in the CBP.



Roles and Responsibilities

The action team is comprised of the lead writer, contributing authors, and editorial board.

*Editorial Board* – would review early report drafts and make decisions about what stays in or is dropped out and how to handle comments for all reviews

*Lead Writer/Project Manager* - responsible for working with writers in the Action Team to compile the report and working with CBP entities to present initial findings, getting review comments, and some revising the report to address the review comments.

*Chapter Leads* – Write chapters and review and revise based on topical comments

There are also roles for CBP groups to provide review and input to the document. Some of the key roles include:

*States* *and DC*– answer questions on state 303/305 data and process; possibly join actions team; at a minimum, review report drafts

*Fisheries, Habitat and Water-Quality Goal Teams*-provide comments and input on preliminary findings and initial drafts of the report; possibly provide member for editorial board.

*Management Board (MB), Principal Staff Committee (PSC), Executive Council, Federal Office Directors (FOD), and Federal Leadership Committee (FLC)*—the action team will provide briefings to these groups. The primary roles of these groups will be to use the findings from the report to work with the CBP Goal Teams to develop toxic reduction goals (in 2013) and strategies to reduce toxic contaminants (by 2015)

*STAC* *(or EPA, USGS)* – independent peer review will be conducted before the report is finalized.

Time Line

Tentative target dates for report preparation and interact with CBP groups:

* Develop initial draft of report chapters-March and combine into one report (early April). Get input from editorial board.
* Begin to prepare overview of preliminary findings-April, 2012 (with input from editorial board)
* Provide briefing of preliminary findings to CBP Goal Teams Water-Quality, Fisheries, Habitat) and state contacts of assessment reports (April-May, 2012) and get feedback to revise report
* Provide briefings of preliminary findings to Management Board and Principal staff Committee, FOD, FLC (May-June, 2012)
* Prepare a summary of preliminary findings for Executive Council meeting and potential next steps on developing goals and strategies (June, 2012) (with input from editorial board)
* Complete second draft of report-July, 2012 (with input from editorial board)
* CBP partner Technical Review-August, 2012 GITs, states, Revise-September, 2012
* Peer review of draft final-September 2012 (STAC or agency peer review process)
* Revise and Finalize-October, 2012 (with input from editorial board).
* Release-Nov, 2012

**DRAFT OUTLINE**

Each chapter is expected to be 5 to 10 pages with 2-4 key figures (graphs, tables, photos). The lead author(s) for each chapter are listed below. Greg Allen and Mike Focazio are the overall lead writers for the report.

## Executive Summary (Greg Allen, Mike Focazio and Scott Phillips)

## Introduction (Greg Allen and Mike Focazio)

## Extent and seriousness of toxic contaminants with reporting criteria (Melanie Culp, Ashlee Harvey, and Jamie Mitchell)

## Summarizing information from state integrated assessment reports and other summary reports (this section includes information from state integrated assessment reports and other key reports)

## Summary of Basin

#### What TOCs are being monitored?

#### Which TOCs are being detected?

#### What concentrations of TOCs are being detected?

#### How do these reflect varying state sampling/reporting methodologies?

#### Contaminant Summaries by Class (this would include a summary of state findings and also from key federal and NGO reports)

* + - * 1. Organic Compounds

PCBs

In Water Column

In Sediments

In Fish Tissue

PAHs

Water

Sediments

Fish Tissue

Pesticides/herbicides

Water

Sediments

Fish Tissue

Other Organics

Water

Sediments

Fish Tissue

* + - * 1. Metals

Mercury

Water

Sediments

Fish Tissue

Other Metals

Water

Sediment

Fish Tissue

* + - * 1. Other Contaminants

Known

Water

Sediment

Fish Tissue

Unknown

Water

Sediment

Fish Tissue

**3. State Summaries** (Melanie Culp and Ashlee Harvey)

1. **Contaminants of Emerging Concern** (Mike Focazio)
   * 1. Pharmaceuticals
     2. Flame Retardants
     3. Other
     4. Potential future issues impacting Chesapeake bay- Marcellus Shale-gas extraction and contaminants
2. **Overview of biological impacts on fish** (Vicki Blazer, USGS and Fred Pickney, FWS; and a representative from NOAA)
3. **Overview of impacts on wildlife** (Barnett Rattner, USGS)
4. **Next Steps** (Greg Allen, Mike Focazio, and Scott Phillips)
   1. **Suggestions for Improved/Streamlined Monitoring**
   2. **Recommendations for Further Research** (Greg Allen, Mike Focazio and Scott Phillips)
   3. **Discussion of Potential Regulations or Initiatives (existing or pending) with an impact attainment of WQS** (focused on a set number of pollutant classes?)
   4. **Prioritization of Needs and Considerations for the Development of Federal-State Toxic Reduction Strategies**
5. **Appendix of section: Progress toward Chesapeake 2000 Toxic Reduction Strategy** (Greg Allen)

\*Things to highlight during jurisdictional summaries:  effects of acid mine drainage, flue gas desulfurization at coal-powered plants, and mountaintop mining on surface water quality; also include the three focus areas discussed in the strategies (Elizabeth, Patapsco, Anacostia) within each jurisdiction.