

Water Capacity Charge Study

November 19, 2024



Approach to Setting Water Capacity Charges

Buy-In Approach:

- Equity Method

- Valuation of Existing System

- No Future Expansion Project

Incremental Approach:

- Marginal Method

- Value to Expand Capacity of Existing System



Valuation Approaches

Determine value of existing system

Original cost

- Simple

- Doesn't capture increased cost to replace

Replacement cost

- Captures increased costs due to inflation

- Use cost indices to calculate present value

Original/Replacement cost less depreciation

- Captures loss of value due to age or wear and tear

- RCLD most common approach

Cost Indices

Engineering News Record Construction Cost Index (CCI):

- Wide swath of construction costs

- Comes out monthly

- Widely used

Handy Whitman Index (HWI):

- Hones in on utility specific costs

- Comes out bi-annually

- Starting to be more widely used – moving west

Calculation of Water Capacity Charges

- + System Value (net of grants)
- + Capital Reserves
- Outstanding Debt Principal

- = Net System Value

Net System Value

————— = Unit Cost per EMU

System EMUs



Capacity Fee Calculation EMU – CCI w/Mortality Curve

System Valuation	\$112,787,388
Total EMUs	17,386
Fee per EMU	\$6,487

Capacity Fees	Ratio	Proposed Fees	Current Fees	\$ Difference	% Difference
5/8" Restricted	0.50	\$3,244	\$11,125	-\$7,881	-71%
5/8"	1.00	\$6,487	\$22,250	-\$15,763	-71%
1"	2.50	\$16,219	\$55,626	-\$39,407	-71%
1.5"	5.00	\$32,437	\$100,126	-\$67,689	-68%
2"	12.50	\$81,093	\$194,690	-\$113,597	-58%
3"	25.00	\$162,186	\$367,130	-\$204,944	-56%
4"	50.00	\$324,372	\$489,507	-\$165,135	-34%
6"	80.00	\$518,995	\$1,335,020	-\$816,025	-61%

Capacity Fee Calculation EMU – HWI w/Mortality Curve

System Valuation	\$185,504,574
Total EMUs	17,386
Fee per EMU	\$10,670

Capacity Fees	Ratio	Proposed Fees	Current Fees	\$ Difference	% Difference
5/8" Restricted	0.50	\$5,335	\$11,125	-\$5,790	-52%
5/8"	1.00	\$10,670	\$22,250	-\$11,580	-52%
1"	2.50	\$26,675	\$55,626	-\$28,951	-52%
1.5"	5.00	\$53,350	\$100,126	-\$46,776	-47%
2"	12.50	\$133,376	\$194,690	-\$61,314	-31%
3"	25.00	\$266,752	\$367,130	-\$100,378	-27%
4"	50.00	\$533,504	\$489,507	\$43,997	9%
6"	80.00	\$853,606	\$1,335,020	-\$481,414	-36%

Neighboring Agency Survey*

Meter Size	Soquel Creek Current	Soquel Creek Calculated - CCI	Soquel Creek Calculated - HWI	City of Santa Cruz	San Lorenzo Valley WD	Scotts Valley WD	Coastside County WD	Marina Coast WD (Marina)	Marina Coast WD (Ord)
5/8" Restricted	\$11,125	\$3,244	\$5,335	N/A	N/A	N/A	N/A	N/A	N/A
5/8"	\$22,250	\$6,487	\$10,670	\$11,159	\$10,577	\$26,238	\$16,030	\$5,715/EDU**	\$11,699/EDU
3/4"	N/A	N/A	N/A	\$16,738	\$10,577	\$39,209	\$24,045	\$5,715/EDU	\$11,699/EDU
1"	\$55,626	\$16,219	\$26,675	\$27,896	\$17,629	\$65,345	\$40,075	\$5,715/EDU	\$11,699/EDU
1.5"	\$100,126	\$32,437	\$53,350	\$55,792	\$35,257	\$130,689	\$80,151	\$5,715/EDU	\$11,699/EDU
2"	\$194,690	\$81,093	\$133,376	\$89,267	\$56,412	\$209,103	\$128,241	\$5,715/EDU	\$11,699/EDU
3"	\$367,130	\$162,186	\$266,752	\$195,271	\$112,824	\$457,412	\$280,528	\$5,715/EDU	\$11,699/EDU
4"	\$489,507	\$324,372	\$533,504	\$351,487	\$176,287	\$823,340	\$480,903	\$5,715/EDU	\$11,699/EDU
6"	\$1,335,020	\$518,995	\$853,606	\$725,290				\$5,715/EDU	\$11,699/EDU

*Neighboring Agency Fees are for FY 2024

**EDU = Equivalent Dwelling Unit, different terminology but same approach as ERU