Update on Progress Towards Identifying Toxics Indicators

Prepared for the Toxic Contaminants Workgroup

August 12, 2015

Potential Indicators and Metrics

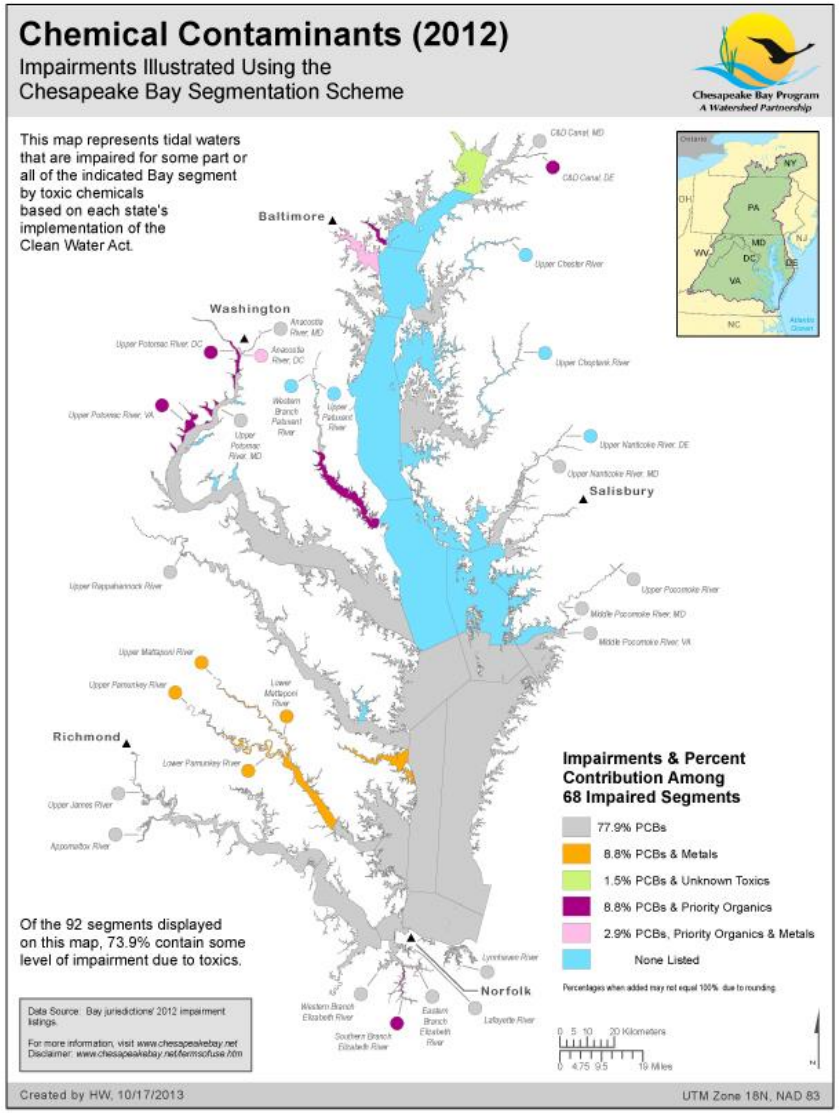
Progress Indicators

- Toxic Impairments
- Fish Tissue Concentrations for PCBs and Mercury
- Fish Consumption Advisories

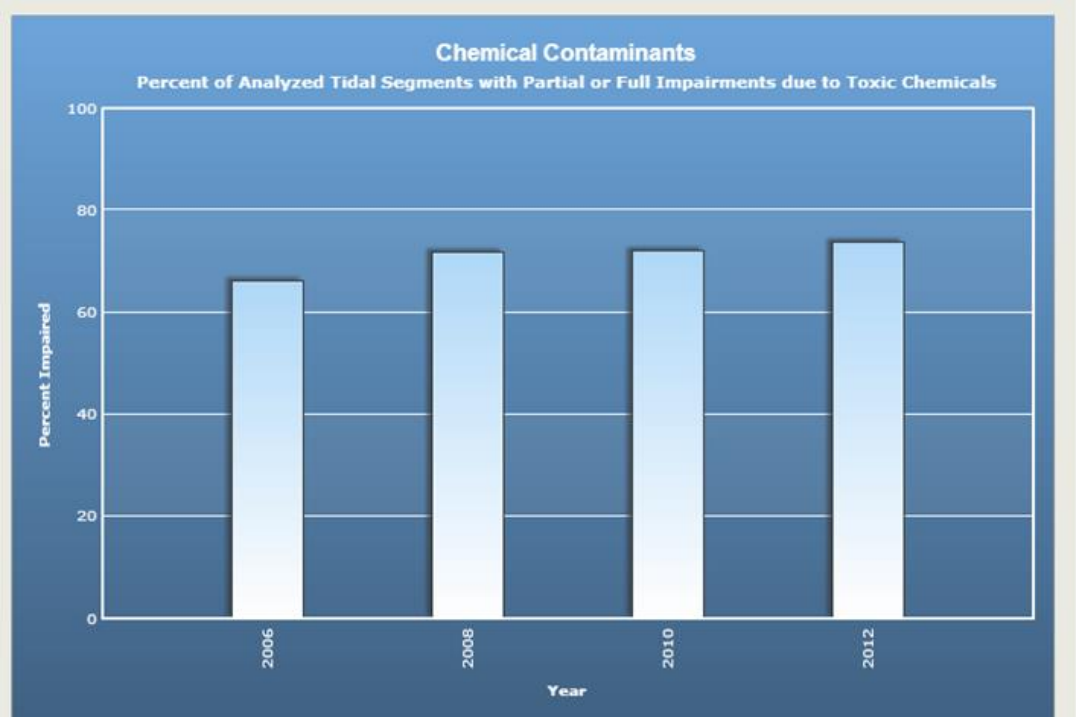
Management

- TMDL status
- Sources of Loading Data
  - Wastewater
  - Stormwater
  - Atmospheric Deposition

Existing Indicator of Toxic Impairments

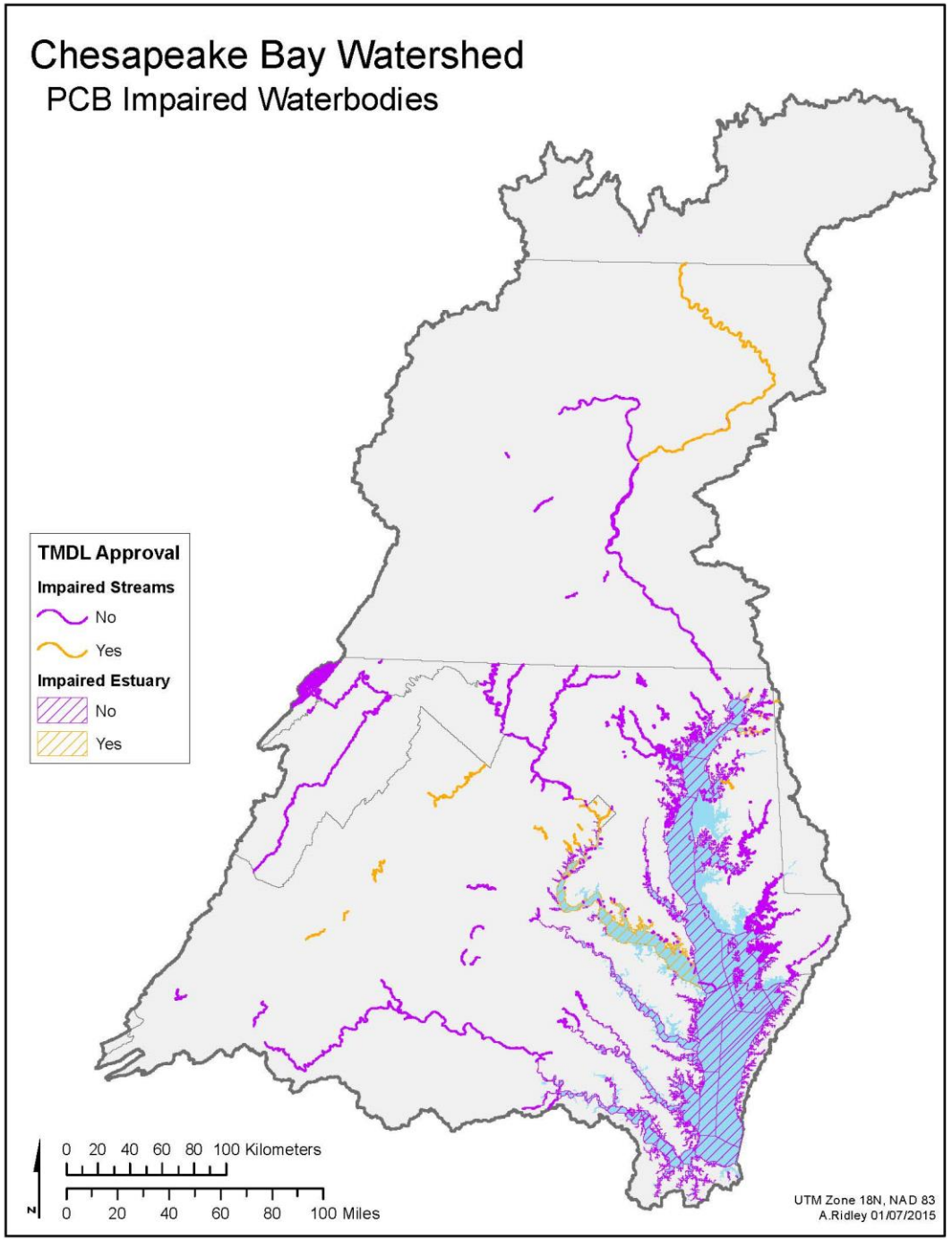


- What does the legend on the map mean? Is it 77.9% of the segments that are listed are due to PCBs only?
- Are these based solely on 303d listings within each segment?



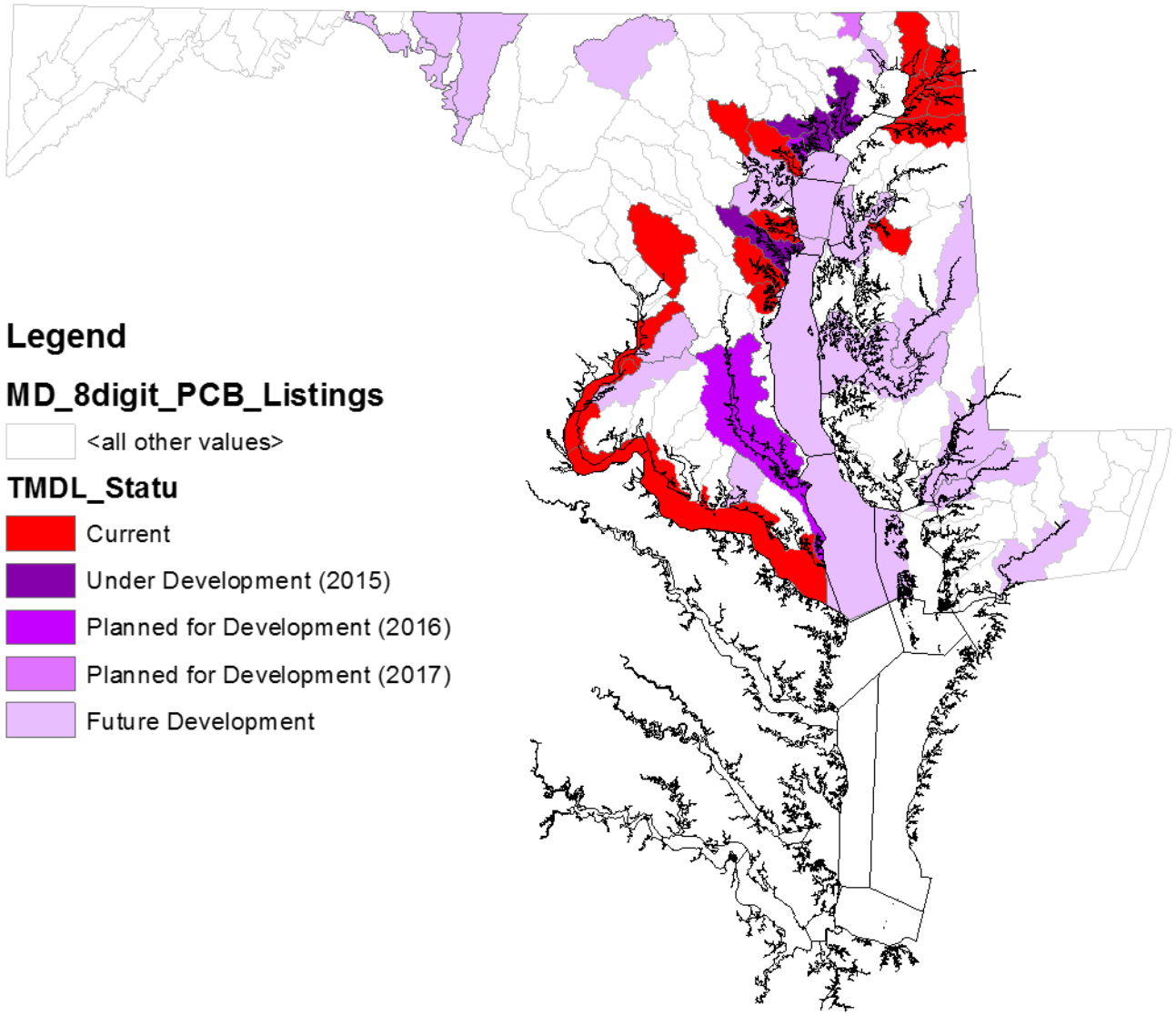
Toxic Impairments

- Current focus on PCBs for entire watershed
  - Can we present in the same format as the current indicator?
- Status of TMDL on those impaired
- Gathered previously by A. Ridley – not sure if most up to date/complete
- Mindy will be meeting with GIS Team to further understand the data behind this map



TMDLs Being Developed for PCBs

- PA – none
- DE – none
- WV – none
- VA – Elizabeth and James Rivers
- MD – Severn, Bush, Gunpowder, Bird, Rivers (2015) & More



PCB Concentrations

Potential Sources: EPA Fish Advisory website – not up-to-date / complete

STORET

- PCB data gathered
  - WVA– fish tissue PCB concentrations Excel file
  - VA – ambient water, sediment, fish tissue PCB concentration Excel files
  - MD – fish tissue PCB concentrations from Fish Advisory program Excel file (til 2011)
- PCB data on the way
  - PA – Up to data state data to be provided
  - MD – Additional PCB fish tissue data from TMDL program

Fish Consumption Advisories

Goal:

- Create a GIS map of Fish Advisories within the Bay watershed
  - Focus on PCB-related advisories first
- Overlay with EJSCREEN

Progress:

- Collecting Data
  - Readily available data not geospatially referenced
  - What type of advisories would be most helpful to map (consumption threshold? Number of advisories? Certain species?)
- Mapping would begin in late August/Early September

Toxics Loading Data

Goal:

- Identify potential data sources that can be used to quantify toxic contaminant source loads to the watershed

Progress:

- Several potential data sources identified
- Few to no records in the point source data inventories
- Looking through studies for nonpoint source loads
  - Suggested data sources or studies?

Toxics Loading Data

Point sources

- EPA Toxic Reduction Inventory
- EPA's DMR Pollutant Loading Tool
  - Pulls from ICIS-NPDES
  - Only 7 facilities with reported PCB loading data

Stormwater

- Several studies identified toxics content (mg/kg) in street sediment
- Working through other studies found by CSN
- Sediment release factors