

Table 1 for use in capturing 2021 EPA GIT Funding Ideas

(See version below for more detailed instructions)

Required Components of the Phase 1 Development of Project Ideas (<i>Table 1</i>)	
Goal Implementation Team (GIT)	Scientific, Technical Assessment and Reporting (STAR) Team: Climate Resiliency Work Group (CRWG)
Proposed GIT Technical Lead	Nicole Carlozo Maryland Department of Natural Resources nicole.carlozo@maryland.gov
Annual Weighting Factors to Consider	<ol style="list-style-type: none"> 1. Project addresses a Diversity, Equity, Inclusion, and Justice (DEIJ) need. <ul style="list-style-type: none"> ○ This project aims to incorporate conversations with non-traditional partners to identify their climate resilience needs pertaining to marsh adaptation. To accomplish this, we will include social vulnerability metrics, such as low income and minority status, when prioritizing regional focus areas for the consideration of large-scale collaborative restoration projects. We will also draw on social vulnerability metrics and expertise from the Diversity Workgroup to identify local, under-represented stakeholders to participate in the workshop. 2. Project addresses a Climate Change need. <ul style="list-style-type: none"> ○ This project addresses capacity-building activities needed to support progress for the Adaptation Outcome in the 2014 Chesapeake Bay Watershed Agreement that involves pursuing and designing restoration projects to enhance the resiliency of the Bay and aquatic ecosystems from the impacts of coastal erosion and sea level rise (SLR). The identification and alignment of organizational priorities with marsh resilience research opportunities will allow for partners to more effectively pursue collaborative marsh restoration and evaluate the success of resilience design strategies to climate change impacts (e.g., SLR). The proposed workshop will focus on areas with potential for marsh migration in order to align with and build off of ongoing Wetland Workgroup projects. 3. Project addresses a Local Engagement need. <ul style="list-style-type: none"> ○ Once the regional focus areas are identified, this project aims to include local stakeholders to participate in the workshop. Local engagement is a priority since tidal marsh restoration opportunities will be identified on both public and private lands. 4. GIT Priority Project (one priority project identified per GIT). <ul style="list-style-type: none"> ○ This project is STAR’s top priority. Past efforts have focused on the climate monitoring and assessment outcome. To achieve the climate adaptation outcome, capacity-building projects like this one are needed to support effective collaboration that can promote implementation of science-

	<p>driven, nature-based adaptation projects that provide multiple benefits, including water quality improvement, habitat formation, shoreline stabilization, and resilience to climate change. In addition, this project builds upon the commitment of the Executive Council to prioritize conserving and restoring wetlands for increased resilience to climate impacts. In recognition of the growing body of science documenting the impacts of climate change, there is an urgent need for action, and the proposed workshop exemplifies a collaborative response to addressing these challenges.</p> <p>5. Projects that address outcomes that are lagging in outcome attainability.</p> <ul style="list-style-type: none"> ○ The Wetlands Outcome was identified by the Outcome Attainability Team as unlikely to be met without significant change of course. It will require additional support from technical and policy experts to outline geographically specific interim targets to accelerate progress and establish accountability. The proposed marsh adaptation workshop provides a venue to begin identifying where opportunities exist to restore tidal wetlands at a larger regional scale through collaborative partnerships. Incorporating adaptation considerations, such as marsh migration opportunities, and aligning research around effective strategies to maintain healthy marshes under changing climate conditions will increase the likelihood of restored tidal wetland acres persisting in the future. Established partner networks and identified large-scale restoration projects from this project could be built into a more comprehensive plan for tidal wetland restoration in the future. The proposed workshop represents a change in business as usual, moving from opportunistic restoration to strategic partnership-driven projects that are needed for outcome attainability.
<p>CBP Functional Areas (Yes or No)</p>	<p>Yes - GIS</p>
<p>Preparers</p>	<ol style="list-style-type: none"> 1) Nicole Carlozo Maryland Department of Natural Resources nicole.carlozo@maryland.gov 2) Jackie Specht The Nature Conservancy (TNC) jackie.specht@tnc.org 3) Taryn Sudol Maryland Sea Grant tsudol@umd.edu 4) Molly Mitchell Virginia Institute of Marine Science (VIMS) molly@vims.edu 5) Julie Reichert-Nguyen

	<p>NOAA Chesapeake Bay Office (NCBO) Julie.reichert-nguyen@noaa.gov</p> <p>6) Breck Sullivan United States Geological Survey (USGS)</p> <p>7) Alex Gunnerson Chesapeake Research Consortium (CRC) gunnersona@chesapeake.org</p>
Project Title (10 words or less)	Workshop aligning stakeholder and research priorities for collaborative marsh adaptation
Project Type (Describe the type of project submitted)	<u>Logic and Action Plan Implementation Projects:</u> <ul style="list-style-type: none"> ● Mapping (climate resilience and social vulnerability data, tidal marsh restoration projects, stakeholder geographic and organizational priorities for tidal marsh restoration and management) ● Environmental demonstration projects ● Other: Capacity Building
Proposed Project Outcomes	<p>This project aims to advance the Chesapeake Bay Program (CBP) Climate Adaptation Outcome in the 2014 Chesapeake Bay Watershed Agreement by building capacity to implement large-scale tidal marsh restoration projects that have increased resilience to climate change impacts, while addressing corresponding DEIJ and local engagement needs. This project will also identify research needs and advance research partnerships that can increase understanding of marsh resilience and the success of marsh adaptation strategies. The proposed workshop will build off the collaborations and data and information collected from the 2019 Marsh Resilience Summit and the GIT-funded “Synthesis of Shoreline, Sea Level Rise, and Marsh Migration Data for Wetland Restoration Targeting” (Marsh Synthesis) project to identify 1) regional focus areas in Maryland and Virginia, and 2) partners for collaborative, large-scale tidal marsh restoration required to meet wetland outcome attainability in light of climate change. Identified regional focus areas will include metrics such as marsh migration potential and proximity to socially vulnerable populations. Additionally, the proposed workshop will identify marsh research needs and opportunities to coincide with the identified large-scale marsh restoration projects. The identification of research needs will use existing marsh research and input from experts during the workshop. We will also utilize relevant findings from the Virginia Tech BMP climate resilience assessment and STAC programmatic workshop on wetland systems approach to BMP crediting if available. A two-pronged focus on restoration and research opportunities will support short-term collaborative action in vulnerable areas, as well as long-term adaptive management to preserve tidal wetlands as environmental conditions change.</p> <p>The alignment of stakeholder and research priorities for collaborative marsh adaptation will be achieved through completion of the following outcomes:</p> <p><i>Capacity-Building</i></p>

- Identify and pursue alignment of geographic priorities and organizational goals (e.g., marsh migration management, fish habitat, bird habitat, *Phragmites* management, community resilience) across environmental stakeholders to initiate large-scale shoreline and marsh restoration projects in Maryland and Virginia that correspond with areas that have high potential for marsh migration, and where collaborative partnerships are vital for project success. Examples of geographic priorities include, but not limited to, Maryland [Envision the Choptank](#) Habitat Focus Area, US Army Corps of Engineers (USACE) [Comprehensive Plan and Restoration Roadmap](#) related to coastal areas, [Virginia York River and Small Coastal Basin Roundtable](#), jurisdictional water quality, habitat and shoreline tidal areas in [Watershed Implementation Plans](#), and nonprofit targeted restoration areas.
- Foster interest and momentum in short- and long-term action across federal, state, and local jurisdictions, environmental stakeholders, and research partners, and form partnerships for pursuing collaborative large-scale tidal marsh restoration projects.
- Transfer knowledge between natural resource managers, land trusts, and researchers about marsh condition, vulnerability, and resilience to climate change. Communicate findings of Marsh Synthesis and other relevant information from CBP tidal wetland efforts (e.g., Virginia Tech review on tidal wetland BMP climate resilience effectiveness, STAC programmatic workshop on wetland systems approach to BMP crediting).
- Identify funding opportunities for tidal marsh restoration in identified regional focus areas that could be pursued by established partner networks.

Research

- Align future research with identified restoration opportunities to monitor the success of resilience restoration or management strategies (e.g., thin-layer sediment placement, optimal plant species to mitigate wave energy, water quality and habitat benefits of migrating marsh, carbon sequestration, living shorelines, etc.) and increase understanding of environmental triggers (e.g. erosion rates, internal ponding, vegetation density, ghost forests, etc.), for identifying when adaptation action is needed.
- Connect existing monitoring, modeling, and other research to marsh management and adaptation at regional scales.
- Identify data gaps and research needs to inform on-the-ground adaptation and decision-making related to planning, design, monitoring, adaptive management, and project implementation in identified regional focus areas. Incorporate discussions building on relevant findings from the Virginia Tech review on tidal wetland BMP climate resilience effectiveness and the STAC programmatic workshop on wetland approach to BMP crediting.
- Identify funding opportunities for tidal marsh research in identified regional focus areas that could be pursued by established partner networks.

DEIJ

	<ul style="list-style-type: none"> ● Integrate and elevate the voices of non-traditional partners (e.g., local community organizations, local tribal members) when identifying and prioritizing restoration projects in identified regional focus areas. ● Evaluate social vulnerability metrics, such as low income and minority status, to prioritize focus areas with DEIJ impacts. <p>To achieve these outcomes this project will produce the following deliverables:</p> <ul style="list-style-type: none"> ● Maps demonstrating stakeholder geographical and organizational priorities for marsh restoration in areas that marsh migration is likely to occur based on existing data syntheses (e.g., Marsh Synthesis project, TNC Resilient & Connected Landscapes, NOAA Sea-Level Rise Viewer, American Community Survey). Maps will be used to identify regional focus areas for large-scale tidal marsh restoration and research. Focus areas will incorporate metrics to include socially vulnerable populations. ● One regional stakeholder workshop (Maryland and Virginia) with participation from experts in marsh science, marsh management and restoration, marsh resilience, carbon sequestration, fish and bird habitat, and water quality, along with representatives from local governments and underrepresented stakeholder groups within the identified regional focus areas. This project will coordinate with the CBP Diversity Workgroup to identify underrepresented stakeholder groups to engage and the best strategy for their participation (e.g. interviews or surveys to identify community needs, coordination with pre-existing community partnerships, pre-workshop site visits, workshop participation, seat on the Steering Committee, etc.). ● List of prioritized restoration/research projects with associated funding opportunities in identified regional focus areas. ● Identification of local and regional data gaps related to the understanding of marsh condition/resilience. ● The establishment of working groups and a “collaboration roadmap” to support an action plan for continued collaboration after the workshop and encourage implementation of large-scale tidal marsh restoration and research in identified regional focus areas. Working groups will follow the collaboration roadmap to pursue the prioritized restoration/research projects and incorporate local and underrepresented stakeholders to co-produce on-the-ground projects. ● Report summarizing recommendations and identified priorities for collaborative large-scale tidal marsh restoration and resilience research in Maryland and Virginia in identified regional focus areas. A list of other potential regional focus areas will be identified to support future replication. ● Summary of new or emerging research on marsh condition and resilience to SLR and other climate stressors not addressed in Marsh Synthesis. ● Distribution of lessons-learned from workshop development and engagement to support future replication in other regional focus areas.
Project Justification (500 words or less)	The health of tidal saltwater marshes in Chesapeake Bay is at risk due to climate change impacts (e.g., SLR, coastal storms). These impacts lead to

eroding and drowning marsh areas. In response to coastal flooding, many property owners rely on shoreline hardening strategies (i.e., bulkheads, concrete seawalls) preventing marshes from migrating inland. Protecting and restoring tidal marsh habitat is a priority wetland outcome under the Chesapeake Bay Watershed Agreement that also has cross-cutting benefits for other outcomes, including climate resiliency and habitat. Given the current challenge of meeting wetland acreage goals identified by the CBP Outcome Attainability Team, a focus on adaptation is much needed to ensure that marsh restoration and conservation goals are successful even under changing climate conditions.

Effectively enhancing marsh resilience (i.e. the ability of marshes to remain healthy and continue to persist in the future) and restoring marshes to build resilience for shorelines and adjacent communities will require collaborative, large-scale restoration and research efforts amongst local, state, federal, non-profit, and university partners across the Chesapeake Bay watershed. However, partners typically have numerous or siloed organizational priorities and much restoration remains opportunistic and disconnected. Further, these efforts often do not incorporate the perspectives of the local communities that depend on them for many services including coastal protection or cultural heritage. As federal funding increases for climate resilience projects, we have an opportunity to develop strategic collaborations for large-scale marsh restoration and research supporting cross-goal benefits.

For such collaborations, conversations are needed between multiple stakeholder groups (i.e., restoration practitioners, researchers, local and underrepresented community representatives). We propose one 2-day workshop for Maryland and Virginia stakeholders and researchers to align marsh restoration and research priorities in support of progress toward the Chesapeake Bay tidal wetland goal. Participants will learn about overlapping geographical and organizational priorities and identify collaborative, large-scale tidal marsh restoration projects with cross-goal benefits, adaptive management opportunities, and research opportunities supporting marsh resilience. Project will focus on SLR impacts and social vulnerability. This work will directly build on the Marsh Synthesis GIT-funded project to advance collective adaptation actions.

This project will also build on the 2019 Marsh Resilience Summit, which identified the “need for even greater engagement among researchers, government agencies, land-managers, policy-makers, NGOs, and other organizations to begin to **break down barriers** and identify opportunities to **facilitate coastal resiliency projects.**” With over 200 participants representing 125 different agencies, the summit fostered dialogue between scientists and practitioners about the many relevant aspects of marsh resilience (i.e., marsh migration, conservation policy, community resilience, restoration techniques, beneficial use of dredged material, agriculture and industry). The facilitated discussions and networking opportunities led to more monitoring partnerships; however, there was not dedicated, structured time for project-based collaboration focused on adaptation. The proposed workshop will advance this need and build in considerations for SLR impacts, marsh migration, and social vulnerability, and identify projects and

	<p>partnerships to facilitate large-scale marsh restoration that could be built into a more comprehensive plan for tidal wetland restoration in the future.</p>
<p>Proposed Project Steps and Timeline</p>	<p>The proposed project will be implemented in three phases over 15 months, costing \$75,000. Workshop cost estimates are based on previous workshop development by The Nature Conservancy and Maryland Sea Grant.</p> <p><u>Phase 1: Understanding Regional Research and Stakeholder Priorities.</u> This Phase will inform Workshop development.</p> <p>The project contractor will: (Month 1-5; \$20,000)</p> <ul style="list-style-type: none"> ● Convene a project Steering Committee of Maryland and Virginia and CBP GITs/workgroups (e.g., Climate Resiliency, Wetland, Fish Habitat, Black Duck, Water Quality) representatives in coordination with the GIT Technical Lead and Project Team. The Steering Committee should include jurisdictional and CBP workgroup experts in marsh resilience, restoration and management and include a DEIJ expert who can 1) provide guidance on when and how to include local community engagement once regional focus areas have been identified, and 2) advise on regional focus area selection. Contractor will organize a project kick-off meeting with the Steering Committee in coordination with the GIT Technical Lead and project team. ● Develop an updated workplan for project completion based on feedback from the Steering Committee and Project Team. ● Review data outcomes and recommendations from the Marsh Synthesis project and Marsh Summit to inform resilience data mapping and stakeholder engagement activities described below. Also utilize relevant findings from the ongoing Virginia Tech BMP climate resilience assessment and STAC programmatic workshop on wetland systems approach to BMP crediting if available provided by Project Team. ● Work with the GIT Technical Lead and Project Team to compile geographical data related to marsh resilience (e.g., marsh migration corridors, erosion rates, unvegetated-vegetated marsh ratio) and social vulnerability (e.g., low income, minority status) to inform selection of regional focus areas for marsh restoration and stakeholder engagement. Resilience data will come from the Marsh Synthesis project and other partner efforts, such as data layers from the George Mason University/The Nature Conservancy SLAMM update for Maryland, TNC's Resilient and Connected Landscapes data, NOAA Sea Level Rise Viewer and social vulnerability metrics from American Community Survey and EJ Screening Tool. The project team and Steering Committee will identify these data layers, with feedback from the Contractor. The CBP GIS Team will overlay data layers with guidance from the Project Team, Steering Committee, and Contractor to inform identification of initial regional focus areas for marsh restoration, research, and stakeholder engagement. ● Identify and survey stakeholders on their priorities, with a focus on their organization's geographical priorities for marsh restoration and research and resilience goals within the identified regional focus

areas. This information can be collected via phone interviews, focus groups, surveys, virtual mapping, participatory mapping, or other methods as proposed by the Contractor. Stakeholders will include ~20 state and federal agencies, university partners, and environmental nonprofits in Maryland and Virginia who are engaging in marsh management and restoration practices or research. The stakeholder list will be provided by the Steering Committee and Project Team. The Contractor may add to this list as needed. This work includes working with the Steering Committee and relevant CBP workgroups (e.g., Local Leadership, Local Advisory Committee, Local Engagement Team, Diversity, Climate Resiliency, Wetland) to identify community/local representatives in Maryland and Virginia to survey. Already identified restoration priority areas for restoration and involved stakeholders should also be considered (e.g. Maryland [Envision the Choptank](#) Habitat Focus Area, [Virginia York River and Small Coastal Basin Roundtable](#), US Army Corps of Engineers [USACE] [Comprehensive Plan and Restoration Roadmap](#) and State [Watershed Implementation Plans](#) related to coastal areas, nonprofit targeted restoration areas, etc.). The Contractor will digitize stakeholder geographic information and summarize the organizational marsh restoration and resilience goals. Digitized maps will be handed off to the CBP GIS Team to overlay with data layers to refine regional focus areas for workshop focus.

- The CBP GIS Team will overlay mapped stakeholder priorities identified by the Contractor with the resilience and social vulnerability metrics to finalize regional focus areas that have high marsh migration potential, DEIJ needs, and greatest likelihood of collaboration given alignment of priorities. The Project Team and Steering Committee will provide guidance to the CBP GIS Team when performing this task. The CBP GIS Team will provide mapped results to the Contractor, who will facilitate a conversation with the Project Team and Steering Committee to finalize the regional focus areas for use at the workshop in Phase 2. At least two focus areas will be identified to represent Maryland and Virginia. The Contractor will present a project update to relevant CBP workgroups (e.g., Climate Resiliency, Wetland, Fish Habitat, Black Duck, Water Quality, Diversity, Local Leadership, Local Engagement) for feedback on selected focus areas and recommendations on invitees for the workshop beyond stakeholders surveyed (i.e., experts that can contribute to discussions on cross-benefits of marsh restoration).
- Summarize key findings/themes identified via stakeholder outreach to inform workshop development, including any identified new or emerging research in the region related to marsh health, condition and resilience, building on the Marsh Summit and Marsh Synthesis projects.

Phase 2: Plan and Convene 2-Day Workshop. This Phase will develop a workshop agenda and convene 2-day workshop aimed to spur collaboration amongst partners to advance marsh restoration and adaptation actions over the short-term, while identifying research/science needs to inform adaptation actions over the long-term.

The project contractor will: (Month 6-10; \$35,000)

- Plan for, conduct and facilitate one 2-day workshop for Maryland and Virginia stakeholders focused on initiating collaboration between research, management, and community stakeholders related to marsh resilience in areas with high potential for marsh migration. The workshop will include identifying collaborative large-scale restoration and research opportunities and potential funding opportunities in the regional focus areas identified in Phase 1. It will also identify new or emerging research in the region related to marsh health, condition and resilience, building on the Marsh Synthesis project to inform conversations on marsh adaptation and management. The workshop should balance identification of short-term restoration action items with long-term research needs.
- Create a workshop agenda and workshop materials, to be reviewed by the Steering Committee and Project Team. The Contractor will draw on Marsh Summit and Marsh Synthesis findings and stakeholder interviews to identify and summarize existing marsh restoration and management challenges and any new/emerging tools to address these challenges.
- Work with the Steering Committee to define relevant terms for the workshop (e.g. restoration, resilience, adaptation, etc.).
- Share resilience metrics, research and stakeholder mapping that was used in the overlay analysis in Phase 1 to define focus areas and facilitate discussions about missing layers/gaps to inform lessons learned. This may include presentations by researchers about relevant data and gaps.
- Use breakout groups to foster collaboration and project identification within regional focus areas. Breakout groups may be formed based on organizational priorities, geography, DEIJ topics, research needs, management challenges, or other factors identified in Phase 1. The Steering Committee and Project Team will assist with facilitation and/or note-taking for break-out groups.
- Conduct targeted stakeholder outreach to identify and invite workshop presenters and participants from the research and management communities at local, state, and regional scales. Work with the DEIJ workgroup to ensure underrepresented community representatives are integrated into the workshop planning and participation as early as possible.
- A qualified facilitator on the contractor's team will lead the workshop to 1) understand current and expected future conditions of the marshes within the identified regional focus areas from Phase 1, 2) prioritize restoration and research projects to inform adaptation actions that will enhance marsh resilience to SLR and support CBP stakeholders and local community interests, and 3) establish a framework for pursuing collaborative large-scale restoration/research projects post-workshop. This work will include the identification of appropriate funding opportunities and project leaders for priority projects to inform a collaboration roadmap and future action plan.

	<p>Phase 3: Informing Strategic Adaptation. This Phase will compile recommendations and lessons-learned from Phases 1 and 2 to support future marsh restoration and adaptation progress and future stakeholder workshops.</p> <p>The project contractor will: (Month 7-15; \$20,000)</p> <ul style="list-style-type: none"> ● Meet with the Steering Committee to debrief on Workshop findings. ● Continue engagement with workshop participants and the Steering Committee to address questions and themes brought up during the workshop. ● Prepare a final summary report that 1) outlines overlapping organizational priorities with resilience metrics, 2) provides maps/lists of identified marsh restoration/research opportunities, 3) identifies all potential regional focus areas based on overlay analysis and stakeholder feedback, 4) describes marsh research and restoration needs and collaborations identified at the workshop for the regional focus areas discussed with list of potential funding opportunities and lead organizations, 5) identifies major challenges to ongoing collaborations to promote marsh resilience to SLR, 6) outlines the workshop process for replication at a later date in other regional geographies, and 7) includes appendices with a summary of project activities, including stakeholder surveys, resilience data and stakeholder mapping, workshop activities and discussions, stakeholder contacts, and additional information gathered (e.g., new/emerging marsh condition tools, data and resources for use by managers). ● Establish a collaboration roadmap for the continuation of identified restoration and research projects to support an action plan. Include recommendations for how marsh projects with resilience considerations could be built into a more comprehensive plan for tidal wetland restoration to achieve the Chesapeake tidal wetland goals.
Estimated Costs	\$75,000
Cross-Outcome Benefits	<p>This proposal is being advanced by the Climate Resiliency Workgroup with the support of the Wetlands Workgroup.</p> <p>This project meets the science needs of the Climate Resiliency Monitoring and Assessment and Wetland Outcomes which includes:</p> <ul style="list-style-type: none"> ● Better understanding of SLR and subsidence impacts related to wetland loss, marsh migration, and adjacent land use considerations. ● Impacts on wetland extent, distribution and function due to climate change. ● Coordinate with Black Duck and Fish Habitat Action Teams to identify Wetland areas that are suitable black duck and fish habitat and would be ideal for restoration. <p>This project supports the following Chesapeake Bay Watershed Agreement Goals:</p> <p>Climate Resiliency Goal: Increase the resiliency of the Chesapeake Bay watershed, including its living resources, habitats, public infrastructure and</p>

communities, to withstand the adverse impacts from changing environmental and climate conditions.

- This work will support Climate Resiliency Workgroup Monitoring & Assessment Management Approach 2: Work with CBP Goal teams to fill critical data and research gaps and improve understanding of climate change impacts and implications for selected outcomes in the Chesapeake Bay Watershed Agreement. Action 1.3 Increase capacity to better understand SLR impacts to habitats and their ecosystem services.
- This work will support Climate Resiliency Workgroup Adaptation Management Approach 1: Improve knowledge and capacity to implement and track priority adaptation actions. Action 2.2. Assist with capacity-building activities that support the implementation of priority climate adaptation projects.
- Results from this project would support advancement of restoration projects, such as living shorelines, across jurisdictions. Participants will gain an improved understanding of marsh resilience to SLR, marsh management needs, and next steps for marsh restoration to adapt to SLR. Project results will advance on-the-ground adaptation actions and help identify additional science needs to inform strategic marsh restoration and/or management.

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.

- This project can support efforts for attainability of the wetland goal. The CBP Outcome Attainability Team identified that the wetland outcome in the Chesapeake Bay Watershed Agreement is not on track to be achieved by 2025. This outcome states, “create or reestablish 85,000 acres of tidal and non-tidal wetlands and enhance the function of an additional 150,000 acres of degraded wetlands by 2025.” The proposed marsh adaptation workshop provides a venue to begin identifying where opportunities exist to restore tidal wetlands at a larger regional scale through collaborative partnerships. Incorporating adaptation considerations, such as marsh migration opportunities, and aligning research around effective strategies to maintain healthy marshes under changing climate conditions will increase the likelihood of restored tidal wetland acres persisting in the future.
- Results from this project would support the advancement of natural shoreline and marsh restoration projects in areas impacted by SLR. Project activities will build off the GIT-funded “Synthesis of Shoreline, Sea Level Rise and Marsh Migration Data for Wetland Restoration Targeting” project by convening stakeholders to advance restoration based on marsh health/condition/resilience and organizational priorities across the watershed.
- This work will support the Black Duck Outcome Management Approach 2: Support efforts to Enhance and Manage Wetlands or Vegetation in Areas Where Black Ducks Have Historically Bred or Wintered. Action 2.1 Support efforts to enhance and manage priority habitats as identified by the Decision Support Tool.

	<p>Sustainable Fisheries Goal: Protect, restore and enhance finfish, shellfish and other living resources, their habitats and ecological relationship to sustain all fisheries and provide for a balanced ecosystem in the watershed and Bay.</p> <ul style="list-style-type: none"> • This work will support the Fish Habitat Outcome Management Approach 4: Communicate importance of fish habitat. Action 4.2 Committed coordination and cooperation with key CBP workgroups to assure shared resources, information and priorities while reducing duplication of efforts: Key complementary groups include Wetlands and Climate Resiliency. <p>Stewardship Goal: Increase the number and the diversity of local citizen stewards and local governments that actively support and carry out the conservation and restoration activities that achieve healthy local streams, rivers and a vibrant Chesapeake Bay.</p> <ul style="list-style-type: none"> • This project would bring together researchers, land managers, land trusts, practitioners, funders, and community representatives to advance short-term restoration goals and long-term planning. Results from this project would inform local and regional adaptation actions and planning.
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Required Components of the Phase 1 Development of Project Ideas (<i>Table 1</i>)	
Goal Implementation Team (GIT)	<p>As defined by the Chesapeake Bay Program and described below:</p> <ul style="list-style-type: none"> • 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	<p>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.</p>
Annual Weighting	<p>Each year, annual weighting factors will be described, depending upon current program needs. In FY21, the following annual weighting factors are described for the Phase 1 Project Idea:</p>

Factors to Consider	<ol style="list-style-type: none"> 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. <p>Describe the extent to which the project addresses: 1. Diversity, Equity, Inclusion, and Justice; 2. Climate Change, and/or 3. Local Engagement ; 4. describe if your project is a GIT Priority, and 5. Describe if your project addressees an outcome lagging in attainability.</p>	
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 Science Prioritization 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 <i>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</i>).	
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 Other (please describe)	<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)
Proposed Project Outcomes	Project outcomes are the changes you expect to see as a result of the work being completed. Examples of Project <i>Outcomes</i> 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)	This is the 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 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). 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).