Arlington WPCP Capital Project

Category: Stormwater/Sewer Utility

Department Lead: Public Works

Type: Ongoing Project

Project Description, Benefit, Estimate, and Schedule

The City of Falls Church is a wholesale customer of the Arlington Wastewater Pollution Control Plant (WPCP). As an Inter-Jurisdictional (IJ) partner, the City contributes to Capital Improvements on a cost-share basis according to the City's reserved capacity at the Plant (0.80 MGD). The City attends IJ meetings to discuss required plant improvements and upgrades, which are needed to maintain a state required level of operation and effluent discharge. The City's portion (based on reserved capacity / total plant capacity) of the improvements is 2.0% of the total costs. The Arlington WPCP's Capital Projects include the following:

- Building Improvements to Eads Street
- Non-Expansion Maintenance
-Technology Enhancements
- Odor Control
-Primary Clarifier Upgrade and Secondary Clarifier Rehab/Replacement
- Solids Master Plan Phases 1, II, and III
- Large Diameter Sewer- Four Mile Run Interceptor Relining

Capital Funding Plan

Project	Funding Source	PY Funds	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030-33	10-YR Total
Arlington WPCP	Local (Debt)	$ -		$ -	$ 1,353,000	$ 979,000	$ 431,000	$ 65,000	$ 167,000	$ 2,995,000
	Local (PAYGO)	$ 312,000	$ 776,000	$ 1,314,000	$ -	$ -	$ -	$ -	$ -	$ 2,402,000
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
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		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total:		$ 312,000	$ 776,000	$ 1,314,000	$ 1,353,000	$ 979,000	$ 431,000	$ 65,000	$ 167,000	$ 5,397,000

**if no activity per City Charter (Section 6.19) in 3 years note as re-appropriation action*

Impact on Operating Costs

Conformity with Comprehensive Plan and Council Strategic Plan/ Equity Lens Score

The upgrade of the Arlington Water Pollution Control Plant meets goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:
• Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community;
• Identify and prioritize facilities that require upgrading;
• Ensure the most efficient and effective management of sanitary sewer systems.

Upgrades at the Arlington Water Pollution Control Plant do not worsen desparites or inequities; however, they do have environmental and resillence impacts by reducing chemical usage at the plant and reducring overflows.

FY 24-29 Equity/Environmental/Resilience Lens Review

Falls Church 2040 Vision, adopted April 10, 2017 *In the year 2040, the City of Falls Church is a welcoming and inclusive community – a special place in the heart of Northern Virginia. Involved citizens are key to the City's long-term success as a leader in education, environmental sustainability, multi-modal transportation, and vibrant economic development. By investing in neighborhoods, community services and facilities, schools, and parks the City preserves small-town character and history while honoring a deep commitment to progress and a growing community. The continual rejuvenation of robust commercial areas supports the City's high quality of life for all citizens.*				**Benefit those under stress** **(Q1) Does the proposed project benefit communities of color, low-income neighborhoods, persons with disabilities and/or underserved? Could it be adjusted to avoid or mitigate the burden and/or to realize a higher benefit? How?**		**Reduce current disparities** **(Q2) Does the proposed project help reduce disparities and inequities? If not, could it be adjusted to do so? How?**		**Avoiding Implicit Bias or Increased Inequities** **(Q3) If Q1 and Q2 do not directly apply to this project describe how it does not worsen disparities and inequities?**		**Environmental Impact** **What impact does the request have on environmental sustainability? Consider five categories: Climate, Air & Energy (CAE); Stormwater, Streams & Natural Springs (SSNS); Urban Forest & Biodiversity (UFB); Consumption & Waste (C&W); Community Engagement (CE). For clarification, refer to Comp Plan Ch. 5 Environment for Everyone.** https://www.fallschurchva.gov/DocumentCenter/View/11848/Environment-Chapter-February-10-2020-FINAL	**Resilience Impact** **What impact does the request have on the community's ability to withstand, adapt to and/or recover from adversity (whether natural or man-made)?**
Department	**Project(s)-listed in priority order**	**Funding Request**	**City Mgr Recommended Funding**	**Rank: Low (L) Medium (M) High (H)**	**Burden/Benefit Comments**	**Rank: Low (L) Medium (M) High (H)**	**Disparities Comments**	**Rank: Low (L) Medium (M) High (H)**	**Bias/Inequities Comments**	**Environmental Impact Comments (replace * below)**	**Resilience Comments**
DPW	Arlington WPCP Non-Expansion Capital	$ 5,397,000	Yes		NA		NA		As an Inter-Jurisdictional (IJ) partner, the City contributes to Capital Improvements on a cost-share basis according to the City's reserved capacity at the Arlington Wastewater Pollution Control Plant (WPCP). This project provides non expansion improvements to the Arlington WPCP to ensure fiscally responsible treatment alternatives and up keep of the facilities.	CAE: Reduction in chemical usage and type at treatment facility. SSNS: Reduction in overflows during heavy rain events. UFB: None. C&W: Construction materials will be required for some project elements. CE: None.	With reduction of overflows, there will be less environmental cleanup and therefore the region will be able to dedicate more resources to recovery efforts.
										CAE:* SSNS:* UFB:* CW:* CE:*	
										CAE:* SSNS:* UFB:* CW:* CE:*	

Alexandria Wastewater Treatment Upgrades

Category: Stormwater/Sewer Utility

Department Lead: Public Works

Type: Ongoing Project

Project Description, Benefit, Estimate, and Schedule

The City of Falls Church is a wholesale customer of the Alexandria Renew Wastewater Treatment Plant. When improvements to the treatment process are required to maintain the level of service specified by the plant's discharge permit the City is responsible for its share of the costs based on the City's reserved capacity at the plant. The City currently has 1.0 million gallons per day reserved, which equates to a 3.1% share of the cost to improvements. The City attends IJ meetings to discuss required plant improvements and upgrades.

The proposed CIP includes estimated costs to:
- Complete the nitrogen and phosphorus removal upgrades (SANUP)
- Implement a wet weather management strategy
- Upgrade UV disinfection system and scum system
- Replace blower system for biological reactor and settling basins

Capital Funding Plan

Project	Funding Source	PY Funds	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030-33	10-YR Total
Alexandria Wastewater Treatment Upgrades	Local (Debt)	$ 394,837	$ -	$ -	$ 247,000	$ 801,366	$ 709,678	$ 469,430	$ 797,723	$ 3,420,034
	Local (PAYGO)	$ 110,000	$ 1,458,584	$ 2,058,326	$ 873,456	$ -	$ -	$ -	$ -	$ 4,500,366
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total:		$ 504,837	$ 1,458,584	$ 2,058,326	$ 1,120,456	$ 801,366	$ 709,678	$ 469,430	$ 797,723	$ 7,920,400

**if no activity per City Charter (Section 6.19) in 3 years note as re-appropriation action*

Impact on Operating Costs

Provide specific operating cost impact with $ amounts.

Conformity with Comprehensive Plan and Council Strategic Plan/ Equity Lens Score

The upgrade of the Alexandria Wastewater Plant meets goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:
- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community;
- Identify and prioritize facilities that require upgrading;
- Ensure the most efficient and effective management of sanitary sewer systems.

Upgrades at the Alexandria Waste Water Treatment Plant do not worsen desparites or inequities; however, they do have environmental and resillence impacts by reducing chemical usage at the plant and reducring overflows.

FY 24-29 Equity/Environmental/Resilience Lens Review

Falls Church 2040 Vision, adopted April 10, 2017 *In the year 2040, the City of Falls Church is a welcoming and inclusive community – a special place in the heart of Northern Virginia. Involved citizens are key to the City's long-term success as a leader in education, environmental sustainability, multi-modal transportation, and vibrant economic development. By investing in neighborhoods, community services and facilities, schools, and parks the City preserves small-town character and history while honoring a deep commitment to progress and a growing community. The continual rejuvenation of robust commercial areas supports the City's high quality of life for all citizens.*				**Benefit those under stress**		**Reduce current disparities**		**Avoiding Implicit Bias or Increased Inequities**		**Environmental Impact**	**Resilience Impact**
				(Q1) Does the proposed project benefit communities of color, low-income neighborhoods, persons with disabilities and/or underserved? Could it be adjusted to avoid or mitigate the burden and/or to realize a higher benefit? How?		**(Q2) Does the proposed project help reduce disparities and inequities? If not, could it be adjusted to do so? How?**		**(Q3) If Q1 and Q2 do not directly apply to this project describe how it does not worsen disparities and inequities?**		**What impact does the request have on environmental sustainability? Consider five categories: Climate, Air & Energy (CAE); Stormwater, Streams & Natural Springs (SSNS); Urban Forest & Biodiversity (UFB); Consumption & Waste (C&W); Community Engagement (CE). For clarification, refer to Comp Plan Ch. 5 Environment for Everyone.** https://www.fallschurchva.gov/DocumentCenter/View/11848/Environment-Chapter-February-10-2020-FINAL	**What impact does the request have on the community's ability to withstand, adapt to and/or recover from adversity (whether natural or man-made)?**
Department	**Project(s)-listed in priority order**	**Funding Request**	**City Mgr Recommended Funding**	**Rank: Low (L) Medium (M) High (H)**	**Burden/Benefit Comments**	**Rank: Low (L) Medium (M) High (H)**	**Disparities Comments**	**Rank: Low (L) Medium (M) High (H)**	**Bias/Inequities Comments**	**Environmental Impact Comments (replace * below)**	**Resilience Comments**
DPW Sanitary Sewer	Alexandria Wastewater Treatment Upgrades	$ 5,931,972	Yes		NA		NA	NA	The City of Falls Church is a wholesale customer of the Alexandria Renew Wastewater Treatment Facility (WWTF). When improvements to the treatment process are required to maintain the level of service specified by the plant's discharge permit the City is responsible for its share of the costs based on the City's reserved capacity at the plant. This project provides improvements to the Alex Renew WWTF to ensure fiscally responsible treatment alternatives and upkeep and upgrades to the facilities.	CAE: Reduction in chemical usage and type at treatment facility. SSNS: Reduction of overflows during heavy rain events. UFB: None. C&W: Plant upgrades and replacements will require new equipment and materials. CE: None.	With reduction of overflows, there will be less environmental cleanup and therefore the region will be able to dedicate more resources to recovery efforts.

Alexandria Wastewater Treatment Plant Capacity

Category: Stormwater/Sewer Utility

Department Lead: Public Works

Type: Ongoing Project

Project Description, Benefit, Estimate, and Schedule

The City of Falls Church contracted consultants in fiscal year 2020 to analyze future flow projections to both Arlington and Fairfax Counties where the City discharges sanitary sewer flow under the conditions of existing Inter-jurisdictional Agreements (IJA). The analysis concluded that the sanitary flow rates to Fairfax associated with future developments in the City of Falls Church will exceed the current 1.0 MGD allocation as outlined per Fairfax Inter-jurisdictional Agreement. Flow rates currently surpass this allocation on an intermittent basis with anticipated flow rates approaching 1.50 MGD in the next 10-15 years.

The City of Falls Church seeks to purchase a total of 0.5 MGD of treatment capacity at the Fairfax County (Alex Renew) waste water treatment plant. Draft pricing information was recieved in from Fairfax County in FY2023. Negotiations with Fairfax County are pending regarding the final cost and details of the purchase.

Capital Funding Plan

Project	Funding Source	PY Funds	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030-33	10-YR Total
Alexandria Waste Water Treatment Plant Capacity	Sewer Avalibility Fees	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Local (Debt)	$ -	$ 9,292,500	$ -	$ -	$ -	$ -	$ -	$ -	$ 9,292,500
	Select Source Here	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
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		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total:		$ -	$ 9,292,500	$ -	$ -	$ -	$ -	$ -	$ -	$ 9,292,500

**if no activity per City Charter (Section 6.19) in 3 years note as re-appropriation action*

Impact on Operating Costs

Provide specific operating cost impact with $ amounts.

Conformity with Comprehensive Plan and Council Strategic Plan/ Equity Lens Score

The upgrade of the Alexandria Wastewater Plant meets goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:
- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community;
- Identify and prioritize facilities that require upgrading;
- Ensure the most efficient and effective management of sanitary sewer systems.

FY 24-29 Equity/Environmental/Resilience Lens Review

Falls Church 2040 Vision, adopted April 10, 2017 *In the year 2040, the City of Falls Church is a welcoming and inclusive community – a special place in the heart of Northern Virginia. Involved citizens are key to the City's long-term success as a leader in education, environmental sustainability, multi-modal transportation, and vibrant economic development. By investing in neighborhoods, community services and facilities, schools, and parks the City preserves small-town character and history while honoring a deep commitment to progress and a growing community. The continual rejuvenation of robust commercial areas supports the City's high quality of life for all citizens.*				**Benefit those under stress**		**Reduce current disparities**		**Avoiding Implicit Bias or Increased Inequities**		**Environmental Impact**	**Resilience Impact**
				(Q1) Does the proposed project benefit communities of color, low-income neighborhoods, persons with disabilities and/or underserved? Could it be adjusted to avoid or mitigate the burden and/or to realize a higher benefit? How?		**(Q2) Does the proposed project help reduce disparities and inequities? If not, could it be adjusted to do so? How?**		**(Q3) If Q1 and Q2 do not directly apply to this project describe how it does not worsen disparities and inequities?**		**What impact does the request have on environmental sustainability? Consider five categories: Climate, Air & Energy (CAE); Stormwater, Streams & Natural Springs (SSNS); Urban Forest & Biodiversity (UFB); Consumption & Waste (C&W); Community Engagement (CE). For clarification, refer to Comp Plan Ch. 5 Environment for Everyone.** https://www.fallschurchva.gov/DocumentCenter/View/11848/Environment-Chapter-February-10-2020-FINAL	**What impact does the request have on the community's ability to withstand, adapt to and/or recover from adversity (whether natural or man-made)?**
Department	**Project(s)-listed in priority order**	**Funding Request**	**City Mgr Recommended Funding**	**Rank: Low (L) Medium (M) High (H)**	**Burden/Benefit Comments**	**Rank: Low (L) Medium (M) High (H)**	**Disparities Comments**	**Rank: Low (L) Medium (M) High (H)**	**Bias/Inequities Comments**	**Environmental Impact Comments (replace * below)**	**Resilience Comments**
DPW Sanitary Sewer	Alexandria Wastewater Treatment Plant Capacity Purchase	$ 9,292,500	Yes		NA		NA	NA	The City has agreements in place with Fairfax County and Arlington County to treat city generated waste water. The current proposed plan to address over capacity issues at the Fairfax County Facility (Alex Renew) is to purchase additional capacity at the Alex Renew Waste Water Treatment Plant.	None	None

Sanitary Sewer Rehabilitation

Category: Stormwater/Sewer Utility

Department Lead: Public Works

Type: Ongoing Project

Project Description, Benefit, Estimate, and Schedule

A systematic approach to sewer line rehabilitation is being pursued throughout the City's sanitary sewer system. Based on consultant recommendations, a 30-year program has been developed. This is an on-going project to rehabilitate pipes with a process for reconstructing aged, damaged and deteriorated sewer lines. A new cured-in place pipe is formed inside of the existing sewer pipe by using water pressure to install a flexible tube saturated with a liquid thermosetting resin. The water is then heated to harden the resin. This process increases the sewer capacity (due to the smoothness of the new interior surface). It also results in a continuous, tight fitting, pipe-within-a-pipe and reduces infiltration and inflow (I&I). This is a relatively non-invasive and cost-effective process because there is little excavation required. This on-going project, begun in FY2004, will continue until the entire system is rehabilitated. Smoke testing and video inspection are performed to guide the decision process for selecting sewer mains for rehabilitation. In some cases a new sewer main may be a proposed solution to a localized capacity issue. Since the program began, the City has relined 31.4 miles of our total system length of 49 miles (64%).

Capital Funding Plan

Project	Funding Source	PY Funds	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030-33	10-YR Total
Sanitary Sewer Rehabilitation	Local (PAYGO)	$ -	$ -	$ -	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 600,000	$ 1,200,000
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
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		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total:		$ -	$ -	$ -	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 600,000	$ 1,200,000

**if no activity per City Charter (Section 6.19) in 3 years note as re-appropriation action*

Impact on Operating Costs

Purposes of program are:
1. Long-term cost savings in maintenance of pipe network and,
2. Reduced treatment costs due to reduction of infiltration.

Conformity with Comprehensive Plan and Council Strategic Plan/ Equity Lens Score

The continued needed maintenance of the sewer system meets goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:
• Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community;
• Identify and prioritize facilities that require upgrading,
• Explore new technology to update and operate the City's utilities system.

Sanitary sewer reahbilitation does not worsen desparites or inequities. However, tt it does provide some positive environmental and resillence impacts detailed on the FY24-29Equity/Enviornmental/Resilliance Lens Review.

FY 24-29 Equity/Environmental/Resilience Lens Review

Falls Church 2040 Vision, adopted April 10, 2017				**Benefit those under stress**		**Reduce current disparities**		**Avoiding Implicit Bias or Increased Inequities**		**Environmental Impact**	**Resilience Impact**
In the year 2040, the City of Falls Church is a welcoming and inclusive community – a special place in the heart of Northern Virginia. Involved citizens are key to the City's long-term success as a leader in education, environmental sustainability, multi-modal transportation, and vibrant economic development. By investing in neighborhoods, community services and facilities, schools, and parks the City preserves small-town character and history while honoring a deep commitment to progress and a growing community. The continual rejuvenation of robust commercial areas supports the City's high quality of life for all citizens.				**(Q1) Does the proposed project benefit communities of color, low-income neighborhoods, persons with disabilities and/or underserved? Could it be adjusted to avoid or mitigate the burden and/or to realize a higher benefit? How?**		**(Q2) Does the proposed project help reduce disparities and inequities? If not, could it be adjusted to do so? How?**		**(Q3) If Q1 and Q2 do not directly apply to this project describe how it does not worsen disparities and inequities?**		**What impact does the request have on environmental sustainability? Consider five categories: Climate, Air & Energy (CAE); Stormwater, Streams & Natural Springs (SSNS); Urban Forest & Biodiversity (UFB); Consumption & Waste (C&W); Community Engagement (CE). For clarification, refer to Comp Plan Ch. 5 Environment for Everyone.** https://www.fallschurchva.gov/DocumentCenter/View/11848/Environment-Chapter-February-10-2020-FINAL	**What impact does the request have on the community's ability to withstand, adapt to and/or recover from adversity (whether natural or man-made)?**
Department	**Project(s)-listed in priority order**	**Funding Request**	**City Mgr Recommended Funding**	**Rank: Low (L) Medium (M) High (H)**	**Burden/Benefit Comments**	**Rank: Low (L) Medium (M) High (H)**	**Disparities Comments**	**Rank: Low (L) Medium (M) High (H)**	**Bias/Inequities Comments**	**Environmental Impact Comments (replace * below)**	**Resilience Comments**
DPW Sanitary Sewer	Sanitary Sewer Rehabilitation	$ 1,200,000	Yes		NA		NA	NA	A systematic approach to sewer line rehabilitation is being pursued throughout the City's sanitary sewer system. This is an on-going project to rehabilitate pipes with a process for reconstructing aged, damaged and deteriorated sewer lines and address FOG issues. Maintenance of existing infrastructure does not worsen disparities and inequities as the program focus is to re-line and renew the areas most in need.	CAE: Relining avoids the air pollution associated with road excavation equipment use. SSNS: Relining will reduce inflow and infiltration leading to a reduction in overflow discharges, which will ultimately help environmental quality. UFB: By relining existing pipe, excavation and possible concommitant damage to roadside trees is avoided. C&W: Relining avoids the need for new sewer lines.	Fewer breaks means we can reallocate resources to recovery efforts.

Reduction of Inflow and Infiltration (I&I)

Category: Stormwater/Sewer Utility

Department Lead: Public Works

Type: New Project

Project Description, Benefit, Estimate, and Schedule

A targeted approach for investigating inflow and infiltration (I&I) of stormwater and other illicit connections in to the City's sanitary sewer system has been started. Two areas where reports were the greatest were in the Trammel Branch/W. Columbia and the Hillwood areas. These two areas were singled out to be examined using gauging data of the flow in the sewer system along with rainfall data to find if there is any correlation between the two. The studies will include three main parts. The first part will be continuous flow monitoring and rainfall measurement for approximately a 6-month duration. The second part will be the flow data analysis and I&I investigation where all the data collected is examined for issues using EPA accepted I&I concentration rates as a benchmark to understand the severity of the situation. Finally, there will be a report developed that summarizes the results and conclusions as well as recommend any additional actions required. Both studies were started in the Fall of 2022 with completion expected in the late 2023.

Capital Funding Plan

Project	Funding Source	PY Funds	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030-33	10-YR Total
Reduction of I&I	Local (PAYGO)	$ -	$ -	$ -	$ 600,000	$ 600,000	$ 600,000	$ 600,000	$ 2,400,000	$ 4,800,000
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
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		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total:		$ -	$ -	$ -	$ 600,000	$ 600,000	$ 600,000	$ 600,000	$ 2,400,000	$ 4,800,000

**if no activity per City Charter (Section 6.19) in 3 years note as re-appropriation action*

Impact on Operating Costs

Reduced treatment costs due to reduction of infiltration.

Conformity with Comprehensive Plan and Council Strategic Plan/ Equity Lens Score

Reducing I&I in the sewer system meets goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:

- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community;
- Identify and prioritize facilities that require upgrading,
- [illegible]

FY 24-29 Equity/Environmental/Resilience Lens Review

Falls Church 2040 Vision, adopted April 10, 2017 *In the year 2040, the City of Falls Church is a welcoming and inclusive community – a special place in the heart of Northern Virginia. Involved citizens are key to the City's long-term success as a leader in education, environmental sustainability, multi-modal transportation, and vibrant economic development. By investing in neighborhoods, community services and facilities, schools, and parks the City preserves small-town character and history while honoring a deep commitment to progress and a growing community. The continual rejuvenation of robust commercial areas supports the City's high quality of life for all citizens.*				**Benefit those under stress** **(Q1) Does the proposed project benefit communities of color, low-income neighborhoods, persons with disabilities and/or underserved? Could it be adjusted to avoid or mitigate the burden and/or to realize a higher benefit? How?**		**Reduce current disparities** **(Q2) Does the proposed project help reduce disparities and inequities? If not, could it be adjusted to do so? How?**		**Avoiding Implicit Bias or Increased Inequities** **(Q3) If Q1 and Q2 do not directly apply to this project describe how it does not worsen disparities and inequities?**		**Environmental Impact** **What impact does the request have on environmental sustainability? Consider five categories: Climate, Air & Energy (CAE); Stormwater, Streams & Natural Springs (SSNS); Urban Forest & Biodiversity (UFB); Consumption & Waste (C&W); Community Engagement (CE). For clarification, refer to Comp Plan Ch. 5 Environment for Everyone.** https://www.fallschurchva.gov/DocumentCenter/View/11848/Environment-Chapter-February-10-2020-FINAL	**Resilience Impact** **What impact does the request have on the community's ability to withstand, adapt to and/or recover from adversity (whether natural or man-made)?**
Department	**Project(s)-listed in priority order**	**Funding Request**	**City Mgr Recommended Funding**	**Rank: Low (L) Medium (M) High (H)**	**Burden/Benefit Comments**	**Rank: Low (L) Medium (M) High (H)**	**Disparities Comments**	**Rank: Low (L) Medium (M) High (H)**	**Bias/Inequities Comments**	**Environmental Impact Comments (replace * below)**	**Resilience Comments**
DPW Sanitary Sewer	Inflow and Infiltration Program	$ 4,800,000	Yes		NA		NA		The inflow and infiltration (I&I) program investigates areas with reported inflow and infiltration issues. The initial steps are data collection, investigation, and reporting. The report will include conclusions and recommended actions. The long-term goal of the program is to reduce sanitary flows by reducing I&I. Reducing I&I can be achieved by removing illicit connections and re-lining pipes and laterals as needed Citywide.	CAE: Relining avoids the air pollution associated with road excavation equipment use. SSNS: Removal of illicit connections and relining laterals and pipes will reduce inflow and infiltration leading to a reduction in overflow discharges, which will ultimately help environmental quality. UFB: By relining existing pipe, excavation and possible concommitant damage to roadside trees is avoided. C&W: Relining avoids the need for new sewer lines.	Fewer breaks means we can reallocate resources to recovery efforts.

Stormwater CIP Program

Category: Stormwater/Sewer Utility

Department Lead: Public Works

Type: Ongoing Project

Project Description, Benefit, Estimate, and Schedule

With ARPA funding settled, a number of projects were able to start moving towards completion in FY2023. Federal ARPA funding will allow for the construction of Trammel Branch and Hillwood #1. It has also allowed the final planning and design for the Sherrow Avenue Stormwater and Greening of Lincoln Projects to begin. Finally Federal ARPA dollars have allowed us to advance the planning of the Lincoln West Area as well as the study of the Tripp's Run Watershed in preparation for future projects. State ARPA funding will be used for the construction of Sherrow and Greening of Lincoln. City leadership has asked that the City's Stormwater Capital Program be driven by resiliency in its planning. This objective is a part of our planning by studying the entire watershed and not just the problem area in order to look for other problem areas that may have gone unnoticed, as well as continuously managing the Capital Improvement Plan by developing additional projects where there is a need. This watershed wide approach will also identify the possibility of flooding outside of the regulated floodplain.

FY 2024-2026 (Funded)

In Construction

- W. Columbia/Trammel Branch Planned Completion FY24 - $2,300,000
- Hillwood #1/Ives Branch Planned Completion FY24 - $2,021,880
- Lincoln Ave/Ellison Branch Planned Completion FY24 - $743,920

Design Underway

- Hillwood #2 Robertson Branch Planned Completion FY25- $383,350
- Sherrow Ave/Tripp's Run Planned Completion FY26- $1,197,180
- Greening of Lincoln Planned Completion FY26 - $2,050,218

Planning to Start

- E. Columbia/Harrison Branch Planned Completion FY26- $1,708,850
- Tripp' Run Watershed Study FY24/25 $250,000
- Lincoln/West Watershed Study FY24/25 $300,000

FY 2026 and Beyond Future Projects (Funding/Grants TBD)

- City Hall Campus GI Project FY 27 - $600,000
- Park Ave Drainage Improvements and GI Project FY27- $1,000,000
- Robert's Park Erosion control and GI Project FY28 - $450,000
- North Oak Street GI Project FY 29- $500,000
- West Broad Street GI Project FY30 - $500,000
- Broad Street at the Broadway Project FY 30 - $2,000,000
- Green Infrastructure and Capital Project Maintenance $500,000 per year
- Sherrow Ave Green Infrastructure FY 26-27 $1,000,000

Capital Funding Plan

Project	Funding Source	PY Funds	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030-33	10-YR Total
Trammel Branch	Federal Grant (ARPA)	$ 2,400,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,400,000
Hillwood Avenue #1	Federal Grant (ARPA)	$ 2,200,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,200,000
Hillwood Avenue #2	Federal Grant (ARPA)	$ 135,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 135,000
	State Grant (ARPA)	$ 400,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 400,000
Upper Lincoln Avenue	Local (PAYGO)	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 500,000
	Federal Grant (EPA)	$ -	$ 400,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 400,000
Sherrow Avenue	Federal Grant (ARPA)	$ 565,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 565,000
	State Grant (ARPA)	$ 1,000,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,000,000
Greening of Lincoln	Federal Grant (ARPA)	$ 900,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 900,000
	State Grant (ARPA)	$ 2,600,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,600,000
Modeling	Federal Grant (ARPA)	$ 900,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 900,000
Lincoln West Watershed Study	Federal Grant (ARPA)	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 500,000
Columbia Harrison Project	State Grant (Gen. Fund Request) Pending	$ -	$ 4,000,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,000,000
	Local (PAYGO)	$ 143,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 143,000
Future Stormwater Projects (see above)	State Grant (Gen. Fund Request) Pending	$ -		$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Local (Debt)	$ 399,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 399,000
	TBD	$ -	$ -	$ -	$ 100,000	$ 3,850,000	$ 1,700,000	$ 1,800,000	$ 3,800,000	$ 11,250,000
Total:		$ 12,642,000	$ 4,400,000	$ -	$ 100,000	$ 3,850,000	$ 1,700,000	$ 1,800,000	$ 3,800,000	$ 28,292,000

**if no activity per City Charter (Section 6.19) in 3 years note as re-appropriation action*

Impact on Operating Costs

Operating costs will increase due maintenance on new green stormwater infrastructure. Additional staff was approved and funded with ARPA for the administration of contracts needed to complete the CIP.

Conformity with Comprehensive Plan and Council Strategic Plan/ Equity Lens Score

The continued needed maintenance of the stormwater system meets the goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:

- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community
- Identify and prioritize facilities that require upgrading
- Explore new technology to update and operate the City's utilities system

FY 24-29 Equity/Environmental/Resilience Lens Review

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Public Works	Stormwater Flooding Remediation		Yes		NA		NA	L	This project will not worsen disparities and inequities because flooding and stormwater infrastructure system damage is the common denominator and it does not discriminate based on creed or color.	CAE:* SSNS:* UFB:* CW:* CE:*	In the case of Stormwater, the City describes Resiliency as the infrastructure's ability to achieve its intended level of service and also how it functions and recovers from rainfall events above the level of service it provides. Re-development is also an event that impacts the operation of the drainage system. If not planned correctly, re-development can change the stormwater runoff characteristics of a watershed, increasing flows and reducing the infrastructure's ability to meet its intended level of service. THese projects have a positive impact on the City resilience by reducing the likelyhood of flloding and improvement the condition of the infrastructure.

City Hall Campus (FMR-5A)	This is a large drainage area (7.4 acres) at the top of the Four Mile Run watershed that affects many downhill homes along West Columbia and Shadow Walk. This project has a large impervious area (particularly parking lots) with significant potential for green improvements and demonstration effect of various technologies (such as permeable pavement, tree box filters, parking lot infiltration and more). Improvements at this site will have significant impacts on runoff into Trammel Branch and reduce water flows to Four Mile Run, among other co-benefits. Being City property, this project will also have positive demonstration effects for anyone visiting the City Hall campus and be easier to implement than projects facing other constraints such as utility or easement conflicts.	$ 600,000
Park Ave Drainage Improvements and GI Project	This project will help reduce draiange to Coe Branch and treat local street runoff therefore reducing the chance of flooding and reduce the pollutant loading. Small Underground Detention and the installation of tree boxes which will help reduce nitrogen.	$ 1,000,000
Robert's Park Erosion control and GI Project	This project will reduce the amount of sediment runoff in the Roberts Park by making improvements to the shelter drainage an installing stormwater BMPs to help mitigate rear yard runoff into the stormwater system. There is also the opportunity to perform some turf management by elimenting concentrated stormwater flow and using rain gardens to help manage the overall flow.	$ 450,000
North Oak Street between Broad and Park (TR-5)	This project has an extremely large amount of impervious area (89%) causing flooding onto Oak Street, adjacent to a school and commercial areas. It has significant demonstration effect potential to utilize green technologies such as permeable pavers, box filters and bioretention measures. Located atop the Tripps Run watershed, improvements here will reduce or slow runoff downstream, and thus lessen impacts on the entire watershed and on homes closer to Tripps Run, which experience severe flooding during storm events.	$ 500,000
West Broad Street between Virginia and Pennsylvania (TR-11)	This is a highly impervious area (91%) with excess sheet flows during storms onto Broad Street, a major thoroughfare and commercial district. The project will reduce residential and commercial flooding and street flooding. At the top of its watershed, it will slow down flows into Tripps Run, benefitting downhill homes during storms. The project has a demonstration effect through the use of green technologies including permeable pavers and bio-retention. It also offers co-benefits by improving the area's attractiveness.	$ 500,000
Green Infrastructure and Capital Project Maintenance	This funding would be used to maintain the many Stormwater BMPs the City plans on building as a part of the CIP Program.	$ 1,200,000
Sherrow Ave Green Infrastructure	This project would take advantge of the Property purchased at 2920 Sherrow Avenue. This property buy out that occurred on this property makes for a good opportunity to install a Stormwater BMP in the current house's location. This BMP would help to reduce runoff to tripp's Run and help remove pollutants from the stormwater. Being close to a school would also bulster edcational oppertunities.	$ 1,000,000
Broad Street at the Broadway Project	The Broadway has experinced flooding of the garage and basement areas. Although most of the problem can be traced to roof runofff not being managed correclty it does appear that the stormwater system that is adjacent to the property causes back ups that also impact the building as well as Broad Street Itself. Studies are underway that will quantify the problem. This project would build on that study and look to address the stormwater issues on West Broad Street.	$ 2,000,000
CIP Project 1 - 4	These projects are place holders for the projects we would add to the CIP list due to problems we found as a result of the Watershed wide modeling studies.	$ 4,000,000

Four Mile Run Restoration (North Washington Street POA)

Category: Stormwater/Sewer Utility

Department Lead: Community Planning and Economic Development Services

Type: New Project

Project Description, Benefit, Estimate, and Schedule

On June 11, 2012, the City Council adopted the North Washington Street Small Area Plan (https://www.fallschurchva.gov/467/North-Washington-Street-Small-Area-Plan). The Plan calls for redevelopment and rejuvenation of the City's North Washington Street Planning Opportunity Area. The Area follows N. Washington Street from the City/County boundary to Great Falls Street. There is a bridge connecting this area to the W&OD Trail.

A major component of the Plan is restoring Four Mile Run and opening up the stream adjacent land as public open space. The restoration of the stream would convert the stream from an eyesore to a community asset. The streamside park and trail would be an amenity used by city residents, nearby office workers, and visitors. The restored stream would serve as a gateway feature at the entrance to the City. Terracing of Four Mile Run similar to the stream in Queensland, Otago could be a nice treatment to allow for secondary seating and public use of the space.

Planning for the stream restoration is supported by an action report prepared by Virginia Tech students that compared similar situations and project in other area jurisdictions. The planning level $15M cost estimate breakdown: $7M for land acquisition, $6M for stream restoration, $2M for park development.

Capital Funding Plan

Project	Funding Source	PY Funding	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030-33
Four Mile Run Restoration	Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 15,000,000
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total:		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 15,000,000

**if no activity per City Charter (Section 6.19) in 3 years note as re-appropriation action*

Impact on Operating Costs

New maintenance responsibilities for Public Works Operations unknown at this time. Operating costs will be evaluated as projects are developed. The Fiscal Analysis will also include the expected increases in revenue generated by the project.

Conformity with Comprehensive Plan and Council Strategic Plan/ Equity Lens Score

Developing Four Mile Run is called for in the City's Parks for People Plan, the Parks, Open Space, and Recreation Chapter of the Comprehensive Plan. Restoring Four Mile Run is also called for in the City's North Washington Street Small Area Plan, which is adopted pursuant to the Comprehensive Plan as a guide for redevelopment and investment in the area.

FY 24-29 Equity, Env, Resilience Lens Review

				Burden or Benefit those under stress		Reduce current disparities	Avoiding Implicit Bias or Increased Inequities		Environmental Impact	Resilience Impact
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Department	**Project(s)-listed in priority order**	**Funding Request**	**City Mgr Recommended Funding**	**Rank: Low (L)/ Medium (M)/ High (H)**		**Rank: Low (L)/ Medium (M)/ High (H)**	**Rank: Low (L)/ Medium (M)/ High (H)**		**Environmental Impact Comments (replace * below)**	**Resilience Comments**
DPW/CPEDS	Stormwater-Four Mile Run Restoration	$ 15,000,000		H	The proposed project, inclusive of the larger public/private redevelopment, includes significant ADA and accessibility upgrades, including accessible sidewalks, park spaces, lighting, and a streamside trail. The larger public/private redevelopment would provide more housing opportunities, including housing for lower income households. The larger public/private redevelopment would provide job/economic opportunities tha are transit accessible given the proximity to the East Falls Church Metrorail Station - which is a hub station for the Orange and Silver lines.	See Q1 response		NA	CAE: Increased pedestrian and bicycle accessibility could reduce GHG emissions, air pollution and added heat associated with vehicle use. SSNS: Increased pedestrian and bicycle accessibility could reduce ground and water pollution associated with vehicle use. Improvements to Four Mile Run immediate area will improve water quality and reduce erosion and impacts of stormwater runoff. UFB: Some sidewalk trees could be impacted by construction work. Trees and native plants would be added as part of project improvements. CW: construction materials are only direct impact. CE: increased pedestrian and bicycle accessibility could increase interpersonal public interactions.	Restoration of Four Mile Run will increase resilience to and decrease impacts from flood events.