Toxic Contaminants Research Outcome

Effective date: 2016-2018

Goal: *Toxic Contaminants*
Outcome: Research
Long term Target:
2 year Target:
Partner contributions to 2 year target:

Management Approach 1: Supply information to make fish and shellfish safe for human consumption

Key Action *Description of work/project. Define each major action step on its own row. Identify specific program that will be used to achieve action.*	**Performance Target(s)** *Identify incremental steps to achieve Key Action*	**Partners Responsible** *Identify responsible partner for each step.*	**Geographic Location**	**Timeline** *Identify completion date (month and year) for each step.*	**Estimated Project Cost** *Best estimate total cost of project (need)*	**Available funding by Partner**	**Total Available Funding** *Roll up of estimated funding*	**Factors Influencing and/or Gap** *ID related factor or gap in Mgmt. Strat*
1. Monitor levels of PCBs in fish and shellfish and issue/revise consumption advisories. (High)		Bay Watershed jurisdictions, EPA, federal agencies (FWS, USGS)						
~~2. Move known PCB contaminated sites towards cleanup and the state and federal level.~~		Bay Jurisdictions, EPA						
3. Conduct coordinated monitoring to better delineate toxic contaminant sources from diffuse sources of land, release from deposits in stormwater pipes, and atmospheric deposition. (High)	• Obtain funding to develop a guidance document on track down studies. • The District of Columbia will initiate a study (1/2016) • UMBC will continue PCB source studies	TCW DOEE/USGS MDE/UMBC						
4. Summarize information from recent studies by NOAA and		NOAA and partners						

Commented [WD1]: Policy and Prevention Workplan will mostly cover this key action. Still request information from FWS, USGS, and EPA on ongoing federal programs.

partners to enhance understanding of the effects of contaminants on shellfish and fisheries. (Medium)								
5. Consider the development of a PCB mass balance model for the Chesapeake Bay. (Medium)		TCW and science partners						
6. Generate further information on mercury, focused on determining whether further Chesapeake Strategies are needed to supplement national efforts to reduce its impact on fish and associated consumption advisories. (High)	• Establish a Mercury Subgroup that would report information to the TCW. • Maryland is conducting a trend analysis study on young of the year. • Review and obtain information documented during the establishment of Maryland's proposed Mercury TMDL.	Mercury Working Group (Scherwell and Cohen)						
7. Explore the extent to which diverse populations are located in areas where fish advisories are being issued, using EPA's EJSCREEN tool. (Medium)	• Obtain funding for a collaborative project with the Diversity Action Team.	TCW and Diversity Action Team						

Management Approach 2: Understanding the influence of contaminants in degrading the health, and contributing to mortality, of fish and wildlife

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1. ~~Revise USGS Chesapeake Bay Science Strategy to better~~	• Compile list of studies on fish conditions.	USGS in partnership						

Commented [WD2]: Request information from NOAA partners.

Commented [WD3]: Request information from UMBC partners.

~~support information on fish conditions and put the studies in a regional context.~~ Generate information to better understand fish conditions and effects in a regional context. (High)	• Evaluate Yellow Perch study. • Work towards completion of study looking at contaminants tied with biological effects observed in eggs and young of the year • Identify compounds causing the observed impacts on fish. • Use information gained to begin formation of wildlife	with MD, PA, and WV						
2. Assess the effects of toxic contaminants on wildlife by summarizing existing studies and considering additional research activities. (Medium)	• Wildlife review as part of the USGS EDC project. • Assess results from the recently published Chesapeake Bay osprey food study. • Assess results from the Delaware-based osprey food study currently underway. Assess study on tumor analysis in the tidal Potomac.	USGS and FWS						

Commented [WD4]: More information will be provided by USGS following a September meeting that will allow elaboration on FY16 projects.

Commented [WD5]: More information will be provided by USGS following a September meeting that will allow elaboration on FY16 projects.

Management Approach 3: Document the occurance, concentrations, and sources of contaminants causing fish and wildlife degredation

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3. Better define the sources and occurrence of EDCs and other contaminant groups that are effecting the health of fish and wildlife. (High)	• USGS study on sources and occurrence of EDCs in agricultural watersheds. • Following study in ag watersheds, USGS will conduct a study in urban watersheds, focusing on	USGS in partnership with MD, WV, and PA						

	impact of BMPs on EDCs in the environment. • Pesticide and hormone water collection studies							
4. Identify settings where inputs of contaminants are expected to have the maximum impact on fish, amphibian, and other biological resources, as well as human health. (High)								

Management Approach 4: Assess the relative risk of contaminants, and options for mitigation, to inform policy and prevention

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1. Develop an approach based on the Toxic Contaminants Summary Report (CBP, 2013) to assess the relative risk of contaminants to help inform policy and prevention strategies.(High)	• As part of the USGS EDC study, there will be a risk assessment component, led by Ty Wagner. • Lessons learned from DC study	TCW, USGS, DOEE						
2. Share approaches for assessing relative risk with the TCW so that they can consider options for mitigating impacts of toxic contaminants. (High)								

Management Approach 5: Gather information on issues of emerging concern

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3. Propose STAC workshops to address contaminant toxicity to pollinators, and microplastics.(Medium)	• STAC will conduct a literature review on the effects of microplastics on fish and wildlife.	TCW						
4. Better delineate potential impacts of UOG activities. (Low)								

Commented [WD6]: Need to check on status of this lit review/workshop.