Table 1: Defining the Project and Outlining the Scope of Work

*The purpose of this table is to articulate a project idea to evaluate project necessity/relevancy and to strengthen project outcomes, steps, and deliverables. As you are developing your ideas, consider describing in your project justification section if the following three initiatives were incorporated: 1)Science, 2) Diversity, Equity, Inclusion, and Justice, and/or 3) Local Engagement.

Item	*Guidance*		*Response*
Goal Implementation Team (GIT)	As determined by the Chesapeake Bay Program.		STAR – Climate Resiliency Workgroup (CRWG)
Project Priority #	List the rank of this project in relation to other projects being submitted by the same GIT. Teams may submit up to four project ideas, each with a rank of 1-4.		#1 for STAR
CBPO Creative Team Component(s) (Yes or No)	Does this project involve components that require input from the following functional areas: Web and Creative, GIS, Communications, and IT.		No
Proposed GIT Technical Project Lead	If this project idea is selected to move forward for bid, the person identified as the GIT Technical Project Lead will be responsible for reviewing and recommending the selected contractor; this person will also review and approve the selected contractor's work for the duration of the project. 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.		Erik Meyers The Conservation Fund emeyers@conservationfund.org
Preparers	List names of all parties beyond the GIT lead 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.		1. Cuiyin Wu Chesapeake Research Consortium cwu@chesapeakebay.net 2. Erik Meyers The Conservation Fund emeyers@conservationfund.org 3. Breck Sullivan Chesapeake Research Consortium bsullivan@chesapeakebay.net 4. Julie Reichert-Nguyen NOAA Chesapeake Bay Office julie.reichert-nguyen@noaa.gov
Project Title (10 words or less)	The title should be short and give a high-level view of what your project is trying to accomplish. Creative and catchy is fine only if it also captures the real purpose of your work. (Good Examples: "New Methods for Resilient Fish Ladder Design"; "Research and Database Creation for In-stream Litter Collection Devices"; "Development of Invasive Plant Management at Reforestation Sites").		Blue Carbon Literature Review & Carbon Model Comparison to Inform Possible Financing Strategies
Project Type (check all that apply)	Metric Development and Tracking Projects: • Support for science needed to develop metrics • Metric/indicator development • Performance measure development	Logic and Action Plan Implementation Projects: • Economic modeling • Database development • Policy research and recommendations	Logic and Action Plan Implementation Projects: • Baseline analyses • Other – Literature review to assess feasibility of future program direction Metric Development and Tracking Projects: • Performance measure development • Other – assessment of carbon value from climate resilience projects related to wetland and SAV restoration

	• Monitoring/tracking program development • Data collection program development • Assessments of data to evaluate progress on metrics • Modeling support • Other (please describe)	• Training • Mapping, lands assessment • Baseline analyses • Environmental monitoring • Environmental demonstration projects • Other (please describe)	• Modeling support – assessment of blue carbon and terrestrial carbon models
Proposed Outcomes	Outcomes are the changes you expect to see as a result of the work being completed. Examples of 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.		• Ability to assess the feasibility of financing strategies to support wetland and SAV conservation and restoration efforts. • Improved knowledge within the CBP on carbon sequestration, storage and loss by wetlands and seagrass beds (submerged aquatic vegetation). • Improved communication of the benefits of wetland and SAV conservation in addition to those already identified by CBP such as resilience to changing climate conditions and sea level rise, water quality improvement and habitat for wildlife and fish, which can help shape future conservation and climate resiliency policy development. • Ability to identify future science needs and research questions that remain knowledge gaps, particularly related to carbon storage volume, rate of sequestration, and carbon/methane sources and rate of release. • Future modeling efforts could be undertaken based on the identification of available blue carbon models.
Justification (500 words or less)	This is your elevator speech - why is this work 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 your answer.		Wetland and SAV restoration and conservation projects in the Chesapeake Bay and watershed provide benefits for water quality, wildlife habitat, fisheries, and resiliency to the effects of a changing climate (warming, extreme storm events, sea level rise). Wetland and SAV systems also contribute the additional, globally relevant benefits of carbon sequestration and storage. Private capital investment could significantly increase the pace and scope of wetland and SAV restoration and conservation. A growing market exists for private investments in carbon – primarily in terrestrial forests. The carbon models utilized for these terrestrial forest markets assure private and public stakeholders that investments in forest carbon projects deliver measurable climate benefits, both for carbon sequestration as well as prevention of loss. Coastal habitats and inland wetlands likewise offer great potential both in terms of increased sequestration through restoration and from loss prevention through conservation. However, better understanding of these “blue carbon” systems is

		needed to generate confidence for private capital investment. This project will review scientific literature to consolidate information and increase knowledge on carbon sequestration, storage and loss in wetland and SAV systems, identify existing "blue carbon" models, identify knowledge gaps that still exist, and compare blue carbon and terrestrial carbon models. This will allow the CBP to assess and potentially develop financing strategies for the restoration and conservation of these habitats. Ultimately, this increased knowledge and potential strategies for increasing wetland and SAV restoration and conservation will reinforce the goals of the Water Quality, Habitat, and the Sustainable Fisheries Goal Implementation Teams (GITs). The project builds on the goals of the March 2020 Chesapeake Bay Program (CBP) Finance and Investment Forum organized by the Partnership GIT 6, where this project was identified as a need. The project will advance the CRWG objective to build capacity of institutions and the private sector to understand the science and incorporate meaningful change into plans, programs, processes, or projects. It will also build on the CRWG of climate change research efforts related to the 2014 Chesapeake Bay Agreement.
Proposed Project Steps and Timeline (up to 8 maximum)	List all of the major steps required to accomplish the project goals. Make sure to include any meetings with GIT teams and other relevant stakeholders (try to quantify meetings; 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 that work will start March 2021.	**A. Project scoping, draft literature review & model comparison** 1. March 2021 Kickoff meeting between the CBP CRWG leadership and contractor to discuss literature review needs of workgroup and to provide initial ideas for the scoping, strategy, schedule and communication products. Initial planned scope of literature review should include (1) extent of knowledge of carbon stores in coastal (tidal) wetlands, seagrass beds (SAV), and inland freshwater wetlands in the US by location (marine, coastal, inland); (2) extent of knowledge of methane/CO2 release from erosion or other loss or conversion of coastal wetlands; (3) extent of knowledge of methane/CO2 releases from inland wetlands (by wetland type and landscape location); (4) details on any current blue carbon (carbon stored in aquatic ecosystems) models, both for carbon sequestration and also to prevent carbon/methane losses of existing stores; and (5) a comparison of terrestrial carbon models to blue carbon models. 2. April 2021 Contractor provides a documented strategy for wetland and SAV carbon science literature review and gap identification, strategy for comparison of terrestrial and blue carbon models, and work schedule. 3. September 2021

		Contractor provides first draft of literature review and model comparison reports to CRWG and reviewers identified (see below). **B. Report review** 1. August 2021 With the help of CRWG, SAV, Wetland and Forestry workgroups, contractor will develop a list of potential reviewers to provide edits on literature review and model comparison. Reviewers may differ between the general literature review and the model comparison. 2. September 2021 Contractor will contact and confirm with reviewers regarding the timeline to review the first drafts of literature review and model comparison. Once the reports are delivered in September, reviewers have 1 month to review. 3. November 2021 Contractor will work with reviewers to compile and revise the literature review and model comparison based on the feedback from reviewers. Contractor will gather feedback from CRWG and reviewers on appropriate communication products (e.g. StoryMap if appropriate). **C. Report finalization & dissemination** 1. January 2022 Contractor will deliver the revised literature review and model comparison reports to CBP for the final fatal flaw review and incorporate any suggested changes. 2. March 2022 Contractor will deliver final literature review and model comparison reports in PDF format to CRWG and any associated communication products.
Estimated Costs	Provide an estimate of the project cost (generally $25,000-$75,000). 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 *YOU* to accomplish each of the steps identified above. Keep in mind that contractors can range from $50-150 an hour (when indirect costs are factored in). Don't forget to include the time it would take for the contractor to attend any meetings. Finally, don't forget to account for contractor time to revise final products to incorporate stakeholder feedback.	$65,000
Cross-Goal Benefits	List any cross-goal benefits succinctly	Vital Habitats Goal: Restore, enhance and protect a network of land and water habitats to support fish and wildlife and to afford other public benefits, including water quality, recreational uses and scenic value across the watershed. Quantifying the wetland and SAV carbon value to inform potential financing strategies to promote projects that build climate resilience could contribute to the restoration of 85,000 acres and protection of 150,000 acres of tidal and non-tidal wetlands and the objective to achieve and sustain 185,000 acres of SAV Bay-wide.

		Water Quality Goal Implementation Team: *Management Approach 1:* WIPs, and Two-Year Milestones to reach attainment of target loads to reduce N, P, and sediment provided in the Chesapeake Bay TMDL. - *1.5* Document current state and local programs, policies, and strategies to address climate change *Management Approach 4:* Enhance analysis of modeled and monitored data to better target pollution reduction practices and to better measure progress towards attaining Water Quality Standards - *4.10* The WQGIT will collaborate with the Climate Resiliency Workgroup to pursue research, policies and practices to address climate impacts in the Watershed with regards to water quality management practices. *Management Approach 7:* Cross-outcome collaboration and multiple benefits - *7.3* Develop improved understanding of the potential benefits, and risks, of selected practices and policies to provide benefits to multiple outcomes.