

Canebrake County Water District Water Rates

**Board Meeting
January 13, 2024**

FY 2022-2023



Winter 2024

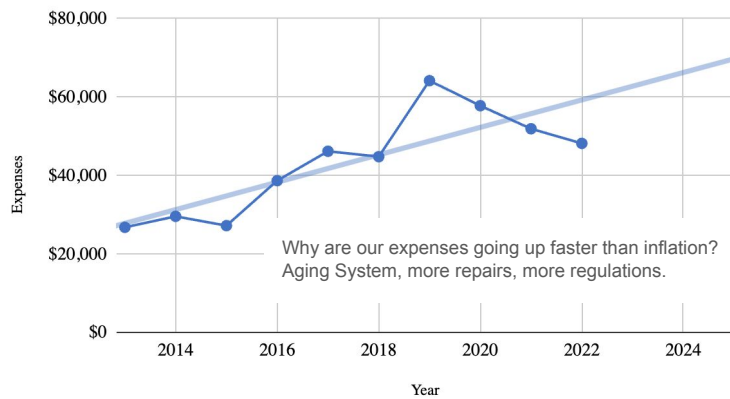
Water Rate History and Expenses/Income/Profits

Date	Access Fee	<5k gallons cents/gallon	<10k gallons cents/gallon	> 10k gallons cents/gallon
August 2015	\$50		0.75 (\$7.5/kgallon)	3 (\$30/kgallon)
Oct 2015	\$60 (+%20)	0.95 (+26%) (\$9.5/kgallon)	0.95 (+26%) (\$12.5/kgallon)	3 (\$30/kgallon)
Apr 2019	\$60	1.25 (+31%) (\$12.5/kgallon)	2.5 (+%263) (\$25/kgallon)	4 (+%33) (\$40/kgallon)
Usage Last 3 yrs (1386 readings)	77 meters	92% (~7 houses no usage)	7% (97 reads)	1% (12 reads)

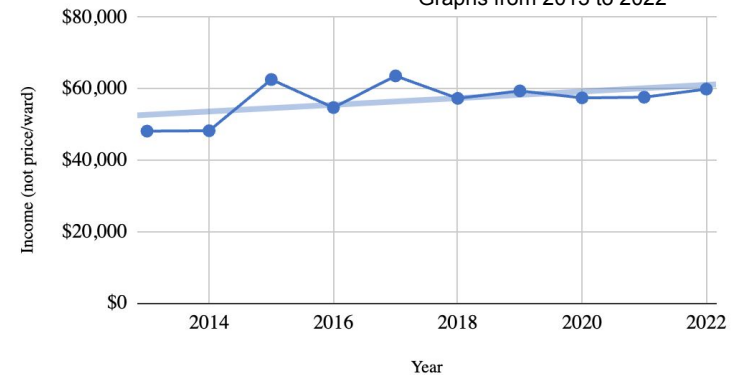
Water Usage Fee <5k gallons - common consumers
 Water Usage >5k gallons - garden hobbyists & oversights

Usage 2023 One Tier Equivalent **1.516** cents/gallon [calculation](#)

Expenses Last 10 Years (8.5% change) no depreciation expenses.



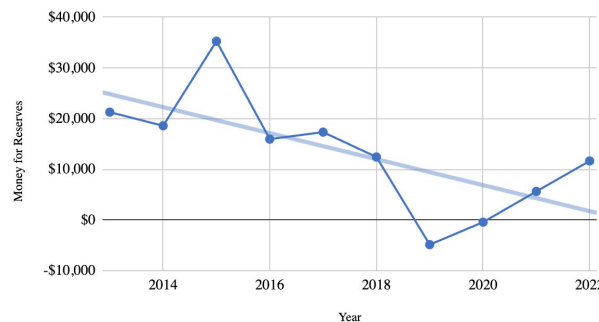
Income (not price/ward) vs. Year Note: Misc Income \$10k in 2015. Graphs from 2013 to 2022



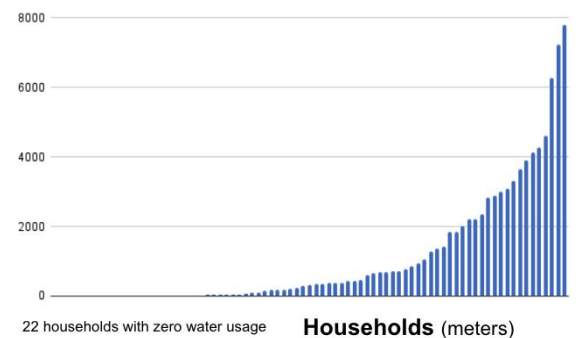
US Inflation increases Avg 2.56%/year
Canebrake Patrons Donate \$1740/year

Donations	Amount (last 10 years)
Patrons	\$17.4 k
Price/Ward	\$88 k
Total	\$105 k

Money for Reserves vs. Year



Gallon Usage last Two Months (Jan & Feb 2023)



Water Rates Calculator



Rates Calculator - funded by the EPA and created by the Environmental Finance Center at the University of North Carolina Chapel Hill.



Output - The Calculator will compute your Fund Balance - the best measure of a life-to-date net worth based on transactions that have been posted. The calculator allows for easy adjustments and visualizations using graphs and tables.

High Level Inputs

1. Volume Usage & Usage Trends per Tier
2. # Customers
3. Customer Trends (growth rate, uncollectable bills)
4. Current Rate Structure (Access Fee and Tiers with prices)
5. One Time Fees (eg connection)
6. Proposed Rate Structures for next 5 years
7. Yearly Expenses (budget)
8. Debt Services
9. Reserves amounts
10. Inflation per Year

Water & Wastewater Rates Analysis Model
Version 2.8.7 (last updated May 2018)

 SCHOOL OF GOVERNMENT
 Environmental Finance Center
 Developed by the Environmental Finance Center at the University of North Carolina, Chapel Hill
<http://efc.sog.unc.edu>

 
 Funded by the U.S. Environmental Protection Agency and the Public Water Supply Section of the North Carolina Department of Environmental Quality

DESCRIPTION
A do-it-yourself, simplified financial model to assist utility managers and private system owners in setting water and wastewater rates.

FEATURES
 Comparisons of annual fund balance projections (for up to 20 years) under proposed new rates vs. staying with existing rates
 Adjust rates for the next 1-5 years Up to 12 rate structures Uniform or block rates (up to 10 blocks)
 Model changes to accounts and water use Customizable list of operating and capital expenses Building up reserves through rates
 Compare monthly bills under new rates vs. existing rates Assess revenue sufficiency and fund balance
 Error notifications

INSTRUCTIONS

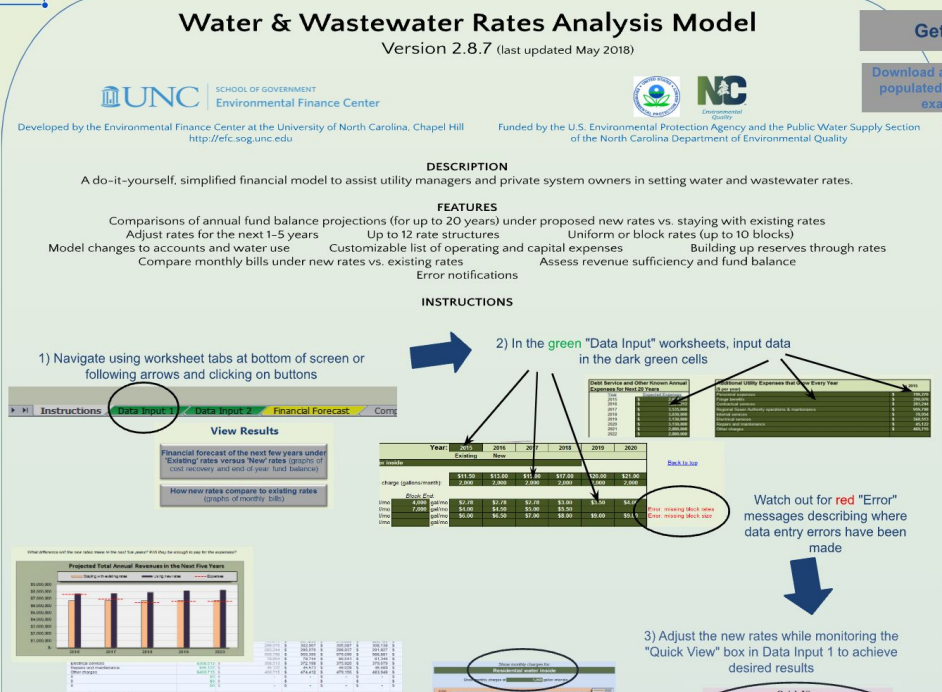
1) Navigate using worksheet tabs at bottom of screen or following arrows and clicking on buttons

2) In the green "Data Input" worksheets, input data in the dark green cells

3) Adjust the new rates while monitoring the "Quick View" box in Data Input 1 to achieve desired results

Watch out for red "Error" messages describing where data entry errors have been made

Quick View



Year	2015	2016	2017	2018	2019	2020
Volume	\$115.00	\$115.00	\$115.00	\$117.00	\$20.00	\$21.00
Charge (customers)	2.00	2.00	2.00	2.00	2.00	2.00
Block Rate						
Block 1	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75
Block 2	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00
Block 3	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00
Block 4						

Supporting Docs for Rate Analysis

[Rates Calculator](#) (Funded by EPA, created by Univ North Carolina, Environmental Finance Center)

[Univ North Carolina Finance Center](#) (POC for Rates Calculator)

[CCWD Finance Calculator](#) (Investments, Budget, Asset Dashboard)

[CCWD Capital Reserves and Yearly Expenses](#)

[CCWD Master Schedule](#) (Five Year Plan, Admin Schedule, Maintenance Schedule, Finance Schedule)

[CCWD Historical Budgets](#) (Last 10 years Budgeted vs Actual Expenses)

CFO also has:

- Profit Loss Statements (summary and detail) last three years
- Balance Sheet
- January Financial brief showing:
 - Bank balances
 - Investment Portfolio
 - Government apportionment and trends
 - Asset Dashboard Status

Inflationary Impact of Delaying Rate Adjustment

Assume \$1.00 Base rate with an annual 3% Compounded Increase								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Accumulated Dollars Collected
Implementing Rate Increase Immediately - 19% Increase From Year 1 to Year 7								
Rate	\$ 1.00	\$ 1.03	\$ 1.06	\$ 1.09	\$ 1.13	\$ 1.16	\$ 1.19	\$ 7.66
Waiting 4 Years to Increase Rates - 26% From Year 1 to Year 7								
Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.19	\$ 1.22	\$ 1.26	\$ 7.66
Waiting 5 Years to Increase Rates - 35% From Year 1 to Year 7								
Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.31	\$ 1.35	\$ 7.66
Waiting 6 Years to Increase Rates - 66% From Year 1 to Year 7								
Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.66	\$ 7.66

Raise Rates Annually! It's cheaper in the long term.

Water Rate Life Expectancy

Current rate structure should be reviewed **annually**.

The Bottom Line

Annual revenues must cover your total:

- ✓ Operating & Non- Operating expenses
- ✓ Debt payments
- ✓ Taxes
- ✓ Fees
- ✓ Funding reserve accounts