



Homeowner's Report

General Information

Date:

Assessed by: XXXXXX

Homeowner Name: XXXXXXXXXX

Address: XXXXXXXXXXXX

Phone: XXXXXXXXXXXX

Email: XXXXXXXXXXXX

Watershed: Little Patuxent

Homeowner Identified Issues

The homeowner wrote: *Water runoff collects on patio in back and sidewalk in front. Can see areas in yard where erosion is occurring. We would like to have an assessment done and discuss plans for remediation.*

General Site Information

The subject property (house constructed in 19xx) is located in the XXXXXXXXXX of Ellicott City. It is listed in the County records as 20000 square feet of land area with an approximate above grade enclosed area of XXXXXXXX square feet. The tree canopy coverage of the property is estimated at 50%. Soils on the site are listed GhB – Glenelg – Urban land complex. County records indicate that the property is located in the Little Patuxent watershed.

Howard County GIS Map showing elevation contours

Front façade of XXXXXXXXX

Observed Conditions

The elevation contour map shows a drop across the property of approximately 15 feet from northeast to southwest. The homeowners report water issues in several locations around the property. One area of ponding, located to the north and northeast of the structure, appears to result from discharges from the two downspouts discharging to the north of the house, downspouts located on the south side of the adjacent property directly to the north, and sheet flow from a turf area on this same abutting property. A second area of concern is located to the east of the house where erosion on relatively steep slope appears to be caused by a combination of a downspout discharging from the center of the house and draining a portion of the east facing roof slope, flow from the area noted above, and additional sheet flow from an embankment along the east property line. A third area is located near the southeast corner of the house where runoff from the areas discussed above collects in the vicinity of a patio constructed of stone pavers. A downspout on the southeast corner of the house may also contribute to the ponding in this area.

Downspout locations

Areas of interest

Direction of flow

Area of ponding along north property line – left side of photo - view looking east

Area of erosion caused by water flowing along east property line



Area of erosion due to sheet flow and downspout discharge – view looking west

Possible Storm Water Best Management Practices

As with most stormwater issues, it is preferable to address upstream areas first as effective control of these areas may have a mitigating effect of downgradient problems. We suggest the following practices to address drainage issues on this property:

1. Construct a rain garden to the north of the house which will collect stormwater directly from the two downspouts discharging in this vicinity. Combined, the two north side downspouts drain approximately 900 square feet of impervious roof surface. Alternatively, construct a conservation landscape along the north property line. This will collect water from the two north downspouts along with sheet flow from the adjacent turf area on the neighboring property to the north. Considerations in these locations include tree roots which might impede digging. Both rain gardens and conservation landscapes are reimbursable under the Howard County's CleanScapes program.
2. Install a bioswale or dry creek bed along (and to the south of) the split rail fence which bisects the back yard (see top photo, page x). Either remedy will collect water from the center downspout and slow flow from the upgradient turf area, minimizing erosion on the embankment below.
3. Consider spreading mulch, wood chips, or even leaves under the trees located above the slope to the east of the house to aid in slowing flow from this area. The turf under these trees is sparse and provides very little resistance to upgradient runoff. Landscape timbers might need to be spotted around the area to help hold the mulch in place.
4. Consider constructing a small berm around a portion of the patio off the southeast corner of the house. However, as noted above, hold off on any remedies in this area until the effects of any upstream work undertaken can be determined.



Example of a dry creek bed in a residential setting



Example of a rain garden in a residential setting. Note: The rain garden depicted above is shown just after a rain event and should drain in less than 48 hours.

Potential Available Reimbursements

Howard County will reimburse up to 50% of the cost with a maximum of \$1,200 per qualifying rain garden through their CleanScapes program. Conservation landscapes are reimbursable up to \$750 under this program. There are changes to the program which became effective July 1, 2019. Please see the CleanScapes website for additional details.

Residential property owners are also eligible for a credit off their annual watershed protection fee if they install and maintain a storm water management practice that meets the CleanScapes program minimum requirements.

The program is described in greater detail in the CleanScapes brochure which is available as noted in the section below.

Useful Links

Howard County Watershed Stewards Academy:

<http://howardwsa.org/>

County's CleanScapes program Coordinator – Julie Costantino:

jcostantino@howardcountymd.gov

Clean Water Howard (Howard County Residential Storm Water Solutions):

<http://www.cleanwaterhoward.com/what-is-your-role/residential-properties>

County's CleanScapes program Information Sheet

https://www.cleanwaterhoward.com/sites/default/files/uploads/bmp_financial_incentive_criteria_0.pdf

CleanScapes Residential Property Program

<https://www.cleanwaterhoward.com/what-is-your-role/residential-properties>

Nurseries for Native Plants:

<http://www.bluewaterbaltimore.org/>

<http://www.sunnurseries.com>

Landscape Companies Familiar with Stormwater Management in Howard County:

Laurens Garden Service - www.laurensgardenservice.com/

Village Gardeners – www.villagegardenerscapes.com/

READY- <http://www.howardecoworks.org/>

McHale Landscape - www.mchalelandscape.com

Permeable Hardscapes

Rhine Landscaping, LLC - www.rhinelandscaping.com

First Impression Hardscapes - www.firsthardscapes.com

Maryland Master Gardener BayWise OnSite Consultations Program:

<https://www.extension.umd.edu/mg/locations/bay-wise-landscape-management>

Nurseries for Native Plants:

http://www.cleanwaterhoward.com/sites/default/files/uploads/green_registry_doc.pdf

<http://www.bluewaterbaltimore.org/herring-run-nursery/about-the-nursery/>

<http://www.sunnurseries.com>

Local sources of soil, stone, and mulch

<http://www.mulch4u.com/>

<http://www.marylandgroundcovers.com/>

Chesapeake Bay Landscape Professional Directory

<https://certified.cblpro.org/>