Great Lakes Water Authority

Investment Performance Report – June 2023





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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 97% 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 S&P.
- 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 June 30, 2023, approximately 80% of GLWA's funds were held in cash and money market accounts maturing overnight. The percentage is higher than last quarter due to cash needed for July 1st debt payments.
- ➤ Return The overall yield at market increased to 4.90% as of June 30, 2023, versus 4.60% as of March 31, 2023. The higher yield is reflective of the rise in rates that the market has experienced. GLWA earned \$34.8 million (unaudited) in investment income for fiscal year 2023 on a book value basis. It should be noted that the budgeted investment income for GLWA for FY 2023 was expected to be \$32.5 million. Investment income includes earning on funds for construction and bond proceeds.

AVAILABLE FUNDS (Unaudited)						
Туре	Book Value	Market Value	Yield @ Cost (as of 6/30/23)	Yield @ Market (as of 6/30/23)		
Deposit Account	\$38,965,397	\$38,965,397	3.70%	3.70%		
Deposit Account - Retainage	\$28,719,854	\$28,719,854	0.01%	0.01%		
Deposit Account – Flint Security Deposit	\$3,904,990	\$3,904,990	3.70%	3.70%		
Trust Money Market Fund	\$628,823,635	\$628,823,635	4.97%	4.97%		
Money Market Fund	\$9,342,562	\$9,342,562	4.99%	4.99%		
Local Government Investment Pool	\$245,388,679	\$245,388,679	5.21%	5.21%		
Managed Funds	\$245,160,978	\$241,239,511	3.77%	5.24%		
JUNE 2023 TOTALS:	<u>\$1,200,306,095</u>	<u>\$1,196,384,628</u>	<u>4.60%</u>	<u>4.90%</u>		
PREVIOUS QUARTER TOTALS:	<u>\$1,237,391,191</u>	<u>\$1,233,322,743</u>	<u>4.27%</u>	<u>4.60%</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 4.27\$ as of 3/31/2023 to 4.60% as of 6/30/2023; the higher yield is a result of reinvesting proceeds of lower-yielding securities that have matured in a higher interest rate environment.
- > The total portfolio had a market yield of 4.90% at the end of June. Yield at market represents what the market would provide in return if the portfolio was purchased on June 30, 2023 (versus purchased in prior months / years).
 - This 4.90% yield at market as of 6/30/2023 is higher than in the prior quarter as the increase in short-term yields during the first half of calendar year 2023 resulted in a shift in the yield at market of the portfolio higher.

PORTFOLIO PERFORMANCE – PROJECTIONS

- ➤ GLWA earned over \$34.8 million (unaudited) in investment interest income for fiscal year 2023 (as of 6/30/2023) on a book value basis.
- > It should be noted that the FY 2023 total interest earnings projection forecast was estimated to be around \$32.5 million.
- > The fiscal year period earnings were slightly higher than budgeted expectations, mainly due to more Federal Reserve interest rate hikes priced into the market.

^{*} 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, March 31, 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

- The Federal Reserve (the "Fed") held its benchmark interest rate unchanged on June 14th but signaled more hikes are still on the table this year. The "hawkish pause" pushed Treasury yields higher as markets accepted a higher-for-longer overnight target rate.
- ➤ The May CPI report indicated that prices increased by 4.0% year-over-year. While still elevated relative to the Fed's preferred target of 2.0%, the pace of increases declined for the eleventh consecutive month.
- ➤ The June employment report showed the slowest pace of job creation since December of 2020, posting gains of 209,000. This was down from a revised reading of 306,000 in May. Employment continued to trend up in government, healthcare, social assistance, construction, professional and business services, and leisure and hospitality. The unemployment rate in June fell modestly to 3.6%, down from 3.7% in May. Average hourly earnings increased by 0.4% in June, matching the May print.
- ➤ Real gross domestic product ("GDP") increased at an annual rate of 2.0% in the first quarter of calendar year 2023, modestly surprising to the upside as estimates called for growth of 1.4%.
- > The services sector continued to expand in June, following a trend that has continued in 36 of the last 37 months. On the other hand, the slide in the manufacturing sector continued as it posted its eighth consecutive month in contractionary territory.
- ➤ The average national 30-year mortgage rate hovered above 7.00% in June. Existing home sales continue to show tight inventory. On the other hand, new home sales jumped by 12.2% to a seasonally adjusted annual rate of 763,000, the highest level since February of 2022. Housing starts also surged in May, underscoring the strength of the consumer and the resilient housing market.

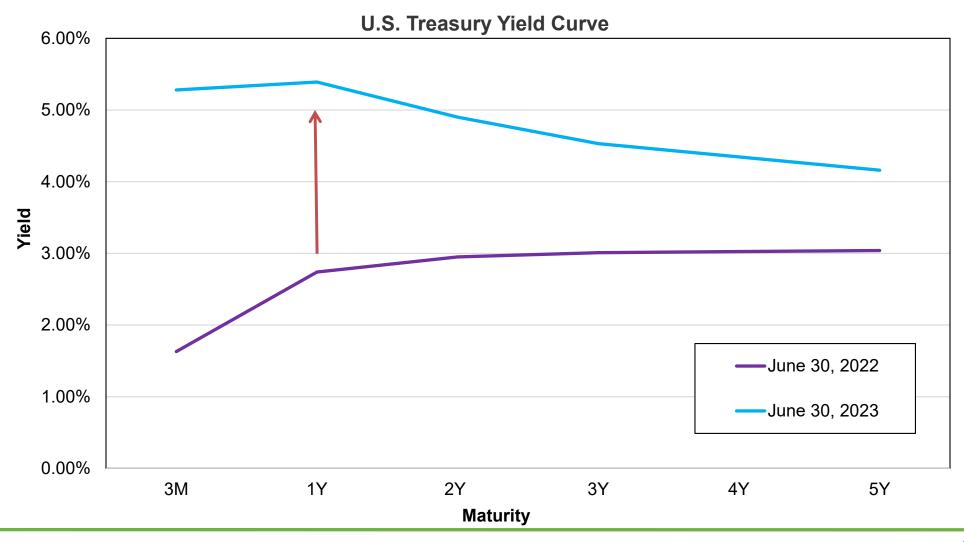
ECONOMIC IMPACT ON PORTFOLIO

- ➤ U.S. Treasury yields beyond one year pushed higher in June, led by a 0.49% increase in the 2-year maturity. The inversion in the yield curve (as measured by the difference between the 2 and 10-year maturities) deepened to more than 100 basis points by the end of the month, marking the greatest disparity between the two measures since 1981.
- ➤ With the exception of only the shortest maturities, U.S. Treasury yields increased in the quarter, as benchmark 2, 5, and 10-year Treasuries finished the quarter at 4.90%, 4.16%, and 3.84%...
- ➤ Portfolio Impact: Throughout the quarter, Fed Chair Jerome Powell reiterated that more rate hikes are likely, echoing the Fed's updated dot plot released in June, which showed two more rate hikes by December. Given the steady ascent of yields over the quarter and steadfast Fed speak indicating higher-for-longer overnight rates, we have maintained a modestly defensive duration bias. However, it should be noted that the 2-year U.S. Treasury yield surged over 100 basis points from early May lows through the end of June. We will likely continue to maintain a marginally defensive bias as the yield curve remains near historically extreme levels of inversion. Spreads in non-Treasury government sectors such as Agencies remain tight. New buying opportunities are limited, and this sector may be utilized for duration-rebalancing trades.



Summary Market Overview and Outlook Treasury Yield Curve Presently Inverted

• It should be noted that the Federal Reserve delivered another rate hike in the previous quarter with a continued hawkish tone that has driven yields back up towards the upper-end of their recent range.



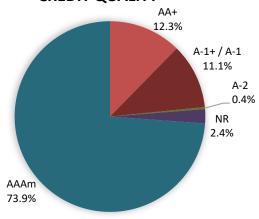


Portfolio Snapshot Overall Portfolio Composition Summary

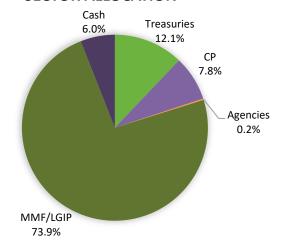
PORTFOLIO STATISTICS

Invested Amount	\$1.196 Billion		
Duration	0.11 Years		
Yield at Cost	4.60%		
Yield at Market	4.90%		

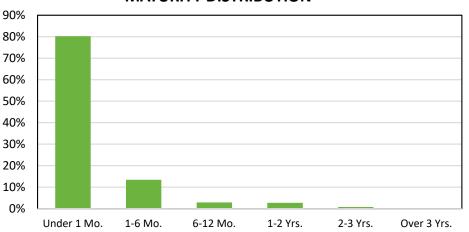
CREDIT QUALITY



SECTOR ALLOCATION



MATURITY DISTRIBUTION

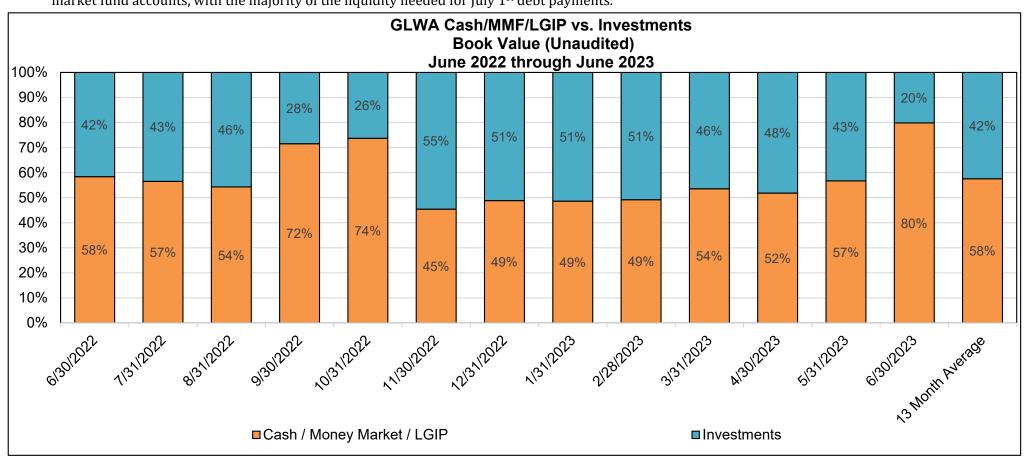




Portfolio Snapshot

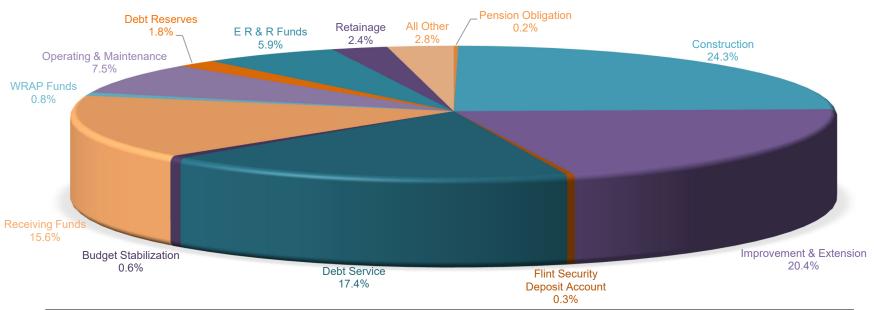
Portfolio Mix - Cash / Money Market vs. Investments

- > 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 June of 2023, about 80% of the overall portfolio was invested in cash, LGIP, and/or overnight money market fund accounts, with the majority of the liquidity needed for July 1st debt payments.





Portfolio Snapshot Investments – By Account Purpose



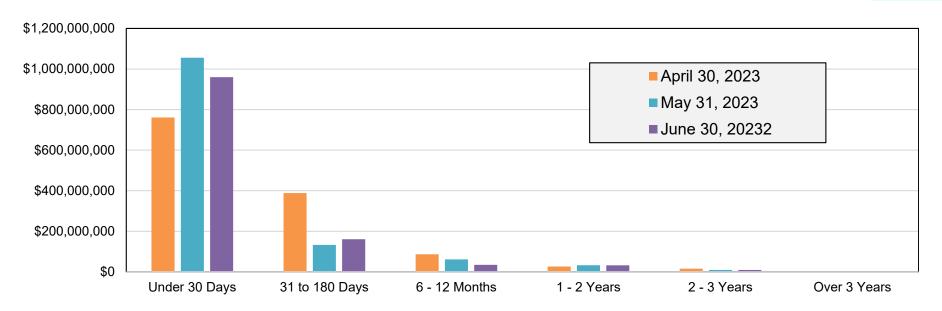
	Value	Allocation	Cost	Market		
Account Purpose	Market	%	Yield at	Yield at	Duration	Strategy
Construction	\$ 290,766,652	24.3%	5.13%	5.26%	0.128 Years	Cash Flow Driven
Improvement & Extension	\$ 244,103,364	20.4%	4.76%	4.95%	0.008 Years	Cash Flow Driven
Debt Service	\$ 207,712,252	17.4%	5.01%	5.03%	0.039 Years	Short-Term
Receiving Funds (includes lockbox account)	\$ 186,795,259	15.6%	4.94%	4.94%	0.003 Years	Short-Term
Operating & Maintenance	\$ 89,618,300	7.5%	4.97%	4.97%	0.003 Years	Short-Term
Extraordinary Repair & Replacement Funds	\$ 70,433,735	5.9%	1.77%	5.08%	0.928 Years	Long-Term
Other*	\$ 33,905,624	2.8%	3.78%	3.78%	0.003 Years	Restricted Short-Term
Retainage	\$ 28,719,854	2.4%	0.01%	0.01%	0.003 Years	Restricted Short-Term
Debt Reserves	\$ 21,201,014	1.8%	4.73%	5.05%	0.469 Years	Long-Term
WRAP Funds	\$ 9,700,084	0.8%	5.29%	5.35%	0.142 Years	Short-Term
Budget Stabilization Funds	\$ 7,195,549	0.6%	2.01%	5.08%	0.862 Years	Long-Term
Flint Security Deposit Account	\$ 3,904,990	0.3%	3.70%	3.70%	0.003 Years	Restricted Short-Term
Pension Obligation Funds	\$ 2,327,952	0.2%	5.06%	5.06%	0.003 Years	Short-Term
Total	\$ 1,196,384,628	100.0%	4.60%	4.90%	0.110 Years	

^{*} In addition to the totals listed above, there also exists GLWA EFSD deposits nd DWSD EFSD deposits in the "Other" category as of June 30, 2023.



Portfolio Snapshot Investments – By Maturity

Maturity Distribution	April 30, 2023	%	May 31, 2023	%	June	30, 2023	%
Under 30 Days	\$ 761,104,518	59.6%	\$ 1,055,790,913	81.7%	\$ 959	9,983,380	80.2%
31 to 180 Days	388,187,667	30.4%	132,916,601	10.3%	160	0,652,983	13.4%
6 - 12 Months	86,707,172	6.8%	61,506,347	4.8%	34	1,383,631	2.9%
1 - 2 Years	26,206,939	2.1%	32,424,535	2.5%	32	2,273,953	2.7%
2 - 3 Years	15,587,907	1.2%	9,171,047	0.7%	9	9,090,682	0.8%
Over 3 Years	-	0.0%	-	0.0%		-	0.0%
Totals	\$ 1,277,794,203	100.0%	\$ 1,291,809,443	100.0%	\$ 1,196	6,384,628	100.0%





Portfolio Snapshot Investment Accounts – Yield at Cost & Market

riola at oost a market					
	,		ch 31, 2023		
YTM @ Cost	YTM @ Market	YTM @ Cost	YTM @ Market		
0.040/	0.040/	0.040/	0.040/		
			0.01%		
			0.01%		
			3.03%		
			3.03%		
2.00%	2.00%	0.61%	0.61%		
5.21%	5.21%	4.76%	4.76%		
4.97%	4.97%	4.61%	4.61%		
4.99%	4.99%	3.07%	3.07%		
5.04%	5.04%	4.63%	4.63%		
0.00%	0.00%	5 11%	5.06%		
			4.43%		
	-		5.05%		
	7 7 7		4.43%		
	-		5.26%		
			4.37%		
	-		4.52%		
		4.46%	4.80%		
			4.87%		
0.46%	5.13%	0.45%	4.38%		
5.07%	5.33%	5.09%	4.87%		
0.00%	0.00%	4.28%	4.79%		
0.00%	0.00%	5.11%	5.05%		
1.60%	5.26%	0.70%	4.54%		
0.00%	0.00%	5.12%	5.03%		
4.28%	5.26%	4.18%	4.54%		
5.19%	5.29%	5.05%	5.02%		
0.45%	5.14%	0.43%	4.37%		
0.29%	3.78%	0.36%	4.62%		
0.00%	0.00%	4.43%	4.80%		
5.35%	5.35%	4.91%	4.90%		
0.47%	5.13%	0.45%	4.37%		
5.53%	5.32%	5.34%	4.99%		
0.00%	0.00%	4.29%	4.79%		
3.77%	5.24%	4.13%	4.84%		
4.60%	4.90%	4.27%	4.60%		
	As of Jun YTM @ Cost 0.01% 0.01% 3.70% 3.70% 2.00% 5.21% 4.97% 4.99% 5.04% 0.00% 0.49% 0.00% 4.23% 5.29% 0.45% 1.32% 0.00% 5.32% 0.46% 5.07% 0.00% 0.00% 4.28% 5.19% 0.45% 0.29% 0.45% 0.29% 0.45% 0.29% 0.45% 0.29% 0.45% 0.29% 0.45% 0.29% 0.00% 5.35% 0.47% 5.53% 0.00%	As of June 30, 2023 YTM @ Cost YTM @ Market 0.01%	As of June 30, 2023 As of Mark YTM @ Cost YTM @ Cost YTM @ Market YTM @ Cost 0.01% 0.01% 0.01% 0.01% 0.01% 0.01% 3.70% 3.70% 3.03% 3.70% 3.70% 3.03% 2.00% 2.00% 0.61% 5.21% 4.76% 4.97% 4.99% 4.99% 3.07% 5.04% 5.04% 4.63% 0.00% 0.00% 5.11% 0.49% 5.21% 0.32% 0.00% 5.01% 4.17% 5.29% 5.34% 5.26% 0.45% 5.12% 4.40% 1.32% 4.74% 0.77% 0.00% 5.03% 5.09% 0.46% 5.13% 0.45% 5.07% 5.33% 5.09% 0.00% 1.1% 0.45% 5.07% 5.33% 5.09% 0.00% 0.00% 5.11% 0.00% 0.00% 5.12%		

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 favorably 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 June 30, 2023				
	Mark et Value	YTM @ Market	Effective Duration	Weighted Average Maturity	
GLWA					
Great Lakes Water Authority	\$1,196,384,628	4.90%	0.11 Years	40 Days	
Short/Intermediate-Term Indices					
S&P Rated Government Investment Pool Index		5.10%	0.08 Years	30 Days	
BoA / ML 3-Month Treasury Index		5.18%	0.14 Years	51 Days	
BoA / ML 6-Month Treasury Index		5.29%	0.39 Years	142 Days	
BoA / ML 1-Year Treasury Index		5.45%	0.89 Years	325 Days	
BoA / ML 1-3 Year Treasury Index		5.01%	1.75 Years	639 Days	
BoA / ML 1-5 Year Treasury Index		4.73%	2.50 Years	913 Days	
Peer Analysis (Water Entities / Utilities)					
District of Columbia Water & Sewer Authority, DC	\$402,021,449	5.10%	0.99 Years	400 Days	
DuPage Water Commission, IL	\$190,484,912	4.90%	1.96 Years	946 Days	
Fairfax County Water Authority, VA	\$201,652,712	4.93%	1.81 Years	698 Days	
Metro Wastewater Reclamation District, CO	\$208,820,154	4.85%	2.15 Years	862 Days	
Metropolitan Water District of Southern California, CA	\$1,008,799,751	5.05%	1.24 Years	543 Days	
Philadelphia Water Department, PA	\$201,925,183	5.47%	0.86 Years	325 Days	
San Bernardino Valley Municipal Water District, CA	\$336,472,902	5.05%	1.67 Years	658 Days	
Tohopekaliga Water Authority, FL	\$197,194,775	4.78%	1.71 Years	867 Days	
Truckee Meadows Water Authority, NV	\$88,939,662	4.88%	1.89 Years	713 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 - Accrual Basis

(Book Value in 000's)

FY 2023 INVESTMENT INCOME BY MONTH (Unaudited)

Month	Interest Earned During Period (in thousands)	Realized Gain / Loss (in thousands)	Investment Income (in thousands)
Jul-22	\$567.7	(\$310.2)*	\$257.5
Aug-22	\$807.7	\$0.0	\$807.7
Sep-22	\$1,638.1	(\$192.9)*	\$1,445.3
Oct-22	\$2,191.1	\$0.0	\$2,191.1
Nov-22	\$3,032.8	\$0.0	\$3,032.8
Dec-22	\$3,493.9	\$0.0	\$3,493.9
Jan-23	\$3,534.0	\$37.3	\$3,571.3
Feb-23	\$3,455.3	\$0.0	\$3,455.3
Mar-23	\$3,777.6	\$0.0	\$3,777.6
Apr-23	\$4,024.2	\$0.0	\$4,024.2
May-23	\$4,418.2	(\$22.3)*	\$4,395.8
Jun-23	\$4,350.7	\$0.0	\$4,350.7
FY 2023 - Accrual Basis	<u>\$35,291.2</u>	<u>(\$488.0)</u>	<u>\$34,803.2</u>
Memo: FY 2023 - Cash Basis	\$21,280.0		

^{*} The realized loss in July of 2022 was due to the sale of investments in the Water I&E account in anticipation of liquidity requirements. The realized loss in September of 2022 was due to the sale of investments to fund the Debt Service Reserve Fund ("DSRF") releases. The realized loss in May of 2023 was due to the sale of Treasuries within the "X-date" period of time as a result of the uncertainty regarding the debt ceiling.

These figures are based upon actual interest earned and posted to the Authority's various accounts via book value and does not include any earnings credit rate tied to the Authority's bank deposits.

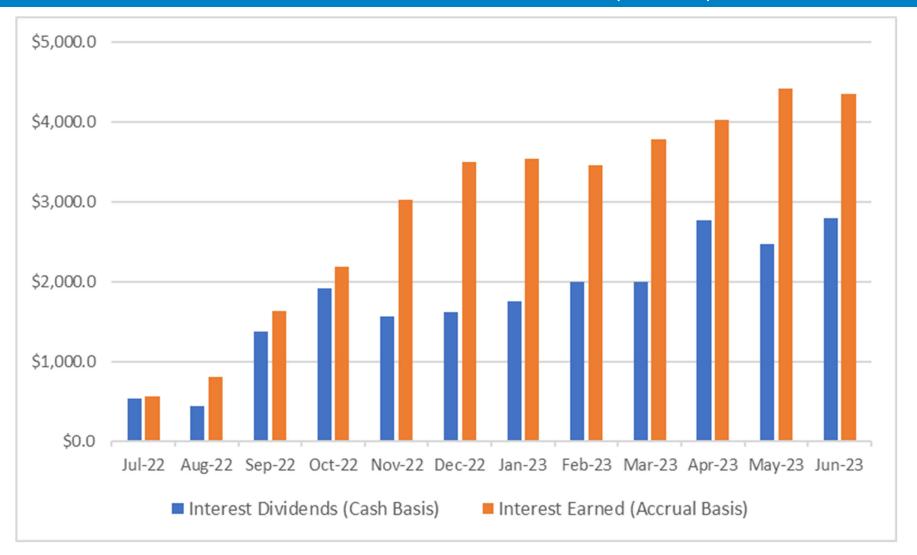


Portfolio Snapshot

Monthly Investment Income – Cash Basis vs Accrual Basis

(Book Value in 000's)

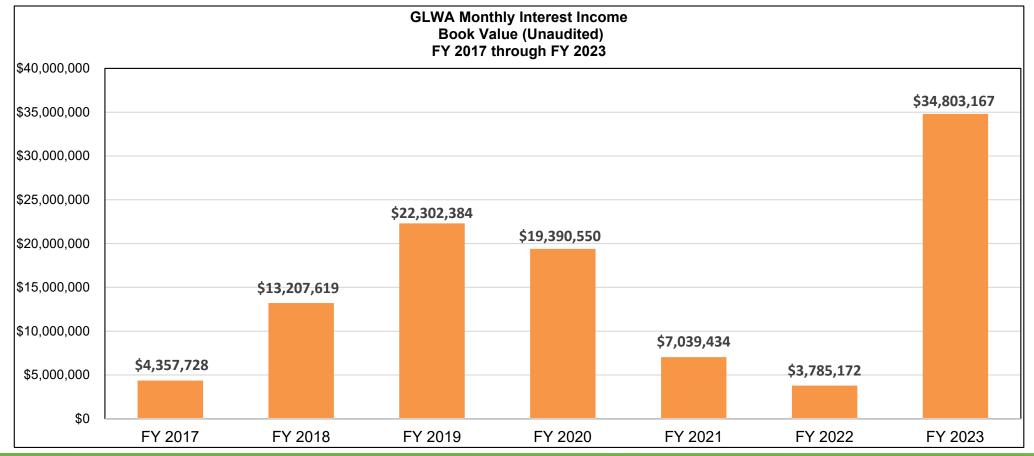
FY 2023 INVESTMENT INCOME BY MONTH (Unaudited)





Portfolio Snapshot Year-Over-Year Investment Income

- > GLWA earned \$34,803,167 in investment income for fiscal year 2023 on a book value basis compared to \$3,785,172 for fiscal year 2022.
- ➤ Projected investment income for fiscal year 2023 was forecasted to be around \$32.5 million. It should be noted that the budgeted total investment income for fiscal year 2024 is projected to be higher than the interest earnings received in FY 2023 based on the market's anticipation of a "higher-for-longer" Fed Funds target rate over the next fiscal year. The Authority is also being mindful of its arbitrage rebate position and yield restriction liability on its 2020AB Water construction funds as well as the 2022AB Water and 2022ABC Sewer bond proceeds due to the recent rise in interest rates. Though there are no payments due to the IRS on any of the bonds at this time, we are working to add value to our investment program by potentially having the 2022 bond issues meet spending exception requirements going forward.

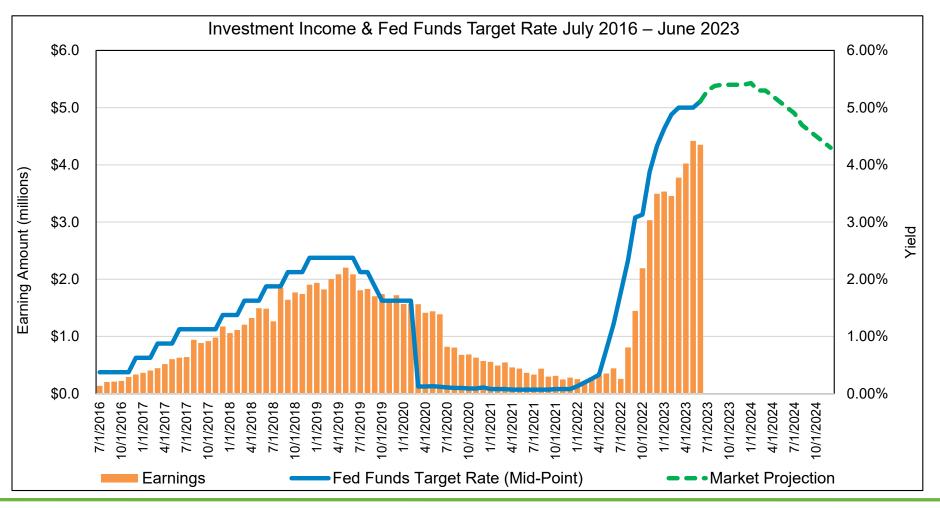




Portfolio Snapshot

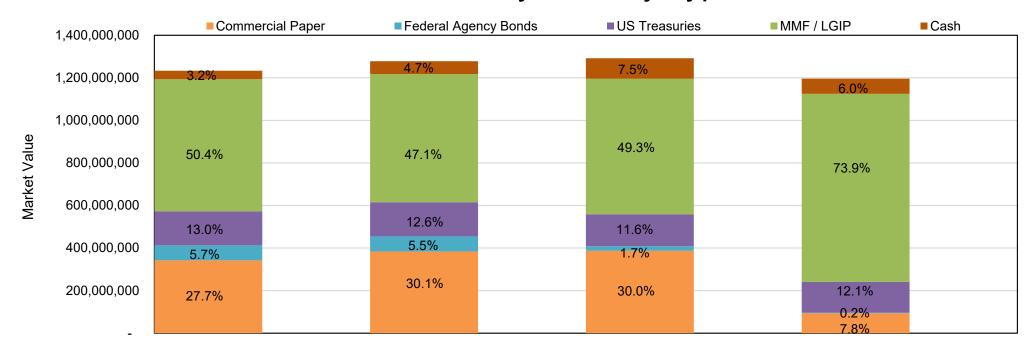
Monthly Investment Income Compared to Fed Funds Rate

- At least 50% or more 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 target rate; the chart below illustrates 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.





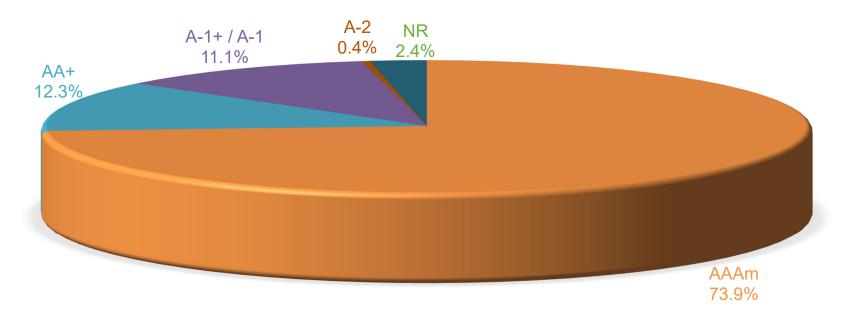
Portfolio Snapshot Investments – By Security Type



	March	ı	April		Мау		June	
	Market	Asset	Market	Asset		Asset		Asset
Security Type	Value	Allocation	Value	Allocation	Value	Allocation	Value	Allocation
Commercial Paper	342,072,816	27.7%	384,090,236	30.1%	386,897,660	30.0%	93,529,261	7.8%
Federal Agencies	70,382,441	5.7%	70,633,802	5.5%	21,759,859	1.7%	2,897,152	0.2%
U.S. Treasuries	160,241,668	13.0%	160,533,428	12.6%	150,370,349	11.6%	144,796,156	12.1%
MMF / LGIP	621,095,249	50.4%	601,950,913	47.1%	636,413,603	49.3%	883,554,877	73.9%
Cash	39,530,568	3.2%	60,585,824	4.7%	96,367,972	7.5%	71,607,183	6.0%
Total	1,233,322,743	100.0%	1,277,794,203	100.0%	1,291,809,443	100.0%	1,196,384,628	100.0%



Portfolio Snapshot Investments – By Credit Quality



Credit Quality	Market Value	Asset Allocation
Ratings		
AAAm	883,554,877	73.9%
AA+	147,701,420	12.3%
A-1 + / A-1	132,211,260	11.1%
A-2	4,197,217	0.4%
NR	28,719,854	2.4%
Totals	1,196,384,628	100.0%

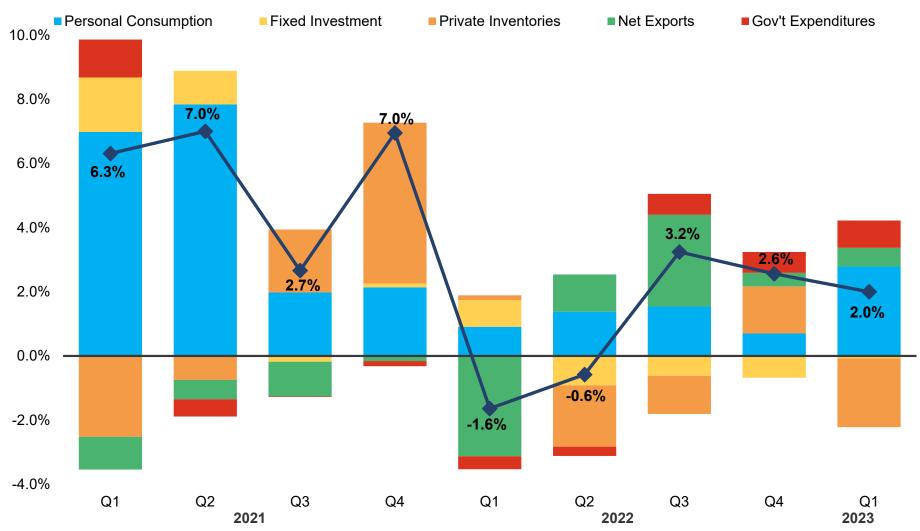


Appendix I: Economic Update



U.S. 1Q GDP Revised Higher from Stronger Spending





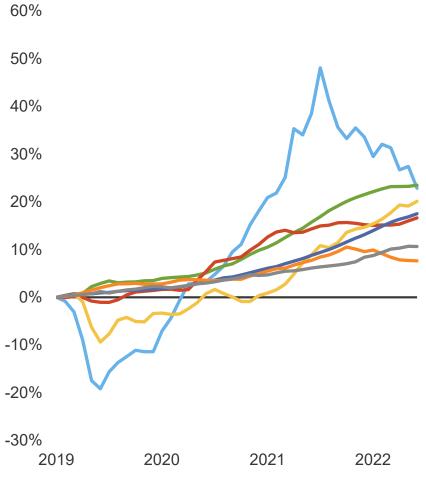
Source: Bloomberg, as of June 2023.



Shelter Is Still The Biggest Contributor to CPI

Price Change of Major CPI Components

Since December 2019



CPI Component	12-mo. Change	Weight ¹	Contribution to YoY CPI
Energy	-11.3%	7.0%	-0.8%
Food	6.7%	13.4%	0.9%
Transportation	10.3%	5.9%	0.6%
Goods	2.0%	21.3%	0.4%
Shelter	8.0%	34.6%	2.8%
Medical services	-0.1%	6.4%	0.0%
Other Services ²	4.2%	11.4%	0.5%
Overall	4.0%		

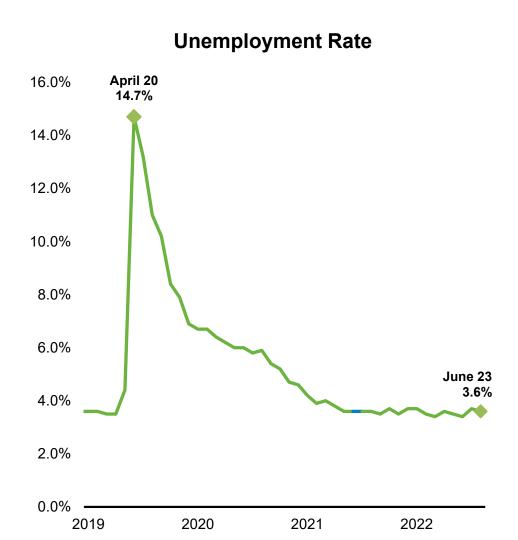
Source: Bloomberg, Bureau of Labor Statistics as of May 2023.

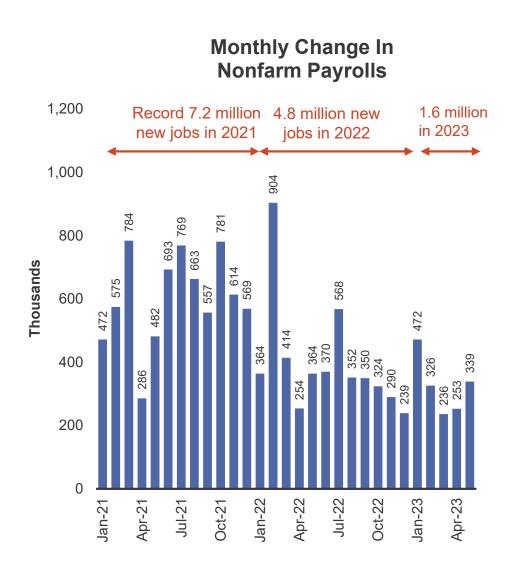
¹ Index weights are as of April 2023 as they are published on a one-month lag.

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



Unemployment Rate Rose to 3.6%



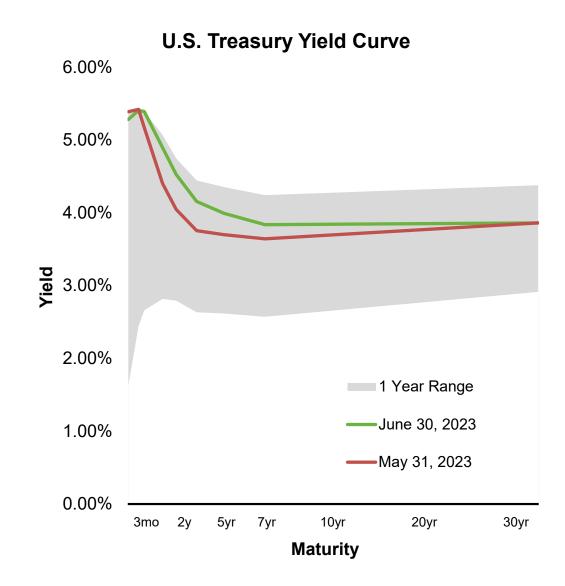


Source: Bloomberg, as of June 2023 and May 2023. Data is seasonally adjusted.



Treasury Yield Curve

	05/31/2023	06/30/2023	<u>Change</u>
3 month	5.39%	5.28%	-0.11%
6 month	5.42%	5.41%	-0.01%
1 year	5.17%	5.39%	0.22%
2 year	4.40%	4.90%	0.50%
3 year	4.05%	4.53%	0.48%
5 year	3.75%	4.16%	0.41%
10 year	3.64%	3.84%	0.20%
30 year	3.86%	3.86%	0.00%



Source: Bloomberg, as of 05/31/2023 and 06/30/2023, as indicated.



Fixed Income Market Overview and Outlook

FIXED INCOME MARKET - ECONOMIC HIGHLIGHTS

- In the prior quarter, U.S. economic conditions were characterized by a myriad of financial headlines:
 - Investors contended with ongoing recession risks
 - Regional bank concerns
 - The Federal Reserve's (the "Fed") historic pace of interest rate hikes
 - Stubbornly high inflation
 - A debt ceiling impasse in Washington
- President Biden signed the bi-partisan debt ceiling bill, avoiding a much-publicized potential default and allowing the U.S. Treasury to fund its obligations
 - The bill suspends the debt ceiling until January 1, 2025 and included some spending cuts
- > The Fed followed up the two 25 basis point hikes in the first quarter of calendar year 2023 with one more 25 basis point hike at the May meeting, brining the overnight rate to a target range of 5.00% to 5.25%
 - At the June FOMC meeting, the Fed paused hiking, breaking the string of consecutive meetings with an increase at ten
 - The Fed held its benchmark interest rate unchanged on June 14th but signaled more rate hikes are still on the table this
 calendar year
 - The "hawkish pause" was accompanied by new Fed projections (the so called "dot plot") which indicated the expectation for two more 25 basis point rate hikes in the remaining part of calendar year 2023, underscoring the Fed's vigilance in fighting inflationary pressures
 - Additionally, the "hawkish pause" pushed Treasury yields higher as markets accepted a higher-for-longer overnight target rate expansion
 - Throughout the quarter, Fed Chair Jerome Powell reiterated that more rate hikes are likely, echoing the Fed's updated dot plot released in June, which showed two more rate hikes by December



Fixed Income Market Overview and Outlook

FIXED INCOME MARKET - ECONOMIC HIGHLIGHTS

- ➤ U.S. Treasury yields jumped across the yield curve in the second quarter, as economic data came in stronger than expected, and markets capitulated to the Fed's "higher-for-longer" trajectory for short-term rates
 - Increases in the yield curve were led by the 2-year U.S. Treasury note, which finished the quarter at 4.90%, up 87 basis points from 4.03% on March 31st
- While yields of all tenors increased, the U.S. Treasury yield curve remains steeply inverted
 - The difference between the yield on the U.S. Treasury 2-year (4.90%) and 10-year note (3.84%) ended the quarter at over 100 basis points (1.00%), marking one of the deepest levels of curve inversion in over 40 years
 - There has been a steady ascent of yields over the quarter and steadfast Fed speak indicating higher-for-longer rates
 - The 2-year U.S. Treasury yield surged over 100 basis points from early May lows through the end of June as the yield curve remains near historically extreme levels of inversion
- > Pressures in the front end of the yield curve are complicated by uncertainty around future Fed hikes
 - At the same time, money market credit (commercial paper and certificates of deposit) remains quite attractive and offers yield advantages of as much as 50 basis points in longer 6 – 12-month maturities
 - Short credit spreads widened modestly in the 6 12-month part of the curve as rate cuts have been taken off the table in addition to the Fed's projections revising up with two additional hikes if the data continues to surprise on the upside
- Diversification away from U.S. Treasury securities was strongly additive to fixed-income performance during the second quarter of calendar year 2023 as yield spreads across most sectors tightened
 - Although investors began the quarter with heightened concern about market volatility, recent bank failures, credit conditions, and the looming debt ceiling impasse, sentiment eased during the quarter
 - That move to a more "risk on" mentality resulted in strong relative performance from spread sectors



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