



City of Harrisonburg Stormwater Advisory Committee
Meeting Minutes
July 29, 2015 5:00 – 7:10 p.m.

Members in attendance: Daniel Michael, Rob Alexander, Joanna Mott, Dale Chestnut, Eldon Kurtz

Staff/Other in attendance: Thanh Dang, Kelley Junco, Tom Hartman, Harsit Patel, Poti Giannakouros, Noel Levan

Appointment of Chair and Vice Chair

Daniel Michael volunteered as chairperson and Dale Chestnut volunteered as vice chairperson.

Discussion of Ground Rules

Thanh reviewed the Ground Rules for Stormwater Advisory Committee Meetings. The ground rules overviewed expectations for public comment period, expectations for the public during meetings, and the process for requesting a Stormwater Utility Fee Credit Appeal. The ground rules were agreed upon by SWAC members and no changes were made to the document. Thanh said the document would also be posted online so the public could review the rules prior to SWAC meetings.

Public Comment

No public comment.

Review and Adopt Minutes

No changes were made to the June 15, 2015 meeting minutes. Minutes were voted upon and adopted.

Overview of Residential and Non-Residential Manuals

Kelley outlined the basic components of the Residential and Non-Residential Credit Manuals. For Residential, this included an overview of the available stormwater practices outlined in the manual, the credit reductions associated with each approved stormwater practice, and the documents required in an application package. For Non-Residential, this included an overview of the VA DEQ and Chesapeake Bay standards and specifications required for a Non-Residential stormwater practice, an explanation that these practices are credited according to the impervious area that they treat rather than a pre-determined credit amount, and the requirements for the application package. Kelley also showed the most current statistics for applications submitted and approved through the Program.

Rob asked the incentive for Non-Residential property owners. Thanh said the fee is not high enough for property owners to hire consultants to apply for credits. This has hindered applicants. Joanna echoed Rob's question and asked if we should raise fees to incentivize the property owners. She also said we need to determine a goal of the overall program to direct these credits. Is the goal for property owners to apply and get credits or is the goal to gather revenue? Tom responded that TMDL pollutant reduction

is the goal of the program. Rob said that by offering credits to property owners for pre-existing BMPs we are normalizing rather than accruing pollutant reductions, but that that may be necessary in building the program and eventually pushing out further incentives. Dale added that we should anticipate the regulations may change to disallow municipalities from submitting pre-existing BMPs for credit since those pre-existing practices do not help improve water quality.

Review Appeals Received

98 Emery Street – Conservation Landscaping

Thanh introduced Poti Giannakouros' appeal case at 98 Emery St which included a report as to why his credits were denied by staff. Staff did not believe that Poti's application for conservation landscaping met the design specifications outlined in the Homeowner Guide to a More Bay Friendly Property or the Residential Credit Manual. The landscaping also did not meet the 20% minimum parcel coverage. Tree Canopy and Conservation Landscaping cannot overlap, which in this case staff believed it did. Thanh also said that Poti had been approved for other stormwater practices and had achieved a 40% credit reduction.

Poti then spoke regarding his appeals case. He said if the goal of the overall program is pollutant reductions but the program continues to credit existing practices then the program will not succeed as it is currently in place. He expressed his overall disapproval of the program. He said there is not enough educational outreach to the public to encourage innovative ecological change. He said that turf grass is an ecosystem, not a type of grass and that when turf grass grows it becomes a meadow. He also said that the exemption added to the Tall Grass and Weeds Ordinance for the Stormwater Utility Fee supports his practice and should be utilized to allow for things like this.

Noel spoke next and stated his approval of the program and the educational opportunity that the program allows. He encouraged partnership with the Master Gardeners and pushed the need for enhanced engagement with homeowners and the public relations portion of the program.

Staff discussed the appeal. Eldon said native prairies may be as effective as or more effective than turf grass, but he would need to explore the research. He also expressed how difficult it is to keep invasive species out of a meadow. Dale said that either way, the homeowner does not meet the 20% minimum requirement for conservation landscaping. Joanna said this is a tough decision that she feels is too specific. Rob said that plants that have grown tall is not sufficient landscaping and supported that by referencing the homeowner guide specifications stating that a landscaping bed should be lower than the rest of the yard for greater runoff management. Dale asked if conservation landscaping was credited by DEQ and Thanh responded that it is not credited, but is being reviewed by the Chesapeake Bay Program. Dale also said that in order to encourage absorption of stormwater, the credit may need to require taking up compacted soil and turf grass after construction and replacing with soil that is able to infiltrate. All voted to deny the 10% credit for conservation landscaping based on the 20% coverage requirement and due to the nature of the practice not meeting basic specifications.

Stormwater Utility Fee Credits – Program Review

Residential Tree Canopy Cover

Thanh introduced the proposed tree canopy credit adjustment to capture larger parcels that do not reach the 20% minimum canopy coverage. Three applicants with parcels over two acres have applied for a tree planting credit. Since these applicants did not have 20% of their property covered, even though they had abundant tree cover, they could not be credited due to the large parcel area. Staff proposed a scale so those properties over 2.5 acres would only need to have 10% canopy coverage and those over 5 acres would need 5% canopy coverage. Eldon suggested an impervious area ratio to tree canopy or tree canopy over impervious area since the property owner is not being charged for the rest of their parcel (assuming it is grassed). Joanna said the credit discussion was breaching too specific and that we were a step away from discussing the type of trees and size of leaves. Tom expressed that Eldon's canopy ratio would be difficult to calculate quickly whereas the weighted table is a quick reference. Kelley agreed. The tree canopy proposed credit change was delayed until the November meeting.

As a side note, Rob suggested that the list of non-natives that should not be planted by property owners should be more prominent in the Residential Manual.

Non-Residential - Maintenance Agreement

Thanh introduced the maintenance agreement discussion. There are three types of BMPs that need maintenance agreements: "post-2009" constructed BMPs that were required with site development and have a required maintenance agreement that conveys with the land, Voluntary BMPs which have a maintenance agreement that is required as part of the credit application but is only tied to the credit and would be revoked if the BMPs is not maintained, and the "pre-2009" BMPs which were required by site development like the post-2009 BMPs but a maintenance agreement was not then required by the state and therefore was not required by the City. As of now, applicants in that third category have signed a provisional agreement which gives them a year of stormwater utility fee credit coverage until an official agreement will need to be signed. Rob asked what the previous SWAC members had determined. Thanh responded that they determined the agreement should convey with the land but there was a complication in altering the agreement that is used for post-2009 BMPs so staff thought SWAC should revisit. Daniel offered that older BMPs could provide an opportunity for water quality retrofits. Dale made a motion that the maintenance agreement for pre-2009 BMPs should be conveyed with the land. Rob seconded the motion and the motion was passed unanimously.

Chesapeake Bay TMDL Public Comment Review

Kelley said no comments were received after requesting public comment from citizens regarding the Chesapeake Bay TMDL Action Plan. Dale said he only wanted to reiterate that we should anticipate TMDL pollutant loads and TMDL credits changing so we cannot count those pre-existing practices that will not promote Chesapeake Bay water quality improvements. Tom said that may mean we would potentially need to purchase credits. Daniel said they approved oyster farming in the Chesapeake Bay as an annual credit.

Next Steps/Assignments

Tom introduced the concept of a cost-share/grant program to promote pollutant removal in the City. He and Thanh tasked the SWAC with brainstorming the program prior to the next meeting and sending any questions to Thanh prior to that meeting. Thanh said staff will also have a scope for the Stormwater Improvement Plan by the next meeting as well.

The next meeting will be held on November 4 from 5-7pm at the Public Works Department.

Stormwater Advisory Committee

July 29, 2015



Stormwater Credit Manuals

Stormwater Credit Manuals

- Residential
- Non-Residential

Residential Credit Manuals

- Application Package:
 - Residential Application Form
 - Residential Maintenance Agreement
 - Pictures (all but Nutrient Management)
 - Nutrient Management (optional)
 - Petition for Adjustment (optional)
- Credits are pre-determined in manual:
 - Most are between 10-20%. Rain Garden qualifies for 25-50%

CREDITS AVAILABLE:

- Roof Drain Disconnection
- Rain Garden
- Vegetated Filter Strip
- Rain Barrel/Cistern
- Tree Planting/Tree Canopy
- Conservation Landscaping
- Nutrient Management & Lawn Care Agreement
- Impervious Cover Removal
 - Permeable Hardscapes
 - Vegetated Roofs

Residential Credit Stats

- Total Applications Approved: 145
- What percent credit did they receive?
 - 10% - 2
 - 20% - 15
 - 30% - 34
 - 40% - 56
 - 50% - 41
- Most popular credits approved:
 - Downspouts – 123
 - Nutrient Management – 125
 - Tree Canopy – 83
 - Rain Barrel – 44
 - Conservation Landscaping – 19
 - Rain Garden - 2

Non-Residential Credit Manuals

- Application Package:
 - Non-Residential Application Form
 - Provisional Maintenance Agreement
 - Pictures
 - Stormwater Narrative/Plan Set w/ Pollutant Removal Calculations
 - Petition for Adjustment (optional)
- Credits are determined by the impervious area the BMP treats
 - Quality OR Quantity: 15%
 - Quality AND Quantity: 20%
 - Quality Voluntary: 25%

Credit options include BMPs that follow DEQ – Approved Stormwater Design Specifications **OR** Chesapeake Bay Urban Stormwater Protocol

Non-Residential Credit Stats

- Total Applications Received: 8
- Total Applications Approved: 7
- Total Applications Pending: 1
- What they applied for:
 - Petition for Adjustment – 3
 - VPDES Industrial Permit Coverage – 2
 - Water Quantity BMPs – 3

Review Appeals Received

98 Emery Street, Conservation Landscaping

Residential Credit Appeal: 98 Emery St

- 98 Emery St Application
 - Homeowner describes 700 sf of tall grass, and 1500/2500 sf of forbes and fine grass
- City staff denied credit for Conservation Landscaping
 - Applicants plantings do not meet conservation landscaping design principles.
 - Plants being cultivated by applicant are intermixed between turf grass and there is not 20% conservation coverage on the property.
 - Applicants claim of conservation landscaped area overlaps with tree canopy cover area claimed. Does not meet 20% required area.

Photos of 98 Emery St



Conservation Landscaping



Photos from Chesapeake Stormwater Network's *Homeowner Guide for a More Bay-Friendly Property*

Examples of Conservation Landscaping in Harrisonburg



Request for SWAC Action

1. Feedback for consideration of what plantings or planting design qualifies as conservation landscaping
2. Recommendation to Director of Public Works to approve or deny credit for Conservation Landscaping at 98 Emery St

Stormwater Utility Fee Credits – Program Review

Tree Canopy Cover on Residential Property

Residential: Tree Canopy Cover

- Proposed criteria for residential tree canopy cover

Lot size (acres)	% tree canopy cover requirement
2.5 or less	20%
> 2.5 - 5.0	10%
Greater than 5.0	5%



- 150 W Mosby Rd

Lot size	1,000,000 sf (~22.95 acres)	
Existing tree canopy cover	~ 155,133 sf (~3.56 acres)	15% of property
10 year projected tree canopy cover for new tree plantings*	~4,296 sf (~0.09 acres)	0.9% of property
New total tree canopy cover	~159,429 (~3.65 acres)	15.9% of property



- 890 Greendale Rd

Lot size	95,832 sf (2.2 acres)	
Existing tree canopy cover	12,539 sf	13.1% of property

Request for SWAC Action

1. Recommendation from Stormwater Advisory Committee on proposed Tree Canopy Cover Criteria for Residential Properties

Note: Proposed changes would require City Council action to amend the Stormwater Utility Fee Program Manual for Residents

Stormwater Utility Fee Credits – Program Review

Maintenance Agreement for BMPs required with site development

Non-Residential: Maintenance Agreement

- “A locality adopting such a system shall provide for full or partial waivers of charges to any person who installs, operates, and maintains a stormwater management facility that achieves a permanent reduction in stormwater flow or pollutant loadings.” – VA State Code Section 15.2-2114
- BMPs required with site development do not help the City’s Chesapeake Bay TMDL requirements
- Maintenance Agreements required to ensure function of BMP

	(A) "Post-2009" BMPs required to satisfy development regulations	(B) Voluntary BMP installed for Stormwater Utility Fee Credit	(C) "Pre-2009" BMPs required to satisfy development regulations
Type of Maintenance Agreement Required as part of Development Regulations	VSMP regulations require Maintenance Agreement at time of development, recorded at Clerk of Court.	N/A	No maintenance agreement was required at time of development
Type of Maintenance Agreement Required for Stormwater Utility Fee Credit Application	Copy of recorded Maintenance Agreement as required by City Design & Construction Standards Manual	Accepting "Stormwater Utility Fee Maintenance Agreement – for use with Voluntarily Installed Non-Residential BMPs". Not recorded at Clerk of Court.	Presently accepting "Provisional Maintenance Agreement". Agreement expires June 30, 2016. <i>Future Maintenance Agreement – should we require option A or B?</i>
Conveyance of Maintenance Agreement	Maintenance Agreement conveys with land.	If property owner changes, then new application and maintenance agreement required.	<i>Should future owners be bound to Maintenance Agreement to maintain BMP in perpetuity?</i> <i>Or should they be allowed to opt out of the agreement?</i>
Failure to Maintain BMP	After proper notice, City may enter upon property to correct deficiencies and charge cost of repairs to owner.	After proper notice, failure to maintain will result in revocation of stormwater utility fee credits and maintenance agreement is voided. No further penalty.	?
Utility Fee Credit Terms/ Expiration	Utility Fee Credits valid for 5 years from date of application approval. Credits do not transfer with ownership.	Utility Fee Credits valid for 5 years from date of application approval. Credits do not transfer with ownership.	Utility Fee Credits valid for 5 years from date of application approval. Credits do not transfer with ownership.

Additional Considerations

- Issue of fairness – new developments are required to maintain BMPs
- Is this a way to encourage property owners to bring failing BMPs up to standard?
- What is the likelihood of property owners applying for Stormwater Utility Fee Credits for either option A or B?
- If the stormwater BMP has claimed “*overage*” credits (25%), and the City reports them to DEQ for Chesapeake Bay TMDL reductions, what are the consequences of Utility Fees being revoked and the City no longer being able to report pollutant reductions to DEQ?
 - If BMP has no “overages”, then City gets no TMDL credit anyway
- Both Charlottesville and Lynchburg require Pre-2009 BMPs seeking to Stormwater Utility Fee Credits to go through Option A process for Maintenance Agreement. Conveys with land in perpetuity.

Request for SWAC Action

1. Recommendation from Stormwater Advisory Committee to city staff on what type of maintenance agreement should be used for “*Pre-2009*” *BMPs required to satisfy development regulations.*