Great Lakes Water Authority

Investment Performance Report – September 2023





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Executive Summary

PORTFOLIO RECAP

- ➤ Safety The aggregate portfolio is diversified amongst cash, bank deposits, U.S. Treasuries, Federal Agencies, commercial paper, SEC-registered money market funds, and a local government investment pool. The total credit profile of the portfolio is strong with over 96% of the assets invested in bank deposits or securities that are rated within the two highest short and long-term rating classifications as established by Standard & Poor's.
- ➤ Liquidity Great Lakes Water Authority ("GLWA") has continued to monitor its portfolio with the goal of limiting the allocation to cash and bank deposit accounts and maximizing the use of short-term investments to meet cash requirements. As of September 30, 2023, approximately 67% of the funds were held in cash and money market accounts maturing overnight. The percentage is lower than the last quarter due to higher short-term commercial paper yields.
- > Return The overall yield at market increased to 5.15% as of September 30, 2023, versus 4.90% as of June 30, 2023. The higher yield is reflective of the rise in interest rates experienced throughout the quarter. GLWA earned over \$12.0 million (unaudited) in investment income for the first three months of fiscal year 2024 on a book value basis. We expect the investment income for GLWA for FY 2024 to be approximately \$41 million (investment income includes earnings on all fund types, including restricted funds and unrestricted funds combined).

AVAILABLE FUNDS (Unaudited)					
Туре	Book Value	Book Value Market Value		Yield @ Market (as of 9/30/23)	
Deposit Account	\$33,309,871	\$33,309,871	3.39%	3.39%	
Deposit Account - Retainage	\$29,849,481	\$29,849,481	0.01%	0.01%	
Deposit Account – Flint Security Deposit	\$3,939,144	\$3,939,144	4.01%	4.01%	
Trust Money Market Fund	\$453,150,712	\$453,150,712	5.21%	5.21%	
Money Market Fund	\$16,720,432	\$16,720,432	5.22%	5.22%	
Local Government Investment Pool	\$195,661,366	\$195,661,366	5.48%	5.48%	
Managed Funds	\$357,638,514	\$354,096,121	4.49%	5.51%	
SEPTEMBER 2023 TOTALS:	<u>\$1,090,269,520</u>	<u>\$1,086,727,127</u>	<u>4.82%</u>	<u>5.15%</u>	
PREVIOUS QUARTER TOTALS:	<u>\$1,200,306,095</u>	<u>\$1,196,384,628</u>	<u>4.60%</u>	<u>4.90%</u>	



Investment Strategy

OVERALL STRATEGY

- ➤ All investment activity is conducted subject to GLWA's investment policy and state statutes while meeting the primary objectives of safety and liquidity. The portfolio is managed to a disciplined investment plan to provide improved safety and diversification while putting every dollar to work.
- ➤ GLWA, working with its investment advisor PFM Asset Management ("PFMAM"), has continued to invest its funds in a mixture of short and intermediate-term individual investment securities to ensure adequate liquidity to cover upcoming debt, pension payments, and operational requirements.
- ➤ PFMAM will continue to actively manage long-term portfolios with full discretion and align short-term balances with expected liabilities and identify strategies to maximize future investment income in the current interest rate environment, subject to GLWA's investment policy and state statutes.

PORTFOLIO PERFORMANCE – CURRENT PERIOD*

- The overall portfolio's original yield at cost went from 4.60% as of 6/30/2023 to 4.82% as of 9/30/2023.
- ➤ The total portfolio had a market yield of 5.15% at the end of September, compared to 4.90% as of March 31, 2023. Yield at market represents what the market would provide in return if the portfolio was purchased on September 30, 2023 (versus purchased in prior months / years); the higher yield is a result of the increase in interest rates throughout the quarter.
 - We utilize a variety of investment sectors, and because of that, this 5.15% yield at market as of 9/30/2023 is higher than in the prior quarter as the increase in yields during the quarter resulted in a shift in the yield at market of the portfolio higher.

PORTFOLIO PERFORMANCE - PROJECTIONS

- ➤ GLWA earned over \$12.0 million (unaudited) in investment interest income for fiscal year-to-date 2024 (as of 9/30/2023) on a book value basis.
- ➤ The fiscal year-to-date 2024 period earnings were slightly higher than 2023 year-to-date earnings, mainly due to another Federal Reserve interest rate hike that occurred during the past quarter.
- > The FY 2024 total interest earnings projection forecast is currently \$41 million for both restricted and unrestricted funds combined.

^{*} Yield at cost is based on the original cost of the individual investments from the purchase date to maturity. On the other hand, yield at market is calculated on a specific day (in this case, September 30, 2023) and assumes that all the securities in the portfolio are purchased given the market price/yield on that particular day. If one is to generally hold their investments to the stated maturity date, then the yield at cost would be the better number to use to gauge how the portfolio is performing.



Summary Market Overview and Outlook

ECONOMIC HIGHLIGHTS UPDATE

- At its September meeting, the Federal Reserve kept the overnight target rate unchanged in its current range of 5.25% to 5.50%. They did, however, signal that interest rates may still need to be a bit higher to counteract inflationary pressures, as reflected by the half-percent increase in the year-end 2024 and 2025 median projections for overnight rates compared to June estimates. Fed Chair Jerome Powell noted that the Fed can now "proceed carefully" thanks to its aggressive tightening early in this cycle.
- ➤ Inflation, as measured by CPI, posted a second straight significant monthly increase in September (+0.4%). This was in large part due to an increase in both shelter costs and gasoline prices. Overall, CPI increased by 3.7% from a year ago, holding at higher levels than in June and July. However, core inflation, excluding food and energy prices, continue to moderate, rising by 4.1% year-over-year, down from 4.3% in August and 4.7% in July. The most recent core inflation reading was the weakest since September of 2021.
- ➤ The employment report for September was surprisingly strong, with the U.S. economy adding 336,000 new jobs. Job gains occurred in leisure and hospitality, government, health care, professional and technical services, and social assistance. The unemployment rate held at 3.8% as the labor force continued to grow. Average hourly earnings, an important gauge of wages, rose by 4.2% year-over-year, the slowest pace in two years.
- ➤ The final estimate for second quarter GDP was unchanged at 2.1%. Some concerns have emerged as consumer spending advanced at only half the pace as previously reported, largely due to weaker services outlays. Stronger business fixed investment helped offset the slowdown in consumer spending; however, all eyes are on the ability of the consumer to support the desired economic soft landing.

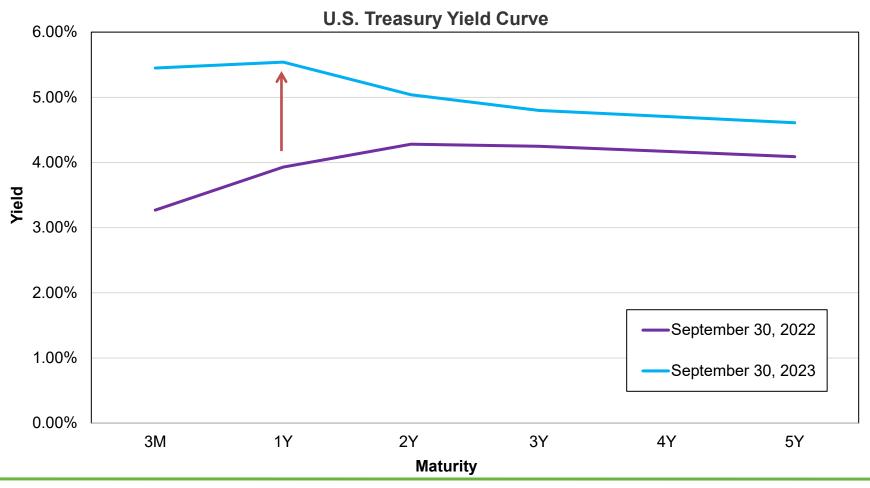
ECONOMIC IMPACT ON PORTFOLIO

- ➤ The 10-year U.S. Treasury yield closed September above 4.50% for the first time since October of 2007. Sticky inflation, a "higher-for-longer" market consensus, increased Treasury borrowing, and reduced holdings by China/Japan weighed on the long end of the curve.
- ➤ The Treasury yield curve remained inverted despite the notable increase in the 10-year yield in the third quarter. But the yield curve inversion became far less severe, falling from a peak of -108 basis points in early July to -47 basis points by quarter-end.
- > Tracking Treasury yields higher, 30-year mortgage rates climbed further, closing the month at a new cycle high of 7.74%, further impairing home affordability.
- ➤ The benchmark 3-month, 2 and 10-year U.S. Treasuries finished the quarter at 5.45%, 5.05%, and 4.57%, respectively.
- ➤ Portfolio Impact: The markets continue to recalibrate expectations for Fed policy with the consensus coalescing around rates being "higher for longer." At the same time, the inverted yield curve makes duration extension less attractive. Spreads on Agencies remain tight amid sparce issuance. Since new attractive buying opportunities have been limited, we will likely continue to lighten allocations in this sector. Short-term credit, including commercial paper, offer the highest yields in over fifteen years, and provide excellent earnings opportunities for cash investors.



Summary Market Overview and Outlook Treasury Yield Curve Presently Inverted

• Treasury yields continued to rise across the curve during the quarter; looking forward, the Federal Reserve looks to balance growth and continued elevated inflation with increased expectations of a "higher-for-longer" interest rate policy with the possibility of "additional policy firming."



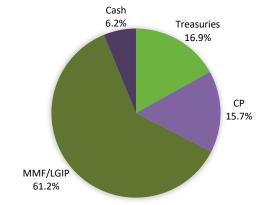


Portfolio Snapshot Overall Portfolio Composition Summary

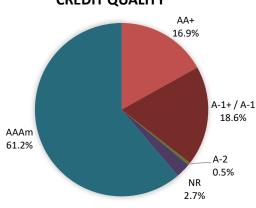
PORTFOLIO STATISTICS

Invested Amount	\$1.087 Billion		
Duration	0.18 Years		
Yield at Cost	4.82%		
Yield at Market	5.15%		

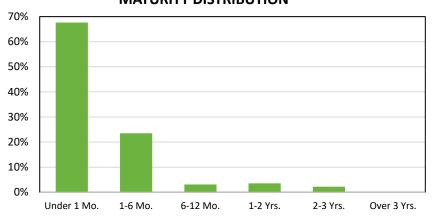
SECTOR ALLOCATION



CREDIT QUALITY



MATURITY DISTRIBUTION

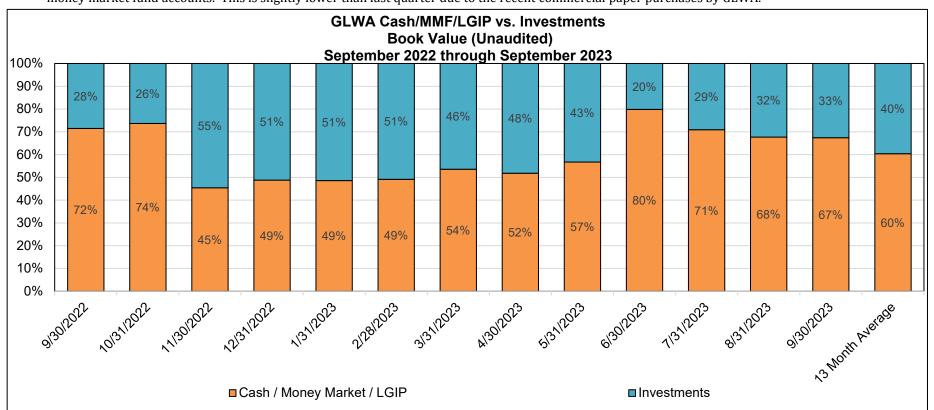




Portfolio Snapshot

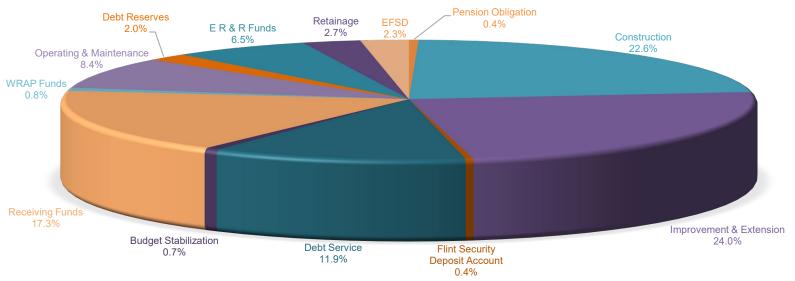
Portfolio Mix - Cash / Money Market vs. Investments

- > GLWA's liquidity requirements fluctuate each month based on operational requirements, capital funding, and debt payments. Based on a review of historical activity and refinement of cash flow projections, GLWA has continually tried to balance the allocation of the portfolio's holdings to cash & money market accounts versus the allocation to investments for the portfolio holdings.
- The chart below compares the monthly allocation of the portfolio holdings to the 13-month average. The allocation between cash and investments will vary each month based on liquidity requirements. For September of 2023, around 67% of the overall portfolio was invested in cash, LGIP, and/or overnight money market fund accounts. This is slightly lower than last quarter due to the recent commercial paper purchases by GLWA.





Portfolio Snapshot Investments – By Account Purpose

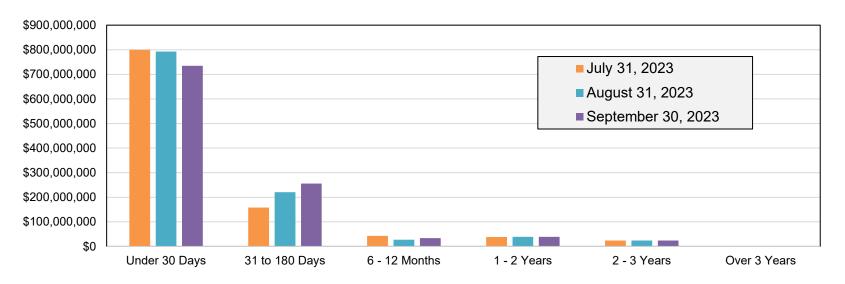


	Value	Allocation	Cost	Market		
Account Purpose	Market	%	Yield at	Yield at	Duration	Strategy
Improvement & Extension	\$ 260,471,262	24.0%	5.21%	5.21%	0.003 Years	Cash Flow Driven
Construction	\$ 245,802,697	22.6%	5.33%	5.44%	0.116 Years	Cash Flow Driven
Receiving Funds (includes lockbox account)	\$ 188,204,664	17.3%	5.18%	5.18%	0.003 Years	Short-Term
Debt Service	\$ 129,107,803	11.9%	5.62%	5.72%	0.316 Years	Short-Term
Operating & Maintenance	\$ 91,644,246	8.4%	5.14%	5.14%	0.003 Years	Short-Term
Extraordinary Repair & Replacement Funds	\$ 70,557,793	6.5%	1.58%	5.15%	1.383 Years	Long-Term
Retainage	\$ 29,849,481	2.7%	0.01%	0.01%	0.003 Years	Restricted Short-Term
Evergreen Farmington Sewer District	\$ 24,766,906	2.3%	4.12%	4.12%	0.003 Years	Restricted Short-Term
Debt Reserves	\$ 21,311,816	2.0%	3.94%	5.48%	0.816 Years	Long-Term
WRAP Funds	\$ 8,979,255	0.8%	5.51%	6.16%	0.093 Years	Short-Term
Budget Stabilization Funds	\$ 7,206,708	0.7%	1.80%	5.15%	1.445 Years	Long-Term
Pension Obligation Funds	\$ 4,885,353	0.4%	5.44%	5.56%	0.623 Years	Short-Term
Flint Security Deposit Account	\$ 3,939,144	0.4%	4.01%	4.01%	0.003 Years	Restricted Short-Term
Total	\$ 1,086,727,127	100.0%	4.82%	5.15%	0.184 Years	



Portfolio Snapshot Investments – By Maturity

Maturity Distribution	July 31, 2023	%	August 31, 2023	%	September 30, 2023	%
Under 30 Days	\$ 800,022,068	75.2%	\$ 792,705,382	71.8%	\$ 734,710,516	67.6%
31 to 180 Days	158,034,210	14.9%	220,706,065	20.0%	255,556,695	23.5%
6 - 12 Months	43,150,467	4.1%	27,454,895	2.5%	33,606,912	3.1%
1 - 2 Years	38,590,301	3.6%	38,707,267	3.5%	38,718,098	3.6%
2 - 3 Years	24,235,492	2.3%	24,255,454	2.2%	24,134,906	2.2%
Over 3 Years	-	0.0%	-	0.0%	-	0.0%
Totals	\$ 1,064,032,538	100.0%	\$ 1,103,829,062	100.0%	\$ 1,086,727,127	100.0%





Portfolio Snapshot Investment Accounts – Yield at Cost & Market

		nber 30, 2023	As of June 30, 2023			
Bank Deposits	YTM @ Cost	YTM @ Market	YTM @ Cost	YTM @ Marke		
Bank A	0.01%	0.01%	0.01%	0.01%		
Bank B	0.01%	0.01%	0.01%	0.01%		
Flint Deposit Account	4.01%	4.01%	3.70%	3.70%		
Bank C	4.01%	4.01%	3.70%	3.70%		
Sub-Total Bank Deposits	1.92%	1.92%	2.00%	2.00%		
Money Market Funds / LGIPs						
Local Government Investment Pool	5.48%	5.48%	5.21%	5.21%		
Trust Money Market Fund	5.21%	5.21%	4.97%	4.97%		
Money Market Fund	5.22%	5.22%	4.99%	4.99%		
Sub-Total MMF / LGIPs	5.29%	5.29%	5.04%	5.04%		
Investment Portfolios						
Sewage SR Debt Serv 5403	5.60%	5.68%	0.00%	0.00%		
Sewage SR Res 5400	3.30%	5.47%	0.49%	5.21%		
Sew 2nd Debt Serv 5403	5.62%	5.73%	0.00%	0.00%		
Sewage 2nd Res 5481	4.92%	5.47%	4.23%	5.21%		
Sew SRF Debt Serv 5410	5.79%	5.87%	5.29%	5.34%		
Sewage ER & R	1.51%	5.15%	0.45%	5.12%		
Sewer Improvement & Extension	0.00%	0.00%	1.32%	4.74%		
Sewer Pension Obligation	5.46%	5.57%	0.00%	0.00%		
Sewer Wrap Fund	5.60%	6.36%	5.32%	5.44%		
Sewer Budget Stabilization Fund	1.76%	5.15%	0.46%	5.13%		
Sewer Bond Fund	5.08%	5.41%	5.07%	5.33%		
Sewer O&M Pension Sub Account	5.31%	5.52%	0.00%	0.00%		
Water SR Debt Ser 5503	5.62%	5.73%	0.00%	0.00%		
Water SR Reserve 5500	4.49%	5.49%	1.60%	5.26%		
Water 2nd Debt Serv 5503	5.61%	5.74%	0.00%	0.00%		
Water 2nd Res 5581	5.08%	5.49%	4.28%	5.26%		
Water SRF Debt Serv 5575	5.82%	5.86%	5.19%	5.29%		
Water ER & R	1.67%	5.16%	0.45%	5.14%		
Water Improvement & Extension	0.00%	0.00%	0.29%	3.78%		
Water Pension Obligation	5.50%	5.59%	0.00%	0.00%		
Water Wrap Fund	5.58%	6.54%	5.35%	5.35%		
Water Budget Stabilization Fund	1.85%	5.15%	0.47%	5.13%		
Water Bond Fund	5.54%	5.69%	5.53%	5.32%		
Water O&M Pension Sub Account	5.31%	5.52%	0.00%	0.00%		
Sub-Total Investment Portfolios	4.49%	5.51%	3.77%	5.24%		
Grand Total	<u>4.82%</u>	<u>5.15%</u>	<u>4.60%</u>	<u>4.90%</u>		

YTM @ Cost is the expected return, based on the original cost, the annual interest receipts, maturity value and the time period from purchase date to maturity, stated as a percentage, on an annualized basis. YTM @ Market is the rate of return, based on the current market value, the annual interest receipts, maturity value and time period remaining until maturity, stated as a percentage, on an annualized basis.



Portfolio Snapshot Peer Analysis Comparison

- The comparison agencies included in the list below were selected based on type and/or other non-performance-based criteria to show a broad range of water entities/utilities; this peer group list does not represent an endorsement of any of the public agencies or their services.
- The overall yield of GLWA's aggregate portfolio compares somewhat similarly to those of other short-term market indices (i.e., the S&P LGIP index and the 3-month U.S. Treasury index), despite the volatility of short-term interest rates and the limited ability in managing assets to a longer-term strategy.
- > GLWA does have some limitations and unique constraints related to its ordinance and covenants that restricts the potential for a longer duration portfolio when compared to other similar water agencies.

	As of September 30, 2023				
	Mark et Value	YTM @ Market	Effective Duration	Weighted Average Maturity	
GLWA					
Great Lakes Water Authority	\$1,086,727,127	5.15%	0.18 Years	67 Days	
Short/Intermediate-Term Indices					
S&P Rated Government Investment Pool Index		5.39%	0.08 Years	30 Days	
BoA / ML 3-Month Treasury Index		5.36%	0.16 Years	58 Days	
BoA / ML 6-Month Treasury Index		5.47%	0.40 Years	146 Days	
BoA / ML 1-Year Treasury Index		5.50%	0.88 Years	321 Days	
BoA / ML 1-3 Year Treasury Index		5.14%	1.75 Years	639 Days	
BoA / ML 1-5 Year Treasury Index		4.97%	2.50 Years	913 Days	
Door Analysis (Mater Entities / Hillities)					
Peer Analysis (Water Entities / Utilities) District of Columbia Water & Sewer Authority, DC	\$437,586,513	5.23%	0.93 Years	369 Days	
DuPage Water Commission, IL	\$190,192,648	5.14%	1.97 Years	950 Days	
Fairfax County Water Authority, VA	\$185,501,036	5.15%	1.83 Years	705 Days	
Metro Wastewater Reclamation District, CO	\$204,810,637	5.08%	2.16 Years	871 Days	
Metropolitan Water District of Southern California,	' ' '	5.33%	1.57 Years	698 Days	
Philadelphia Water Department, PA	\$233,785,815	5.57%	0.83 Years	311 Days	
San Bernardino Valley Municipal Water District, C	A \$338,951,275	5.22%	1.66 Years	648 Days	
Tohopekaliga Water Authority, FL	\$198,623,299	4.94%	1.69 Years	863 Days	
Truckee Meadows Water Authority, NV	\$80,586,226	5.13%	1.83 Years	690 Days	

The BoA / ML indexes are unmanaged indexes tracking on-the-run Treasuries. These indexes are produced and maintained by Bank of America / Merrill Lynch & Co. Yield to maturity is the rate of return, based on the current market value, the annual interest receipts, maturity value and time period remaining until maturity, stated as a percentage, on an annualized basis.



Portfolio Snapshot

Monthly Investment Income

(Book Value in 000's)

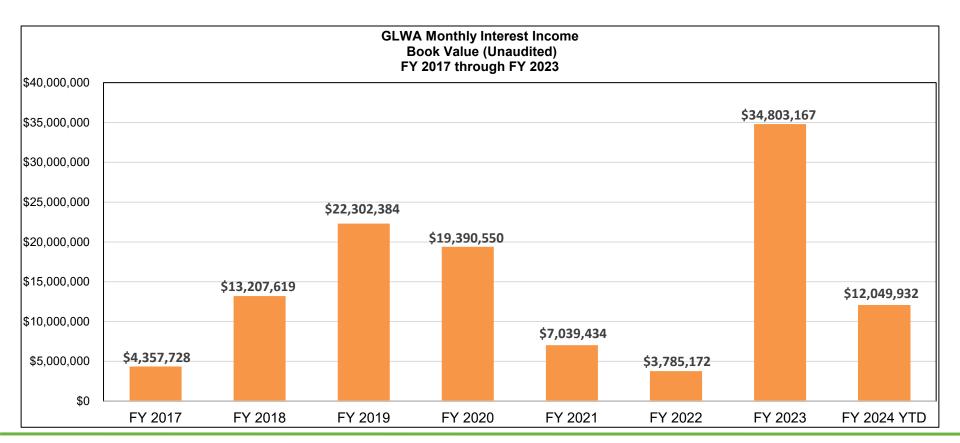
FY 2024 INVESTMENT INCOME BY MONTH (Unaudited)

Month	Interest Earned During Period (in thousands)	Realized Gain / Loss (in thousands)	Investment Income (in thousands)
July 2023	\$3,920.9	\$0.0	\$3,920.9
August 2023	\$4,068.8	\$0.0	\$4,068.8
September 2023	\$4,060.2	\$0.0	\$4,060.3
FY 2024 Y-T-D	<u>\$12,049.9</u>	<u>\$0.0</u>	<u>\$12,049.9</u>



Portfolio Snapshot Year-Over-Year Investment Income

- ➤ GLWA earned \$12,049,932 in investment income for the first three months of fiscal year 2024 on a book value basis compared to \$1,732,104 for the first three months of fiscal year 2023.
- ➤ Based on current market assumptions and the anticipated addition of assets and proceeds from GLWA's upcoming bond fund issue, projected investment income for fiscal year 2024 is forecasted to be around \$41 million for all fund types (both restricted and unrestricted funds combined), as the market expects the Federal Reserve to hold overnight rates "higher for longer" over the next several months.

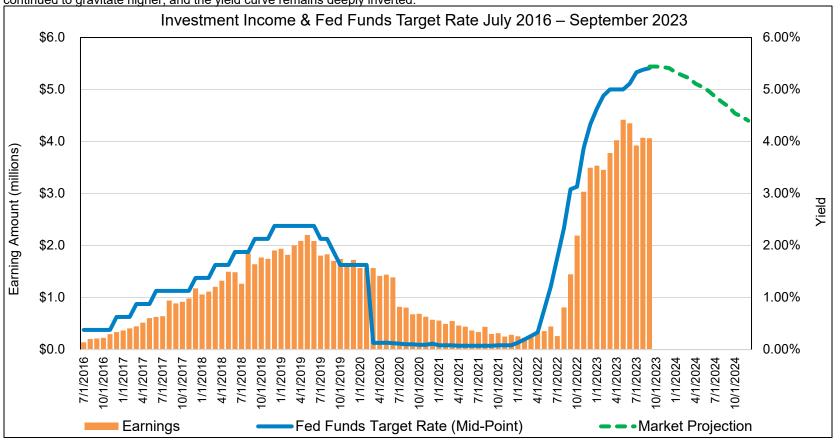




Portfolio Snapshot

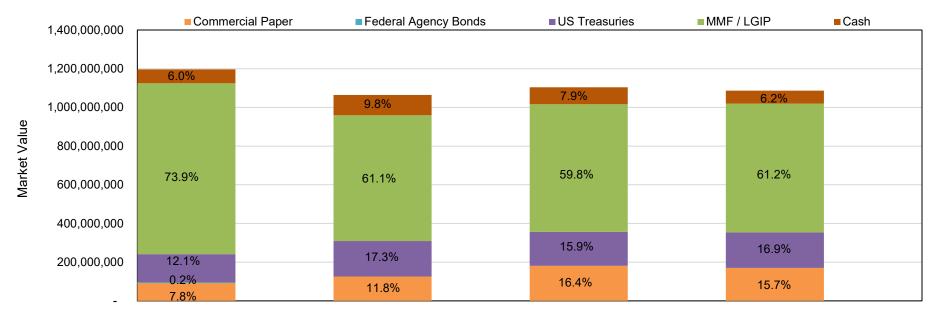
Monthly Investment Income Compared to Fed Funds Rate

- At least 50% of the GLWA portfolio is designated for obligations that are 12 months or less. As a result of the short-term duration of GLWA's portfolio, it is heavily impacted by changes in the Fed Funds rate; the chart below shows that GLWA's income has consistently followed the trend of the Fed Funds rate.
- > The top end of the Fed Funds rate is at 5.50% and there is a possibility of another hike later this calendar year. With the economy remaining resilient and yields expected to remain at elevated levels, GLWA is expected to have higher interest earnings for fiscal year 2024. The markets seem to be converging to the Fed's long-standing view that the U.S. would avoid a recession and short-term rates will remain elevated for the foreseeable future. Rates have continued to gravitate higher, and the yield curve remains deeply inverted.





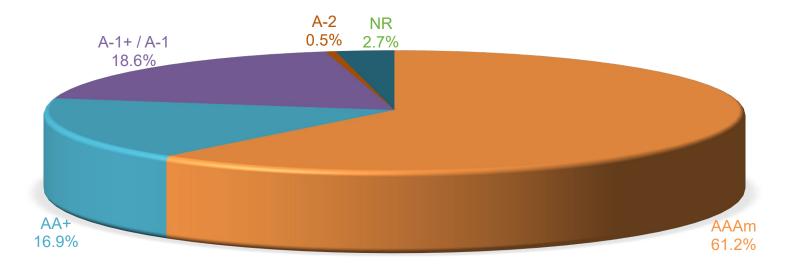
Portfolio Snapshot Investments – By Security Type



	June		July		Augus	st	Septem	ber
Security Type	Market Value	Asset Allocation	Market Value	Asset Allocation		Asset Allocation	Market Value	Asset Allocation
Commercial Paper	93,529,261	7.8%	125,572,748	11.8%	181,183,197	16.4%	170,295,243	15.7%
Federal Agencies	2,897,152	0.2%	-	0.0%	-	0.0%	-	0.0%
U.S. Treasuries	144,796,156	12.1%	183,816,211	17.3%	175,001,570	15.9%	183,720,457	16.9%
MMF / LGIP	883,554,877	73.9%	650,014,314	61.1%	660,488,767	59.8%	665,532,511	61.2%
Cash	71,607,183	6.0%	104,629,265	9.8%	87,155,528	7.9%	67,178,916	6.2%
Total	1,196,384,628	100.0%	1,064,032,538	100.0%	1,103,829,062	100.0%	1,086,727,127	100.0%



Portfolio Snapshot Investments – By Credit Quality



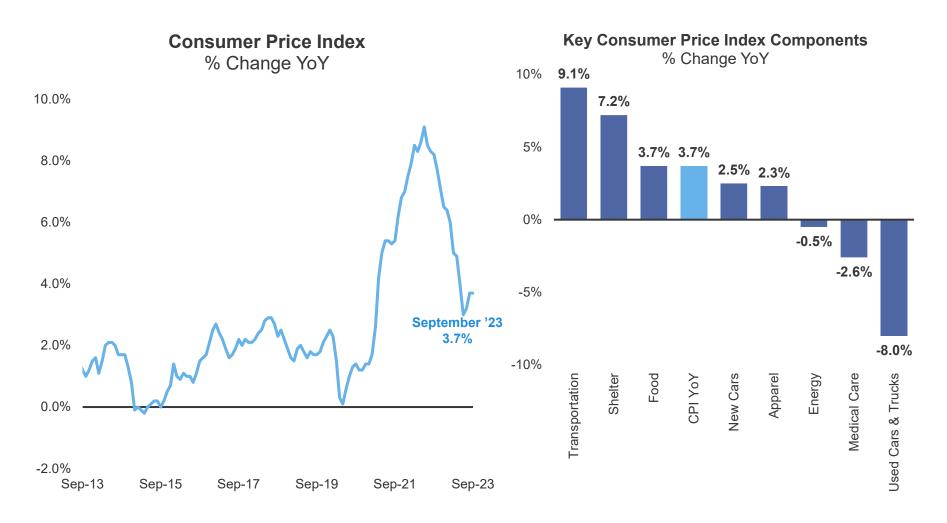
Credit Quality	Market Value	Asset Allocation
Ratings		
AAAm	665,532,511	61.2%
AA+	183,737,911	16.9%
A-1 + / A-1	202,424,688	18.6%
A-2	5,182,536	0.5%
NR	29,849,481	2.7%
Totals	1,086,727,127	100.0%



Appendix I: Economic Update



Consumer Inflation

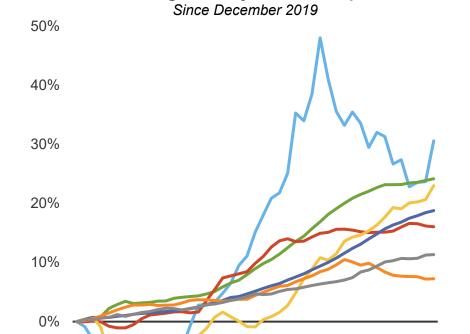


Source: Bloomberg, as of September 2023.



Inflation Remained Elevated, Led by Transportation

Price Change of Major CPI Components



CPI Component	12-mo. Change	Weight ¹	Contribution to YoY CPI
Energy	-0.5%	7.2%	0.0%
Food	3.7%	13.4%	0.5%
Transportation	9.0%	6.0%	0.5%
Goods	0.0%	21.1%	0.0%
Shelter	7.1%	34.7%	2.5%
Medical services	-2.6%	6.3%	-0.2%
Other Services ²	4.2%	11.3%	0.5%
Overall	3.7%		

Source: Bloomberg, Bureau of Labor Statistics as of September 2023.

2020

2021

2022

-10%

-20%

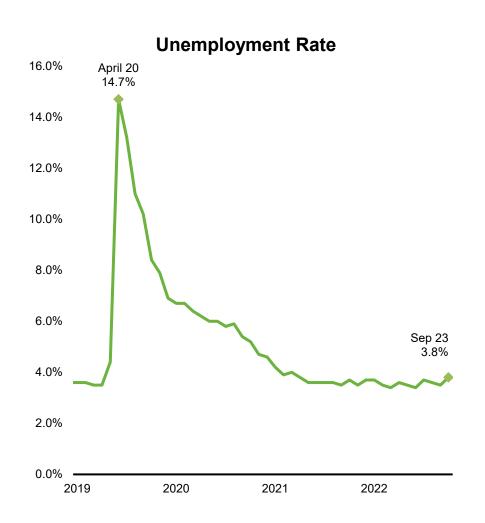
2019

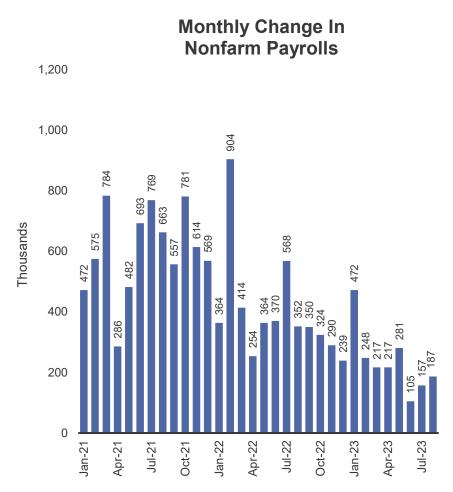
¹ Index weights are as of August 2023 as they are published on a one-month lag.

² Other services is a weighted blend of Water/Sewer/Trash, Household Operations, Recreation, and Education and Communication services.



Unemployment Rate Stayed at 3.8%



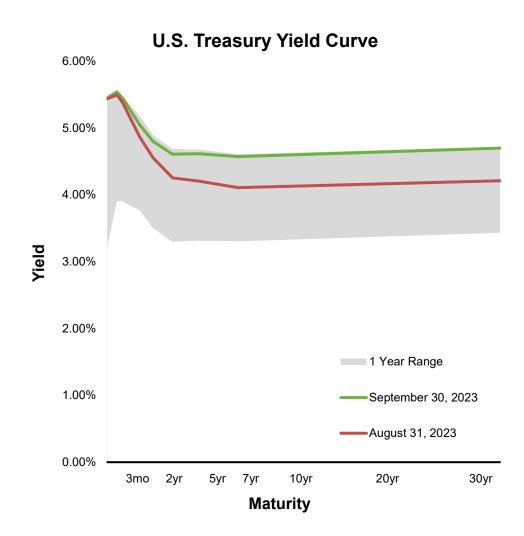


Source: Bloomberg, as of August 2023 & September 2023. Data is seasonally adjusted.



Treasury Yield Curve

	08/31/2023	09/30/2023	<u>Change</u>
3 month	5.44%	5.45%	0.01%
6 month	5.50%	5.54%	0.04%
1 year	5.38%	5.45%	0.07%
2 year	4.86%	5.04%	0.18%
3 year	4.55%	4.80%	0.25%
5 year	4.25%	4.61%	0.36%
10 year	4.11%	4.57%	0.46%
30 year	4.21%	4.70%	0.49%



Source: Bloomberg, as of 8/31/2023 and 9/30/2023, as indicated.



Fixed Income Market Overview and Outlook

FIXED INCOME MARKET - ECONOMIC HIGHLIGHTS

- The previous quarter was mostly characterized by the consumer continuing to spend, supported by rising wages and also a strong labor market
 - The potential for additional monetary policy tightening by the Federal Reserve remains possible in light of the Federal Reserve's projections for stronger domestic product growth, higher inflation, and slightly lower unemployment for the balance of the year
 - As interest rates climbed to recent highs, equity markets declined from calendar year highs and modest de-risking swept markets near quarter-end
 - Overall, the U.S. economy is characterized by: (i) stronger than expected growth, supported by a resilient consumer; (ii) inflation that remains stubbornly above the Federal Reserve's target range; and (iii) continued creation of new jobs by the labor market, albeit at a moderating pace
- ➤ The Fed met twice during the past quarter, increasing the target rate by 25 basis points in July to a new range of 5.25% to 5.50% while holding that range steady following the September meeting
 - Despite the pause in September, the post-meeting dot plot projections dominated headlines as calendar year 2024 and 2025 median rate expectations were adjusted higher by 50 basis points each, highlighting the reality of a potentially "higher for much longer" interest rate environment
- The Fed paused again in its rate hike campaign
 - After hiking in July, the Federal Reserve held rates steady at the September FOMC meeting as expected
 - The Fed's most recent "dot plot" indicated one more rate hike for 2023 and set the stage for interest rates to remain "higher for longer"
 - Updated FOMC economic projections point to stronger GDP growth expectations, higher inflation, and slightly lower unemployment for the remainder of 2023 and into 2024



Fixed Income Market Overview and Outlook

FIXED INCOME MARKET - ECONOMIC HIGHLIGHTS

- U.S. Treasury yields increased across the entire curve during the previous quarter, with most tenors closing the quarter at multidecade highs
 - While the yield curve still remains deeply inverted due to yields on the front end reacting to several quarters of Fed rate increases, more recent yield increases have been led by longer maturities
- Over the quarter, the yield on a 2, 10, and 30-year U.S. Treasury security increased by 15 basis points, 73 basis points, and 84 basis points, respectively, while the yield on a 3-month U.S. Treasury Bill increased by only 5 basis points
 - The increase in the 30-year yield marked the largest quarterly increase in more than 14 years
 - Along with the steepening of the curve, the inversion of the yield curve became less severe by quarter-end
 - After reaching a low of -108 basis points in early July, the yield difference between the 2 and 10-year U.S. Treasury closed the quarter at -47 basis points
- ▶ Interest rates reached their highest levels since 2006 2007
 - The U.S. government rating downgrade by Fitch had little impact, although it highlighted growing worry about the erosion of governance standards and fiscal irresponsibility
 - Treasury yields across the curve rose during the past quarter; sticky inflation, a "higher for longer" market consensus, increased Treasury borrowing, and reduced Treasury holdings by China and Japan weighed especially on the long end of the curve
 - The next concern is the annual federal budget process and potential for a government shutdown
- Diversification away from U.S. Treasury securities was generally additive to fixed-income performance during the previous quarter as spreads across most sectors tightened or remained relatively stable
 - Broadly, lower quality and longer duration securities outperformed their higher quality and shorter-term counterparts



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