

CBP Water Quality Goal Implementation Team  
 Toxic Contaminants Workgroup  
**Meeting Minutes**

Date: Wednesday, May 13, 2020

Time: 1:00 - 3:00 PM

Calendar Page: [Link](#).



**Chesapeake Bay Program**  
 A Watershed Partnership

Agenda Item and Desired Outcome	Time	Background Docs, Notes, and <a href="#">Action Items</a>
<p><b>1. Introductions and Announcements</b></p> <ul style="list-style-type: none"> <li>Approval of the April Meeting Minutes</li> <li>Update on Final User Guide for Fish Consumption – Caitlyn Johnstone, CBP</li> <li>Recently published articles:           <ul style="list-style-type: none"> <li><a href="#">Spatiotemporal variation in occurrence and co-occurrence of pesticides, hormones, and other organic contaminants in rivers in the Chesapeake Bay Watershed</a> <ul style="list-style-type: none"> <li><i>“Within the Chesapeake Bay Watershed, United States, there are concerns about the potential role of contaminant exposure on fish health. Evidence suggests that exposure to contaminants in surface water is causing immunosuppression and intersex in freshwater fish species...To address these concerns, we applied a Bayesian hierarchical joint-contaminant model to describe the occurrence and co-occurrence patterns of 28 contaminants and total estrogenicity across six river sites and over three years. We found that seasonal occurrence patterns varied by contaminant, with the highest occurrence probabilities during the spring and summer months. Additionally, we found that the proportion of agricultural landcover in the immediate catchment, as well as stream discharge, did not have a significant effect on the occurrence probabilities of most compounds.”</i></li> </ul> </li> </ul> </li> <li>SERC’s Shorelines Blog: <a href="#">We’re Winning The Fight Against Mercury Pollution</a> <ul style="list-style-type: none"> <li><i>“Marylanders can celebrate at least one environmental win this year. Since 2005, toxic mercury pollution in the state’s rain has dropped over a third. The preliminary figure comes from three state monitoring stations: Beltsville, Frostburg and a weather tower in Edgewater, at the Smithsonian Environmental Research Center (SERC). All three stations belong to the Mercury Deposition Network, a collection of roughly 100 sites tracking mercury across the U.S. Maryland’s success partially stems from early regulations—most notably the 2006 Healthy Air Act.”</i></li> </ul> </li> </ul>	1:00	<ul style="list-style-type: none"> <li><a href="#">Complete the Mercury Story Map documentation</a></li> <li><a href="#">Complete the toxic contaminant indicator</a></li> </ul>

<ul style="list-style-type: none"> <li>• <a href="#">Causal factors for pesticide trends in streams of the United States: Atrazine and deethylatrazine</a> <ul style="list-style-type: none"> <li>▪ <i>“The overall trend patterns and past investigation of use trends (Ryberg et al., 2014) indicate that regulatory changes may have been successful in encouraging atrazine degradation to DEA. The acute and chronic toxicity of DEA is less than that of atrazine for aquatic organisms (Ralston-Hooper et al., 2009); therefore, increasing DEA concentration trends would be preferential to increasing atrazine concentration trends, and in some cases, declines in DEA may follow declines in atrazine, with lag times depending on groundwater movement.”</i></li> </ul> </li> </ul>		
<p><b>2. GIT Funded Project Ideas</b> – Greg Allen, EPA , Scott Phillips and Emily Majcher, USGS</p> <ul style="list-style-type: none"> <li>• The TCW will review GIT Funded Project ideas and make a decision on which projects to put forth to the WQGIT in June.</li> </ul> <p><b>3.</b> Scott and Emily will provide an overview of project idea for “Developing approaches to integrate selected urban toxic contaminants into CAST”</p>	1:20	<ul style="list-style-type: none"> <li>• <a href="#">RFP</a></li> <li>• <a href="#">Draft idea for</a> “Developing approaches to integrate selected urban toxic contaminants into CAST”</li> </ul>
<p><b>4. SRS Review Progress: Logic and Action Plans for Research and Policy and Prevention</b> – Greg Allen, EPA, Scott Phillips and Emily Majcher, USGS</p> <ul style="list-style-type: none"> <li>• Reminder of 3 main deliverables</li> <li>• For each outcome the workgroup will review the following questions: <ul style="list-style-type: none"> <li>• Are there any remaining gaps?</li> <li>• Based on what we have learned, should we revise any actions?</li> </ul> </li> </ul>	1:50	<ul style="list-style-type: none"> <li>• TCW <a href="#">SRS Review Schedule</a></li> <li>• TCW Updated Logic and Action Plans</li> </ul>
<p><b>5. STAC CEC Report Updates</b> – Scott Phillips and Emily Majcher, USGS</p> <ul style="list-style-type: none"> <li>• Initiate discussion of draft language for CBP’s response to STAC</li> </ul>	2:50	
<b>6. Wrap Up and Adjourn</b>	3:00	<b>Next meeting: June 10, 2020</b>

### Summary of Actions and Decisions

**Decision:** TCW approved the April Meeting Minutes.

**Action:** If TCW members know of any organizations that should receive the Final User Guide for Fish Consumption, please send this information to Caitlyn Johnstone ([cjohnstone@chesapeakebay.net](mailto:cjohnstone@chesapeakebay.net)).

**Action:** Hilary Swartwood will send a follow- up email to the TCW with links to the final Mercury Story Map, and the new USGS paper and data release titled *“Mercury bioaccumulation in freshwater fishes of the Chesapeake Bay watershed.”*

**Action:** Greg Allen and Scott Phillips will send their revised GIT Funded Project ideas to the group and as long as no comments to discontinue the projects are received, they will plan to present their ideas to the WQGIT on May 26, 2020.

**Action:** Scott Phillips will create the written CBP responses for the STAC CEC report and send them to the group for feedback before sending to WQGIT and STAC for final approval.

## Meeting Minutes

### 1. Announcements

- a. **Decision:** TCW approved the April Meeting Minutes.
- b. Caitlyn Johnstone gave update on Fish Consumption Guide:
  - i. The guide is almost complete. The remaining work is on the technical instructions for how organizations can add their own information and approval of the Spanish translation. Currently, we are looking for a place for this to live. In the next week or two, we should be sending an email where jurisdictions can find that information. Now would be the time to send a reminder to Caitlyn about organizations that should receive this information.
  - ii. **Action:** If TCW members know of any organizations that should receive the Final User Guide for Fish Consumption, please send this information to Caitlyn Johnstone ([cjohnstone@chesapeakebay.net](mailto:cjohnstone@chesapeakebay.net)).
- c. New paper on Hg (Willacker):
  - i. Data Release link: <https://doi/10.5066/P9T2N1UT>
  - ii. Paper link: <https://doi.org/10.1007/s10646-020-02193-5>
- d. **Action:** Hilary Swartwood will send a follow-up email to the TCW with links to the final Mercury Story Map, and the new USGS paper and data release titled *Mercury bioaccumulation in freshwater fishes of the Chesapeake Bay watershed*.

### 2. GIT Funded Projects

- a. Integrating Urban Contaminants into CAST (follow up from STAC Workshop):
  - i. Len Schugam said from a regulatory standpoint to select a BMP that would be effective but wasn't sure if the information is there to support CAST at this time. Upal Gosh shared the same concerns as Len Schugam about what type of information is out there in the literature. Scott Phillips asked if the feeling of the workgroup is that information is too scant? George Onyullo said that he understands the comments, he also said that when CAST spits out results, he doesn't want the results to conflict. He supports the integration being presented here but he wants there to be a caveat because CAST is too entrenched in the Bay Program and people may be too quick to accept the results as is. Greg Allen said that this fits perfectly but there is concerns about the new information and is wondering if we could build a contingency plan to see what's out there and then determine what they should be doing. George Onyullo said that BMP efficiency is always a touchy subject so looking for a gold standard is a long shot. He also said that most of us accept the CAST numbers as they are even though we don't like them. Greg Allen said that in this RFP we should not be overly prescriptive to not limit what we are looking for in CAST. Greg Allen then said that we could grow the idea out to include surrogates. Scott Phillips then asked that given we can't get the gold standard; would more qualitative information be helpful/ a benefit? George Onyullo said that Scott Phillips is thinking along the same lines as him- his thought is start with qualitative information with the expectation that as new information comes in, we can develop quantitative information.
- b. Develop Chesapeake Watershed- Focused PCB Track- down study Guide
  - i. Evelyn MacKnight said that DE has a track down study and there have been other things from San Francisco and NY, and it would be wonderful to take the DE study and update it and revise it. MacKnight said she would think about it broader than the literature. San Francisco and DE also have similar issues related to dissolved oxygen. It would be good to talk to folks about what they are doing (examining existing practices in place). Greg Allen said that they will send out revised project plans and if people have comments regarding not pushing it forward should send them otherwise, they will be put forth to the GIT.

- ii. **Action:** Greg Allen and Scott Phillips will send their revised GIT Funded Project ideas to the group and as long as no comments to discontinue the projects are received, they will plan to present their ideas to the WQGIT on May 26, 2020.

### 3. SRS Review

#### a. Research:

- i. Management Approach 1: no initial response from group
- ii. Management Approach 2: no initial response from group
- iii. Management Approach 3: no initial response from group
- iv. Management Approach 4: no initial response from group
- v. Management Approach 5:
  - 1. George Onyullo suggested figuring out a process to prioritize emerging concerns (a metric or rating like high, medium, low) to have space for new things that come along.

#### b. Policy and Prevention

- i. Management Approach 1: no initial response from group
- ii. Management Approach 2: no initial response from group
- iii. Management Approach 3: no initial response from group
- iv. Management Approach 4: no initial response from group
- v. Management Approach 5: no initial response from group

### 4. STAC CEC Report

- a. CBP response to STAC for CEC Report
  - i. Action 1 response: no objections from group
  - ii. Action 2 response: no objections from group
  - iii. Action 3 response: no objections from group
  - iv. Action 4 & 5 response: George Onyullo is okay with scaling back, especially due to COVID. Greg Allen said it might not be scaling back and more changing it to answering the bigger questions, which is how can we move into CAST and other models given what is available?
- b. *Next steps:* create written responses and send to group for feedback before sending back to STAC / WQGIT.
- c. *Additional Comments:* George Onyullo asked Greg Allen if the track down study could be included as part of general communication in the STAC report with the caveat that the group will try to bring it to a local level. Greg Allen said that this is a good idea and could be the technical core that we can build Chesapeake specific's around.
- d. **Action:** Scott Phillips will create the written CBP responses for the STAC CEC report and send them to the group for feedback before sending to WQGIT and STAC for final approval.

### Call Participants

Greg Allen, EPA CBPO

Hilary Swartwood, CRC

George Onyullo, DOEE

Caitlyn Johnstone, Alliance for the Chesapeake

Scott Phillips, USGS

Doug Austin, EPA

John Cargill, DNREC  
Leonard Schugam, MDE  
Scott Glaberman, GMU  
Vicki Blazer, USGS  
Mark Richards, VA DEQ  
Marel King, CBC  
John Maleri, DOEE  
Gretchen Mikeska, DOEE  
Cindy Gilmour, SERC  
Upal Gosh, UMBC  
Kelly Smalling, USGS  
Leonard Schugam, MDE  
Amy Williams, PA DEP  
Tom Baron, PA DEP  
Emily Majcher, USGS  
Raffi Marano, EPA  
Lori Baker, EPA  
Evelyn MacKnight, EPA  
Tom Parham, MDE