CEO Board Report July 2022

Dear Members of the Board of Alexandria Renew Enterprises,

During the Alexandria Renew Enterprises (AlexRenew) Board of Directors meeting on July 19, 2022, the Board approved the contract for AlexRenew's customer billing service and the existing finance agreement to Virginia Resources Authority (VRA). The Board also approved a resolution honoring Board member Mr. Kerry Donley, who passed away on July 13, 2022.

In July, AlexRenew had 1 reported case of COVID-19. AlexRenew continues to adapt its policies to ensure that it follows the CDC guidance and complies with Virginia Department of Labor and Industry standards.

Operational Excellence

Precipitation for July at the Reagan National Airport was 7.61 inches of rain, which is above the Washington, D.C. historical average precipitation of 3.73 inches for the month. As reported in 5-day letters sent via email on July 13 and July 26, 2022, AlexRenew Water experienced sanitary sewer overflows in the following locations:

- Four Mile Run Pumping Station (FMRPS): On July 9, 2022, between approximately 5:40 am to 7:00 am about 0.5 MG of sanitary sewer overflow (SSO) was discharged into Four Mile Run. The overflow was a result of an intense storm event with 3.92 inches of rainfall as measured by the USGS rainfall gauge. The primary contributing factor to the SSO was excessive infiltration and inflow into the Four Mile Run Separate sanitary sewer system, sending upwards of 20 MGD,9 times greater than the average daily flow to the station.
- AlexRenew Water Resource Recovery Facility (WRRF): On July 21, 2022, between 9:30 am to 10:00
 am approximately 200 gallons of filter backwash was discharged to Hooffs Run via the separate
 storm sewer system at the WRRF. The overflow resulted from a temporary sanitary bypass installed
 as part of construction related work being overwhelmed during the routine draining and backwashing
 of two filters.

Biosolids production for July was 2,094 wet tons, all of which was beneficially used through land application in the Virginia counties of Fauquier, Fluvanna, and Buckingham. The biosolids were land applied as Class B biosolids.

AlexRenew met all Virginia Pollutant Discharge Elimination System (VPDES) effluent parameters for July 2022.

Treatment	Daily Average Flow	Carbonaceous Biochemical Oxygen Demand	Total Suspended Solids	Ammonia (as N)	Dissolved Oxygen	Total Nitrogen ¹	Total Nitrogen LOAD	Total Phosphorus	Total Phosphorus LOAD
	MGD	(Monthly Average) mg/L	(Monthly Average) mg/L	(Monthly Average) mg/L	(Minimum) mg/L	(Annual Average) mg/L	(YTD) Ib	(Monthly Average) mg/L	(YTD) Ib.
Permit	54.0	5.0	6.0	Seasonal ²	6.0	3.0	493,381	0.18	29,603
Reported	34.8	< QL	1.7	0.01	7.6	2.6	165,856	0.07	5,191

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

Public Engagement and Trust

Tours and Events

AlexRenew welcomed 20 visitors from the Capital Youth Empowerment Program that hosted reoccurring meetings on the 6th floor of the Environmental Center. Alexandria City Public Schools visited with 23 students and 4 chaperons from its summer learning program for an Environmental Center Tour.

Customer Service

Customer service received a total of 970 calls with 47 percent opting for self-service. Average call answer time was 27 seconds. Call center staff answered 84 emails.

Social Media and Website

We reached 1,015 unique viewers and had more than 3,000 post engagements on Facebook. We currently have 3,623 Facebook followers. AlexRenew had 800 post engagements on Twitter. We have a total of 3,331 followers on Twitter, 2,446 on LinkedIn, and 252 Instagram followers. Alexrenew.com had 6,264 sessions and 10,990 page views during July. We had 65 visitors click through to our website from social media.

Watershed Stewardship

See RiverRenew Dashboard. (Attachment 1)

Adaptive Culture

Since July 2021, AlexRenew has logged 181,556 hours without a lost time accident.

Thank you for your ongoing dedicated service to AlexRenew.

Regards,

Karen Pallansch Chief Executive Officer

RiverRenew Board of Directors Dashboard



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

re

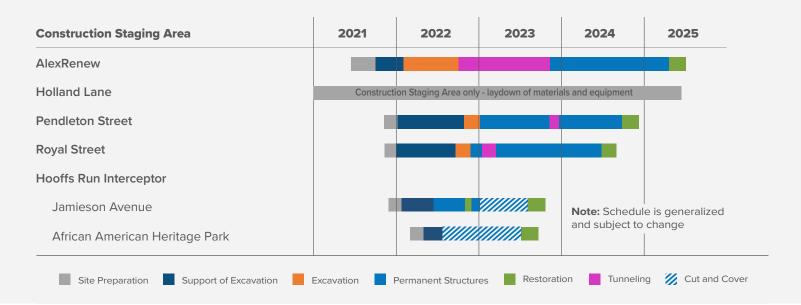
RiverRenew

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 RiverRenew projects at AlexRenew's wastewater treatment plant are complete. The remaining project includes the construction of a new tunnel to connect AlexRenew's wastewater treatment plant to the four existing combined sewer outfalls in Alexandria.

The Tunnel Project is illustrated on Page 4 of this Dashboard. Construction associated with the Tunnel Project started in early 2021 and will continue through 2025 at five primary locations in Alexandria. The phases of construction at each location are illustrated in the schedule below.

RiverRenew Tunnel Project Schedule



Summary of Major Tunnel Project Delays

Date:	Activity:		
12/2021	Monitoring potential supply chain issues due to ongoing pandemic.		
12/2021	COVID outbreak at tunnel segment mold plant in Slovenia. Manufacturing for tunnel segment molds relocated to Turkey. Anticipated one-month delay on tunnel segment molds.		
1/2022	Concrete for shaft slurry walls delayed due to weather, COVID impacts, shortage of CDL drivers due to Omicron spike, and lack of concrete materials in the Greater Metro D.C. area. Monitoring schedule impacts to critical path.		
2/2022	TBM fabrication and delivery delayed by three weeks. Monitoring schedule impacts to critical path.		

RiverRenew Tunnel Project Design-Build Progress

Overall Project Progress

(Design and Construction)

2	6%	
	30%	
▲ DEC 2020		JUL 2025



	85 %
	96%
Construction Progress	SEP 2022
13%	
15%	
	JUL 2024



TBM arrived at AlexRenew

LEGEND:

Design Progress		
	71%	
	72 %	
Construction Progress		AUG 2022 🛦
22%		
29%		
		SEP 2023 🔺

Actual Progress

Pendleton Street	
Mobilizing for shaft slurr	y wall construction
Design Progress*	

	81%
	///////////////////////////////////////
Construction Progress	AUG 2022
15%	
15%	
	NOV 2024



	93%
	///////////97%///
Construction Progress**	AUG 2022
11%	
13%	
	Aug 2023 🛦



Design Progress	
	80%
	80%
Construction Progress	OCT 2022
12%	
////// 12%	
	JUL 2025

Planned Completion Date

Actual Progress as of July 31, 2022. Planned Progress bars are representative of updates to Baseline Schedule. *The Design-Builder deferred the Pendleton Street and Royal Street designs to prioritize critical path designs at Hooffs Run and AlexRenew. Deferring the Pendleton and Royal Street designs will not impact the project schedule.

**The planned construction progress for Hooffs Run is based on the Design-Builder's sequence of construction activities as of July 2022.

Planned Progress

Attachment 1

2

RiverRenew Tunnel Project Six-Month Look-Ahead

Pendleton Street

MAJOR WORK ACTIVITIES

Activity	Date
Shaft support of excavation	Aug 2022
Shaft excavation	Dec 2022

PERMITS

Permit	Date
Building Permit - Shaft Support of Excavation	Oct 2022
DSUP Final Site Plan Approval	Nov 2022
Building Permit - Shaft Liner and Base Slab	Nov 2022
Building Permit - Shaft Roof	Nov 2022
Building Permit - Permanent Seawall	Nov 2022

Royal Street

MAJOR WORK ACTIVITIES

Activity	Date
Shaft support of excavation	Ongoing through Aug 2022
Shaft excavation	Sep 2022
Shaft base slab construction	Dec 2022
Near surface structures support of excavation	Jan 2023

PERMITS

Permit	Date
DSUP Final Site Plan Approval	Nov 2022
Building Permit - Shaft Liner and Base Slab	Nov 2022
Building Permit - Shaft Roof	Nov 2022
Building Permit - Near Surface Structure and SOE	Jan 2023

Waterfront Tunnel

MAJOR WORK ACTIVITIES

Activity	Date
Tunnel boring machine (TBM)	
Lower TBM in shaft and assemble	Aug 2022
Begin mining	Oct 2022

Community Outreach

Event	Date			
2022-2023 RiverRenew SAG Meeting No. 4	Sep 15, 2022			
Council-Board Workgroup Meeting No. 16	Oct 19, 2022			
2022-2023 RiverRenew SAG Meeting No. 5	Nov 17, 2022			

Hooffs Run

MAJOR WORK ACTIVITIES

Activity	Date
North of Jamieson Ave	
Diversion Chamber construction	Ongoing through Dec 2022
Open cut construction	Aug 2022
Junction chamber base construction	Dec 2022
African American Heritage Park	
Support of excavation	Ongoing through Aug 2022
Junction Chamber construction	Ongoing through Oct 2022
Open cut construction	Sep 2022

PERMITS

Permit	Date
Grading Plan Amendment	Aug 2022

AlexRenew

MAJOR WORK ACTIVITIES

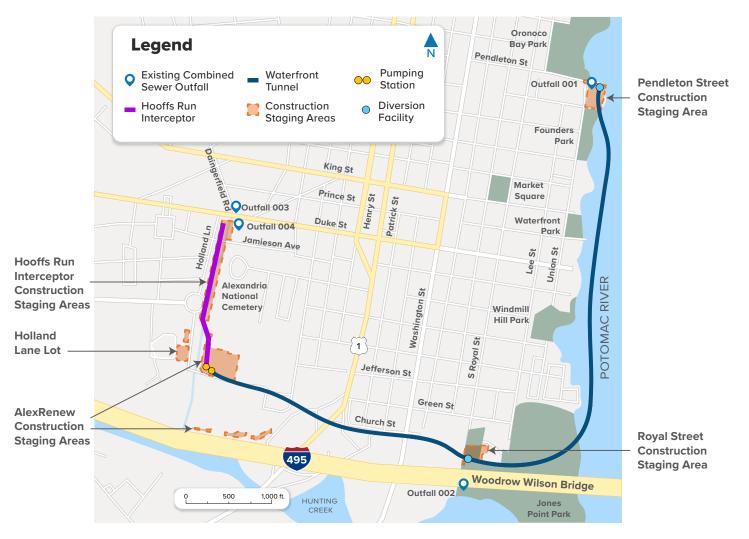
Activity	Date		
Screening Shaft base slab construction	Ongoing through Aug 2022		
HGL Control Structure support of excavation	Aug 2022		
Hooffs Run Interceptor (portion at AlexRenew)	Oct 2022		
Near surface structures deep foundations installation	Oct 2022		
Pumping Shaft base slab construction	Dec 2022		
Pumping Shaft liner construction	Jan 2023		

PERMITS

Permit	Date
DSUP Final Site Plan Approval	Jul 2022
Building Permit - Near Surface Structures	Aug 2022
Building Permit - Superstructure Architectural	Nov 2022

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 two pumping stations.





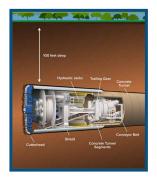
Hooffs Run Interceptor

Click **here** to learn more about upcoming activity at our Hooffs Run site.



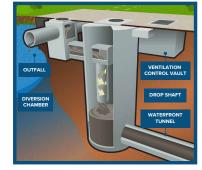
Pumping Station

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.

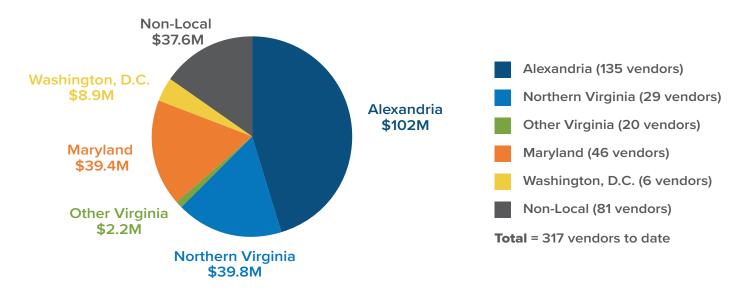


Diversion Facility

Click **here** for an introduction to diversion facilities from two RiverRenew engineers.

RiverRenew Program Costs to Date

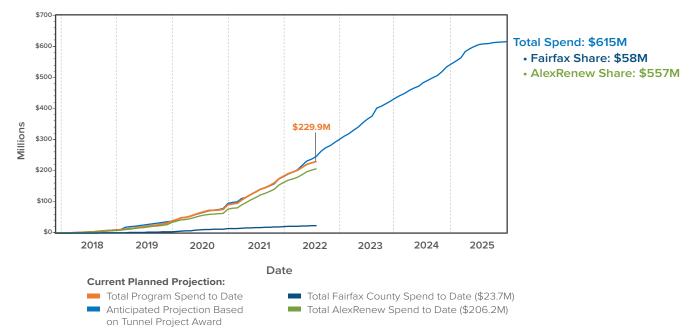
RiverRenew Spend to Date by Locality



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	\$113.9
Brown and Caldwell	Owner's Advisor	Professional Services	17-022	Nov 2017	\$59.5
EPC	Resident Engineering & Inspection Tunnel System Project	Professional Services	20-013	Apr 2020	\$7.3
Completed RiverRenew Wast	\$49.2				

RiverRenew Cash Flow Analysis



RiverRenew Community Outreach



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.

Highlights:

- Community Listening Sessions: July 11-14
- 2022-2023 RiverRenew SAG Meeting No. 3: July 21

Looking Ahead:

- 2022-2023 RiverRenew SAG Meeting No. 4: September 15
- 2022-2023 RiverRenew SAG Meeting No. 5: November 17

*All Community Listening Sessions materials are available at RiverRenew.com/community/community-listening-sessions.



Digital Programming

Digital programming keeps the community connected to RiverRenew with regular program updates on RiverRenew.com, 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:

- Email, website, and social post **notifications** for extended work hours at Royal Street
- Photo and **video updates** highlighting the TBM's journey home
- A recap and photos from the Tunnel Boring Machine Welcome Reception
- The debut of our newest RiverRenew teammate, Mark the MSV





Community Events

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

Highlights:

• Sip 'n See events ongoing

Looking Ahead:

- Sip 'n See event at Hooffs Run: Tuesdays between 11 a.m. and 1 p.m.
- Sip 'n See event at Royal Street: Wednesdays from 11 a.m. to 1 p.m.
- Sip 'n See event at Pendleton Street (Resuming September 1): Thursdays between 11 a.m. and 1 p.m.



Community Days

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

Highlights:

• RiverRenew Tunnel Boring Machine Welcome Reception: July 14



Education

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

Highlights:

• Shared a presentation on wastewater treatment careers and the story of RiverRenew with Alexandria City Public School's Career Exploration Camp



- PR

Council-Board Workgroup

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

Highlights:

Council-Board Workgroup Meeting No. 15: July 13

Looking Ahead:

Council-Board Workgroup Meeting No. 16: October 19

Monthly Spotlight

Hello, Hazel! AlexRenew welcomes our healthier waterways heroine.

On July 14, 2022, AlexRenew welcomed and dedicated Hazel, our 380-ton tunnel boring machine that will build toward Alexandria's healthier waterways future.

Hazel is a state-of-the-art, underground powerhouse that was custom-built to construct the Waterfront Tunnel under Alexandria to stop combined sewage from polluting its waterways. She carries the namesake of Hazel Johnson, one of America's leading women pioneers for environmental justice who founded an organization in her Chicago community to educate those disproportionally impacted by pollution and fight for a safer environment.

"There's nothing more important than keeping our communities clean, safe, and healthy," AlexRenew General Manager Karen Pallansch said during the reception. "AlexRenew is proud to promote such influential environmental stewardship in our region, and we couldn't accomplish any of this without the staunch and tireless support from our public and private partners."

Learn more about Hazel and see highlights from the reception at **RiverRenew.com/news/program-updates/** welcome-reception!

Building for the Future of Alexandria's Waterways

To learn more, visit www.RiverRenew.com



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



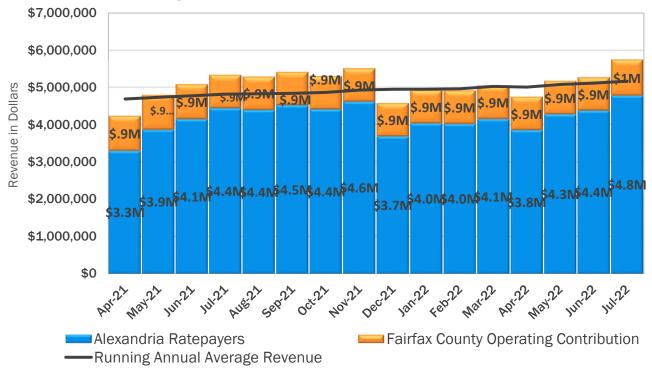
Month: July 2022

<u>Overview</u>

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. Staff continues to work with our external auditor to complete the audit of FY22 finances.

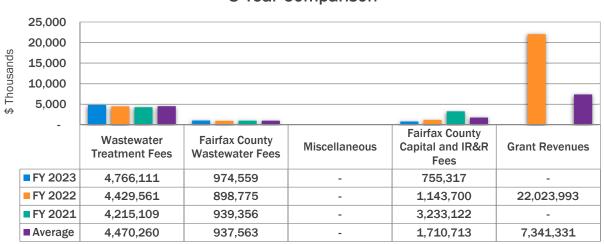
Revenues

- FY23 operating revenues total \$5.7 million through the end of July with approximately \$4.8 million in Wastewater Treatment Charge revenue and \$1.0 million collected from Fairfax County. Wastewater Treatment Charge revenue is approximately \$0.34 million (7.6%) more compared to the same time period in FY22, and \$0.52 million (12.31%) above the Fiscal 2023 YTD budget. Data indicates an increase month-over-month in customer revenue due to a combination of seasonal trends and the rate adjustment that went into effect on July 1 for FY23. 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

FY23 operating and maintenance expenses are in line with the year-to-date budget, representing a spend rate of 8.4%. While sludge disposal and sewage disposal costs have decreased, other expenses such as chemicals, maintenance, utilities, personnel services and general administrative activities are rising due to inflationary pressures.

Capital outlay expenses are \$5.8 million year-to-date, representing a spend rate of 5.4%.

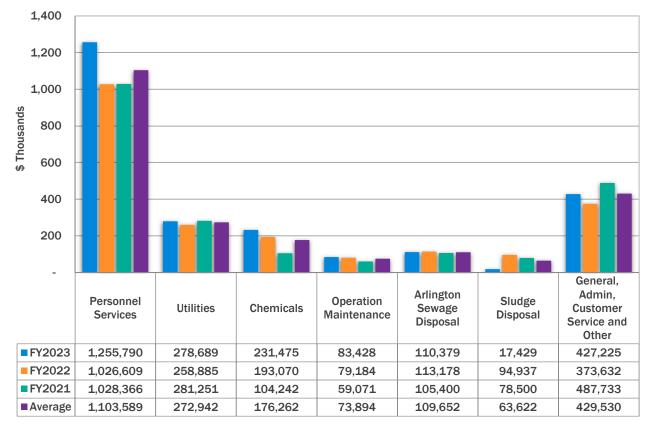
At one (1) month into the fiscal year, the overall spend rate is 5.7% of the total budget.



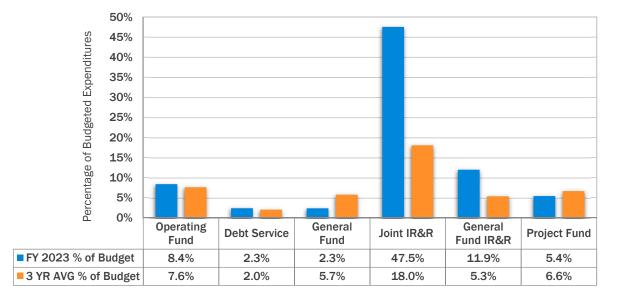
Expenses by Fund

ACTUAL VS. BUDGET						SPEND				
Through July 2022					RATE					
(\$ Millions)		FY 2023		TD 2023	2023 3 YR AVG FYTD 2023		FY 2023	3 YR AVG	Variance FY23	
Expenses (By Fund)		BUDGET	A	CTUAL		ACTUAL	BUDGET	% of Budget	% of Budget	to 3 YR AVG
Operating Fund	\$	28.39	\$	2.37	\$	2.20	\$ 2.37	8.4%	7.6%	0.8%
Debt Service		13.92		0.33		0.29	1.16	2.3%	2.0%	0.3%
General Fund		72.40		1.68		1.71	6.03	2.3%	5.7%	-3.4%
Joint IR&R		5.70		2.71		1.30	0.48	47.5%	18.0%	29.5%
General Fund IR&R		0.12		0.01		0.02	0.01	11.9%	5.3%	6.6%
Project Fund		107.50		5.78		6.32	8.96	5.4%	6.6%	-1.2%
Total	\$	228.03	\$	12.89	\$	11.84	\$ 19.00	5.7%	6.7%	-1.1%

Annual Operating Expenses 3 Year Comparison



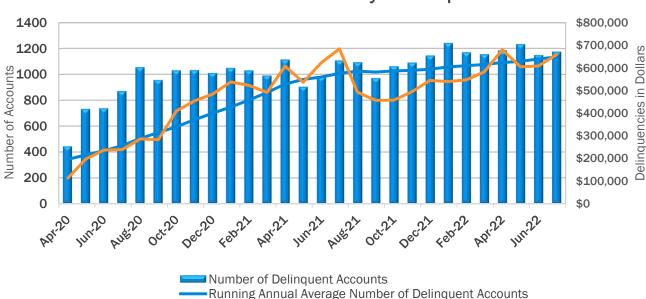




Expenditure Budget Comparison By Fund FY 22 vs. 3 Year Average

Delinquencies

The number of accounts that are delinquent by more than 60 days was 1,173 in July and increased by 27 accounts month-over-month. The total dollar amount owed to AlexRenew from these accounts totaled \$659,472 at the end of July and increased by \$50,588 month-over-month. 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.



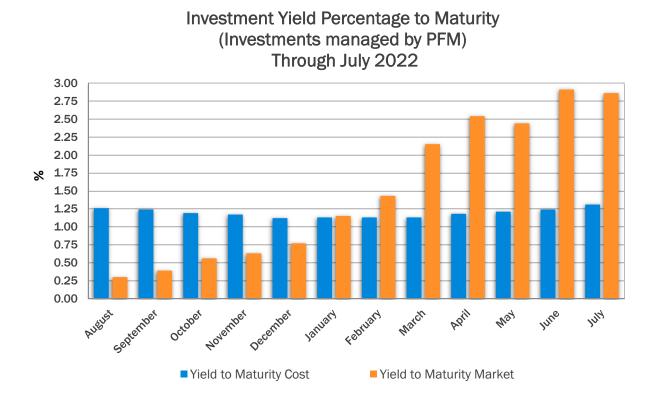
Active Accounts 60+ Days Delinquent

Total Delinquent Dollar Amount Due to AlexRenew



Investments

PFM Investment Advisors manages approximately \$21 million of AlexRenew's \$25 million investment portfolio. The following graph demonstrates current earnings on investments of approximately 1.31%; a level higher than general bank deposit earnings rates.

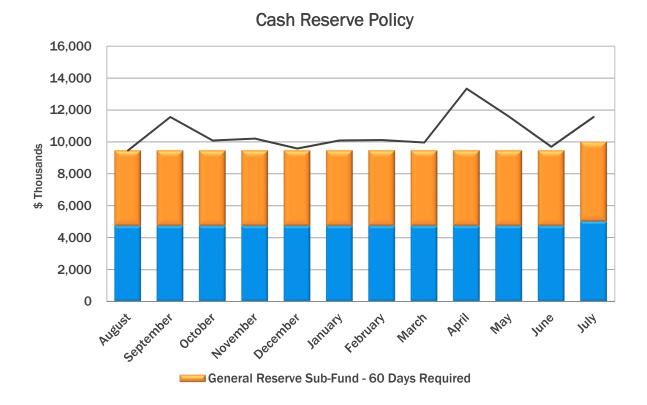


Cash Reserves

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 FY23 this equals a minimum of \$10,008,654 The chart and graph below demonstrate that AlexRenew currently exceeds this requirement.

Board Policy 120 Days Cash Reserves	Actual	Percentage of Goal
As of July, 2022		
Total Operating Cash	\$ 3,693,474	
Total Certificates of Deposit (Cash Equivalent)	\$ 2,865,411	
CARE ACT COVID19 Funding Balance	\$ -	
Total Operating Cash	\$ 6,558,885	
Total General Reserve Sub-Fund Cash	 5,004,327	
Total Operating and General Reserve Sub-Fund Cash	 11,563,212	116%





Debt Service Coverage

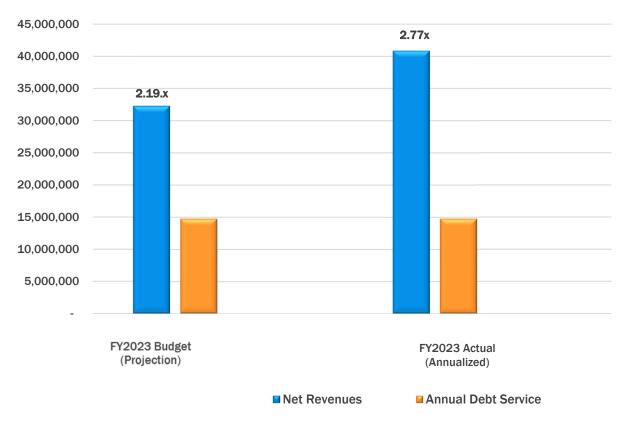
The Indenture also requires AlexRenew to maintain minimum debt service coverage such that Revenues less Operating Expenses or Net Revenues (each term as defined in the Indenture) is at least 1.10x the parity debt service due in any fiscal year. Compliance with Board-approved financial policies requires 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 2.19x designated in the graph below represents projected coverage for FY23 based on original FY23 budget expectations. At one month into the fiscal year, annualized results would indicate coverage of 2.77x, ahead of the budgeted projection of 2.19x.



Financial Policy Compliance - All-In Debt Service Coverage	FY 2023 Actual	FY 2023 Budget
Gross Revenues Available for Debt Service Coverage:		
Wastewater Treatment Charges - Alexandria Ratepayers	57,193,330	50,922,485
Fairfax County Operating Expense Charge	11,694,706	11,694,706
Reimbursement from other systems	-	-
Investment Income	428,539	115,000
Less Restricted Investment Income	-	-
Total	69,316,575	62,732,191
LESS Operating Expenses	(28,447,899)	(30,442,988)
Net Revenues [a]	40,868,676	32,289,203
Annual Debt Service [b]	14,739,509	14,739,509
Calculated All-In Debt Coverage [a/b]	2.77x	2.19x
Financial Policy Target	≥ 1 .50x	≥ 1 .50x

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





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.

Parity Debt Service Fund

The Parity Debt Service 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 AlexRenew 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.

JONATHAN RAK

Dear John, Jim, Bill and Admiana, Thank you very much for the beautiful framed photo of the Environmental (enter and your warm send-off. Working with you and Karen has been an honor and a privilege. I will always remain proud of the amorning things Alexandria Renew has accomplished. Best wishes for your continued success, Jointhe