FY 2014 GIT Focused Funding Proposals Summary
August 4, 2014

Project Priorities

EPA is eager to provide funding for projects that support program goals, outcomes, and management strategies. Projects in the following categories should receive stronger consideration:

1. *Management Strategy Development*
   a. Writing and editing of management strategies
   b. Literature searches supporting management strategy development
   c. Travel support for subject matter experts and stakeholders in management strategy development
   d. Projects addressing uncertainties and gaps to strengthen management strategies
2. *Metric Development and Tracking*
   a. Support for science needed to develop metrics
   b. Metric/indicator development
   c. Performance measure development
   d. Monitoring/tracking program development
   e. Data collection program development
   f. Assessments of data to evaluate progress on metrics
   g. Modeling support
3. *Implementation Projects*
   a. Pilot projects
4. *Meeting Support*
   a. Facilitation of GIT processes and meetings supporting management strategies
   b. Place-based meeting tools for collaborative decision-making

Proposed Projects Summary

Pg	*ID*	*Title*	*Proposer GIT*	*Cost*
		Management Strategy Development		
5	1	CBSAC Research Needs	1	$85,000
6	2	Habitat/fisheries data and literature synthesis plus shallow water survey development	1/2	$50,000
7	3	Black Duck Prioritization	2	$40,000
8		Healthy Towns/Healthy Bay: Expanding Tree Canopy in the Chesapeake	2	$25,500
9	4	Summarizing potential benefits of nutrient and sediment practices to reduce toxic contaminants	3	$50,000
10-11	5	Leveraging local lessons / Development of a crowd sourced database as part of the Chesapeake Network to promote shared outreach and marketing case studies, results, and materials	4/5	$70,000
12	6	Advancing WIPs and MS4s through voluntary actions on privately owned land: An assessment of opportunities, partnerships, and recommended policy and funding actions	5	$25,000
13	7	Create a baseline for inventory, tracking, and marketing local government financing strategies in support of WIPs and MS4s	5	
14	8	Synthesis of Local Leadership Development Programs	5/6	$40,000
15	9	Indigenous cultural landscape mapping	5	$50,000
16	10	Facilitation and technical content development support for GIT development of management strategies	6	$50,000
17-18	11	Climate change, marsh erosion, and the Chesapeake Bay TMDL	1-5	$82,000
19-20	12	Summarizing science to support management strategies of the new Bay Agreement in support of the Fisheries and Habitat Goal Teams	3	$25,000
		Metric Development and Tracking		
21	13	Forage fish indicator/metric development	1	$50,000
22	14	Baywide Oyster Population Assessment	1	$50,000
23	15	Striped Bass Health Indicator Development	1	$40,000
24	16	Stream Health Outcome Baseline/Defining new Metric	2	$30,000
25	17	Brook trout monitoring support to EBTJV	2	$40,000
26	18	Extension of the atmospheric deposition nitrogen load estimates from 1983 to 2013	3	$47,600
27	19	Re-calibrated Tools for Determining Sources of Anthropogenic Stress Affecting Benthic Community Condition in the Chesapeake Bay	3	$33,500
28	20	Citizen monitoring of land conversion to development, tree cover, and riparian buffers	3/4	$60,000
29	21	Identification of additional healthy waters	4	$50,000
30-31	22	Quantifying floodplain ecosystem services in the Chesapeake Bay watershed	4	$83,000
32	23	Metrics finalization and state implementation plans/Environmental literacy planning	5	$75,000
33	24	Development of baseline indicator of citizen stewardship	5	$75,000
		Implementation		
34	25	Accelerate wetland restoration in support of WIPs/GIT integration	2	$50,000
35	26	Landscape level demonstration project designed to test incentive for forestland retention through the TMDL model	4	$50,000
36	27	Public access site mobile application: providing the public the ability to locate a variety of public access sites	5	$30,000
			Total	1,331,100

Management Strategy Development Proposals

Project ID	1
Goal Team	GIT 1
Project Title	CBSAC Research Needs
Goal/Outcome	Sustainable Fisheries Goal, Blue Crab Management Outcome
Cost Estimate Range and recommended funding vehicle	Grant to jurisdictions (CBIGs) or academic institutions/CBSAC members to complete identified research or data analyses $ 85,000
Project Duration	Fall-Winter 2014
Priority Area Addressed	Management Strategy Development
Activity Description	Each year, CBSAC identifies specific research and data needs in their Blue Crab Advisory Report. This project would support one or multiple CBSAC research needs that would significantly contribute to our understanding of both the blue crab population and the fishing industry. Specific projects may include analysis of overwintering mortality, survey of the peeler pot industry, and analysis of juvenile recruitment.
Outputs	Improved knowledge of blue crab population dynamics and/or industry operation and effect on the population
Justification for FY 14 funding	The research projects CBSAC identified would contribute significantly as the Fisheries GIT and jurisdictional managers begin to develop the Management Strategy for the blue crab management outcome. Information on the population, especially the juveniles, and industry operation would better inform management decisions and allow for increased accountability. In order to evaluate an allocation-based management system, managers need more data on the fishery.

Management Strategy Development Proposals

Project ID	2
Goal Team	Joint GIT 1 and GIT 2
Project Title	Habitat/Fisheries Data and Literature Synthesis plus shallow water survey development
Goal/Outcome	Sustainable Fisheries Goal, Fish Habitat Outcome
Cost Estimate Range and recommended funding vehicle	Cooperative agreement with jurisdictions (CBIGs) to utilize and build on their current data efforts $50,000
Project Duration	Summer-Fall 2014
Priority Area Addressed	Management Strategy Development
Activity Description	This project would compile and assess the available data throughout the Bay watershed related to fish species and their use of habitat. This could include data on habitat quality, characterization, distribution of fish species, catch data, etc. This compilation of available data will help target habitat areas for conservation/restoration that may be important for fish species for nursery, foraging, refuge, etc. Additionally, the results from the data and literature review should be used to develop recommendations to establish new shallow water surveys and scope out the necessary components. Shallow water surveys are critical to monitor and characterize important habitat areas.
Outputs	Data synthesis; recommendations for new shallow water surveys
Justification for FY 14 funding	This project specifically addresses the fish habitat outcome by gathering and exploring all available data that characterizes Bay habitats and fish usage of this habitat. This data could help identify priority habitat areas for restoration/conservation. The recommendations for the shallow water surveys will provide the basis for establishing and procuring resources for potential new surveys.

Management Strategy Development Proposals

Project ID	3
Goal Team	GIT 2
Project Title	Black Duck Prioritization
Goal/Outcome	Vital Habitats Goal, Black Duck Outcome
Cost Estimate Range and recommended funding vehicle	FWS pass through to ACJV to offset dedicated GIS staff support or Interagency Agreement with USGS for GIS staff on-site at the CBP $40,000
Project Duration	Fall 2014-Fall 2015
Priority Area Addressed	Management Strategy Development
Activity Description	Data Analysis and Targeting Efforts: Based on the results of the USGS energetic study, determine the priority habitat to protect/restore/enhance in order to support black duck populations.
Outputs	Targeted areas of priority black duck habitat
Justification for FY 14 funding	Black ducks are a priority species and addressed in the EO, new agreement, and will be a CBP indicator. Once the results of the energetics study are released, it will be imperative to determine the priority habitat (how much of what and where) in order to support a wintering population of 100,000 black ducks.

Management Strategy Development Proposals

Project ID	
Goal Team	GIT 2/Forestry Workgroup
Project Title	Healthy Towns/Healthy Bay: Expanding Tree Canopy in the Chesapeake
Goal/Outcome	Vital Habitats Goal, Tree Canopy Outcome
Cost Estimate Range and recommended funding vehicle	Total: $25,500 Summit Budget: Coordination (staffing) $ 6,500 Meeting Facility Cost (estimate) 2,000 Attendance – 100 @ $75/person 7,500 Meeting Materials $ 800 Outreach and Registration $ 500 **Total Cost $17,300** Management Strategy Development Budget: Staffing $ 4,500 Regional meetings/Focus groups (3) $ 600 Travel costs $ 600 Report preparation and synthesis $ 2,500 **Total Cost $ 8,200** Potential funding vehicle: grant to Alliance for the Chesapeake Bay
Project Duration	Summit would occur in October 214
Priority Area Addressed	Management Strategy Development
Activity Description	The Forestry Workgroup (FWG) proposes to: 1) work with the Alliance for the Chesapeake Bay to hold a Tree Canopy Summit and 2) use the momentum of the Summit to develop a draft Management Strategy for this outcome. Step #2 will include following-up and further developing ideas generated at the Summit.
Outputs	Increased collaboration with stakeholders and jurisdictions in regards to the development of the UTC Management Strategy.
Justification for FY 14 funding	The new Tree Canopy Outcome means some substantial changes to how localities will approach, track, and report accomplishments for Expanded Tree Canopy. The rich array of experience gained by partners over the last 12 years will be a vital asset. A regional 2-day Summit, to be held in October 2014, which will provide tools and examples to kick-start the new tree canopy outcome. A focus of the Summit will be effective means of integrating an expanding tree canopy into existing municipal programs. The Summit will be a key step in developing a Management Strategy for this outcome. Using information prepared for the Summit and outcomes flowing out of the Summit, the Forestry Workgroup will help a team of experts to develop a Management Strategy for the Expanded Tree Canopy outcome that will apply to all developed areas of the Chesapeake watershed.

Management Strategy Development Proposals

Project ID	4
Goal Team	GIT 3
Project Title	Summarizing potential benefits of nutrient and sediment practices to reduce toxic contaminants
Goal/Outcome	Toxic Contaminants Goal, Research and Policy/Prevention Outcome Would also provide benefits to the Fisheries GIT (reduce effects of toxic contaminants on fisheries) and enhance collaboration with Water Quality GIT (nutrient and sediment reduction outcomes)
Cost Estimate Range and recommended funding vehicle	$50,000. Grant to NGO or academic institution to use existing water-quality contracts (such as to TetraTech).
Project Duration	6 to 9 months
Priority Area Addressed	Management Strategy Development: literature searches.
Activity Description	A literature search would summarize potential benefits of nutrient and sediment practices to also reduce toxic contaminants. Toxic contaminants come from many of the same sources as nutrients and sediments in the watershed. Some of the major sources, and associated toxic contaminants, include wastewater treatment plants (pharmaceuticals, personal care products, and industrial contaminants), chemicals related to crop production (pesticides and insecticides), manure (chemicals to promote animal growth and health), and urban areas (a variety of chemicals in stormwater runoff and sediment). There is an opportunity to identify which practices being implemented for the Bay TMDL (to reduce nutrients and sediment) would also reduce toxic contaminants and the relative amount of reduction that might occur across the range of BMPs (to the extent such information exists).
Outputs	Report with summaries of which nutrient and sediment practices provide additional benefits to reduce toxic contaminants.
Justification for FY 14 funding	Management strategies for toxic contaminant outcomes need to be developed by June, 2015. The report from this proposed activity would provide valuable information about current practices being used for nutrient and sediment reduction could be used as the foundation for toxic contaminant strategies. The findings could provide a significant cost savings to the CBP partnership by taking advantage of efforts to meet the Bay TMDL to also reduce many toxic contaminants.

Management Strategy Development Proposals

Project ID	5
Goal Team	Joint GIT 4 and GIT 5
Project Title	Leveraging local lessons / Development of a crowd sourced database as part of the Chesapeake Network to promote shared outreach and marketing case studies, results, and materials
Goal/Outcome	Stewardship Goal, Citizen Stewardship Outcome
Cost Estimate Range and recommended funding vehicle	$35,000 Work through the Chesapeake Network and collaborate with other partners to build a web-based mechanism for data and management. Potential engagement of a database management group. Consultancy?
Project Duration	Aug 2014-Nov 2015
Priority Area Addressed	Management strategy development
Activity Description	Develop a white paper summarizing local lessons learned from healthy waters protection, where approaches and ideas that have been successful could be highlighted in some way and understood, systemized and replicated. Make recommendations on best ways to disseminate. (Cacapon, WV could be a starting place.) A draft frame has been created in order to collect and share outreach program data and resources. The frame would be translated into an online database linked through the Chesapeake Network that would be crowd sourced and query-able in order to allow for resource sharing and longitudinal tracking of outreach program elements.
Outputs	Recommendations to local governments and partners on what it takes to achieve successful healthy water protection. The first standardized environmental outreach and marketing program database allowing for improvement of management strategies, sharing of resources, and tracking of social science case studies across the region.

Justification for FY 14 funding	Healthy water protection depends on locally-based action (government, citizens, NGOs, etc.). Understanding and communicating key factors that drive success is essential to meet this Bay agreement outcome, especially given the broad, dispersed nature of localities throughout the Bay watershed. This was the highest rated priority recommendation by the Chesapeake Bay Trust's 2014 Stormwater Outreach Forum participants. The intent of this initiative would be to develop a database built on an existing frame already developed by Erin Ling at Virginia Tech. The database would provide a much needed space for organizations to share outreach program information and resources. Data would be provided in a standardized format that would allow for longitudinal tracking of programs by BMP, program strategies employed, and demographic information, as well as relative rate of success of program elements. The database would also allow for organizations to develop or modify existing outreach programs based on shared success, and would provide the ability to conduct program analysis by BMP, resulting in improved outreach program design, increased citizen stewardship, increased partnerships, and improved proficiency in diversity and inclusion efforts. Chesapeake Bay Funding agencies could require grantees to share project outcomes and resources as transferrable tool kits within the database, resulting in less duplication of effort and lower cost of outreach program development and implementation over time.

Management Strategy Development Proposals

Project ID	6
Goal Team	GIT 5 (Outcome GIT is GIT 3)
Project Title	Advancing WIPs and MS4s through voluntary actions on privately owned land: An assessment of opportunities, partnerships, and recommended policy and funding actions
Goal/Outcome	Water Quality Goal, 2025 WIP Outcome (or Stewardship Goal, Citizen Stewardship Outcome)
Cost Estimate Range and recommended funding vehicle	$25,000; could be coordinated and produced by the Bay Program through existing workgroups, STAC members or another entity.
Project Duration	Aug 2014-Nov 2015
Priority Area Addressed	Serve as justification for development of federal state and local management strategies to advance citizen stewardship programs that directly address WIPs
Activity Description	This would be a peer reviewed report that would accomplish the following: 1) Document the need and opportunity to achieve WIP targets and local water quality goals through scaled up implementation of selected best management practices on private lands, specifically residential homeowners. 2) Estimate the cost and benefit of scaled up outreach programs implemented by local governments and NGO's often as required by MS4 permits, 3) Define known best practices of successful outreach programs and recommend specific policy and funding actions to better incorporate best practices into existing programs and direct funding to expand potentially high impact, low cost strategies to achieving WIP goals, and 4) demonstrate the potential of outreach partnerships with local watershed groups to achieve WIP and MS4 results
Outputs	A report with appropriate backing from Bay Program Partners
Justification for FY 14 funding	The vast majority of the land in the watershed is privately owned and there are a growing number of programs that are publically and privately funded to encourage adoption of best management practices that reduce the impact of that land on local streams and rivers. Many of these programs are being implemented by local governments, to a varying degree of success, as a requirement of their stormwater permits. Reports issued by James River Association and others have indicated that effective outreach programs that result in the adoption of relatively low cost BMPs by homeowners and others could significantly reduce the cost of local WIPs, yet they do not define a realistic level of scaled up implementation of these programs or what an effective outreach program is and what it might cost. This information, which would combine landscape level GIS and modeling analysis with proven social science predictors, approaches, and models exists but has not been compiled in a focused report on the true potential of these increasingly popular programs.

Management Strategy Development Proposals

Project ID	7
Goal Team	GIT 5
Project Title	Create a baseline for inventory, tracking, and marketing local government financing strategies in support of WIPs and MS4s
Goal/Outcome	Stewardship Goal, Local Leadership Outcome
Cost Estimate Range and recommended funding vehicle	Grant Amendment/Cooperative Agreement with Alliance for the Chesapeake Bay in support of LGAC. $25,000
Project Duration	September 2014-June 2015
Priority Area Addressed	Foundation for Management Strategy and Metric Development
Activity Description	Provide support to the Local Government Advisory Committee to survey and inventory local governments to determine the current level of spending and the proposed strategies for financing of stormwater, water quality, and watershed/stream restoration activities needed to achieve the goals of the Agreement. By identifying strategies being used and considered by local governments, and evaluating their potential, the project can also characterize successful strategies within the context of community characteristics (borough, city, county/rural urban, MS4, etc.) Work could also create a baseline and metric for LGAC that could be marketed to encourage engagement with and further participation of local governments. Build from data being collected by Town Creek, Environmental Finance Center, and others.
Outputs	Report of financing status, successful strategies, and baseline metrics for tracking trends.
Justification for FY 14 funding	The Project directly addresses the need to expand knowledge of financing and begin to track local leadership initiative.

Management Strategy Development Proposals

Project ID	8
Goal Team	GIT 6
Project Title	Synthesis of Local Leadership Development Programs
Goal/Outcome	Stewardship Goal, Local Leadership Outcome
Cost Estimate Range and recommended funding vehicle	$20,000 Grant or contract
Project Duration	September 2014-October 2014
Priority Area Addressed	Management Strategy Implementation
Activity Description	Identify and research existing local leadership development programs within the Chesapeake Bay watershed that have a focus on local watershed restoration efforts. Provide a description of these programs that can be used to inform a decision on the need for a Chesapeake Bay Program local leadership development program. The synthesis will focus on making meaningful connections between programs that are intended to build the leadership capacity for local leadership in regards to Chesapeake Bay restoration; however, it is possible that valuable insight may come from leadership development programs in other regions of the country and world. This work will provide insight into the current efforts for building local leadership in the Chesapeake Bay watershed, identify gaps in the current efforts, as well as discover successful strategies that are being used in other places outside of the watershed. Research will be used to assess whether a leadership development program is appropriate, necessary and will lead to enhanced local stewardship and increased Bay restoration efforts.
Outputs	A synthesis of existing local leadership development programs that will inform a decision on the creation of a Bay Program funded local leadership training program. A potential training program will equip local leaders across the watershed to implement the new *Agreement* management strategies using collaborative leadership techniques, coalition building and adaptive management.
Justification for FY 14 funding	The project specifically addresses the local leadership outcome and provides a means of increasing knowledge and fostering leadership. The synthesis will provide the Bay Program with a greater understanding of existing local leadership development programs in order to determine whether an additional program with a focus on local watershed restoration is necessary.

Management Strategy Development Proposals

Project ID	9
Goal Team	GIT 5 (Outcome GITs are GITs 3 and 4)
Project Title	Indigenous Cultural Landscape Mapping
Goal/Outcome	Land Conservation Goal, Land Use Methods/Metrics Outcome
Cost Estimate Range and recommended funding vehicle	$35000 (scalable based on geographic extent of effort – lower number for 1 river, higher number for 2); Cooperative agreement with CESU (Cooperative Ecosystems Studies Unit – a university consortium) or NGO
Project Duration	Aug 2014-July 2015
Priority Area Addressed	Fills land conservation priority dataset gap for informing strategic land conservation.
Activity Description	This effort will develop identify and map Indigenous Cultural Landscapes (ICLs) along two key rivers (York/Pamunkey/Mattaponi and the Rappahannock). ICLs encompass the totality of natural and cultural resources that supported a particular American Indian group. These two rivers are known for their significance to American Indians both in the early 17th century and today, yet the specific landscapes and resources important to tribes has not be documented or mapped. This prevents focused strategic conservation of these resources. This project will build on methodology established through pilot mapping in 2013 on ICLs along the Nanticoke and Lower Susquehanna.
Outputs	Mapped ICL datasets for York/Pamunkey/Mattaponi Rivers and for Rappahannock River; plus report documenting process and resource values.
Justification for FY 14 funding	Since the 2009 EO, conservationists have consistently identified major gaps in conservation priority datasets for culturally significant landscapes. This is particularly the case for landscapes important to groups underrepresented in the conservation field, including American Indians, African Americans and Latinos. An extensive methodology has been developed for documenting ICLs in collaboration with tribes, ethnographers and archaeologists. It has been piloted along two rivers already with work underway on the Potomac. This work needs to be expanded to create a more comprehensive dataset to inform strategic conservation.

Management Strategy Development Proposals

Project ID	10
Goal Team	GIT 6
Project Title	Facilitation and Technical Content Development Support for GIT Development of Management Strategies
Goal/Outcome	All Outcomes
Cost Estimate Range and recommended funding vehicle	$50,000 (approximately 500 hours of contracted support)
Project Duration	September 2014 – June 2015
Priority Area Addressed	Development of Management Strategies
Activity Description	- Meeting coordination and facilitation - Outreach to stakeholders for input and/or participation in management strategy development - Review and editing of strategy documents including work plans - Estimate required resources for potential activities - Forecasting outputs and environmental response from specific activities or across a range of activities - Development of options for metrics - Estimating cost benefit for activities/outputs - Assessing programs and actions undertaken by other watershed restoration programs - Analysis of alternative GIT governance structures for implementing strategies that ensures engagement of key stakeholders at the GIT level
Outputs	
Justification for FY 14 funding	Creating management strategies with work plans is a sizeable undertaking that will need to take place under an accelerated timeline. The proposed project will establish capacity for support that will directly benefit the GITs.

Project ID	11
Goal Team	GIT 3 (Outcome GITs are GITs 1-5)
Project Title	Climate Change, Marsh Erosion and the Chesapeake Bay TMDL
Goal/Outcome	Climate Resiliency Goal, Monitoring and Assessment Outcome The work provides key support for the CBP 2017 Midpoint Assessment decisions on climate change.
Cost Estimate Range and recommended funding vehicle	The cost of this project is $82,000, and the vehicle would be an existing IA with the CoE. Collaborative work with USGS and CBP research institutions would be supported by this effort.
Project Duration:	2 years
Priority Area Addressed	1) Climate resiliency, 2) addressing uncertainties and gaps to strengthen management strategies 3) Metric development and tracking in climate change (modeling support)
Activity Description	Rising sea level in Chesapeake Bay is inexorable. One environmental effect associated with sea level rise is marsh erosion. Secondary effects of sea level rise on marshes may include transition in marsh type due to change in elevation or predominant salinity regime. Marsh erosion can impact water quality in two fashions. The first is the effect on light attenuation and biogeochemistry associated with eroded materials released to the water column. The second, often overlooked, effect is the loss of marsh function. Beneficial functions include retention and burial of suspended solids, nutrient uptake and sequestration, and nitrogen removal through denitrification. Loss of these functions has the potential to affect water quality standards enforced through enactment of the recent total maximum daily load (TMDL). We propose to examine the potential impact of marsh loss through a three-phase program including: • Phase I – Estimate marsh loss and transition due to sea level rise • Phase II – Investigate the reactivity of material eroded from marshes and released to Chesapeake Bay waters • Phase III – Quantify effects of marsh loss on water quality and examine implications for TMDL Phase I – Estimate Marsh Loss and Transition Sea level rise can enhance marsh loss through multiple processes. The fundamental process is inundation when the rate of sea level rise exceeds the rate at which marshes accrete particulate material. Loss also occurs through physical processes when wave energy dissipated on the shore is enhanced by higher mean sea level. Another potential for loss occurs when increased salinity, associated with higher sea level, impacts vegetation adapted to a different salinity regime. The projected sea level rise will be taken from climate change scenarios currently being run by the Chesapeake Bay Program (CBP). Based on the multiple approaches including collaboration with USGS and university work in this area, a projection of marsh loss due to sea level rise will be completed. Volumes and rates of material loss will be subsequently calculated.

	Phase II - Investigate the Reactivity of Material Eroded from Marshes Particulate material eroded from marshes includes inorganic sediments, organic carbon, organic nitrogen, and organic and inorganic phosphorus. The carbon and nutrients have the potential to react in the bay water column and/or after settling to bottom sediments. Research and experiments will be conducted by a local research institute/university to examine this. Phase III - Quantify Effects of Marsh Loss on Water Quality and the TMDL This phase will involve multiple model activities and will interface with key CBP activities of 1) estimating the impact of climate change, including but not limited to sea level rise, on the Bay, 2) examining strategies to mitigate climate change impacts, and 3) decide how the consideration of climate change would modify Chesapeake TMDL activities.
Outputs	Deliverables from this investigation will include: • A CBP consensus projection of marsh loss due to sea level rise. • Understanding of how marsh loss would influence Bay water quality • Understanding of how loss of marshland effects watershed function • Key management support for the CBP's 2017 year of decision on climate change
Justification for FY '14 funding	This work needs to begin now in order to support decisions on climate change in the Chesapeake 2017 Midpoint assessment. The work will also provide valuable climate change mitigation information of immediate importance to the CBP States and jurisdictions.

Project ID	12
Goal Team	GIT 3 (Outcome GITs are GITs 1 and 2)
Project Title	Summarizing science to support management strategies of the new Bay Agreement in support of the Fisheries and Habitat Goal Teams.
Goal/Outcome	Sustainable Fisheries Goal, Fish Habitat Outcome
Cost Estimate Range and recommended funding vehicle	25,000
Project Duration:	1 year
Priority Area Addressed	Developing management strategies: literature search.
Activity Description	The new Chesapeake Agreement has a focus on sustaining fisheries and recovering the habitat and water quality they depend on. To write management strategies, having summaries about policies and practices that have worked would be a great benefit. Several partners, working through STAR, produced the "New Insights Report," which summarized the effects of practices to improve water quality and discussed future challenges. The proposed activity is for a second literature review and report that would support development of management strategies for items in the new Bay Agreement. The STAR would work with fisheries and habitat goal teams to identify potential stories and management actions to be highlighted. Some examples that could be developed include: • Terrestrial and aquatic species recoveries – fish and wildlife management o Toxics controls plus habitat protection - Bald eagle, Osprey return links water quality, fisheries and riparian zone habitat management. Toxics links: Success managing DDT, however, recent work highlights emerging contaminants concerns as a new challenge. o Dam Removals – Another dimension of reconnecting habitats that have been fragmented; Bay miles have been reopened reconnecting Alosid and other species habitats. This is another tool in the management tool box for improving the brook trout occupancy outcome o Harvest restrictions: Wood duck, striped bass, crabs, black bear – Habitat is one piece of the fisheries puzzle. Harvest restriction as a tool to success when habitat exists but harvest pressures limits living resource recoveries should be illustrated and demonstrated as another. o Oysters example and Law Enforcement is a success story! Top down management successes. It is hard to recover and sustain keystone species if people are poaching them : http://baltimore.cbslocal.com/2014/01/16/police-seize-truck-filled-with-undersized-oysters/ o Wetlands and Invasive species controls – nutria control and habitat recovery at the Blackwater NWR Wetland Complex:

	http://www.fws.gov/chesapeakebay/pdf/CBNEPNutriaNews201302.pdf • Economic spin-offs of restoration: A new peer-reviewed report, *Restoration Returns: The Contribution of Partners for Fish and Wildlife Program and Coastal Program Projects to Local U.S. Economies*, finds that, these programs created more than 3,900 jobs in Fiscal Year 2011, generating a total economic stimulus of $327.6 million.
Outputs	Working with the Communications WG and the Goal Teams, one or two of the items would be written during the year highlighting the management technique and where success has been achieved in species recoveries.
Justification for FY '14 funding	The variety of outputs support GIT needs for understanding how to develop a management plan with tools that have produced success in recovering species and their habitats. The products would become part of a "tool box" of success stories that can be applied to management strategies for achieving outcomes of the new Bay Agreement.

Metric Development and Tracking Proposals

Project ID	13
Goal Team	GIT 1
Project Title	Forage Fish Indicator/Metric Development
Goal/Outcome	Sustainable Fisheries Goal, Forage Fish Outcome
Cost Estimate Range and recommended funding vehicle	Grant or cooperative agreement with academic institution (UMD, UMCES, etc.) to analyze data to develop metrics $50,000
Project Duration	January 2015-June 2015
Priority Area Addressed	Metric Development and Tracking
Activity Description	Use available data on forage species in the Chesapeake Bay to develop indicators/metrics that quantify some aspect of the forage base. Recommendations of how to proceed with developing such metrics will emerge from the STAC Forage Base Workshop planned for November 2014.
Outputs	Forage species indicators/metrics
Justification for FY 14 funding	This project specifically addresses the forage fish outcome and will apply recommendations from the November 2014 STAC workshop to move forward with quantifying the Chesapeake Bay forage base.

Metric Development and Tracking Proposals

Project ID	14
Goal Team	GIT 1
Project Title	Baywide Oyster Population Assessment
Goal/Outcome	Sustainable Fisheries Goal, Oyster Outcome
Cost Estimate Range and recommended funding vehicle	Grant to jurisdictions (CBIGs) to support necessary analyses to complete Oyster Population Assessment project being conducted by VIMS $50,0000
Project Duration:	Fall-Winter 2014
Priority Area Addressed	Metric Development and Tracking
Activity Description	Funding would support necessary data analyses identified by VIMS that are needed to complete the Baywide Oyster Population Assessment being conducted by VIMS. The project aims to evaluate the status of the Chesapeake Bay oyster stock with respect to harvest pressure, disease, etc.
Outputs	Metric and information on the status of the Baywide oyster stock
Justification for FY '14 funding	This research project was a priority identified by the Fisheries GIT as it would provide more comprehensive information on the status of oysters Baywide. There is currently no Baywide indicator or metric for oysters and this project would provide important information on the current stock status.

Metric Development and Tracking Proposals

Project ID	15
Goal Team	GIT 1
Project Title	Striped Bass Health Indicator Development
Goal/Outcome	Sustainable Fisheries Goal, Fish Habitat Outcome
Cost Estimate Range and recommended funding vehicle	Grant or cooperative agreement with jurisdictions (CBIGs) or academic institution (UMD, UMCES, etc.) to analyze data to develop metrics $40,000
Project Duration:	Fall-Winter 2014
Priority Area Addressed	Metric Development and Tracking
Activity Description	Use findings from current research and surveys to develop a CBP indicator of striped bass health. This indicator could incorporate information the diet/nutritional status of striped bass based on current research efforts. The indicator could also document disease prevalence and associated interactive effects from hypoxia on diseased fish.
Outputs	Indicator/publically available information on the most recent data on striped bass health
Justification for FY '14 funding	Striped bass are an iconic Bay species and very valuable fishery in the Bay. Tracking health of Chesapeake Bay striped bass would help inform coastwide management as the Bay serves as the spawning grounds for a majority of the coastwide stock. Tracking health factors such as the interactive effects of disease/hypoxia and nutritional status could help better understand fisheries response to climate change and forage availability respectively.

Metric Development and Tracking Proposals

Project ID	16
Goal Team	GIT 2
Project Title	Stream Health Outcome Baseline/Defining new metric
Goal/Outcome	Vital Habitats Goal, Stream Health Outcome
Cost Estimate Range and recommended funding vehicle	EPA contract with Vistronix to dedicate portion of Jackie Johnson's time/staff capacity to analysis of multi-state data; ICPRB oversight? $30,000
Project Duration	EO Action Plan milestone commits to be done by end of FY2015
Priority Area Addressed	Metric Development and Tracking
Activity Description	Data Analysis and Metric Development: Determine a new metric to measure stream health and determine the overall health of streams in the watershed.
Outputs	Re-assessed baseline for stream health and recommendations for how to adapt the stream health outcome to be multi-dimensional
Justification for FY 14 funding	A reassessed baseline is committed to in the new Agreement. A revised outcome that expands beyond the Chessie BIBI would more accurately and effectively measure the health of streams, which will be critical with implementation of the Regional General Permit.

Metric Development and Tracking Proposals

Project ID	17
Goal Team	GIT 2
Project Title	Brook Trout Monitoring Support to EBTJV
Goal/Outcome	Vital Habitats Goal, Brook Trout Outcome
Cost Estimate Range and recommended funding vehicle	FWS pass through funding to EBTJV (Science and Data Committee) possibly via USGS Non-tidal network? $40,000
Project Duration	Fall 2014-Spring 2015
Priority Area Addressed	Tracking and Accountability in support of Management Strategy implementation
Activity Description	Data management system analyst: dedicated staff time to design and pilot test consolidated multi-state system for reporting to CBP
Outputs	Agreed-upon method of tracking/reporting annual progress
Justification for FY 14 funding	A baseline is necessary to develop the management strategy to support the Brook Trout Outcome in the new Watershed Agreement and to measure and track progress toward the 2025 goal.

Metric Development and Tracking Proposals

Project ID	18
Goal Team	GIT 3
Project Title	Extension of the Atmospheric Deposition Nitrogen Load Estimates from 1983 to 2013
Goal/Outcome	Water Quality Goal, Water Quality Standards Outcome The improved and extended quantification of atmospheric deposition supports all GITs particularly the Vital Habitats, Water Quality, and Healthy Waters GITs. The work provides key support for the CBP 2017 Midpoint Assessment decisions on atmospheric deposition loads.
Cost Estimate Range and recommended funding vehicle	The cost of this project is $47,600, and the vehicle would be through an addition to Pennsylvania's CBIG. Development of this work would be by Penn State which has extensive experience and knowledge of this work.
Project Duration:	10 months
Priority Area Addressed	1) Support for science needed to develop metrics 2) Performance measure development, 3) Monitoring./tracking program development, 4) addressing uncertainties and gaps to strengthen management strategies and 5) Metric development and tracking modeling support
Activity Description	The proposed work plan is for the extension and refinement of the ammonium and nitrate atmospheric wet deposition models from the original 1984 to 2005 time-span currently used by the CBP (Grimm and Lynch, 2005; Grimm, 2007) to an extended period of 1983 to 2013. This will update the load source of what is among the highest nitrogen inputs and bring it up to the current period. From the 1980s to the present the atmospheric nitrogen loads had the greatest reduction of all the load sources, including point and nonpoint sources. The record of hourly wet deposition from 1983 to 2013 will support all of CBP's modeling efforts in the watershed and estuary, and will assist in the tracking of an important source of nitrogen loads to the Chesapeake.
Outputs	Deliverables from this investigation will include: • Daily, hourly, and annual estimates of nitrate wet deposition in a continuous time-series from January 1, 1983 to December 31, 2013. • Daily, hourly, and annual estimates of ammonia wet deposition in a continuous time-series from January 1, 1983 to December 31, 2013.
Justification for FY '14 funding	This work needs to begin now in order to support decisions on atmospheric deposition loads of nitrogen in the development of the Phase III Watershed Implementation Plans (WIPs) that will guide and plan implementation for the last phase of the Chesapeake restoration. The work will also provide valuable atmospheric deposition information of immediate relevance to the CBP States and jurisdictions.

Metric Development and Tracking Proposals

Project ID	19
Goal Team	GIT 3
Project Title/ Outcome Addressed	Re-calibrated Tools for Determining Sources of Anthropogenic Stress Affecting Benthic Community Condition in the Chesapeake Bay
Goal/Outcome	Toxic Contaminants Goal, Research Outcome
Cost Estimate Range Funding vehicle	$33,500
Project Duration:	1 year
Priority Areas Addressed	Metric Development and Tracking
Activity Description	The objectives of this project will be to: (1) re-calibrate previously developed discriminant analysis tools (Dauer et al., 2002) to improve function simplicity and classification efficiencies using additional data sets; (2) develop new habitat specific and/or Bay-wide analytical tools using different techniques (e.g. PCA, logistic regression, PERMANOVA/CAP analysis) to identify sources of anthropogenic stressors using all available data; and (3) compare classification efficiencies between analytical approaches to provide the best possible method for stress source identification. Analytical tools developed will be assessed solely on their ability to correctly classify a data set(s) with a known number of sites within each category of stress. All analyses will be conducted in coordination with ongoing efforts designed to recalibrate the Benthic Index of Biotic Integrity.
Outputs	Final deliverables will include a final report describing all results of the study along with recommendations for implementing any and all diagnostic tools developed.
Justification for FY '14 funding	Although a diagnostic tool has been previously developed to identify anthropogenic sources of stress to degraded benthic communities in Chesapeake Bay, this tool was limited in scope because it was capable of identifying contaminant stress if and only if it did not occur in combination with other stressors (e.g. low dissolved oxygen) and it had a relatively high overall error rate of 25% (Dauer et al., 2002). Limitations to the diagnostic tool developed were due primarily to limitations in sample size in combination with the number of variables used, the spatial scale at which the analytical tool was developed and the statistical approaches readily available at the time. In the last decade, additional benthic biological and contaminants data have been collected which could be used to recalibrate and improve the existing analytical tools and new statistical approaches which may be more appropriate given the limitations of the available data.

[*] Dauer, Lane & Llansó. 2002. Development of Diagnostic Approaches to Determine Sources of Anthropogenic Stress Affecting Benthic Community Condition in the Chesapeake Bay. Final Report to U.S. EPA Chesapeake Bay Program by Old Dominion University.

Metric Development and Tracking Proposals

Project ID	20
Goal Team	Joint GIT 3 and GIT 4
Project Title	Citizen Monitoring of Land Conversion to Development, Tree Cover, and Riparian Buffers
Goal/Outcome	Land Conservation Goal, Land Use Options Evaluation Outcome
Cost Estimate Range and recommended funding vehicle	$60,000; Existing IAG and GDA contract; USGS
Project Duration	1 year
Priority Area Addressed	Management Strategy Development, Metric Development and Tracking, & Implementation Projects
Activity Description	Pilot a distributed citizen monitoring effort to develop precise and accurate county-level estimates of impervious surface change from 2001 – 2010 and characterize the nature of that change (i.e., conversion of forest vs. farmland) using newly developed free image classification software (Land Image Analyst 1.1) developed by the USFS, USGS, and GDA Corporation. The USGS will develop a sampling framework sufficient for monitoring impervious surface change at the county level. Citizens will be able to download multi-date imagery for sample areas from the web, classify impervious surfaces for those areas, characterize pre-development land use on a web-form, and then upload their results for QA/QC by CBP Partners.
Outputs	Sampling design, free Land Image Analyst 1.2 software, estimates of impervious surface change for select counties within each Bay state, and an implementation plan for impervious surface change assessments for all counties within the Chesapeake Bay Watershed
Justification for FY 14 funding	This project will help inform the management strategy for addressing multiple facets of the Land Use Methods and Metrics Development Outcome in the 2014 Bay Agreement. This Outcome states: “Continually improve the knowledge of land conversion and the associated impacts throughout the watershed. By 2016, develop a Chesapeake Bay watershed-wide methodology and local-level metrics for characterizing the rate of farmland, forest and wetland conversion, measuring the extent and rate of change in impervious surface coverage and quantifying the potential impacts of land conversion to water quality, healthy watersheds and communities. Launch a public awareness campaign to share this information with citizens, local governments, elected officials and stakeholders.”

Metric Development and Tracking Proposals

Project ID	21
Goal Team	GIT 4
Project Title	Identification of additional healthy waters
Goal/Outcome	Healthy Watersheds Goal, Healthy Watersheds Outcome
Cost Estimate Range and recommended funding vehicle	$50,000 Consultancy
Project Duration	1 year?
Priority Area Addressed	Metric Development and Tracking
Activity Description	Hire consultants to make use of the USGS NAWQA methodology to identify additional high quality waters (reference sites) in the watershed. This methodology was used in the following NAWQA publication: http://water.usgs.gov/nawqa/ecology/pubs/cir-1391/index.html. This is a cross-GIT project because part of the methodology depends on finding unaltered fish, algae and benthic invertebrate communities in streams and rivers. Activity would include up meetings between USGS NAWQA and states to consider identifying additional high quality waters based on NAWQA reference sites (this is not saying that everybody must identify such waters based on the NAWQA methodology). Use funds for presentations from NAWQA with state elected officials as a way to gain leverage for protection of the reference sites. Since NAWQA looks at a variety of factors that could impact biological communities in streams, use funds to have them work together with STAC to identify the most important factors (biophysical, land use, etc.) for ensuring healthy watersheds remain healthy and for ensuring maintenance of brook trout populations (e.g., not all urbanized or agriculture-dominated watersheds have impaired waters - why? what factors allow for this to happen?), which can then be shared as guidance (using funds to develop the guidance document) with local government planners through LGAC and environmental groups through CAC.
Outputs	Identification of new healthy watersheds
Justification for FY 14 funding	Parts of the Chesapeake watershed are unassessed for healthy waters. In order to effectively develop management strategies for healthy waters protection, we need to know where they are.

Metric Development and Tracking Proposals

Project ID	22
Goal Team	4
Project Title	Quantifying Floodplain Ecosystem Services in the Chesapeake Bay Watershed
Goal/Outcome	Land Conservation Goal, Land Use Methods/Metrics Outcome
Cost Estimate Range and recommended funding vehicle	Cost estimate: The estimate of costs is $83,151 and is primarily salary funds to cover required economics expertise, biophysical processes expertise, GIS analyses, and model development. USGS in kind services of $61,960 is offered as part of preliminary analyses being done to map floodplains in selected pilot watersheds in the Chesapeake Bay watershed. This floodplain mapping project is being done summer 2014, and is titled "Mapping Fluvial Landforms in Floodplains Related to Ecosystem Functions". This work is being done by West Virginia University through the Great Lakes Cooperative Ecosystem Study Unit (CESU). The product will be directly used in this proposed ecosystem services assessment to estimate potential ecological production and ecological and socioeconomic value analyses. Funding Vehicle: There is an active EPA/USGS (EGSC) funding vehicle that may be used for this work.
Project Duration:	The initial floodplain mapping exercise required for this work is underway (summer 2014). This proposal will use the product of that effort to provide an estimate of ecological production and ecological and socioeconomic value analyses for an ecosystem services assessment designed for land use decision support. The ecosystem services assessment would take place October 2014 – September 30, 2015.
Priority Area Addressed	This assessment of ecosystem services is designed to incorporate social and economic factors with ecological parameters in support of land use decision making. This work will incorporate information from, and be of interest to: (1) vital habitats (focus on living resources); (2) water quality; (3) healthy watersheds; and (4) Chesapeake stewardship. Data and information from the first three may be used in the assessment, and the inclusion of socioeconomic factors will help foster Chesapeake stewardship.

Activity Description	Ecosystem services are the resources and products provided by the natural environment that are of value to people for their ability to provide biotic support (e.g., clean air, clean water, food production), regulation (e.g., climate and nutrient cycling), and cultural and recreational benefits. Protecting and restoring these services are principle goals of the Bay TMDL and the President issued Executive Order 13508 and they are increasingly being recognized and prioritized by state and local governments. Despite these goals, there continues to be a direct need for an ecosystem services approach in the Chesapeake Bay watershed to support local and regional land use change decision making. This project will assess the feasibility of estimating the ecologic production and socioeconomic value of selected ecosystem services in Chesapeake Bay watershed floodplains. This will be accomplished by piloting the effort in small watersheds where extensive field data and floodplain landform information exist. Such watersheds have already been identified as part of an ongoing USGS project that is designed to map floodplains and fluvial landform features. The assessment of floodplain ecosystem services will include a quantification of the ecological and the socioeconomic value of floodplain ecosystems, as is needed to support land use decision making. The services that are likely of interest with respect to floodplain ecosystems include: water quality (e.g., nutrient and sediment removal, retention, and transformation functions), flood protection or attenuation, wildlife habitat (living resources and healthy watersheds), and recreation potential. Quantifying these services can lead to a more integrated, ecosystems approach to decision making and the management of the Chesapeake Bay watershed.
Outputs	• Floodplain ecosystem services analysis in pilot study watersheds in the Chesapeake Bay watershed. This analysis will provide the methods, with an understanding of the accuracy and confidence in those methods that may then be used to provide an expanded ecosystem services analysis in the Chesapeake Bay watershed. This analysis will also provide improved understanding of the function and value of floodplain ecosystems. • Assessment of the level of effort required to expand the analysis to all floodplains in the Chesapeake Bay watershed.
Justification for FY '14 funding	We are requesting funding to support the development of methods for quantifying ecosystem services associated with selected floodplains in the Chesapeake Bay watershed. There is a need for an ecosystem services approach in the Chesapeake Bay watershed to enable local and regional land use change decision makers consider the ecological impacts of land use change along with the benefits of economic development.

Metric Development and Tracking Proposals

Project ID	23
Goal Team	GIT 5
Project Title	Metrics Finalization and State Implementation Plans/Environmental Literacy Planning
Goal/Outcome	Environmental Literacy Goal, Literacy Planning Outcome
Cost Estimate Range and recommended funding vehicle	$75,000; Contract with Measurement Incorporated or similar evaluation firm
Project Duration	Aug 2014-Nov 2015
Priority Area Addressed	Metrics Development and Tracking
Activity Description	Professional review of first year of data to establish meaningful baselines. Technical assistance to states to develop strategies to collect voluntary data from local education agencies to feed into the new Chesapeake Bay Program environmental literacy metrics.
Outputs	New MWEE baseline for the watershed. Local Education Agency data on sustainable schools, student participation in MWEEs, and related data.
Justification for FY 14 funding	Environmental Literacy Planning is an outcome of the new Bay Agreement, which includes a commitment to develop and collect voluntary metrics. The Education Workgroup is piloting a new tool this summer with a representative sample of local education agencies with the goal of full implementation for the 2014-2015 school year. Because of the highly localized nature of K-12 education and the fact that this is a voluntary data collection, the development of state-specific strategies on outreach and implementation will be essential to collect enough data to have a statistically significant sample size. The review of baseline data by professional evaluators will also be important to establish a solid baseline and long-term monitoring strategy for the new environmental literacy metrics.

Metric Development and Tracking Proposals

Project ID	24
Goal Team	GIT 5
Project Title	Development of Baseline Indicator of Citizen Stewardship
Goal/Outcome	Stewardship Goal, Citizen Stewardship Outcome
Cost Estimate Range and recommended funding vehicle	$75K; MOU with University partner, potentially UMCES who has developed a tool to assist with this project.
Project Duration	Aug 2014-Nov 2015
Priority Area Addressed	Metrics Development and Tracking
Activity Description	A comprehensive index or indicator(s) that measure the extent of citizen and community participation and engagement in watershed protection and restoration actions would be defined and additional data gathered to inform baseline metrics for this new goal and outcomes.
Outputs	New Stewardship action baseline for the watershed. Regional, local and social metrics will be identified and collected which could be used for a variety of purposes to assist in the design of local programs and strategies.
Justification for FY 14 funding	The intent of this project would be to develop an index that would provide a much needed base line metric(s) for the citizen stewardship, local leadership, and diversity outcomes of the stewardship goal. This would build upon existing efforts to measure the penetration rate of homeowner best management practices (e.g. rain gardens, rain barrels, etc.), assess local NGO capacity and volunteer activity and local government leadership and capacity by identifying key data gaps and filling them as needed. All relevant data would contribute to an analysis that would generate an initial index of behavior and social capital to advance local restoration goals and serve as a much needed baseline from which to measure future progress.

Project ID	25
Goal Team	GIT 2
Project Title	Accelerate Wetland Restoration in support of WIPs/GIT Integration
Goal/Outcome	Vital Habitats Goal, Wetlands Outcome
Cost Estimate Range and recommended funding vehicle	Cooperative agreements with TNC and DU; could be used as match for projects deemed priority by local partners such as Upper Susquehanna Coalition (NY – Jim Curatolo) and Trout Unlimited (WV – Gary Berti) $50,000
Project Duration	Fall 2014-Fall 2015
Priority Area Addressed	Demonstration wetland restoration/conservation Projects
Activity Description	Implementation Project: A wetland initiative project is being led by TNC (with support from DU) under a NFWF grant to accelerate wetland restoration across four states (VA, MD, DE, and PA). This project would fund complimentary projects in WV and NY.
Outputs	Targeted wetland restoration efforts in WV and NY
Justification for FY 14 funding	Wetland Restoration is an outcome in the new agreement, an indicator tracked by CBP, and part of WIPs. The current 2025 WIP goal for wetland restoration in agricultural landscapes within the watershed is 106,121 acres. These targeted projects need to be funded and accelerated in order to meet the WIP targets, as well as the goals set in the new agreement and CBP indicator. Implementation phase of these projects will include targeted watersheds based on strategy maps that show optimal locations for restoration.

Implementation Project Proposals

Project ID	26
Goal Team	GIT 4 (Outcome GIT is GIT 5)
Project Title	Landscape Level Demonstration Project Designed to Test Incentives for Forestland Retention through the TMDL Model
Goal/Outcome	Land Conservation Goal, Protected Lands Outcome
Cost Estimate Range and recommended funding vehicle	This is a multi-year project requiring participation from multiple partners and will require specialized expertise. Funding will be required from multiple sources. $50,000 is requested from EPA through the Healthy Waters Goal Implementation Team to support development of the management strategies component of the project.
Project Duration	3+ years TBD – Longer duration provides more definitive data concerning impact of forestland retention efforts for meeting TMDL objectives
Priority Area Addressed	**2014 Chesapeake Bay Partners Agreement**: Healthy Waters outcome Protected Lands Outcome, e.g. 695,000 acres of forest land of highest value for maintaining water quality; Land Use Methods and Metrics Development Outcome, e.g. by 2016, develop a Chesapeake Bay watershed-wide methodology and local-level metrics for characterizing the rate of … forest… conversion, measuring the extent and rate of change in impervious surface coverage and quantifying the potential impacts of land conversion to water quality, healthy watersheds, and communities; and Land Use Options Evaluation Outcome:, e.g. by the end of 2017, with the direct involvement of local governments or their representatives, evaluate policy options, incentives, and planning tools that could assist local governments in their efforts to continually improve their capacity to reduce the rate of conversion of agricultural lands, forests and wetlands as well as the rate of changing landscapes from more natural lands…

Implementation Project Proposals

Project ID	27
Goal Team	GIT 5
Project Title	Public access site mobile application: providing the public the ability to locate a variety of public access sites
Goal/Outcome	Public Access Goal, Site Development Outcome
Cost Estimate Range and recommended funding vehicle	$30,000. Contract with appropriate APP development firm or others, plus cooperative agreement with NGO to facilitate data enhancement process.
Project Duration	September 2014 – August 2015
Priority Area Addressed	Enhances public's ability to locate and use water access sites at the Bay and tributaries through dissemination of updated information on existing and new public access sites.
Activity Description	This would develop a new mobile application giving the public the ability to locate and use existing public water access sites in the watershed. The application would function as a modern and vastly improved replacement of the old Chesapeake public access map, last published a decade ago. The project would leverage and flesh out data collected on more than 1,100 existing public access sites through the Chesapeake watershed public access planning process. It would entail: crowd-sourced and expert enhancement of existing data to add additional access site details; user testing of mobile application designs; and final development of the APP for ISO and Android platforms.
Outputs	Either a new APP or expansion of an existing APP (e.g. Chesapeake Explorer) which allows people to search for public access sites near their location, search for specific kinds of access, and/or gain information about a particular access site.
Justification for FY 14 funding	As a result of partner efforts over the last four years, existing public access sites have been comprehensively inventoried. This has created a geographic dataset of more than 1,100 existing public access sites. An additional 63 new access sites have been opened in the past three years. 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. Developing this new or enhanced APP would address this problem. It would help showcase efforts of Bay partners in enhancing public access opportunities and highlight the need for additional access.