



# Outreach and Community Engagement Grant Program-Status Report Form

[www.chesapeakebaytrust.org](http://www.chesapeakebaytrust.org) / 410-974-2941

To complete the status report for your grant, please fill out the form below.

## 1. Grantee Information

Organization Name: Harford County, MD

Project Leader: Christine Buckley

Grant Number: 11057

## 2. Progress to Date

### *Project Preparation*

In preparation for the project, a letter was mailed to the residents (see enclosure) in the watershed describing the ongoing restoration occurring in the Wheel Creek watershed along with information about the proposed project to pursue low-cost alternatives within the community. No emails or phone calls were received as a result of this letter.

Aerial photographs were reviewed to determine the areas of focus for the project. While there are 800 residential properties in the watershed, the focus was limited to single family homes where disconnection of the downspouts would be more practical. This limited the project to the Country Walk Community (132 properties), the community north of Darby Lane (12 properties), and Country Walk Circle (9 properties) for a total of 153 properties. The Arthur's Woods community was eliminated because the downspouts were already directed to water quality facilities.

### *On-line Survey / Door Hangers*

In order to determine the opinions of the community about watershed restoration and to solicit participants in a focus group, an on-line survey was developed (see enclosure). The survey was limited to 20 questions and was developed using the on-line survey software Survey Monkey. The focus of the survey was about the community's interest in watershed health, existing knowledge of watershed restoration and willingness to participate in low-cost restoration on their individual properties.

As an alternative to traditional mailings that have been only marginally successful in the past, a door hanger was used to solicit property owners to participate in the on-line survey (see enclosure). The incentive for participating in the survey was free native plants. Prior to distributing the door hangers, Harford County contacted the property management company for the Country Walk community to obtain their approval. The homeowners association was receptive to the request and even suggested that we could distribute our request through their website, which we did approximately two weeks after the door hangers were distributed. Unfortunately, we were unable to limit our request through the community's website to only those residents within our project focus.

Twenty nine (29) residents responded to the on-line survey. Five (5) residents responded to the on-line survey prior to the listing on the website. Six (6) of those that responded accepted our offer for free perennials. Three (3) black-eyed Susans were delivered to each of these residents along with a summary of the survey results and information about native plants (see enclosure).

### *Focus Group*

Three (3) of the residents that responded to the on-line survey agreed to participate in a focus group to discuss watershed restoration and methods to improve community outreach. The incentive for participating in the focus group was a free native tree. Only one of the focus group participants were within our targeted properties.

The focus group meeting was held on a weeknight at Panera Bread located within a half mile of the community. The meeting lasted approximately 2 hours and included discussions about the current and proposed Wheel Creek watershed restoration projects, why they responded to the on-line survey and focus group, and methods to improve community outreach and engagement. All of the focus group members responded because of an existing interest in the environment and the free incentives. And one of the members was interested in an update on the stream restoration proposed in her backyard. Some suggestions to consider were social media, local magazines, and workshops (see enclosure).

### *Existing Downspout Disconnection*

As each door hanger was distributed, the location of the downspouts and connection to impervious for each house was inventoried. This information was entered into the GIS and a database developed to determine the amount of rooftop already disconnected from driveways and roads. For the properties surveyed (153), there is a total of 6.1 acres of rooftop impervious. Eighty percent (80%) of the rooftops are already disconnected. Approximately half of those listed as connected were either physically difficult to disconnect or were not visible. The approximate area to each downspout is 400 square feet.

### *Request to Disconnect Downspouts*

Since a large number of the downspouts were determined to already be disconnected, Harford County decided to offer rain barrels in addition to a free tree to the community to disconnect their downspouts. As suggested through the focus group, a Facebook page was developed for reference to the project and was named Wheel Creek Redirected Downspouts (see enclosure). A flyer requesting participation along with a summary of the on-line survey (see enclosure) was developed and forwarded to the management company to include on the community website. For reasons that seemed not entirely related to our project, the community decided to not post the flyer on their website. Since the door hangers were only marginally success for soliciting participation in the on-line survey, the flyers were mailed to the 153 properties including those already disconnected. An automated call was also delivered approximately one week after the flyers were mailed. Unfortunately, only 2 property owners responded by telephone and no likes were generated on the Facebook page. The property owners selected the rain barrels which did disconnect approximately 800 square feet of impervious area. At a cost of \$24.27 per barrel, the cost for this treatment is \$2,800 per acre, which is considerably less than the average \$30,000 per acre for stream restoration and stormwater retrofit.

### 3. Project evaluation and lessons learned

- Door hangers were only marginally more effective than direct mailings.
- Distribution during the summer months may not have been the best time as personal schedules can be very busy and unimportant mail pushed aside. Distribution during the late winter may be a better time.
- Consideration should be given to coordinate with local downspout companies to promote the program or offer discounts.
- Direct contact with the Country Walk Homeowners Association at the beginning of the project could have lead to better success in distributing materials. Although an email to the board of directors to coordinate outreach for restoration projects and community involvement remains unanswered 2 weeks after being sent.
- Offering native plants as an incentive for participation was well received.
- The focus group provided excellent opportunity to meet with some members of the community and develop suggestions for outreach.
- Water Resources needs to develop a focused outreach program with a message that is easy to understand even through improving water quality can be an abstract concept for the general public.
- Continue to develop “Your Piece of the Earth” as a potential message and develop steps that the community can take in their own backyards to help towards watershed restoration.
- Lots smaller than 1/3 acre can sometimes be difficult to redirect downspouts away from impervious areas in order to meet the 2000 Design Manual for credits towards stormwater. The use of rain barrels or rain gardens may be more effective.
- Completing a targeted inventory and contacting individual property owners based on a recommendation for redirecting the downspout or installing a rain barrel or rain garden could lead to high response.

### 4. Timeline

- |                                 |                   |
|---------------------------------|-------------------|
| 1. Review aerial photographs    | 5/2012 – 6/2012   |
| 2. Develop door hangers         | 6/2012 – 7/2012   |
| 3. Site visits                  | 7/2012 – 8/2012   |
| 4. Inventory site visit results | 9/2012 – 10/2012  |
| 5. Focus group                  | 10/2012 - 11/2012 |
| 6. Full Implementation          | 2/2013 – 3/2013   |
| 7. Inventory Success            | 2/2013 – 3/2013   |

### 5. Community Involvement and Outreach Activities

- On-line survey – 29 residents participated in an on-line survey. The survey took approximately 15 minutes to complete for a total of 7.25 volunteer hours.
- Focus Group – 3 residents participated in a focus group that lasted 2 hours for a total of 6.0 volunteer hours.

- Perennial plantings – 7 residents received perennials to plant. Planting the perennials should take each resident approximately 15 minutes to complete for a total of 1.75 volunteer hours.
- Tree plantings – 2 residents received trees to plant. Planting the trees should take approximately 15 minutes for a total of 0.5 volunteer hours.
- Rain Barrels – 2 residents received rain barrels. Installing the rain barrels should take approximately 30 minutes for a total of 1.0 volunteer hours.
- *A total of 16.5 volunteer hours contributed to this project.*

**6. Accounting of Expenditures**

Budget item	Total amount awarded	grant funding expended to date	Total Expended to Date	Cash match to date	In-kind match to date	Source of match	Volunteer hours to date
Contract	14,871	7,562.00	6,049.60	1,512.40	0	County General Fund	0
Door hangers	996	151.50	189.38	37.88	0	County General Fund	13.25
Trees	1,992	60.00	75.00	15.00	0	County General Fund	0.5
Perennials	149	48.92	61.15	12.23	0	County General Fund	1.75
Signs	1,992	0	0	0	0	N/A	0
Rain Barrels	0	38.19	47.74	9.55	0	County General Fund	1.0
TOTAL	20,000	7,860.61	6,422.87	1,587.06	0		16.5

6,348.22      7,935.27

Rain barrels were added as an incentive since many of the downspouts were already disconnected.

**7. Project partners**

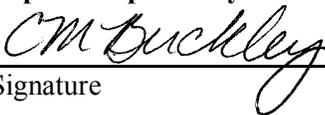
Staff at the Anita C. Leight Estuary Center assisted in the construction of the rain barrels. The barrels were donated from Harford County Water and Sewer.

**8. Measuring Impact**

Project Participants	#	Restoration Outcomes (cont'd)	#	Outreach Outcomes	#
Estimated number of volunteers:		Sq. ft. of bay grasses (SAV) planted:		# of publications (print, web, other) produced:	6
Estimated number of people of color		Sq. ft. of oyster reef restored:		# of copies of print publications produced	459
Estimated number of students:		# of trees planted:	2	# web hits on online publications expected	50
Estimated number of students of color		# of native plants planted:	23	# of presentations/workshops:	1
Estimated number of teachers:		# of rain barrels installed/distributed:	2	# of attendees at presentations:	3
Estimated number of people of color		# of fish to be raised and/or released:		Pounds of trash/debris removed:	
<b>Restoration Outcomes</b>		# of bay grasses (SAV) planted:		# of storm drains stenciled:	
Sq. ft. of streamside forest buffers planted:		# of oysters to be raised and/or released:		# media hits (e.g., newspaper articles, TV and radio stories, etc.)	
Linear ft of bank stabilization:		# of wildlife habitat structures:		Other: Downspouts disconnected	2
Sq. ft. of rain garden or bioretention created:		Sq. ft. of invasive species removed:		Other:	
Sq. ft. of wetlands enhanced/ restored:		Linear feet of living shoreline created:			

**9. Signature**

Report Prepared By:

  
 \_\_\_\_\_  
 Signature

Christine M. Buckley  
 \_\_\_\_\_  
 Print Name

4/1/2013  
 \_\_\_\_\_  
 Date

**Please return this status report to:** Chesapeake Bay Trust, 60 West Street, Suite 405, Annapolis, MD 21401 or via email to [tbaker@cbtrust.org](mailto:tbaker@cbtrust.org).

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**DAVID R. CRAIG**  
HARFORD COUNTY EXECUTIVE

  
**MARY F. CHANGE**  
DIRECTOR OF ADMINISTRATION



**TIMOTHY F. WHITTIE, P.E.**  
DIRECTOR OF PUBLIC WORKS

  
**H. HUDSON MYERS, III, P.E.**  
DEPUTY DIRECTOR OF PUBLIC WORKS

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## HARFORD COUNTY GOVERNMENT

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### DEPARTMENT OF PUBLIC WORKS DIVISION OF HIGHWAYS AND WATER RESOURCES

July 24, 2012

Subject: Wheel Creek Watershed Restoration

Dear Home Owner:

Harford County Water Resources Engineering (HC) is collecting neighborhood data to determine opportunities to reduce impacts to the health of your local stream, Wheel Creek. Your property is located within the Wheel Creek watershed, which means that stormwater runoff that leaves your property ultimately reaches Wheel Creek. All of the activities that occur within a watershed can impact the health of your local stream.

HC is currently implementing the Wheel Creek Watershed Restoration Plan. The restoration plan includes an extensive water quality monitoring program, stream restorations and upgrades to existing stormwater management facilities. The first stormwater management project in this watershed is scheduled to start within the next month. These types of traditional watershed restoration projects can be very costly. HC is collecting neighborhood data in your community to determine if there are viable low cost alternatives.

In addition to collecting neighborhood data, we are also collecting information via an on-line survey about the community's interest in participating in low cost alternative watershed restoration. Information concerning the on-line survey will be distributed on a door hanger. The results of our survey will also be provided at a later date on a door hanger.

If you have any questions, please contact me at (410) 638-3545 ext 1176 or via email at [cmbuckley@harfordcountymd.gov](mailto:cmbuckley@harfordcountymd.gov) or Michele Dobson at (410) 638-3545 ext 1247 or via email at [mgdobson@harfordcountymd.gov](mailto:mgdobson@harfordcountymd.gov). Thank you for your consideration.

Sincerely,

  
Christine Buckley  
Environmental Engineer

CMB: cmb

Cc: Timothy F. Whittie, P.E., Director of Public Works  
H. Hudson Myers, P.E., Deputy Director of Public Works  
Michael Rist, P.E., Chief Engineer  
Jane Walker, Constituent Services Coordinator  
Patricia Gonzalez, Constituent Services Coordinator

*~ Preserving Harford's past; promoting Harford's future ~*

MY DIRECT PHONE NUMBER IS 410-638-3509  
212 SOUTH BOND STREET, 3<sup>rd</sup> FLOOR, BEL AIR, MARYLAND 21014 • [www.harfordcountymd.gov](http://www.harfordcountymd.gov)

## 1. What role does the Chesapeake Bay play in your life? (Check all that apply.)

		Response Percent	Response Count
Fishing		17.2%	5
Boating		10.3%	3
Crabbing		10.3%	3
Water Skiing		0.0%	0
Swimming		20.7%	6
<b>None</b>		<b>51.7%</b>	<b>15</b>
Other, please specify		17.2%	5
		<b>answered question</b>	<b>29</b>
		<b>skipped question</b>	<b>0</b>

## 2. How healthy is the Chesapeake Bay?

	Very Unhealthy					Very Healthy	Rating Average	Rating Count
	0.0% (0)	28.6% (8)	<b>39.3% (11)</b>	32.1% (9)	0.0% (0)	0.0% (0)	2.04	28
	answered question							28
	skipped question							1

## 3. How important is a healthy Chesapeake Bay to you?

	Not Important					Very Important	Rating Average	Rating Count
	0.0% (0)	7.1% (2)	7.1% (2)	10.7% (3)	35.7% (10)	<b>39.3% (11)</b>	3.93	28
	answered question							28
	skipped question							1

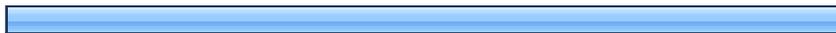
#### 4. Which pollutants have the greatest impact on the health of the Chesapeake Bay? (Check all that apply.)

		Response Percent	Response Count
Sediment		48.1%	13
Nutrients		48.1%	13
Heavy Metals		44.4%	12
Bacteria		44.4%	12
<b>Pesticides</b>		<b>74.1%</b>	<b>20</b>
Other, please specify		0.0%	0
		<b>answered question</b>	<b>27</b>
		<b>skipped question</b>	<b>2</b>

### 5. Which of the following have the greatest impact on the health of the Chesapeake Bay? (Select 2.)

		Response Percent	Response Count
Industry		69.2%	18
Wastewater Treatment Plants		30.8%	8
Farming		38.5%	10
Commercial Fishing		15.4%	4
Residential Properties		11.5%	3
Schools and Libraries		0.0%	0
Septic Systems		11.5%	3
Construction Sites		3.8%	1
Comercial Businesses		15.4%	4
Recreational Boating		3.8%	1
Roads		0.0%	0
Parks		0.0%	0
<b>answered question</b>			<b>26</b>
<b>skipped question</b>			<b>3</b>

## 6. Which of the following have the least impact on the health of the Chesapeake Bay? (Select 2.)

		Response Percent	Response Count
Industry		0.0%	0
Wastewater Treatment Plants		3.8%	1
Farming		3.8%	1
Commercial Fishing		3.8%	1
Residential Properties		15.4%	4
<b>Schools and Libraries</b>		<b>73.1%</b>	<b>19</b>
Septic Systems		0.0%	0
Construction Sites		0.0%	0
Commercial Businesses		3.8%	1
Recreational Boating		11.5%	3
Roads		11.5%	3
<b>Parks</b>		<b>73.1%</b>	<b>19</b>
<b>answered question</b>			<b>26</b>
<b>skipped question</b>			<b>3</b>

### 7. What role do local rivers and streams play in your life? (Check all that apply.)

		Response Percent	Response Count
Fishing		23.1%	6
Boating		7.7%	2
Crabbing		7.7%	2
Water Skiing		0.0%	0
Swimming		19.2%	5
<b>None</b>		<b>50.0%</b>	<b>13</b>
Other, please specify		23.1%	6
<b>answered question</b>			<b>26</b>
<b>skipped question</b>			<b>3</b>

### 8. How healthy are the local rivers and streams in Harford County?

	Very Unhealthy				Very Healthy	Rating Average	Rating Count
	3.8% (1)	11.5% (3)	26.9% (7)	<b>42.3% (11)</b>	11.5% (3)	3.8% (1)	2.58
<b>answered question</b>							<b>26</b>
<b>skipped question</b>							<b>3</b>

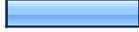
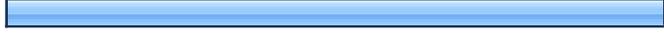
### 9. How important are healthy local rivers and streams to you?

	Not Important					Very Important	Rating Average	Rating Count
	3.8% (1)	3.8% (1)	19.2% (5)	11.5% (3)	19.2% (5)	<b>42.3% (11)</b>	3.65	26
							<b>answered question</b>	<b>26</b>
							<b>skipped question</b>	<b>3</b>

### 10. How important is the health of local rivers and streams to the health of the Chesapeake Bay?

	Not Important					Very Important	Rating Average	Rating Count
	3.8% (1)	0.0% (0)	3.8% (1)	19.2% (5)	23.1% (6)	<b>50.0% (13)</b>	4.08	26
							<b>answered question</b>	<b>26</b>
							<b>skipped question</b>	<b>3</b>

**11. The runoff from your property drains to which body(ies) of water? (Check all that apply.)**

		Response Percent	Response Count
Atkisson Reservoir		42.3%	11
Bush River		7.7%	2
Bynum Run		11.5%	3
Chesapeake Bay		23.1%	6
Deer Creek		3.8%	1
Gunpowder River		7.7%	2
Otter Point Creek		3.8%	1
Swan Creek		0.0%	0
<b>Winters Run</b>		<b>57.7%</b>	<b>15</b>
		<b>answered question</b>	<b>26</b>
		<b>skipped question</b>	<b>3</b>

**12. Your tap water comes from which body(ies) of water? (Check all that apply.)**

		Response Percent	Response Count
Atkisson Reservoir		19.2%	5
Bush River		3.8%	1
Lake Montebello		0.0%	0
Loch Raven Reservoir		11.5%	3
<b>Susquehanna River</b>		<b>42.3%</b>	<b>11</b>
Winters Run		26.9%	7
Underground Wells		15.4%	4
<b>answered question</b>			<b>26</b>
<b>skipped question</b>			<b>3</b>

**13. How significant are your daily activities to the health of local rivers and streams?**

	Not Significant					Very Significant	Rating Average	Rating Count
	15.4% (4)	15.4% (4)	15.4% (4)	15.4% (4)	<b>19.2% (5)</b>	<b>19.2% (5)</b>	2.65	26
<b>answered question</b>								<b>26</b>
<b>skipped question</b>								<b>3</b>

**14. What changes to your daily activities would you be willing to make to improve the health of local rivers and streams?  
(Check all that apply.)**

		Response Percent	Response Count
Wash my car so the wash water drains onto the grass		44.0%	11
Complete a soil test to determine the proper amount of fertilizer to use		44.0%	11
<b>Direct the downspouts from my house onto the grass</b>		<b>64.0%</b>	<b>16</b>
Install a rain barrel		36.0%	9
Install a rain garden		28.0%	7
Plant trees		56.0%	14
Use alternative materials for new projects such as porous pavers		16.0%	4
None of the above		12.0%	3
Other, please specify		4.0%	1
		<b>answered question</b>	<b>25</b>
		<b>skipped question</b>	<b>4</b>

**15. If there were no costs to you, how willing would you be to make changes to your daily activities to improve the health of local rivers and streams?**

	Not Willing					Very Willing	Rating Average	Rating Count
	4.0% (1)	8.0% (2)	0.0% (0)	16.0% (4)	32.0% (8)	<b>40.0% (10)</b>	3.84	25
	answered question							25
	skipped question							4

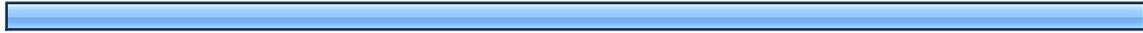
**16. How much would you be willing to spend to make changes to your daily activities to improve the health of local rivers and streams?**

		Response Percent	Response Count
\$0		12.5%	3
<b>\$1 - \$50</b>		<b>50.0%</b>	<b>12</b>
\$51 - \$100		20.8%	5
\$101 - \$200		8.3%	2
\$201 or more		8.3%	2
	answered question		24
	skipped question		5

### 17. What is the estimated cost per year for Maryland's portion of the restoration of the Chesapeake Bay by 2025?

		Response Percent	Response Count
Under \$10 million		17.4%	4
Between \$10 million and \$30 million		26.1%	6
<b>Between \$30 million and \$50 million</b>		<b>39.1%</b>	<b>9</b>
Between \$50 million and \$1 billion		13.0%	3
Over \$1 billion		4.3%	1
		<b>answered question</b>	<b>23</b>
		<b>skipped question</b>	<b>6</b>

**18. If you would be willing to participate in a one-hour focus group to discuss activities that homeowners can participate in to improve the health of the Chesapeake Bay and our local rivers and streams, please complete your contact information below. A free native tree (\$50 value) will be provided to those selected.**

		Response Percent	Response Count
Name		100.0%	5
Street Address		100.0%	5
Phone		100.0%	5
Email Address		80.0%	4
		answered question	5
		skipped question	24

**19. As a thank you for completing this survey, you will receive free native plants. Please complete the contact information below to receive these plants. Your contact information will remain confidential.**

		Response Percent	Response Count
Name		100.0%	8
Street Address		100.0%	8
Phone		62.5%	5
Email Address		75.0%	6
		<b>answered question</b>	<b>8</b>
		<b>skipped question</b>	<b>21</b>

**20. Please provide any additional information or comments regarding watershed restoration.**

	Response Count
	2
<b>answered question</b>	<b>2</b>
<b>skipped question</b>	<b>27</b>

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# Free

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Please take 10 minutes to  
answer a short on-line survey

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*What are your thoughts about*

**The Chesapeake Bay  
and  
Local Rivers & Streams**

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**FREE**

Answer the survey and  
receive free native plants

**FREE**

*\* This project is funded through a grant with  
the Chesapeake Bay Trust \**

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*Survey responses accepted through 9/2012*

**On-line Survey**

WWW.

**Phone Survey**

(410) 638-4109 ext. 1236

**Contact Us**

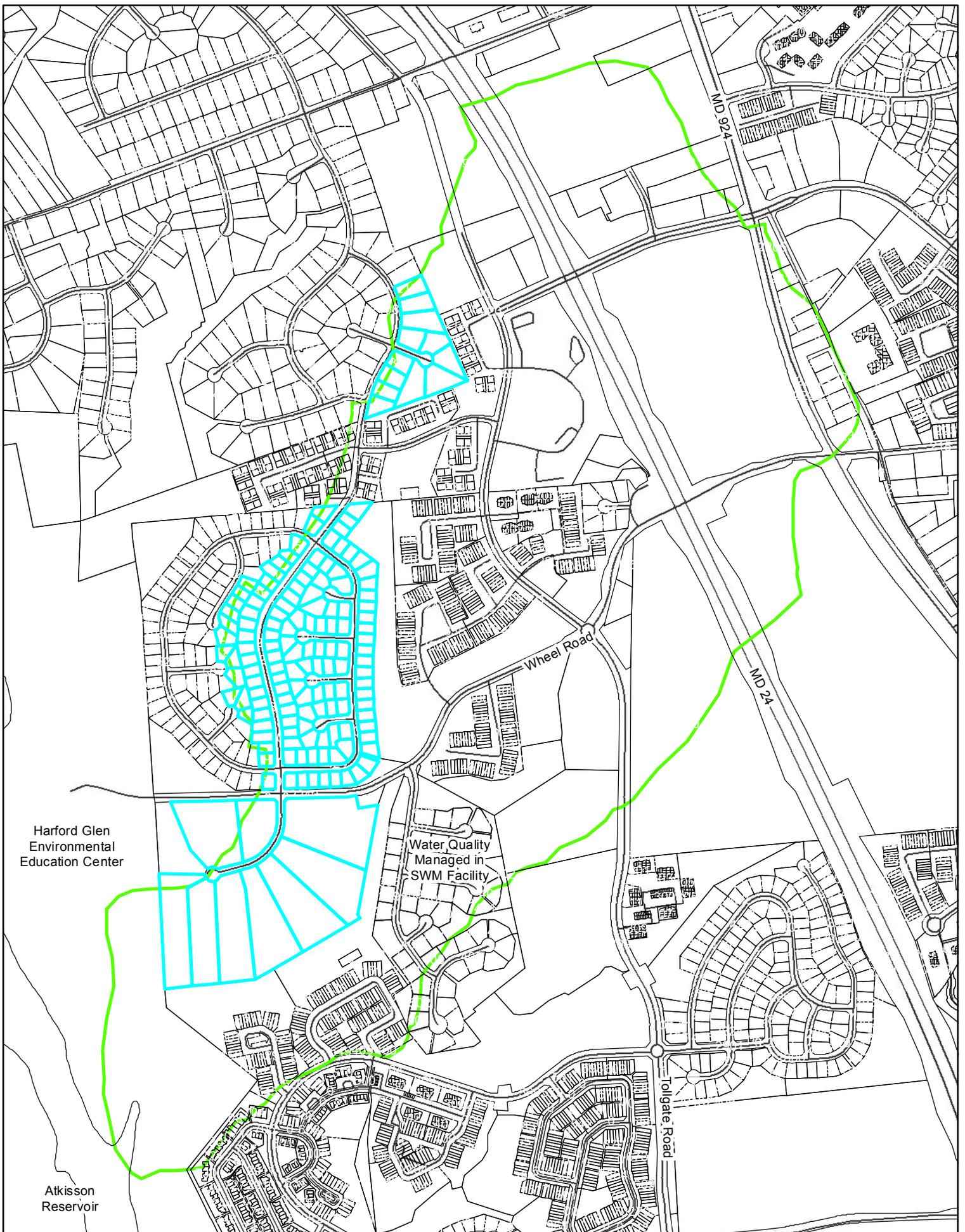
(410) 638-4109 ext. 1176

cmbuckley@HarfordCountyMD.gov

*The survey is requested by  
Harford County Department of Public Works.*

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Houses that received door hangers

# ...Thank You...

## Please enjoy these Black-eyed Susans as a thank you for responding to our questionnaire.

Thank you for taking the time to respond to our questionnaire. Your responses are helpful for us in developing our watershed restoration program and providing us insight on public opinions. The following is a portion of the results.

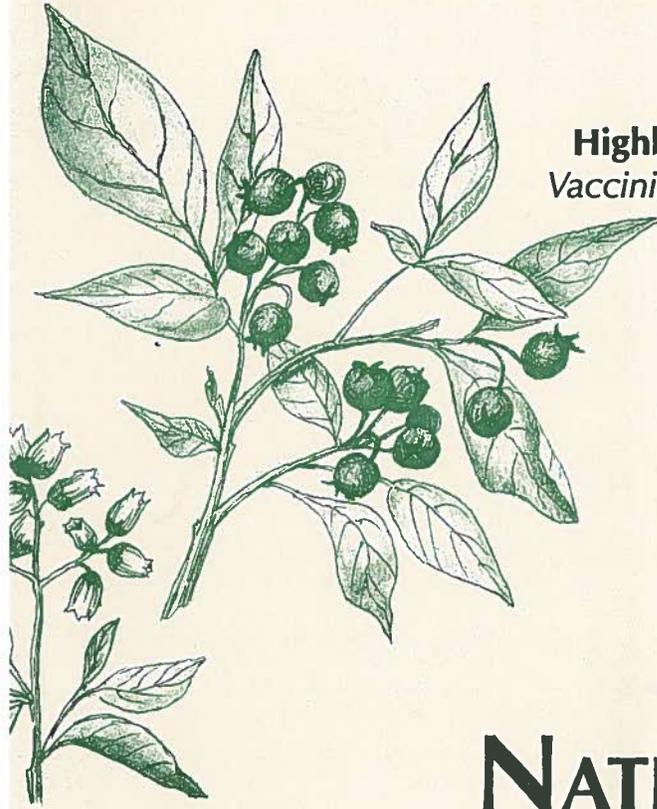
- While neither the Chesapeake Bay nor our local streams play a major role in your lives, their health is important to you.
- Most of you responded correctly that your properties drain into the Winters Run, Atkisson Reservoir, Bush River and Chesapeake Bay watersheds.
- Most of you also responded correctly that your drinking water source is the Susquehanna River and underground wells. A portion of the public drinking water does come from the reservoirs in Baltimore City, but none of your drinking water comes from Atkisson Reservoir. Winters Run does supply the Town of Bel Air.
- Most of you would be willing to make changes to your daily habits to improve water quality, even if it cost up to \$50.
- Most of you estimated Maryland's portion of the Bay Restoration would cost up to \$50 million per year through 2025. Projections are actually well over 10 times that amount.

Our office is currently working on a watershed restoration within your watershed, Wheel Creek. The watershed is 435 acres and drains into Atkisson Reservoir. A stormwater management retrofit is currently under construction along Darby Lane and a stream restoration is anticipated to begin within the next month. A map of the watershed along with location of projects is enclosed.

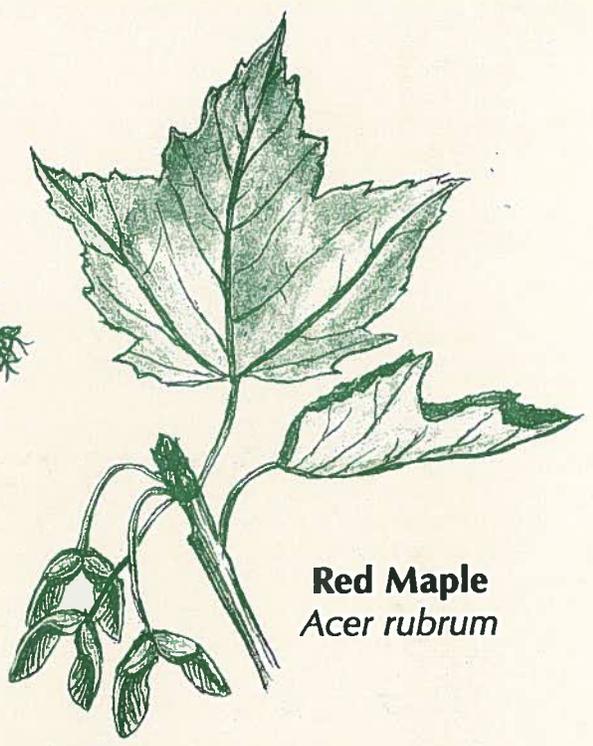
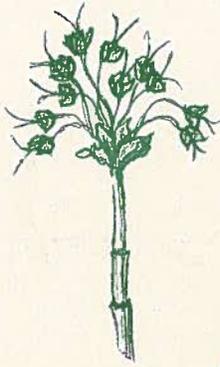
Please feel free to contact me with any suggestions or questions. Again, I appreciate your input.

Sincerely,

Christine Buckley  
Harford County Water Resources  
212 South Bond Street  
Bel Air, MD 21014  
(410) 638-3545 extension 1176  
[cmbuckley@harfordcountymd.gov](mailto:cmbuckley@harfordcountymd.gov)



**Highbush Blueberry**  
*Vaccinium corymbosum*



**Red Maple**  
*Acer rubrum*

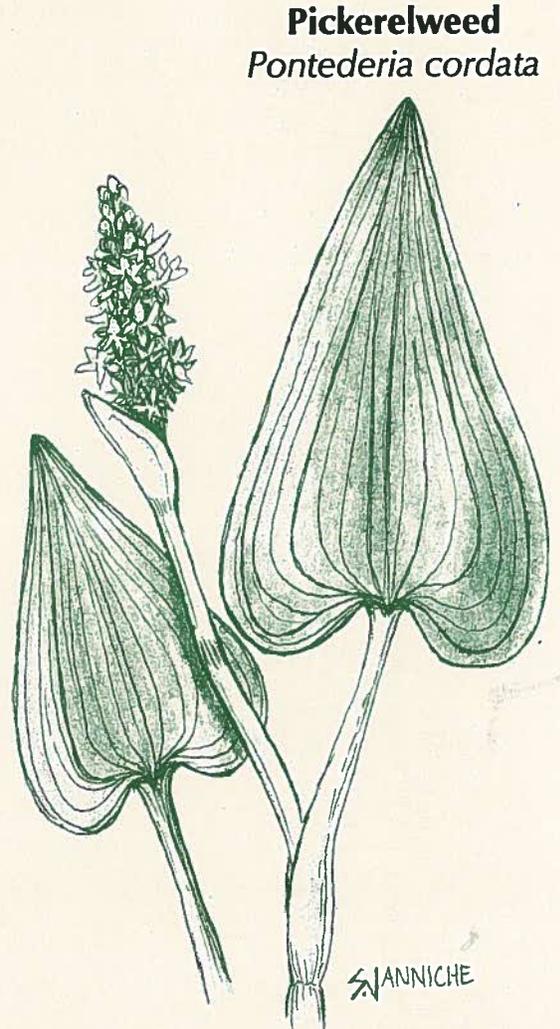
# NATIVE PLANTS for WILDLIFE HABITAT



**Staghorn Sumac**  
*Rhus typhina*



**Black-Eyed Susan**  
*Rudbeckia hirta*



**Pickerelweed**  
*Pontederia cordata*

ANNICHE

**Compiled by the U.S. Fish and Wildlife Service, Chesapeake Bay Field Office, in cooperation with Irvine Natural Science Center and Adkins Arboretum.**

**U.S. Fish and Wildlife Service, Chesapeake Bay Field Office**

The Fish and Wildlife Service is a federal agency responsible for protecting, enhancing and managing the nation's fish and wildlife resources. The Chesapeake Bay Field Office has several programs to assist private landowners and schools in wildlife habitat restoration.

*Address: 177 Admiral Cochrane Drive, Annapolis, MD 21401. Telephone: (410) 573-4500.*

**Irvine Natural Science Center**

The Irvine Natural Science Center is a private nonprofit educational organization offering programs of environmental studies and natural science to children and adults in the greater Baltimore area. The purpose of these programs is to inspire an appreciation and respect for the natural world, to increase awareness of environmental issues and to encourage individuals to sustain the earth's ecosystem.

*Address: St. Timothy's School, Stevenson, MD 21153. Telephone: (410) 484-2413.*

**Adkins Arboretum**

Adkins Arboretum contains 500 acres of native trees and shrubs arranged in natural forest types. The arboretum offers educational programs.

*Address: Tuckahoe State Park, Rt. 1 Box 23, Queen Anne, MD 21657. Telephone: (410) 634-2847.*

Compiled by Rich Mason and Jason Hitchcock.

Cover illustration by Sandy Janniche.

Other illustrations by Sandy Glover and Rich Mason.



**Not for resale.**

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*November 1995  
Reprinted November 1997*

***Printing made possible with a grant from the Chesapeake Bay Trust***

## ***Wheel Creek Focus Group Results (November 2012)***

### 3 participants

A – Has lived on Country Walk Circle for 45 years; Works as a planner; Has 2 grown children

B – Has lived on Althea Court for 21 years; Retired from Army Environmental Command; Has no children

C – Has lived on Amelanchier Court for 5 years; Works in accounts payable; Has 1 pre-school child

### Why response to survey?

A, B, C – free flowers

B & C - Email from HOA

### Why response to focus group?

A – update on restoration project

C – free tree

### What are your opinions on Unsolicited information?

- Mailings are generally not well received or overlooked or added to the pile to look at later
- Door hangers are short and are read immediate and a decision made quickly
- Automated calls are listened to if they are providing specific information or directions
- Newspaper articles could be effective
- Consider writing a featured article in a local monthly magazine such as Harford Heart
- Consider using Facebook – new posts pop up as news feeds for those who like your page
- Consider using the on-line news pages Bel Air Patch or Daily Dagger
- None of the participants read the bulletin boards in community centers

### What are your opinions on community based outreach?

- They do not regularly visit the HOA website, but do review emails received from HOA
- They do not attend the monthly HOA board meeting, although anyone can attend
- They do have a community yard sale that could potentially be a place for outreach

- Consider using local businesses – Double T paper place mats, Kleins, church bulletins & community centers, snow ball stands, Brads Produce on Tollgate Road, Chik-Fil-a
- Consider using temporary signs within the community to announce meetings or project information

What are your opinions on voluntary outreach?

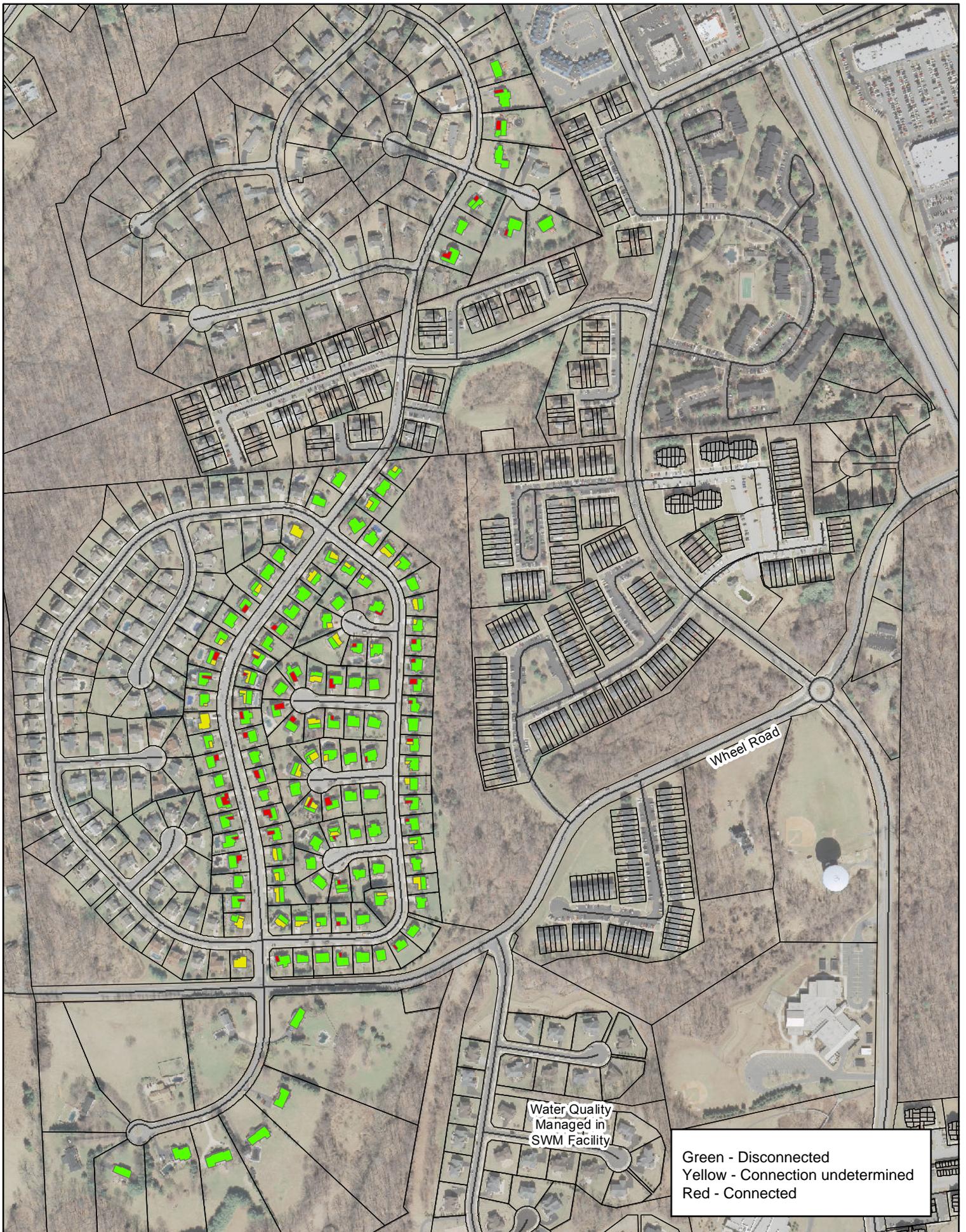
- They would attend a one-day workshop / Non-credit course on a broad subject if the cost was inexpensive
- Consider developing courses for children at the library
- Coordinate with local scout troops and develop a list of potential projects
- Consider monthly information exchanges at environmental centers such as Leight Center, Harford Glen
- Advertise workshops through Parks & Recreation
- Advertise on bulletin boards / newsletters / websites in environmental center and along the Ma & Pa Trail and Promenade in Havre de Grace
- Include signage for demonstration projects
- Develop computer based games

What incentives would encourage the public to participate?

- Coupons
- Free Trees
- Individual property sign
- Free labor
- Tax reductions
- Grants
- Recognition other than signs

Other

- Provide “hands on how to” within the neighborhoods
- Develop partnerships with gutter companies for discounts
- ***Need to determine an overall message to property owners to promote our program. “What are we trying to say to the community?”***



Search for people, places and things

Chris Buckley Find Friends Home

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### Wheel Creek Redirected Downspouts

1 like

Like Message

Government Organization  
Pilot project in Wheel Creek Watershed, Harford County, MD to encourage property owners to redirect downspouts away from paved surfaces --- Funding through Chesapeake Bay Trust.

About - Suggest an Edit



Photos Likes

Highlights

Post Photo / Video  
Write something...  
Share

**Wheel Creek Redirected Downspouts**  
February 13  
In Harford County, rain water enters into stormdrain pipes and ultimately into our local streams. As the rain flows over the land it can pick up harmful pollutants from our roofs, lawns, driveways and sidewalks depositing into the streams.

Likes  
**Wheel Creek at Calverts Walk Stream Restoration**  
Government Organization  
Like

**Wheel Creek Redirected Downspouts**  
February 13  
Covering the land with hard surfaces such buildings, driveways, sidewalks and roads causes less rain water to absorb into the land and more rain water to flow into stormdrain pipes and ultimately our streams. This increased amount of rain water flowing off the land not only can contain harmful pollutants but can cause erosion in our streams.

Chat

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Like · Comment · Share

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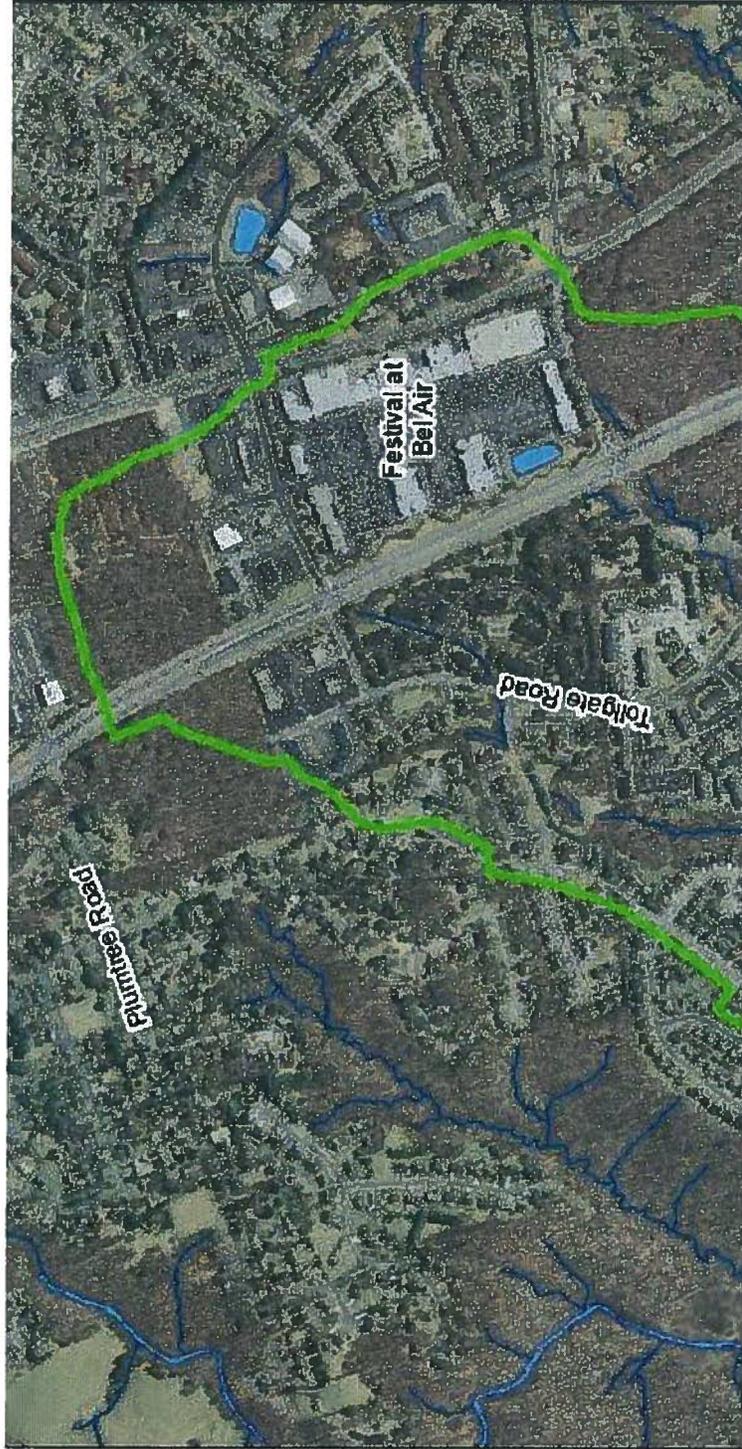


Wheel Creek Redirected Downspouts

February 13

Now Founded

If you live in the Wheel Creek Watershed (shown in the map below) and are interested in participating in this project, please comment on this post or send a private message.



Like · Comment · Share

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Office stress relief.  
sweepstakes.amf.com



Joined Facebook

January 23

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Earlier in 2013

### Joined Facebook

January 23

### Founded in 2013

Like Comment

Likes 2013



Liked Wheel Creek at Calverts Walk Stream Restoration

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Chat



# “Your Piece of the Earth”

We are looking for property owners to volunteer to participate in a project to improve the quality of the water in our local streams. Small changes to your property can collectively make a difference and we would like to encourage property owners to share our goal in improving water quality. We are proposing the following two projects:

1. **Redirecting downspouts** – If your downspout currently drains directly onto or close to a paved surface, turning your downspout to drain to a grassy area can improve water quality. This occurs by allowing rain water to absorb into the ground instead of draining into the roadway and stormdrains and into local streams.
2. **Rain Barrels** – If redirecting your downspout is impractical, you can still help improve water quality by directing your downspout into a rain barrel. This occurs by collecting rain water to be used on your property for watering plants and shrubs instead of draining into the roadway and stormdrains and into local streams.

Property owners, who voluntarily redirect at least one downspout,  
can qualify for a **FREE** tree or rain barrel.

Please consider participating in one of these programs. A small commitment of your time can lead to a large improvement to our local streams. If you are interested in participating in one of these programs or are interested in more information, please contact us.

Christine Buckley

(410) 638-3545 ext 1176

[cmbuckley@harfordcountymd.gov](mailto:cmbuckley@harfordcountymd.gov)

Visit us on Facebook at Wheel Creek Redirected Downspouts

## **...On-line Survey Results...**

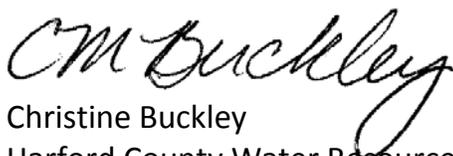
The following is a summary of responses from your neighborhood to an on-line survey about Chesapeake Bay Watershed Restoration.

- While neither the Chesapeake Bay nor our local streams play a major role in your lives, their health is important to you.
- Most of you responded correctly that your properties drain into the Winters Run, Atkisson Reservoir, Bush River and Chesapeake Bay watersheds.
- Most of you also responded correctly that your drinking water source is the Susquehanna River and underground wells. A portion of the public drinking water does come from the reservoirs in Baltimore City, but none of your drinking water comes from Atkisson Reservoir. Winters Run does supply the Town of Bel Air.
- Most of you would be willing to make changes to your daily habits to improve water quality, even if it cost up to \$50.
- Most of you estimated Maryland's portion of the Bay Restoration would cost up to \$50 million per year through 2025. Projections are actually well over 10 times that amount.

Our office is currently working on a watershed restoration within your watershed, Wheel Creek. The watershed is 435 acres and drains into Atkisson Reservoir. A stormwater management retrofit along Darby Lane and a stream restoration within the Calverts Walk Apartment Complex (on Facebook at Wheel Creek at Calverts Walk) are currently under construction.

Please feel free to contact me with any suggestions or questions.

Sincerely,



Christine Buckley  
Harford County Water Resources  
212 South Bond Street  
Bel Air, MD 21014  
(410) 638-3545 extension 1176  
[cmbuckley@harfordcountymd.gov](mailto:cmbuckley@harfordcountymd.gov)

***The following message was distributed via automated call system.***

Hello. This is Christine Buckley with Harford County Water Resources.

You should have received a flyer from me earlier this week looking for volunteers to participate in a very important program to improve stream water quality.

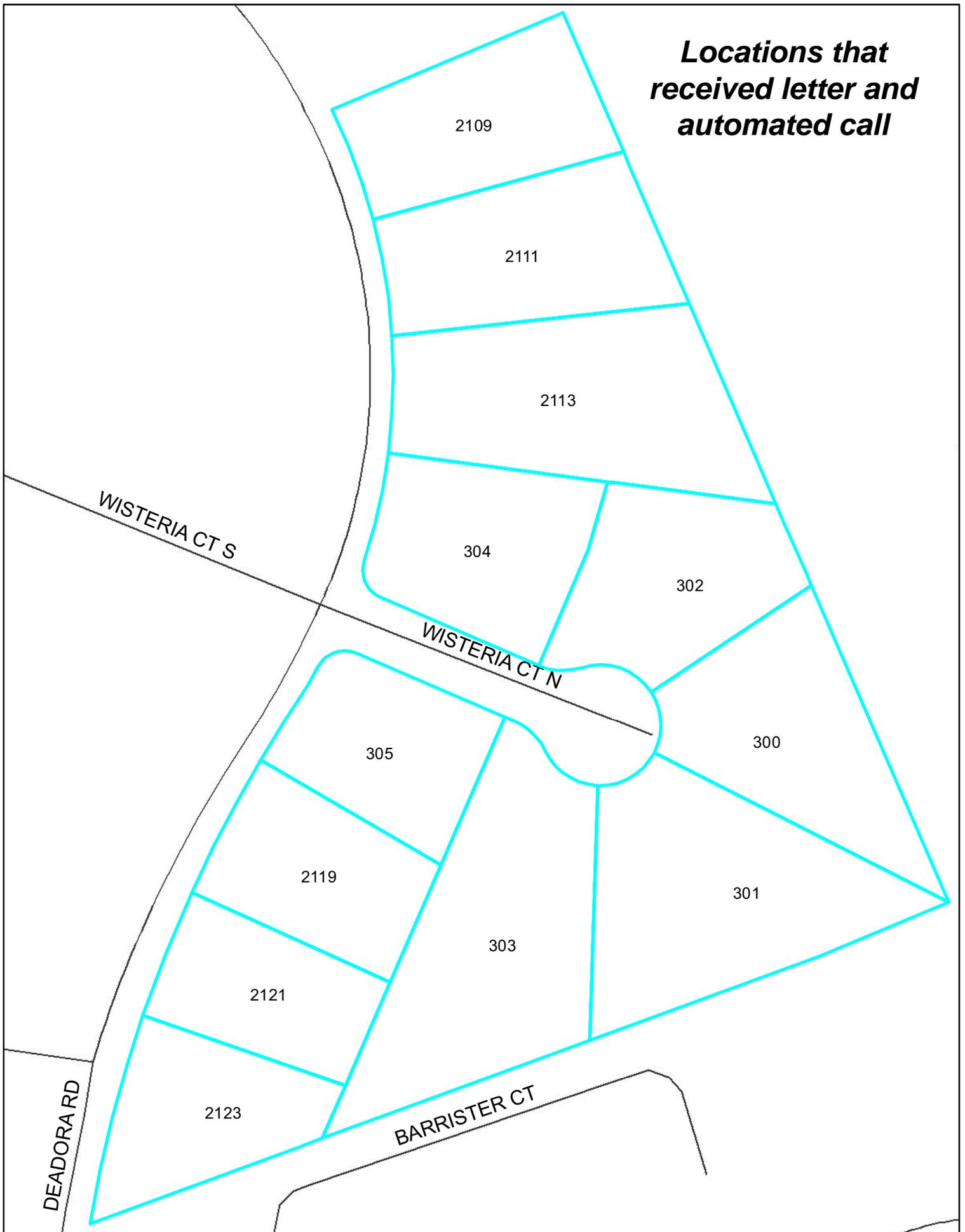
For property owners who voluntarily redirect their downspouts away from roads and driveways, Harford County will provide free of charge a rain barrel or native tree.

Quantities are limited and will be distributed on a first come basis.

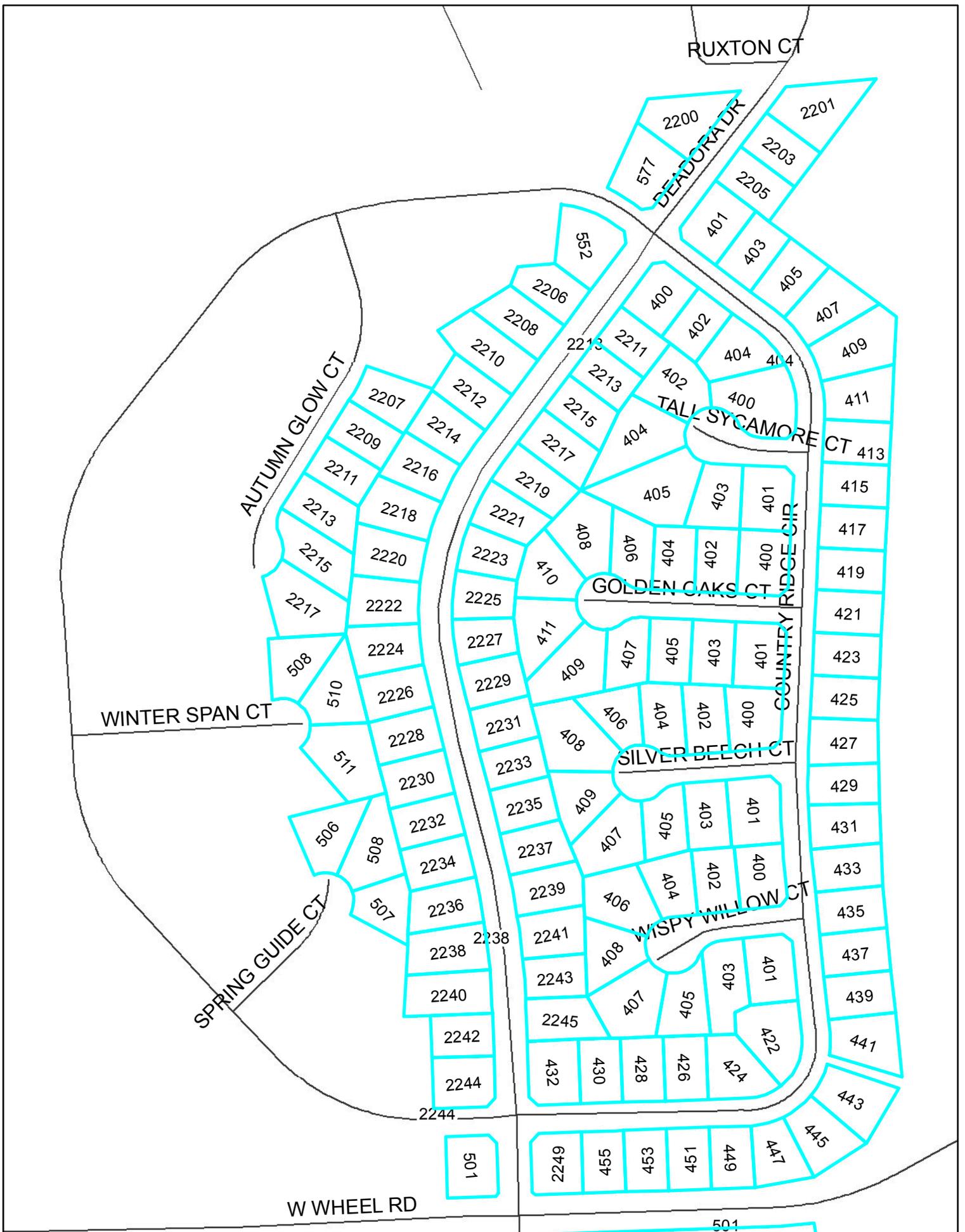
For more information contact me at (410) 638-3545 extension 1176 or visit us on Facebook at Wheel Creek Redirected Downspouts.

Each of us can make a difference in the health of the Chesapeake Bay by how we manage "Our piece of the earth". Thank you.

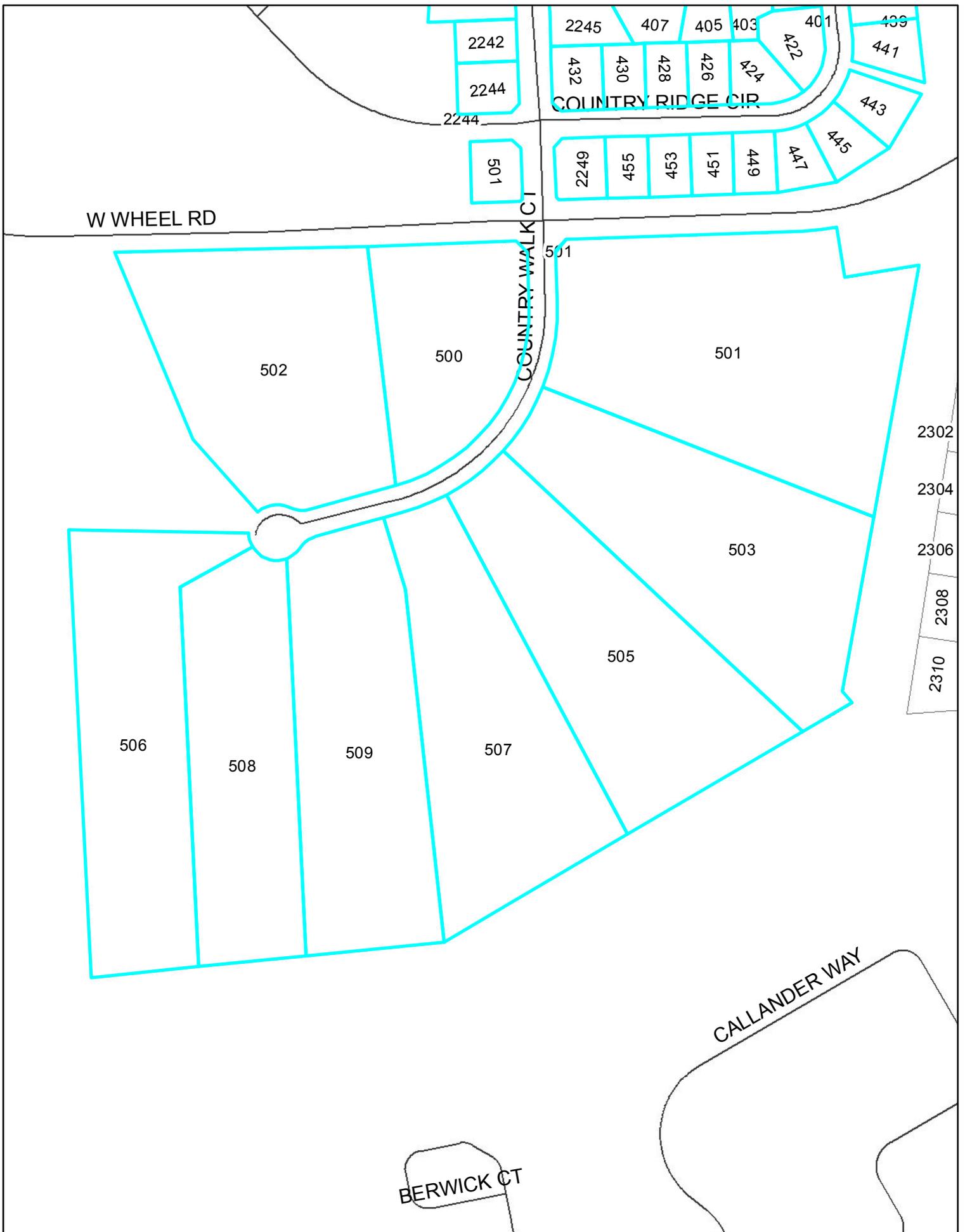
***Locations that  
received letter and  
automated call***



1 inch = 100 feet



1 inch = 216 feet



1 inch = 217 feet

OWN_1	LEGAL_2	P_CITY	P_Z_1
MUSE	2207 AUTUMN GLOW COURT	BEL AIR	21015
MARIANETTI	2209 AUTUMN GLOW COURT	BEL AIR	21015
ANDERSEN	2211 AUTUMN GLOW COURT	BEL AIR	21015
KREBS	2213 AUTUMN GLOW COURT	BEL AIR	21015
GAGNON	2215 AUTUMN GLOW COURT	BEL AIR	21015
BROWN	2217 AUTUMN GLOW COURT	BEL AIR	21015
HARRELL	400 COUNTRY RIDGE CIRCLE	BEL AIR	21015
NGUYEN	401 COUNTRY RIDGE CIRCLE	BEL AIR	21015
KRUGER	402 COUNTRY RIDGE CIRCLE	BEL AIR	21015
WHITE	403 COUNTRY RIDGE CIRCLE	BEL AIR	21015
KANSLER	404 COUNTRY RIDGE CIRCLE	BEL AIR	21015
GOODMAN	405 COUNTRY RIDGE CIRCLE	BEL AIR	21015
SHELL	407 COUNTRY RIDGE CIRCLE	BEL AIR	21015
KELLER	409 COUNTRY RIDGE CIRCLE	BEL AIR	21015
LYONS	411 COUNTRY RIDGE CIRCLE	BEL AIR	21015
GRACKI	413 COUNTRY RIDGE CIRCLE	BEL AIR	21015
AMATO	415 COUNTRY RIDGE CIRCLE	BEL AIR	21015
PERKINS	417 COUNTRY RIDGE CIRCLE	BEL AIR	21015
MURPHY	419 COUNTRY RIDGE CIRCLE	BEL AIR	21015
DAVIS	421 COUNTRY RIDGE CIRCLE	BEL AIR	21015
LE GRAND	422 COUNTRY RIDGE CIRCLE	BEL AIR	21015
ABBRUZZESE	423 COUNTRY RIDGE CIRCLE	BEL AIR	21015
KAFER	424 COUNTRY RIDGE CIRCLE	BEL AIR	21015
MAYO	425 COUNTRY RIDGE CIRCLE	BEL AIR	21015
FRIESWYK	426 COUNTRY RIDGE CIRCLE	BEL AIR	21015
MAULDIN	427 COUNTRY RIDGE CIRCLE	BEL AIR	21015
STARN	428 COUNTRY RIDGE CIRCLE	BEL AIR	21015
SANTONI	429 COUNTRY RIDGE CIRCLE	BEL AIR	21015
WELSH	430 COUNTRY RIDGE CIRCLE	BEL AIR	21015
HEBERT	431 COUNTRY RIDGE CIRCLE	BEL AIR	21015
KOHLER	432 COUNTRY RIDGE CIRCLE	BEL AIR	21015
MORATIS	433 COUNTRY RIDGE CIRCLE	BEL AIR	21015
REIMEL	435 COUNTRY RIDGE CIRCLE	BEL AIR	21015
KUPCHINSKAS	437 COUNTRY RIDGE CIRCLE	BEL AIR	21015
BIERMAN	439 COUNTRY RIDGE CIRCLE	BEL AIR	21015
CAVOLO	441 COUNTRY RIDGE CIRCLE	BEL AIR	21015
MC CRORY	443 COUNTRY RIDGE CIRCLE	BEL AIR	21015
MORRIS	445 COUNTRY RIDGE CIRCLE	BEL AIR	21015
PEREZ	447 COUNTRY RIDGE CIRCLE	BEL AIR	21015
CRAMER	449 COUNTRY RIDGE CIRCLE	BEL AIR	21015
SRIVASTAVA	451 COUNTRY RIDGE CIRCLE	BEL AIR	21015
STRINGFELLOW	453 COUNTRY RIDGE CIRCLE	BEL AIR	21015
LEVY	455 COUNTRY RIDGE CIRCLE	BEL AIR	21015

OWN_1	LEGAL_2	P_CITY	P_Z_1
KING	501 COUNTRY RIDGE CIRCLE	BEL AIR	21015
GINLEY	552 COUNTRY RIDGE CIRCLE	BEL AIR	21015
NOVIA	577 COUNTRY RIDGE CIRCLE	BEL AIR	21015
BRAZIER	500 COUNTRY WALK COURT	BEL AIR	21014
STEFANIDES	501 COUNTRY WALK COURT	BEL AIR	21014
JONES	502 COUNTRY WALK COURT	BEL AIR	21015
ELLIS	503 COUNTRY WALK COURT	BEL AIR	21014
BOCCIA	505 COUNTRY WALK COURT	BEL AIR	21014
GAPHARDT	506 COUNTRY WALK COURT	BEL AIR	21015
PASQUAL	507 COUNTRY WALK COURT	BEL AIR	21015
WILSON	508 COUNTRY WALK COURT	BEL AIR	21014
SENESCHAL	509 COUNTRY WALK COURT	BEL AIR	21015
SMITH	2109 DEADORA RD	BEL AIR	21015
EWING	2111 DEADORA ROAD	BEL AIR	21015
BAKER	2113 DEADORA ROAD	BEL AIR	21015
TENEROWICZ	2119 DEADORA RD	BEL AIR	21015
MOHLER	2121 DEADORA ROAD	BEL AIR	21015
KLEIN	2123 DEADORA RD	BEL AIR	21015
GWIAZDOWSKI	2200 DEADORA DRIVE	BEL AIR	21015
LENNON	2201 DEADORA DRIVE	BEL AIR	21015
ZABOROWSKI	2203 DEADORA DRIVE	BEL AIR	21015
SCHNEIDER	2205 DEADORA DRIVE	BEL AIR	21015
CHIU	2206 DEADORA DRIVE	BEL AIR	21015
HENDERSON	2208 DEADORA DRIVE	BEL AIR	21015
TRENTOWSKI	2210 DEADORA DRIVE	BEL AIR	21015
WEBBER	2211 DEADORA DRIVE	BEL AIR	21015
PATTON	2212 DEADORA DRIVE	BEL AIR	21015
CHO	2213 DEADORA DRIVE	BEL AIR	21015
MACHLINSKI	2214 DEADORA DRIVE	BEL AIR	21015
BROGDEN	2215 DEADORA DRIVE	BEL AIR	21015
SHAVER	2216 DEADORA DRIVE	BEL AIR	21015
STREIB	2217 DEADORA DRIVE	BEL AIR	21015
MYERS	2218 DEADORA DRIVE	BEL AIR	21015
MARINICH	2219 DEADORA DRIVE	BEL AIR	21015
CALHOUN	2220 DEADORA DRIVE	BEL AIR	21015
STANGLE	2221 DEADORA DRIVE	BEL AIR	21015
SMOLENSKI	2222 DEADORA DRIVE	BEL AIR	21015
ZAKROCK	2223 DEADORA DRIVE	BEL AIR	21015
WILLIAMS	2224 DEADORA DRIVE	BEL AIR	21015
COHEN	2225 DEADORA DRIVE	BEL AIR	21015
MUZII	2226 DEADORA DRIVE	BEL AIR	21015
KIMBLE	2227 DEADORA DRIVE	BEL AIR	21015
NOLTKAMPER	2228 DEADORA DRIVE	BEL AIR	21015

OWN_1	LEGAL_2	P_CITY	P_Z_1
SMITH	2229 DEADORA DRIVE	BEL AIR	21015
HUSTON	2230 DEADORA DRIVE	BEL AIR	21015
LOTMAN	2231 DEADORA DRIVE	BEL AIR	21015
HEIMBACH	2232 DEADORA DRIVE	BEL AIR	21015
LUECKERT	2233 DEADORA DRIVE	BEL AIR	21015
KELLY	2234 DEADORA DRIVE	BEL AIR	21015
ALBANESE	2235 DEADORA DRIVE	BEL AIR	21015
ROBERTSON	2236 DEADORA DRIVE	BEL AIR	21015
DODD	2237 DEADORA DRIVE	BEL AIR	21015
HARDING	2238 DEADORA DRIVE	BEL AIR	21015
MAYO	2239 DEADORA DRIVE	BEL AIR	21015
GASIOR	2240 DEADORA DRIVE	BEL AIR	21015
STEWART	2241 DEADORA DRIVE	BEL AIR	21015
KANSLER	2242 DEADORA DRIVE	BEL AIR	21015
MACIAG	2243 DEADORA DRIVE	BEL AIR	21015
SOMERVILLE	2244 DEADORA DRIVE	BEL AIR	21015
COMITZ	2245 DEADORA DRIVE	BEL AIR	21015
NGUYEN	2249 DEADORA DRIVE	BEL AIR	21015
TOSKES	400 GOLDEN OAKS COURT	BEL AIR	21015
KRUEGER	401 GOLDEN OAKS COURT	BEL AIR	21015
ZABRISKIE	402 GOLDEN OAKS COURT	BEL AIR	21015
BAILEY	403 GOLDEN OAKS COURT	BEL AIR	21015
HARPER	404 GOLDEN OAKS COURT	BEL AIR	21015
KOSCINSKI	405 GOLDEN OAKS COURT	BEL AIR	21015
WEBER	406 GOLDEN OAKS COURT	BEL AIR	21015
BROWN	407 GOLDEN OAKS COURT	BEL AIR	21015
ROLAND	408 GOLDEN OAKS COURT	BEL AIR	21015
BATTS	409 GOLDEN OAKS COURT	BEL AIR	21015
BLICK	410 GOLDEN OAKS COURT	BEL AIR	21015
YAKIM	411 GOLDEN OAKS COURT	BEL AIR	21015
GLENN	400 SILVER BEECH COURT	BEL AIR	21015
SMITH	401 SILVER BEECH COURT	BEL AIR	21015
BAVIS	402 SILVER BEECH COURT	BEL AIR	21015
SZROM	403 SILVER BEECH COURT	BEL AIR	21015
QUIMBY	404 SILVER BEECH COURT	BEL AIR	21015
LAURY	405 SILVER BEECH COURT	BEL AIR	21015
TOLSTON	406 SILVER BEECH COURT	BEL AIR	21015
WASHENFELDT	407 SILVER BEECH COURT	BEL AIR	21015
GRIMM	408 SILVER BEECH COURT	BEL AIR	21015
JOHNSON	409 SILVER BEECH COURT	BEL AIR	21015
MELICK	506 SPRING GUIDE COURT	BEL AIR	21015
HARRIS	507 SPRING GUIDE COURT	BEL AIR	21015
APPLEFELD	508 SPRING GUIDE COURT	BEL AIR	21015

OWN_1	LEGAL_2	P_CITY	P_Z_1
HETZER	400 TALL SYCAMORE COURT	BEL AIR	21015
GRYGLEWSKI	401 TALL SYCAMORE COURT	BEL AIR	21015
JULIAN	402 TALL SYCAMORE COURT	BEL AIR	21015
WELLS	403 TALL SYCAMORE COURT	BEL AIR	21015
KUNZ	404 TALL SYCAMORE COURT	BEL AIR	21015
BELL	405 TALL SYCAMORE COURT	BEL AIR	21015
MESHAL	508 WINTER SPAN COURT	BEL AIR	21015
SIEBOLD	510 WINTER SPAN COURT	BEL AIR	21015
DENNIS	511 WINTER SPAN COURT	BEL AIR	21015
ANTHONY	400 WISPY WILLOW COURT	BEL AIR	21015
RZEPECKI	401 WISPY WILLOW COURT	BEL AIR	21015
MUNLEY	402 WISPY WILLOW COURT	BEL AIR	21015
DEE	403 WISPY WILLOW COURT	BEL AIR	21015
RASTOGI	404 WISPY WILLOW COURT	BEL AIR	21015
RODRIGUEZ-RAMOS	405 WISPY WILLOW COURT	BEL AIR	21015
HERMAN	406 WISPY WILLOW COURT	BEL AIR	21015
HEALY	407 WISPY WILLOW COURT	BEL AIR	21015
BLACKWELL	408 WISPY WILLOW COURT	BEL AIR	21015
ADKINS	300 WISTERIA COURT	BEL AIR	21015
FRAZIER	301 WISTERIA COURT	BEL AIR	21015
VIERS	302 WISTERIA COURT	BEL AIR	21015
VALUNAS	303 WISTERIA COURT	BEL AIR	21015
MANIFOLD	304 WISTERIA COURT	BEL AIR	21015
HENNEMAN	305 WISTERIA COURT	BEL AIR	21015



### Rain Barrel Supply List

Barrel	Free
Hose Fitting	\$5.97
Grate	\$4.19
Overflow Hose	\$5.24
Downspout Connector	\$8.87
Miscellaneous (Screen, Caulk)	Less than \$1.00
Total	\$24.27

1332 Macton Road  
Street, MD 21154  
July 9, 2012

Ms. Christine Buckley  
Harford County Department of Public Works  
212 South Bond Street  
Bel Air, MD 21014

Dear Christine,

Below is an accounting of the hours I have worked on the Wheel Creek Downspout Disconnection Project during the period May 9 - June 30, 2012.

05/15/2012	3.00 hours	Reviewed websites concerning the disconnection of downspouts in other cities in North America
05/17/2012	3.00 hours	Meeting at DPW with Christine, Michele & Shirley; reviewed additional information about downspout disconnection online
05/18/2012	0.25 hours	Emails
05/24/2012	0.25 hours	Reviewed my meeting notes & email summary of the meeting
05/25/2012	2.00 hours	Conference call with Christine & Shirley; emails; reviewed meeting notes & revised schedule; reviewed rain garden information online
06/08/2012	1.00 hours	Conference call with Christine & Shirley; listed other questions & called Christine to discuss them
06/10/2012	0.75 hours	Downloaded & reviewed maps & datasheets email
06/12/2012	1.00 hours	Researched downspout disconnection; reviewed Survey Monkey for use in our online survey; review & respond to emails
06/21/2012	2.25 hours	Reviewed downspout disconnect information & developed draft questions & answers for our online survey; called Shirley about the survey
06/25/2012	5.25 hours	Worked on draft survey questions; met with Shirley at DPW to finalize the draft online survey
06/28/2012	2.75 hours	Reviewed meeting notes, grant proposal, etc. & listed points that need clarification before starting field survey in neighborhoods; prepare for the field survey dry run
06/29/2012	4.25 hours	Met Christine to discuss the downspout disconnection work, data sheets, etc.; conducted dry run of neighborhood survey of downspouts with Christine in Country Walk; drove through the other 3 neighborhoods to generally assess downspouts & if the data sheets & aerial photos will work in the field survey; looked at Home Depot for availability of items for homeowners to use in the downspout disconnection work & their costs

Total Hours 25.75  
Pay Rate/Hour \$50.00  
Total Compensation Due \$1,287.50

Thank you. If you have any questions, please contact me at 410-836-0423

Sincerely,

*Joanne Bowen*  
Joanne Bowen

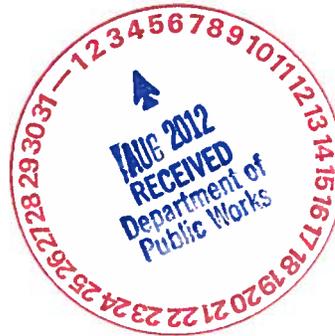


OK to pay  
CMB 7/13/12

DP12 06547

Ms. Christine Buckley  
Harford County Department of Public Works  
212 South Bond Street  
Bel Air, MD 21014

1332 Macton Road  
Street, MD 21154  
August 2, 2012



Dear Christine,

Below is an accounting of the hours I have worked on the Wheel Creek Downspout Disconnection Project during the period July 1 - 31, 2012.

07/08/2012	2.75 hours	Typed & sent report & questions to Christine about field survey observations & the online survey questions
07/09/2012	1.00 hours	Reviewed additional information about downspout disconnection
07/13/2012	0.75 hours	Reviewed & commented on 6/29/12 meeting summary, draft survey door hanger, draft field data sheets, & grid maps
07/15/2012	1.00 hours	Review & respond to emails; review websites collected for reasons other cities chose to disconnect downspouts; download new data sheets & grid maps
07/16/2012	3.50 hours	Draft paper on downspout disconnect guidelines; compile websites & information for neighborhood survey letter; emails
07/17/2012	1.25 hours	Review & comment on survey questions
07/18/2012	0.75 hours	Called Christine about online survey; spoke with Matt about questions on surveys & emailed draft to him for review & comment
07/19/2012	3.75 hours	Review & comment about revised draft online survey, survey door hangers & field data sheets; received draft online survey comments from Matt
07/20/2012	3.25 hours	Typed & sent Matt's survey comments to Christine; review & respond to emails
07/24/2012	3.25 hours	Conference call with Christine; reviewed & commented on latest draft of online survey; download & review Wheel Creek grid maps
07/25/2012	1.75 hours	Grid maps; organize Wheel Creek files; picked up grid maps, data sheets & informational letter for neighbors from Christine for use in the neighborhood walking survey
07/28/2012	1.00 hours	Review & organize grid maps for use in the field survey
07/30/2012	7.00 hours	Conducted walking survey of Wisteria Court & half of Harford Greens & quick confirmation driving survey of Country Walk Court
07/31/2012	5.25 hours	Continued walking survey in the rest of Harford Greens & began the Country Walk development

Total Hours 36.25  
Pay Rate/Hour \$50.00  
Total Compensation Due \$1,812.50

Thank you. If you have any questions, please contact me at 410-836-0423.

Sincerely,  
*Joanne Bowen*  
Joanne Bowen

*ok to pay  
CMB 8/3/12*

1332 Macton Road  
Street, MD 21154  
September 2, 2012

Ms. Christine Buckley  
Harford County Department of Public Works  
212 South Bond Street  
Bel Air, MD 21014



Dear Christine,

Below is an accounting of the hours I have worked on the Wheel Creek Downspout Disconnection Project during the period August 1 - 31, 2012.

08/02/2012	4.00 hours	Transfer data from field maps to data sheets; fill out house numbers on data sheets for use in the field; emailed field survey status report to Christine
08/05/2012	1.00 hours	Reconfirmed Deadora Drive & Harford Greens numbers on data sheets vs. field maps
08/06/2012	2.25 hours	Continued walking survey - started today in Country Walk (Golden Oak & Silver Beech Ct.)
08/08/2012	5.50 hours	Transferred data from maps to data sheets & rechecked numbers; texts to/from Christine; organized field maps for the remainder of the field work; continued field work in Country Walk on Country Ridge Circle; picked up door hangers at DPW
08/09/2012	5.25 hours	Continued field survey in Country Walk on Country Ridge Circle & Deadora Drive
08/10/2012	1.75 hours	Transferred data from field maps to data sheets; emailed & texted Christine
08/13/2012	5.00 hours	Finished remainder of field survey in Country Walk; placed door hangers for the survey on all doors in the Country Walk development located within the Wheel Creek watershed
08/14/2012	2.25 hours	Transferred data from field maps to data sheets from yesterdays field survey; spoke with Christine; reconfirmed yesterdays numbers on data sheets vs. field maps; downloaded & reviewed final online survey
08/15/2012	3.00 hours	Met with Christine at DPW; began entering downspout field data onto GIS maps on computer at DPW (Wisteria Drive area)
08/20/2012	3.50 hours	Finished placing door hangers for the online survey on remainder of homes that were downspout field surveyed (Wisteria Drive area & Harford Greens development)
08/21/2012	4.25 hours	Entered field data onto GIS maps at DPW (Country Walk)
08/22/2012	3.75 hours	Entered more field data onto GIS maps at DPW (Country Walk)
08/24/2012	3.50 hours	Entered more field data onto GIS maps at DPW (Country Walk)
08/27/2012	0.75 hours	Data checks & record keeping
08/31/2012	3.75 hours	Finished entering field data onto computer GIS maps at DPW for the Wheel Creek watershed area of Country Walk development; notes on procedure used & any variations needed in mapping field data onto GIS

Total Hours 49.50  
Pay Rate/Hour \$50.00  
Total Compensation Due \$2,475.00

Thank you. If you have any questions, please contact me at 410-836-0423.

DP1206547  
OK to pay  
CMB 9/13/12

Sincerely,  
*Joanne Bowen*  
Joanne Bowen

1332 Macton Road  
Street, MD 21154  
December 9, 2012

Ms. Christine Buckley  
Harford County Department of Public Works  
212 South Bond Street  
Bel Air, MD 21014

Dear Christine,

Below is an accounting of the hours I have worked on the Wheel Creek Downspout Disconnection Project during the period September 1 - November 30, 2012.

09/02/2012	0.25 hours	Email
10/03/2012	0.50 hours	Downloaded & reviewed online survey results
11/01/2012	0.25 hours	Focus group emails to/from Christine
11/05/2012	0.50 hours	Review & respond to emails
11/08/2012	2.50 hours	Meeting at DPW about the downspout disconnect project & focus group plans
11/12/2012	0.75 hours	Review information & prepare for focus group meeting
11/13/2012	3.50 hours	Focus group meeting prep; emails; met with Focus Group at Panera Bread
11/14/2012	0.25 hours	Emailed Christine
11/27/2012	0.25 hours	Email
11/29/2012	0.50 hours	Responded to emailed information request

Total Hours	9.25
Pay Rate/Hour	\$50.00
Total Compensation Due	\$462.50

Thank you. If you have any questions, please contact me at 410-836-0423.

Sincerely,

*Joanne Bowen*  
Joanne Bowen

*OK to pay  
CMB 12/20/12*



1332 Macton Road  
Street, MD 21154  
February 20, 2012

Ms. Christine Buckley  
Harford County Department of Public Works  
212 South Bond Street  
Bel Air, MD 21014

Dear Christine,

Below is an accounting of the hours I have worked on the Wheel Creek Downspout Disconnection Project during the period Dec.1, 2012 - Jan. 31, 2013.

12/09/2012	0.50 hours	Emails; reviewed project plan
01/02/2013	0.25 hours	Emailed Christine
01/11/2013	0.25 hours	Emailed Christine
01/19/2013	0.50 hours	Meeting date & contract emails to/from Christine
01/20/2013	1.50 hours	Reviewed work program & made notes for Wednesday's meeting to discuss next steps for the project
01/23/2013	4.00 hours	Meeting with Christine at DPW to evaluate next steps; worked on possible "robocall" message
01/26/2013	0.50 hours	Review & comment on contract addendum
01/31/2013	0.50 hours	Emails & texts

Total Hours	8.00
Pay Rate/Hour	\$50.00
Total Compensation Due	\$400.00

Thank you. If you have any questions, please contact me at 410-836-0423.

Sincerely,

*Joanne Bowen*  
Joanne Bowen

*OK to pay*  
*CMB 3/7/13*



1332 Macton Road  
Street, MD 21154  
April 1, 2013

Ms. Christine Buckley  
Harford County Department of Public Works  
212 South Bond Street  
Bel Air, MD 21014

Dear Christine,

Below is an accounting of the hours I have worked on the Wheel Creek Downspout Disconnection Project during the period February 1 - April 1, 2013.

02/14/2013	2.50 hours	Review & comment on letter for HOA website; downspout emails & text messages
02/15/2013	0.75 hours	Reviewed final letter for HOA website & reviewed website
02/21/2013	0.50 hours	Emails
03/12/2013	0.75 hours	Rain barrel & mailing emails to/from Christine & Michele
03/13/2013	1.00 hours	Rain barrel emails (Christine, Kriste, Travis); research rain barrels online
03/14/2013	2.25 hours	Emailed Christine; drafted summary of project accomplishments for inclusion in grant report to CBT
03/15/2013	0.50 hours	Review & comment on robocall text; emailed Travis again about rain barrels
03/17/2013	2.75 hours	Rain barrel training at ACLEC; looked for rain barrel supplies at Home Depot Edgewood
03/18/2013	0.75 hours	Emailed Christine a rain barrel update
03/19/2013	2.50 hours	Met at DPW & went on site visit to home on Deadora Drive about a rain barrel; purchased rain barrel supplies at Home Depot Bel Air; looked at ready-made rain barrels on line for design alternatives
03/20/2013	3.00 hours	Assembled rain barrel; researched rain barrels available for sale on the internet
03/22/2013	0.50 hours	Emails
03/28/2013	2.00 hours	Review & respond to email from Christine about field data procedures & data collected; review field data sheets & aerial photo maps
03/29/2013	2.00 hours	Summarize field data collection methods, codes on field data sheets & aerial photos, & transfer of field data to GIS to keep in files for future reference of field data collected
04/01/2013	0.75 hours	Finish & scan final hours invoice & submit electronically to Christine

Total Hours	22.50
Pay Rate/Hour	\$50.00
Total Compensation Due	\$1,125.00

Thank you. If you have any questions, please contact me at 410-836-0423.

*OK to pay*  
*AMB 4/1/13*

Sincerely,

*Joanne Bowen*  
Joanne Bowen

**devaughn, shirley**

**From:** CustomerService@PaperDirect.com  
**Sent:** Wednesday, July 25, 2012 8:39 AM  
**To:** devaughn, shirley  
**Subject:** Order Confirmation W1922257



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P.O. Box 35750      1-800-A-PAPERS      1-719-534-1741  
Colorado Springs, CO 80935-3570

**Order Date:** 7/25/2012

**Order Number:** W1922257

**Order Summary**

**Billing Information:**  
SHIRLEY K DEVAUGHN  
HARFORD COUNTY MARYLAND  
212 S. BOND STREET  
THIRD FLOOR  
BEL AIR MD 21014  
(410)638-3548  
skdevaughn@harfordcountymd.gov

**Payment:**  
SHIRLEY K DEVAUGHN  
\*\*\*\*\*9244  
Visa

**Order Summary:**  
Subtotal: \$ 41.98  
Discount: \$ 12.59  
Tax: \$ 0.00  
Sample Shipping and Handling: \$ 0.00  
Shipping and Handling: \$ 10.99  
**TOTAL:** \$ 40.38  
Congratulations!

You Saved \$ 12.59 today!

Your Invoice Comments:

303310 WRE DISCONNECTED DOWNSPOUTS

*Thank you for ordering from PaperDirect!*

**Electronically Delivered Items**

Quantity	Item Description	Status	Price Each	You Pay
----------	------------------	--------	------------	---------

**Template link will be sent to account email.**

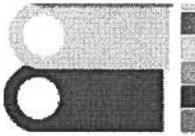
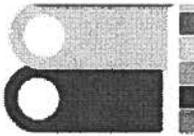
TPUBCDH0018  
 Brights Door Hangers Stock  
 Product Type: Template  
 FREE Template for MS  
 Publisher

1      Paid      Shipped From Manufacturer      \$ 0.00      \$ 0.00

**Items To Be Shipped**

Ship To:  
 SHIRLEY K DEVAUGHN  
 HARFORD COUNTY MARYLAND  
 212 S. BOND STREET  
 THIRD FLOOR  
 BEL AIR MD 21014  
 (410)638-3548  
[skdevaughn@harfordcountymd.gov](mailto:skdevaughn@harfordcountymd.gov)

Shipping Method:  
 UPS Ground

Quantity	Item Description	Status	Expected Shipping Date	Price Each	You Pay
1	 CDHH0018 Brights Door Hangers Stock Product Type: Desktop Printable Color:Spring Green Count:200/box	In Stock	Ships Jul. 25, 2012	\$ 20.99	\$ 20.99
1	 CDHH0017 Brights Door Hangers Stock Product Type: Desktop Printable Color:Yellow Count:200/box	In Stock	Ships Jul. 25, 2012	\$ 20.99	\$ 20.99

Your Packing Slip Comments:  
 Your Shipping Label Comments:

303310 WRE DISCONNECTED DOWNSPOUTS

[ ]

You can check on your order by clicking [here](#). Your order status is updated automatically online.

**devaughn, shirley**

---

**From:** customerservice@zoomerang.com  
**Sent:** Monday, July 30, 2012 2:57 PM  
**To:** devaughn, shirley  
**Subject:** Thank You for Upgrading to Zoomerang Pro

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Zoomerang - Online Surveys & Polls

---

Dear Shirley,

Thank you for upgrading to Zoomerang Pro. This email confirms that your purchase has been paid in full. Your credit card was charged \$149 USD on 07/30/2012.

\* Your username is: [skdevaughn@harfordcountymd.gov](mailto:skdevaughn@harfordcountymd.gov)

Create a survey with Zoomerang Pro:

[https://app.zoomerang.com/?lr=c&utm\\_source=zoomapp&utm\\_medium=email&utm\\_campaign=upgrade](https://app.zoomerang.com/?lr=c&utm_source=zoomapp&utm_medium=email&utm_campaign=upgrade)

Your receipt appears at the end of this message. You may also get a printable receipt at any time by logging into your account, clicking "My Account," and clicking the "Print Receipt" link. Thanks again for choosing Zoomerang and happy surveying!

Sincerely,

The Zoomerang Team

---

\*\*\*\*\* Zoomerang Subscription Receipt \*\*\*\*\*

---

Receipt Date: 07/30/2012  
Receipt Number: 22967126  
Customer P.O. Number:

Username: [skdevaughn@harfordcountymd.gov](mailto:skdevaughn@harfordcountymd.gov)  
Account ID: 12274906

Purchase Description: Zoomerang Pro Subscription  
Purchase price: \$149 USD  
Amount paid: \$149 USD  
Subscription Begin Date: 07/30/2012  
Subscription Expiration Date\*: 07/30/2013

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12017 GLEN ARM ROAD  
GLEN ARM, MARYLAND 21057  
PHONE: 410-592-6106  
FAX: 410-592-8338

CUSTOMER NO. HARCOU

**BILL TO:** HARFORD CO DEPT.PUBLIC WORKS  
WATER RESOURCES  
212 S BOND ST  
BELAIR, MD 21014  
Ph. (410) 638-3548

**SHIP TO:** HARFORD CO DEPT.PUBLIC WORKS  
WATER RESOURCES  
212 S BOND ST  
BELAIR, MD 21014

SHIP DATE 10/17/2012	SHIP VIA Customer Pickup	F.O.B. Glen Arm, MD	TERMS NET 30
PURCHASE ORDER NUMBER	ORDER DATE 10/17/2012	RACKS DROPPED OFF	RACKS PICKED UP

ORDERED	QUANTITY		ITEM NUMBER	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
	SHIPPED	B.O.				
18	18	1 qt.	RUDGOL1QT	Rudbeckia f. 'Goldsturm'	2.30	41.40
18	18					
NET AMOUNT:						\$41.40
TOTAL AMOUNT:						\$41.40
ALL CLAIMS MUST BE MADE AT TIME OF PICKUP OR DELIVERY						
A104102-3599			<p><i>Shirley DeVaughn</i></p> <p>Shirley DeVaughn</p> <p>ok to pay</p> <p>CMB 10/17/12</p> <p><i>CSH</i></p>			



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P 410.529.0552 f 410.529.3883

Mailing address: P.O. Box 158 Perry Hall, MD 21128

Nursery location: 4812 East Joppa Rd Perry Hall, MD 21128

sales@americannativeplants.net

ORDER # 130391

ORDER DATE 03/28/13

REVISION DATE 03/28/13

PAGE 1 of 1

## ORDER ACKNOWLEDGMENT

### BILL TO

Harford County Dept of Public Works  
 Division of Water Resources  
 212 S. Bond St 3rd floor  
 Belair, MD 21014  
 Phone: 410-638-3545 x1366

### SHIP TO

Harford County Dept of Public Works  
 Division of Water Resources  
 212 S. Bond St 3rd floor  
 Belair, MD 21014  
 Phone: 410-638-3545 x1366

ESTIMATED SHIP DATE	SHIP VIA	TERMS	ORDER PLACED BY	CUSTOMER PO #
04/03/13	Pickup	VISA/MC	Christine Buckley	

ORDERED	ITEM DESCRIPTION	SIZE	UNIT PRICE	EXT. PRICE
1	Quercus prinus B&B	1.5" caliper	\$59.50	\$59.50
1	Chionanthus virginicus 5 GALLON	24" to <36"	\$15.50	\$15.50
5	Lobelia siphilitica 1 GALLON		\$3.95	\$19.75

### NOTE

SUBTOTAL	\$94.75
ORDER TOTAL	\$94.75
PAYMENTS & CREDITS	\$0.00
BALANCE DUE	\$94.75

\*\*Shipping charges are only estimates prior to shipping or invoicing.  
 Estimates are subject to increase or decrease due to changes to the order and or final shipping method,  
 as well as unforeseen circumstances. We will always do our best to minimize your shipping costs and maintain the initial estimate.



*Shirley*

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655 MARKETPLACE DRIVE; BEL AIR, MD 21014  
STORE MGR CHRIS GIBSON 410-638-0929

2506 00011 90610 03/19/13 12:23 PM  
CASHIER MEAGAN - MLT4305

046878279469 MALE REPAIR <A>	
5/8" MALE END HOSE REPAIR	
601.99	11.94N
052063600406 BLACK GRATE <A>	
6" ROUND BLK DRAIN GRATE	
594.19	20.95N
031724853559 50' HOSE <A>	16.47N
5/8"X50' MEDIUM DUTY HOSE	
022315336698 HOSE KIT <A>	10.48N
24" UNIVERSAL DISCHARGE HOSE KIT	
011646331052 FGCL36X84 <A>	6.48N
36"X84" CHARCOAL FIBERGLASS SCREEN	
077578057033 DRAINAWAY <A>	8.47N
AUTO DRAIN AWAY	
046878279339 SHUT OFF CPL <A>	
BRASS SHUTOFF COUPLING	
505.97	29.8N
046878279476 HOSE REPAIR <A>	
5/8" FEMALE END HOSE REPAIR	
501.99	9.95N
077027900163 WD SUPREME <A>	8.22N
GE SILICONE SUPREME W&D CLEAR	
049821850104 FLEXSPOUTWHT <A>	8.87N
FLEX-A-SPOUT-WHITE	

*wheel creek  
A104102 -  
3599*

*4.19  
- 10.48 / 2 = 5.24  
- 5.97  
- 8.87*

	SUBTOTAL	131.68
	SALES TAX	0.00
AX EXEMPT	TOTAL	\$131.68
xXXXXXXXXXXXX9244 VISA		131.68
AUTH CODE 089103/6115183		TA
P.O.#/JOB NAME: WHEEL CREEK		

\$24.27



2506 11 90610 03/19/2013 5468

RETURN POLICY DEFINITIONS  
POLICY ID DAYS POLICY EXPIRES ON  
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