



1. Contact Information

Lori Lilly, Executive Director
Howard EcoWorks
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81-2054803

2. Company's mission and profile

Howard EcoWorks empowers communities and diverse workforces to respect and restore our natural systems for future generations. EcoWorks is a regional force for social and environmental change. We engage and educate the community about environmental sustainability and restoration, while creating pathways to green jobs through our workforce development programs.

- We educate and train individuals on best management practices to improve our local natural resources, build environmental stewardship, and provide them with job skills and employment opportunities.
- We design attractive and resilient landscapes with plants and trees native to the local environment, by removing invasive species and enhancing habitats to benefit pollinators and local wildlife.
- We focus on waterway debris management and stormwater best practices to protect vulnerable areas from flooding and storm-water run-off.

EcoWorks service area is primarily within a 20-25 miles radius of Columbia, MD. With a staff of five and 2+ crews running throughout the year, we support 15 annual maintenance contracts including faith-based organizations, homeowner associations and Howard Community College; Howard County Government with multiple scopes of work and agreements; several grantors and consulting and EcoCrew services for private residential and commercial clients.

EcoWorks has been in operation since July, 2017 during which timeframe, we successfully navigated the global pandemic through a business model change to that of a social enterprise. FY2022's annual budget was approximately \$800,000 to administer multiple green jobs programs and implement and maintain environmental sustainability projects year-round. EcoWorks has installed more than 1,500 trees in the past several years and has successfully developed, implemented and completed two CBT, primarily tree planting, grants – Tree HoCo and Making Suburban Lands, Working Lands. EcoWorks has institutionalized the Tree HoCo initiative and campaign to continue offering free tree plantings to under-served individuals and



communities with funding from Howard County Government and is now actively working on a third CBT grant for the Urban Trees program.

3. Type of services and fee structure.

Howard EcoWorks offers tree services identified in Table 1.

Table 1. Service and Fee Structure				
	SERVICE	SUMMARY	FEE	NOTES
1	Tree planting site identification	Identifying the best planting sites available in a community or in a particular location (i.e., church or school grounds); identifying the type of planting: street lawn, tree pit, cluster planting that is possible at the site	\$175 / hr	Assessment conducted by ISA certified arborist.
2	Species selection	Identifying the most appropriate species for the site	\$60 / hr	<u>Estimated Labor:</u> <25 trees: 1hr 25-50 trees: 2hrs 50+ trees: 3hrs (or more)
3	Tree purchasing	Obtaining trees from nurseries/growers	\$40 / hr	Labor will be dependent on Nursery availability.
4	Utilities and other restrictions	Identifying utilities, other infrastructure and/or ordinance restrictions to take into consideration when selecting a tree-planting site	\$50 / site (ticket)	Utilities will be marked: 1. Prior to initial site assessment 2. Prior to installation



Table 1. Service and Fee Structure

	SERVICE	SUMMARY	FEE	NOTES
5	Site preparation	Cleaning up the site (i.e., trash or invasive plant removal); preparing the soil, applying soil conditioner/amendment, and ensuring that the right soil volume is available for root growth; installing root barriers	\$150 / hr	Pricing for crew of 2 If the current state of the site is lawn, no site prep will be necessary.
6	Planting	Planting the tree(s); providing appropriate tree root preparation and care at time of planting; staking the tree(s); installing tree shelters or fencing for lawn mower or deer protection; installing tree grates for tree protection as needed; applying mulch	\$225 / tree	Cost includes: labor, project management, 5 gallon size tree, mulch, compost soil amendment, tree protection materials and 1 yr warranty
7	Maintenance	Watering, mulching, pruning, checking for disease or damage during the first two years after planting	\$160 / tree	Minimum 25 trees for pricing provided - pricing will vary for fewer trees per site. Includes 2 visits / year
8	Warranty – 1 year	Re-planting if a tree dies within 1 year	N/A	1 yr warranty included in Planting cost above
9	Warranty – 2 years	Re-planting if a tree dies within 2 years	\$200 / tree	
10	Other – Community education	1-hour webinar for community on any number of tree topics	\$200 / webinar	Topics could include: Why Trees?; Tree Care; Species Selection



Table 1. Service and Fee Structure

	SERVICE	SUMMARY	FEE	NOTES
11	Other – Community education	1.5 hour In-person or in-field workshop on any number of tree topics	\$400 / workshop	Topics could include: Pruning; Tree Maintenance; Identifying Pests and Diseases

4. Service Area

Howard EcoWorks service area is identified in Table 2.

Table 2. Service Area

Jurisdiction	Service Area (Yes or No)	Comments
Allegany County	No	
Anne Arundel County	Yes	Northern Anne Arundel
Baltimore City	No	
Baltimore County	Yes	Southern Baltimore County
Calvert County	No	
Caroline County	No	
Carroll County	Yes	Southern Carroll County
Cecil County	No	
Charles County	No	
Dorchester County	No	
Frederick County	No	
Garrett County	No	
Harford County	No	
Howard County	Yes	Entire County
Kent County	No	
Montgomery County	Yes	Northeastern Montgomery County
Prince George's County	Yes	Northern Prince George's County
Queen Anne's County	No	
Somerset County	No	
St. Mary's County	No	
Talbot County	No	
Washington County	No	



Table 2. Service Area		
Jurisdiction	Service Area (Yes or No)	Comments
Wicomico County	No	
Worcester County	No	

5. Key Staff

EcoWorks has a very competent staff that includes professionals skilled in project management, programming, education, arboriculture, watershed restoration and more. The resumes of two key staff, Lori Lilly, Executive Director and Andrés Ovalle Campos, Conservation and Restoration Director, can be found in Attachment 1. Crew work is overseen by Genevieve Simard, Field Operations Manager, and Nick Lovett, Landscape Foreman. With their combined experiences constructing and maintaining environmental sustainability projects, they provide exemplary field leadership for EcoWorks workforce.

EcoWorks' workforces are trained and receive certificates as Chesapeake Bay Landscape Professional-Associates, a program developed and modeled by EcoWorks that is now being implemented by other entities around the Chesapeake Bay. EcoWorks staff are certified as Chesapeake Bay Landscape Professional Level I. EcoWorks provides direct service to Howard County Government for the maintenance of stormwater projects such as bioretention, stream restoration, and other BMPs as well as provides critical support for the County's Safe and Sound Plan for Ellicott City. Maintenance heavy work includes management of 17 of the County's stream restoration projects primarily for tree care and invasive species management.

6. Experience

As stated above, EcoWorks has installed more than 1,500 trees in the past several years and has successfully developed, implemented and completed two CBT, primarily tree planting, grants – Tree HoCo and Making Suburban Lands, Working Lands. EcoWorks has institutionalized the Tree HoCo initiative and campaign to continue offering free tree plantings to under-served individuals and communities with funding from Howard County Government and is now actively working on a third CBT grant for the Urban Trees program. We have successfully leveraged additional grant funds from the National Fish and Wildlife Foundation and an additional grant from the Chesapeake Bay Trust to continue tree planting in urban under-served areas in our region from the present through 2024.

Past 2022 clients include the following who were engaged for the CBT Urban Trees grant program:



- a) Deering Woods Homeowner Association – Twenty-two trees were planted in fall 2022 in common space areas of this homeowner association in an identified urban underserved area. Contact: Sunny Bick at whensunnygetsblue@hotmail.com . A planting plan for this community planting can be found in Attachment 2.
- b) Dunloggin Square Condos – Thirteen trees were planted in fall 2022 in common space areas of this condo association in an identified urban underserved area. Contact: Courtney Spencer at Cortz520@gmail.com . A planting plan for this community planting can be found in Attachment 2.
- c) City of Laurel – Thirty-six trees were planted in fall 2022 along the riverside and in public spaces around the City of Laurel in identified urban underserved area. Contact: Bill Bailey at BillB@laurel.md.us . A planting plan for this public planting can be found in Attachment 2.

7. Past Failure

We had a partially unsuccessful tree planting in an urban underserved community called Clocktower Homeowner Association in Columbia, MD. The planting did not thrive for multiple reasons including lack of maintenance by the community and harmful impacts to the plantings from the community's contracted landscape contractor. We have learned that extensive education is needed for communities to care for any best management practices, including tree plantings, and we provide this at all stages of the project beginning at the initial site visit, during the signing of purchase agreements to begin the work, and again at the conclusion of the project. To the extent that maintenance can be provided to the grounds contractors of the communities is that much the better and at times we have been able to meet these contractors onsite to come to agreement on the type and frequency of maintenance that should occur.

8. Key Specialties

EcoWorks has significant experience working with local communities throughout Howard County and in adjacent counties, having constructed hundreds of projects with scores of churches, HOAs and neighborhoods. Original experience focused on the installation of rain gardens but has shifted to tree planting and conservation landscapes for various reasons including costs of the projects, ease of installation with workforce training programs, amount and level of design needed, flexibility of the installation in the landscape, and environmental benefit. Our strategic plan for the coming years continues to focus on tree planting and conservation landscapes as the primary best management practices of choice for environmental improvements with our clients and the community. We do not engage in typical landscape maintenance activities such as mowing and lawn care but focus specifically on sustainable landscapes that will provide ecosystem service benefits. Our geographic focus in the Columbia, MD region puts us in a mix of urban, suburban and rural areas and we have comfort level working in all with the exception of highly urbanized areas where we have less experience.



9. Method of Evaluation

EcoWorks evaluates the effectiveness of services and projects in multiple ways. Upon completion of a project, the client will be sent an electronic survey to complete to rate their experience in working with our team and their satisfaction with the services rendered. Certain projects such as rain gardens and conservation landscapes will be visited after significant rain events to assess their performance and any potential needs for modifications. Projects that are located in Howard County and that are credited to the County's MS4 permit will be inspected on a triennial basis to assess their continued existence and current function. EcoWorks has an active maintenance program and we highly encourage landowners to participate in an annual maintenance agreement with us to provide seasonal care for our projects so that we can ensure their optimum function.



Attachment 1 – Resumes of Key Staff

Lori A. Lilly

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Sykesville, MD 21784

443.936.8805 (c)
llilly@howardcoworks.org

Environmental | Watershed Restoration Professional

Empowering Communities, Improving Water Resources

CAREER SUMMARY

A natural resource management professional with an M.S. in Marine Estuarine and Environmental Science and over 15 years of cumulative experience in watershed planning and implementation, project management, water quality monitoring and grant writing. A leader and independent thinker with a passion for environmental issues and a demonstrated commitment to improving water resources through grassroots efforts. An innovator in the Chesapeake Bay region for green jobs programming and environmental solutions.

CORE COMPETENCIES:

- ✓ Experienced Watershed Professional
- ✓ Community Leader
- ✓ Fundraiser
- ✓ Self-motivated
- ✓ Demonstrated Initiative

PROFESSIONAL EXPERIENCE

Founder and Executive Director, Howard EcoWorks

January, 2017 – Present

- Non-profit founder - providing overall organizational development, direction and management.
- Lead in carrying out the mission; fundraising; strategic planning; budget management; Board and Committee development and management; financial policy and procedure development; and establishing and maintaining working relationships with existing and new partners.
- Transitioned the business to a social enterprise business through the pandemic.

Owner, Lori A. Lilly Environmental Solutions

March 2014 – June 2017

- Owner / operator of an environmental consulting business focused on watershed planning, environmental restoration and non-stormwater (illicit) discharge detection and elimination (IDDE)
- Notable projects include:
 - Developed and implemented a behavior change project for the reduction of sanitary sewer overflows in the City of Baltimore
 - Conducted pollution detection and response workshops for citizens in Montgomery County, MD; and
 - Developed an IDDE standard operating procedure manual and chemical fingerprint library for the City of Richmond, VA.
 - Led the modification of IDDE protocols for adaptation in coastal communities.

Project Manager, Alliance for the Chesapeake Bay

May 2014 – December, 2016

- Oversaw program management and quality control for Restoring the Environment and Developing Youth (READY).
- Oversaw and managed \$600,000+ budget; supervised 30+ crew; coordinated with local government.
- Developed grant proposals; oversaw project implementation; developed new initiatives including a new debris management program in flood-prone Ellicott City, MD.
- Interacted with customers and community organizations; conducted site assessments; oversaw project construction and maintenance activities by crews.

Watershed Ecologist / Planner, Center for Watershed Protection

March 2009 – March 2014

- Project manager and team member for a multitude of watershed protection and restoration projects across the nation with emphasis in the Chesapeake Bay watershed.
- Led and coordinated illicit discharge detection and elimination (IDDE) field, research and training projects including:
 - Provided primary leadership on an IDDE Expert Panel.
 - Quantified pollutant loads from illicit discharges on a watershed scale in Baltimore and Montgomery County.
 - Led a research project to document and quantify the pollutant load from a newly identified pollution source, HVAC discharges.
 - Led IDDE training and the development of guidance materials for municipal staff in Richmond, VA; Baltimore and Montgomery County, MD; St. Albans, Vermont; Puerto Rico; Hampton Roads, VA; and Chicago, IL.
- Other notable projects and efforts include:
 - Developed and delivered multiple training programs to local governments and watershed groups.
 - Conducted stream, upland, conservation and stormwater retrofit assessments.
 - Developed watershed plans and technical memos.
 - Facilitated numerous public stakeholder meetings.

Watershed Council Coordinator, Columbia River Estuary Study Taskforce (CREST)

September 2006 – March 2009

- Directed and managed organizational activities of the North Coast Watershed Association (NCWA) and coordinated the activities of its four member watershed councils.
- Wrote and received grants for over one million dollars in grants for habitat restoration projects and staff.
- Managed salmon and habitat restoration, monitoring and research projects.
- Managed and tracked project and organizational budgets.
- Coordinated events, public outreach, and facilitated stakeholder meetings.
- Led the NCWA through the process of developing and implementing a strategic plan.
- Developed and implemented water quality monitoring programs.

CERTIFICATIONS

- *Certified Environmental Professional, 2016 - present*
- *Chesapeake Bay Landscape Professional, Level 1, 2017 - present*

EDUCATION

M.S. with Honors, Marine Estuarine and Environmental Sciences - Ecology, University of Maryland Eastern Shore, MD. May 2004. 4.0 GPA.

B.S. with Honors, Natural Resource Management - Conservation and Applied Ecology, Cook College, Rutgers University, NJ. January 1997. 3.4 GPA.

VOLUNTEER EXPERIENCE

- Howard County Planning Advisory Committee Member, Sept 2020 – Sept 2021
- Ellicott City Master Plan Advisory Committee, Jul 2019 – Sept 2020
- Ellicott City Partnership Clean, Safe and Green Committee, Dec 2014 – present
- Ellicott City Flood Workgroup, May 2015 – Nov 2018

PUBLICATIONS

Lilly, Lori A., Neely Law, Alexander Torella, Daniel McCann and Pamela Parker. 2014. Pollutant Analysis of HVAC Discharges in Montgomery County, Maryland. Watershed Science Bulletin, Ellicott City, MD.

Lilly, Lori A. 2012. *Impacts of Buried Pipelines to Water Resources*. American Water Resources Association Impact. 14(3):3-5.

Lilly, Lori A., B. Stack., and D. Caraco. 2011. *Nonstormwater discharge pollution loading in two Mid-Atlantic subwatersheds and implications for nutrient and bacteria Total Maximum Daily Loads*. Watershed Science Bulletin, Ellicott City, MD.

Arnold, C., **L. Lilly**, K. Collins, D. Caraco, and A. Kitchell. 2011. *Incorporating impervious cover into water quality plans*. Public Works magazine. March 2011 issue, pages 59-63.

Collins, K., **L. Lilly**, D. Caraco, C. Arnold and A. Kitchell. 2010. *Addressing an impervious cover TMDL through the use of LID*. Proceedings of the ASABE TMDL 2010 Conference, Baltimore, MD, November 2010.

Lilly, Lori. 2006. *Forest dynamics of shortleaf pine-dominated xeric sand dunes, MD*. Master's thesis. University of Maryland Eastern Shore, Princess Anne, MD.

ANDRES ALEXIS OVALLE CAMPOS

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240-474-8812

EDUCATION

2000–2005 B.S. Forestry Engineering	University of Chile	Santiago, Chile
2007 English language program (E.L.P)	University of Pennsylvania	Philadelphia, US
2007 English language program (E.L.P)	Temple University	Philadelphia, US

TRAINING AND CERTIFICATION

2022 CBLP Level-1	Chesapeake Conservation Landscaping C.	Maryland, US
2021 Adult First Aid/CPR/AED	American Red Cross	Maryland, US
2020 ISA Certified Arborist MA-6332A	International Association of Arboriculture (ISA)	Maryland, US
2020 Racial Equity Workshop	Leadership Montgomery	Maryland, US
2018 Master Naturalist Trainee	UMD Extension – Montgomery Parks	Maryland, US
2016 Beekeeping Certification	Montgomery C, Beekeeping Association	Maryland, US
2014 Weed Warrior Certification	Montgomery Parks	Maryland, US

WORK EXPERIENCE

2023- Present <i>Director of Conservation and Restoration</i>	Howard EcoWorks	Maryland, US
<ul style="list-style-type: none">• Work with landowner, homeowner associations, nonprofits and agencies to develop and implement water quality improvement, habitat restoration, invasives species management and conservation projects.• Conduct site assessments and develop project proposals for new potential projects• Oversee the native plant nursery operations at the Howard County Department of Corrections• Develop retail sales business at the native plant nursery• Develop and implement tree assessment, tree care, tree planting and woodland management business• Support and lead training of crew and public education efforts, including workshops and webinars• Develop and sustain partnerships with local organizations and businesses• Lead <i>Tree HoCo</i>, a residential tree planting program for Howard County residents		
2022- present <i>CBLP-Crews Instructor</i>	Chesapeake Conservation Landscaping C.	Maryland, US
<ul style="list-style-type: none">• This course is designed for landscape crew members and crew leaders• The course focused on engagement, interaction, and hands-on learning• Topics include routine and non-routine best management practice (BMP) maintenance tasks, plant ID techniques, best native plants for BMPs, ID and management of non-natives invasives species and developing a landscape maintenance plan.		

- Participants who complete the class receive the CBLP-CREWS certificate

2021- 2022

The Neighborhood Design Center

Maryland, US

Forestry Technician

- Inspect and evaluate street tree health (disease, damage, safety issues, etc.)
- Identify trees for removal or pruning, select right tree species for the right location
- Communicate effectively with a broad set of stakeholders who will have input into the tree planting and design process
- Conduct outreach and education for residents about benefits of trees and County tree planting and conservation programs
- Track and maintain project records and record the data accurately in ArcGIS and a computerized tree inventory database
- Monitor and inspect tree installations, pruning, planting, and tree removal work. Respond to resident inquiries. Submit contractor work orders as needed

2021- 2022

Howard EcoWorks

Maryland, US

Seeds of Change Nursery Manager/Tree HoCo Arborist

- Manage the production of plants, perennials, shrubs, and trees used for landscape and restoration projects
- Manage nursery staff including work-release individuals from Howard County Corrections facility
- Develop and maintain nursery budget, purchase orders, plant inventory
- Educate and train landscape crews about plants, plant selection, proper planting, and plant maintenance
- Develop and sustain partnerships with local organizations and businesses
- Organize and manage volunteers and community plant sales
- Lead *Tree HoCo*, a residential tree planting program for Howard County residents
- Conduct planting site assessments and species selection
- Conduct tree health assessments and assist residents with woodland management

2021- present

Conservation Montgomery

Maryland, US

Home Tree Care Class Instructor

- Deliver educational and engaging Residential Tree Care classes for diverse communities across Montgomery County
- Educate community members about the benefits, maintenance and care of trees
- Provide information and technical assistance about tree rebate and incentive programs including the Tree Montgomery program

2019- 2020

Montgomery Parks M-NCPPC

Maryland, US

Park Activation Specialist

- Work collaboratively to plan, implement, administer, and evaluate all aspects of special events and nature-based programs that appeal to diverse audiences from across the county
- Build and maintain partnerships and contracts with local communities and businesses
- Manage specialized projects with internal and external stakeholders

2011- 2019

Turismo Agrícola Chile

Santiago, Chile

Program Manager

- Develop, coordinate, and lead international educational trips focused on agriculture, forestry and natural resources for universities, organizations, and professional groups from the US, Canada, New Zealand, Australia, and Europe
- Serve as liaison between the natural resource organizations, businesses, universities, and individuals to optimize international partnerships, collaborations, and education opportunities
- Provide program information, manage operations, promote positive public relations, and encourage public appreciation for Chile's natural resources

2009- 2011

Cascada Expediciones and Tourism Lago Grey (Torres Del Paine)

Chile

Naturalist

- Coordinate and lead interpretive, educational natural history programs for visitors from around the world
- Manage day-to-day operations including oversight of safety, transportation, and educational programming
- Plan logistics of nature based guided programs
- Provide customer service and tour information

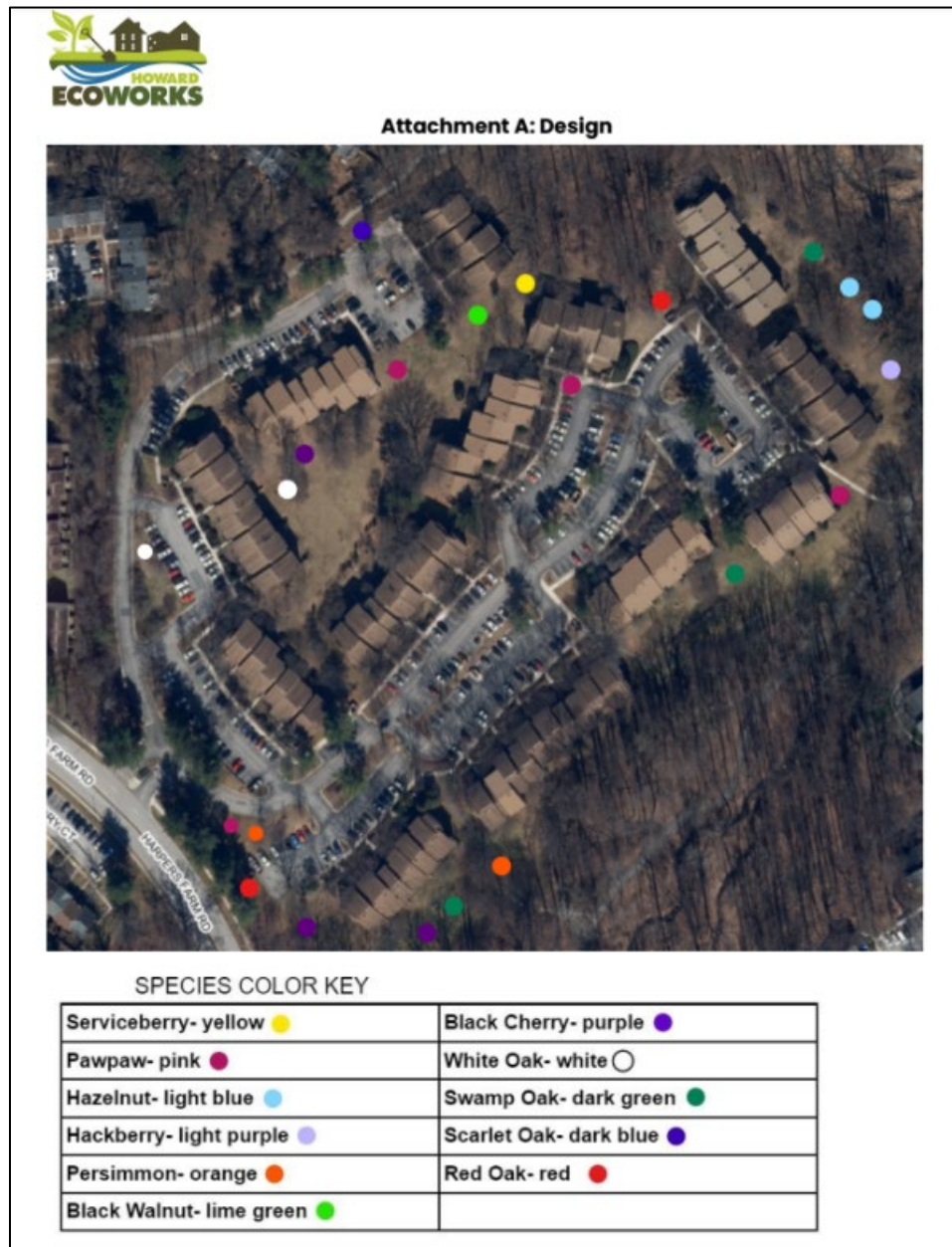
KEY SKILLS

- Fluent in Spanish and English
- Proficient in Portuguese
- Working knowledge of ArcGIS
- Public Speaking
- Excellent communication and organization skills
- Ability to work under pressure and solve problems
- Self-motivated with a willingness to learn
- Team player



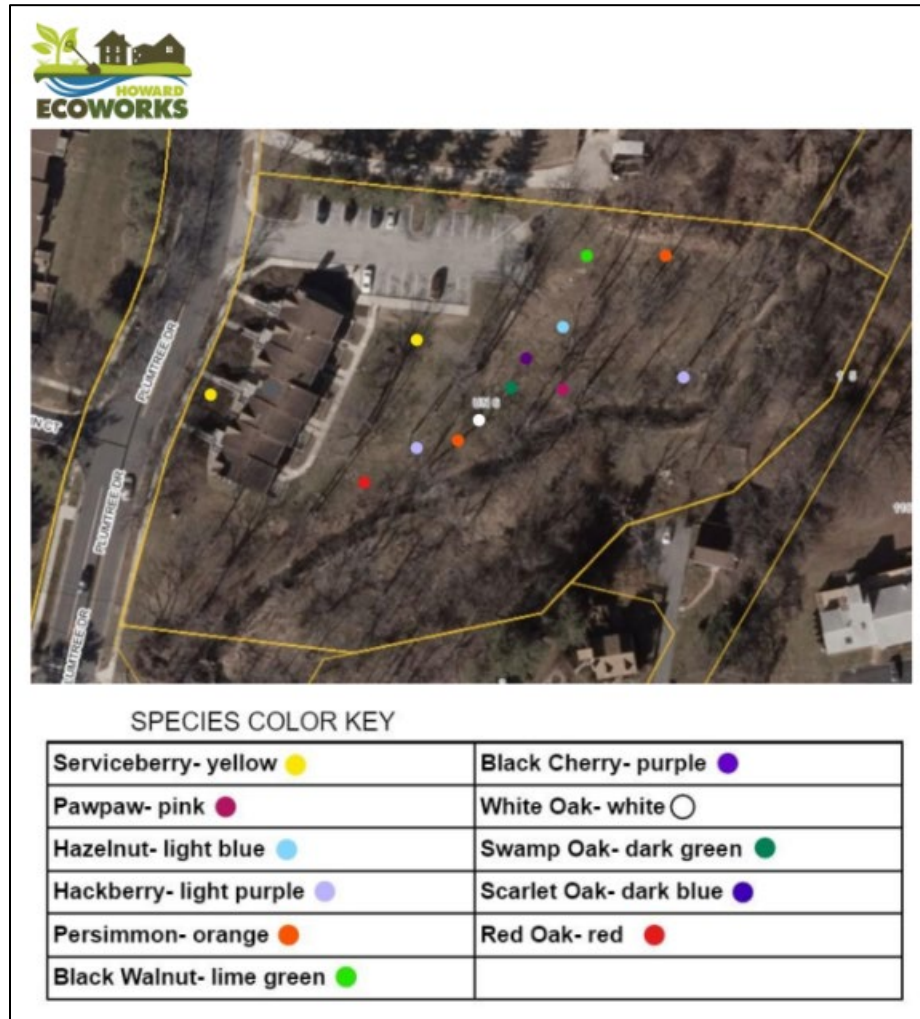
Attachment 2 – Tree Planting Plans

Deering Woods HOA Planting Plan





Dunloggin Square Condos Planting Plan





City of Laurel Planting Plan



Attachment A: Design

SPECIES COLOR KEY

Serviceberry- yellow ●	Black Cherry- purple ●
Pawpaw- pink ●	White Oak- white ○
Hazelnut- light blue ●	Swamp Oak- dark green ●
Hackberry- light purple ●	Scarlet Oak- dark blue ●
Persimmon- orange ●	Red Oak- red ●
Black Walnut- lime green ●	

