PPAT Meeting Feedback

1. Of the questions already identified, which are most important?

Choices	Count
What are the sources (i.e. plastic product) of plastics found in the bay and watershed?	8
What are the pathways (i.e. stormwater, wastewater, non-point source) of plastics for the bay and its watershed?	6
What is the current status (i.e., concentrations) of plastic pollution in tidal and nontidal waters of Chesapeake Bay and its watershed?	4
What is the status (and trend) of plastics pollution in the Bay, based on beach and water monitoring?	2
What is the range of concentrations for plastic pollution within the food webs of species mentioned in the 2014 Chesapeake Bay Watershed Agreement?	2
What is the spatial distribution of plastic pollution in the Chesapeake Bay and watershed?	1
What are the annual (and seasonal) loads of microplastics entering the Bay at the fall line?	1

2. Which should be addressed first (i.e., within the next 5 years)?

Choices	Count
What is the current status (i.e., concentrations) of plastic pollution in tidal and nontidal waters of Chesapeake Bay and its watershed?	6
What are the sources (i.e. plastic product) of plastics found in the bay and watershed?	6
What is the spatial distribution of plastic pollution in the Chesapeake Bay and watershed?	3
What are the pathways (i.e. stormwater, wastewater, non-point source) of plastics for the bay and its watershed?	3
What is the range of concentrations for plastic pollution within the food webs of species mentioned in the 2014 Chesapeake Bay Watershed Agreement?	2
What are the annual (and seasonal) loads of microplastics entering the Bay at the fall line?	1
What is the status (and trend) of plastics pollution in the Bay, based on beach and water monitoring?	1

3. How should we prioritize biota for sampling (gamefish, other fish, oysters, blue crabs, non-tidal freshwater benthos, Bay benthos)

- Non tidal freshwater benthos
- Blue crab
- implications for human health
- Those for human consumption
- oysters
- commercial & recreational species for human consumption
- Fish / shellfish that people eat.
- Fish / shellfish that people eat.
- By their importance to the health of the Bay…
- No preference.
- Oysters, Bay benthos, gamefish, other fish, blue crabs, non-tidal freshwater benthos
- Prioritize by consumption, i.e. potential impact.
- Include a representative species from "low", "middle" and "high" trophic levels
- Prioritize human consumptive species, perhaps with filter feeders as highest priority.
- Blue crabs
- start with the base of the food chain
- Gamefish
- Species that are consumed by humans (catfish, crabs, oysters, etc)
- ecologically important species (i.e. striped bass, oysters) should be prioritized highest to understand effects on individual species but also ecological effects
- tidal freshwater benthos
- Species most consumed by people
- source
- how great of a sink is the bay seabed for microplastics and at what rate
- effect on biota and human
- defer to the experts

4. What other key management questions that can (and should) be answered by monitoring microplastics?

- Hotspots
- Are there living resources at risk bc of microplastic concentrations
- Highest source contributors/locations to guide mgmt actions.
- Are residential washing machines the greatest source of MPs.
- What data are needed to support passing EPR legislation?
- How can water managers prevent microplastics from getting into waterways
- What is the public health impact of microplastics in the Chesapeake bay?
- How are microplastics affecting food webs? More studies on how they are passed from organism to organism
- Identifying contributing sources and then how to prevent MPs from entering waterways
- What other compounds are being carried along with the microplastics ?
- watersheds of highest concern (large loads)
- Creating a cleanup strategy, and how to stop microplastic loading.
- What management practices are affecting the microplastic load?
- How microplastics bioaccumulate and impact consumers
- At what point along the pathway do primary sources breakdown in various land use settings (e.g., would the same foam cup breakdown in an urban area moreso than rural)?
- Transfer, retention, and fragmentation of mps within food webs
- microplastic particle characteristics
- Can findings lead to policies to prevent introduction of MP from consumer products/packaging?
- What MP can be managed through policy?
- Policy considerations and health implications

5. What programs should be contacted for further information on current monitoring?

- Chesapeake Bay Program Office
- EPA Trash Free Waters
- Pennsylvania's upcoming monitoring effort
- USGS
- VIMS for biota
- Chesapeake Monitoring Cooperative
- Unsure about question.
- MD Coastal Bays Program
- I'm not sure specifically but the comment earlier about international efforts would be useful to know.
- Wastewater treatment plants
- Non-profit watershed organizations
- NOAA
- It would be good to have a repository and data management system that allows for data retrieval also. It would help to keep all of our data in 1 place. Anacostia Riverkeeper has some data I think too.
- MDE
- Other groups around the world doing this work
- PEARL https://www.morgan.edu/pearl has new funding and one of the projects discussed are microplastics