**FY 2014 GIT Focused Funding Proposals Summary**

**GIT Chairs Meeting**

June 16, 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*
   1. Writing and editing of management strategies
   2. Literature searches supporting management strategy development
   3. Travel support for subject matter experts and stakeholders in management strategy development
   4. Projects addressing uncertainties and gaps to strengthen management strategies
2. *Metric Development and Tracking*
   1. Support for science needed to develop metrics
   2. Metric/indicator development
   3. Performance measure development
   4. Monitoring/tracking program development
   5. Data collection program development
   6. Assessments of data to evaluate progress on metrics
   7. Modeling support
3. *Implementation Projects*
   1. Pilot projects
4. *Meeting Support*
   1. Facilitation of GIT processes and meetings supporting management strategies
   2. Place-based meeting tools for collaborative decision-making

**Proposed Projects Summary**

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| ***Pg.*** | ***Title*** | ***GIT*** | ***Cost*** |
| *Management Strategy Development* | | | |
| 5 | Blue Crab Allocation Economic Modeling and Workshop | GIT 1 |  |
| 6 | Habitat/Fisheries Data and Literature Review plus shallow water survey development | GITs 1 and 2 |  |
| 7 | Leveraging local lessons | GIT 4 | $60,000-$75,000 |
| 8 | Connecting Land Trusts and Chesapeake Water Quality | GIT 4 |  |
| 9 | Development of a crowd sourced database as part of the Chesapeake Network to promote shared outreach and marketing case studies, results, and materials | GIT 5 | $50,000 |
| 10 | Advancing WIPs and MS4s through voluntary actions on privately owned land – An assessment of opportunities, partnerships, and recommended policy and funding actions | GIT 5 | $25,000 |
| 11 | Create a baseline for inventory, tracking, and marketing local government financing strategies in support of WIPs and MS4s | GIT 5 | $25,000 |
| 12 | Develop a model for ongoing leadership training in watershed issues and solutions for local elected officials | GIT 5 | $35,000-$50,000 |
| 13 | Indigenous Cultural Landscape Mapping | GIT 6 | $25,000-$50,000 |
| 14 | Facilitation and Technical Content Development Support for GIT Development of Management Strategies | GIT 6 | $30,000 |
| *Metric Development and Tracking* | | | |
| 15 | Forage Fish Indicator/Metric Development | GIT 1 | $30,000-$50,000 |
| 16 | Brook Trout Monitoring Support to EBTJV | GIT 2 |  |
| 17 | Stream Health Outcome Baseline/Defining new metric | GIT 2 |  |
| 18 | Black Duck Habitat Prioritization | GIT 2 |  |
| 19 | Citizen Monitoring of Land Conversion to Development, Tree Cover, and Riparian Buffers | GIT 3 | $40,000-$60,000 |
| 20 | Identification of additional healthy waters | GIT 4 | $50,000-$100,000 |
| 21 | Updating the Resource Lands Assessment | GIT 4 |  |
| 22 | Metrics Finalization and State Implementation Plans/Environmental Literacy Planning | GIT 5 | $50,000-$75,000 |
| 23 | Development of Baseline Indicator of Citizen Stewardship | GIT 5 | $50,000-$75,000 |
| *Implementation* | | | |
| 24 | Invasive Catfish Pilot Removal Project | GIT 1 | $10,000-$30,000 |
| 25 | Accelerate Wetland Restoration in support of WIPs | GIT 2 |  |
| 26 | Landscape Level Demonstration Project Designed to Test Incentives for Forestland Retention through the TMDL Model | GIT 4 | $95,000 |
| 27 | Enhance site-specific preplanning efforts for potential new public access sites | GIT 5 | $30,000-$100,000 |
| 28 | Accelerate application of LandScope Chesapeake by land trusts | GIT 5 | $35,000-$75,000 |
| 29 | Large Landscape Conservation Partners Staff Support | GIT 5 | $35,000-$40,000 |
| 30 | Public access site mobile application – providing the public the ability to locate a variety of public access sites | GIT 5 | $25,000-$35,000 |
| *Miscellaneous* | | | |
| 31 | The Chesapeake Bay Natural Resources Leadership Institute: Piloting a Collaborative Local Leadership Approach for Meeting our Bay Restoration Goals | GIT 6 | $25,000 |

**Management Strategy Development Proposals**

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| **Goal Team** | GIT 1 (Sustainable Fisheries) |
| **Project Title/Outcome Addressed** | Blue Crab Allocation Economic Modeling and Workshop  Fisheries GIT – Blue Crab Management Outcome |
| **Cost Estimate Range and recommended funding vehicle** | Grant to academic institution to apply economic model  Workshop costs  Exact cost unknown |
| **Project Duration** | Fall-Winter 2014 |
| **Priority Area Addressed** | Management Strategy Development |
| **Activity Description** | This project would use economic models to predict the economic outcomes and benefits/costs to watermen for a Baywide allocation scenario in comparison to the current management framework. This project would also consist of a workshop bringing in fisheries managers from outside the region that currently employ an allocation or similar management framework in their fishery. |
| **Outputs** | Estimated economic outcomes of a new allocation framework  In-depth knowledge of fisheries management and allocation frameworks that exist in other fisheries outside the region |
| **Justification for FY 14 funding** | This project is a critical piece to developing the management strategy for the blue crab management outcome. The project would give managers and science a better understanding of the potential economic changes associated with an allocation framework and the opportunity to learn from existing allocation frameworks outside the region. |

**Management Strategy Development Proposals**

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| **Goal Team** | Joint GIT 1 (Sustainable Fisheries) and GIT 2 (Protect and Restore Vital Habitats) |
| **Project Title/Outcome Addressed** | Habitat/Fisheries Data and Literature Review plus shallow water survey development |
| **Cost Estimate Range and recommended funding vehicle** | Cooperative agreement with TNC to utilize and build on their Habitat Prioritization Tool (currently in development)  Exact cost unknown |
| **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** | Database/ literature review; 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**

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| **Goal Team** | GIT 4 (Maintain Healthy Watersheds) |
| **Project Title/Outcome Addressed** | Leveraging local lessons (Healthy Waters Outcome) |
| **Cost Estimate Range and recommended funding vehicle** | 50-75k?  Consultancy? |
| **Project Duration** | 6 months |
| **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.) |
| **Outputs** | Recommendations to local governments and partners on what it takes to achieve successful healthy water protection. |
| **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. |

**Management Strategy Development Proposals**

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| **Goal Team** | GIT 4 (Maintain Healthy Watersheds) |
| **Project Title/Outcome Addressed** | Connecting Land Trusts and Chesapeake Water Quality (Healthy Waters Outcome) |
| **Cost Estimate Range and recommended funding vehicle** | $TBD  Contractual |
| **Project Duration** | TBD |
| **Priority Area Addressed** | Management Strategy development |
| **Activity Description** | Develop a “how-to” curriculum guide for Land Trusts that highlights the Clean Water Act and the connection between land conservation and water quality.  Various curriculum guides have been created on other topics.  Mary Burk is a curriculum guide expert (and Kevin said GIT4 can contact her directly to discuss this idea).  Create a map of Land Trusts’ service lands – the lands representing the spatial range of work of each Land Trust – within the Chesapeake Bay Watershed.  This map would be very useful for several groups, including: Land Trust Alliance, GIT4, and the National Parks Service at the Bay Program Office (Jonathan Doherty has already expressed interest in this).  It can be done through a contract, and GIT4 can seek funding from EPA and NPS. |
| **Outputs** | Curriculum guide; service map |
| **Justification for FY 14 funding** |  |

**Management Strategy Development Proposals**

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| **Goal Team** | GIT 5 (Foster Stewardship) |
| **Project Title/Outcome Addressed** | Development of a crowd sourced database as part of the Chesapeake Network to promote shared outreach and marketing case studies, results, and materials (Citizen Stewardship Outcome) |
| **Cost Estimate Range and recommended funding vehicle** | $50k; 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. |
| **Project Duration** | Aug 2014-Nov 2015 |
| **Priority Area Addressed** | Supporting Management Strategies |
| **Activity Description** | 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** | 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** | 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**

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| **Goal Team** | GIT 5 (Foster Stewardship) |
| **Project Title/Outcome Addressed** | Advancing WIPs and MS4s through voluntary actions on privately owned land – An assessment of opportunities, partnerships, and recommended policy and funding actions (Citizen Stewardship Outcome) |
| **Cost Estimate Range and recommended funding vehicle** | $25K; 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**

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| **Goal Team** | GIT 5 (Foster Stewardship) |
| **Project Title/Outcome Addressed** | Create a baseline for inventory, tracking, and marketing local government financing strategies in support of WIPs and MS4s (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**

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| **Goal Team** | GIT 5 (Foster Stewardship) |
| **Project Title/Outcome Addressed** | Develop a model for ongoing leadership training in watershed issues and solutions for local elected officials. Model after VNRLI successes. (Local Leadership Outcome) |
| **Cost Estimate Range and recommended funding vehicle** | Grant/Cooperative Agreement with the Alliance for management as part of LGAC. Alliance would execute Cooperative Agreement with the Institute for Environmental Negotiation at UVA.  $35-50,000 |
| **Project Duration** | October 2014 to October 2015 |
| **Priority Area Addressed** | Management Strategy Implementation |
| **Activity Description** | Work with the LGAC Executive Committee and the leadership staff of the VA Natural Resource Leadership Institute to develop a pilot local leadership training & certification course (Web and place-based) for local elected officials in order to increase local government officials’ knowledge of local water resources issues and the economic, cultural and policy incentives and strategies available to support their implementation of actions that help achieve the goals of the Agreement. Once tested, training would be ongoing.  Advertise at Association of County meetings, Municipal Leagues, etc. Kick-off the leadership program each year at a Local Government workshop prior to the Watershed Forum. Foster marketing of graduate credentials. |
| **Outputs** | Framework for training and developed modules and certification criteria for a Course modeled on the VA Natural Resource Leadership Institute (Chesapeake Local Leaders Institute) but more accessible to local elected officials and senior staff. Primarily web-based with opening and closing face to face seminar. A network of elected official mentors. |
| **Justification for FY 14 funding** | The project specifically addresses the local leadership outcome and provides a means of increasing knowledge and fostering leadership. |

**Management Strategy Development Proposals**

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| **Goal Team** | GIT 5 (Foster Stewardship) |
| **Project Title/Outcome Addressed** | Indigenous Cultural Landscape Mapping (Land Conservation Outcome) |
| **Cost Estimate Range and recommended funding vehicle** | $25K-$50K (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**

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| **Goal Team** | GIT 6 (Enhance Partnering Leadership and Management) |
| **Project Title/Outcome Addressed** | Facilitation and Technical Content Development Support for GIT Development of Management Strategies |
| **Cost Estimate Range and recommended funding vehicle** | 300 hours (50 hrs/GIT) x $100 average rate for technical contractor staff = $30,000 |
| **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. |

**Metric Development and Tracking Proposals**

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| **Goal Team** | GIT 1 (Sustainable Fisheries) |
| **Project Title/Outcome Addressed** | Forage Fish Indicator/Metric Development (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  $30-50K? |
| **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**

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| **Goal Team** | GIT 2 (Protect and Restore Vital Habitats) |
| **Project Title/Outcome Addressed** | Brook Trout Monitoring Support to EBTJV |
| **Cost Estimate Range and recommended funding vehicle** | FWS pass through funding to EBTJV (Science and Data Committee) possibly via USGS Non-tidal network? |
| **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**

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| **Goal Team** | GIT 2 (Protect and Restore Vital Habitats) |
| **Project Title/Outcome Addressed** | Stream Health Outcome Baseline/Defining new metric |
| **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? |
| **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**

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| **Goal Team** | GIT 2 (Protect and Restore Vital Habitats) |
| **Project Title/Outcome Addressed** | Black Duck Habitat Prioritization |
| **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 |
| **Project Duration** | Fall 2014-Fall 2015 |
| **Priority Area Addressed** | Metric Development and Tracking, foundational for 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. |

**Metric Development and Tracking Proposals**

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| **Goal Team** | GIT 3 (Restore Water Quality) |
| **Project Title/Outcome Addressed** | Citizen Monitoring of Land Conversion to Development, Tree Cover, and Riparian Buffers |
| **Cost Estimate Range and recommended funding vehicle** | $40,000 - $60,000; Existing IAG and GDA contract. |
| **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**

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| **Goal Team** | GIT 4 (Maintain Healthy Watersheds) |
| **Project Title/Outcome Addressed** | Identification of additional healthy waters (Healthy Waters Outcome) |
| **Cost Estimate Range and recommended funding vehicle** | $50-100K?  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**

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| **Goal Team** | GIT 4 (Maintain Healthy Watersheds) |
| **Project Title/Outcome Addressed** | Updating the Resource Lands Assessments (Healthy Waters Outcome) |
| **Cost Estimate Range and recommended funding vehicle** | TBD based on USGS |
| **Project Duration** | TBD based on USGS |
| **Priority Area Addressed** | Metric Development and tracking; management strategy development |
| **Activity Description** | The Resource Lands Assessment was released a several years ago.  A revision and update of the map is needed to accommodate new data. Would include:  - an updated map of areas likely to be converted from current land use  - map overlays that recommend potential protection and/or restoration at the subwatershed scale.  - map indicating areas with controls on where and how development occurs |
| **Outputs** | Update maps of resource lands and values; areas threatened for conversion. |
| **Justification for FY 14 funding** |  |

**Metric Development and Tracking Proposals**

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| **Goal Team** | GIT 5 (Foster Stewardship) |
| **Project Title/Outcome Addressed** | Metrics Finalization and State Implementation Plans/Environmental Literacy Planning (Environmental Literacy Outcome) |
| **Cost Estimate Range and recommended funding vehicle** | $50-75K; 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**

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| **Goal Team** | GIT 5 (Foster Stewardship) |
| **Project Title/Outcome Addressed** | Development of Baseline Indicator of Citizen Stewardship  (Citizen Stewardship Outcome) |
| **Cost Estimate Range and recommended funding vehicle** | $50-75K; 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. |

**Implementation Project Proposals**

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| **Goal Team** | GIT 1 (Sustainable Fisheries) |
| **Project Title/Outcome Addressed** | Invasive Catfish Pilot Removal Project |
| **Cost Estimate Range and recommended funding vehicle** | Grant to state agencies and/or academic institutions  $10-15K per project🡪$20-30K for a project in each jurisdiction |
| **Project Duration** | Summer-Fall 2014 |
| **Priority Area Addressed** | Implementation Projects-Pilot projects |
| **Activity Description** | These pilot projects would be fishery-independent removals of invasive catfish from tributaries of high ecological value. The Fisheries GIT would choose one project in Maryland one project in Virginia. |
| **Outputs** | Removal of harmful invasive species  Baseline for planning future catfish removals |
| **Justification for FY 14 funding** | Targeted removals of invasive catfish are a recommendation in the Invasive Catfish Task Force’s final report. These removals would be targeted to tributaries with high ecological value where the ecosystem and native fish species would benefit from the removal of invasive catfish. The pilot projects need to occur as soon as possible in order to determine the best protocols and effectiveness for future removals. |

**Implementation Project Proposals**

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| **Goal Team** | GIT 2 (Protect and Restore Vital Habitats) |
| **Project Title/Outcome Addressed** | Accelerate Wetland Restoration in support of WIPs |
| **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) |
| **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**

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| **Goal Team** | GIT 4 (Maintain Healthy Watersheds) |
| **Project Title/Outcome Addressed** | Landscape Level Demonstration Project Designed to Test Incentives for Forestland Retention through the TMDL Model |
| **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. $95,000 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**

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| **Goal Team** | GIT 5 (Foster Stewardship) |
| **Project Title/Outcome Addressed** | Enhance site-specific preplanning efforts for potential new public access sites (Public Access Outcome) |
| **Cost Estimate Range and recommended funding vehicle** | $30,000 - $100,000+. Funding level is scalable depending on how many sites are targeted. It could be done via contract for environmental/site screening with a firm or under a cooperative agreement with state or NGO partners. |
| **Project Duration** | September 2014 – August 2015 as pilot; potentially annually thereafter. |
| **Priority Area Addressed** | This would help meet the goal of 300 new public access sites by 2025. |
| **Activity Description** | This would set up a process and funding so that preplanning could be implemented for specific potential projects. The Public Access Action Team would work with partners who were ready to advance access projects and select those with most potential of proceeding. Funding would be provided for development of conceptual plans and environmental screening so that a sound construction budget and time frame is developed. |
| **Outputs** | Pre-screened potential access projects that could compete better for limited implementation funding opportunities and be closer to construction ready. |
| **Justification for FY 14 funding** | One of the major hurdles facing development of public access projects is the design and permitting process. The Public Access Action team has identified 486 potential access sites for future development, but over 95% of these have had insufficient planning and design work completed to make them shovel-ready. If projects could be pre-screened through a set of standard criteria including site conditions and environmental factors as well as coordination with the permitting agencies there would be greater confidence in their ability to move forward. A preplanning process would help bring projects on line more quickly and remove ones from the process that had too many issues to reasonably overcome. The end result would be an enhanced process and more confidence that funded projects would move quickly to completion. |

**Implementation Project Proposals**

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| **Goal Team** | GIT 5 (Foster Stewardship) |
| **Project Title/Outcome Addressed** | Accelerate application of LandScope Chesapeake by land trusts  (Land Conservation Outcome) |
| **Cost Estimate Range and recommended funding vehicle** | $35K-$75 (somewhat scalable; influences number of land trusts reached); Cooperative agreement(s) with NatureServe; collaboration/coordination with Land Trust Alliance |
| **Project Duration** | August 2014 – July 2015 |
| **Priority Area Addressed** | Strategic land conservation implementation |
| **Activity Description** | Develop and implement a targeted outreach and training program to increase adoption and effective application of LandScope Chesapeake among land trusts. This serves to help focus land trusts on strategic conservation planning and use of existing conservation priority datasets. This program would include intensive training and informational presentations based on the site. Scheduling and presenting these instructor-led sessions is resource-intensive, but it gets non-GIS users over the initial hump of uncertainty about using the site. An additional component of training would include introducing land trusts to incorporating their land protection data in the National Conservation Easement Database (NCED) that feeds LandScope conservation tracking. Effort would be coordinated with Land Trust Alliance and state land trust associations. |
| **Outputs** | Implementation of new on-line tutorial for introducing users to advanced mapping tools; delivery of specific training sessions to multiple land trusts (number scalable depending on funding level). Ultimately, contributes to increased number of acres of land conserved in designated priority places across the watershed. |
| **Justification for FY 14 funding** | Significant investments have been made in 2012 and 2013 in developing LandScope Chesapeake as the comprehensive watershed-wide location for conservation priorities reflecting multiple values at the federal, state and local level. The site is now well positioned for use by land trusts and others in the conservation community to help inform strategic conservation. However, land trusts without dedicated GIS staff typically need initial assistance and training to begin using mapping tools for more strategic conservation planning. The timing is right for this next step in outreach and training. |

**Implementation Project Proposals**

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| **Goal Team** | GIT 5 (Foster Stewardship) |
| **Project Title/Outcome Addressed** | Large Landscape Conservation Partners Staff Support  (Land Conservation Outcome) |
| **Cost Estimate Range and recommended funding vehicle** | $35K-$40; Cooperative agreement with Chesapeake Conservancy; funding likely matched by NPS and Conservancy. |
| **Project Duration** | August 2014 – July 2015 |
| **Priority Area Addressed** | Strategic land conservation implementation |
| **Activity Description** | This would support a staff coordinator for the Chesapeake Large Landscape Conservation Partnership. The position serves as principal coordinator for the Partnership’s Steering Committee including facilitating Steering Committee meetings for effective progress; organizing and carrying out strategic planning with the committee to set out annual agendas and workplan; and supporting subcommittees the committee may organize to carry out various activities/initiatives. The position supports also a Communications and Outreach Work Group and its activities building interaction among the Partnership’s community of practitioners and connections with the national community (e.g. the Practitioners Network for Large Landscape Conservation), and engaging diverse populations within the Partnership. |
| **Outputs** | Staff coordinator position facilitating activities described above and collaborative progress on land conservation outcomes. |
| **Justification for FY 14 funding** | The collaborative partnership among dozens of land conservation agencies and organizations formed several years ago to support collaboration in advancing large landscape conservation in the Chesapeake. Based on the group’s annual meeting in 2013, partners are ramping up efforts in 2014 and following, including increasing capacity for supporting the collaborative’s efforts. A new steering committee guides the partnership’s work with partial support from the Chesapeake Conservancy and National Park Service. This includes initial support for a staff coordinator. Additional support is sought to bring this new role to full capacity. Ultimately, this is crucial to enhancing collective progress toward more strategic watershed-wide achievement of land conservation goals. |

**Implementation Project Proposals**

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| **Goal Team** | GIT 5 (Foster Stewardship) |
| **Project Title/Outcome Addressed** | Public access site mobile application – providing the public the ability to locate a variety of public access sites (Public Access Outcome) |
| **Cost Estimate Range and recommended funding vehicle** | $25,000 - $35,000. 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. |

**Miscellaneous Proposals**

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| **Goal Team** | GIT 6 (Enhance Partnering Leadership and Management) |
| **Project Title/Outcome Addressed** | The Chesapeake Bay Natural Resources Leadership Institute: Piloting a Collaborative Local Leadership Approach for Meeting our Bay Restoration Goals |
| **Cost Estimate Range and recommended funding vehicle** | Funding directed to the Virginia Department of Conservation and Recreation (DCR). Amount requested is $25,000. Sub grant to University of Virginia, Institute for Environmental Negotiation for professional training services and travel support. DCR to handle training coordination and logistics. |
| **Project Duration** | September 2014 – June 2015 |
| **Priority Area Addressed** | Teaching Effective Leadership Strategies to local leaders through use of place-based tools for collaborative decision-making  Training on Group Process Decision-Making and Consensus Building  Building capacity for Critical Thinking and Problem-Solving using Adaptive Management techniques |
| **Activity Description** | One week long pilot program will be held to train at least 20 Bay watershed local leaders. A small cost to attend will be required to ensure program ownership and attendance. If possible, program to be held in central Bay watershed location or at National Training facility in Shepardstown, WV to facilitate attendance across the watershed. Through rigorous before and after program evaluation, this pilot program will be used to assess whether a longer and more rigorous leadership development program is appropriate, necessary and will lead to enhanced local stewardship and increased Bay restoration efforts. |
| **Outputs** | Twenty trained local leaders across the watershed to implement the new Bay agreement management strategies using collaborative leadership techniques, coalition building and adaptive management. |
| **Justification for FY 14 funding** | Local coalition building through consensus-building and appropriate group process work can significantly improve the rate of conservation and restoration work accomplished within the Bay watershed. This is achieved by building and improving relationships and achieving long-term commitments to water quality improvements, natural resource conservation and restoration. |