Chesapeake Conservation Corps
Host Organization Cover Sheet
2015 – 2016

www.chesapeakebaytrust.org / 410-974-2941

1.   Applicant Information

Name of Organization/Legal Applicant:	Frederick County Community Development, Office of Sustainability and Environmental Resources (OSER)
Street Address:	30 N. Market St.
City/State/Zip:	Frederick, MD 21701
County:	Frederick
Main Telephone:	301.600.1413
Web Page:	www.SustainableFrederickCounty.org
Legal Applicant Federal I.D. Number:	52-6000943
State Legislative District:	Districts 6 & 8
U.S. Congressional District:	6th District of Maryland
Executive Director:	Shannon Moore, Manager, Office of Sustainability and Environmental Resources
Executive Director's Telephone:	301.600.1413
Name of Application Writer/Initial Contact:	Lisa Orr
Contact's Title:	Sustainability Program Coordinator
Contact's Telephone:	301.600.6864
Contact's Email:	LOrr@FrederickCountyMD.gov
Name of Corps Volunteer Mentor:	Darlene Bucciero
Mentor's Title:	Project Manager IV
Mentor's Telephone:	301.600.2952
Mentor's s Email:	DBucciero@FrederickCountyMD.gov
Number of Corps Volunteers Sought	1
Name of Organization/Legal Applicant:	Frederick County Community Development, Office of Sustainability and Environmental Resources (OSER)

2. Type of Organization (check one):

Non-profit organization	
School	
Community associations	
Service, Youth, or Civic Groups	
Institutions of Higher Education	
Local government (county or municipality)	X
Unit of State Government	

3. Organization Mission:

The Frederick County Office of Sustainability and Environmental Resources advances practical solutions for protecting the environment, conserving energy, and living sustainably in Frederick County, MD.

4. Types of Activities in which a Volunteer Corps Member will be engaged (see "Corps Volunteer Eligible Activities" section above for description of each activity type. Check all that apply.

Watershed Restoration	X
Energy Conservation	
Agricultural	
Forestry	X
Environmental Education	X

5. Short Description:

The CCC Member will develop expertise in stormwater management, a rapidly growing field in Maryland.

1. *Conserve and Increase Forests and Riparian Buffers:* Help develop and implement an easement program through which property owners are incentivized to register conservation areas; Develop program and outreach materials; Meet with landowners; Assist with planting plans; Coordinate at least one tree planting.

2. *Improve Water Quality:* Develop a plan to address the Total Maximum Daily Load (TDML) requirements of one impairing substance or stressor on a waterbody; Help with Geographic Information System (GIS) project mapping; build baseline and pollution reduction scenarios using a modeling tool; Put together a plan that includes restoration projects, timeframes and costs.

3. *Investigate Hotspots:* Assist with visual inspections of commercial and industrial areas to determine hotspot areas that are sources of water pollution. Produce field inspection reports.

6. General Liability Insurance: Does your agency currently have general liability insurance for its volunteers?

Yes _____ X _____   No _____

Partnership Application Electronic Signatures

In submitting this partnership application to become a Chesapeake Conservation Corps Host Organization, we attest that all information provided is true to the best of our knowledge.

_____   2/27/2015
Signature of Legal Applicant Director   Date

_____   2/27/2015
Signature of the Host Organization Mentor   Date

Thank you for applying to be a Chesapeake Conservation Corps Host Organization!

Frederick County Office of Sustainability and Environmental Resources Office (OSER)

1) <u>Activities</u>:

A. *Large Scale Tree Planting and Easement Acquisition Program:* (40% of time)

- **Project Description:** Frederick County has developed urban tree planting programs called Backyard Buffers and Neighborhood Green that have been used as models statewide. These programs work with private landowners to plant native trees that provide habitat and water quality. The County has also piloted a tree planting and easement acquisition program using Forest Conservation Act funds. The County is scaling up the program for private landowners so that it can reduce more stormwater pollution on protected acres and will be targeting restoration to key natural infrastructure areas (also known as "Green Infrastructure;" i.e., interconnected networks of natural and undeveloped areas needed to maintain and support ecosystems). The CCC volunteer will develop valuable job and resume skills by working with the Community Restoration Coordinator on this project and will coordinate at least one 1-acre planting.

- **Activities:**
    - Activity 1: Find and target properties for restoration that contain key natural infrastructure and lie in the exurbs, land parcels of greater than two acres on the urban-rural interface. An analysis will be performed using Geographic Information Systems (GIS) to develop a wetness index model, and to overlay it with Green Infrastructure maps and The Nature Conservancy's Eco-Hydrologically Active Areas. This overlay will provide areas for priority restoration on natural resource management areas.

    - Activity 2: Assist with developing the Request for Proposals (RFP) for tree planting contractors. Public Bidding projects of a certain size require RFPs; this is a formal procurement process that ensures contractors meet technical qualifications at the best price.

    - Activity 3: Help to develop program. The CCC Volunteer will help generate language for easements, the legal tool through which property owners are incentivized to register conservation areas of forest, riparian buffers, and wetlands. The CCC Volunteer will develop program and outreach materials, use GIS to target parcels and send mailings, meet landowners along with Community Restoration Coordinator, assist with planting plans and learn tree identification, and help to secure contracts from landowners.

    - Activity 4: Conduct planting. CCC volunteer will be responsible for coordination of a planting event on at least 1 property totaling at least one acre of restoration.

B. *Water Quality Control Program***:** (40% of time)

- **Project Description:** Frederick County has numerous water bodies that have regulatory limits on pollution known as Total Maximum Daily Loads (TMDLs). TMDLs exist for nitrogen, phosphorus, total suspended solids, and e. coli bacteria. The CCC Volunteer will work with County Project Managers in the Watershed Management Section to develop valuable skill sets in GIS geoprocessing, pollution reduction modeling, restoration plan development, and public presentations. The CCC volunteer will help to develop a plan to address at least one pollutants with TMDL restrictions and educate the public about ways to reduce the pollutant in the TMDLshed (designated watersheds with TMDL restrictions).

- **Activities:**

  - Activity 1: Use Maryland Department of the Environment's (MDE) TMDL Toolkit to develop wasteload allocation for the specific pollutants, and delineate the urban area of the TMDLshed using GIS.

  - Activity 2: Use MDE guidance resources to develop a Stormwater Wasteload Allocation Implementation Plan by compiling information about the TMDLshed, identifying pollutant hotspots in the field, and building scenarios in the Maryland Assessment Scenario Tool or Watershed Treatment Model to reduce pollution.

  - Activity 3: Use educational campaign materials from the Environmental Protection Agency (EPA), MDE, and other sources to educate the public about the importance of reducing the pollutant in the watershed. Create engaging communications about the topic using social media, topical videos, program materials, and/or other outlets. Prepare and give presentations on the project to the Monocacy and Catoctin Watershed Alliance and other groups.

C. *Hotspot Investigations:* (20% of time)

- **Project Description:** The CCC Volunteer will help County Project Managers in the Watershed Management Section to select a protocol for identifying pollution hotspots in commercial and industrial areas. They will help to develop a hotspot inventory, develop estimates of impervious cover on the sites using GIS, and conduct field inspections and look for illicit discharges. The CCC Volunteer will also provide information from EPA and Center for Watershed Protection (CWP) to hotspot owners about pollution prevention practices

- **Activities:**

  - Activity 1: Select a protocol for identifying pollution hotspots in commercial and industrial areas. Conduct a review of existing protocols and select one to use that meets Maryland regulatory requirements.

  - Activity 2: Develop inventory of hotspots using an Initial Hotspot Status inventory developed by the Center for Watershed Protection.

  - Activity 3: Develop estimates of impervious cover on the sites using planimetric data in GIS.

  - Activity 4: Conduct field inspections, fill in field inspection sheets, look for illicit discharges, and provide outreach materials to property owners on proper pollution prevention activities. Materials are available from EPA and CWP.

These projects help protect and positively impact the Chesapeake Bay by developing local government programs to expand the implementation of cost-effective best management practices for stormwater. Tree plantings have direct pollution removal benefit as does hotspot elimination. The programs also help to track progress towards meeting TMDL restrictions and developing plans, cost estimates and schedules for future efforts.

2) <u>Outcomes</u>: Provide a list of quantifiable outcomes to be accomplished by the Corps Volunteer(s). Examples might include number of rain gardens installed, number of volunteers engaged, number of energy audits accomplished, number of green schools engaged, number of students reached, etc.

During the service year, we estimate that the Corps Volunteer will help achieve the following quantifiable outcomes:

A. *Large Scale Tree Planting and Easement Acquisition Program*
- Outcome 1: GIS targeting layer for targeted natural infrastructure on parcels greater than two acres.
- Outcome 2: Wetness index model.
- Outcome 3: Request for Proposals document for tree planting contractor.
- Outcome 4: Tree planting easement language
- Outcome 5: Program materials for landowners
- Outcome 6: Planting plans
- Outcome 7: Landowner contract for planting greater than 1 acre
- Outcome 8: 1 acre of trees planted

B. *Water Pollution Control Program*
- Outcome 1: TMDL wasteload allocation for one pollutant
- Outcome 2: GIS map of the urban area within the TMDLshed
- Outcome 3: Map of pollution hotspots
- Outcome 4: Pollution reduction scenario using the Maryland Assessment Scenario Tool or Watershed Treatment Model
- Outcome 5: Copies of outreach materials including social media, newspaper articles, videos, presentation materials, recordings of presentations.

C. *Hotspot Investigations*
- Outcome 1: Literature review and protocol for identifying pollution hotspots in commercial and industrial areas
- Outcome 2: Initial Hotspot Status Inventory
- Outcome 3: GIS impervious cover estimates for commercial and industrial properties
- Outcome 4: Field inspection sheets
- Outcome 5: List of illicit discharge sites identified and forwarded for follow-up
- Outcome 6: Copies of outreach materials and addresses of target properties

3) <u>Advancement of mission</u>: Describe how the service of the Corps Volunteer will advance the mission of the organization.

The CCC Volunteer's goals are tied to the initiatives and goals of OSER's Watershed Management Section, in particular stormwater management efforts that improve the Chesapeake Bay and local water quality while meeting regulatory requirements for municipal separate storm sewer system (MS4) permits and TMDLs. Having a CCC Volunteer involved with these efforts ties in directly with OSER's mission to advance practical solutions for protecting the environment, conserving energy, and living sustainably in Frederick County. OSER is also responsible for implementing elements of the County's Clean Water Act-required MS4 permit and coordinating the implementation of TMDL restrictions. The CCC Volunteer will directly assist the County with these regulatory compliance efforts.

4) <u>Key Staff</u>: Describe the staff members who will work most closely with the Corps Volunteer. What roles and responsibilities will these key staff have in supporting the Corps Volunteer's activities?

<u>Darlene Bucciero</u>, Project Manager IV, will directly mentor and train the *Stormwater Corps* Volunteer and work collaboratively with him/her on a daily basis to implement initiatives. She will meet individually with the Corps Volunteer on a weekly basis to discuss projects, activities, needs, and progress. She will also be overseeing the CCC program and submitting progress reports to CBT. Darlene has over 15 years of program and grant management experience. Prior to joining Frederick County Government, Darlene worked for Roy Jorgensen Associates and MKI as a Consultant to State and Federal Governments. . Darlene has a degree in Civil Engineering from the University of Maryland and a degree in Business Administration from Pace University in New York.She is certified as a Project Management Professional (PMP) and a LEED-Green Associate (GA).

<u>Heather Montgomery</u>, Project Manager III, will assist with Hotspot Investigations. Heather has over 10 years experience in natural resource conservation and restoration, is a certified ISA arborist, a certified Project Management Professional (PMP), and holds a B.A. degree in Environmental Science from the University of Virginia. Her current responsibilities include managing consultants and NPDES MS4 Permit compliance programs such as the County's Industrial Activities Permit Program (12-SW Stormwater Pollution Prevention Plans (SWPPPs) for County facilities); Illicit Discharge Detection and Elimination (IDDE) Program; Community restoration maintenance and inspection, and; NPDES Annual Reporting.

<u>Jeff Feaga, PhD,</u> Community Restoration Coordinator, will work with the *CCC Volunteer* on the Large Scale Tree Planting and Easement Acquisition Program. Jeff has a PhD in Wildlife Management from Virginia Tech with 12 years of Environmental Management experience. He has worked as a Soil Conservationist with the US Department of Agriculture and as a Wetland/environmental Specialist in the private Sector.

<u>Shannon Moore,</u> OSER Manager, will provide guidance to the *CCC Volunteer*. She also will supervise the OSER staff working directly with the CCC Volunteer and managing the CCC program. She brings 13 years of program management experience with Frederick County Government and 10 years of private sector management experience. She has successfully managed several million dollars in state and federal grants. Shannon has Master's Degree in Environmental Science and Management from the Bren School at the University of California Santa Barbara.

5) Work Skills Training: Please describe any formal or informal work skills training your organization can provide to a Corps Volunteer.

OSER will provide on-the-job training for the Corps Volunteer and support him/her in all endeavors. The CCC Volunteer will have regular sessions with Darlene Bucciero to establish project goals, deliverables, timeframes, and work quality expectations, as well as help the CCC Volunteer develop project management skills. The Volunteer will have opportunities to take desktop training in GIS, and will learn raster modeling from Dr. Jeff Feaga. Shannon Moore will teach the CCC Volunteer how to use water quality modeling tools. The CCC Volunteer will get additional project support from Heather Montgomery and Dr. Jeff Feaga. Shannon Moore will focus on mentoring the volunteer to provide career-building opportunities and will have biweekly meetings to review project progress and help the volunteer succeed in a fast-paced work environment through schedule management, breakdown of larger tasks, skill set development, making contacts in the Volunteer's areas of interest, and focusing on career opportunities. In addition, Frederick County Government regularly offers a wide variety of training courses such as Microsoft Office, CPR/First Aid, time management, conflict resolution, and other job-related training. Training and conferences will also be available to the Corps Volunteer through networks such as the Western Maryland Government Exchange and the Metropolitan Washington Council of Governments. OSER will provide $200 for the Corps Volunteer to attend a professional development conference related to the goals of the *Stormwater Corps* project.

In addition, the *Restoration Plans and Projects for Stormwater* project will provide the Corps Volunteer with the following job-related experiences and skills:
* Project management and planning;
* Research skills;
* Experience with local government operations;
* Skills and knowledge related to stormwater management, natural filters, riparian buffers, rain gardens, urban forestry/arboriculture;
* Writing skills;
* Networking and broad education in local environmental issues and projects through involvement with the Monocacy Catoctin Watershed Alliance; and
* Basic office administration skills such as telephone etiquette and use of software tools and databases such as Constant Contact, Survey Monkey, cVent, and Microsoft Access.

6) Budget of Matching Resources (See Position 1 Table below this one if want to make the same except for stipend match)

Budget Items	Value	Type of Match (Cash or In-kind)	Source of Match
Parking - required	N/A	In-Kind: Parking available at no cost within 3 blocks	N/A
Mileage Reimbursement: Estimated at 29 mi/mo over 12 months @ $0.575/mi.	$200	Cash	Frederick County General Funds
Conference attendance costs – optional	$200	Cash	Frederick County General Funds
Telephone/Internet - required	$400	In-Kind	Frederick County General Funds
Office Space - required	Overhead	In-Kind	Frederick County is not including a cash value for overhead
Software and Human Resources training workshops - optional	Overhead	In-Kind	Frederick County is not including a cash value for overhead
100% of the Volunteer stipend and related costs	$21,500	Cash	Frederick County General Funds
Other: Workman's Compensation	$51	Cash	Frederick County General Funds
TOTAL	**$ 22,351**		

Organizational Chart, Sustainability and Environmental Resources Office:
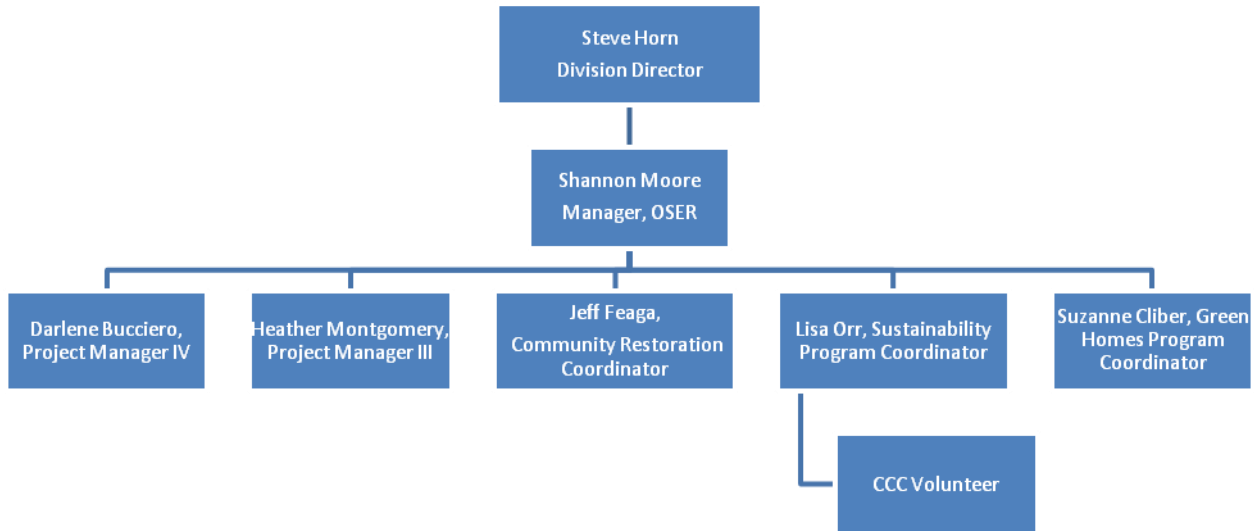
OSER Budget:

OSER is internal to the Community Development Division. The FY2015 budget for "Environmental Sustainability" (OSER) is reflected in the Community Development Division's budget on pages 47 and 48 in this document: http://frederickcountymd.gov/DocumentCenter/View/277561

Financial Statement:

Frederick County's Comprehensive Financial Report for the Fiscal Year ended June 30, 2014 is available on-line at: https://frederickcountymd.gov/DocumentCenter/View/277777