



**Agenda**  
Alexandria Renew Enterprises Board of Directors Meeting  
Tuesday, September 21, 2021@ 6:00 p.m.  
VIRTUAL

No.	Item	Presenter	Action Required
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Due to Covid-19 pandemic emergency, the September 21, 2021 Alexandria Renew Enterprises Board of Directors meeting is being held electronically pursuant to Virginia Code Section 2.2.3708.2(A)(3), the Continuity of Government ordinance adopted by the City Council on June 20, 2020 and/or Section 4.0.00(g) in HB29 and HB30 to undertake essential business.

The Board of Directors and staff are participating from remote locations through a videoconference call on Zoom:

Links: [https://us06web.zoom.us/webinar/register/WN\\_Fyy5w2iyQ-Se1pfDAU8R8A](https://us06web.zoom.us/webinar/register/WN_Fyy5w2iyQ-Se1pfDAU8R8A)

Topic: Regular Board of Directors Meeting  
Register in advance for this webinar:

After registering, you will receive a confirmation email containing information about joining the webinar.

Submission of written statements is encouraged. Written statements may be emailed to the Board Secretary at [lorna.huff@alexrenew.com](mailto:lorna.huff@alexrenew.com).

Public comment will also be received at this meeting. If you wish to speak during public comment, please email or call the Board Secretary at (703) 721-3500 ext. 2260 in advance so you can be added to the speakers list. A recording of the meeting will be posted on the alexrenew.com website after the meeting.

1	Call To Order (6:00 p.m.)	Chairman	
2	Approval of Agenda (6:02 p.m.)	Chairman	Approval
3	Explanation of Required Procedures for an Electronic Meeting (6:05 p.m.)	Mr. Rak	Information
4	Public Comment Period (6:15 p.m.)	Chairman	
5	Consent Calendar (6:18 p.m.) A. Minutes (Meeting July 20, 2021) (Tab 1)	Chairman	Approval
6	Unfinished Business (6:21 p.m.) A. None	Chairman	Approval
7	New Business (6:51 p.m.) A. Presentation of City Sanitary Sewer Master Plan process (Tab 2 – under separate cover)	Chairman	Approval
8	AlexRenew Monthly Outcomes Update (7:01 p.m.) (Tab 3)	Ms. Pallansch	Information
9	Adjourn (7:10 p.m.)	Chairman	

*Times shown in parentheses are approximate and serve as guidelines*

*If you need an interpreter, translator, materials in alternate formats or other accommodations to access this service, activity or program, please call (703) 721-3500 ext. 2260 at least three business days prior to the meeting.*

***The next Board of Directors meeting is scheduled for Tuesday, October 19, 2021@ 6:00 p.m.***

Minutes of the 885th Meeting  
***“Celebrating Over 60 Years of Continuous Environmental Excellence”***  
Alexandria Renew Enterprises  
6:00 p.m., Tuesday, July 20, 2021

On Tuesday, July 20, 2021, the Alexandria Renew Enterprises Board of Directors held its regular Board of Directors meeting in the Ed Semonian Board Room at 1800 Limerick Street with the following present:

Members: Mr. John Hill, Chairman  
Mr. James Beall, Vice Chairman,  
Mr. William Dickinson, Secretary-Treasurer  
Mr. Bruce Johnson, Member  
Ms. Adriana Caldarelli, Member

Staff: Ms. Karen Pallansch, Chief Executive Officer  
Ms. Liliana Maldonado, Chief Environmental Performance Officer  
Ms. Christine McIntyre, Chief Financial Officer  
Ms. Allison Deines, Director of Research & Strategy Engagement  
Ms. Lorna Huff, Secretary to the Board

Counsel: Mr. Jonathan Rak, General Counsel, McGuireWoods LLP

Fairfax County  
Representative: Mr. Shahram Mohsenin, Director of Wastewater Planning & Monitoring  
Division

City Representative: Ms. Erin Bevis-Carver T&ES/Sanitary Sewer Infrastructure Division

Consultants: Mr. Justin Carl, Brown & Caldwell, Owner’s Advisor

Call to Order

The Chairman called the meeting to order at 6:09 p.m.

Approval of Agenda

The Chairman requested that members review the Final Agenda and inquired if there were changes. There being no changes, the Chairman requested a motion to approve the Agenda. Mr. Beall moved and Mr. Dickinson seconded. The Board unanimously approved.

Public Comment Period

There were no members of the public in attendance wishing to speak. The Chairman moved to the Consent Calendar.

### Consent Calendar

A. Board Minutes of June 15, 2021 Meeting

B. Board Minutes Virtual Meetings March 2020 through May 2021

The Chairman recognized Mr. Rak who reported that the City's continuity of governance ordinance requires that minutes of electronic meetings be approved at a regular meeting once the pandemic emergency has ended. There being no additional comments, the Chairman requested a motion to approve the Consent Calendar. Mr. Dickinson moved and Ms. Caldarelli seconded. The Board unanimously approved.

### Unfinished Business

A. None

### New Business

A. Election of Officers

#### Discussion

The July Board meeting serves as the Annual meeting of the Board of Directors.

Mr. Dickinson moved the re-election of Mr. Hill as Chairman, Mr. Beall as Vice Chairman and Mr. Dickinson as Secretary-Treasurer and Mr. Beall seconded. The Board unanimously approved.

### CEO Monthly Outcome Reports

The Chairman recognized Ms. Pallansch who noted her written report and discussed additional items. An announcement of a naming contest for the Tunnel Boring Machine (TBM) is expected at the end of July. She reported that TBM's are always named after females drawing from Saint Barbara, the patron saint of miners. A list of potential names has been compiled. A groundbreaking event for Outfall 001 is scheduled for September 30.

Ms. Pallansch reported on her contact with Mr. McArthur Meyers, an Alexandria "Living Legend" and local African American historian to discuss wayfinding signage along the waterfront noting the history of African Americans in the area.

Ms. Pallansch discussed the data from the Biobots for testing Covid-19 in wastewater. Members inquired about sampling at the plant, City of Alexandria participation in the sampling program, and data results. Ms. Pallansch reported that sampling was taking place at the plant only. She and Ms. Bevis-Carver were not aware of any sampling done by the City of Alexandria. She noted that the data is too new to have much results.

Ms. Pallansch reported on an overflow in June at the Four Mile Run Pump Station and at Hooff's Run due to excessive wet weather flows.

Ms. Pallansch reported on the RiverRenew Dashboard and noted that a time elapsed camera had been posted to the RiverRenew website. She would send members the link. Staff is monitoring supply chain issues to maintain project schedule.

Ms. Pallansch reported on state budget requests for CSO funding. The Governor's budget is expected by week's end. There is reportedly some money for CSOs available.

Ms. Pallansch reviewed the Financial Report noting that AlexRenew had received the second tranche of grant money and that AlexRenew reserves are in good shape.

All of the necessary easements have been approved. Staff is currently waiting for one last easement which was delayed due to a change in mortgage servicer. No issues are anticipated.

Ms. Pallansch reported that the auditor is picking a random selection of customers as part of the audit process. They will be surveyed to confirm their billing amounts. Mr. Johnson inquired about the audit schedule. A draft report would be available in October or November in time for the Finance and Audit Committee meeting. She will send the final schedule to members.

The Chairman noted that delinquencies are up. Ms. Pallansch reported that the number of delinquencies changes from month to month. The delinquencies are a mix of residential and commercial customers. Staff has enlisted the Promise Pay Network to assist with customers seeking support.

Ms. Pallansch reported the first Listening Session was well attended and noted that attendance has been falling off. Ms. Pallansch reported that the range of attendees was 20-50.

Ms. Pallansch gave a presentation on the impacts of wet weather events on Four Mile Run Pump Station. (See attached presentation). She reviewed how water works in the City of Alexandria and the one water concept. She noted that AlexRenew serves both sanitary sewer and combined sewer systems. She further reviewed the governance, regulation and design requirements of the interceptor and pump stations. She noted that the sanitary sewer system connected to the Four Mile Run Pumping Station is subject to excess infiltration and inflow and noted that work to address this has been ongoing since the mid 1990's. She further reviewed the significant modifications to Four Mile Run to minimize overflows and will work with the City to help minimize infiltration and inflow in the separate sanitary sewer system.

The Chairman and members commended Ms. Pallansch for her presentation and noted that the problem will require a long-term solution. There were no additional questions or comments and the Chairman requested a motion to enter closed session.

At 7:05 p.m., the Chairman requested a motion to move to a closed session for the annual performance review of the Chief Executive Officer, under Virginia Code Section 2.2-3711.A (1). Mr. Beall moved and Mr. Dickinson seconded. The Board unanimously approved.

At 7:50 p.m. the meeting returned to open session, and the following certification was unanimously adopted by the members: "Pursuant to 2.2-3712 (D) of the Virginia Freedom of Information Act, it is hereby certified to the best of each Member's knowledge, (1) only public business matters lawfully exempted from the open meeting requirements of the Act, and (2) only public business matters identified in the motion by which this closed meeting was convened were heard, discussed, or

considered by Alexandria Renew Enterprises.” Motion was made by Mr. Beall and seconded by Mr. Johnson. The roll call vote to certify was approved unanimously.

Mr. Hill moved to recognize the exemplary performance of Karen Pallansch during the calendar year 2020 and increase her compensation as discussed in closed session. Mr. Beall seconded the motion and the vote was unanimous.

Mr. Dickinson moved to adjourn and Ms. Caldarelli seconded.

The meeting adjourned at 6:51 p.m.

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**Secretary-Treasurer**

# Impacts on the Four Mile Run Pumping Station When it Rains

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July 20, 2021

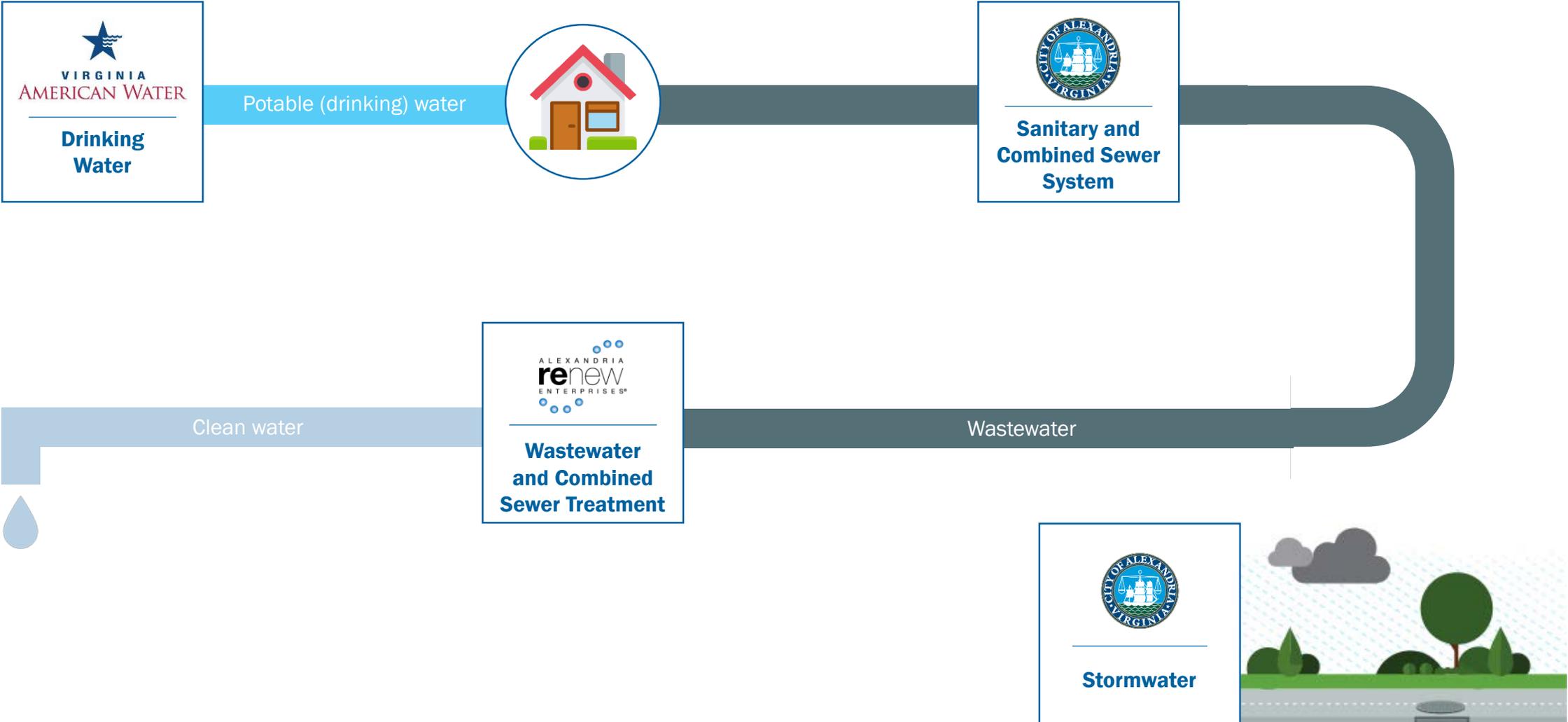
# Presentation Outline

- How Water Works in the City of Alexandria
- Four Mile Run Pumping Station Background
- Impacts on the Four Mile Run Pumping Station When it Rains
- Major Takeaways

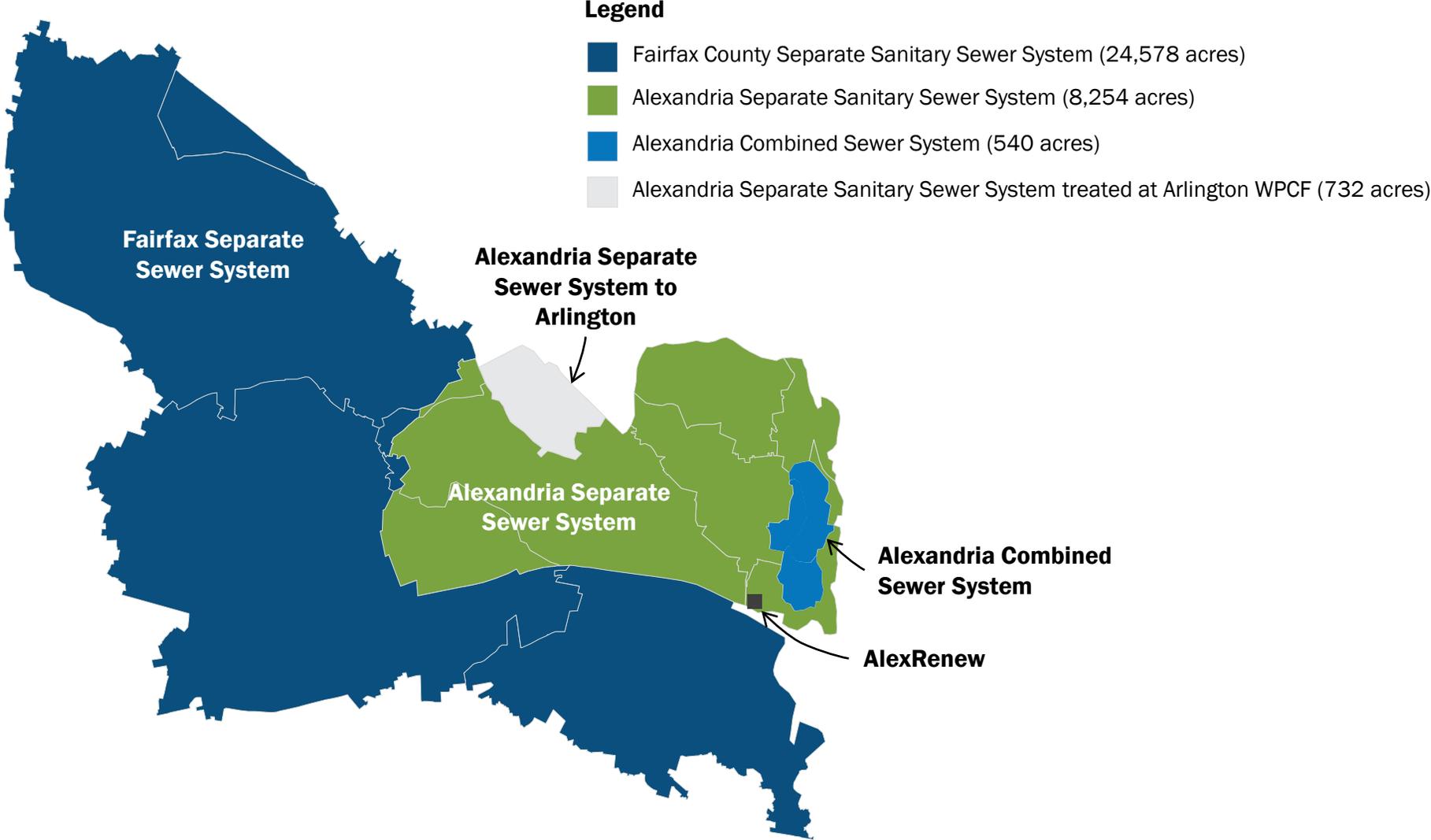
# **How Water Works in the City of Alexandria**

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# How Water Works in the City of Alexandria



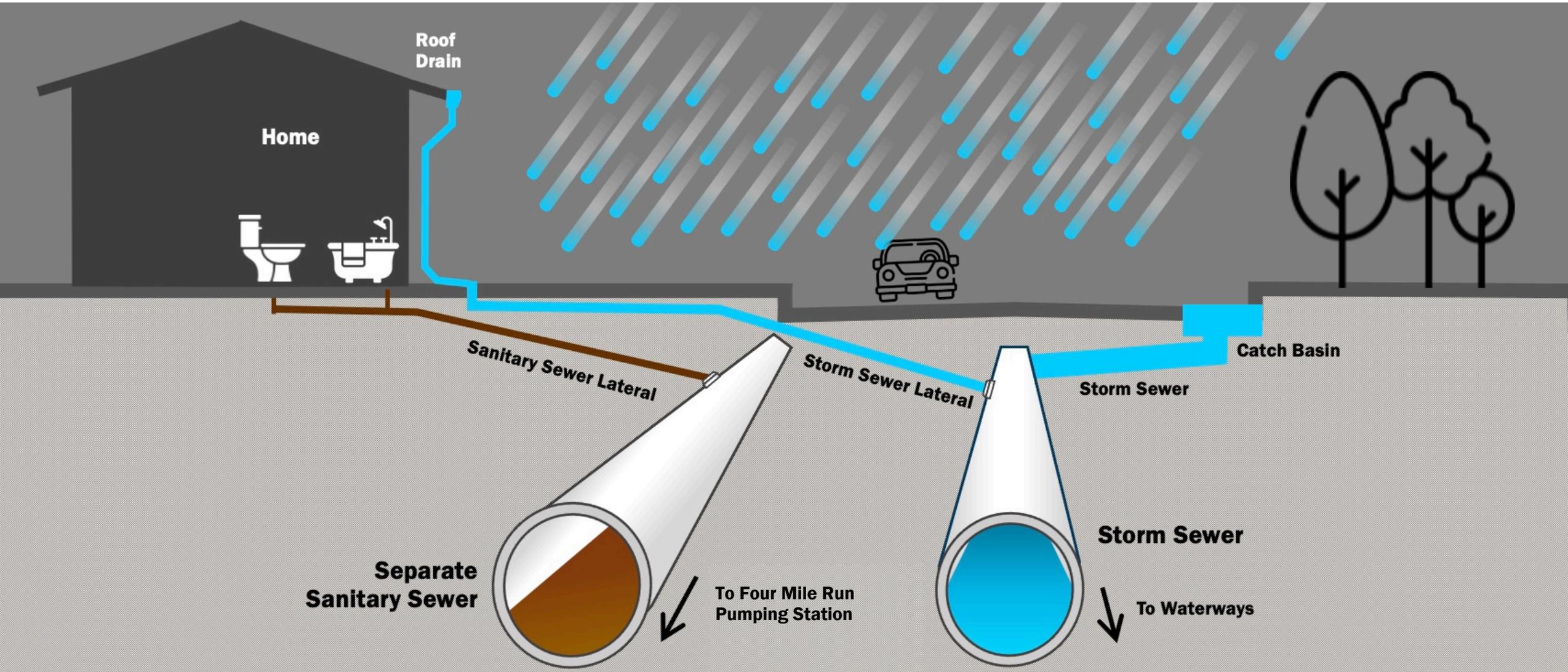
# AlexRenew Serves both Separate Sanitary and Combined Sewer Systems



# **Four Mile Run Pumping Station Background**

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# The Four Mile Run Pumping Station is Served by a Separate Sanitary Sewer System



# How Are Sanitary Sewer Interceptors and Pumping Stations Designed?

## Sanitary Sewer Interceptors

## Pumping Stations

**Governance**

State Water Control Board through Virginia Department of Environmental Quality

State Water Control Board through Virginia Department of Environmental Quality

**Regulation**

Virginia Code (9VAC25-790) Sewage Collection and Treatment Regulations

Virginia Code (9VAC25-790) Sewage Collection and Treatment Regulations

**Design Requirements**

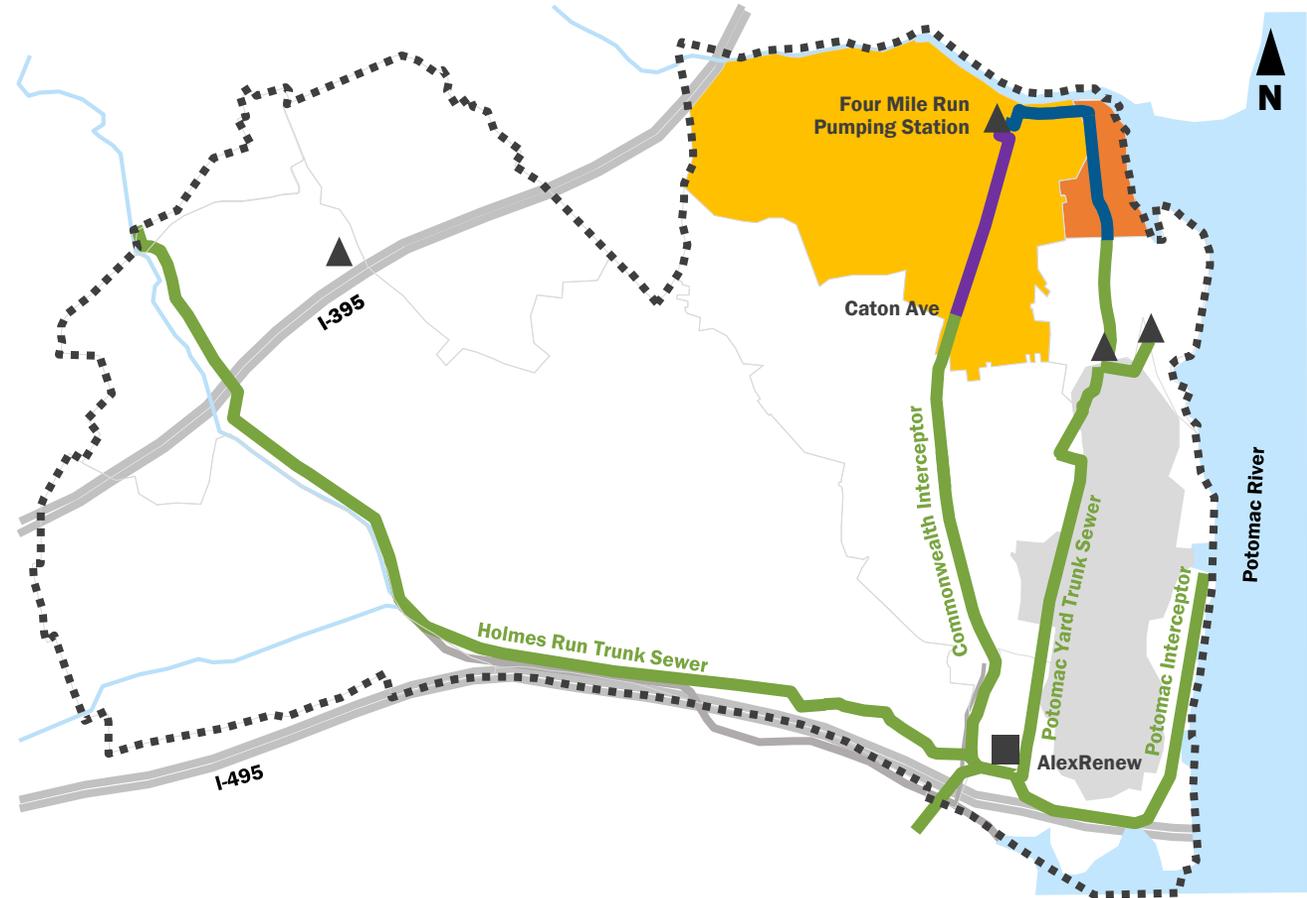
200% of the average daily sewage flow per person

250% of the average daily sewage flow per person

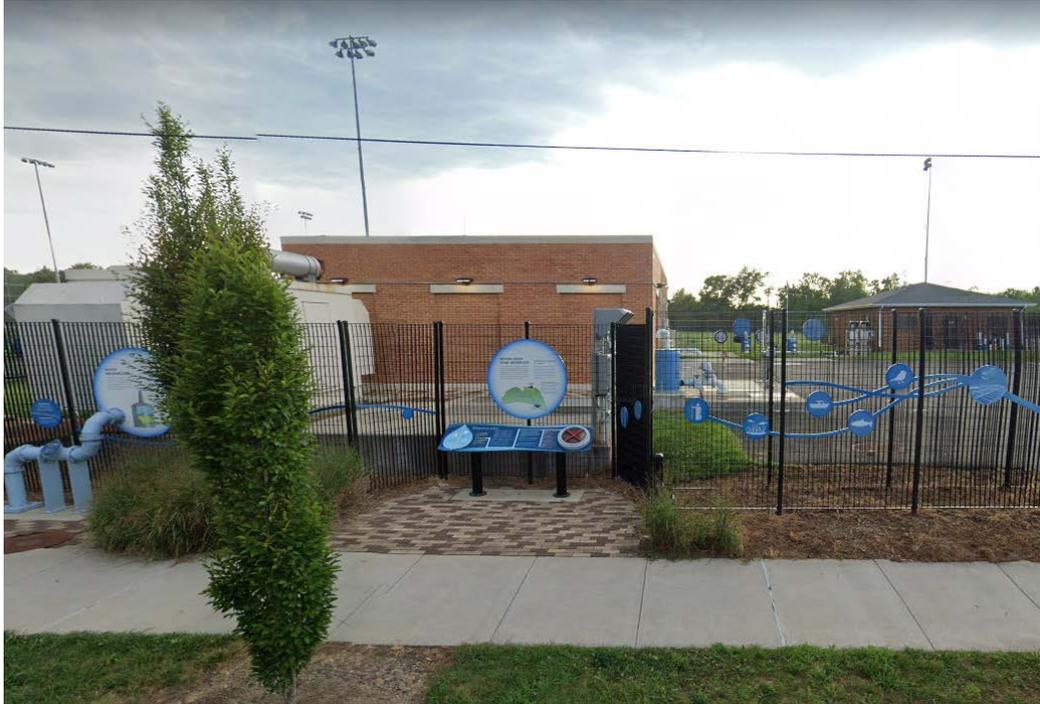


# Four Mile Run Pumping Station Service Area

- Separate sanitary sewer system
- Serves **23,000 people**
- **Yellow** area is the original Four Mile Run sanitary sewer system: **1,190 acres**
- **Orange** area is the North Potomac Yard sanitary sewer system: **75 acres**
- **Gray** area is the combined sewer system: **540 acres**
- **Purple** line is the forcemain to the Commonwealth Interceptor
- **Blue** line is the Four Mile Run Pump Over to the Potomac Yard Pumping Station



# Four Mile Run Pumping Station Overview

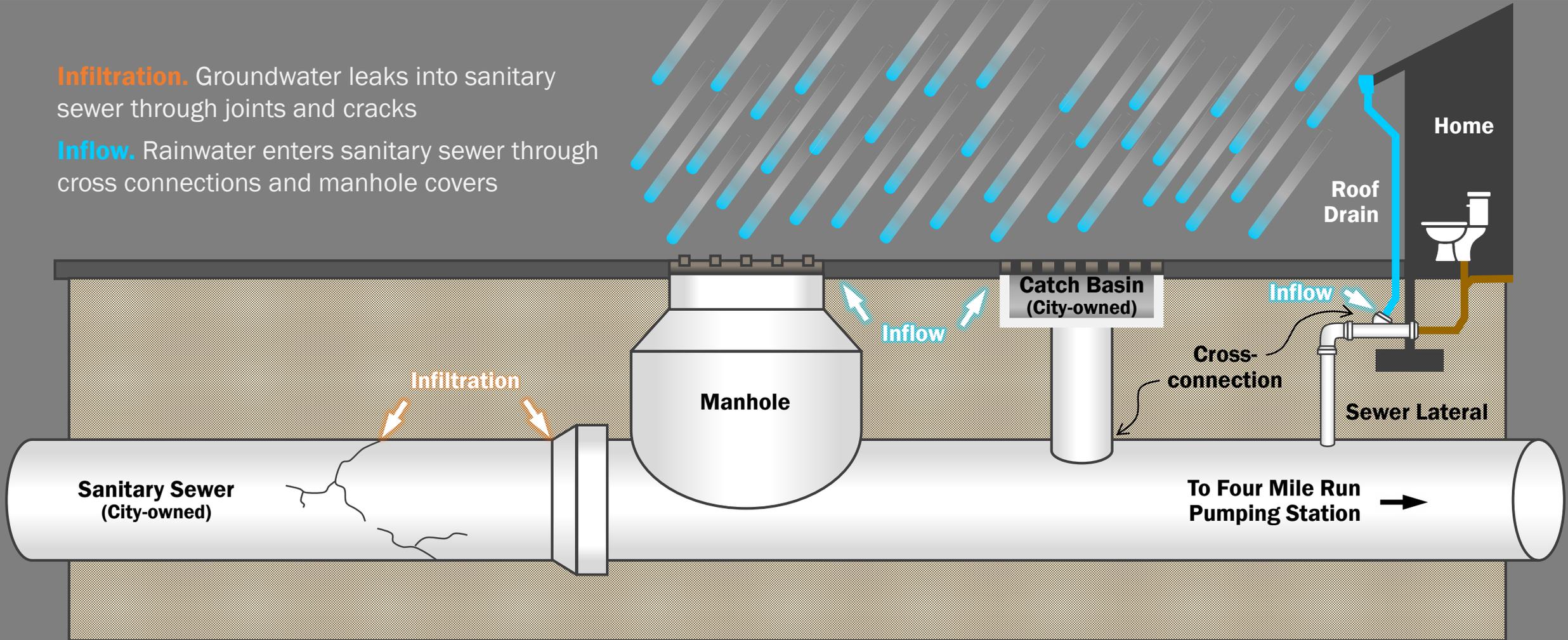


- Originally constructed in **1954**
- Number of pumps: **4**
- Design Annual Dry Weather Flow: **2.4 MGD**
- Peak Flow Capacity to Commonwealth Interceptor: **9.4 MGD**
- Peak Flow Capacity to the Potomac Yard Pumping Station: **4.0 MGD**
- Storage tank volume: **1.0 MG**
- Design peak factors (SCAT regulation: 2.5)
  - Pumping Station only: **3.9**
  - With storage tanks: **8.0**
  - With storage tanks and Pump Over: **9.8**
- Most recent upgrade completed in **2016**

# The Separate Sanitary Sewer System Connected to the Four Mile Run Pumping Station Continues to be Subject to Excess Infiltration and Inflow

**Infiltration.** Groundwater leaks into sanitary sewer through joints and cracks

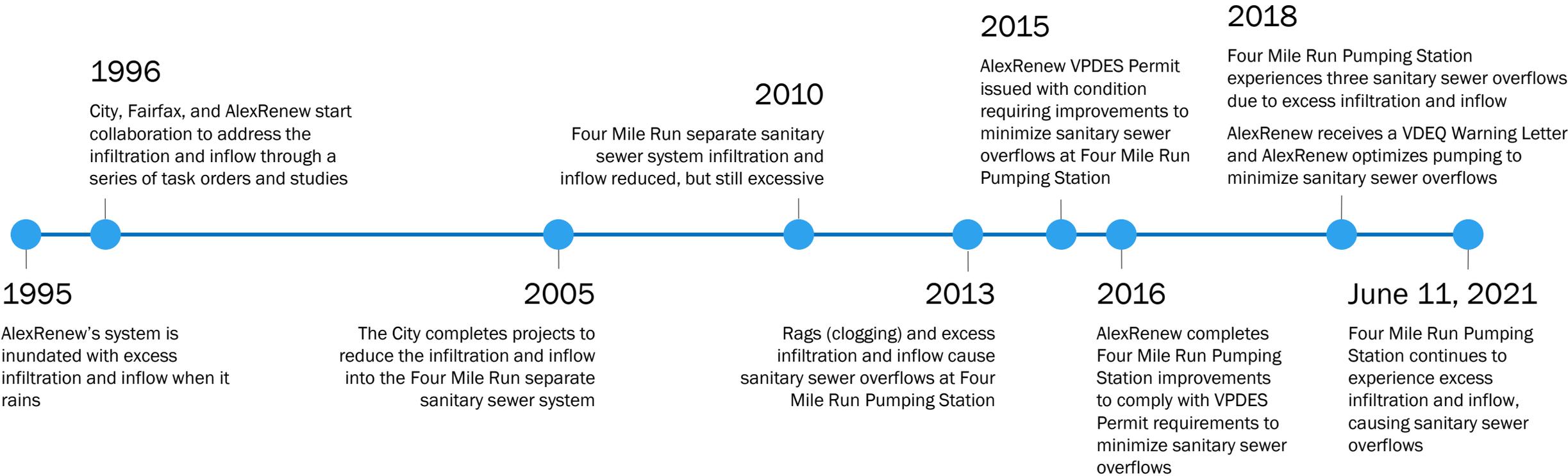
**Inflow.** Rainwater enters sanitary sewer through cross connections and manhole covers



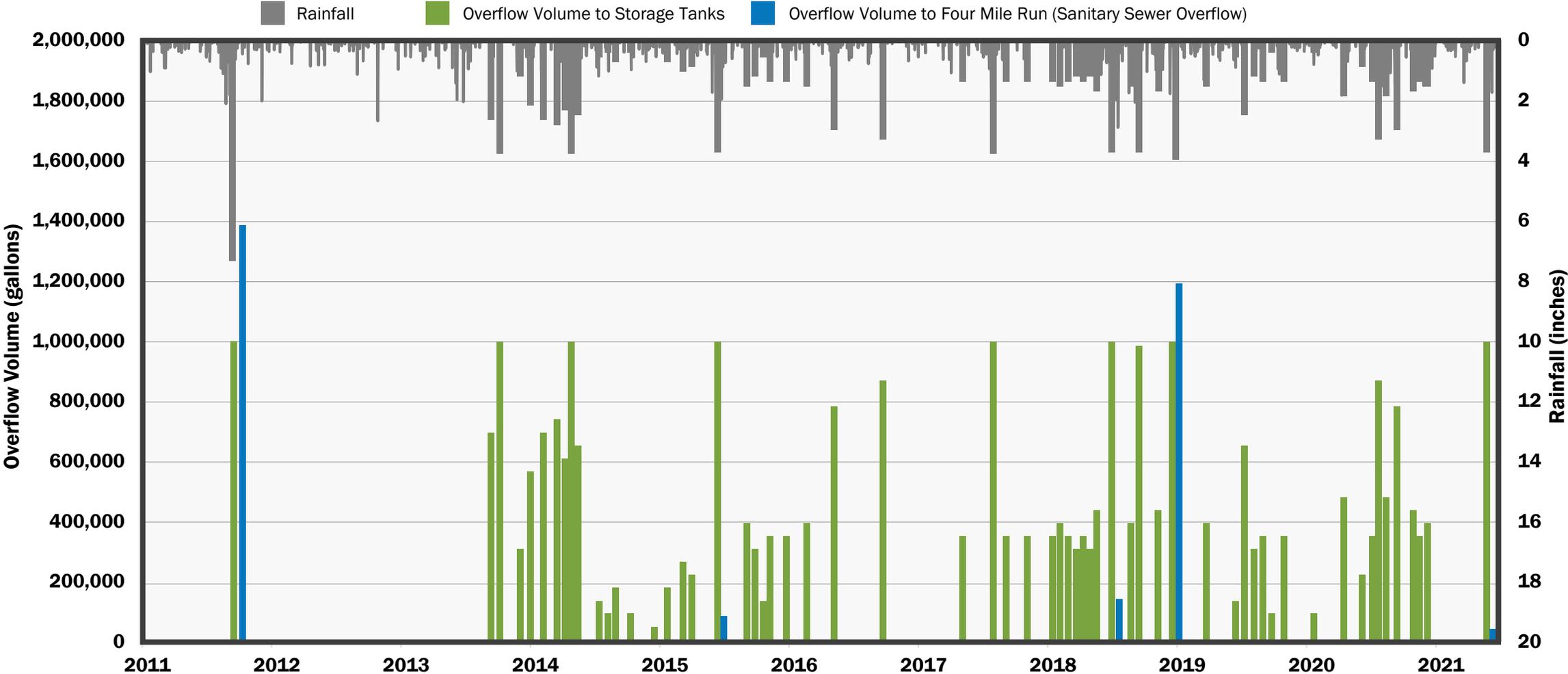
# **Impacts on the Four Mile Run Pumping Station When it Rains**

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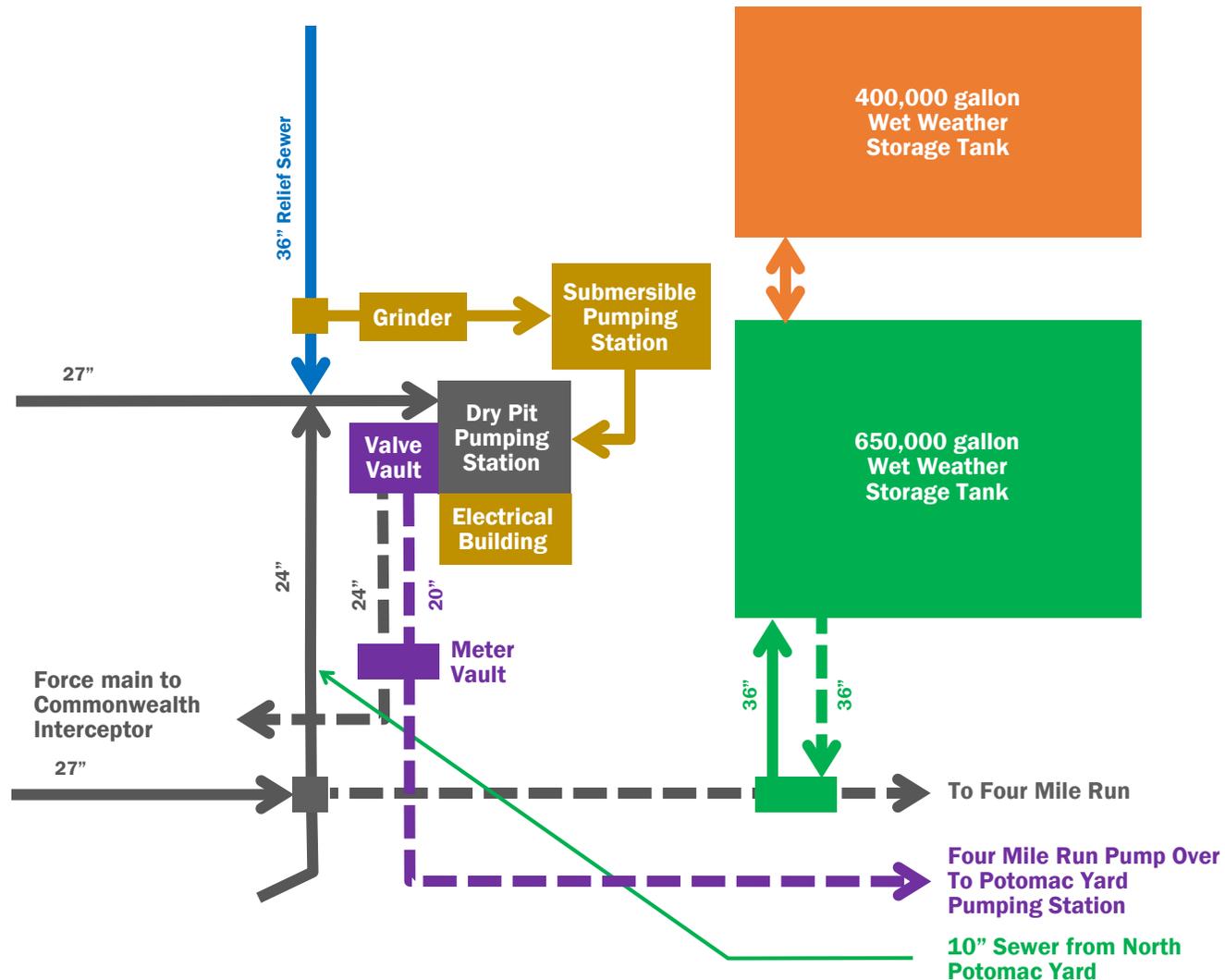
# Work to Address Excess Infiltration and Inflow into AlexRenew's System and the Four Mile Run Pumping Station has been Ongoing Since the mid-1990's



# During Wet Weather, the Four Mile Run Pumping Station is Affected by Excess Infiltration and Inflow, which Results in Sanitary Sewer Overflows



# Four Mile Run Pumping Station Evolution to Address Excess Infiltration and Inflow



1954

9.4 MGD Dry pit pumping station installed to manage **sanitary sewer flows** from Four Mile Run Service Area (peak factor of 3.9)

1978

36" Bruce Street Relief Sewer installed to relieve basement backups on Bruce Street during **excess infiltration and inflow**

1996

650,000 gallon storage tank installed to minimize sanitary sewer overflows at the Four Mile Run PS during **excess infiltration and inflow**; 10" Sewer installed to manage **sanitary sewer flows** from Potomac Yard development

2001

400,000 gallon storage tank installed to minimize sanitary sewer overflows at the Four Mile Run PS during **excess infiltration and inflow** (peak factor of 8.0)

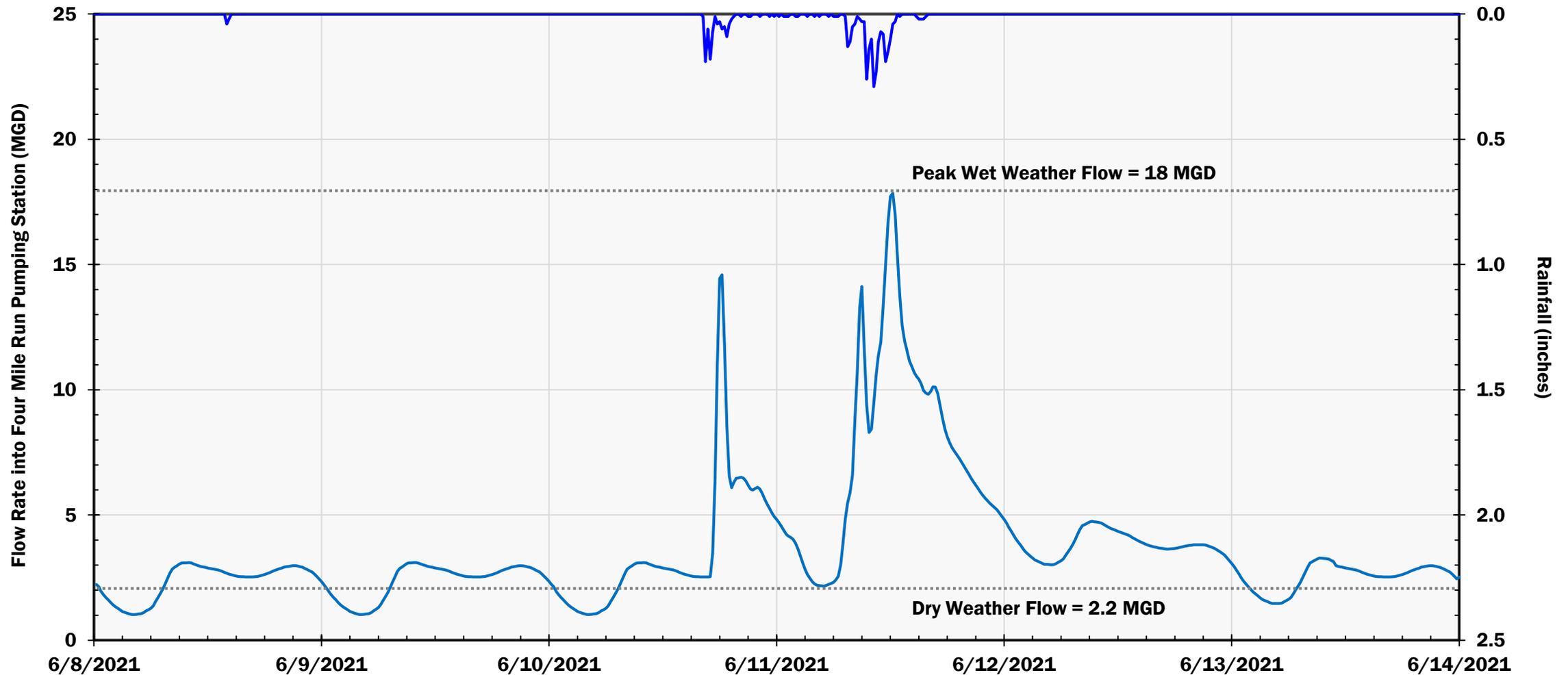
2009

20" Four Mile Run Pump Over (4 MGD) installed to minimize overflows at the Four Mile Run PS during **excess infiltration and inflow** (peak factor of 9.8)

2016

Grinder, submersible pumping station, and electrical equipment installed to address clogging of pumps to due rags being washed into the station during **excess infiltration and inflow**

# As Evidenced During the June 11, 2021 Storm, the Four Mile Run Pumping Station Flow Rate Increased by 8.2 Times the Dry Weather Flow and Resulted in a Sanitary Sewer Overflow, Reported to VDEQ



# Major Takeaways

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# Major Takeaways

Like the Commonwealth Interceptor system, the separate sanitary sewer system that connects to Four Mile Run Pumping Station is affected by excess infiltration and inflow when it rains.

The Four Mile Run Pumping Station has undergone significant modifications to minimize sanitary sewer overflows due to excess infiltration and inflow (as required by AlexRenew's VPDES Permit).

The Four Mile Run Pumping Station has a conservative design peak factor, well beyond the SCAT regulations.

Sanitary sewer overflows continue to occur at the Four Mile Run Pumping Station due to excess infiltration and inflow when it rains.

Additional enforcement action from VDEQ may occur due to a sanitary sewer overflow on June 11, 2021 that resulted from excess infiltration and inflow into the Four Mile Run Pumping Station.

AlexRenew is required by its permit to minimize sanitary sewer overflows at the Four Mile Run Pumping Station. However, the pumping station is not the issue – too much rainwater enters the collection system connected to the Four Mile Run Pumping Station.

AlexRenew will reach out to the City to ensure they help minimize infiltration and inflow in the separate sanitary sewer system.

## CEO Board Report August 2021

Dear Members of the Board of Alexandria Renew Enterprises,

As per the bylaws, AlexRenew’s Board of Directors did not meet in August.

On August 18, AlexRenew was selected to be part of a program at the Virginia Department of Health that will establish twenty-five monitoring sites for wastewater surveillance of COVID-19 across Virginia. This selection follows AlexRenew’s successful participation in the National Wastewater Surveillance Program, a joint program of the Centers for Disease Control and Prevention (CDC) and the Department of Health and Human Services (HHS). More information on these programs is included as Attachment 1.

### Operational Excellence

Precipitation for August at the Reagan National Airport was 9.17 inches of rain, which is above the Washington, D.C. historical average precipitation of 2.93 inches for the month. On August 15<sup>th</sup>, 2021, Four Mile Run Pump Station (FMRPS) had a sanitary sewer overflow (SSO) as the result of an intense storm event that dropped 3.95 inches of rainfall in 3 hours. On August 20<sup>th</sup>, 2021, Hooffs Run Junction Chamber (HRJC) overflowed as the result of a storm event that produced 2.43 inches of rainfall within 4 hours. These overflows were reported to the Virginia Department of Environmental Quality per permit requirements.

Biosolids production for August was 1,740 wet tons, all of which was beneficially used through land application in the Virginia counties of Fauquier, King George, Louisa and Spotsylvania. The biosolids were land applied as Class B biosolids.

AlexRenew met all Virginia Pollutant Discharge Elimination System (VPDES) effluent parameters for August 2021.

Treatment	Daily Average Flow MGD	Carbonaceous Biochemical Oxygen Demand (Monthly Average) mg/L	Total Suspended Solids (Monthly Average) mg/L	Ammonia (as N) (Monthly Average) mg/L	Dissolved Oxygen (Minimum) mg/L	Total Nitrogen <sup>1</sup> (Annual Average) mg/L	Total Nitrogen LOAD (YTD) lb	Total Phosphorus (Monthly Average) mg/L	Total Phosphorus LOAD (YTD) lb
Permit	54.0	5.0	6.0	Seasonal <sup>2</sup>	6.0	3.0	493,381	0.18	29,603
Reported	39.2	<QL	3.0	0.23	7.3	2.2	22,666	0.14	1,526

#### NOTES

- Total Nitrogen expressed as year-to-date average.
- Ammonia has seasonal limits: **April – October: 1.0 mg/L**

### Public Engagement and Trust

#### **Social Media and Website**

70 percent of people who engaged with us on Facebook during August were from the City of Alexandria; the majority (66 percent) were women and 33 percent were men. We had 193 organic engagements on Facebook. We currently have 3,453 Facebook followers. AlexRenew had 71 organic engagements on Twitter. We have a total of 3,310 followers on Twitter, 2,348 on LinkedIn, and 194 Instagram followers. Our website

had 6,506 sessions and 9,941 page views during August. We had 21 visitors click through to our website from social media. The RiverRenew website had 969 visitors and 2,337 page views.

**Customer Service**

Customer service received 1,030 calls in August with 45 percent opting for self-service. Average call answer time was 35 seconds. Call center staff answered 152 emails.

*Watershed Stewardship*

See RiverRenew Dashboard. (Attachment 2)

*Adaptive Culture*

Since July 2021, AlexRenew has logged 19,000 hours without a lost time accident.

Thank you for your ongoing dedicated service to AlexRenew.

Regards,

Karen Pallansch  
Chief Executive Officer

# WASTEWATER SURVEILLANCE PROGRAM UPDATE September 2021

## PROGRAM OVERVIEW

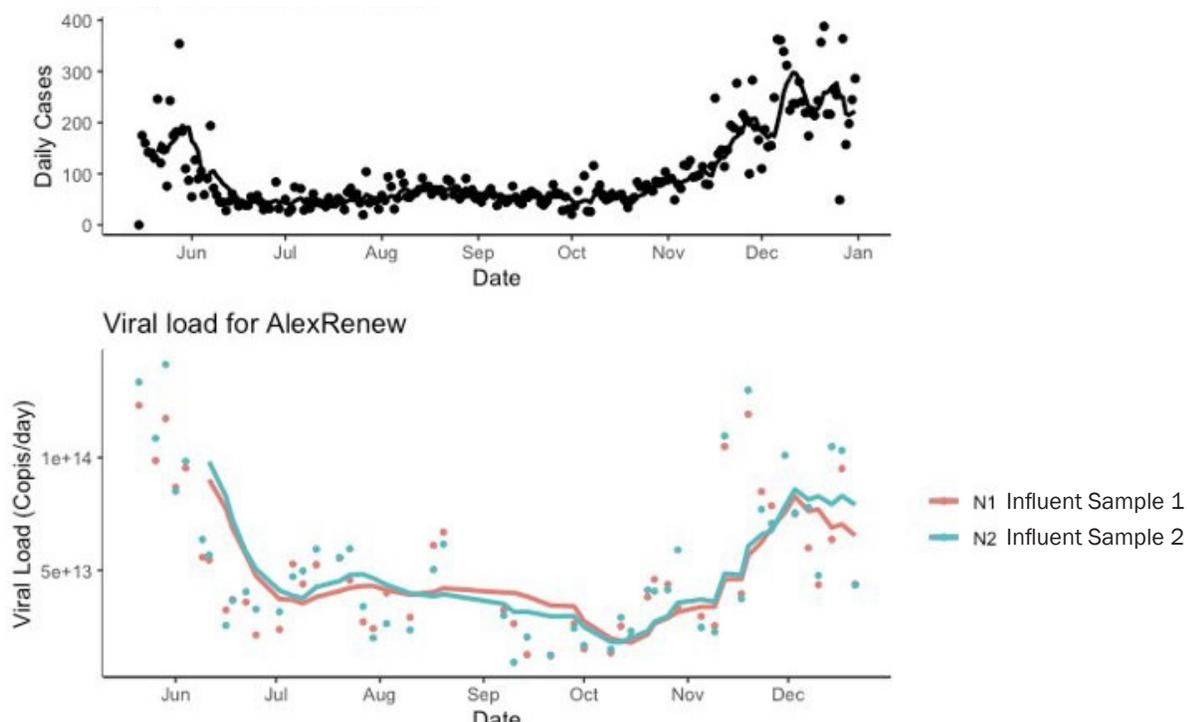
Wastewater surveillance is the practice of testing wastewater for the presence of virus, bacteria, or chemicals excreted in human urine or feces. This practice can be used as a complement to other public health tools. During the COVID-19 pandemic, it has been used to track the prevalence of the SARS-CoV-2, the virus that causes COVID-19, in communities. AlexRenew has been supporting research on this practice since May 2020.

## RESEARCH RESULTS

### Howard University's Research on Methods for Quantification of SARS-CoV-2 in Wastewater

AlexRenew partnered with Howard University to support research to refine methods for the quantification of SARS-CoV-2 in wastewater. AlexRenew was one of six treatment plants that were monitored in the DC metro region. AlexRenew provided Howard University with influent and primary solids samples twice a week from May 2020 through January 2021. Research helped refine how samples were prepared and analyzed to maximize virus recovery. Figure 1 shows that total viral loads from AlexRenew's influent coincide with reported daily cases for AlexRenew's service area.

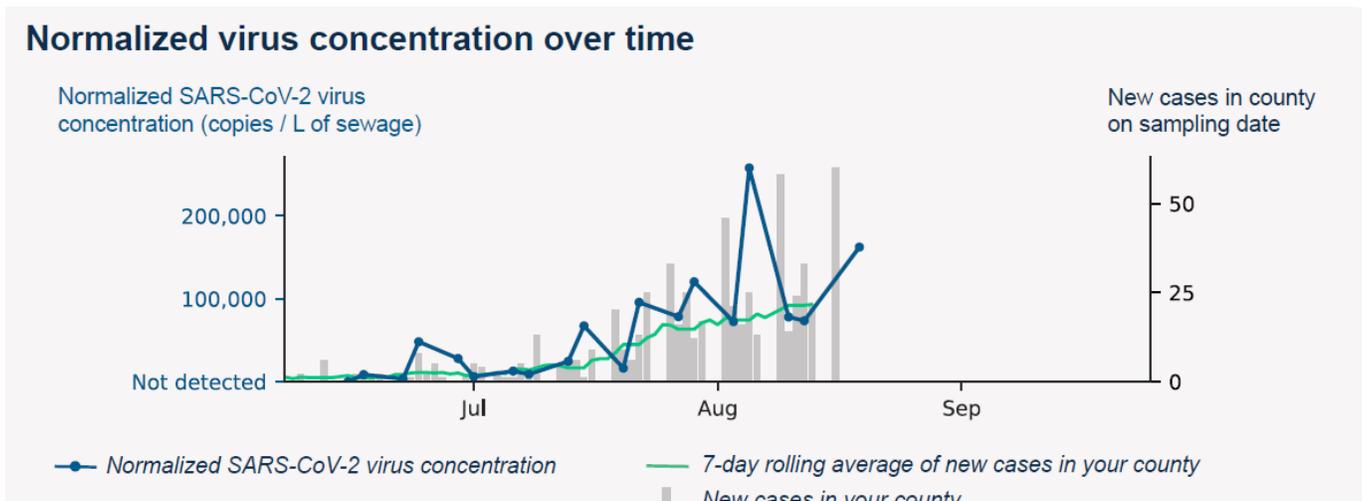
**Fig. 1** New reported cases of COVID-19 and Viral Concentrations of SARS-CoV-2 Detected in AlexRenew's Influent: May 2020 – January 2021.



## CDC and HHS's National Wastewater Surveillance System

In August 2020, the Centers for Disease Control and Prevention (CDC) and the US Department of Health and Human Services (HHS) created the National Wastewater Surveillance System (NWSS) to monitor community COVID-19 trends and collect data from communities performing wastewater surveillance. From June 2021 through August 2021, AlexRenew sent two influent samples per week for analysis. Figure 2 shows the general trend between the concentrations of SARS-CoV-2 in wastewater samples from AlexRenew compared to clinically-detected cases in AlexRenew's service area. The increase in cases seen during the NWSS pilot is likely attributable to the rise of the Delta variant.

**Fig. 2** New reported cases of COVID-19 and Normalized Viral Concentrations of SARS-CoV-2 Detected in AlexRenew's Influent: June - August 2021. Samples in this project were normalized by flow.



## FUTURE RESEARCH

### Virginia Department of Health's Sentinel Monitoring Program

The Virginia Department of Health (VDH) was recently awarded a grant from CDC to establish a Sentinel Wastewater Monitoring program for COVID-19. The goal of the grant is to establish local wastewater monitoring sites throughout Virginia that can act as an early-warning system for public health agencies. AlexRenew was selected to be one of the 25 wastewater treatment plants to participate in the program. Starting mid-September, AlexRenew will be providing weekly influent samples to be analyzed in VDH's laboratory.

# RiverRenew Board of Directors Dashboard



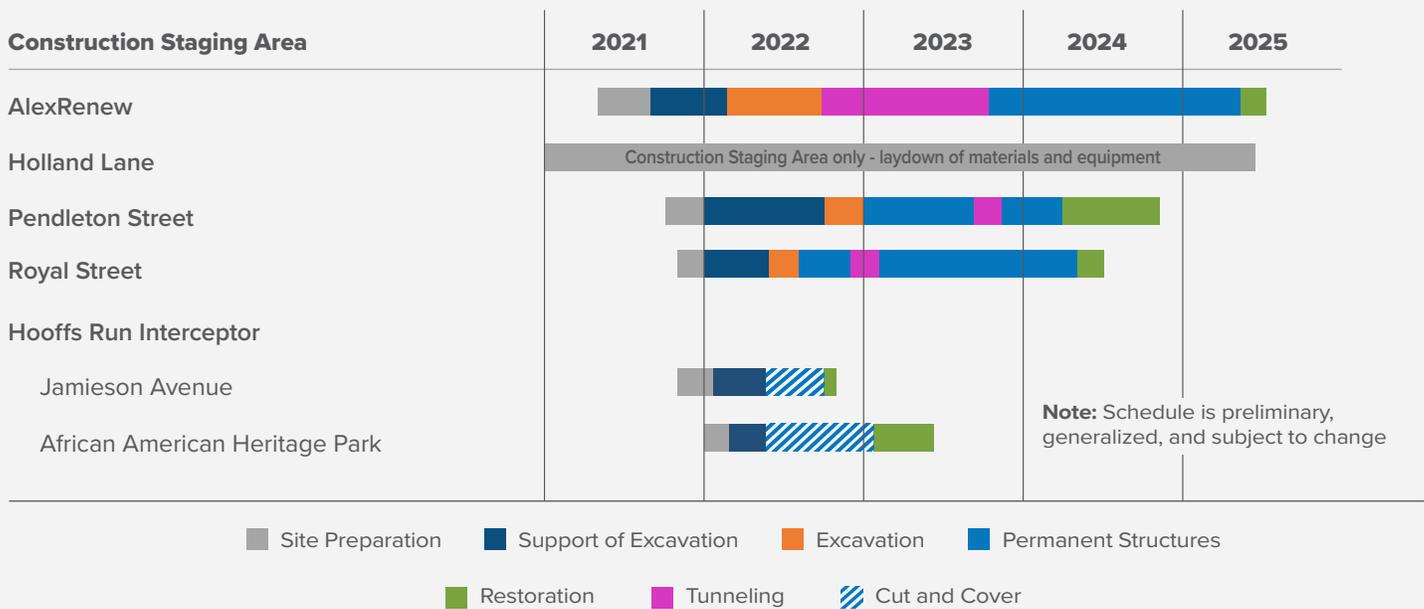
MONTH ENDING: AUGUST 31, 2021

RiverRenew is a program owned and implemented by AlexRenew, Alexandria's regional wastewater treatment provider.

## RiverRenew Overview

To improve the waterways that connect us, AlexRenew is implementing RiverRenew to prevent millions of gallons of combined sewage from polluting Alexandria's local rivers and streams each year. Three out of four RiverRenew projects were largely completed at AlexRenew's wastewater treatment plant in 2020. The remaining project includes the construction of a new tunnel and sewer infrastructure to connect AlexRenew's wastewater treatment plant to the four existing combined sewer outfalls in Alexandria.

## RiverRenew Tunnel Project Schedule

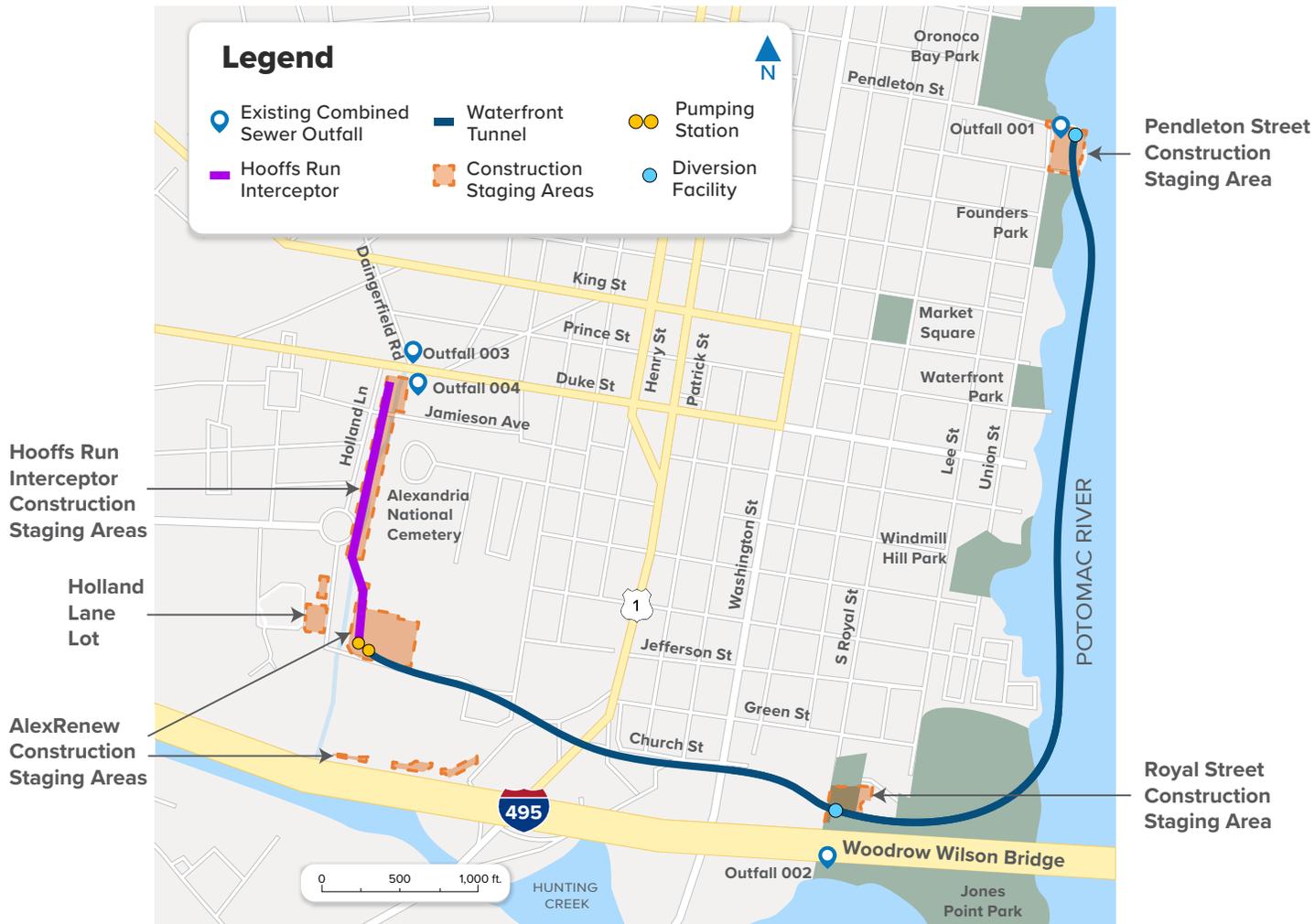


THREE-MONTH LOOK AHEAD			
Date:	Activity:	Date:	Activity:
Ongoing	Permitting and Design	Sept. 30	RiverRenew Tunnel Project Groundbreaking Ceremony
Ongoing	Field Surveys and Utility Locating	Oct. 21	Imagine A Day Without Water
Ongoing	Site Preparation at AlexRenew	Oct. 2021	Mobilization to Pendleton Street
Sept. 16	2021-2022 RiverRenew Stakeholder Advisory Group (SAG) Meeting No. 4	Nov. 2021	Mobilization to Royal Street
Sept. 23	Council Board Workgroup Meeting No. 12 at AlexRenew	Nov. 2021	Mobilization to Hooffs Run
Sept. 26 - Oct. 2	Water Discovery Days	Nov. 18	2021-2022 RiverRenew Stakeholder Advisory Group (SAG) Meeting No. 5

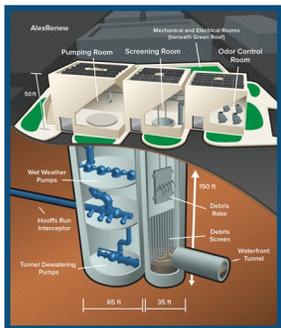
SUMMARY OF MAJOR DELAYS	
Date:	Activity:

# RiverRenew Tunnel Project Snapshot

The Tunnel Project includes the following major components: a two-mile-long, 12-foot-wide, 100-foot-deep tunnel; a six-foot-wide sanitary sewer interceptor; diversion facilities to capture combined sewer discharges; and a pumping station.

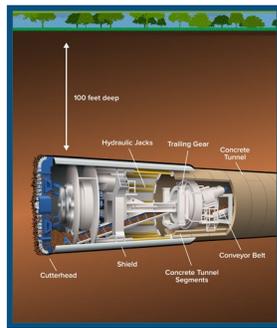


**Hooffs Run Interceptor**



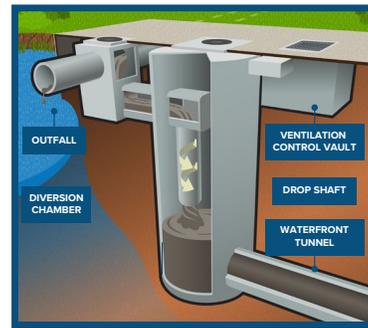
**Pumping Station**

Click [here](#) to take a 3D tour of RiverRenew's future pumping station.



**Waterfront Tunnel**

Click [here](#) to watch an animated video about RiverRenew and learn how the Waterfront Tunnel will be constructed.



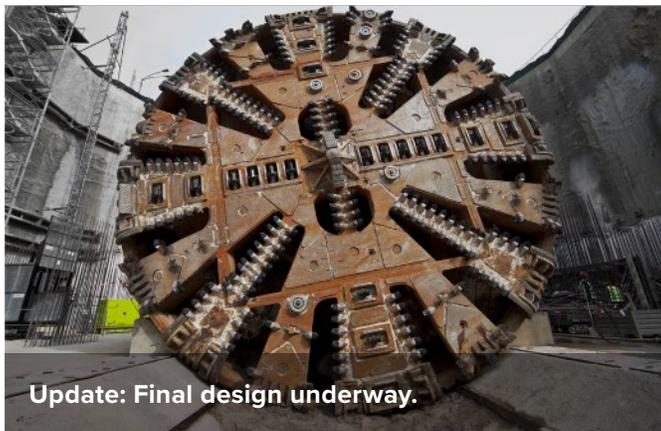
**Diversion Facility**

Click [here](#) for an introduction to diversion facilities from two RiverRenew engineers.

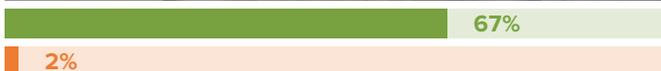
# Status of RiverRenew Tunnel Project Components

■ Design
 ■ Construction

## Waterfront Tunnel



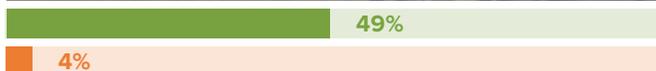
Update: Final design underway.



## Pendleton Street Diversion Facility



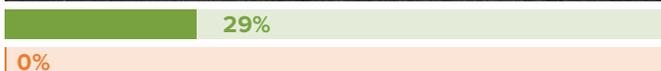
Update: Final design underway. Preparing for Groundbreaking.



## Royal Street Diversion Facility



Update: Final design underway.



## Hooffs Run Interceptor



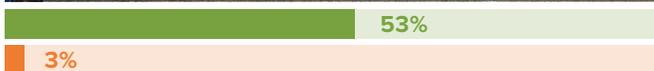
Update: Final design underway.



## AlexRenew



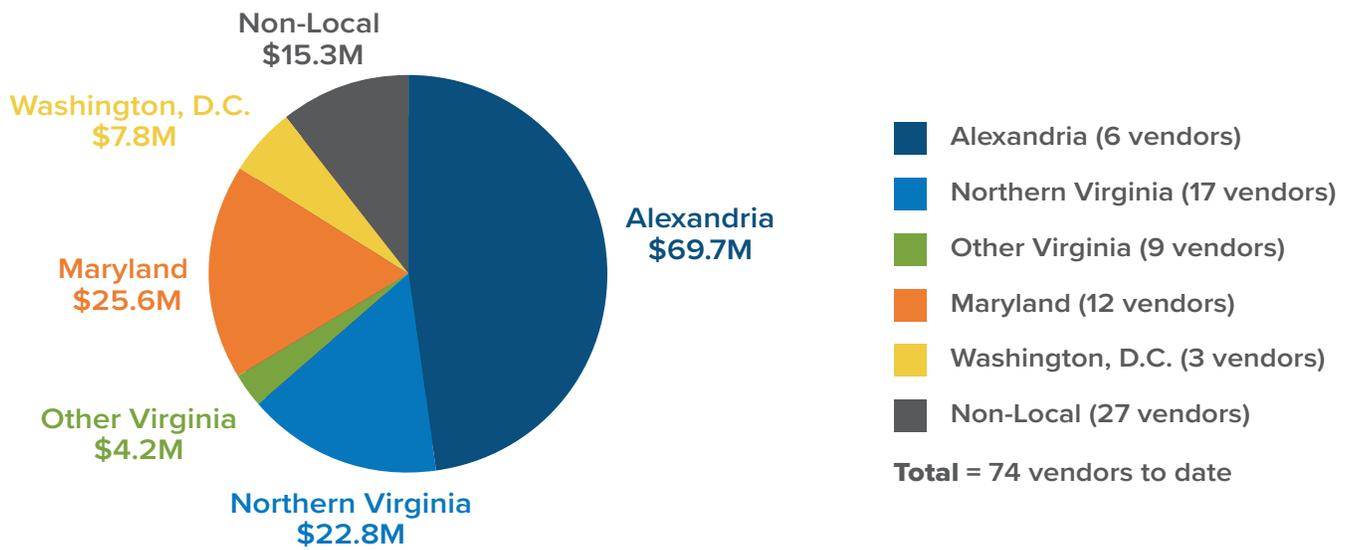
Update: Mobilization and site preparation underway. Final design ongoing.



Note: As of Pay Application No. 7 for the Tunnel Project, pending as of August 25, 2021.

# RiverRenew Program Costs to Date

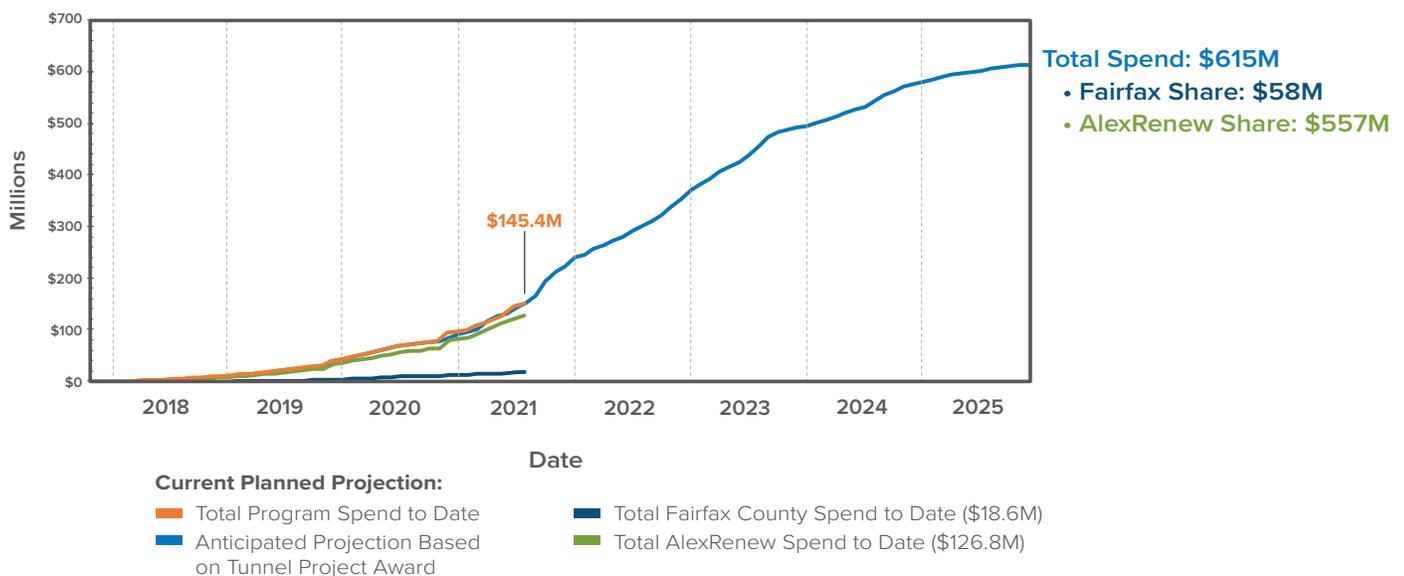
## RiverRenew Spend to Date by Locality



## RiverRenew Tunnel Project Contracts

Vendor	Role	Contract Type	Contract No.	Contract Date	Spent to Date (\$ millions)
Traylor-Shea Joint Venture	Design-Builder Tunnel System Project	Design-Build	19-079	Dec 2020	\$47.9
Brown and Caldwell	Owner's Advisor	Professional Services	17-022	Nov 2017	\$48.3
EPC	Resident Engineering & Inspection Tunnel System Project	Professional Services	20-013	April 2020	\$2.5
Completed RiverRenew Wastewater Projects to Pave the Way for the Tunnel Project					\$46.7

## RiverRenew Cash Flow Analysis



**Note:** As of Pay Application No. 7 for the Tunnel Project, pending as of August 25, 2021.

# RiverRenew Community Outreach



## Education

**Education** initiatives are intended to engage audiences of all ages and help them learn more about RiverRenew and its technical components.

**Looking Ahead:**

- Cloe the TBM Builds a Tunnel, a RiverRenew storybook, to be released September 2021



## Community Meetings

**Community meetings** are presentations given to various stakeholder groups, including the SAG, and community listening sessions. These presentations can be delivered in person or virtually.

**Looking Ahead:**

- 2021-2022 SAG Meeting No. 4: [September 16](#)



## Public Inquiries

The RiverRenew team is committed to keeping the community informed every step of the way, dedicating their time to addressing all **public inquiries** about the project.



## Community Days

**Community days** feature project-specific events to celebrate construction progress on the Tunnel Project and engage the community along the way.

**Looking Ahead:**

- Groundbreaking Ceremony and Virtual Live Stream: September 30



## Digital Programming

**Digital programming** keeps the community connected to RiverRenew with regular program updates on RiverRenew.com, featured “Tunnel Takeover” content on AlexRenew’s social media pages, and distribution of *The River Renewer*, a quarterly newsletter promoting updates and milestones to more than 500 contacts.

**Highlights:**

- Distributing construction alerts via email to subscribers from [RiverRenew.com](#)
- A **short video** summarizing recent construction activity at AlexRenew’s wastewater treatment plant
- Social graphics preparing the community for construction activity on [Royal Street](#), [Duke Street](#), and [South Old Town](#).



Field work update:

## Potholing



## Council-Board Workgroup

The **Council-Board Workgroup** comprises two members from AlexRenew’s Board of Directors and two members from the Alexandria City Council.

**Next Meeting:**

- Council-Board Workgroup Meeting No. 12: [September 23](#)



## Community Events

Participating in or co-sponsoring **community events** strengthens AlexRenew’s relationship with its water and community partners.

**Looking Ahead:**

- Water Discovery Days: September 27 - October 1, 2021
- Imagine A Day Without Water: October 21, 2021

# Monthly Construction Spotlight



## Construction Toward Healthier Waterways to Begin This Fall

Three sites in Alexandria will soon see increased activity, workers, and equipment as RiverRenew crews prepare to begin construction on essential project infrastructure.

In **October 2021**, construction will start at **Pendleton Street**, where AlexRenew will build a diversion facility to transfer flows from a combined sewer outfall to the Waterfront Tunnel. [Learn more](#) about this work from our Virtual Community Listening Session.

In **November 2021**, work will start at **Royal Street**, where AlexRenew will build another diversion facility to prevent combined sewage from polluting Hunting Creek. [Watch how](#) we'll address this issue in our recent Virtual Community Listening Session.

Also starting in **November 2021**, a new pipeline will be constructed along **Hooffs Run**. [See how](#) AlexRenew will construct this facility to prevent the pollution of Hooffs Run with combined sewage.

To learn more about our upcoming activity and find more resources about each site, visit [RiverRenew.com/news/program-updates/mobilize](https://www.RiverRenew.com/news/program-updates/mobilize).

Note: Construction start dates are subject to change.

## Building for the Future of Alexandria's Waterways

To learn more, visit [www.RiverRenew.com](https://www.RiverRenew.com)





**Board of Directors**  
John Hill, Chair  
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Bruce Johnson  
Adriana Caldarelli

**Chief Executive Officer**  
Karen L. Pallansch, P.E., BCEE

**General Counsel**  
McGuireWoods, LLP

## MEMORANDUM

TO: AlexRenew Board of Directors

FROM: Karen Pallansch, CEO

DATE: September 21, 2021

SUBJECT: For Information: Overview Summary of Fiscal Year 2021 Operating and Capital Budget Performance

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Finance staff is in the process of completing its annual financial audit and preparing the Annual Financial Report (AFR) for the Fiscal Year ending June 30, 2021 (FY21). The FY21 financial performance and audit results are anticipated to be presented to the Finance & Audit Committee and by the committee to the full Board in November; however, staff is providing the following unaudited final budgetary performance for information.

As the Board is aware and has endorsed through its approval of contract awards, AlexRenew's capital spending has increased significantly with the implementation of the RiverRenew program. During FY21, a great deal of engineering, third party work and plant site construction was performed to prepare for the construction of the Tunnel System program. The award of the Tunnel System Design-Build contract occurred on schedule, in December 2020, and was made to Traylor-Shea Joint Venture (TSJV) for \$454 million, bringing the total estimated capital cost on RiverRenew to \$615 million.

During FY21, the Board was informed of spending increases related to RiverRenew through the RiverRenew monthly dashboard and the presentation of contracts for action by the Board. In summary, the spending increases are attributable to:

- Additional easements and increases in negotiated easement costs
- Earlier than anticipated hiring of construction management and resident engineering and inspection teams to coordinate and inspect current plant construction projects
- Increase in community outreach efforts to respond to community concerns
- Early execution of the Tunnel Boring Machine Purchase Agreement
- Added work needs on the Building J relocation and demolition project

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Alexandria's Water Transformers

A decorative graphic at the bottom of the page consisting of a blue, wavy splash of water with a white highlight on the left side, extending across the width of the page.

As a result of these program related impacts, the final FY21 actual capital spending exceeded the approved projected budgeted capital expenditures line item by approximately \$14.1 million. These costs and programmatic changes were not specifically contemplated when the FY21 capital budget was developed in January 2020 and subsequently received board approval in June 2020. The FY21 budget was developed a year prior, and approved six months prior, to the award of the TSJV contract. Spending increases can be related in most cases to earlier than planned spending needed to prepare the plant for the Tunnel System construction; in a few cases, there were unanticipated changes in scope as design progressed, such as the need for additional testing and borings. A summary of the FY21 spend is provided below:

<b>FISCAL YEAR 2021 - SUMMARY OF BUDGETARY SPENDING</b>				
		<u>Budget</u>	<u>Actual*</u>	<u>Variance \$</u>
Operating	\$	28,386,991	26,750,694	(1,636,297)
Debt Service		14,123,976	14,015,828	(108,148)
IRR and Capital		69,014,850	84,951,437	15,936,587
<b>TOTAL</b>	<b>\$</b>	<b>111,525,817</b>	<b>\$ 125,717,959</b>	<b>\$ 14,192,142</b>

\* Preliminary, unaudited numbers

When published in the coming months, the AFR will provide the Board and public a more comprehensive view of AlexRenew's fiscal position. AlexRenew has been able to absorb the increased capital spend without deteriorating its fiscal profile, in large part due to the receipt of grant funding received from the Commonwealth of Virginia and low interest loans to fund RiverRenew construction.

As shown above, spending in the operating and debt service funds were well below budget, and performance was also strong in the areas of revenue and investment income. The preliminary final results show AlexRenew in compliance with its debt service coverage, cash reserves, and all other financial policies and requirements.

# Monthly Financial Report

**Month:** August 2021

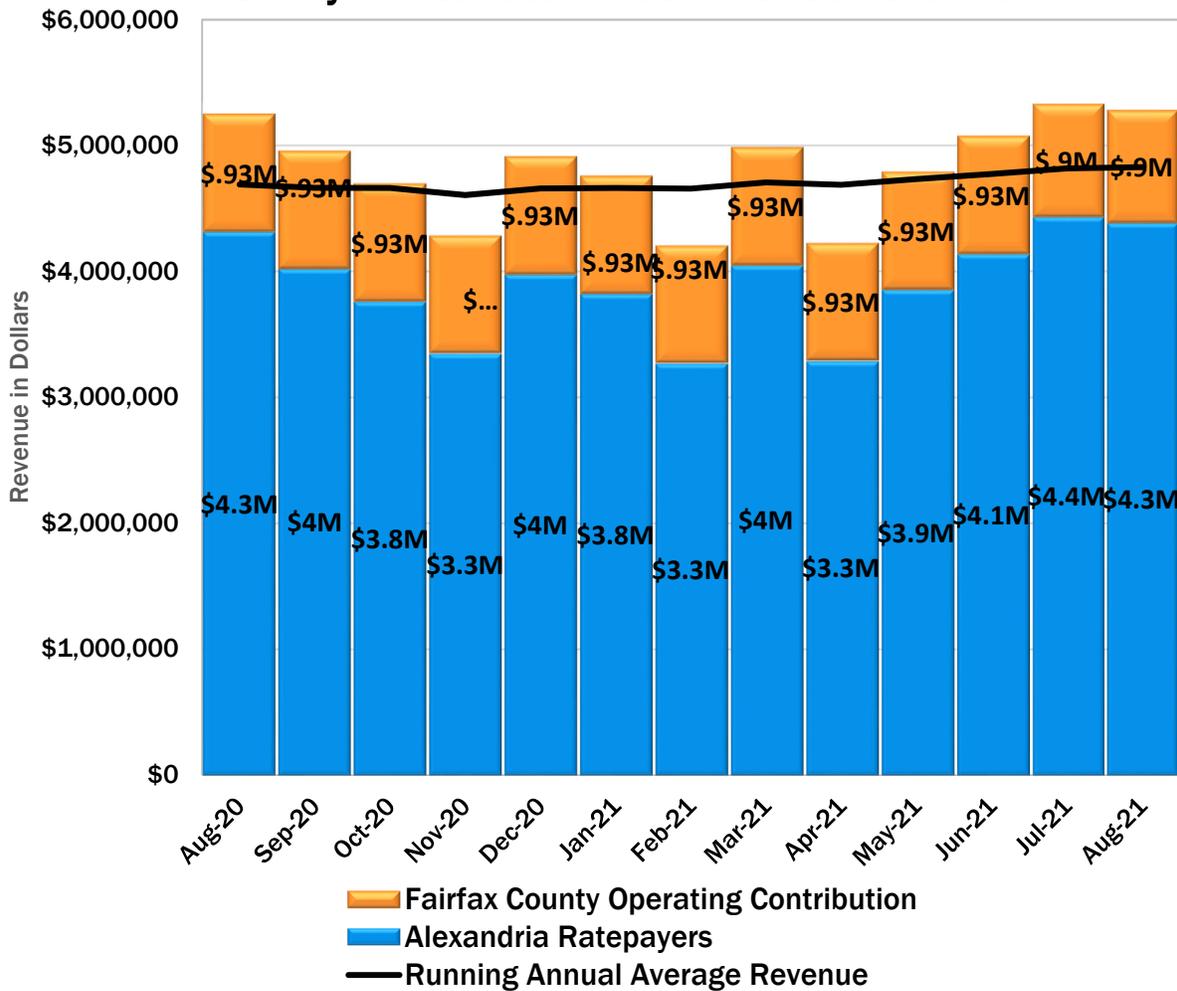
## Overview

Monthly performance of AlexRenew’s annual approved budget is reviewed and evaluated against actual to planned spend rates, historical trends, appropriate benchmarks and internal financial policies, to ensure overall organizational financial stability.

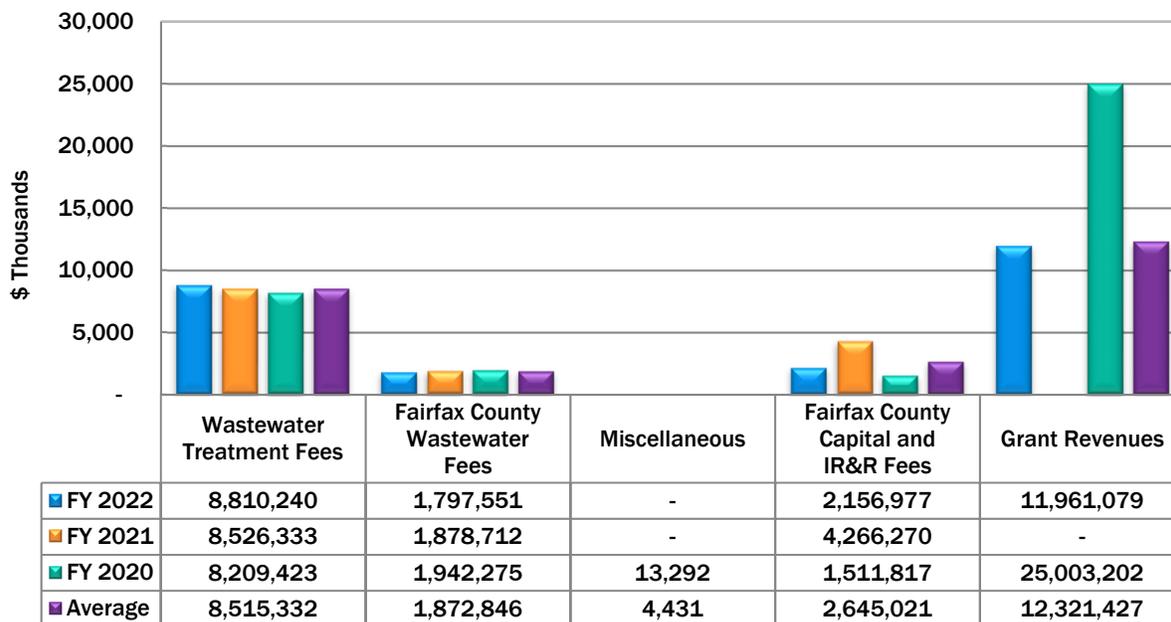
## Revenues

- FY22 operating revenues total \$10.6 million through the end of August with approximately \$8.8 million in Wastewater Treatment Charge revenue and \$1.8 million collected from Fairfax County. Wastewater Treatment Charge revenue is approximately \$0.28 million (3.33%) more compared to the same time period in FY21, and \$0.84 million (10.6%) above the Fiscal 2022 YTD budget. Data indicates a slight decrease month-over-month in customer revenue in August 2021. Finance staff will continue to monitor the trend in coming months.
- Revenue performance is primarily driven by billed flows that may be impacted by seasonality and by the Virginia American Water meter reading process, which can vary month-to-month.
- The Fairfax County operating expense charge and IR&R contribution YTD are on budget respectively. Fairfax County capital outlay contributions are also in-line with capital expenditures.

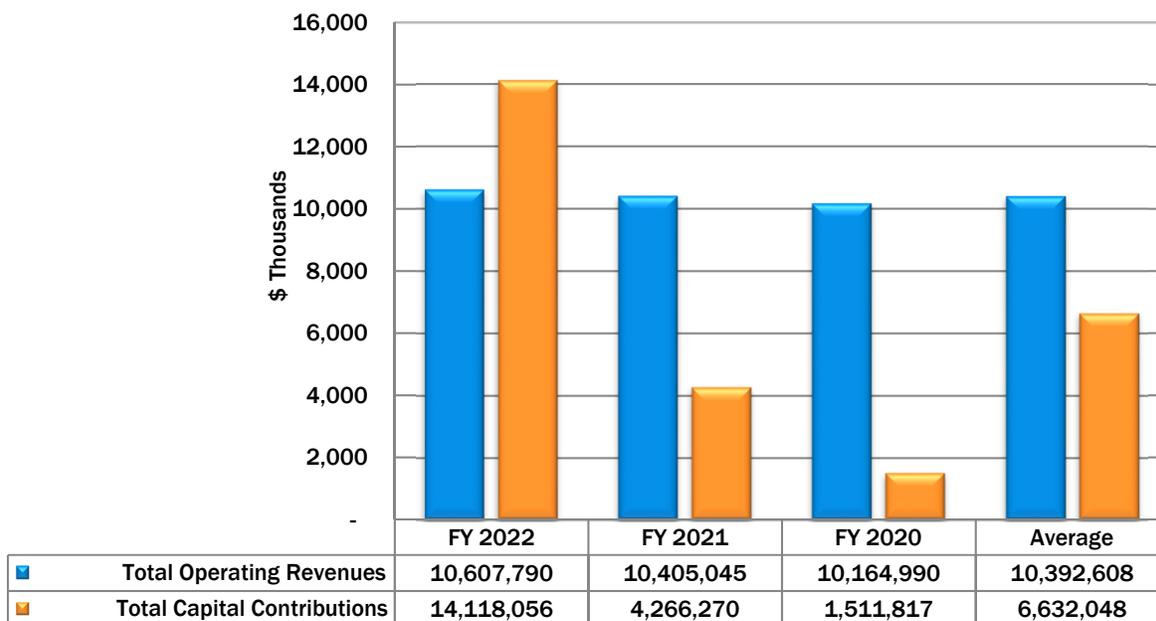
## Monthly Wastewater Treatment Fee Revenue



### Annual Revenue and Capital Contributions 3 Year Comparison



### Operating Revenue vs. Capital Contributions



## Expenses

FY22 operating and maintenance expenses are approximately 33% or \$1.56 million under the year-to-date budget, representing a spend rate of 11.2%. An overall decrease in utilities, personnel services and sludge disposal accounts primarily for this variance.

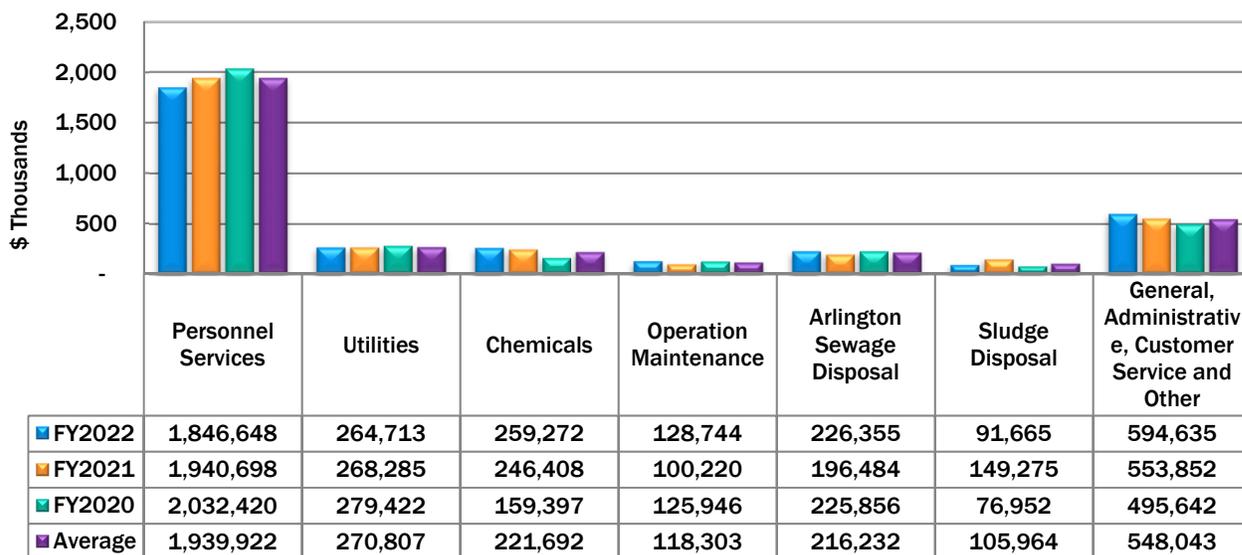
Capital outlay expenses are \$4.1 million year-to-date, representing a spend rate of 3.8%.

At two (2) months into the fiscal year, the overall spend rate is 5.1% of the total budget.

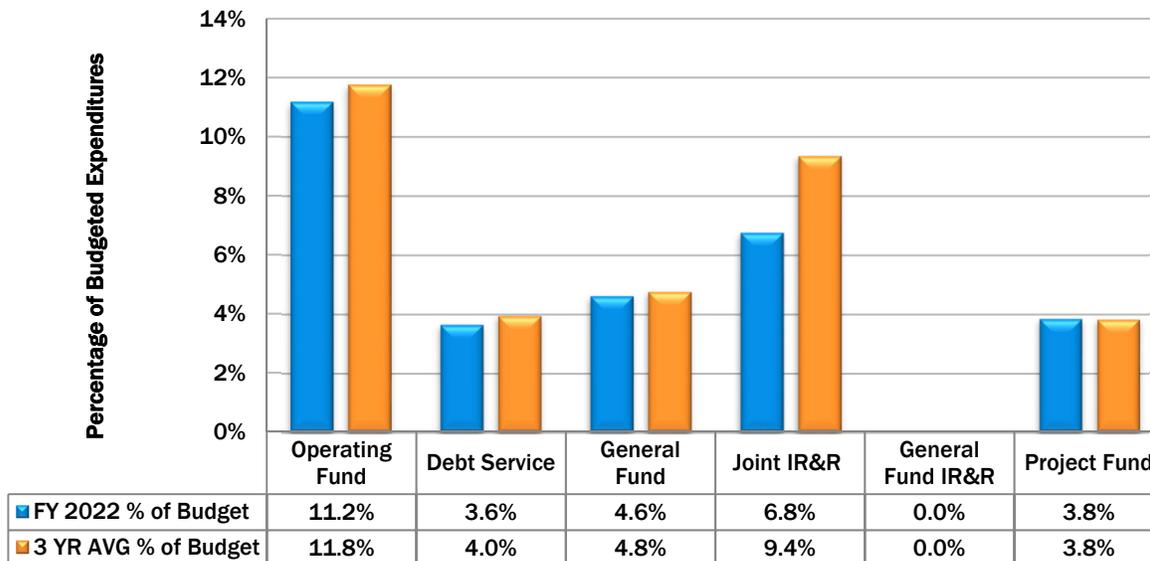
## Expenses By Fund

ACTUAL VS. BUDGET Through August 2021					SPEND RATE		
(\$ Millions)	FY 2022	FYTD 2022	3 YR AVG	FYTD 2022	FY 2022	3 YR AVG	Variance FY22
Expenses (By Fund)	BUDGET	ACTUAL	ACTUAL	BUDGET	% of Budget	% of Budget	to 3 YR AVG
Operating Fund	\$ 28.39	\$ 3.17	\$ 3.34	\$ 4.73	11.2%	11.8%	-0.6%
Debt Service	13.92	0.51	0.56	2.32	3.6%	4.0%	-0.3%
General Fund	72.40	3.34	1.22	12.07	4.6%	4.8%	-0.2%
Joint IR&R	5.70	0.39	0.49	0.95	6.8%	9.4%	-2.6%
General Fund IR&R	0.12	-	-	0.02	0.0%	0.0%	0.0%
Project Fund	107.50	4.13	2.69	17.92	3.8%	3.8%	0.0%
<b>Total</b>	<b>\$ 228.03</b>	<b>\$ 11.54</b>	<b>\$ 8.29</b>	<b>\$ 38.01</b>	<b>5.1%</b>	<b>5.8%</b>	<b>-0.7%</b>

## Annual Operating Expenses 3 Year Comparison



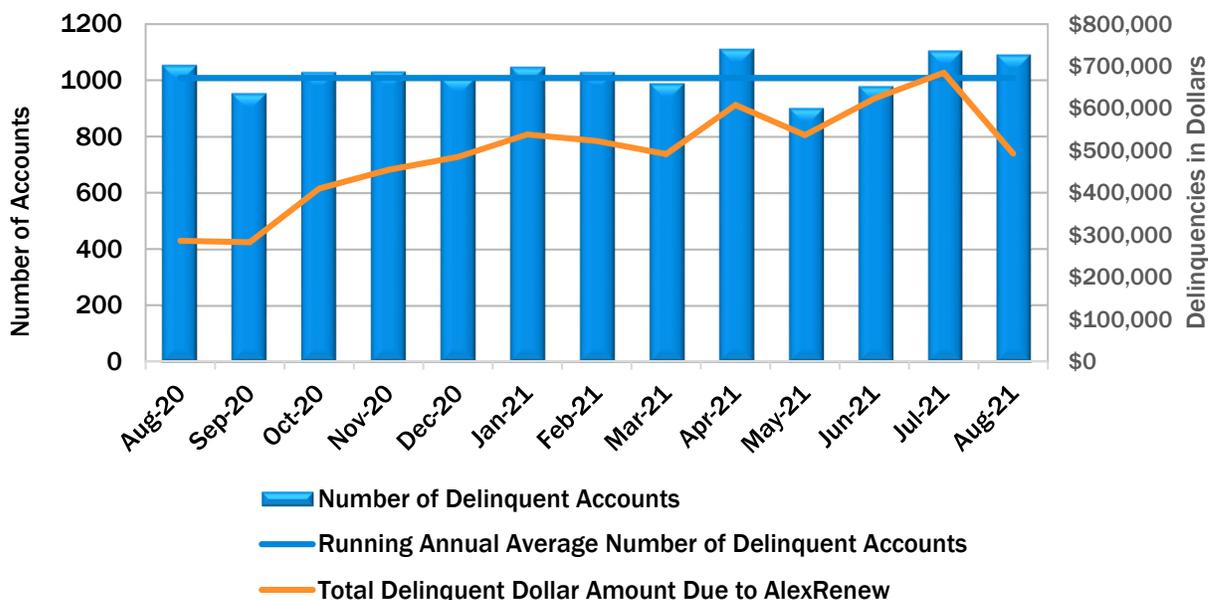
## Expenditure Budget Comparison By Fund FY 22 vs. 3 Year Average



### Delinquencies

The number of accounts that are delinquent by more than 60 days decreased slightly month-over-month, from 1,105 accounts in July to 1,091 in August. The total dollar amount owed to AlexRenew from these accounts decreased to \$492,977, which was primarily attributable to several large commercial accounts becoming current. AlexRenew continues to work with customers with unpaid bills to establish payment plans, evaluate eligibility for relief programs, and otherwise assist them in bringing their accounts current.

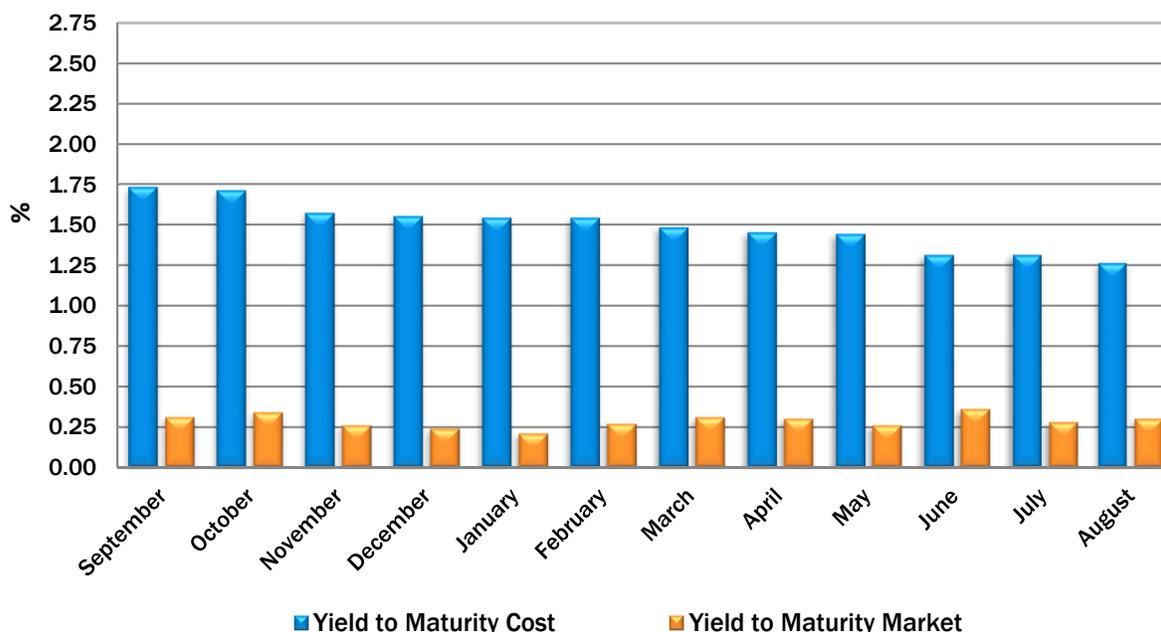
## Active Accounts 60+ Days Delinquent



## Investments

PFM Investment Advisors manages approximately \$21 million of AlexRenew's \$28.0 million investment portfolio. The following graph demonstrates current earnings on investments of approximately 1.26%; a level significantly higher than general bank deposit earnings rates.

### Investment Yield Percentage to Maturity (Investments managed by PFM) Through August 2021

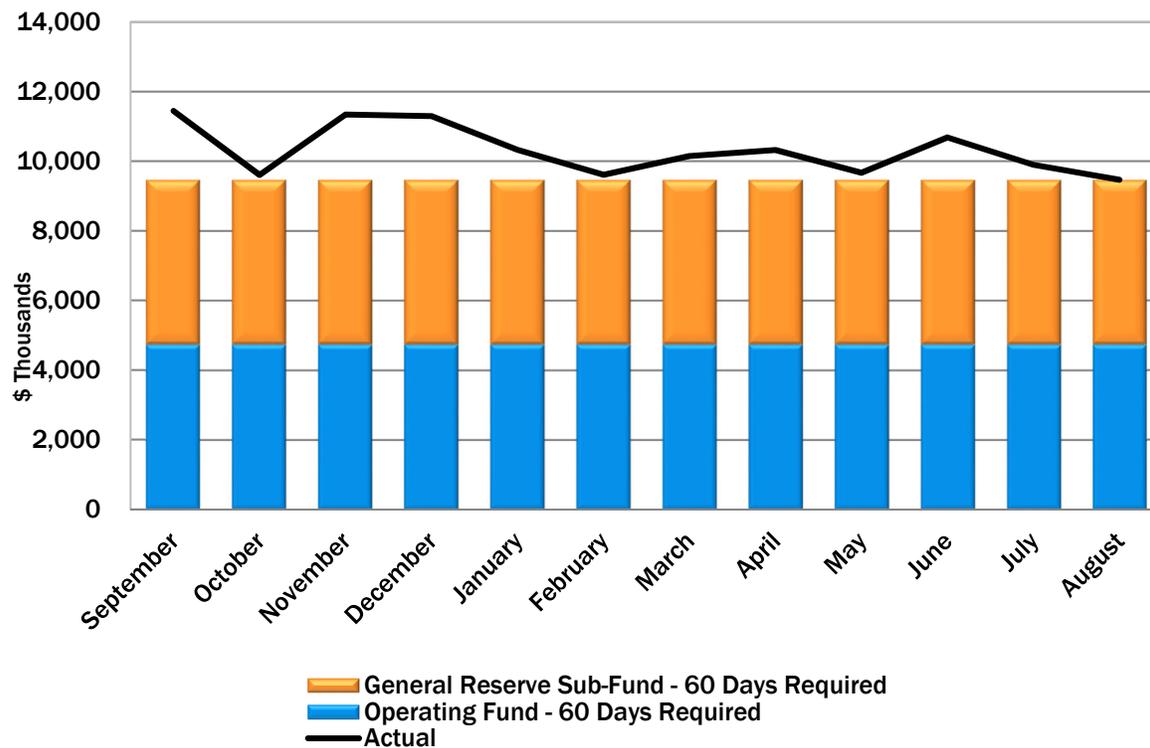


## Cash Reserves

AlexRenew's Indenture requires that it maintain a balance on deposit in the Operating Fund equal to not less than 60 days of budgeted operating expenses. AlexRenew's Financial Policy requires a balance on deposit in the General Reserve sub-Fund, also equal to not less than 60 days of budgeted operating expenses. In total, these combined compliance conditions require AlexRenew to maintain at least 120 days cash on hand, and for FY22 this equals a minimum of \$9,462,334. The chart and graph below demonstrate that AlexRenew currently exceeds this requirement.

Board Policy 120 Days Cash Reserves	Actual	Percentage of Goal
<b>As of August, 2021</b>		
Total Operating Cash	\$ 2,007,792	
Total Certificates of Deposit (Cash Equivalent)	\$ 2,862,988	
CARE ACT COVID19 Funding Balance	\$ (136,652)	
Total Operating Cash	<u>\$ 4,734,128</u>	
Total General Reserve Sub-Fund Cash	<u>4,731,167</u>	
Total Operating and General Reserve Sub-Fund Cash	<u>9,465,295</u>	100%

### Cash Reserve Policy



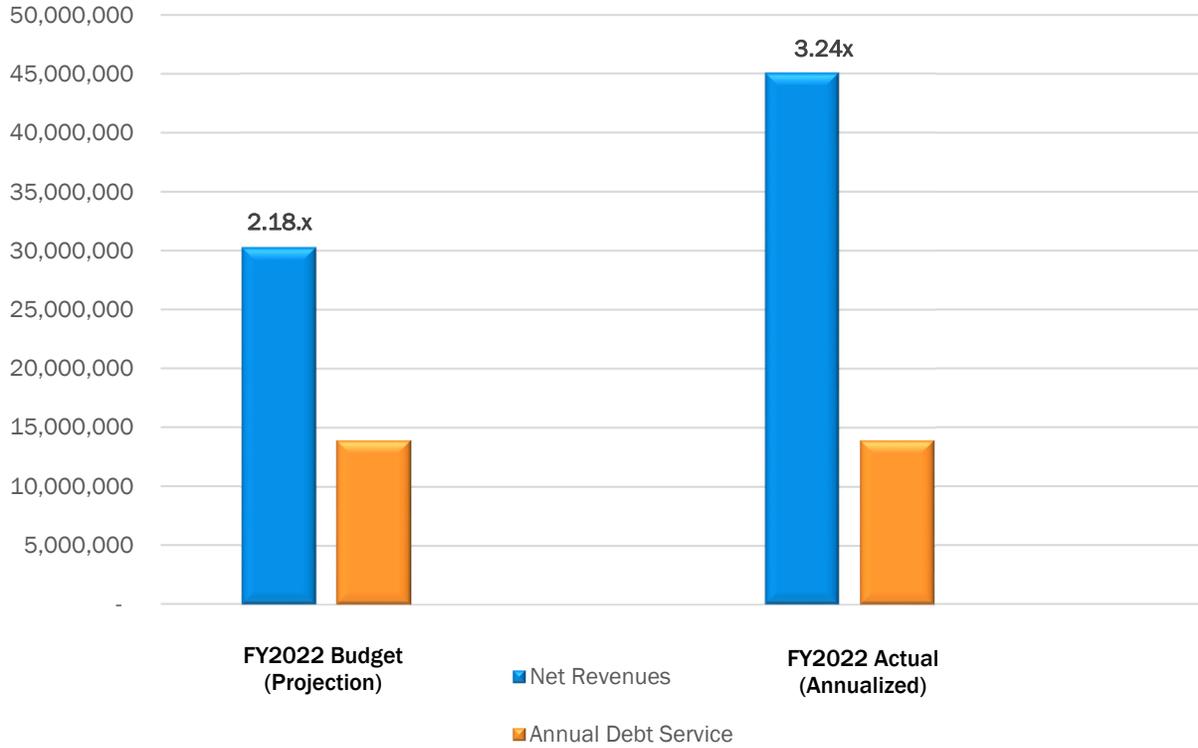
### Debt Service Coverage

The Indenture also requires AlexRenew to maintain minimum debt service coverage such that Revenues less Operating Expenses or Net Revenues (each term as defined in the Indenture) is at least 1.10x the parity debt service due in any fiscal year. Compliance with Board-approved financial policies requires AlexRenew to maintain a higher minimum debt service coverage of at least 1.50x applying the same criteria as defined above.

In both cases, AlexRenew currently exceeds its compliance standard as indicated below. The 2.18x designated in the graph below represents projected coverage for FY22 based on original FY22 budget expectations. At one month into the fiscal year, annualized results would indicate coverage of at 3.24x, ahead of the budgeted projection of 2.18x.

Financial Policy Compliance - All-In Debt Service Coverage	FY 2022 Actual	FY 2022 Budget
<b>Gross Revenues Available for Debt Service Coverage:</b>		
Wastewater Treatment Charges - Alexandria Ratepayers	52,861,437	47,814,540
Fairfax County Operating Expense Charge	10,785,305	10,785,305
Reimbursement from other systems	-	-
Investment Income	453,008	115,000
Less Restricted Investment Income	-	-
<b>Total</b>	<b>64,099,750</b>	<b>58,714,845</b>
<b>LESS Operating Expenses</b>	<b>(19,045,940)</b>	<b>(28,386,991)</b>
<b>Net Revenues [a]</b>	<b>45,053,811</b>	<b>30,327,854</b>
<b>Annual Debt Service [b]</b>	<b>13,919,620</b>	<b>13,919,620</b>
<b>Calculated All-In Debt Coverage [a/b]</b>	<b>3.24x</b>	<b>2.18x</b>
<b>Financial Policy Target</b>	<b>≥1.50x</b>	<b>≥1.50x</b>

## All-in Debt Service Coverage Net Revenues to Annual Debt Service



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## Glossary:

### Revenue Fund

All revenue receipts of Alexandria Renew are deposited in the Revenue Fund.

### The Operating Fund

The Operating Fund accounts for the administration and maintenance of the wastewater treatment system. By Board policy, the Operating Fund shall maintain 120 days of cash in reserve as established by Board Policy.

### Parity Debt Service Fund

The Parity Debt Fund shall have deposited in it one-twelfth (1/12th) of the annual required debt payment due within the budget year. Deposits are restricted funds for use to make semiannual payments in accordance with the Alexandria Renew Trust Agreements.

### Joint Improvement, Renewal & Replacement (IRR) Fund

The IR&R Fund receives deposits directly from Fairfax County (60% of IR&R budget) and from AlexRenew customer revenue (40% of IR&R budget) for asset renewal of joint use facilities. The contribution to the IRR Fund is 0.7% of the total amount of capital expenditures made subsequent to October 1, 1997, for the joint portion of the system, as set forth by the service agreement with Fairfax County.

### Project Fund

The Project Fund records the cost of each joint use capital project included in the Alexandria Renew Capital Improvement Plans (CIP).

The plans for current and future capital projects, both joint and City only, is summarized in a Ten-Year CIP. City use only CIP are accounted for within the General Fund.

### General Fund

The General Fund serves as reserve fund to be used for any lawful purpose of the Authority. Deposits to the General Fund are made from the Revenue Fund after all other fund expenditures and requirements have been satisfied. Alexandria Renew principally uses the General Fund to finance specific capital improvements and to provide sufficient reserves in accordance with policy.