

Chesapeake Bay Trust

REQUEST FOR PROPOSALS

CONSULTANT SERVICES

TECHNICAL ASSISTANCE TO SUPPORT CHESAPEAKE BAY PROGRAM GOALS AND OUTCOMES - FISHERIES, HABITAT, STEWARDSHIP, LEADERSHIP, AND CLIMATE

SECTION I - INTRODUCTION

1.1 **Purpose:** The purpose of this Request for Proposals ("RFP") is to invite entities experienced in various aspects of fisheries, watershed science and policy, watershed stewardship, local leadership, wetlands, toxics, and other watershed issues to submit proposals to the Chesapeake Bay Trust (the Trust). The Trust has been designated to receive federal funds from the U.S. Environmental Protection Agency through the Maryland Department of Natural Resources as part of the Bay Program Goal Implementation Team Project Initiative. The work to be supported will advance outcomes from the Chesapeake Bay Agreement. Eleven specific outcomes from several management goals have been identified as top priorities to address, and these stretch across all Goal Implementation Teams. The Funding is supplied by the United States Environmental Protection Agency (EPA).

This program and request for proposals includes eleven components separated into eleven individual scopes of work. One focuses on fisheries issues, two focus on habitat issues, two focus on water quality issues, two focus on healthy watershed topics, two focus on citizen stewardship topics, one focuses on leadership, and one focuses on climate goals. Offerors can bid on one or more of the individual scopes of work, with each scope of work addressed in a separate proposal. The eleven components are listed below, and scope details and qualifications of bidders are described in more detail in Section II below. A maximum bid amount is listed for each project scope. Cost will be a factor in evaluation of bids as described in Section V.

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SECTION II – SERVICES/SCOPES OF WORK and OFFEROR'S MINIMUM QUALIFICATIONS

Find below descriptions of the eleven scopes of work, expected deliverables, and minimum qualifications of bidders.

2.1 Scope #1: Drivers of Forage Population Trends and Consumption patterns

Maximum bid: Bids not to exceed \$60,000

Timeline: Work must be completed by March 1, 2017

a. Scope of Work - Introduction

Forage species (as identified in Table 1 of the STAC Forage Workshop report [2015]; http://www.chesapeake.org/pubs/346_Ihde2015.pdf), play an integral role in the Chesapeake Bay food web by supporting higher trophic level production and are critical to sustaining economically valuable commercial and recreational fish species in the Bay. Consequently, the establishment of methods to quantify important forage and predatory nutritional demands (project in progress; final report expected December 2015), along with an improved understanding of their respective trends in relationship to one another (by habitat), is essential information to determine Bay status in supporting managed predatory species. Further, setting effective management targets and thresholds set for forage species requires an understanding of the effect of variability in prey groups (both singly and in aggregate) on predator populations, as well as an understanding of the environmental factors that causes that variability - this project addresses both of these essential uncertainties.

This project will relate trends of forage population indices and predator consumption (building on results of 2015 forage indicator development project; final report expected December 2015) to environmental drivers and will describe how the variability of prey (by species or group, and in aggregate; species/prey groups of interest include: bay anchovy, Atlantic menhaden, young of the year (YOY) weakfish, YOY spot, YOY croaker, Atlantic silversides, mysid shrimp, bivalves, polychaete worms, Mantis shrimp, sand shrimp, and river herring) affects the production of important predator species (species of interest include: striped bass, summer flounder, Atlantic croaker, white perch, spot) of the Chesapeake.

This project will focus on the prioritized list of “factors influencing success” listed in the management strategy (http://www.chesapeakebay.net/documents/22031/1d_forage_ms_6-24-15_ff_formatted.pdf) that affect forage population dynamics or identify additional factor(s) if found to be of more importance than previously identified factors in driving forage trends.

This project will feed into the forage outcome and its associated management strategy by providing a quantitative method(s) to assess the status of one (or more) Chesapeake Bay forage species and its predators over time (specific to the Chesapeake system). Although proposals that address a single forage species or group specified above will be considered for funding, preference will be given to project proposals that address multiple priority forage and predator groups as identified above, and to those proposals that address the highest priority forage species for the Chesapeake as identified in the STAC Forage Workshop report (http://www.chesapeake.org/pubs/346_Ihde2015.pdf).

b. Scope of Work – Deliverables.

Offerers must outline in detail their ability to perform in timely fashion the following services:

- Analyses that take into account age, as well as spatial and temporal considerations. For species that are forage predominantly during their juvenile life-stages, analyses should be estimated by size class.
- Analyses at both bay-wide and tributary-level scales, and by depth and habitat whenever possible. Projects should also perform analyses on a seasonal basis if data allow.
- Provision of a quantitative method(s) to relate the trends of population indices and predator consumption of one (or more) Chesapeake Bay forage species (as identified above) to environmental drivers (specific to the Chesapeake system).
- Provision of a quantitative approach to estimate the effect(s) of prey variability (species identified above) on the production of important predator species (as identified above).
- Production of a final report
- Organize bi-monthly meetings concerning project status with the GIT project lead

c. Qualifications and expertise

Offeror's personnel assigned to perform under the Contract should have the following experience:

- expertise with the development of quantitative indicators for application to management decisions (required);
- expertise with specific forage groups for Chesapeake predatory species (required);
- experience accessing and analyzing large datasets (required);
- experience analyzing spatially- and temporally-explicit data (preferred).

2.2 Scope #2: Culvert Assessments for Fish Passage in Priority Watersheds

Maximum bid: Bids not to exceed \$45,000

Timeline: Work must be completed by December 1, 2016

a. Scope of Work - Introduction

A number of human activities can disrupt the continuity of river and stream ecosystems. The most familiar human-caused barriers are dams. However, there is growing concern about the role of road crossings – and especially culverts – in altering habitats and disrupting river and stream continuity. The fish passage work group (FPWG) was successful in prioritizing nearly 5000 dams in the Chesapeake watershed for their potential to benefit anadromous fish. The dams are highlighted (as red and orange points) here: http://maps.tnc.org/EROF_ChesapeakeFPP/v2015/. However, the FPWG has little to no information on potential fish blockages due to road crossings.

Over 144,000 road crossings exist in the Chesapeake Bay watershed. Given the sheer volume of potential fish blockages, funding and time constraints do not allow for assessment of all potential road crossings. Using the Chesapeake Fish Passage Prioritization Tool, the FPWG has identified priority areas for dam removal projects. Hence, culvert assessments would be focused in these priority areas as a cost savings measure and to conduct targeted restoration.

Assessments will be conducted using regional assessment protocol developed by the North Atlantic Aquatic Connectivity Collaborative (NAACC). The NAACC is a network of individuals from universities, conservation organizations, and state and federal natural resource and transportation departments focused on improving aquatic connectivity across a thirteen-state region, from Maine to West Virginia and includes all the of the Chesapeake Bay region. The goal of the collaborative is to assess stream crossings for flood resiliency and aquatic organism passage. Each stream crossing in two priority watersheds (one in PA and one in VA) will be visited by a crew of two people (two for safety reasons). Length and width measurements as well as inlet and outlet barriers, and photos at each stream crossing will be recorded and submitted to a central database developed by the NAACC.

Once assessments are complete, the FPWG will pursue funding for design and implementation of retrofits for each of the priority blockages. Potential future projects for fish passage may include removal or retrofits to the existing roadways/culvert or implementation of more fish friendly designs such as bottomless culverts and bridges. Identification of future projects is critical for meeting with fish passage outcome in the Bay Chesapeake Bay Agreement which includes opening 1000 additional miles by 2025.

b. Scope of Work – Deliverables.

Offerers must outline in detail their ability to perform in timely fashion the following services:

- Conduct culvert assessment in two (2) priority watersheds using the protocol developed by the North Atlantic Aquatic Connectivity Collaborative (NAACC). Assessment will be conducted in both PA and VA watersheds. (Two individuals are required at each location to meet safety requirements while conducting culvert assessments in the field.)
- Use an existing assessment protocol that can be found at:

https://www.streamcontinuity.org/assessing_crossing_structures/index.htm

- Obtain in-person training or demonstrate that in-person training has already occurred in the NAACC protocol, a requirement of using the NAACC method. More information on the training can be found at https://www.streamcontinuity.org/about_naacc/training_prog.htm.
- Enter data from the culvert assessments into the following regional database on stream connectivity: <https://www.streamcontinuity.org/database.htm>
- Identify future fish passage project opportunities based on the assessment.

c. Qualifications and expertise

Offeror's personnel assigned to perform under the Contract should have the following experience:

- NAACC training completed as described above (preferred but not required. All individuals conducting assessments will be required to have completed the training prior to assessment work);
- Experience with completing and ability to complete field work in harsh environments including very hot summer days and rainy weather. It will be necessary to walk one (1) miles distances.
- State driver's license.

2.3 Scope #3: Development of a decision support tool to inform black duck wintering habitat

Maximum bid: Bids not to exceed \$50,000

Timeline: Work must be completed by July 1, 2016

a. Scope of Work - Introduction

The Black Duck (BDJV) and Atlantic Coast (ACJV) Joint Ventures are developing a decision support tool to estimate wintering black duck habitat needs under current and future landscape conditions throughout the ACJV and the Atlantic Flyway. This project seeks to scale the development of the tool to the Chesapeake Bay watershed and inform estimates of conservation actions (e.g., acres protected, enhanced, or restored) needed across the landscape and where to prioritize these actions to increase suitable habitat for black ducks. The results will feed into the work plan section of the black duck strategy and provide a way to measure progress toward the outcome.

Historically, the black duck was the most abundant dabbling duck in eastern North America and composed the largest portion of the region's waterfowl harvest. Despite its importance to hunters and outdoor enthusiasts, the continental black duck population declined by more than 50 percent between the 1950s and 80s. Scientists believe this is due to loss of food and habitat associated with changing land use. The mid-Atlantic region, which includes the Chesapeake Bay watershed supports the largest portion of eastern North America's wintering black duck population, and preserving habitat here is critical to the long-term sustainability of the species. Black ducks are subjected to a variety of stressors during their annual lifecycle, many of which are beyond control of managers in the watershed. However, managers strive to provide enough food for ducks using the Atlantic Flyway during the winter months to support the Chesapeake's historical proportion of the continental population goal set by the North American Waterfowl Management Plan (NAWMP). Black duck is an important indicator species, and protection and restoration of its habitat will also benefit many other highest-priority migratory bird species, including most of the waterfowl species that stage or winter in the Bay region.

The ACJV and the BDJV have been working together to follow the 2005 ACJV Waterfowl Implementation Plan and develop a Strategic Habitat Conservation (SHC) process to guide habitat conservation for black ducks (and other waterfowl). They are using a GIS-based modeling framework, informed by recent field research, which estimates the energetic capacity (at multiple spatial scales) of available habitat for the entire watershed, and compares this to estimates of energetic demand (at multiple spatial scales) associated with a wintering black duck population at target levels, to ensure that habitat supply matches demand by ducks. The model incorporates projected urban growth and sea-level rise models to predict future landscape conditions and likely changes to energetic capacity, and will identify and prioritize conservation actions that will maximize carrying capacity over time, so partners can attempt to avoid the most consequential habitat losses due to urbanization and sea-level rise.

b. Scope of Work – Services and Deliverables.

Offerers must outline in detail their ability to perform in timely fashion the following services:

- Development of a decision support tool that will allow conservation managers to estimate habitat needs and prioritize conservation actions on the ground, to ensure habitat (i.e., food resources) of sufficient quality and quantity to support the wintering black duck population goal. Information is to be provided at multiple spatial scales within the Chesapeake Bay watershed, allowing acreage

goals that all partners in the watershed can use to measure and report progress on the watershed-wide black duck goal, in 2-5 year increments.

c. Qualifications and expertise

Offeror's personnel assigned to perform under the Contract should have the following experience:

- Experience with spatial and/or statistical skills (required)
- Experience developing habitat metrics (required)
- Experience developing decision support tools (required)

2.4 Scope #4: Quantify BMP Impact on each Management Strategy

Maximum bid: Bids not to exceed \$90,000

Timeline: Work must be completed by January 1, 2017

a. Scope of Work - Introduction

When complete, this project will support effective coordination of implementation across many management strategies. By quantifying the effect the Bay Model's BMPs have on each management strategy, positive and negative, jurisdictions, localities and others will be better able to assess the impact of their implementation plans on all management strategies. Additionally, this project will help planners understand potential unintended consequences of BMPs beneficial for water quality but potentially harmful to other resources addressed in Management Strategies.

The project will evaluate the BMPs currently approved for use in the watershed model as well as those in expert panels and on the most recent priority list to evaluate the impact each practice has on each of the 29 Management Strategies. Each BMP will be assigned an impact score ranging from -10 to +10 for each Management Strategy or outcome. Potential references include BMP Panel reports, scientific literature, the previously funded toxic contaminants study and best professional judgment. The awardee will be expected to engage the Management Strategy development teams to brief them and provide the opportunity for their input. The project will produce both a table showing the resulting impact scores as well as a project report that documents the scientific basis for assigning the scores.

The project outputs will be helpful to implementation planners to help maximize benefits across multiple objectives as well as increasing awareness of unintended consequences of BMP implementation scenarios.

b. Scope of Work – Services and Deliverables.

Offerers must outline in detail their ability to perform in timely fashion the following services:

- Organize and lead meetings with Management Strategy Teams – April - August 2016
- Create BMP : Outcome Impact Score Table – October 2016
- Produce a Project Final Report – December 2016

c. Qualifications and expertise

Offeror's personnel assigned to perform under the Contract should have the following experience:

- Knowledge of Bay Program modeling system and BMPs;
- Knowledge of Chesapeake Bay Watershed Agreement;
- Ability to identify and apply relevant research and science to complete the project;
- Experience working with the Chesapeake Bay Program Partnership.

2.5 Scope #5: Targeted Outreach Tools for Fish Consumption Advisories in Diverse Chesapeake Bay Communities

Maximum bid: Bids not to exceed \$50,000

Timeline: Work must be completed by February 1, 2017

a. Scope of Work - Introduction

The diversity management strategy, which acknowledges the importance of engaging more diverse populations in restoration of the Bay also requires policies and practices that address the socioeconomic, historic, cultural, recreational and human health values of these underrepresented populations. The diversity management strategy and both toxic contaminants strategies focus on the need to address toxic contaminants related to fish consumption and subsistence fishing in particular. Both the toxics contaminants policy and prevention management strategy and the toxic contaminants research management strategy also recognize the importance of informing subsistence communities and others about risks of consuming contaminated fish. The policy and prevention strategy, which focuses mostly on PCBs, includes this as a strategic element because it will be effective in building public awareness on the severity and extent of PCBs in the environment, which will translate to supporting legal and political action to reduce PCB inputs. This work is necessary in order to inventory outreach tools and efforts to date, evaluate their effectiveness, develop tools to enhance awareness of contaminants in fish and determine the most effective means of disseminating information. In addition, this work will allow for a future project that addresses subsistence fish consumption when fish advisories are disseminated and accessed successfully.

The project will entail 3 specific phases:

Phase 1 - Inventory existing approaches and study findings and develop enhanced tools - Working with states, NGOs, and collective Bay partnership, collect, inventory, and assess effectiveness of fish consumption advisories based upon previous studies (e.g., Anacostia Anglers study) that have assessed the effectiveness of and compliance with fish consumption advisories Based upon this assessment, develop a set of innovative and revised tools and approaches to increasing awareness and compliance with consumption advisories.

Phase 2 - New tool testing and optimization - Evaluate the effectiveness of the revised tools and approaches particularly as it relates to reaching diverse and underrepresented communities through field testing and/or focus groups (use EJ Screen to identify and target diverse communities). Based upon the evaluation, revise tools and approaches (e.g., website, phone app, etc.) to more effectively reach diverse communities. Modify tools based on feedback.

Phase 3 Implementation and dissemination of new tools - Work with jurisdictions and other Bay Program partners to make the tools available for use in targeted communications regarding the risk from consuming contaminated fish.

b. Scope of Work – Services and Deliverables.

Offerers must outline in detail their ability to perform in timely fashion the following services:

Output 1 - Comprehensive inventory and assessment of state and other outreach tools, approaches, materials and the results of studies on angler knowledge and behaviors with regard to compliance with consumption advisory recommendations.

- Draft Inventory and assessment – Jan 2016
- Final Inventory - Feb 2016

Output 2 - Revised and innovative approaches and tools for outreach with particular focus on diverse communities.

- Draft revised approaches and tools – March 2016
- Final revised approaches and tools – April 2016

Output 3 - Assessment of effectiveness in reaching diverse populations.

- Draft effectiveness assessment – July 2016
- Final effectiveness assessment – August 2016

Output 4 - Revised tools and approaches based upon effectiveness assessment. (e.g. websites, apps, multilingual posters and signage)

- Draft revised tools and approaches – October 2016
- Final revised tools and approaches – November 2016

Output 5 – Activities leading to dissemination and use of the new tools

- Activities to disseminate and use new tools – Dec 2016

c. Qualifications and expertise

Offeror's personnel assigned to perform under the Contract should have the following experience:

- Recipient should possess knowledge and skills in interviewing and surveying diverse user groups who are not traditional attendees and participants in local or Bay program partnership discussions.
- Recipient should be skilled in social marketing frameworks the use and development of a variety outreach tactics, including social media and web tools as well as innovative outreach and education tools.

2.6 Scope #6: Evaluation of Land Use policy options, incentives and planning tools to reduce the rate of conversion of agricultural lands, forest and wetlands.

Maximum bid: Bids not to exceed \$70,000

Timeline: Work must be completed by December 1, 2016

a. Scope of Work - Introduction

There are three key tasks identified in the Land Use Options and Evaluation Management Strategy. This project would build off of the initial work conducted by Tetra Tech in 2014 GIT funding year where they developed a scope of work to determine various options and costs for implementing the three Management Strategy tasks. The Offerer will conduct a comprehensive review/study to implement one of the Management Strategy tasks: “determine the spectrum of existing policy options, incentives and planning tools current being implemented at the local and state level”. This has been identified by Healthy Watershed Goal Team staff and leadership as a key first step in the implementation of the three tasks outlined in the Land Use Options and Evaluation MS. The results will be used to inform the implementation (at a later date) of the additional two MS tasks related to survey and tool development.

The comprehensive review/study task is an essential starting point to inform the second part of the Land Use Options and Evaluation Outcome: “strategies should be developed for supporting local governments’ and others’ efforts in reducing these rates by 2025 and beyond”. Gaining the knowledge of the types of land use policy options and tools being used in the Bay watershed—as well as knowledge of effective approaches used in other large watersheds—will enable the Chesapeake Bay Program partnership and its local and non-governmental partners to develop effective strategies to reduce land conversion rates.

b. Scope of Work – Services and Deliverables.

Offerers must outline in detail their ability to perform in timely fashion the following services:

- Identify relevant land use policy options and planning tools at the state and local level throughout the Bay watershed through internet and literature research. Given the large number of governments in the watershed, the results need not be comprehensive; however, criteria will be developed to guide the research (e.g., examining those jurisdictions facing the most growth pressure) to identify where relevant land use policy options are more likely to be found. Overall the findings are to be organized by category (the categories will be provided).
- Identify relevant policy options and planning tools in complex jurisdictions such as Pennsylvania where many townships make up a county and region and are more of a challenge in terms of coordination across a region to achieve targeted land conservation and targeted land development.
- Conduct interviews with stakeholders (identified in consultation with the Local Government Advisory Committee and GIT4 members) to document known examples of successful land use policies. Additional interviews and research will also need to be conducted outside the watershed, as called for in the Management Strategy, in places including but not limited to Portland, Oregon; The Great Lakes and Puget Sound.
- Compile existing studies and reports related to costs, benefits and effectiveness of both local and state level land use “policy options, incentives and planning tools”. Although this is part of a separate MS

task, we feel it makes sense to include it as part of this GIT project given that the same type of approach—internet research and interviews—is needed to identify these reports, and since such research could facilitate identifying additional effective land use policy options.

- Produce a final report including results of the above tasks. The best examples for each category are to be identified, and where available from existing reports and studies, costs, benefits and effectiveness will be listed. All identified examples, as well as identified reports and studies, are to be described. The final report should include:
 - Results of policy options, planning incentives and tools identified as a result of targeted stakeholder interviews that document known examples of successful policies. Targeted stakeholder interviews within the watershed will be identified in consultation with LGAC. Additional interviews are to be conducted in a handful of other areas with similar pressures as the Chesapeake region (e.g., the Puget Sound, Great Lakes or other area).
 - Summary of land use policy options, planning incentives and tools used throughout the watershed at a variety of local, regional and state scales. This summary should focus on those that have been implemented in higher growth pressure areas and a variety of locales with varying population size, demographic and geographic characteristics. The report should be organized in the categories provided. Those outlined should also include information on cost, benefits and effectiveness.
 - Summary of other existing studies that have been compiled on this topic. Include those specific policy options, planning incentives and tools outlined within these documents as part of the larger report (if they were not already captured).
- Present the results to the Maintain Healthy Watersheds Goal Team
- Organize and conduct a phone call check-in with the Healthy Watersheds Goal Team leadership at the start of the work and then to check-in at the completion of each bulleted item listed above.

c. Qualifications and expertise

Offeror's personnel assigned to perform under the Contract should have the following experience:

- expertise with smart growth issues
- experience with research related to all types of land use policy options.

2.7 Scope #7 Healthy Watersheds Forest/TMDL Project

Maximum bid: Bids not to exceed \$50,000

Timeline: Work must be completed by July 1, 2017

a. Scope of Work - Introduction

Although forest cover is recognized as one of the best land uses for achieving Chesapeake Bay water quality and healthy watershed goals and outcomes, localities in the watershed have long maintained that unless TMDL credit is given for retaining forestland, there is little local incentive for preserving forestland. This project aims to address that issue. The objective is to build the technical and modeling evidence needed to stimulate negotiation of regulatory and policy changes at the federal, state and local levels necessary to drive land use planning and decisions in directions that sustain and maintain forestland and thereby further preserve currently healthy watersheds.

A previous project to be completed in December 2015 built the evidence. This next effort will focus on using that evidence to negotiate with local officials to get land use policies and decisions that retain forestland in healthy watersheds implemented. The plan is to work through the sponsorship of the Rappahannock River Basin Commission (RRBC) with geographically targeted peer to peer focus groups of key elected officials and planning community senior staff and to coordinate that effort with other Chesapeake Bay Program Goal Implementation Team initiatives. This project should identify lessons learned and develop a tool box of local authorities that can then be rolled up into the planned online Chesapeake Bay wide tool box repository and made available throughout the Watershed.

It is anticipated that the toolbox for this project will include items such as proffer guidelines to developers that encourage forest retention in major projects; elements that could be built into site plan reviews that could facilitate forestland retention in rezoning decisions; approaches for determining and designating high conservation value (HCV) forestland in land use planning; language in comprehensive plans that emphasize HCV; zoning criteria that favors retention of HCV forestland; and incentives to private forestland owners to keep their land in forest rather than develop it.

It should be noted that because Virginia is a Dillon Rule state the potential exists that in the peer-to-peer process the participants may identify the need to change state land use enabling legislation to enhance a tool or tools in the toolbox. The RRBC offers a unique vehicle for such a task because members of the House of Delegates and State Senate sit on the Commission along with local elected officials. At this stage one cannot say for certain that such action will be an outcome but it is possible that something will come up in the local negotiation phase and if so, key state policy makers on the RRBC are engaged in the project. In addition, an RRBC member is the current chair of the CBC and the LGAC chair represents a district in the Rappahannock River Basin so coordination with other efforts can be enhanced.

The objective of an earlier project to be completed December 2015 was to model various land use scenarios in the Rappahannock River basin area as a proof of concept pilot using EPA/TMDL model methodologies and land use data provided by the localities to determine if forest retention actions by individual localities would result in a decrease in actual load over their current 2025 projected TMDL load allocation land cover. If “yes”, the modeling data and assumptions would be shared with EPA and localities to determine the present economic value implications of the reduction in nitrogen, phosphorus and sediment loads of alternative land use change scenarios. A Chesapeake Bay watershed-wide methodology and local level metrics could then be developed so the value could be passed on to

localities as a forestland retention BMP in the TMDL model to create an incentive for localities to implement land use policies to retain more high conservation value forestland now.

Data collection and scenario modeling was completed July 31, 2015 using different assessments and evaluations of growth trends in the pilot region in coordination with Chesapeake Bay Program staff and the pilot area localities that paralleled modeling criteria CB staff are using to amend the 2017 CB TMDL model. Scenarios were: (1) the current TMDL 2025 predictions for the localities in the pilot area, (2) a green infrastructure model that significantly factored in increased forestland retention, (3) a model based on projected land use if the comprehensive plans for each locality in the pilot area were followed and implemented; and (4) a hypothetical scenario that was a hybrid between (2) and (3). 2010 and 2015 scenarios were also run to identify trends.

The modeling results confirm the water quality and healthy watershed value of forestland retention and demonstrate that a range of potential offsets are possible depending on the investment made early in BMPs that retain forestland. Quantification of the offset economic values is currently underway.

While this work was being done, an independent review and synthesis of the literature regarding ecosystem services related to water-quality protection and remediation provided by forests was completed. This review evaluated the specific attributes of forestland that contribute to those ecosystem services to provide information for prioritization of forestland retention decisions in the pilot area land-use-scenario modeling exercises. Evaluation of spatial variability and landscape position of water-related ecosystem services provided within classifications of forestland are being developed as part of the literature review. This information along with the model scenario run results will be used in this project to inform the negotiations and discussions with local leaders.

All findings and recommendations from the two earlier efforts were presented on September 23, 2015 at a summit sponsored by the Rappahannock River Basin Commission. A workshop at the summit began discussions with local officials on strategic implementation strategy next steps including policy, incentives and land use planning approaches that would be tested and if successful, captured to create the basis for the tool box that could be incorporated into the planned CBP on-line repository and used by all the jurisdictions in the Chesapeake Bay watershed.

Since land use decisions are largely local, it is important that the forestland retention incentives tool box be built from a bottom up rather than a top down perspective. The components should be credible on a peer to peer basis. The project team's working hypothesis based on what its own research and that of other GIT's has indicated is that crediting forestland retention in the TMDL will stimulate and perhaps drive development of additional incentives at the local level to conserve high conservation value forestland. Therefore, outreach to and negotiation with local government leaders in coordination with the RRBC, EPA and the pertinent Chesapeake Bay Program GITs will be the focus of phase two and would extend the project from its current pilot area in the George Washington Regional Commission service area of the basin to the entire Rappahannock River basin as a proxy for the Chesapeake Bay watershed.

The project sponsors will work extensively through the RRBC, with local government officials within the Basin, as well as LGAC and other GITs to develop the tool box of criteria, incentives, etc. that could be used in land use policy and zoning situations to accurately identify and assign appropriate values to high conservation value forest lands. The forest land TMDL best management practice credit would be the

driver but only one of what could be a package of incentives available.

This project's planned approach is to break the Rappahannock River Basin into three separate study areas – the lower, middle and upper basins because each area will provide very different political, economic, environmental and social perspectives. The project sponsors want to learn how different dynamics change the thinking about what works and doesn't work. The lower basin is primarily rural and its near proximity to the Chesapeake Bay also makes it an area accustomed to dealing with CB issues. The middle basin includes some of the fastest growing urban areas in the Commonwealth and also includes large military facilities. The upper basin with its mountains represents a very different topography – head waters and includes lands outside the CB preservation area as well as federal conservation areas.

Under the sponsorship of the RRBC, a series of peer- to –peer discussion sessions will be held with geographically targeted focus groups of key elected officials and planning community senior staff to identify obstacles, incorporate best practices and lessons learned elsewhere, develop solutions, and build the tool box elements.

EPA and senior CB GIT representatives are also urging Virginia to invite Pennsylvania to join this project on a Commonwealth to Commonwealth basis. The rationale being that as Virginia moves forward with the implementation phase working with local government officials, Pennsylvania could serve the role as a peer reviewer and evaluate Virginia's modeling methodologies, assumptions and assortment of tools to test ways other states could adapt and implement the lessons learned in Virginia. The project sponsors have also reached out to the Chesapeake Bay Local Government Advisory Committee to assist in the extensive negotiations with local government officials that will be required.

Such partnerships could speed adoption and implementation of forestland retention actions across the watershed as the planned 2017 amendments to the TMDL model are adopted and rolled out.

b. Scope of Work – Services and Deliverables.

Offerers must outline in detail their ability to perform in timely fashion the following services:

- Information Gathering and Collaboration: Conduct a series of peer- to –peer discussion sessions in partnership with the Chesapeake Bay Local Government Advisory Committee, the George Washington Regional Commission, The Rappahannock River Basin Commission and within geographically targeted focus groups of key elected officials and planning community senior staff to identify obstacles, incorporate best practices and lessons learned elsewhere, develop solutions, and build the tool box elements.
- Interstate coordination including VA state agencies and local universities.
- Work collaboratively with the VA Healthy Waters and other entities to integrate the data related to VA accepted definitions and criteria for ecological health into the Phase 1 model to ensure interstate collaboration and assure model results and VA healthy waters locations are consistent with regard to identifying and prioritizing resources related high ecological integrity areas. In addition, incorporate this information into the peer to peer discussions with the lower, middle and upper Rappahannock basin as a communication tool to help frame the conversations.

- Identify and reach out to the Commonwealth of Pennsylvania to serve as a peer reviewer of initial findings, evaluate modeling methodologies, and how lessons learned and tools identified could also be implemented in a different locale.
- Include a detail summary report or subsection in final report outlining key collaboration partnerships discussed above, findings and results.
- Policy Content Development and Report: Produce a detailed report that summarizes potential toolbox content that includes lessons learned, policies, guidelines, including but not limited to local proffer guidelines to developers that encourage forest retention in major projects; elements that could be built into site plan reviews that could facilitate forestland retention in rezoning decisions; approaches for determining and designating high conservation value (HCV) forestland in land use planning; language in comprehensive plans that emphasize HCV; zoning criteria that favors retention of HCV forestland; and incentives to private forestland owners to keep their land in forest rather than develop it.
- Identify and convene extensive partners and stakeholders as outlined above to ensure broad cross state collaboration and input. 1/16 – 4/ 16
- Discussions/negotiations across basin with localities to build, test and implement elements of tool kit to drive greater consideration of forestland retention in land use policies and decisions 1/16 – 9/16
- Support EPA and CB GIT efforts to create a Forestland retention BMP in TMDL model: 1/16 – 9/16
- Coordinate with Pennsylvania on lessons learned and tool kit elements. Write up findings, recommendations, proposed strategies, etc. and make available to CB program and CB watershed jurisdictions for implementation. 9/16 – 12/16
- Make teams available to other CB jurisdictions to provide advice on how to implement toolbox elements. 1/17 – 6/17

c. Qualifications and expertise

Offeror's personnel assigned to perform under the Contract should have the following experience:

- Demonstrated knowledge of the physical, biological, political dynamics within the three separate Lower, Middle and Upper geographic regions within the Rappahannock River Basin.
- Demonstrated ability to convene diverse stakeholders within the Commonwealth of Virginia as well as the ability to reach across lines to the Commonwealth of Pennsylvania.
- Demonstrated understanding of the Chesapeake Bay Program's Phase 5.3 watershed model as well as local (VA based) TMDL implementation efforts.
- Demonstrated understanding of multiple Chesapeake Bay Program Goal teams and how this work can serve multiple goals and objectives across those teams.

2.8 Scope #8 Development of Baseline Indicator of Citizen Stewardship

Maximum bid: Bids not to exceed \$75,000

Timeline: Work must be completed by December 1, 2017

a. Scope of Work - Introduction

Building a larger, broader and more diverse community of citizen stewards for watershed restoration is needed to achieve the goals and outcomes outlined in the Chesapeake Bay Watershed Agreement. Citizen stewards bring the action element that will move work forward. More than 600 conservation and watershed organizations in our region educate and empower citizens to restore and protect local rivers and streams. Tens of thousands of local volunteers donate their time and talent to shared goals.

The Citizen Stewardship Management Strategy stated that there must be a means to measure the progress and results of individual and collective citizen stewardship efforts in all communities across the watershed.

In a previous project, methodology was developed to quantify the extent to which the public is taking or willing to take individual actions and behaviors. The actions and behaviors targeted in this measurement tool were selected using guiding criteria such as: (1) involvement of individual decision-making, (2) repetitiveness and ability to be tracked over time, (3) ability to be broadly adopted, (4) ability to have an impact on water health, and (5) ability to engage the public. Pilot level data will have been collected via a randomly sampled general population survey in fall 2015 to test the viability of the survey instrument as well as provide preliminary data to inform the development of an aggregate index of citizen stewardship.

This project will continue and expand the work completed in the previous project of the metric development process in two ways. First, it will scale up implementation of the randomly sampled general population survey piloted previously in order have sufficient data to compute a statistically significant stewardship index, e.g. baseline measure of citizen stewardship, at a state, regional, or if possible a county scale. The costs associated with collecting data increase as you drill down in scale and will be greater than the funds requested for this project. The Bay Program intends to use these funds as seed funds which will incentivize investments from Bay Program partners to leverage implementation of the tool for higher resolution data. The selected contractor will work with Bay Program staff to secure these matching funds. Second, it will assess the extent to which the survey results provide an adequate measure of volunteerism by state and in the region and facilitate development of a methodology to address gaps in the data among stakeholders.

The Bay Program's goal is to increase the number and diversity of trained and mobilized citizen volunteers with the knowledge and skills needed to enhance the health of their local watersheds. The intent of this project is to first, scale up implementation of the randomly sampled general population survey piloted in 2015 in order have sufficient data to compute a statistically significant stewardship index, e.g. baseline measure of citizen stewardship, at a state, regional, or county scale. The survey and methodology for the index have been developed and piloted and the scale up will use the survey instrument previously developed for the pilot. Stewardship behaviors to be surveyed include pet waste, fertilizer use, pesticide use, leaves/lawn clippings, rain barrels, conservation landscaping/rain gardens, tree planting, fats, grease, contaminants down the drain, septic systems, litter and downspout disconnect, civic engagement and volunteerism.

Second, the contractor will analyze the results of the survey, further refine the index methodology previously developed in order to present data to stakeholders, decision makers, practitioner's and others as a baseline of citizen stewardship in the region. This analysis will also focus on the extent to which the survey results

provide an adequate measure of volunteerism by state and in the region. If gaps or inadequacies are identified, the contractor will assist with facilitation of a stakeholder process to develop a methodology to address gaps in the data.

b. Scope of Work – Services and Deliverables.

Offerers must outline in detail their ability to perform in timely fashion the following services:

- Scale up implementation of the randomly sampled general population survey piloted in the earlier project described above to have sufficient data to compute a statistically significant stewardship index, e.g. baseline measure of citizen stewardship, at a state, regional, and/or county scale.
- Use the survey tool developed 2015 to develop this baseline.
- Work with project leads and an advisory committee to develop a strategy and methodology to implement the survey throughout the watershed.
- Work with project leads and an advisory committee to secure matching funds to implement the survey in greater resolution in targeted jurisdictions within the watershed.
- Provide results by state and/or county based on direction provided by the advisory committee and available funds.
- After fielding the survey, work with project leads and advisory committee to further enhance the stewardship index to provide a reasonably accurate baseline of citizen stewardship for the region.
- Field the index and provide summary report and metadata by December, 2017.
- Work with the Bay Program to package relevant data for presentation and for user access via appropriate web based venues.

c. Qualifications and expertise

Offeror's personnel assigned to perform under the Contract should have the following experience:

- At least ten (10) years of experience in the types of market research work described herein.

2.9 Scope #9: Public Access Data Quality Assurance and Application Integration

Maximum bid: Bids not to exceed \$35,000

Timeline: Work must be completed by December 1, 2016

a. Scope of Work - Introduction

As a result of partner efforts over the last several years, existing public access sites have been comprehensively inventoried. This has created a geographic dataset of more than 1,200 existing public access sites. The intent of this effort has been to enhance the public's ability to interact with the waterways and resources of the Bay watershed, develop a strong appreciation for them, and a stronger stewardship ethic. Yet, the public lacks easy, comprehensive information for locating and using these sites. Providing access to the data through the use of APIs and the integration of the data into existing public-focused digital products would address this problem. It would help showcase efforts of Bay partners in enhancing public access opportunities and highlight the need for additional access.

The project would be broken down into three phases:

Phase I: Quality Assurance: Public access data will be run through a quality assurance process to ensure that all points can be mapped safely and all amenities are correctly collected. Previous processes to quality assure the data resulted in the discovery of erroneous latitude and longitude information among other data adjustments.

Phase II: Application Programming Interface (API) Development: A new API would be developed that exposes the public access dataset to be used by other developers and/or organizations around the Bay watershed.

Phase III: Public Access Data Integration: By leveraging the API, public access data will be integrated into existing digital products such as the new Find Your Chesapeake (www.findyourchesapeake.com) web site and the Chesapeake Explorer application. Additionally, this data would be highly valuable for a planned river-based pilot project focused on interpreting a single river system in the Chesapeake such as the James or Potomac River. The access points will be critical parts of planning itineraries or paddling or exploring segments of the selected river.

b. Scope of Work – Services and Deliverables.

Offerers must outline in detail their ability to perform in timely fashion the following services:

- Complete quality assurance process: make quality assured dataset ready for Phases II and III **(February 2016)**
- Complete Application Programming Interface (API): make new API ready with data exposed to be leveraged in digital products **(May 2016)**
- Complete data integration: integrate public access data into existing digital products. Public access data is to be mapped along with over 350 places around the Chesapeake region on the Find Your Chesapeake web site and the Chesapeake Explorer app, facilitating planning of trips (kayaking, canoeing) along the tributaries of the Chesapeake. **(September 2016)**

- Prepare final report (**December 1, 2016**)

c. Qualifications and expertise

Offeror's personnel assigned to perform under the Contract should have the following experience:

- Experience contracting with IT solution providers OR
- In-house experience with data quality assurance, APIs and application design and development.

2.10 Scope #10: Designing a Strategic Outreach Education Program for Elected Officials

Maximum bid: Bids not to exceed \$75,000

Timeline: Work must be completed by February 1, 2017

a. Scope of Work - Introduction

This project will directly support two approaches outlined in the Local Leadership Management Strategy: 1) to “develop, enhance and expand training and leadership programs” and 2) to “improve transfer of knowledge to local officials.” It will build on the previous GIT Funded project and report (“Chesapeake Watershed Local Leadership Development Programs”).

More specifically, this project will support the Local Leadership workgroup in developing specific recommendations related to:

- baseline knowledge and capacity of local officials;
- existing and proposed local officials knowledge building forums (online and in person);
- peer to peer and other mentoring programs for local officials;
- knowledge transfer approaches and mechanisms for local officials; and,
- key knowledge and content for local officials.
- establish metrics to evaluate success of program meant to increase knowledge and capacity of local officials.

The project will focus on information gathering and gap analysis related to audience needs, detailed design of programs, products, etc., and development of cost estimates, funding sources, recommended approaches to sustained implementation, and metrics to evaluate success.

1. In consultation with the Local Leadership workgroup coordinator and Chair, organize and conduct a strategic outputs discussion with the Local Leadership workgroup. The meeting agenda and outcomes should reflect work to date, including Local Leadership Management Strategy, draft Local Leadership workplan, summary of workgroup feedback and recommendations, Assessment of Local Leadership Development Programs report, and other relevant reports and documents.
2. Based upon strategic outputs discussion, recipient will recommend revisions to work plan.
3. In consultation with workgroup coordinator and Chair, recipient will organize, facilitate, and summarize and present findings from up to four focus groups on topics related to management approaches (examples listed above).

Final focus group membership shall be approved by CBPO project lead, but in general shall include local government officials, communications professionals, watershed restoration experts and leadership program experts identified in the Assessment report.

Focus groups should be conducted to reflect information gathering and gap analysis tasks, help develop detailed watershed education and training program design recommendations, including content, costs, funding and sustainability estimates and considerations.

4. Recipient will attend Local Leadership workgroup meeting to report focus group findings to workgroup for discussion.

5. Develop a final report highlighting focus group findings and recommend a preferred delivery mechanism(s) for the watershed education and training. The report should contain specific and detailed suggestions for program (mechanism) content and design as well as costs, recommended funding sources and considerations for sustainability for the recommended delivery mechanism(s). In preparing the final report, the grant recipient should consider the recommendations of the “Chesapeake Watershed Local Leadership Development Programs” report, including the suggested delivery mechanisms as well as other delivery mechanisms identified by focus groups and the workgroup. The report should also suggest key players and stakeholders that should be involved in the effort. (e.g. specific training communities and service providers, state and regional associations, gov’t agencies, etc.)

b. Scope of Work – Services and Deliverables.

Offerers must outline in detail their ability to perform in timely fashion the following services:

- Conduct strategic outputs session and draft workplan revisions/workgroup direction. (2 months from start)
- Conduct up to four focus groups and report findings to workgroup. (All focus groups shall be convened within 4 months of receipt of contract)
- Prepare summaries of findings from focus groups (within 21 days of convening each focus group)
- Draft recommended approaches to implementation of watershed education and training program, including content, detailed design of program, cost estimates and funding sources, and metrics to evaluate success. (8 months from start)
- Prepare final report (10 months from start)

c. Qualifications and expertise

Offeror’s personnel assigned to perform under the Contract should have the following experience:

- General familiarity with strategic planning.
- Experience facilitating diverse group of stakeholders in developing actionable recommendations.
- Experience conducting focus groups.
- Experience with local government officials, including senior staff, appointed and elected officials.
- Familiarity with local government training programs, including cost structure, educational content providers and platforms, e.g. webinars, social media, etc.
- Ability to efficiently identify and assess information through stakeholder interviews, focus groups, web and print searches, etc.
- General knowledge of Chesapeake Bay Partnership and Watershed Agreement Goals and Outcomes.

2.11 Scope #11: Cross-Goal Climate Resiliency Analysis and Decision-Making Matrix and Implementation Methodology

Maximum bid: Bids not to exceed \$80,000

Timeline: Work must be completed by September 1, 2017

a. Scope of Work - Introduction

One of the highest priority key actions included in the Climate Resiliency Work Group's Draft Work Plan is the development of a science-based framework to engage one-on-one with GITs to identify, assess, evaluate and revise, as necessary, climate-related elements of individual management strategies.

This project would result in the development of a Climate Resiliency Analysis and Decision-Making matrix and implementation methodology to analyze climate-related factors for 24-independent Management Strategies. Using the Climate Smart Conservation Framework as a guide, the matrix would be used to conduct a structured decision-making process with work one-on-one with select Chesapeake Bay Program Goal Implementation Teams and/or Work Groups to : 1) review management goals and outcomes and establish baselines; 2) identify data, research, monitoring and assessment needs; 3) evaluate the effectiveness of existing BMP's; and 4) consider appropriate adjustments, revisions or modifications to proposed management actions or best management practices.

Funding would support the matrix development and implementation of two Cross-Goal Climate Resiliency Analysis and Decision-Making Matrix Pilot Projects (Protected Lands and Wetlands).

The Chesapeake Bay Watershed has experienced changes in climate over the last century. On the whole, the Watershed is experiencing stronger and more frequent storms, an increase in heavy precipitation events, increasing bay water temperatures and a rise in sea level, trends that are expected to continue over the next century. These trends, which vary both spatially and temporally throughout the Watershed, are altering the ecosystems, the watershed, and the human communities of the Chesapeake Bay and will require changes in policies, programs and projects to successfully achieve restoration, sustainability, and conservation and protection goals for the Chesapeake Bay watershed.

The Watershed Agreement includes 29 individual strategies to be developed and implemented by six GITs and various Work Groups. In many cases the effect of climate change on individual outcomes is not well understood, and in other cases it is established and moving forward. For example, with respect to goals and outcomes for Vital Habitats, the outcome of creating/reestablishing 85,000 acres of wetlands and enhancing the functions of another 150,000 acres should be carefully coordinated to include climate change resilience.

The Climate Resiliency Work Group has adopted a management approach that will require close coordination across the GITs to ensure that efforts to consider climate change effects in the strategies are consistent and complementary in their approach. The Management Strategy lays out a process to work closely with the GITs to prioritize those aspects of climate change that have the most impact on achieving outcomes, establish a research agenda for those outcomes where the effect of climate change is not well understood, and determine whether suitable monitoring exists within the Chesapeake Bay to establish baselines and assess progress related to climate change.

One of the highest priority key actions included in the Climate Resiliency Work Group's Draft Work Plan is the development of a science-based framework to engage one-on-one with GITs to identify, assess, evaluate and revise, as necessary, climate-related elements of individual management strategies.

The Climate Resiliency Management Strategy framed its Management Approach around the Climate-Smart Conservation Cycle developed by an expert group empanelled by the National Wildlife Federation (Stein et al. 2014). The Climate-Smart Cycle features seven steps in an iterative process, to be informed by monitoring and assessment at each step of the cycle.

Using the Climate Smart Conservation Cycle as a guide, the project would result in the development of a Climate Resiliency Analysis and Decision-Making Matrix to enable individual Work Groups to complete the following iterative steps: 1) review management goals and outcomes and establish baselines; 2) identify data, research, monitoring and assessment needs; 3) evaluate the effectiveness of existing BMP's; and 4) consider appropriate adjustments, revisions or modifications to proposed management actions or best management practices.

The broad objective of the Watershed Agreement Climate Resiliency Goal is to increase the resiliency of the CB Watershed to the effects of climate change and their interaction with other existing stressors. To achieve this, broad integration of climate considerations across all other goals and outcomes will be necessary. To that end, 17 Management Strategies reference climate-related factors; and 8 of these include a climate component within the specified management approach. This project will result in the development of a Climate Resiliency Analysis and Decision-Making Matrix for use over time to the benefit of all GITs; with near-term cross-goal benefits for the Protected Lands and Wetlands Work Groups.

This project will require the use of secondary data and will therefore require a quality assurance project plan. Sequencing of the proposed projects, including expected project deliverables and outputs are outlined below.

1. Within one week of award, hold a project kick-off call with Chesapeake Bay Program Project Lead(s).
2. Two weeks after project award, submit draft Work Plan and Quality Assurance Project Plan. Work will begin after approval of the Work Plan by Project Lead.
3. Complete a Literature Review of existing ecosystem-based climate resiliency approaches, aids (e.g., tables, matrices) and processes or products for adaptation decision making. This will include an annotated bibliography and memo synthesizing available information/tools with potential for application to the Chesapeake Bay Program. This task should include an examination of both peer reviewed and grey literature. (May 1, 2016)
4. Compile existing climate change vulnerability research and data, including available assessment products and tools, specific to protected lands and wetlands within the Chesapeake Bay region. This task should include a compilation of both peer reviewed and grey literature, data sets and tools, mapping layers and products. It should also include an examination of products resulting from STAC workshops on Uncertainty and Climate Forecasts and Projections to take place in Winter, 2016. (June 1, 2016).
5. Design a Climate Resiliency Analysis and Decision-Making Matrix for Protected Lands and Wetlands. The matrix is intended to be used to conduct a structured decision-making process to :
1) review management goals and outcomes and establish baselines; 2) identify data, research, monitoring and assessment needs; 3) evaluate the effectiveness of existing BMP's; and 4) consider

- appropriate adjustments, revisions or modifications to proposed management actions or best management practices. (July 1, 2016).
6. Prepare and design structured decision-making workshops, including the development of Workshop Facilitation and Implementation Guidance Tables. (August, 2016).
 7. At least two weeks prior to first set of in-person workshops, conduct a pre-workshop call with each work group (Wetlands and Protected Lands – 2 calls total). (September, 2016).
 8. Facilitate an in-person workshop with each work group (Wetlands and Protected Lands – 2 workshops total) to populate Climate Change Analysis component of the Matrix (Climate Smart Cycle Steps 1-4). This process will allow for Work Group consideration of appropriate adjustments, revisions or modifications to proposed management actions or best management practices. Outputs to include workshop notes and results summary. (Oct – November, 2016).
 9. Prioritize and collect data and information on identified critical gaps required to complete matrix development and structured decision-making processes. (December, 2016 - February, 2017).
 10. At least two weeks prior to second set of in-person workshops, conduct a pre-workshop call with each work group (Wetlands and Protected Lands – 2 calls total). (March, 2017).
 11. Facilitate a second workshop with each work group (2 workshops total) to: 1) complete Matrix Analysis process and revise, modify, prioritize and select management actions for integration into Management Strategies; and 2) to develop recommendations for augmenting existing Management Strategies through the “Adaptive Management” framework. (April - May, 2017).
 12. Prepare a Synthesis and Results Write-up report, including: 1) final matrix documents for each work group; and 2) recommendations for refinement of matrix and/or implementation process with other Chesapeake Bay Program Work Groups or Goal Implementation Teams. (September, 2017).

b. Scope of Work – Services and Deliverables.

Offerers must outline in detail their ability to perform in timely fashion the following services:

- Develop work plan and quality assurance plan (Due: Two-weeks after project award)
- Conduct literature review (Due: May 1, 2016)
- Compile existing climate change vulnerability research and data (Due: June 1, 2016)
- Create Climate Resiliency Analysis and Decision-Making Matrix (Due: July 1, 2016)
- Prepare and design workshop (Due: August 1, 2016)
- Conduct pre-workshop calls (2 calls total) (Due: September 30, 2016)
- Conduct first set of facilitated, in-person workshops (2 workshops total) (Due: November 30, 2016)
- Prioritize and collect data and information to fill critical gaps (Due: February 28, 2017)
- Conduct second set of facilitated, in person workshops (2 workshops total) (Due: March 31, 2017)
- Produce synthesis and results write-up (Due: September 1, 2017)

c. Qualifications and expertise

Offeror’s personnel assigned to perform under the Contract should have the following experience:

- Facilitation skills
- Research and analytical skills
- Expertise in structured decision-making processes

- Expertise in basic ecosystem management and conservation planning relevant to the Chesapeake Bay region
- Expertise in climate change vulnerability assessments, coupled with adaptation planning principles and actions
- Familiarity with Chesapeake Bay Program and Bay Agreement Management Strategies
- Technical report writing and editing

SECTION III – ADDITIONAL SERVICES

Additional Services. The Contract Officer may request ancillary or additional services within the capacity of the Contractor as may be useful or necessary in the interests of the Trust and the Project for any of the above Scopes of Work.

SECTION IV - PROPOSAL FORMAT AND SUBMISSION INFORMATION

4.1 **Principal Solicitation Officer and Issuing Office:**

Contract Officer: Jamie Baxter
Telephone Number: 410-974-2941 x105
E-Mail: jbaxter@cbtrust.org
Address: Chesapeake Bay Trust
60 West St., Suite 405
Annapolis, MD 21401

The sole point of contact for the purpose of this RFP is the Contract Officer.

4.2 **Prospective Offerors:** An “Offeror” is a person or entity that submits a proposal in response to this RFP.

4.3 **Cancellation; Discretion of Contract Officer:** This RFP may be canceled in whole or in part and any proposal may be rejected in whole or in part at the discretion of the Contract Officer. In addition, the Contract officer has the right to negotiate separately with any Offeror in any manner which will best serve the interests of the Trust. The Contract Officer may waive any mandatory condition or minimum qualification if she determines that such action is in the best interest of the Trust.

4.4 **Submission Instructions/Proposal Closing Date:**

Offerors must submit proposals using our Online Application System, located at:

https://www.GrantRequest.com/SID_1520?SA=SNA&FID=35071

no later than **4:00 p.m. on January 7, 2016** (the "**Closing Date**"). Requests for extensions will not be granted, late applications will not be accepted, and the online funding opportunity will close promptly at 4:00 pm. **Offerors are strongly encouraged to submit at least a few days prior to the deadline** given potential for high website traffic on the due date. The Trust cannot guarantee availability of Online Application System technical assistance on the deadline date. If email confirmation of submission is not received within two business days, please contact the Principal Solicitation Officer listed in Section 4.1.

Proposals are irrevocable for 90 days following the Closing Date.

4.5 **Proposal Format:** An Offeror may bid on more than one scope of work outlined in Section II above in separate proposals. Each proposal (i.e., a submission in response to each scope of work) must include responses to a-f in a concise (≤5 pages) description. Items g) and h) may be addressed outside of

the 5 page limit and may be attached as additional pages. All material must be submitted in one electronic file.

- a) Names of individuals providing the services and number of years of experience in such areas
- b) Scope on which the bidder is bidding: Scopes #1-11
- c) The individual's proposal for how to address the elements of the scope(s) of work and required outcomes described in the services and deliverables section (Section II above).
- d) Response to the qualifications section: a description of the experience to provide services in the topics described above as described in Section II,
- e) Names, phone numbers, and email addresses of three references
- f) **The Offeror shall submit a budget including total number of hours and hourly rate of compensation for the services to be performed during the term of the Contract broken down by direct rate, overhead/benefit rate, profit, and direct expenses; any additional costs required to complete the project; and total compensation.** Please use the budget form provided in the on-line application and, if needed, provide additional justification or explanation as an attachment to the proposal. The proposed rates of compensation will be irrevocable for a period of 90 days from the Closing Date, or if modified during negotiations, for a period of 90 days from the date such modified rates are proposed by the Offeror.
- g) The resume or CV of the individual(s) providing the service
- h) Any other information which the Offeror considers relevant to a fair evaluation of its experience and capabilities.

Subcontracting Opportunities. It is assumed this solicitation will result in eleven small procurements that will not provide realistic opportunities for subcontracting, though multiple organizations may apply as a collaborative or partnership with an identified project lead. If, however, a Proposer considers subcontracting of services to be available, they should so specify, and in that case demonstrate compliance with Good Faith Efforts to engage Disadvantaged Business Enterprises.

4.6 **Professional Liability Insurance:** The Offeror shall agree to maintain in full force and effect during the term of the Contract usual and customary amounts of liability insurance coverage in connection with the performance or failure to perform services under the Contract.

4.7 **Eligible Organizations:** No entity may enter into a Contract with the Chesapeake Bay Trust under this funding opportunity unless the entity has provided its DUNS number to the Trust.

SECTION V - EVALUATION PROCEDURE

5.1 **Qualifying Proposals:** The Contract Officer will review each proposal for compliance with the minimum qualifications set forth in "Offeror's Minimum Qualifications."

5.2 **Deviations and Negotiation.** The Contract Officer shall have the sole right to determine whether any deviation from the requirements of this RFP is substantial in nature, and the Contract Officer may reject non-conforming proposals. In addition, the Contract Officer may waive minor irregularities in proposals, allow an Offeror to correct minor irregularities, and negotiate with responsible Offerors in any manner deemed necessary or desirable to serve the best interests of the Project.

5.3 **Evaluation.** Proposals shall be evaluated by the Contract Officer and a review committee. This evaluation will be made on the basis of the evaluation criteria discussed below and may include any oral presentation that may be required by the Contract Officer at their discretion. The Contract Officer reserves the right to recommend an Offeror for contract award based upon the Offeror's proposal without oral presentations or further discussion. However, Contract Officer may engage in further discussion if they determine that it might be beneficial. In such case, the Contract Officer will notify those responsible Offerors with whom further discussion is desired. In addition, the Contract Officer may permit qualified Offerors to revise their proposals by submitting "best and final" offers.

5.4 **Evaluation Considerations:** Proposals and any oral presentation by Offerors who meet the minimum qualifications set forth in Section II will be evaluated on the basis of the following factors:

- A. **Proposed Team (Specific Individual(s) Responsible for Performance of Contract).** Evaluation of the qualifications, reputation, and compatibility with needs of the Trust and the Project of the individual or individuals who will perform the Contract.
- B. **Proposed Approach.** Evaluation of the work to be performed to accomplish the goals outlined in the Scopes of Work in Section II.
- C. **Experience of Offeror.** Evaluation of the quality and quantity of the Offeror's experience and expertise in the areas proposed, supported by references.
- D. **Capacity.** Evaluation of the Offeror's ability and commitment to meet timeline for the Project.
- E. **Price and Hours.** Hourly rate and number of hours to be devoted to the project.

SECTION VI: OTHER INFORMATION

6.1 **Disclosure:** Proposals submitted in response to this RFP may be provided to government agencies and be subject to disclosure pursuant to the provisions of the Access to Public Records Act of the State Government Article of the Annotated Code of Maryland (the "Public Information Act"). Offerors must specifically identify those portions of their proposals, if any, which they deem to contain confidential or proprietary information and must provide justification why such materials should not, upon request, be disclosed by the State under the Public Information Act.

6.2 **Expenses:** The Trust and the Contract Officer are not responsible for any direct or indirect expenses which an Offeror may incur in preparing and submitting a proposal, participating in the evaluation process, or in consequence of this solicitation process for any reason.

6.3 **Acceptance of Terms and Conditions:** By submitting a proposal in response to this RFP, (A) the Offeror accepts all of the terms and conditions set forth in this RFP; (B) the Offeror, if selected for award, agrees that it will comply with all federal, State, and local laws applicable to its activities and obligations under the Contract; and (C) the Offeror shall be deemed to represent that it is not in arrears in the payment of any obligation due and owing the United States Government or the State of Maryland or any department or unit thereof, including, without limitation, the payment of taxes and employee benefits, and, if selected for award, that it shall not become so in arrears during the term of the Contract.

6.4 **Disadvantaged Business Enterprise/Minority Business Enterprise (DBE/MBE) Participation:** This RFP encourages the participation of DBE/MBE firms (members of a group as defined in the State Finance and Procurement Article of the Annotated Code of Maryland (the "Procurement Article"), Section 14-301(f)(i)(ii)). The Trust encourages DBE/MBE firms who meet the minimum qualifications to respond to this RFP.

6.5 **Parties to the Contract:** The contract to be entered into as a result of this RFP (the "Contract") shall be between the successful Offeror (the "Contractor") and the Trust, and may be subject to EPA approval prior to Contract award.

6.6 **Contract Documents:** The Contract shall include the following documents: this RFP, the Contractor's Proposal (to the extent not inconsistent with the RFP or the Contract), and the Contract. In the event of an inconsistency, the Contract shall have priority over the other documents and specific conditions of the Contract shall have priority over General Conditions.

6.7 **Contract Term:** The Contract term shall commence as of a date to be specified in the Contract and, unless sooner terminated in accordance with the Contract, shall end when all work authorized under the Contract has been successfully completed, but no later than six (6) months after the commencement date, unless the Contract is renewed or extended at the sole option of the Contract Officer.

6.8 Billing Procedures and Compensation.

A. Method. The Contracts to be entered into as a result of this RFP will not exceed the small procurement threshold fixed at 41 U.S.C. 403 (11) (currently \$100,000.) The Contractor(s) must comply with billing procedures as may be required by the Contract Officer and US EPA. These may entail monthly reporting of time and eligible expenses, or may be based upon satisfactory completion of benchmark tasks.

B. Records. The Contractor(s) shall submit invoices in a form acceptable to the Contract Officer and maintain records relating to the costs and expenses incurred by the Contractor(s) in the performance of the Contracts for a period of three years from the date of final Project payment under the Contracts.

6.9 **Certification.** The Offeror shall certify that, to the best of its knowledge, the price information submitted is accurate, complete, and correct as of the Closing Date, and if negotiations are conducted as of the date of "best and final offer."

6.9 **Branding.** All products (outreach materials, events) will be branded with EPA and Trust logos.