



# Stormwater Utility and Flood Mitigation Advisory Committee

Jan 15, 2025 | 7:00 p.m. | Hybrid (Virtual and In-Person) Meeting

## Minutes

Advisory Group Members Present:

A	John Chapman	P	Howard “Skip” Maginniss
P	Dino Drudi	P	Brian Sands
P	John Hill (Chair)	P	Janette Shew
P	Cheryl Leonard	P	Christine Thuot
P	Chris Ferrara	P	Katherine Waynick (Vice-Chair)

Staff Present:

V	Brian Rahal, T&ES Civil Engineer IV	P	Jesse Maines, T&ES Division Chief, Stormwater Management
P	Dan Medina, DPI Stormwater Program Manager	P	Jessica Lassetter, T&ES Civil Engineer III
P	Emma Wheeler, T&ES Communications Office	P	Jonathan Whiteleather, DPI Technical Project Manager
V	Erin Bevis-Carver, Sanitary Infrastructure Division Chief	V	Lisa Jaatinen, T&ES Civil Engineer IV
V	Felicia Montoney, T&ES Management Analyst I	P	Mitch Dillon, DPI Technical Project Manager
P	Alex Haptemariam, DPI Senior Technical Project Manager	P	Wael Eltayeb, DPI Technical Project Manager

P = Present    A = Absent    V = Virtual (on call)

Other Attendees Present:

V	Ehsanullah Hayat	V	Haweni Gobena

### 1. Welcome Remarks

### 2. Review of November Meeting Minutes

Sent by Mr. Hill to committee members via email. Mr. Whiteleather addressed Mr. Drudi’s comments.

Mr. Drudi moved to approve the minutes. Seconded by Ms. Waynick. All in favor. Aye. Approved.

### 3. Approve Committee Charter

Mr. Hill circulated charter compiled by Ms. Leonard. Question as to whether secretary is needed. Secretary would review the minutes of the committee. Mr. Hill wishes to include.

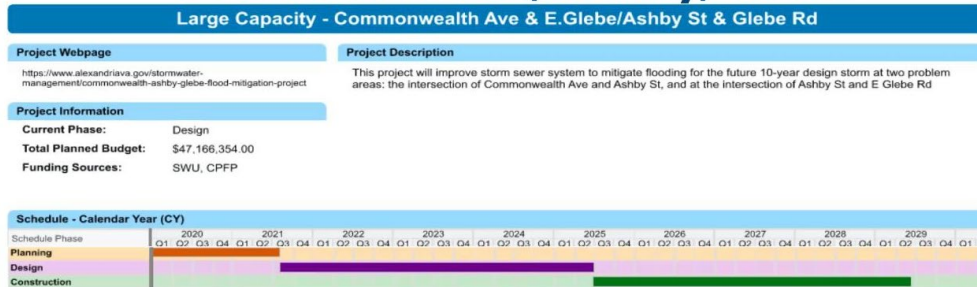
Ms. Waynick moves to approve charter. Seconded by Ms. Leonard. All in favor. Aye. Approved.

Charter will go to City of Alexandria archives.



#### 4. Commonwealth, Ashby, Glebe (Whiteleather)

## Flood Action Progress Report: Commonwealth, Ashby, Glebe



- Continuing 90% design progression
- Performed additional survey at outfall. Looking at design options to lower culvert to avoid utility conflicts
- Reviewing consultant proposal on utility test pits. Anticipate start within 4-6 weeks
- Putting together materials for Winter public meeting

Continuing design progression towards 90%. Potentially lowering portion of culvert to avoid utilities. A survey was conducted on Dec. 23<sup>rd</sup>, 2024. The City is waiting on the results.

The City is obtaining permits for test pits of utility crossings along proposed alignment in order to obtain elevation. Hope to start within 4-6 weeks. Procurement to start in Q3 2025. Construction to begin at earliest in summer 2026 (ballfield/parks requested delay until August).

Plan: Winter public meeting, working to secure date.

Questions:

- Waynick: How does lowering the culvert impact the outfall?
  - Whiteleather: No difference from a hydraulic perspective. Used drone during Dec 2024 survey to assess under water surface (don't have topographical data readily available).
- Drudi: Impact on Alexandria Aces
  - Whiteleather: Project is in softball field and the baseball field will not be impacted. The City has notified the Alexandria Aces.
- Maginniss: Impact on neighboring school.
  - Whiteleather: City is in coordination with school (likely to full retrofit). There may be one year of overlap, but as construction will be done downstream to upstream, active construction should not overlap.
- Drudi: Community concern about scouring damaging public and private investments in restoration. Important to explain that state design requirements will prevent environmental damage.
  - Whiteleather: Outfall design is aligned with state and Federal Highway Administration non-erosive velocity standards. Outfall protection (e.g., riprap, geotextile) is required as part of permitting process. Designed to not scour.



- Maines: Outfall is downstream of wetland. Not in sensitive area.

## 5. Hooffs Run Culvert Bypass (Haptemariam)

### **Flood Action Progress Report: Hooffs Run Culvert Bypass Project**

- Project objectives
  - Convey the 10-year future rainfall event without worsening flooding elsewhere in the drainage system.
  - Where control of the 10-year future storm is not practicable, reduce flooding as much as possible.

### **Flood Action Progress Report: Hooffs Run Culvert Bypass Project**

- A desktop analysis is being performed on the high-performing alternatives.
- The analysis is an initial assessment to evaluate the feasibility of the alternatives
- The analysis includes:
  - Engineering feasibility
  - Cost
  - Constructability
  - Disruption of City functions
  - Potential negative impacts on the community

### **Flood Action Progress Report: Hooffs Run Culvert Bypass Project**

- City staff and project consultants are developing a set of possible design alternatives, which are being analyzed and evaluated.
- As the planning phase continues, project teams will be narrowing down the alternatives, based on several different aspects, including flood mitigation effectiveness, cost, project schedule, construction impacts, and complexity.
- Next steps
  - Refine evaluation criteria
  - Continue evaluation of alternatives
  - Define a course of action
  - Start the design phase

Mr. Hill: Project is more challenging and expensive than expected, and the City may not be able to address it with the existing budget. Suggestion: Tell residents if not solvable.

- Maines: Still troubleshooting. Must discuss with legal.



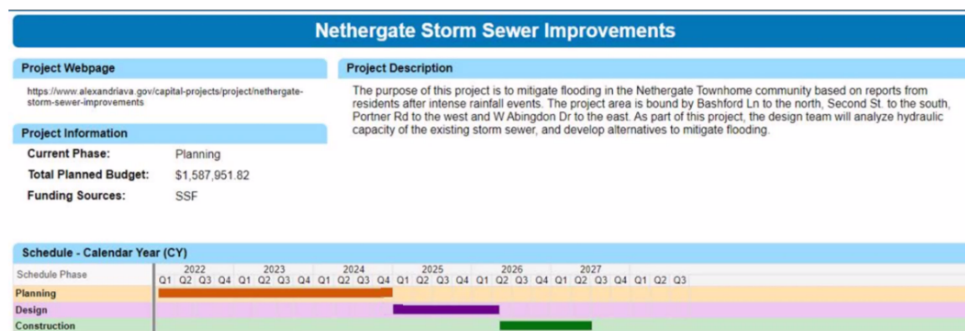
- Waynick: Be cautious with language. Messaging to residents should reference prior documentation.
- Hill: Must weigh cost-benefit.
- Drudi: Area is a historic district. Project will require extensive funding. Committee must advocate for 5% annual increases in budget (currently projected to reduce to 2-3%).
  - Waynick: Many homes most impacted by the flooding are not within the historic district.

Comment: Would be beneficial to come up with a deliverable timeline and consider components of solution are feasible.

## 6. Pitt & Gibbon and Nethergate (Whiteleather)

### Flood Action Progress Report: CSS

- Pitt & Gibbon (\$20-25M) CSO surcharge mitigation. Project team reviewing alternatives to mitigate flooding for the 10-year storm. Schedule pending.
- Nethergate (\$5M) CSO Surcharge mitigation. Project transitioned from planning to design phase. Project team working on task order request for on-call design consultants. Public meeting to be scheduled once designer on board.



**Pitt & Gibbon:** Reviewing alternatives, do not have set schedule. Need to solve for 10-year storm.

Drudi: Old Town Civic Association President asked whether Pitt & Gibbon is combined sewer.

- Thuot: Request: Post CDM Smith report to City website. Could provide edited/interim version to show analysis without including discussion of alternatives. Does the report need to have a solution?
  - Whiteleather: May need to caveat release because task order is not complete. Pitt & Gibbon was a preliminary planning study and identified solutions did not meet the 10-year storm event standard. City will release a second summary report assessing alternatives once all alternatives have been considered.
- Follow-up question: Do alternatives meet any portion of 10-year storm? What is the cost-benefit?
  - Dr. Medina: 10-year storm threshold established based on statistical analysis of prior data. Climate change is altering the frequency of those storms.
    - Thuot: In 2021, had a 200-500 year storm in August and a 10 year storm event in September. City website lists number of significant storm events.



- Maines: 10-year storm estimate is conservative (meets climate change projections).
  - Drudi: Recommends sharing article – showing urbanized areas experience higher rainfall than rural and ex-urban areas – with City staff.
- Waynick: Suggestion: City could use rain rates to communicate severity

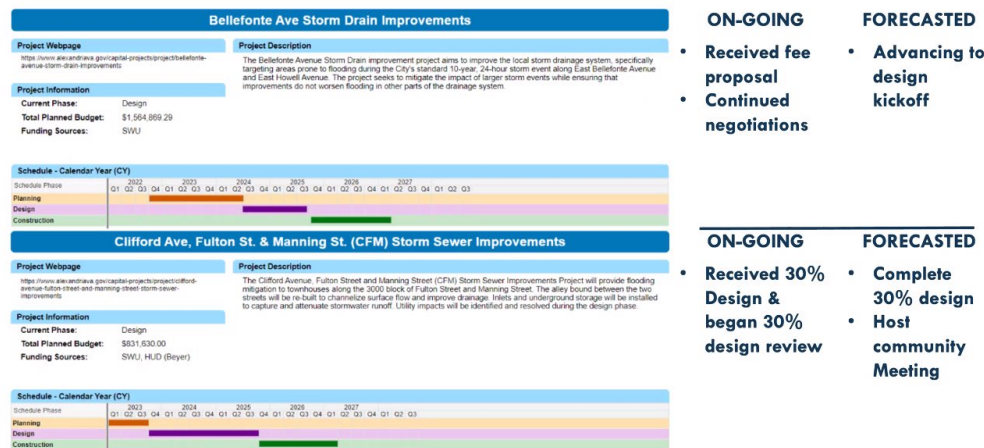
**Nethergate:** Transitioned to design phase. Project involves upsizing three pipes within Nethergate community and micro tunneling (jack and boring) under George Washington Parkway (instead of cut and cover) to create a new CSO connection. The existing storm sewer is undersized. A new storm sewer will be added with no new outfalls.

City is producing task order for consultant designer. City will schedule public meeting once designer is onboarded. City has engaged with HOA president and neighbors.

- Drudi: Will flooding along the parkway/park services area/Abington be fixed?
  - Whiteleather: That is beyond the scope of this project. The primary cause of flooding is the topography – the area is a bowl which results in water ponds – and the combined sewer. While the project may produce some benefits, it is not anticipated. The project will improve the condition of Nethergate.
  - Root cause of neighborhood flooding is sump pump back-up. The project will increase conveyance capacity downstream of local drainage system.

## 7. Bellefonte Ave & Clifford Ave (Dillon)

### Flood Action Progress Report: Updates to Stormwater Program Schedule



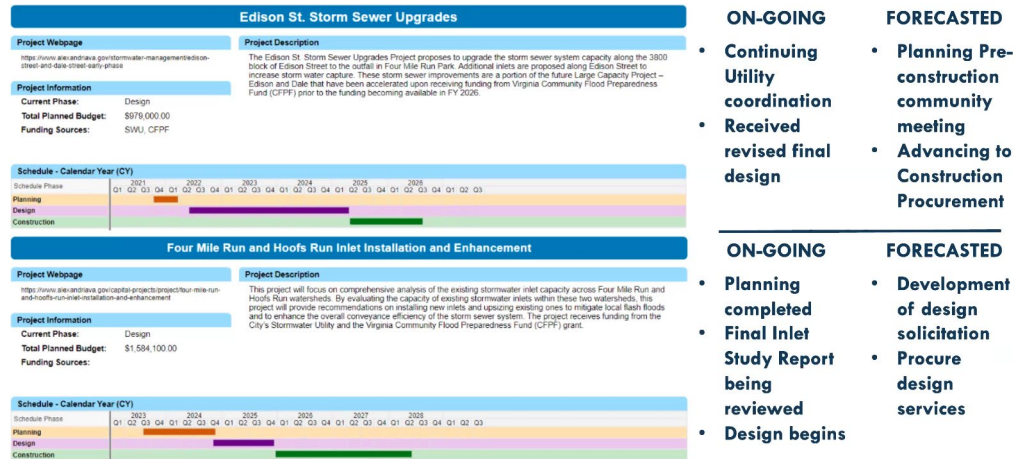
**Bellefonte Ave:** Issued solicitation request for design services, received proposal, and are advancing towards design kick-off.

**Clifford Ave:** Received 30% design package including geotechnical report, specifications, cost estimate, etc. Have promising design, still refining. Will share with community at the end of 30% (Feb – March).



## 8. Edison & Four Mile Run (Dillon)

# Flood Action Progress Report: Updates to Stormwater Program Schedule



**Edison St:** Continuing coordination with utilities (requested several relocations). Received revised final design plans (required second submission). Actively planning pre-construction community meeting and preparing construction procurement solicitation to make up time and complete within grant funding timeline.

**Four Mile Run Inlet Installation and Enhancement:** Completed planning and received final report. Moving to design phase and developing design solicitation.

- Area: Study of entire watershed along Commonwealth Ave (3,000 inlets).

Drudi: Recommendation: Discuss both projects at community meeting.

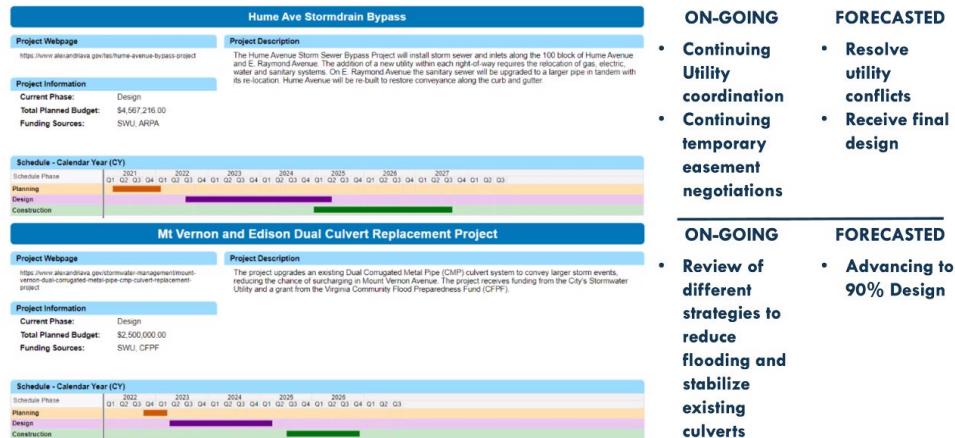
- Dillon: Will consider. Projects are at different stages – Edison will be construction impact discussion while Four Mile Run will be discussion of process and benefits.





## 9. Hume Ave & Edison Dual Culvert (Dillon)

### Flood Action Progress Report: Updates to Stormwater Program Schedule



**Hume Ave:** Continuing utility coordination and easement negotiations with property owners. One utility provider does not need complete City designs to start work. Provider has shared design package with City for review. Once obtain permits and notify community, are likely to begin construction in Q1.

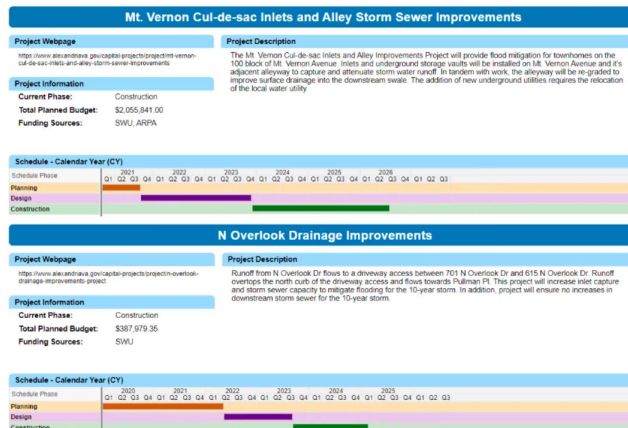
- Waynick: Sanitary sewer pipes in Truist parking lot. Are they contributing to flooding in the area?
  - Dillon: Reviewed connections, no conflicts with proposed City work and no they do not contribute. City is also proposing sanitary system upgrades along East Raymond and Hume Ave.

**Edison Dual Culvert:** Reviewing strategies to stabilize culvert outfall. Once assessment is complete, can proceed to 90% design phase and prepare for construction procurement.



## 10. Mt Vernon & N Overlook (Dillon)

### Flood Action Progress Report: Updates to Stormwater Program Schedule



#### ON-GOING

- Reviewing community concerns and planning responses and adjustments

#### FORECASTED

- Additional community outreach
- Water main re-location by private utility

#### ON-GOING

- Project Closeout & final documents

#### FORECASTED

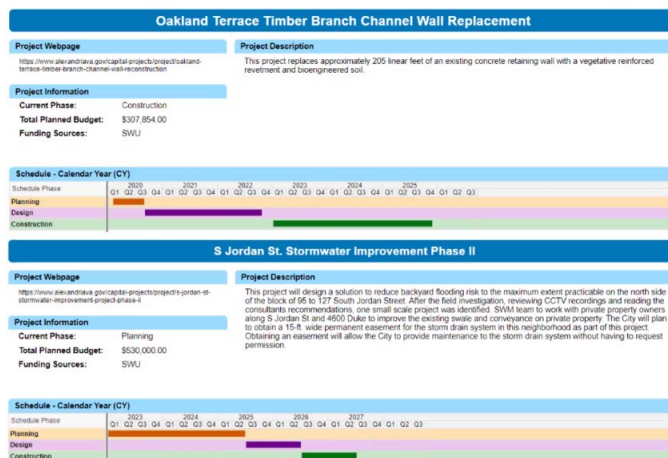
- Project complete

**Mt. Vernon Cul-de-sac:** Received community feedback at meeting. Planning additional outreach to address concerns. GeoAmerican will continue with their water main relocation (not solely Mt Vernon and East Rosemont). There will be construction activity on street, tangentially associated with the City's project. Neighbors are concerned about construction impacts.

**N Overlook:** Closing out. Forecast will be complete before end of Q1.

## 11. Oakland & S Jordan (Dillon)

### Flood Action Progress Report: Updates to Stormwater Program Schedule



#### ON-GOING

- Continued construction

#### FORECASTED

- Wall replacement complete
- Grow-in of live stakes & vegetation

#### ON-GOING

- Preparing for design phase project kickoff

#### FORECASTED

- Project kickoff meeting
- Purchase Order issued for Design

**Oakland Ter:** Wall nearly complete, waiting for growing period to add live stakes and other vegetation.

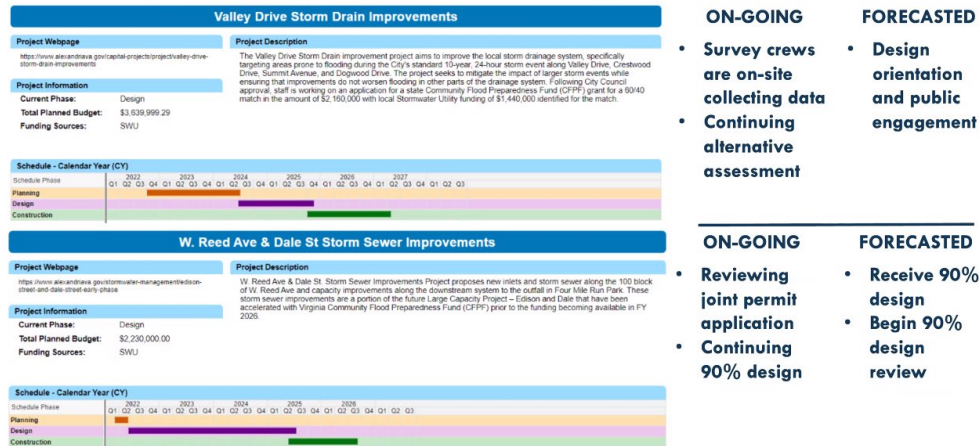
**S Jordan St:** Completed planning phase. Preparing for design/project kick-off meeting.





## 12. Valley Dr & W Reed (Dillon)

### Flood Action Progress Report: Updates to Stormwater Program Schedule



**Valley Drive:** Survey crews collecting data, continuing alternatives assessment. Will hold public project kick-off meeting once complete alternatives assessment.

**W Reed:** Reviewing joint federal and state permit applications due to impacts to wetlands and waters of the United States (outfall project). Will submit, expect permission approval. Will then continue to 90% design, community outreach, and construction.

- Drudi: Question concerning timeline (short planning phase, 3-4 year design phase, short construction phase).
  - Dillon: Design process involved pivoting and expanding project and cost to reach level of service necessary. Construction should be relatively short. Planning phase was a bit longer than that represented on the graph.
- Leonard: Is there coordination between W Reed, Dale, and Commonwealth Ave projects?
  - Dillon: Will be sensitive to number of trucks circulating. Spot projects are unlikely to impact those beyond residents on the immediate street. Project includes 200 feet of pipe along W Reed. Should be short length of time. Aware of school bus lane.
- Drudi: Must consider Hume Spring circular structure (10-15 feet) below ground.
  - Dillon: Geotechnical/topographic survey didn't conflict, will follow-up offline.

Hill: Encourage committee members to go to the OMB homepage, find Capital Project Quarterly update, and read page-long project summary. Will send instructions. Project update includes budget impact. Will make these meetings more productive and lighten burden on staff.

- Whiteleather: Updates reflect end of 4<sup>th</sup> quarter.

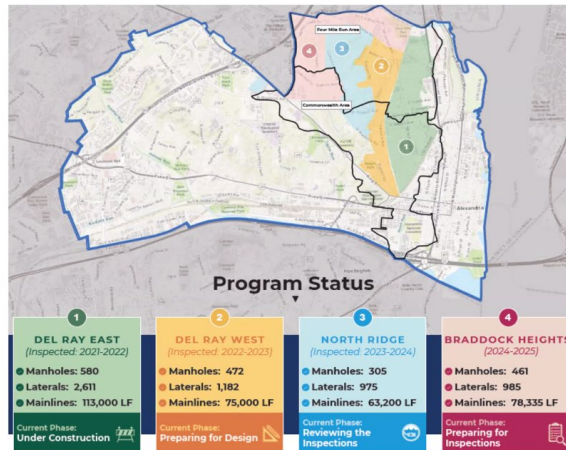


### 13. Sanitary Sewer Asset Renewal Program (Bevis-Carver)

## Sanitary Sewer Asset Renewal Program

#### • Del Ray East Sewer Rehabilitation:

- Contractor issued Notice to Proceed Oct 16, 2023
  - Contract period = 1 year, extended until lining complete (end January)
- Construction progress:
  - 98% pipes lined
  - 100% manholes rehabilitated
  - Lateral sewers under separate contract – Invitation to Bid upcoming (early 2025)



**Del Ray East** (East of Commonwealth): Manhole and pipe construction almost complete. Next step, lateral rehabilitation. Current contractor contract includes manhole and mainline rehabilitation, not lateral rehabilitation. City developing new contract to include all three. Plan: release ITP later in 2025.

**Del Ray West:** In design phase, consultant task order will include all mainlines, manholes, and laterals.

**North Ridge:** Reviewing 2024 inspections using CCTV to assess rehab needs.

**Braddock Heights:** Issued task order. Inspections started 01/14/2025.

Bevis Carver to include project timelines for next meeting (can be found in capital status reports).

## Sanitary Sewer Backup Mitigation Projects

- Types of projects aimed at mitigating sewer backups:
  - Asset Renewal Program – reduce infiltration and inflow into the sanitary sewer system
  - Sewer Upsizing Projects – replace existing sewers with larger sewers
    - Del Ray Upsizing Project #1 – Construction Notice to Proceed January 2025
    - 300/400 blocks N Alfred Street – Construction Notice to Proceed February 2025
    - Madison and Saint Asaph – Bids received, contract award Jan/Feb 2025
    - 400 block Wolfe Street – 100% design completed, Invitation to Bid Feb/Mar 2025
  - Combined Sewer Separation Projects – disconnection of sanitary sewers from combined sewer system and reconnection to fully separate sanitary sewer
    - 500 block N Pitt Street – construction completed
    - 600 block N Columbus Street – 100% design completed, Invitation to Bid Feb/Mar 2025

Mitigation projects aim to address sanitary and combined sewer system backups (similar in scope to stormwater spot projects). Long-term, takes several years to see impacts on system infiltration.

Upsizing projects – nearing 100% design and/or issued construction contracts/notice to proceed:



- Del Ray Upsizing Project #1: Repeated sewer back-ups, existing sewer is undersized. Increasing size from 10 in to 18 in. Area includes Maple, Oak, and Alexandria Ave (excludes Hume, cover by spot project). Construction to start end of January 2025.
- N Alfred St: Undersized sanitary and combined sewers, will upsize to increase conveyance capacity. Anticipate construction notice to proceed in Feb. Public meeting next week. Contacted all those impacted. Most concerns relate to parking, traffic and service interruptions.
- Madison: Smaller size project, using on-call contractor. Plan to award end of Jan/early Feb.
- Wolfe St: 100% design documents, residents involved in design development. To release invitation to bid over next two months

Combined Sewer Separation: Opportunity to reconnect sanitary to separate system to mitigate combined system back-ups (short-term relief). Two projects: 1) N Pitt: Completed construction 2) N Columbus St: 100% design

Drudi: Request: Send N Alfred project details to West Old Town Citizens Association for public meeting.  
Bevis-Carver: To send.

Hill: Project #1

- Bevis-Carver: Starting at 200/300 Oak St (end of Jan 2025) due to repaving needs. Will have sewer bypass during construction. Only disruption to sewer service (a few hours) during individual lateral connections to new pipe. Will notify all neighbors of construction schedule. Sent project letter to residents, held public meeting (~10 attendees).

Thuot: Upsizing/separation impact on flooding/stormwater capacity.

- Bevis-Carver: Yes. Ex: 400 block of Wolf St: upsizing sanitary sewer which connects to combined sewer. Considered 10-year storm conveyance capacity in combined sewer upsizing. Residents weren't experiencing surface flooding.

Thuot: Request share analysis at next meeting. Useful to know where upsizing can benefit capacity.



## 14. Communications (Wheeler)

### Communications

#### November - December

- 10 Total Flood Action/ Stormwater social media posts
  - SWU Fee Credit Program, National Stormwater Day
- Impressions: 63,169 increased by 56%
- Engagements: 3,720 increased by 139%
- Post link clicks: 282 increased by 253%  
\*Compared to previous 2 months (September - October)
- 5,488 Stormwater Management webpage views  
\*86 total pages under Stormwater Management web group
- Average engagement rate: 57%, Average events per session: 4
- Most popular stormwater webpages: Additional Top Ten Pages:
  - [Flood Map](#) = 986 views [Stormwater Utility Fee](#): 338 views
  - [Types of Sewer Systems](#) = 548 views [Flood Mitigation Grant Program](#): 192 views
  - [Flood Action](#) = 496 [Watersheds](#): 157 views

SWU Credit program will be open for one more month. New National Stormwater Day (Nov 16th).

Engagement: Inflated compared to Oct-Sept partially due to T&ES winter weather communications.

Web Updates: Consistent engagement, Watersheds page seeing elevated engagement

### Communications

#### Upcoming Communications Priorities

- Flood Mitigation Grant Program
  - Commonwealth, Ashby, Glebe
  - SWU Fee Credit Program
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- Flood Mitigation Grant Program: Approved (e.g., social and e-mailer). Timeline TBD
  - Commonwealth: Pairing communications ahead of public meeting with larger outreach effort.
  - SWU Fee Credit Program: Final month, hosting webinar next week for community member Q&A on applications. (Leonard: Requested webinar link. Wheeler to send.)



## 15. Maintenance Activities (Jaatinen)

### Maintenance Activities

- Hooffs Run Culvert Maintenance and Cleaning from Linden Street to Duke Street
  - Maintenance work is underway and expected to continue until April 2025.
  - Barrel 1 is 95% cleaned.
  - Concrete repairs in Barrel 1 are ongoing.
  - Staging areas are located in Linden Street Alley, Mount Vernon Avenue cul-de-sac and Hooffs Run Park

Hoofs Run Culvert: Maintenance began in Dec 2024. Barrel 1 (western culvert) is 95% cleaned, ongoing concrete repairs (relatively extensive). Once complete, shift to upper portion (primarily repairs). Slightly behind schedule due to weather. Looking to complete by April 2025

Hill: Request: Pictures and statistics (amount removed). Jaatinen to send.

Drudi: Clarification on upper barrel system (Hoofs Run and Timber Branch converge at Braddock Rd before flowing through the barrels).

- Rahal: Right barrel continues into watershed and collects inlets to North. Jaatinen: Smaller pipes cleaned by flush and back trucks as part of ongoing maintenance. Hill: Recommendation to look at maps.

## 16. Mitigation Grants (Montoney)

### Flood Mitigation Grant Program

- We have reimbursed a total of \$1,098,021.41 since the start of the program in July 2021.
- So far in FY2025, we have 70 applications in various stages with a total of \$107,174.18 reimbursed.
- In FY2024, we had 101 approved applications for a total of \$235,145.16 reimbursed.
- In FY2023, we had 73 approved applications for a total of \$167,538.49 reimbursed.
- In FY2022, we had 148 approved applications for a total of \$588,163.58 reimbursed.

Received 7 additional applications since prior meeting. Anticipate increase in Feb-March.

Thuot: Amount of funding remaining. Could incentivize residents to apply or consider increasing cap.





- Maines: Funded annually in CIP, \$833,000 planned for 2026 (money carries over).
- Montoney: \$540,000 remaining in fund this year.
- Drudi: Condos aren't getting enough.

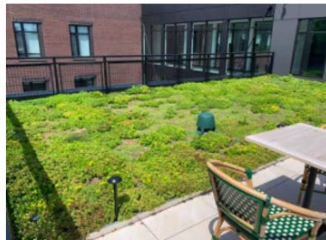
Hill: Should the \$5,000 funding limit be re-evaluated? Will need localized solutions for residents in high-risk areas which cannot be addressed via CIP/system projects. State gives authority for property tax credit.

- Maines: With Flood Resilience Plan, City considering creating own flood maps in addition to FEMA areas. Determine whether increase cap based on area.
- Thuot: Many projects are 10-12 years out and neighbors lack funds to make necessary changes. Do residents submit holistic applications (entire project costs)?
  - Montoney: City does track applications with incremental improvements, and there are many residents that take this approach. Alternatively, several residents submitted applications with work totaling \$30,000-\$60,000 (\$170,000 – outlier but was addition). Overall, residents are developing a better understanding of what City will and will not accept.

#### 17. SWU Credit (Maines)

### Annual SWU Credit Application Window

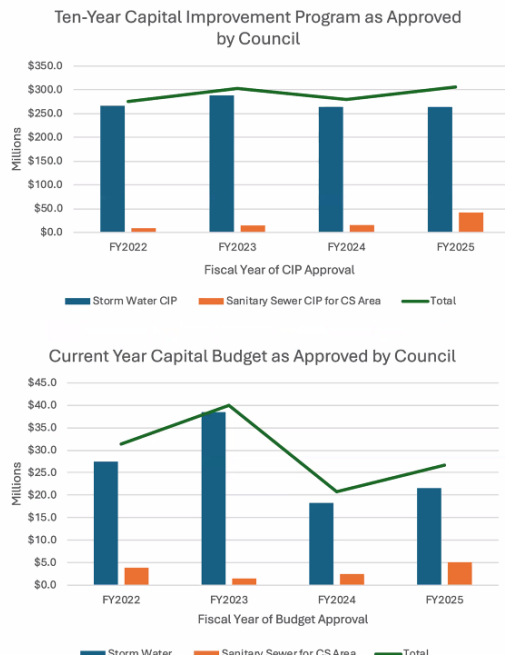
- Annual credit window is open from December 1 to February 15
- Approved eligible credits are good for 2 years
- Floodproofing practices added to eligibility list
- Residents who applied in the 22/23 cycle received an email to reapply.
- Over 120 applications have been received.
- Next webinar is Wednesday, January 22nd at 7pm. Come with questions!



Contacting residents who need to reapply. Upcoming webinar on City calendar. Previous webinar recording and presentation are available on website. Wheeler to send.



## 18. FY2026 Budget (Hill and Waynick)



### Public Hearing Opportunities for FY2026 Budget

*Note: City Manager's Budget is presented on*

*Tuesday, February 25, at 7pm*

*Monday, March 10, at 5:30pm*

*Saturday, March 15, at 9:30am*

*Tuesday, April 8, at 5:30pm*

*Note: Our next Committee meeting is on  
Wednesday, March 19, at 7pm*

Committee defends flood action program budget. 10-Year Capital Improvement Program holding at 300 million. Hill wants authorization to maintain 300 million 10-Year CIP and advocate for 2026 budget at March-April hearings.

- Drudi: Need to increase budget. Expect public pushback against 7%. Should plan annual 5% increase. Drop following 7% implies little will be done.
- Follow-Up: Funding addresses this initial funding package. FY2026 must focus on CIP package.
- Maines: Proposed in FY2021, based on 2017 CIP. Started at \$140 per year for single-family home. Proposed increase to \$340 in 2026. Increases compound (e.g., FY34 is \$600 per year for a single-family home). Must consider threshold for those who do not experience flooding.
  - Revenue includes bonds and service to be paid. Will need to rework each year.
- Waynick: Need realistic expectations. Important to be transparent. Will likely progress to 5% consistently. How far out should the committee raise this issue in a report?
  - Hill: Should focus on Mar-April hearings on FY2026. Annual report in April is opportunity to raise issue. City manager presents budget on Feb. 25, 2025.
- Maginniss: Likely to evaluate tax/program in coming years.

Move to support budget. Second (Waynick). All in favor. Aye (with caveat).



## Recent Virginia law permits property tax exemption for flood mitigation improvements

### CHAPTER 754

*An Act to amend the Code of Virginia by adding in Article 3 of Chapter 32 of Title 58.1 a section numbered 58.1-3228.1, relating to partial exemption from real property taxes for flood mitigation efforts.*

[S 1588]

Approved March 21, 2019

1. That the Code of Virginia is amended by adding in Article 3 of Chapter 32 of Title 58.1 a section numbered 58.1-3228.1 as follows:

*§ 58.1-3228.1. Partial exemption from real property taxes for flood mitigation efforts.*

*B. The governing body of any county, city, or town may, by ordinance, provide a partial tax exemption for improved real estate that is subject to recurrent flooding and upon which qualifying flood improvements have been made. No exemption shall be granted for any improvements made prior to July 1, 2018.*

## Alexandria administers a program of tax exemptions for solar energy improvements



### SOLAR ENERGY EQUIPMENT TAX EXEMPTION City of Alexandria, Virginia

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#### General Information

Property owners can qualify for a tax exemption for the installation of solar equipment that is designed and used primarily for the purpose of providing for the collection and use of solar energy for water heating, space heating or cooling or other applications which would otherwise require a conventional source of energy. Qualifying solar

Hill: Create committee. Commonwealth legislature authorized tax exemptions for flood mitigation. Municipality has authority to give exemptions/tax credit for flood prevention. Alexandria has solar energy tax credit. Maines to ask Virginia Municipal Stormwater Association.

Committee members: Hill, Waynick, Leonard

Thuot: One member of City's Budget and Fiscal Affairs Advisory Committee is missing from charter. Sent email.

- Drudi: Move to amend charter to correct omission. Second (Waynick). All in favor, aye. Hill to change.

No Public Comment.

Motion to adjourn. Second. All in favor, aye.