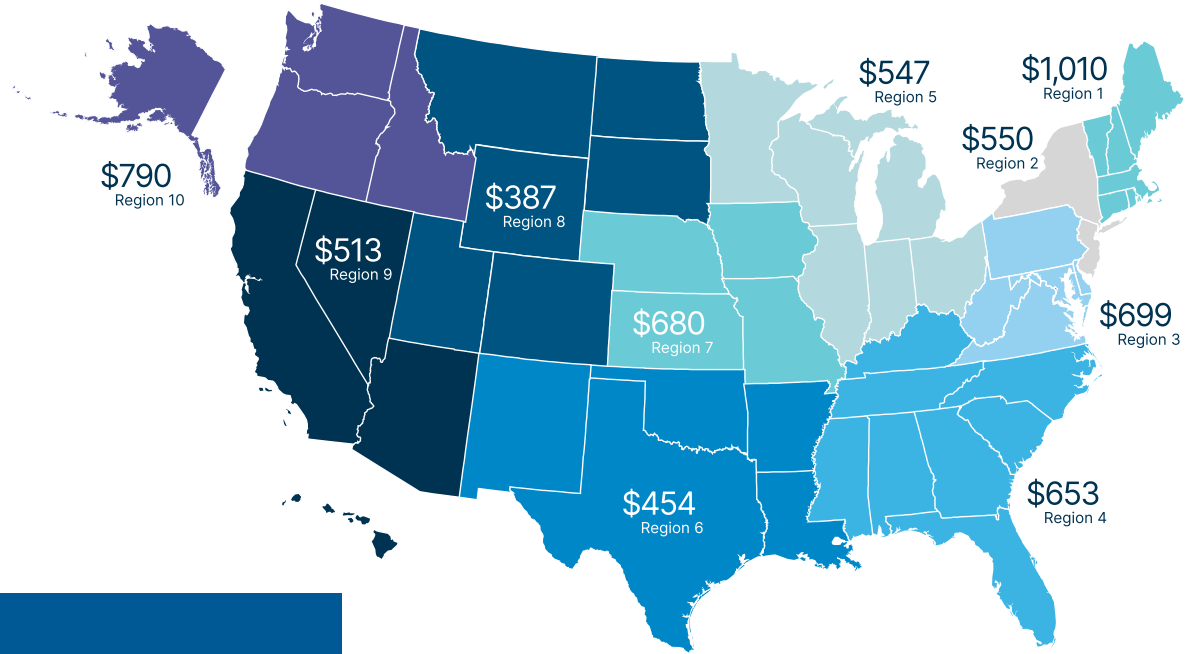


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# Cost of Clean Water Index



**Regional Average Annual Charges, 2023**  
All Respondents

**99 Million**

POPULATION SERVED

**164**

UTILITY RESPONDENTS

**\$588**

AVERAGE NATIONAL ANNUAL SEWER SERVICE CHARGE

**3.2%**

INCREASE IN SEWER CHARGES 2022-2023

**4.1%**

INCREASE IN CONSUMER PRICE INDEX 2022-2023

## Average Charge for Wastewater Services Increased 3.2% in 2023

NACWA's *Cost of Clean Index* for the 2023 calendar year indicates that the average cost of wastewater services rose 3.2 percent. The average increase was 0.9 percentage points below the rate of inflation as measured by the Consumer Price Index (CPI) (see *Annual Change in Cost of Clean Water Index vs. Inflation*). This marks the third straight year where national charges for wastewater collection and treatment services were outpaced by inflation.

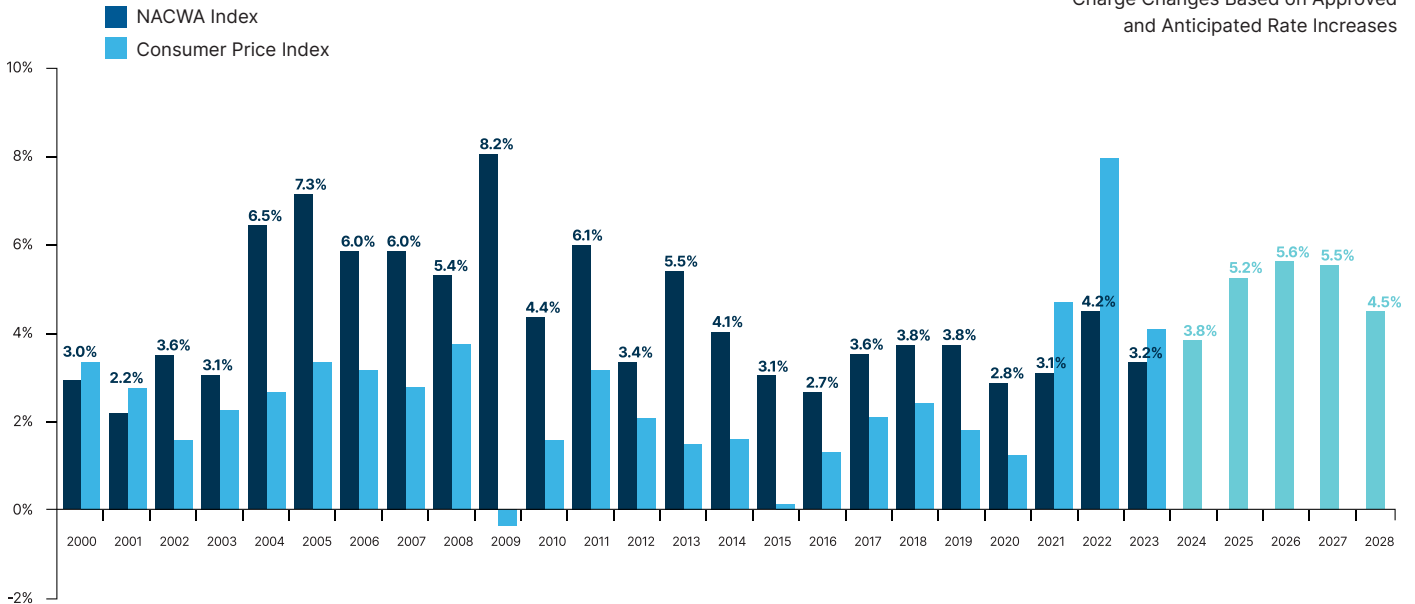
In 2023, the national average amount that a single-family residence paid for wastewater services was \$588. Wastewater service charges vary widely among EPA regions and states, and are affected by demographics, geography, system age, regulatory requirements, and a range of other issues. To illustrate these variations, the *Regional Average Annual Charge* map shows a breakdown of average charges by EPA region. The average service charge by Region varies from a low of \$387 in EPA Region 8 to a high of \$1,010 in EPA Region 1.



## Annual Change in Cost of Clean Water

Index vs. Inflation

2024 to 2028 Projected Service Charge Changes Based on Approved and Anticipated Rate Increases



The *Annual Change in Cost of Clean Water Index vs. Inflation* chart presents a national snapshot of the increase in service charges, as compared to inflation, since 2000. Table A-1 provides additional detail, including a breakdown of *NACWA Index* values and service charges back to 1985, the base year for the *Index*. The values for 2023 are based on the responses from 164 NACWA members serving over 99 million people.

Customers pay for sewer services in a variety of ways. Charges may be based on property values, gallons of water used, on a flat rate, or include some combination of these values. Due to this variability, the *NACWA Index* uses what the average single-family residence pays annually because it is a more consistent measure to track the cost of services over time. In 2023, the majority of clean water utilities implemented rate structures that resulted in increases in the average annual household service charge. However, in some communities, volume-based rates increased, but average service charges dropped due to reductions in actual or estimated residential water use or decreased revenues. Additional national and regional data are included in Tables A-1 and A-3.

### Average Annual Service Charge Still Hovering at Approximately 2.0% of Poverty Threshold

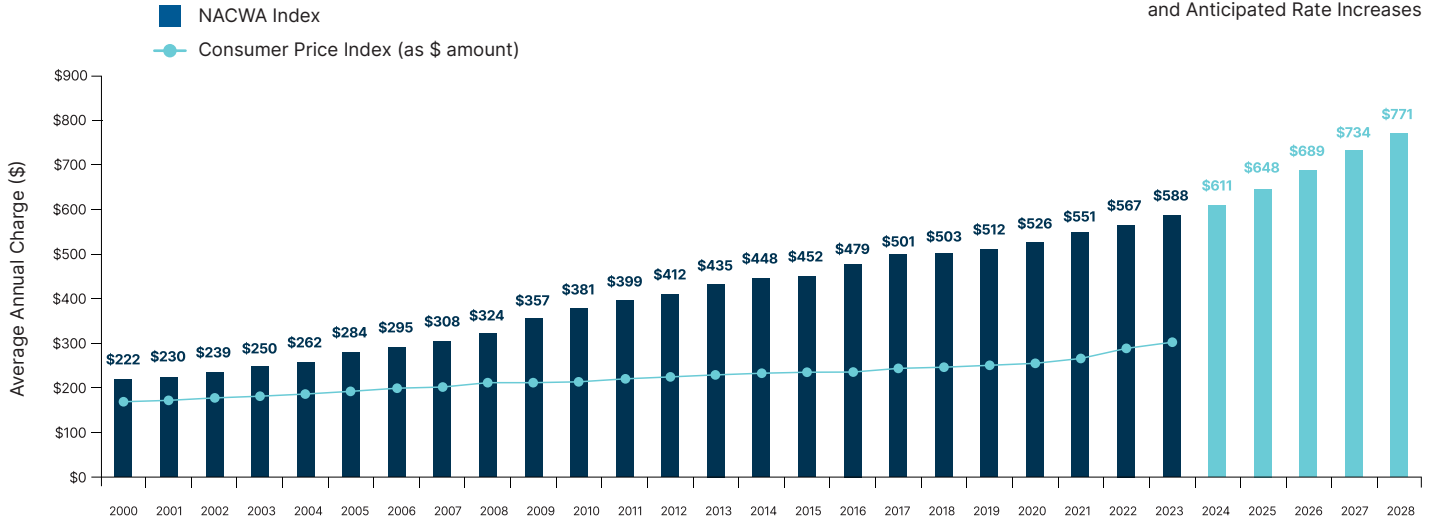
The *Average Annual Service Charge* chart presents a national snapshot of wastewater service charges since 2000 and provides a projection of average charges through 2028. In comparison to the Consumer Price Index (CPI), the annual sewer service charge has increased at double the rate of the CPI since 2000 and has nearly doubled in value since 2006. The average annual sewer charge of \$588 represents nearly 2 percent (1.96 percent) of the 2023 Federal poverty income threshold (\$30,000) for a family of four (which jumped \$2,250 from 2022).



## Average Annual Service Charge

2000 – 2023 & Projected

2024 to 2028 Projected Service Charge Changes Based on Approved and Anticipated Rate Increases



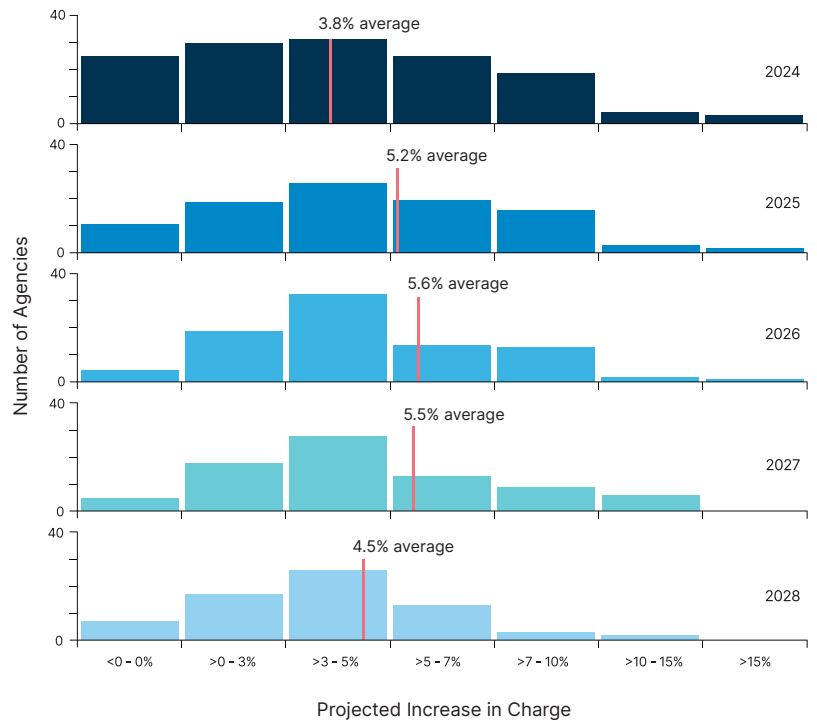
## Half of Utility Respondents to Increase Rates by 20% or More by 2028

Infrastructure needs, as well as inflationary and regulatory cost pressures, are leading to a higher prevalence of approved and planned rate increases nationwide. Eighty percent (80%) of agencies indicated that approved or planned rate increases will be implemented in 2024 and 2025.

From 2024-2028, rates for wastewater services are expected to rise from 4 to 5 percent per year with a median cumulative five-year increase of 20 percent (see *Projected Increases in Charges* chart which shows the distribution of projected increases in charges among agency respondents over the next five years). The top reasons cited for large projected rate increases include capital needs to address aging infrastructure, meeting increased regulatory requirements due to consent decrees, sewer overflows, nutrient control, and increasing O&M costs, including labor, construction, supplies and materials due to inflation.

## Projected Increases in Charges

2024 – 2028



*Disclaimers: The NACWA Index strives to use the best available data each year when determining current and historical household charges and trends. These data are intended for comparison purposes only, and are subject to change from one year to the next. While this document presents the most up-to-date data available, if better data become available in the future, the data presented here may be modified.*

Additional data and information on the NACWA Index and past years' surveys are available on NACWA's website.

**Table A-1: NACWA Service Charge Index, 1985 to 2023**

Year	NACWA Index <sup>(1)</sup>	Change from Previous Year <sup>(2)</sup>	Average Service Charge (\$)	Change from Previous Year (\$)	Change to Consumer Price Index	Total Responses	Population represented (in millions)	Total Responses in Both Previous and Current Year
1985	100.0		\$102.75			155	88.6	
1986	106.8	6.8%	\$109.69	\$6.95	1.9%	158	88.8	155
1987	112.4	5.3%	\$115.51	\$5.82	3.6%	157	88.8	157
1988	119.9	6.9%	\$123.17	\$7.99	4.1%	163	91.3	157
1989	130.1	8.4%	\$133.65	\$10.35	4.8%	166	92.0	163
1990	141.0	8.4%	\$144.84	\$11.25	5.4%	169	92.3	166
1991	153.7	8.9%	\$157.88	\$12.84	4.2%	171	92.5	169
1992	166.7	8.5%	\$171.33	\$13.84	3.0%	175	94.7	171
1993	183.1	8.3%	\$188.12	\$13.78	3.0%	184	100.5	170
1994	193.4	5.1%	\$198.68	\$10.32	2.6%	194	102.4	182
1995	197.8	2.2%	\$203.22	\$4.23	2.8%	199	99.6	189
1996	201.7	3.6%	\$207.28	\$6.44	3.0%	205	105.8	195
1997	203.9	1.3%	\$209.49	\$2.88	2.3%	208	107.9	202
1998	207.8	2.4%	\$213.52	\$4.89	1.6%	214	106.6	204
1999	209.8	0.7%	\$215.61	\$1.90	2.2%	224	109.4	210
2000	216.4	3.0%	\$222.31	\$6.41	3.4%	234	113.7	218
2001	223.5	2.2%	\$229.63	\$4.47	2.8%	238	113.5	227
2002	232.6	3.6%	\$238.99	\$8.45	1.6%	220	107.8	215
2003	243.0	3.1%	\$249.71	\$7.69	2.3%	232	108.4	198
2004	254.8	6.5%	\$261.79	\$16.10	2.7%	222	109.0	200
2005	276.3	7.3%	\$283.91	\$18.79	3.4%	213	108.7	188
2006	287.1	6.0%	\$295.03	\$17.23	3.2%	203	107.0	177
2007	299.4	6.0%	\$307.60	\$16.47	2.8%	196	104.6	173
2008	315.4	5.4%	\$324.11	\$18.00	3.8%	191	107.6	165
2009	347.3	8.2%	\$356.90	\$26.41	-0.4%	171	103.4	161
2010	371.2	4.4%	\$381.45	\$16.82	1.6%	181	100.7	143
2011	387.7	6.1%	\$398.57	\$23.78	3.2%	176	104.0	158
2012	401.6	3.3%	\$412.17	\$13.97	2.1%	179	108.1	148
2013	424.3	5.5%	\$435.26	\$22.53	1.5%	183	107.8	155
2014	436.0	4.1%	\$447.99	\$17.45	1.6%	184	112.8	164
2015	439.8	3.1%	\$451.93	\$13.53	0.1%	176	110.6	160
2016	466.3	2.7%	\$479.07	\$11.85	1.3%	173	104.4	156
2017	487.8	3.6%	\$501.21	\$11.49	2.1%	180	105.4	144
2018	489.5	3.8%	\$503.01	\$19.77	2.4%	178	109.6	154
2019	498.3	3.8%	\$512.01	\$6.30	1.8%	178	110.3	149
2020	512.3	2.8%	\$526.44	\$14.57	1.2%	175	104.4	154
2021	536.1	3.1%	\$550.81	\$15.73	4.7%	171	105.5	144
2022	551.9	4.2%	\$567.12	\$23.57	8.0%	173	104.9	143
2023	572.0	3.2%	\$587.59	\$19.70	4.1%	164	99.0	140

**Note 1:** The value of the Service Charge Index is based on all responses received. The base year, 1985, has been indexed to a value of 100 at the national level.

**Note 2:** The annual percent change in the Index is based on the responses of those agencies that responded in both the previous year and current year using the same calculation method.



**Table A-2: Projected Annual Service Charge Increases, 2024-2028**

	2024	2025	2026	2027	2028
<b>Average Annual Increase (%)</b>	3.8%	5.2%	5.6%	5.5%	4.5%
<b>Average Service Charge (Projected \$)</b>	610.79	647.59	689.40	733.88	771.50
Change from Previous Year (\$)	23.21	36.79	41.82	44.48	37.62
<b># of Total Responses</b>	156	153	151	149	148
<b># of Responses with Numeric Estimates</b>	136	97	86	79	68
<b>Approved</b>	57%	24%	17%	12%	9%
<b>Planned</b>	23%	56%	56%	59%	56%
<b>No Change</b>	13%	7%	3%	2%	3%
<b>Uncertain</b>	6%	13%	25%	27%	32%

**Table A-3: Regional Annual Average Sewer Service Charges, 2023 Summary**

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	National
<b># of Agencies</b>	9	10	18	23	31	10	13	14	22	14	164
<b>Population</b>	3.5	13.1	11.1	10.0	19.7	9.3	4.3	3.9	19.3	4.8	99.0
<b>2023 Charge</b>											
Average	\$1,010.27	\$550.08	\$699.36	\$653.42	\$547.00	\$454.38	\$679.57	\$387.48	\$513.09	\$790.06	\$587.59
Median	\$600.00	\$492.64	\$539.10	\$519.00	\$468.40	\$454.50	\$482.28	\$381.55	\$507.50	\$643.75	\$504.39
Minimum	\$396.00	\$209.32	\$238.68	\$256.50	\$234.54	\$308.52	\$56.77	\$209.00	\$246.44	\$480.48	\$56.77
Maximum	\$1,210.20	\$678.40	\$1,094.02	\$1,173.52	\$759.28	\$914.40	\$898.20	\$609.12	\$1,325.04	\$909.72	\$1,325.04
<b>% Change<sup>(3)</sup></b>											
1-year (2022-23)	3.0%	4.1%	2.2%	6.9%	1.8%	-0.7%	4.4%	19.3%	1.6%	3.9%	4.4%
3-year (2020-23)	11.9%	9.9%	11.7%	13.7%	9.4%	7.0%	16.1%	29.7%	7.5%	15.0%	12.1%
5-year (2018-23)	17.5%	8.6%	25.5%	17.8%	18.1%	6.5%	23.6%	44.9%	12.1%	28.8%	21.2%

**Note 3:** The percent change values in Table A-3 are based on the responses of those agencies that responded in both the previous year and current year using the same calculation method.

