Blank Table 1 - 2022 EPA GIT Funding Ideas

(See detailed instructions below)

Required Components of the Phase 1 Development of Project Ideas (*Table 1*)	
Goal Implementation Team (GIT)	WQGIT
Proposed GIT Technical Lead	
Annual Weighting Factors to Consider	
CBP Functional Areas (Yes or No)	
Preparers	PPAT and TCW
Project Title (10 words or less)	Assessing Biological impacts of microplastic pollution exposure on young-of-year striped bass (Morone saxatilis) in Chesapeake Bay and its tributaries
Project Type (Describe the type of project submitted)	
Proposed Project Outcomes	• Data on microplastic contamination in mysid shrimp sampled from Chesapeake Bay and its tributaries. Mysid shrimp are a major prey item for young-of-year (YOY) striped bass. • Data on biological impacts of microplastic contamination on YOY striped bass. • Study findings should lead to additional data on the exposure of YOY striped bass to microplastics and characterization of risk of microplastic exposure on YOY striped bass inhabiting Chesapeake Bay. This will support the completion of an ecological risk assessment being developed for striped bass by the CBP Plastic Pollution Action Team.
Project Justification (500 words or less)	Since 2020, the CBP Plastic Pollution Action Team (PPAT) has been developing an ecological risk assessment (ERA) for YOY striped bass (*Morone saxatilis*) in the Potomac River. This life stage (~1 month – 1 year old) has been identified as the ERA ecosystem endpoint because of the importance of the Potomac River and other Chesapeake Bay tributaries as a nursery for the east coast striped bass population. Annually, the Maryland Department of Natural Resources and Virginia Institute of Marine Science collect data on the number of YOY striped bass through their respective juvenile index surveys. In addition, a wealth of data has been collected in the Chesapeake Bay and elsewhere on the diet of YOY striped bass. To date, the PPAT has partially completed the first two steps of an ERA looking at microplastic impacts to YOY striped bass by: 1) formulating the problem (i.e., identifying the ecosystem endpoint); and

	2) characterizing exposure to striped bass by looking at sources and pathways of microplastic pollution to the Chesapeake Bay and Potomac Rivers, and contamination of important prey items. In order to develop a complete ERA, the PPAT requires additional data on: 1) Presence of microplastic contamination in mysid shrimp collected in the Chesapeake Bay and its tributaries. Quantitative food web analysis previously conducted for the preliminary ERA has shown that mysids are a very important prey item for striped bass. 1) Biological impacts on YOY striped bass fed with mysid shrimp contaminated with microplastics. Examples of biological impacts include, but are not limited to, hepatosomatic ratio, growth, stress response, and mortality. The PPAT is interested in funding a proposal that couples a lab-based study examining biological impacts of microplastics on YOY striped bass fed with contaminated mysid shrimp, with field surveys sampling mysid shrimp in the Chesapeake Bay and one or more of its tributaries for microplastic contamination. Applicants are expected to use the findings from the preliminary (completed in 2021) and phase II (expected completion – October 2022) ERAs to direct their studies. Completion of this project will help the CBP, and its partners more clearly understand the potential ecological impacts of plastic pollution on Chesapeake Bay therefore inspiring additional action to address plastic pollution loads through management and policy changes.
Proposed Project Steps and Timeline	
Estimated Costs	Lab study - $60,000 Field work - $40,000
Cross-Outcome Benefits	Toxic Contaminant Research Outcome

Detailed Instructions

Table 5. Required Components of the Phase 1 Development of Project Ideas (Table 1)	
Goal Implementation Team (GIT)	As defined by the Chesapeake Bay Program and described below: • Sustainable Fisheries Goal Implementation Team (GIT 1) • Habitat Goal Implementation Team (GIT 2) • Water Quality Goal Implementation Team (GIT 3) • Maintain Healthy Watersheds Goal Implementation Team (GIT 4) • Fostering Chesapeake Stewardship Goal Implementation Team (GIT 5) • Enhance Partnering, Leadership and Management Goal Implementation Team (GIT 6) • Scientific, Technical Assessment and Reporting (STAR) Team • Communications Team
Proposed GIT Technical Lead	A GIT Technical Lead should be identified at the time the Table 1 is submitted. If this project idea is selected to move forward for funding, the person identified as the GIT Technical Lead will work with the Trust to refine the project idea into a

	detailed scope of work (Table 2). GIT Technical Leads provide overall management of the project, from the idea phase in Table 1 to ultimately overseeing the project through to completion. GIT Technical Leads cannot be a part of the bidding team or financially be involved in the project. Provide the following for the GIT Lead: 1) First and Last Name, 2) Organization, and 3) email address.	
Annual Weighting Factors to Consider	Each year, annual weighting factors will be described, depending upon current program needs. In FY22, the following annual weighting factors are described for the Phase 1 Project Idea: 1. Project addresses a Diversity, Equity, Inclusion, and Justice (DEIJ) need. 2. Project addresses a Climate Change need. 3. Project addresses a Local Engagement need. 4. GIT Priority Project (one priority project identified per GIT). 5. Projects that address outcomes that are lagging in outcome attainability. Provide a fair description of the extent to which the project addresses: 1. Diversity, Equity, Inclusion, and Justice; 2. Climate Change, and/or 3. Local Engagement; 4. Identify whether your project is the top GIT Priority, and 5. Describe if your project addressees an outcome lagging in attainability. Please do not overstate the projects linkage to the annual weighting factors. Collaborate with program leads for items 1-3 above to the extent needed to ensure that the project is harmonized with overall strategic direction.	
CBP Functional Areas (Yes or No)	Does this project involve components that require input from the following functional areas: Web/Creative, GIS, Communications, IT, and/or Strategic Science and Research Framework Teams? If yes, have you communicated the project idea with the applicable functional areas and incorporated input (Yes or No)?	
Preparers	List names of all parties who were part of developing the content of this table; list first the lead preparer (the point of contact for questions/clarification). These entities will not be allowed to bid on the scope of work during the Request for Proposals (RFP) stage. Provide the following for each Preparer: 1) First and Last Name, 2) Organization, and 3) email address.	
Project Title (10 words or less)	The title should be short and give a high-level view of what the project is trying to accomplish. Creative and catchy is fine only if it also captures the real purpose of the work. (Recent examples from previously funded GIT projects include *Development of Cost-Effective Methods to Measure Site-Specific Denitrification Rates for the Proposed Oyster Restoration Best Management Practices*; *Cultivating and Strengthening Partnerships with Underrepresented Stakeholders*; *Synthesis of Shoreline, Sea Level Rise, and Marsh Migration Data for Wetland Restoration Targeting*).	
Example Project Type (Describe the type of project submitted)	<u>Metric Development and Tracking Projects:</u> Support for science needed to develop metrics Metric/indicator development Performance measure development Monitoring/tracking program development Data collection program development Assessments of data to evaluate metric progress Modeling support	<u>Logic and Action Plan Implementation Projects:</u> Economic modeling Database development Policy research and recommendations Training Mapping, lands assessment Baseline analyses Environmental monitoring/demonstration Other (please describe)

	Other (please describe)	
Proposed Project Outcomes	Project outcomes are the changes you expect to see as a result of the work being completed. Examples of Project *Outcomes* could be increased knowledge around how fish are changing habits/will change habits due to climate change; future fish ladders will be more successful due to readily available improved design standards; future fish passage policies will be reflective of resulting research.	
Project Justification (500 words or less)	Explain why this work is important to the over-arching goals? Why is it important to the other GITs? How does this work build on previous work? Be succinct in the answer.	
Proposed Project Steps and Timeline	List all the steps required to accomplish the project goals. Make sure to include any meetings with GIT teams and other relevant stakeholders (try to quantify number of meetings anticipated); a step to review draft deliverables by relevant stakeholders; and a step for the contractor to refine the deliverables after draft review. Indicate whether the methods by which a contractor will be expected to undertake the work are well known or whether you intend for the bidders to propose the methodology; assume work will start in June 2022.	
Estimated Costs	Provide an estimate of the project cost (generally $25,000-$100,000 but not limited to this range). Estimating accurate budgets can be a challenge. Some tips to improve budget accuracy: to start, estimate number of the hours and other costs like supplies and travel that it would take to accomplish each of the steps identified above. Contractors can range from approximately $50 to $150 per hour (when indirect costs are factored in). Include the time it would take for the contractor to attend any meetings. Finally, account for contractor time to revise final products to incorporate stakeholder feedback.	
Cross-Outcome Benefits	List any cross-outcome or cross-goal benefits succinctly (Appendix A includes detailed examples).	