2016 Goal Implementation Team Projects Process for Project Funding and Request for Ideas

Chesapeake Bay Program
Science. Restoration. Partnership.

AT A GLANCE

This solicitation is focused on projects that remove barriers limiting accomplishment of Management Strategies/Work Plans. This funding is not intended to support implementation of large-scale restoration, protection, or stewardship projects; rather, it is intended to support tools or analyses that will make restoration, protection, and stewardship easier in the future.

Who is eligible to participate?
Members of Goal Implementation Teams (GITs) and GIT work groups

Deadline:
July 15, 2016

I. Overview

The Environmental Protection Agency Chesapeake Bay Program Office (CBPO) has made funding available for key projects intended to accelerate accomplishment of the Management Strategies developed under the 2014 Chesapeake Watershed Agreement. Chesapeake Bay Program Goal Implementation Teams (GITs) and Workgroups are eligible to participate. The goal of these funds is to identify and remove key barriers that are hindering accomplishment of management strategies and work plans.

II. Project Selection Process

Any member of a GIT or GIT work group may submit a project idea, following the instructions in Section VIII below, to his or her GIT leadership. Each GIT leadership team is responsible for facilitating a process for prioritizing ideas generated within the GIT and reporting out a set of top three priority ideas using the criteria outlined in Section III below. The GIT Chairs will collaborate to form a consensus set of prioritized projects based on available funding levels and will submit that list to the CBPO Director for approval. For 2016, the approximate total amount available is $775,000. Selected project ideas will be assigned a GIT project lead, who will work with the Chesapeake Bay Trust (the Trust) to ready the selected project ideas for the contracting phase and play a key role in seeing the project through to completion. All projects will be openly competed by the Trust to satisfy federal procurement guidelines.

III. Criteria

The following criteria will be used by GIT chairs and reviewers to rank project ideas. Projects:

- must support Chesapeake Bay Program goals, outcomes, management strategies, and work plans (required);
- must aim to remove a key existing barrier to implementation of work plan task(s) (required);
- must include deliverables that can serve as a catalyst for expanded action (required);
- must be projects that have not been previously undertaken (i.e., must have unique deliverables);
- should meet more than one Bay Program outcome, particularly outcomes that fall under more than one GIT (preferred); and
- should aim to complete all the components of an outcome's decision framework (examples: developing a monitoring plan or establishing criteria for measuring progress) (preferred).

IV. Eligible Project Size and Types

Typically, project budgets are in the $25,000-$75,000 range. Example project categories include but are not limited to:

Metric Development and Tracking

- Support for science needed to develop metrics
- Metric/indicator development

Work plan Implementation Projects

- Economic modeling
- Database development

- Performance measure development
- Monitoring/tracking program development
- Data collection program development
- Assessments of data to evaluate progress on metrics
- Modeling support
- Policy research and recommendations
- Training
- Mapping, lands assessment
- Baseline analyses
- Environmental monitoring
- Environmental demonstration projects

V. Timeline

June 30, 2016	Deadline for project idea submission to GIT leadership (Table 1 in Section VIII below).
July 15, 2016	Deadline for GIT leadership to submit top three project proposals from within each GIT.
July 30, 2016	External technical peer review comments are solicited on the top three proposals from each GIT for the purpose of strengthening the project designs.
Mid Aug, 2016	GIT Chairs select the finalists from the full suite of projects based on criteria in Section III, comments from the external review, and input from other Bay Program components.
Aug 15, 2016	GIT Chairs present a final list of projects for funding to the CBPO Director for final approval. CBPO Director will notify Management Board and GIT Chairs of final approved projects list.
Sept. 15, 2016	GIT leads finalize detailed scopes of work (Table 2 in Section VIII below).
Oct. 2016	The Trust issues a Request for Proposals to seek bidders.
Nov. 2016	Bids from contractors are due; the Trust releases bids for external peer review.
Dec. 2016	The Trust compiles reviews, works with the GIT technical project leads to identify winning bidders, initiates sub-award contracts.
Jan. 2016	GIT technical leads meet with awardees to commence projects.

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VI. Role of a GIT Technical Project Lead

Each project selected for funding will have assigned a "GIT technical project lead" (GIT lead) by the GIT Chair. The GIT lead may be the individual who submitted a project idea in response to this solicitation or may be a different individual assigned by GIT leadership. The GIT lead will have several responsibilities over the course of the project:

- Providing a detailed scope of work for the project, with guidance from Chesapeake Bay Trust, to be used to procure a contractor
- Helping to identify at least three potential bidders to accomplish the work outlined in the scope of work
- Reviewing proposals as part of a review team;
- Helping to monitor progress and the acceptability of deliverables of the winning contractor.

An individual named as a GIT lead is not permitted to have a conflict of interest with any organizations that respond to the Trust Request for Proposals. Should a GIT lead be conflicted with any bidders, he or she will be replaced at least for the duration of the bid phase.

VII. Idea Development Assistance

Interested parties are strongly encouraged to work with their GIT leadership (chairs, coordinators, and staffers) prior to completing the form in Section VIII. Additionally, contact:

Hannah Martin
Chesapeake Bay Trust
(410) 974-2941 ext. 112
hmartin@cbtrust.org

Greg Allen
Environmental Protection Agency
(410) 267-5746
allen.greg@epa.gov

VIII. Project Idea Submission Form

Please fill out the following form and submit via email to your GIT Chair and coordinator (see http://www.chesapeakebay.net/about/organized for contact information).

Table 1: Project Description

Your Name:	Daniel Jones
Goal Implementation Team:	Toxic Contaminants Workgroup (TCW)
Project Title:	Detection of sealcoat sources of Polycyclic aromatic hydrocarbons (PAHs) using remotely sensed data
Project Type (See Section IV above)**:**	Mapping, lands assessment; Metric/indicator development
Goal/Outcome:	The goal of this project is to develop calibration spectra for detecting coal-tar-based sealcoat of varying ages from remotely sensed data that could then be applied to document the used of sealcoat throughout the Chesapeake Bay watershed. This pilot study would establish the spectra through a combination of field and laboratory analyses, and use these spectra to classify remotely sensed imagery for a select region in the Chesapeake Bay watershed.
Estimated Cost:	$75,000

Justification: Provide a 2 paragraph description of the work and why it is needed. It is recommended that you draw upon one or more work plans.	Previous research by the U.S. Geological Survey found residences with coal-tar-based sealcoat have 25 times higher concentrations of PAH particles in their dust than homes not adjacent to coal-tar sealed pavements. This elevated exposure increases an occupant's lifetime risk of cancer by 38 times with the greatest risk occurring in early childhood. PAHs from coal-tar-based sealants are also toxic to the environment. Runoff from surfaces treated with the sealant contains 65 times higher concentrations of PAHs than runoff from unsealed surfaces, with levels remaining high for months to years following application. Runoff from freshly sealed surfaces have been proven acutely toxic to common water quality test species (Fathead minnows, mummichogs, and water fleas), effects of which include deformities, stunted growth, and death. In the Chesapeake Bay, liver tumors in bottom feeding species in the Anacostia and Elizabeth Rivers have been statistically linked to exposure with PAH contaminated sediments. As of 2010 Maryland, Virginia, and DC all list impairments associated with PAHs. Remediation projects are currently underway or have been completed in the Elizabeth River. 12 river segments in the District of Columbia have been designated as impaired, and has led to fish consumption advisories. Virginia lists its impairments based on fish tissue samples and includes 74 acres of lakes, and 7 river miles. In the Chesapeake Bay Watershed there are currently 4 local bans and one Federal Ban on coal-tar based sealants. These include the counties of Anne Arundel, Montgomery, and Prince George's in Maryland, the City of Annapolis, and the District of Columbia. There is an outstanding need throughout the Bay to document the occurrence of sealcoat-based PAH impairments to help guide future remediation efforts. As a first step to identifying these impairments, we propose a satellite-imagery-based method for documenting locations with sealcoat applications that could be applied to the Bay.

Methodology: Provide a 1-2 paragraph description of how the work is likely to be accomplished.	This work will have two primary phases: the development of sealcoat spectral curves and application of the developed curves to classify remotely sensed data. During phase one, a number of field sites where sealcoat of varying ages has been applied will be identified using aerial imagery throughout the MD-VA region. Moderate to large sized parking lots will be the primary focus to assure their detection from 30m satellite data. Samples of coated surfaces will then be collected from each identified location, classified based on age, and analyzed using a hyper spectral microscope to establish their spectral signature. In phase two, satellite-derived spectral imagery within the study region will be collected for the closest date to our field sampling campaign. Spectral curves established for each sealcoat sample will then be utilized to classify each satellite dataset to identify surfaces with sealcoat applied. Comparisons between lab spectra and satellite spectra will be made to assess accuracy in classification methodology.
Cross-Goal Benefits: What other goals may be advanced through this work?	Outcomes from this project would help fill data gaps in current ongoing efforts of the EDC research group to map various contaminant sources throughout the Bay. PAHs are underrepresented in the collected datasets, and this effort would help fill that gap at a relatively low cost.
Are you willing to serve as GIT lead (see description of the role in Section VI above) If no, suggest other GIT lead	Yes

If your project idea is selected for funding, you or the assigned GIT lead will be required to provide the following information:

Table 2: Project Details

GIT Lead Name:	
Goal Implementation Team:	
Project Title:	
Refined Cost Estimate:	
Estimated Project Duration:	
Statement of Work: Provide a detailed scope of work to be accomplished by the contractor, including information on methods, stakeholder participants, deliverables, due dates and intended uses of the products.	
List specific deliverables/products to be provided by the contractor:	
QAP: Will environmental data be generated, and will a quality assurance plan be required?	
Qualifications: List skills and experience required of winning bidder:	
Bidders List: Due to federal procurement guidelines, project ideas MUST be open to	

competitive bidding. List at least three entities to include in the request for proposals	
Reviewers List: The Trust will use external review to evaluate bids. List at least 3 potential reviewers without a conflict of interest with likely bidders.	