



City of Harrisonburg Stormwater Advisory Committee

Meeting Summary

December 4, 2024, 5:00-7:00 p.m.

City Hall Room 11 & 12, 409 South Main Street

Members in attendance: Dany Flemming (5:15pm), Ferwerdin Barzanji, Wes Runion, Kurt Schick, Chelsea Thomas

Staff in attendance: Keith Thomas, Brittany Clem-Hott, Tom Hartman, Shayna Carter, Austin Shenk

Election of Chair and Vice-Chair

Shayna Carter started the meeting and asked for nominations for Chair and Vice Chair for the committee. Wes Runion nominated Kent O'Donohue for Chair. Kurt Schick seconded, and the motion passed unanimously. Chelsea Thomas nominated Wes for Vice Chair. Kurt seconded, and the motion passed unanimously.

Review and Adopt Minutes

Kurt motioned to approve the August 2024 meeting minutes. Chelsea seconded, and the motion passed unanimously.

Public Comment

There were no public comments.

Drainage Improvement Program Update

Canterbury Court- Keith Thomas reviewed the Drainage Improvement Program application for the Canterbury Court neighborhood. Keith noted that the neighborhood was concerned about a swale that stretches along a couple of properties. He mentioned that staff first conducted a site visit in 2020. Keith highlighted that there was no evidence of erosion occurring along the two or three parcels near the swale. He noted that the swale was originally constructed to convey the water along the properties.

Kurt noted that he was confused about what the applicant was applying for. Keith mentioned that he believed the residents hoped to receive suggestions or technical assistance.

Ferwerdin Barzanji asked for clarification on who applied for the Drainage Improvement Program. Keith clarified that it was residents of the neighborhood.

Wes noted that in 2018, he believed that the adjacent properties experienced more flooding concerns but believed that the City addressed some of those concerns immediately after they occurred.

Kurt motioned to agree with staff's recommendation to deny the application. Chelsea seconded the motion, and the motion passed unanimously.

Hill Street to N. Mason Street- Keith updated the committee that staff have expanded the study further south to North Mason Street to include more concerns about drainage pipes. Keith mentioned that the study will now evaluate the entire drainage area from Hill Street down to North Mason Street and evaluate

the adequacy of the stormwater pipes throughout the area. He noted that the study will evaluate where improvements could be made as well as where green stormwater infrastructure might be added. Keith then added that letters will be sent to all the property owners in the area to notify them of the study and upcoming survey work.

Ferwerdin then asked what was expected of residents who received this letter. Keith then mentioned that the letter will address that survey crews will need to access some private property. He noted that this was more informational for the property owners to let them know a timeframe of when survey crews will be on site. He mentioned that the letter lists who they can contact if anyone had questions.

Wes then asked how much City infrastructure will be impacted. Keith replied that most of the project is anticipated to be limited to City streets.

Charles to Madison St- Shayna updated the committee that staff were still committed to finding funding for the project. She informed the committee that the City plans to reapply for the FEMA Building Resilient Infrastructure and Communities grant when it opens later in the year. She disclosed that the City will apply for the planning portion of the grant instead of the implementation portion. Shayna noted that she believed the City would be more competitive for that grant.

Wes then asked if the Charles Street Drainage project was tied into the Northend Greenway expansion. Keith replied that the drainage improvement project would be a stand-alone project.

Waterman Drive – Keith mentioned the Waterman Drive study was nearly completed. He highlighted that the consultants still need to provide their final report and cost estimate for the project. He noted that staff brought the presentation material from the open house for committee members to view.

Dany Flemming asked if the study took into consideration the easement that was to be proffered as part of the Quarry Heights development along Waterman Drive. Keith noted that the study considered the easement size when making the recommended concrete ditch along Waterman Drive, but they did not consider the projected development as part of the contributing drainage. Tom noted that because the developers were required to meet pre-existing conditions regarding stormwater, they will need to detain runoff coming from their site. This might cause less runoff coming to Waterman Drive than what was currently being conveyed into the ditch. Tom then reminded the committee that the majority of runoff coming to the drainage ditch was coming from the Park View Shops and the neighborhood and not the quarry.

MS4 Program Updates

Keith updated the committee that the Stormwater Improvement Plan update was almost complete. The second open house for the SWIP was held on October 29th and that concluded with the public engagement portion of the plan. Keith noted that the local Total Maximum Daily Load requirements will be the next section of plan to be completed. He then mentioned that the consulting firm began looking at how the City will meet Chesapeake Bay TMDL requirements and were now evaluating how many BMPs will be needed to complete the local TMDL requirements. Keith reminded the committee that Smith Creek, Blacks Run, and Cooks Creek all have waste load allocations and staff need to create Action Plans for each local TMDL to be submitted to DEQ. Keith also highlighted that these goals will likely not be completed for several hundred years.

Keith then mentioned that staff asked the consulting firm to take several of the highest ranked BMPs and go further into the design phase. He detailed that this would help staff move quicker on getting these BMPs implemented. Keith explained that this process will continue into summer of 2025.

Dany asked what BMP was listed as the highest priority. Keith noted that there is a BMP on West Market near Thomas Harrison Middle School that was built to treat road runoff. He explained that the proposed project would be upsized to a wet pond to treat more water.

Keith then discussed that Shayna and Austin have completed the Stormwater Pollution Prevention Plan inspections for the fall. Keith noted that there were 12 City owned facilities that currently have SWPPPs. He highlighted that these inspections were to confirm no pollution was occurring at these facilities. Keith then mentioned that Shayna and Austin will start conducting City owned BMP inspections. He noted that there were about 60 BMPs that need to be inspected. Keith then highlighted that there were changes in the permit that require a maintenance timeline. He noted that staff will have some flexibility in setting the timeline.

Keith then discussed that there was a BMP at Thomas Harrison Middle School that needs to be replaced. Keith noted that this BMP was built to treat runoff from the school, and it was currently overgrown and does not function as it was designed. Keith noted that the BMP had become a wetland due to lack of maintenance. He mentioned that a new BMP will need to be built in its place.

Dany asked where this new BMP should be located. Keith suggested that it could be constructed in an open space around the school or possibly an underground detention system under a parking lot.

Wes asked if there had been any discussion on what to do with the wetland after the new BMP was built. Keith expressed that staff would evaluate how the City could receive credit for the wetland as a separate BMP. He noted that the City cannot receive credit for the current BMP as a wetland since the conversion was due to a lack of maintenance.

Chelsea Thomas asked for clarification on who was responsible for BMP maintenance. Keith noted that Harrisonburg City Public Schools (HCPS) were covered under the City's MS4 permit but City Schools have their own maintenance staff that were responsible for upkeep of this BMP. He further clarified that each department was responsible for the maintenance of the BMPs on their property. Keith then provided that staff met with HCPS staff to discuss the next steps for the Thomas Harrison BMP and other school BMPs moving forward.

Dany asked if staff feel confident that City Schools will correct issues with their BMPs and ensure maintenance continues in the future. Keith said that he believed City School staff understood the work that needed to be done and that current issues would be corrected. Wes highlighted that School Staff have corrected other issues in the past but that some of the bigger concerns were more complex. Keith then noted that School Staff indicated that they planned to add maintenance for BMPs into their budget.

Dany then expressed concern that if both Schools and Public Works request budget funds for BMP maintenance, would it be more efficient for Public Works to handle maintenance for both departments since it might not be in the wheelhouse of Schools Maintenance staff. Tom then highlighted that when the MS4 Program was formed in 2013 that all departments agreed to handle the maintenance of the BMPs on their property. He noted that Public Works staff conduct inspections of BMPs since they were part of the permit and staff were subject matter experts. Tom then highlighted that Public Works staff were willing to assist in how the maintenance was executed but the maintenance itself would still be the responsibility of the facility owner. Tom then explained that if Public Works staff took over responsibility

for maintenance of all City BMPs that would be a dramatic switch in how things were currently being done. He mentioned that it would require more than double the staff that maintain BMPs. He then indicated that there had not been a big concern over maintenance yet and School staff have indicated that they were okay with the current arrangement.

HCAP Updates

Shayna notified the committee that the program had seen high demand in the tree planting practice. She mentioned that there have been some applications for some of the larger practices as well. Shayna then mentioned that promotion was still on pause due to ongoing staff turnover at the Shenandoah Valley Soil and Water District. She noted that the District still had a backlog of site visits to complete before they would feel comfortable doing any more promotion of the program.

Dany asked if there was still some concern over the waitlist for participants. Shayna clarified that there was a balance between working through the list of potential projects while also trying to answer all the site visit requests in a timely manner, but she believed the District was going through both as quickly as possible.

VMRC Project Update

Keith reminded the committee that this project is to construct a wet pond across from VMRC. He noted that Geotech work was done at the project site and the City engineer was expected to have 100% designs for the project completed soon. He noted that staff hope to complete the Right of Way easements in January. He also highlighted that the next steps will be to create a procurement package and then construct the project.

Tom noted that the project was anticipated to begin in March or April.

Mountain View Drive Stream Restoration Update

Keith mentioned that after the May 6th storm and Hurricane Helene, there was a list of maintenance items that need to be completed. He discussed that an on-call BMP maintenance contract was being prepared by staff to use for stream restorations and other BMPs. He noted that this will be used to complete larger maintenance items for BMPs, and that City Schools would be able to utilize this contract as well for some of their maintenance. Keith noted that staff plan to have this completed by the new fiscal year.

Wes asked if there was a lot of structural damage to Mountain View after Hurricane Helene. Keith stated that large boulders at the top of the stream restoration have been carried to the bottom of the stream by the water. He also noted that that some of the walls of the stream need some repair. Keith noted that staff would evaluate an impact wall to help dissipate the energy.

Wes then asked if the SWIP found any potential upstream detention options. Keith indicated that it did not.

Dany asked if there was any concern about The Village development on JMU property. Tom highlighted that JMU was their own MS4 and will have to address their runoff the same way the City was required to. He noted that any runoff that would come from that site would not affect the stream restoration. Keith then noted that the area along Country Club Road and Reservoir Street that drains to Mountain View Stream Restoration was built before there were any stormwater regulations in effect, so they were not required to treat runoff the same way that developers were required to now.

Northend Greenway Stream Restoration Update

Keith stated that the City had received its final SLAF payment from DEQ. Wes asked if the City received the total amount that was anticipated. Keith indicated that the City received most of the funding that was expected.

Dany asked if there were any other payments that the City had not received from DEQ. Keith noted that the paperwork for Mountain View Stream restoration was sent to DEQ, and it was currently in DEQ's finance office to be signed.

Blacks Run South Stream Restoration Update

Austin Sherk highlighted that there have been issues regarding the tree plantings along the stream and that he recently completed a field survey of the trees. He mentioned that he collected 2,500 data points and 1,700 trees were marked dead, 380 alive, 372 were alive but needed maintenance. Austin then noted that there was a 70% mortality rate for the entire tree planting for the project and staff were working with the contractor on how tree survivability should be corrected. He noted that the severe storms this year, deer pressure, and the two years of drought have impacted the mortality rate.

Dany then asked if certain trees were more resilient than others. Austin noted that he didn't look at the species but did notice that the shrubs especially did not do well. Wes then mentioned that all the trees that were selected to be planted along the stream were trees that were known to do well in riparian plantings.

Tom noted that there will always be some level of loss with tree planting projects. He mentioned that it would be expected to have some trees die during the major storms we had over the summer, however, there should be a lower mortality rate than 70%. Tom mentioned that the process staff were working to create will better set up contractors for success moving forward. He also noted that City staff recommend that a different subcontractor be involved in the tree planting process moving forward to ensure survivability.

Ferwerdin asked who selected the tree species that were planted for the stream restoration. Wes noted that City staff reviewed the list of trees provided by the engineering firm. Ferwerdin asked for clarification that the trees selected were native varieties. Wes confirmed that the selected trees were native, and no invasive species were allowed to be planted.

Keith then updated the committee that the low water bridge was replaced and noted that the permit for the head bridge was received. He noted that the project was almost complete and that additional plantings were expected to go in during the next planting window in the spring.

Chelsea asked if Austin noticed any evidence of Japanese Hops during his field survey. Austin noted that he saw some minor evidence but no large patches. Wes noted that historically there had been a lot of Japanese Hops in the City. He also mentioned that this invasive plant prefers shaded areas along stream banks.

Wes asked if the contractor had come to evaluate survivability of tree species before the May 6th storm. Tom noted that there had been some debate over whether that had happened or not. He mentioned that staff would be more involved in ensuring that monitoring would happen more frequently.

Other Topics

Shayna updated the committee that the Urban Forestry program had been working through several different grants. She mentioned that one of them was a tree canopy study that was still underway. Through this study, staff learned that tree canopy coverage in the City had dropped 3% since 2018. Shayna noted that a large portion of that loss was from the Emerald Ash Borer.

Tom mentioned that the City had not seen enough development since 2018 to attribute to that percentage of loss. Keith then mentioned that any tree that was planted between 2018 and now would most likely be too small to be picked up in the satellite data the consulting firm was using. He also noted that staff had tried to plant as many trees as they had to take out due to the Emerald Ash Borer, but they were still too small to be recognized in the data.

Wes also highlighted that stream restorations might also contribute to the 3% loss due to these projects taking out mature invasive species along stream banks. He noted that stream restoration projects plant a lot of trees back, but they would also be too small to be picked up by the satellite since they have all been planted fairly recently.

Shayna then moved to explain that 2025 will be the 20th year of Harrisonburg's Tree City USA designation. She noted that staff were planning to celebrate the achievement with several different tree plantings and events throughout the year.

Ferwerdin asked if there were any ordinances within the City to prevent property owners from cutting down trees on their property. Keith then explained that there were no ordinances for tree protection on private property and there were no ordinances for development to protect existing trees. He mentioned that there were some options to add protections but that would require City Council's approval. Tom mentioned that he believed that there were conversations happening around tree protection during the current zoning ordinance update.

Wes noted that on public property, there were protections for established trees. He mentioned that tree removal must be approved by a City arborist for trees on public property. Tom then highlighted that if a property owner had a tree in public right of way, the property owner would have to submit a request for tree removal to the Public Tree Advisory Committee.

Brittany Clem-Hott then added that the City received grant funding from the VA Department of Forestry to create a video series around tree care education. She noted that the video series should be completed sometime next year. Dany then noted that tree care would be a great topic to educate the public on. Tom then mentioned that staff have noticed an uptick in companies in the area going door to door to convince homeowners that their trees need to be topped instead of professionally pruned. He noted that was what helped prompt staff to make this video series. Wes then explained that HCAP site visits were a great educational tool for homeowners to hear from the City arborists about appropriate tree maintenance.

Keith then updated the committee on the bioreactor project. Keith mentioned that the City had contracted US Geological Survey (USGS) to conduct water quality sampling. He noted that two of the locations will be the inflow and outflow of the current bioreactor at Purcell Park. Keith explained that he believed that data would assist DEQ in creating the bioreactor specifications for crediting. He then mentioned that USGS will also monitor four other locations to evaluate potential future bioreactor locations.

Dany then asked if there were other areas of Virginia where bioreactors were being used. Wes noted that they were primarily used in agricultural settings. Keith mentioned that other MS4 localities were interested but don't want to install them without them being credited by DEQ.

Dany then highlighted that the SLAF grant was prepared to add a lot of additional dollars to the budget and that the bioreactor projects would be the most efficient use of those grant funds.

Wes asked what kind of data USGS will be collecting for the water quality samples. Keith noted that USGS staff were coming to Harrisonburg in January to discuss those details with City staff. Keith then mentioned that they will look at nitrogen, phosphorus, and dissolved oxygen.

Keith then highlighted the meeting dates for 2025. Tom assured the committee that the next SWAC meeting would be held in the new Public Works building at 320 East Mosby.

Next Meeting Dates

2025 Dates

- February 5th
- May 14th
- August 6th
- November 19th