



**November 14, 2022 Public Hearing
on 2023 Rate, Fees, and Other Charges**



What is Driving the Rate Increase?

- The Water Board funds all its operational costs from rates and fees charged to users of its system, and covenants with its bondholders require it to raise the full amount of its operations budget in rates and fees each year.
- In 2022 and again in 2023, the competitively bid contracts for chemicals increased dramatically.
 - 2023 chemical costs are forecast to total \$10,775,000 or 26.36% of the Water Board's budget, versus \$3,294,000 and 9.63% in 2018.
 - The chemical whose cost most impacts the Water Board's budget is sodium hypochlorite, as the Water Board's outdated wastewater treatment plant uses a physical/chemical treatment technology that requires vast quantities of sodium hypochlorite to achieve treatment and disinfection.
 - Bid prices for sodium hypochlorite by calendar year:

▪ 2018: \$0.422/gal	▪ 2021: \$0.3954
▪ 2019: \$0.477/gal	▪ 2022: \$1.18/gal (a 198% increase)
▪ 2020: \$0.43/gal	▪ 2023: \$2.389/gal (a 102% increase)

What is the Water Board Doing to Control Costs?



- Keeping an eye on expenses within its control, including expanding in-house capabilities to reduce costly use of outside contractors:
 - New equipment for outside maintenance to repair more water/sewer main breaks.
 - Hiring temporary employees from trade Union Halls to perform more work in house without contractor markup.
- Relentless efforts to reduce non-revenue water, which are showing considerable results – a **7.4% decrease** in finished water produced at the WTP from Jan.-Oct. 2022 versus the same period in 2021. Determining the exact percent of non-revenue water reduction will require full-year production and billing results.
- Big picture, the long-term solution to the unsustainable increases in chemical costs seen year over year is to convert the existing physical/chemical treatment process at the wastewater treatment plant to a biological treatment process.
 - Biological plants have substantial operations and maintenance costs too, but conversion is expected to save millions of dollars in chemical costs annually.
 - Cost of conversion is in hundreds of millions of dollars, too much for our ratepayers to afford.
 - Unlike water and sewer systems operated by municipalities and counties, the NFWB received no funding under the American Rescue Plan.
 - **NFWB is aggressively seeking State and Federal funds to make this project happen!**



Personnel Costs Contained – Budget Growth Predominantly Driven by Chemical Cost Increases

2018		
<u>Expense</u>	<u>2018 Total</u>	<u>% of 2018 Budget</u>
Salaries and Benefits	\$11,524,768	33.7%
Chemicals	\$3,294,132	9.6%
Other Contractual Costs	\$7,638,182	22.4%
Debt Service	\$11,740,689	34.3%

2023			
<u>2023 Total</u>	<u>% of 2023 Budget</u>	<u>Increase since 2018</u>	<u>% Increase Divided by Six Years</u>
\$12,599,986	30.8%	9.3%	1.6%
\$10,775,000	26.4%	227.1%	37.9%
\$9,021,381	22.1%	18.1%	3%
\$8,475,711	20.7%	-27.8%	-4.6%

Water Board Debt:

Assumed from City of Niagara Falls when Water Board created: **\$134,000,000**

Current Debt:

\$82,000,000

2023 Chemical Bids

Apparent Low Bidders :

Bid #W2022-02



Apparent Low

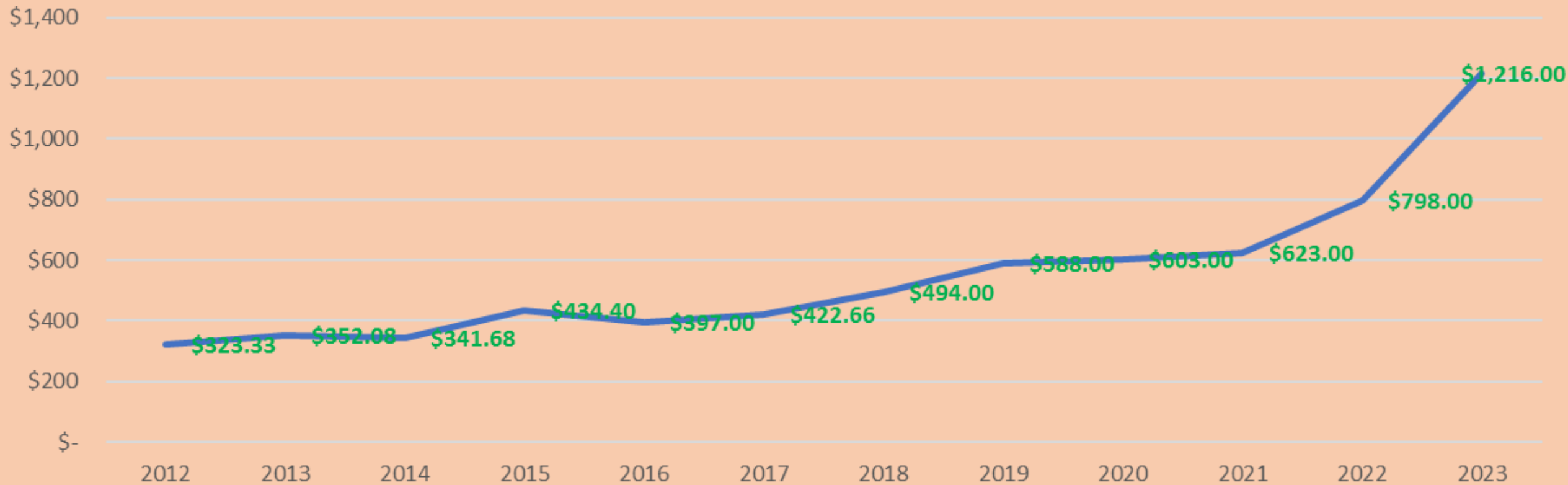
Item	Chemical	Bidder - 2023	Bid-2023	Bid-2022	Bid-2021	Bid-2020	Bid-2019	Bid-2018	Bid-2017	Bid-2016	Bid-2015	Bid-2014	Bid - 2013	Bid - 2012	2023 % Change
1	Chlorine - Ton Cyls	No Bid	None	\$ 3,000.00	\$ 875.00	\$ 815.00	\$ 790.00	\$ 790.00	\$ 750.00	\$ 700.00	\$ 600.00	\$ 550.00	\$ 600.00	\$ 488.00	None
2	Chlorine - 150 lb	No Bid	None	None	\$ 400.00	\$ 350.00	\$ 300.00	\$ 300.00	\$ 200.00	\$ 200.00	\$ 200.00	\$ 110.00	\$ 125.00	\$ 90.00	None
3	Ferric chloride	Kemira	\$ 1,216.00	\$ 798.00	\$ 623.00	\$ 603.00	\$ 588.00	\$ 494.00	\$ 422.66	\$ 397.00	\$ 434.40	\$ 341.68	\$ 352.08	\$ 323.33	52
4(a)	Hydrofluosilicic acid	Univar Solutions	\$ 625.00	\$ 500.00	\$ 508.50	\$ 449.00	\$ 364.00	\$ 435.00	\$ 401.00	\$ 449.00	\$ 507.00	\$ 529.00	\$ 574.00	\$ 581.00	25
5(b)	Hydrofluosilicic acid	No Bid	None	None	\$ 508.50	\$ 520.00	\$ 364.00	\$ 435.00	\$ 471.00	\$ 483.25	\$ 576.00	\$ 605.00	\$ 622.00	\$ 627.00	None
6	Sodium Hypochlorite	Bison Laboratories	\$ 2.389	\$ 1.180	\$ 0.395	\$ 0.453	\$ 0.477	\$ 0.423	\$ 0.473	\$ 0.519	\$ 0.499	\$ 0.532	\$ 0.487	\$ 0.517	102
7	Hydrogen Peroxide	No Bid	None	\$ 659.34	None	\$ 538.00	\$ 425.90	\$ 426.00	\$ 432.00	\$ 424.00	\$ 404.00	\$ 394.00	\$ 416.00	\$ 359.00	None
8	High Calcium Quicklime	Carmeuse Lime	\$ 262.31	\$ 203.01	\$ 179.79	\$ 169.00	\$ 147.83	\$ 149.00	\$ 159.50	\$ 156.41	\$ 162.71	\$ 160.78	\$ 172.80	\$ 177.80	29
9	Polyorthophosphate	Carus	\$ 2,840.00	\$ 1,524.77	\$ 898.00	\$ 920.00	\$ 830.00	NA	\$ 716.00	\$ 738.00	\$ 740.00	\$ 780.00	\$ 820.00	\$ 1,057.57	86
10	Polyaluminum chloride	Kemira	\$ 468.00	\$ 309.80	\$ 265.20	\$ 265.20	\$ 238.00	\$ 195.40	\$ 189.49	\$ 206.80	\$ 223.00	\$ 233.00	\$ 254.00	\$ 260.00	51
XXX	(All WTP Chemcials)														

- (a) 2000 gallon lots
- (b) 900 gallon lots
- (c) 50% solution

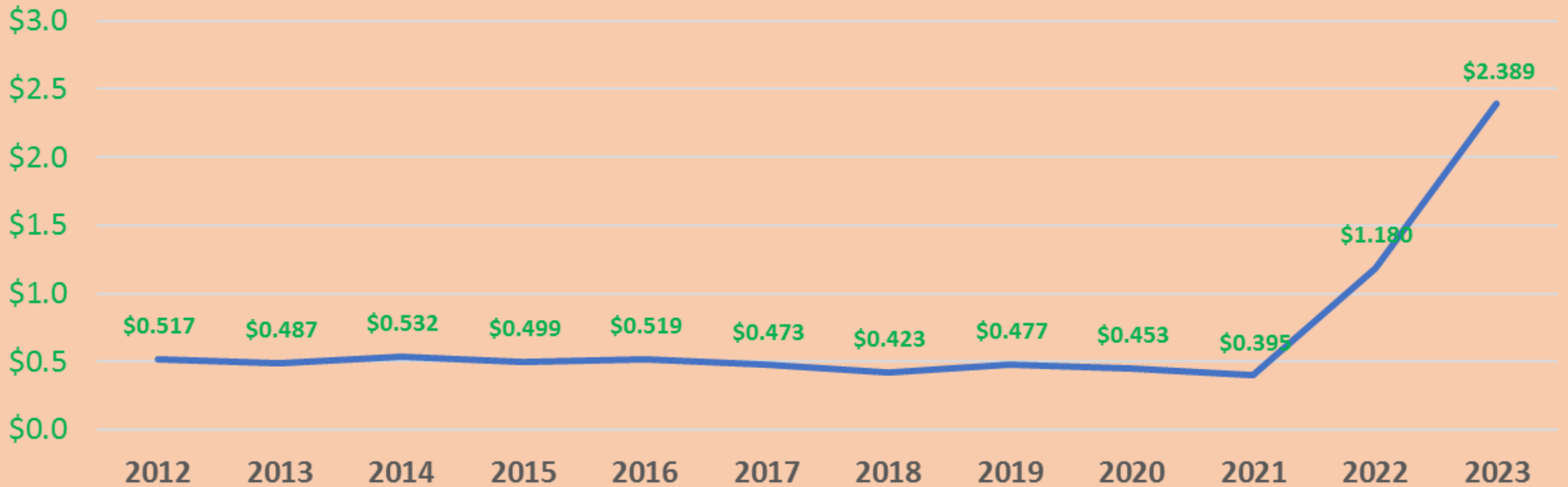
water
wastewater
unused

WASTEWATER TREATMENT PLANT CHEMICALS

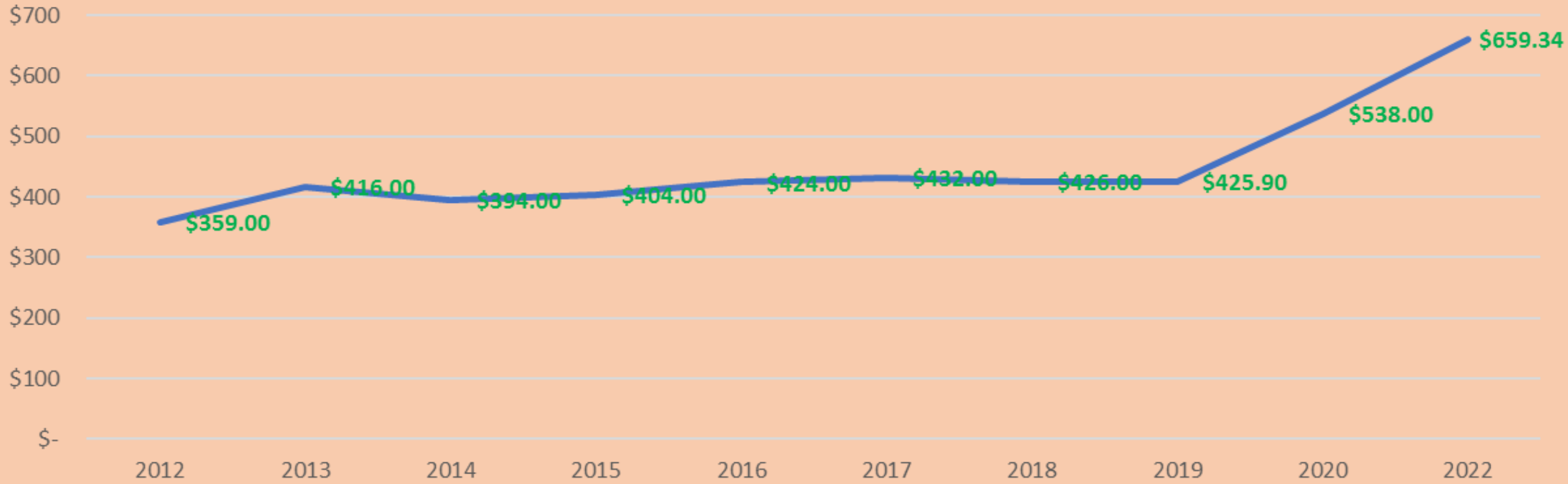
Ferric Chloride (\$/ton)



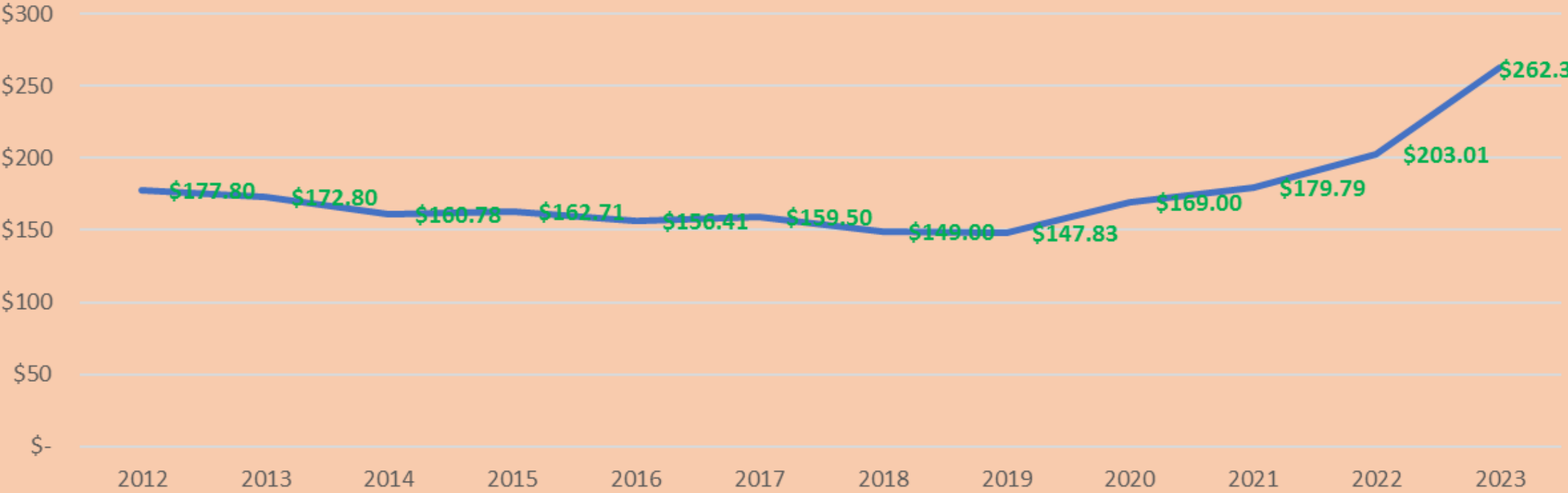
Sodium Hypochlorite Cost (\$/gallon)



Hydrogen Peroxide (\$/ton)

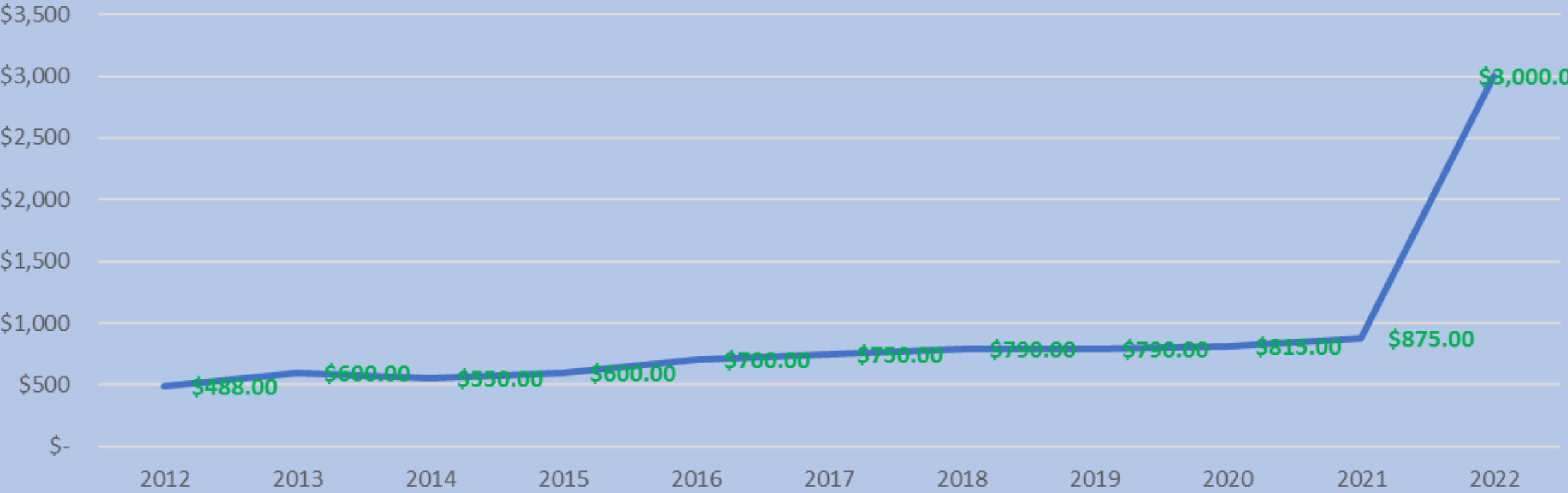


High Calcium Quicklime (\$/ton)

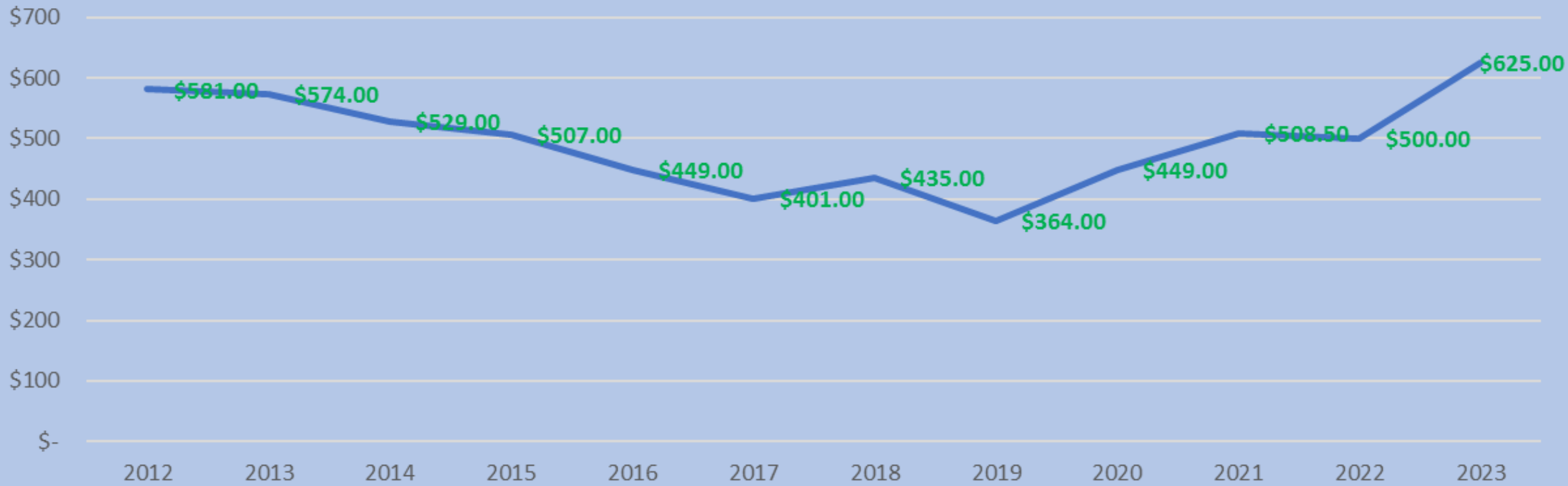


WATER TREATMENT PLANT CHEMICALS

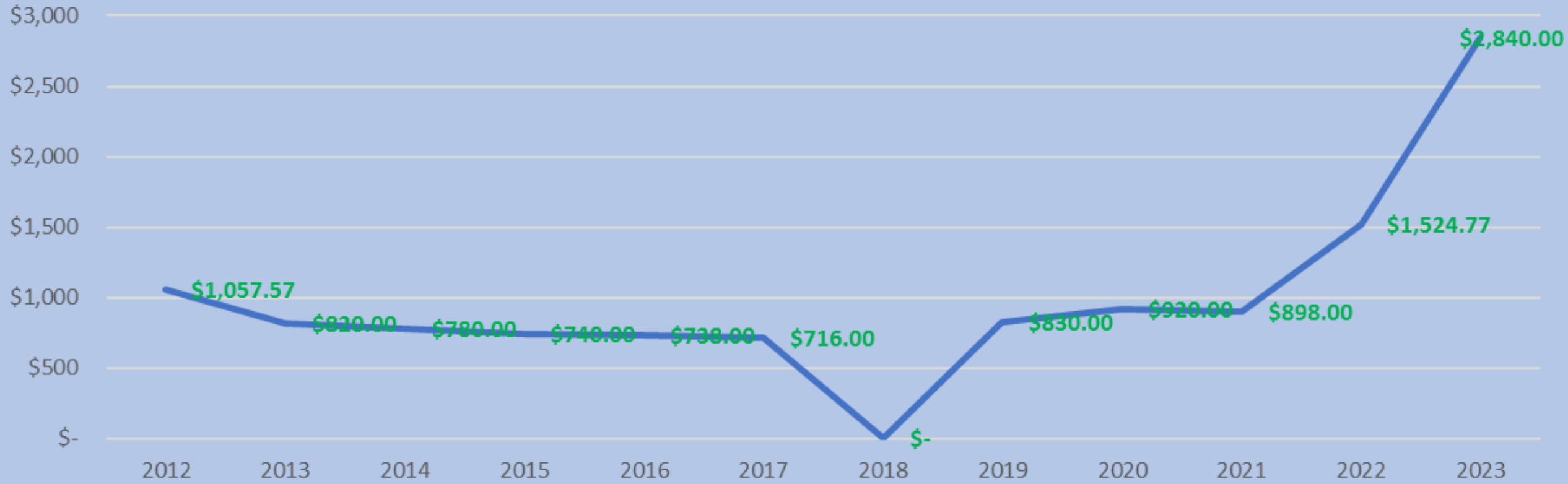
Chlorine - Ton Cylinders (\$/ton)



Hydrofluosilicic Acid (\$/ton)



Polyorthophosphate (\$/ton)



Polyaluminum Chloride (\$/ton)

