GIT funding RFI Topic Idea

Project Title: Developing a *Chesapeake Watershed-Focused PCB Track-Down Study Guide*

Goal Team: Water Quality - Toxic Contaminants Workgroup

Technical Lead: TCW - TBD

Preparers: Greg Allen and Doug Austin, Chesapeake Bay Program Office

Project Type: Development of a tool to assist jurisdictions and federal agencies in implementing PCB TMDLs

Proposed outcomes: The project will produce a guidance document on how to conduct a PCB trackdown study. Technical details involve designing sampling plans, choosing analytical methods, interpreting data, using secondary data and identifying PCB sources. The information will result in more efficient use of local resources to identify and mitigate PCB sources. A Chesapeake watershed focus will add additional context and watershed-specific resources.

Justification. PCBs, a human carcinogen, cause fish consumption advisories and degrade the health of fish. Everyday across the Chesapeake watershed, users of the resource consume fish that are contaminated with PCBs, a human carcinogen. PCBs are being actively loaded into the system from contaminated land, leaking electrical equipment, building paint and caulk, among other sources. Many of the most contaminated areas are urban and in low income areas where a portion of people's diet depend on fisheries.

State agencies and local governments managing water quality and implementing PCB TMDLs need improved information on PCB sources. The ability to find PCB sinks and sources is a critical component in strategies aimed at reducing bio-available PCBs. The style of the document would be a stepwise method of planning and conducting track down studies and would include information such as analytical method options, which will enable cost effective studies. The guide would provide a Chesapeake watershed context by using case studies and background information that is relevant to CBP partners.

Key partners could include those in information technology centers and those responsible for digital tools such as applications to search state and federal lists of known contaminated sites and historical records of land uses.

The project would directly support achieving the Watershed Agreement outcome that is focused on preventing pollutants to reduce impact on humans and living resources. quality goal, improve fish habitats, and make fish safer to eat by the diversity of people living in urban areas.

Proposed Project Steps and Timeline

The proposed project will focus on combining information from various documents including existing guides, journals, presentations, etc. into a guide that follows a logical sequence and allows for the efficient planning and execution of track down studies.

The project will be completed through the following tasks:

- Literature synthesis and identification of any previous guides that can be referred to or incorporated to ensure this project does not recreate usable information Example document to refer to: Naval Facilities Engineering Command, Technical Report "A Handbook for Determining the Sources of PCB Contamination in Sediment," October 2012 https://www.navfac.navy.mil/navfac_worldwide/specialty_centers/exwc/products_and_services/ev/go_erb/focus-areas/sediment-sites.html
- Meetings with IT system owners to explore data integration and partnerships
- Presentation of draft guide outline and a recommended systematic approach for use in conducting track down studies
- Final production of the guide and any online presence as determined

Co-Benefits: Cobenefits are to fisheries by way of higher quality, healthier fish. Other habitat components benefit including stream health and fish habitat. The value of Chesapeake Watershed fisheries increases when users are not exposed to carcinogenic pollutants through fish consumption. Human health and economic benefits extend through lower health care costs when people have lower amounts of carcinogens in their diet.