



Northern California Power Agency

May 2022

Finance Committee Materials

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Report on Current Financial Market Conditions or Issues

Data, rates, and related statistics and charts are as of May 2, 2022, unless otherwise indicated



Market Overview – February 8th to Early March

Date	DJIA	10-Yr MMD	10-Yr Tsy	30-Yr MMD	30-Yr Tsy
8-Feb	35,463	1.48%	1.96%	1.91%	2.25%
10-Mar	36,338	1.81%	1.98%	2.23%	2.38%
Δ	875	0.33%	0.02%	0.32%	0.13%

- The first half of February saw rising AAA MMD and Treasury rates in continued response to inflation and multiple anticipated rate hikes
- The market tone shifted in mid-February with Russia's invasion of Ukraine
 - On February 17th, both the US and UK governments called out Russian actions that signaled an intent to invade Ukraine, which incited a general flight to safety
 - Demand for safe-haven assets surged again following Russia's first attacks on February 24th
- Moving into March, Treasuries continued to fluctuate, in response to day-to-day developments in the Russia-Ukraine conflict, ongoing concerns regarding inflation, and comments from the Fed



Market Overview – March and April

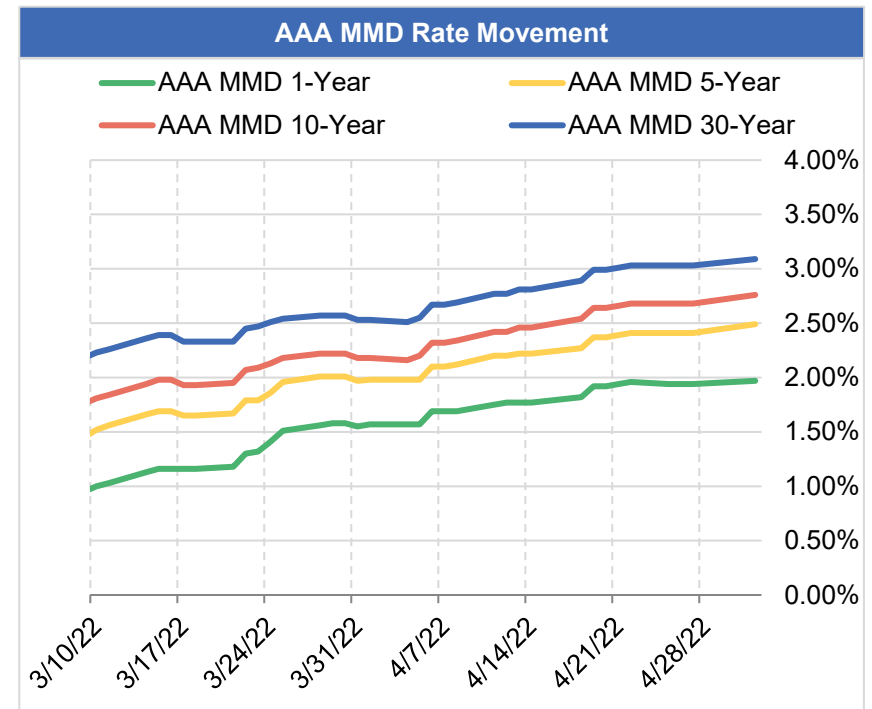
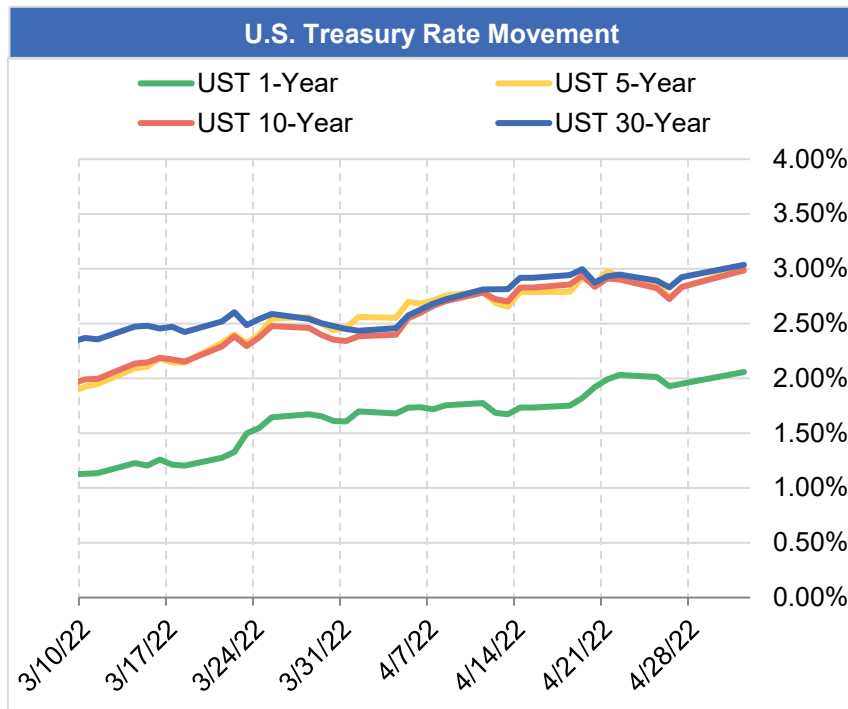
Date	DJIA	10-Yr MMD	10-Yr Tsy	30-Yr MMD	30-Yr Tsy
10-Mar	33,174	1.81%	1.98%	2.23%	2.38%
2-May	33,062	2.76%	2.99%	3.09%	3.07%
Δ	-113	0.95%	1.01%	0.86%	0.69%

- At the March 15-16th FOMC meeting, the Fed hiked the federal funds rate by 25 bps, as indicated in comments at prior meetings
 - Powell made subsequent comments the following week that the Fed would raise rates faster than expected, which incited further increases in rates, as well as an inversion of the 3-year and 10-year treasuries
- Fears about the economic impact of China's Covid-19 lockdowns have boosted the dollar's safe-haven appeal; the dollar index broke above the 102 mark for the first time since March 2020
- For the week ending April 27th, muni bond mutual funds saw outflows for the 16th consecutive week
 - The week ending April 13th saw the 4th highest outflows on record at \$4.1 billion
- The Fed implemented a 50 bps rate hike at the May FOMC meeting
 - Chairman Powell expressed optimism that the central bank would be able to bring down inflation without tipping the economy into recession and stated that the Fed is not “actively considering” a 75 bps rate increase at the next couple meetings, alleviating some investor concerns



U.S. Treasury & AAA MMD Rate Movement Since Hydroelectric Pricing

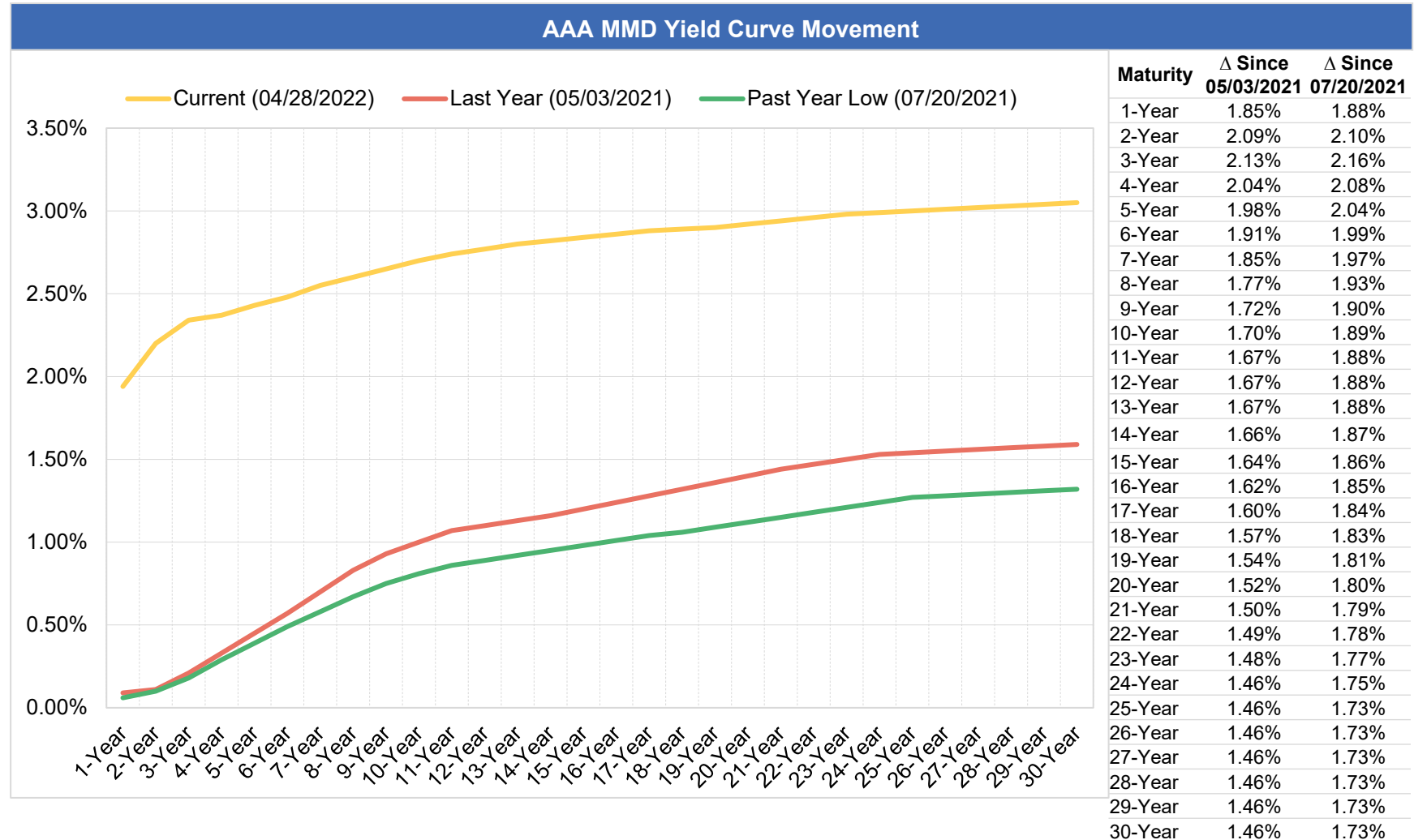
- Since the 2022 Hydroelectric Bonds priced on March 10th, both taxable and tax-exempt rates have risen significantly; Treasuries have risen by ~70-100 bps and AAA MMD has risen by ~80-100 bps across the curve
- Timing was key to completing the financing; at current Treasuries and MMD the 2012A refunding would only achieve \$8.2 million in NPV savings and the 2008A fix out would have cost \$5.9 million (assuming no change in termination value or spreads)
- This does not account for changes in credit spreads, which have also widened significantly in the past month



Source: Refinitiv TM3



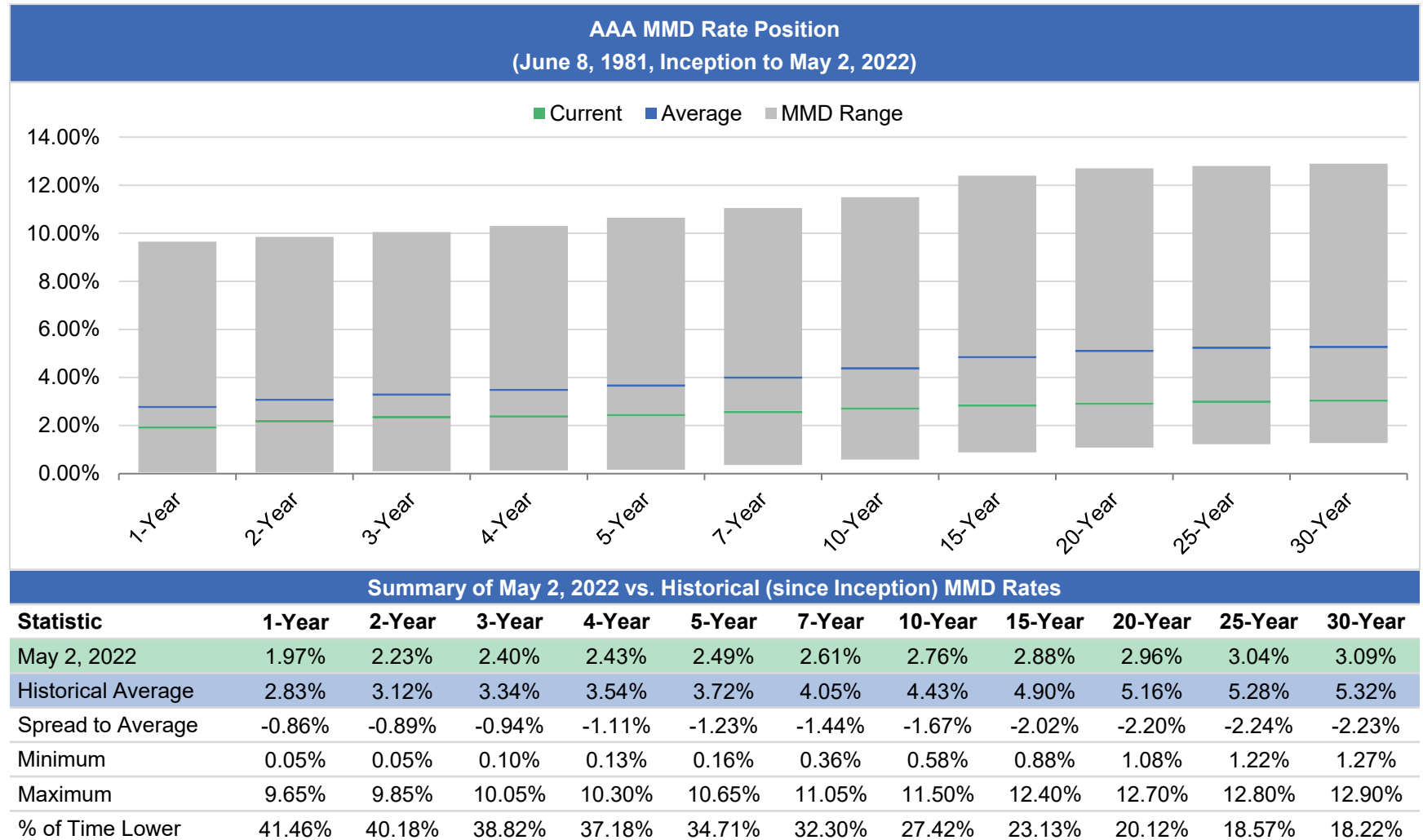
Recent AAA MMD Yield Curve Movement



Source: Refinitiv TM3



AAA MMD Position Since Inception

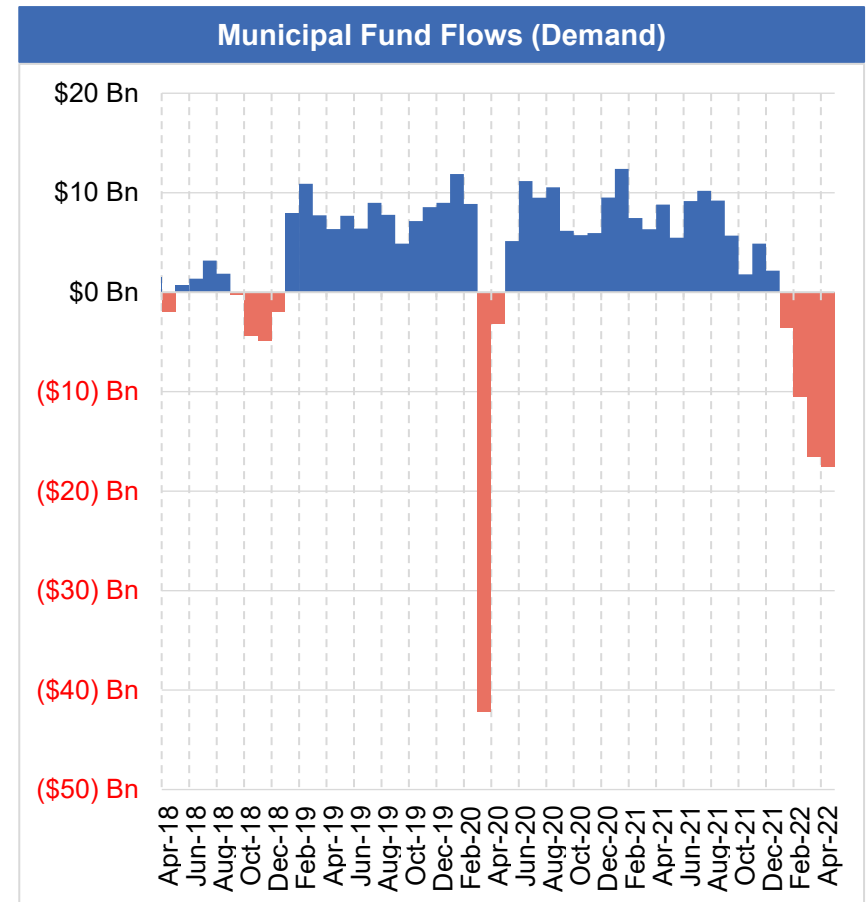
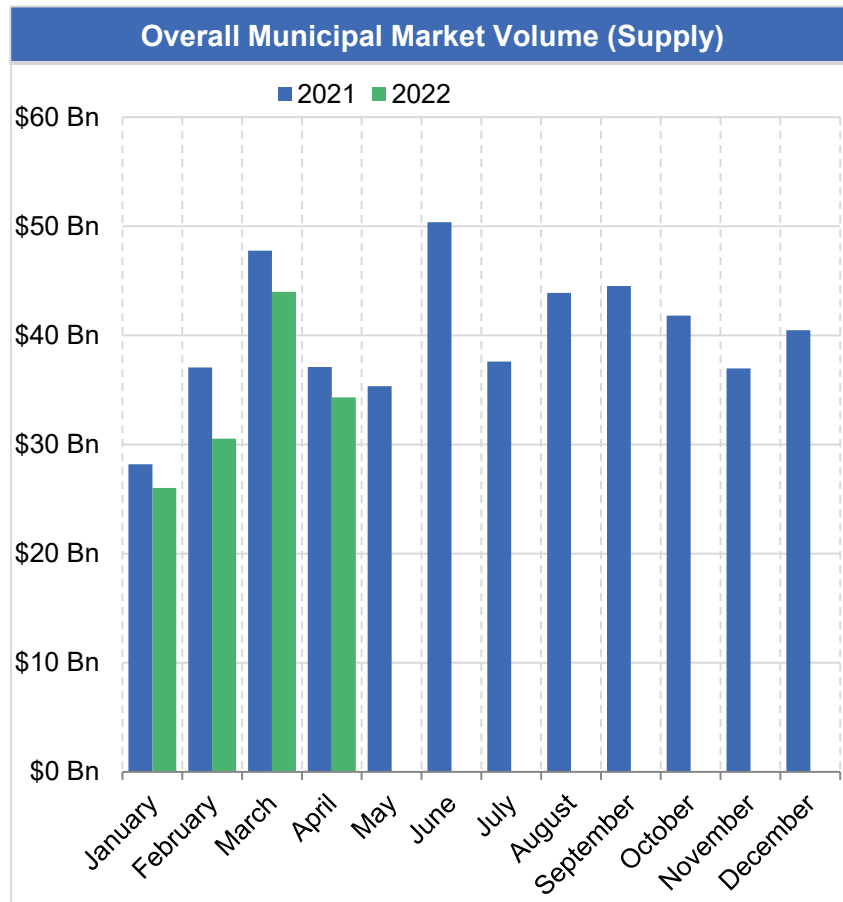


Source: Refinitiv TM3



Municipal Market Supply & Demand

- Municipal bond funds have experienced outflows for 16 consecutive weeks, with outflows of \$2.9 billion for the week ending April 27th. New issuance volume was down 7.5% year-over-year in April, and year-to-date new issuance volume was 10.2% lower than 2021 issuance through April.



Source: Bond Buyer, Investment Company Institute



Interest Rate Forecasts

- The market currently anticipates rate hikes each quarter for the next year, including at least three rate hikes in the next quarter

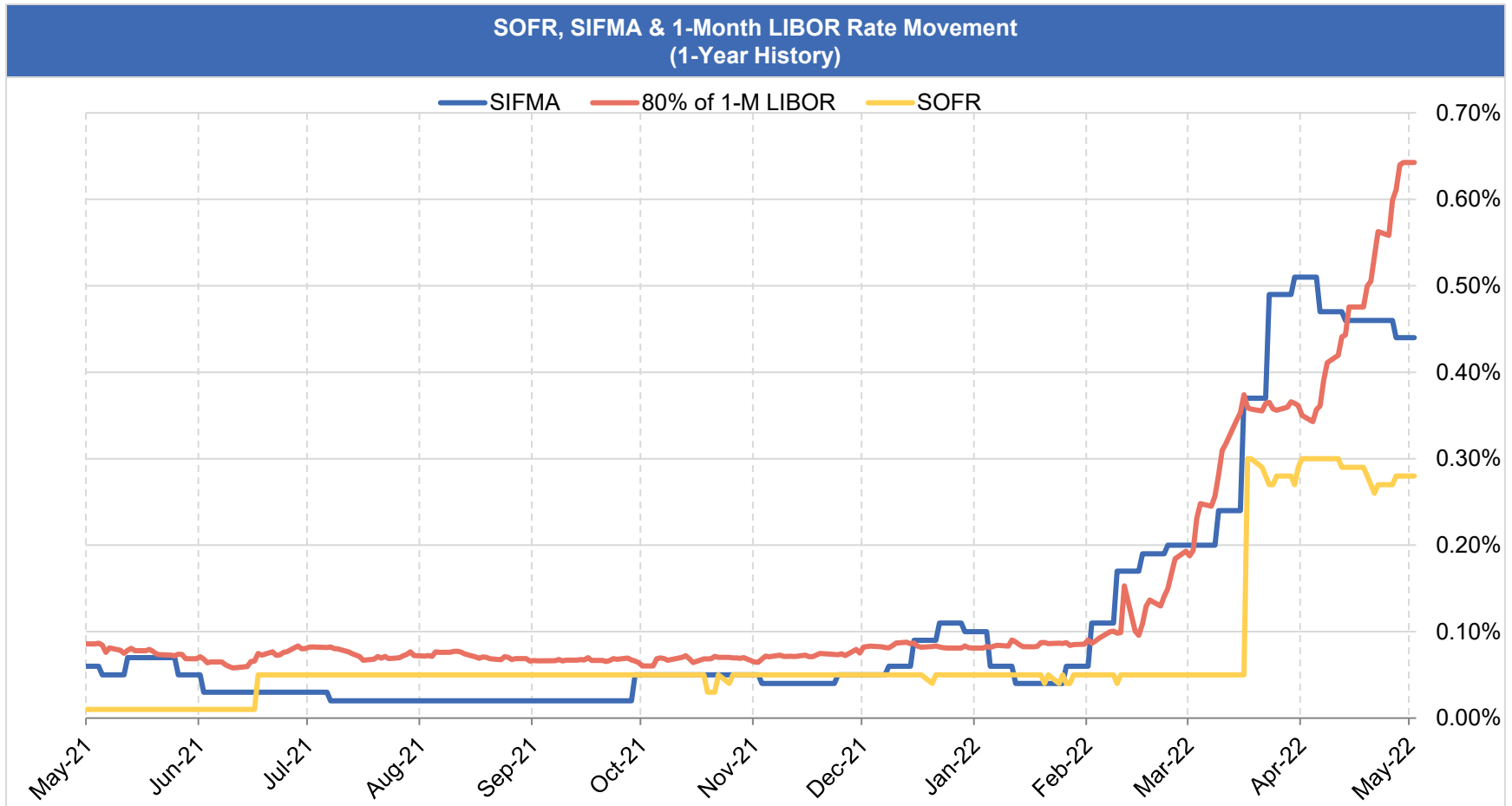
The Street's Interest Rate Forecast (As of May 3, 2021)								
Average Forecasts	Current	Q2 22	Q2 Δ vs. Current	Q3 22	Q4 22	Q1 23	Q2 23	Q3 23
30-Year UST	3.05%	2.75%	-0.30%	2.85%	2.93%	3.02%	3.09%	3.07%
10-Year UST	2.98%	2.64%	-0.34%	2.71%	2.76%	2.84%	2.89%	2.87%
2-Year UST	2.72%	2.57%	-0.15%	2.69%	2.74%	2.82%	2.84%	2.81%
3M SOFR	1.15%	1.05%	-0.10%	1.56%	1.97%	2.29%	2.40%	2.53%
Fed Funds Target Rate	0.25%	1.13%	0.88%	1.66%	2.04%	2.35%	2.50%	2.54%
<i>Fed Funds Δ Since February Meeting</i>	0.25%	0.68%	0.43%	0.97%	1.15%	1.26%	1.22%	1.13%

Source: Bloomberg



SOFR, SIFMA & 1-Month LIBOR Rate Movement

- SOFR and SIFMA maintained more consistent levels during much of April, while 1-M LIBOR experienced steady growth for most of the month.

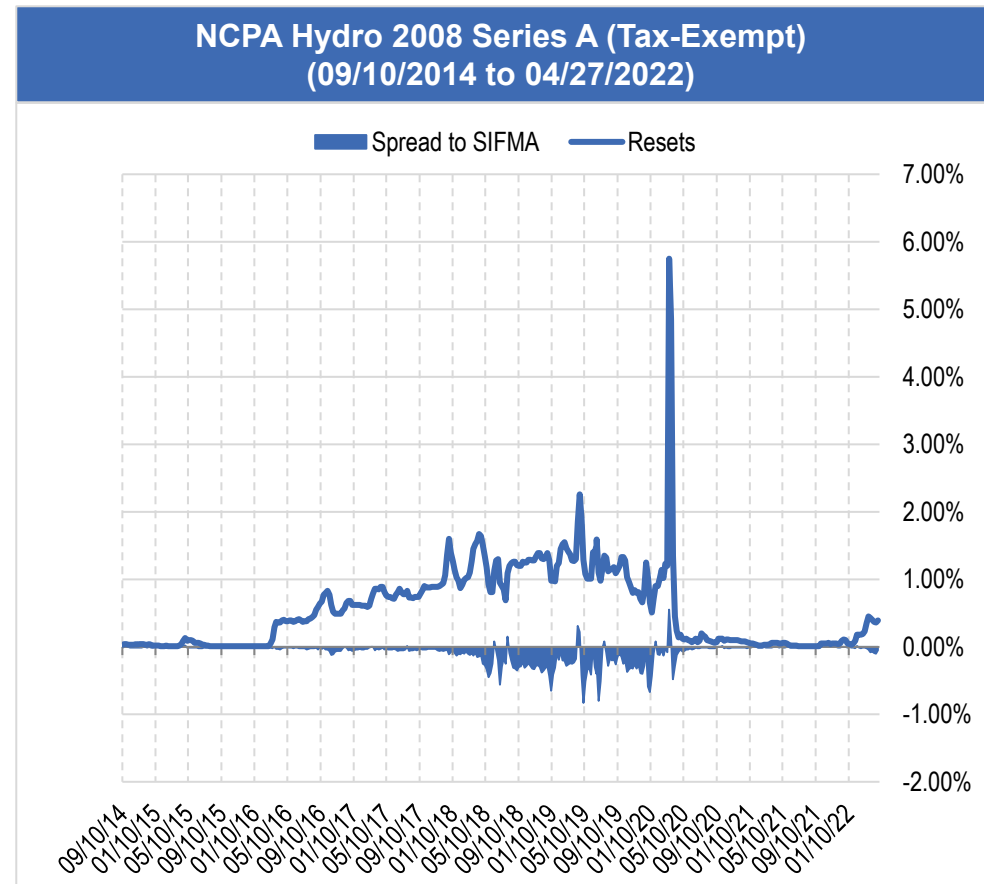


Source: Refinitiv TM3



NCPA's Hydroelectric Project 2008 Series A Bonds

- Since the February meeting, 2008A Bond resets have ranged from 0.09% to 0.45%
- Variable rate resets have been better than SIFMA by 1 to 10 bps through March and April
- The 2008A bonds are hedged with an interest rate swap and backed by a direct-pay letter of credit agreement with Bank of America, N.A.
- The 2008A bonds were paid off on May 5th with proceeds from the sale of the 2022A bonds, and the letter of credit was terminated



Key Takeaway: *The 2008A Bonds reset better than SIFMA over the past two months*

Source: Thomson Reuters, EMMA



Hydroelectric Bonds, 2022 Refunding Series A and B



Hydroelectric 2022 Refunding Overview

- On March 10th, NCPA priced its Hydroelectric Bonds, 2022 Refunding Series A and B
 - \$120,300,000 of tax-exempt Series A was issued to refund the 2012A and 2008A bonds
 - \$12,010,000 of taxable Series B was issued to pay the termination cost for the 2008A associated swap
- The bonds closed on April 5th
 - The swap associated with the 2008A bonds was terminated
 - The 30-day call notice for the 2008A bonds was sent out, and the bonds were paid off on May 5th
 - Bond proceeds to redeem the 2012A bonds have been put in escrow, and the 2012A bonds are considered defeased

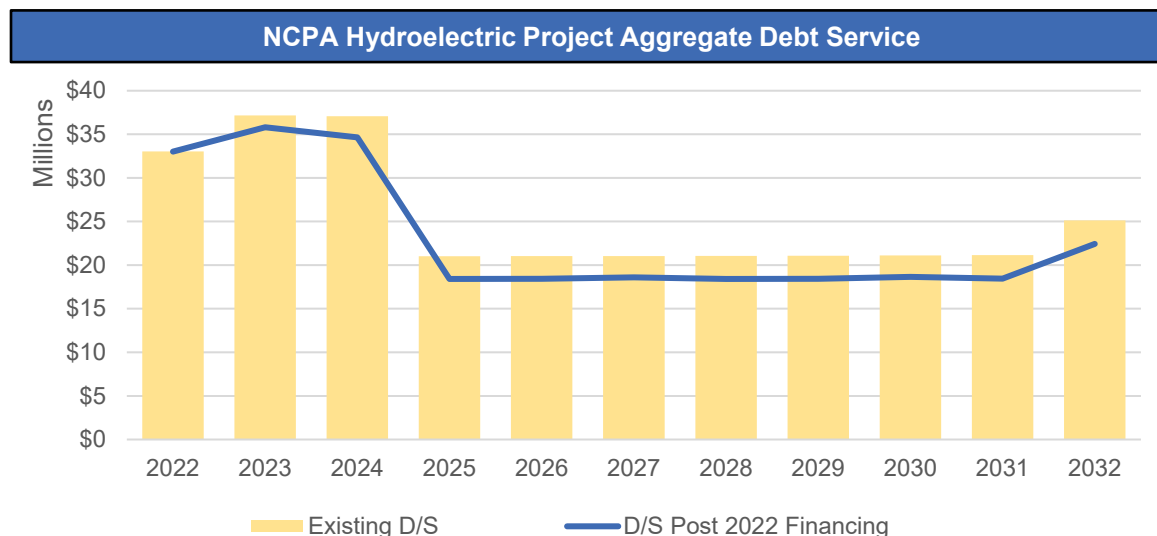
	2022 Refunding Series A	2022 Taxable Refunding Series B	Aggregate
Sources			
Par	120,300,000	12,010,000	132,310,000
Premium	25,095,433		25,095,433
Transfer from Prior Bond funds	13,389,970		13,389,970
	158,785,403	12,010,000	170,795,403
Uses			
2012A Bonds Escrow	78,532,957		78,532,957
2008A Bonds Redemption Amount ⁽¹⁾	79,564,965		79,564,965
Swap Termination Payment		11,928,000	11,928,000
Costs of Issuance	457,980	58,659	516,639
Underwriter's Discount	229,501	23,341	252,842
	158,785,403	12,010,000	170,795,403

⁽¹⁾ Assumes accrued interest from pricing through pay off on 5/5/2022 at 3%



Hydroelectric 2022 Refunding Results

- The new issuance allowed NCPA to realize over \$12 million in NPV savings for the refunding of the 2012A bonds
- NCPA was able to refund the 2008A bonds and terminate the associated swap at a cost of under \$500,000



	2012A Tax-Exempt Current Refunding	2008A Tax-Exempt Refunding and Taxable Swap Termination	Aggregate Refunding
Delivery Date	4/5/2022	4/5/2022	4/5/2022
First Interest Payment Date	7/1/2022	7/1/2022	7/1/2022
Par	63,230,000	69,080,000	132,310,000
Total Escrow Deposit	78,532,957	79,564,965	158,097,922
NPV Savings (\$)	12,681,665	-430,087	12,251,578
NPV Savings (%)	16.54%	-0.54%	7.86%
Average Annual D/S Savings	1,416,130	44,596	1,460,726
Negative Arbitrage	293,514	0	293,514
TIC	1.76%	1.96%	1.88%



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