



DRAFT

CITY OF SANTA BARBARA

FINANCE COMMITTEE AGENDA REPORT

AGENDA DATE: May 10, 2022

TO: Finance Committee

FROM: Water Resources Division, Public Works Department

SUBJECT: Proposed Updates to Water and Wastewater Capacity Charges

RECOMMENDATION: That the Finance Committee:

- A. Receive a presentation on proposed water and wastewater capacity charges for Fiscal Years 2023 through 2027; and
- B. Set a Public Hearing date for June 14, 2022, at 2:00 p.m., for consideration of changes to the City's water and wastewater capacity charges.

DISCUSSION:

Background

Capacity charges are one-time charges for new or expanded water and wastewater connections. Collection of the charges offsets a portion of the system's revenue requirements, eliminating the need to recover these revenues through rates. Over the past three years, capacity charges have made up less than 1% of total revenue for both the Water and Wastewater Funds.

The City last completed a capacity charge study in 2017 and adopted a five-year capacity charge schedule. On September 28, 2021, the City contracted with HDR Engineering (HDR) to analyze the City's water and wastewater capacity charges and perform updates to the capacity charge model.

Capacity Charge Calculation Methodology

HDR valued the water and wastewater system capital assets using an industry-standard Replacement Cost New Less Depreciation (RCNLD) method. The capacity charges calculation begins with a valuation of the current water and wastewater systems, including capital assets and cash reserve balances. The original cost of system assets are brought to current values using the Engineering News Record (ENR) Construction Cost Index (CCI) and subtracting the asset depreciation and outstanding debt used to finance capital assets.

HDR estimated the Water enterprise has approximately \$455 million (RCNLD) in capital assets, consisting of both City-owned capital assets and shared capital assets related to the State Water Project and the Cachuma Project. The Wastewater enterprise has approximately \$135 million (RCNLD) in direct City-owned capital assets.

The total value of each system is divided by the estimated capacity of each system to reflect the buy-in cost of providing new or expanded water or wastewater service. System capacity is equal to the total metered capacity connected to the system, expressed in terms of the number of 5/8" meter equivalents. Therefore, the total asset value divided by the total number of 5/8" meter equivalents equals the capacity charge for a new 5/8" meter connection. A 1" meter has 2.5 times the capacity of a 5/8" meter, so the charge is 2.5 times the 5/8" meter charge, with similar adjustments for other meter sizes. The method results in a capacity charge structure proportional to the flow capacity of each meter size. This approach is commonly used and is recognized by the American Water Works Association.

Proposed Water and Wastewater Capacity Charges

Water Capacity Charges

Meter Size	Weighting	Current Capacity Charges	Proposed FY23 Capacity Charges	Difference
5/8"	1	\$9,561	\$10,248	\$687
3/4"	1.5	\$14,342	15,373	1,031
1"	2.5	\$23,903	25,621	1,718
1 1/2"	5	\$47,805	51,242	3,437
2"	8	\$76,488	81,988	5,500
3"	15	\$143,415	153,727	10,312
4"	25	\$239,025	256,212	17,187
6"	50	\$478,050	512,423	34,373
8"	80	\$764,880	819,877	54,997

Water capacity charges are proposed to increase by approximately 7%. This increase is primarily due to the increase in cash-funded capital projects since the last capacity charge study, for example, the expansion of the Water Main Replacement Program after the end of the last drought period. Debt service payments have also begun on large capital projects, such as the Desalination Plant, which increased the water system's asset valuation, and thus the water capacity charge.

Wastewater Capacity Charges

Meter Size	Weighting	Current Capacity Charges	Proposed FY23 Capacity Charges	Difference
5/8"	1	\$3,885	\$3,744	-\$141
3/4"	1.5	\$5,828	\$5,616	-\$212
1"	2.5	\$9,713	\$9,361	-\$352
1 1/2"	5	\$19,427	\$18,721	-\$706
2"	8	\$31,082	\$29,954	-\$1,128
3"	15	\$58,280	\$56,164	-\$2,116
4"	25	\$97,133	\$93,607	-\$3,526
6"	50	\$194,265	\$187,214	-\$7,051
8"	80	\$310,824	\$299,542	-\$11,282

Wastewater capacity charges are proposed to decrease by 3.6%. The primary factors for the decrease are predicted vs actual inflation and capital project funding. The last capacity charge schedule escalated the capacity charges by 5% each year. Actual annual inflation over that period was slightly less than the assumed amount. The Wastewater Fund supported significant capital projects over the past five years, but most were funded through low-interest rate loans. The value of these debt-financed projects does not add to the value of the wastewater system capital valuation used to compute capacity charges until payments begin on this debt.

Multi-Family Dwelling Units

The City's General Plan policies promote smaller, high-density multi-family dwelling units, and State legislation requires that to the extent capacity charges are allowed on Accessory Dwelling Units (ADUs), the charges be based on the size of the unit, or the number of plumbing fixtures. To account for the fact that most multi-family units do not require the entire capacity of the City's smallest water meter offering, and for State regulations on charges affecting ADUs, the City adopted a \$/fixture unit approach for multi-unit dwellings and ADUs served by a dedicated water meter. The California Plumbing Code ascribes fixture unit values to common plumbing fixtures and based on Plumbing Code, the capacity of one 5/8" meter is equal to 30 fixture units. Staff and HDR recommend continuing with this \$/fixture unit approach.

Multi-Family Dwelling Unit Capacity Charges (\$/Fixture Unit)

Service	Current Capacity Charge (\$/Fixture Unit)	Proposed FY23 Capacity Charge (\$/Fixture Unit)	Difference
Water	\$318.70	\$341.60	\$22.90
Wastewater	\$129.51	\$124.81	-\$4.70

Multi-Year Charge Schedule

HDR's scope of work includes developing a multi-year capacity charge schedule. HDR and staff propose a five-year capacity charge schedule, with annual escalating charges being based on the change in the March ENR CCI from the previous year. For example, if the March 2023 ENR CCI is 3% higher than the March 2022 ENR CCI, then capacity charges will increase by 3% in July 2023 (start of FY24).

BUDGET/FINANCIAL INFORMATION:

The revenue received from capacity charges varies with development activity in the City. The Water and Wastewater Funds have budgeted capacity charge revenue at \$412,000 and \$102,000 in Fiscal Year 2023, respectively. Over the last three years, capacity charges have made up less than 1% of total revenues for both the Water and Wastewater Fund.

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SUBMITTED BY: Clifford M. Maurer, P.E, Public Works Director

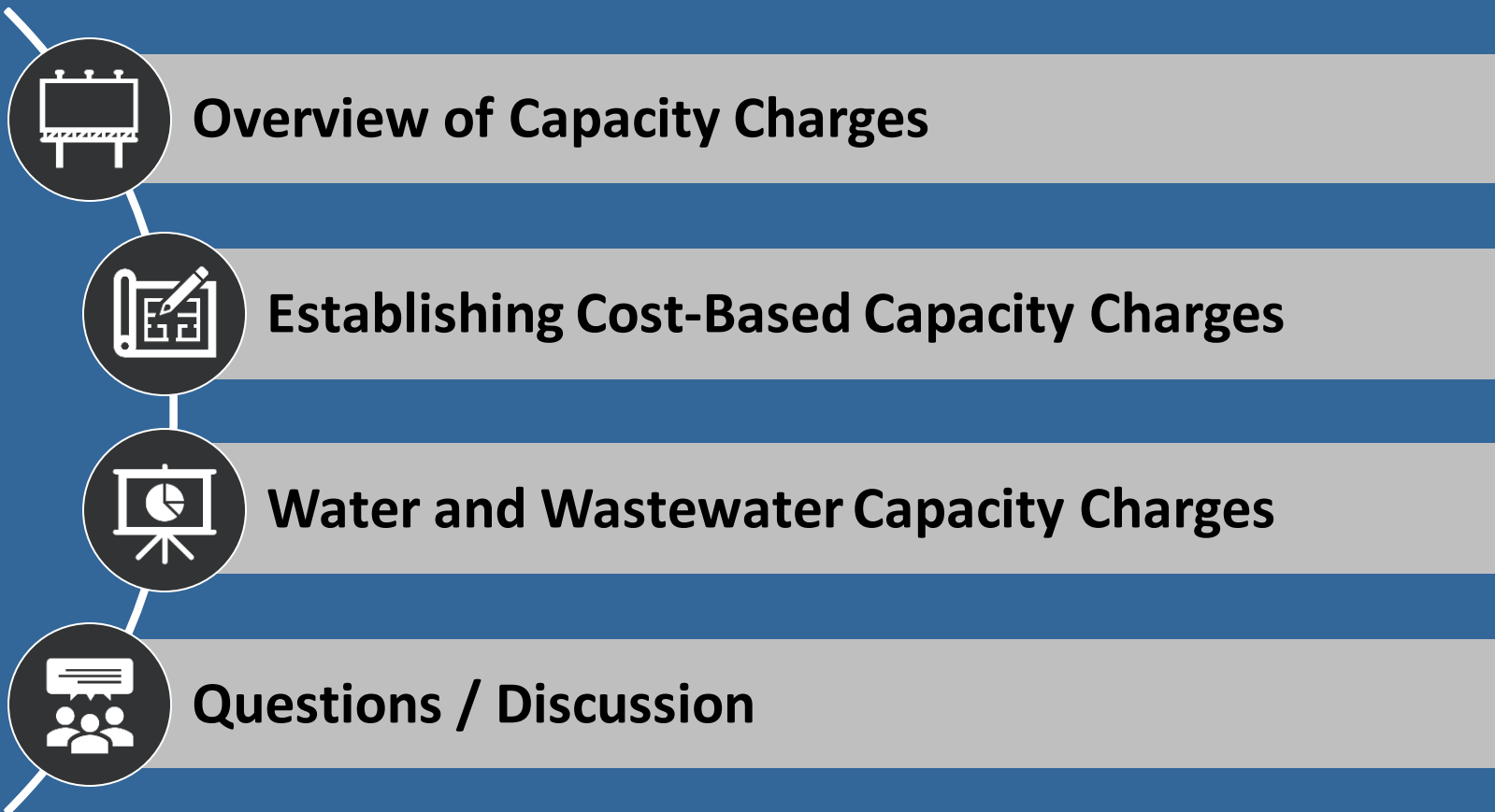
APPROVED BY: City Administrator's Office

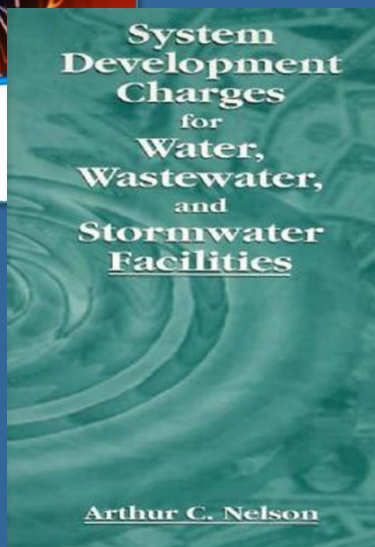
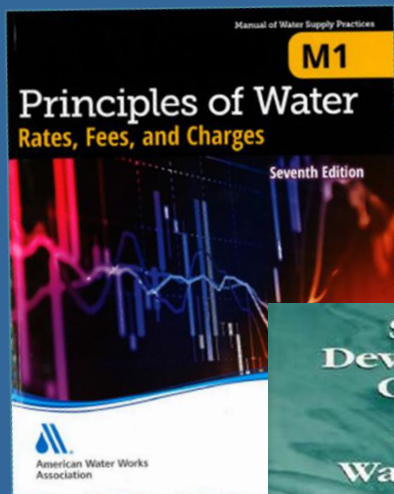


Water & Wastewater Capacity Charge Study

April 21, 2022







Overview of Capacity Charges

- One-time charge to pay into the system. Paying for proportional share of the facilities that are in place today that were funded by existing customers
- New connections pay a “buy-in” for existing assets and related facilities
- Does not include Operations and Maintenance costs in calculation or fund Operations and Maintenance costs
- Based on the City’s planning documents, CIP, and existing assets
- Make up less than 1% of revenues for both funds
- Update to existing model, no major methodology/structure changes



Capacity Charge Methodology

Existing Capital
Assets
(brought to
present value)

÷

Equivalent Units
(system capacity)

=

Capacity Charge

- Buy-in methodology (consistent with past practices/methodology)



Capacity Charge Methodology

Existing Capital Assets
(brought to present value)

÷

Equivalent Units
(system capacity)

=

Capacity Charge

- Determine Value of Capital Assets
- Includes existing assets – current infrastructure and current year capital improvement plan
- Original cost (less depreciation) brought current value using Engineering News Record Construction Cost Index (ENR-CCI 20 City Average)
- Determination of any credits
 - Asset value reduced by outstanding service debt principal, or grants
 - Avoid double-charging – once through capacity charges and again within rates
- Included reserves up to Council Policy minimum



Capacity Charge Methodology

$$\begin{array}{|c|} \hline \text{Existing Capital} \\ \text{Assets} \\ \text{(brought to present} \\ \text{value)} \\ \hline \end{array} \div \begin{array}{|c|} \hline \text{Equivalent Units} \\ \text{(system capacity)} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Capacity Charge} \\ \hline \end{array}$$

- Determination of equivalent units
 - One equivalent unit = 5/8" meter
 - Provides number of equivalent units and linkage to infrastructure required to serve the City's customers based on the capacity of a 5/8" meter
 - 1" meter = 2.5 x 5/8" meter, etc. Per AWWA



Present and Proposed Water Capacity Charge by Meter Size

- Increase of 7.2%
 - Increase in cash funded projects after drought (main replacement)
 - Debt service payments commence (desal)

Meter	Equivalency	Current	Proposed
5/8"	1.00	\$9,561	\$10,248
3/4"	1.50	14,342	15,373
1"	2.50	23,903	25,621
1 1/2"	5.00	47,805	51,242
2"	8.00	76,488	81,988
3"	15.00	143,415	153,727
4"	25.00	239,025	256,212
6"	50.00	478,050	512,423
8"	80.00	764,880	819,877
10"	115.00	1,099,515	1,178,574
Current (\$/Fixture Unit)		Proposed (\$/Fixture Unit)	
\$318.70		\$341.60	



Present and Proposed Wastewater Capacity Charge by Meter Size

- Decrease of 3.6%
 - Estimated inflation outstripped actual inflation
 - Most projects debt funded

Meter	Equivalency	Current	Proposed
5/8"	1.00	\$3,885	\$3,744
3/4"	1.50	5,828	5,616
1"	2.50	9,713	9,361
1 1/2"	5.00	19,427	18,721
2"	8.00	31,082	29,954
3"	15.00	58,280	56,164
4"	25.00	97,133	93,607
6"	50.00	194,265	187,214
8"	80.00	310,824	299,542
10"	115.00	446,810	430,592

Current (\$/Fixture Unit)	Proposed (\$/Fixture Unit)
\$129.51	\$124.81



Adoption Schedule

- Multi-Year Adoption
 - 5-Years (FY23- FY27)
 - Charges for FY24 – FY27 based on actual ENR CCI

- Adoption Schedule
 - Finance Committee - May 10
 - Public Hearing - June 14
 - Adoption – June 21
 - Effective – July 1



Thank You
and Discussion





Water Capacity Charge

	Total	Equivalent Units	\$ / Eq. Mtr.
Assets			
Source	\$115,478,705	44,382	\$2,602
Storage	30,342,512	44,382	684
Pump Station	13,799,810	44,382	311
Trans. And Dist.	94,737,522	44,382	2,135
Treatment	63,897,796	44,382	1,440
General	10,516,816	44,382	237
SWP – DWR Transmission	52,108,869	44,382	1,174
SWP – DWR Conservation	1,559,688	44,382	35
SWP – CCWA	20,996,612	44,382	473
Cachuma – Reclamation	104,710,134	44,382	2,359
Cachuma – COMB	2,991,864	44,382	67
FY 2022 CIP	<u>14,943,454</u>	44,382	<u>337</u>
Total Assets	\$526,083,783		\$11,854



Water Capacity Charge (cont.)

	Total	Equivalent Units	\$ / Eq. Mtr.
Total Assets	\$526,083,783	44,382	\$11,854
Debt Service Credit			
2013 Water COP	(\$9,095,000)	44,382	(\$205)
Cater Plant Improv Loan	(3,286,681)	44,382	(74)
Safe Drinking Water 2011	(19,371,055)	44,382	(436)
Desal Loan	<u>(60,525,218)</u>	44,382	<u>(1,364)</u>
Total DS Credit	(\$99,277,955)		(\$2,079)
Cash Reserves	\$21,041,595	44,382	\$474
Total Capacity Charge	\$454,847,423		\$10,248



Present and Proposed Water Capacity Charge by Meter Size

Meter	Equivalency	Current	Proposed
5/8"	1.00	\$9,561	\$10,248
3/4"	1.50	14,342	15,373
1"	2.50	23,903	25,621
1 1/2"	5.00	47,805	51,242
2"	8.00	76,488	81,988
3"	15.00	143,415	153,727
4"	25.00	239,025	256,212
6"	50.00	478,050	512,423
8"	80.00	764,880	819,877
10"	115.00	1,099,515	1,178,574



Wastewater Capacity Charge

	Total	Equivalent Units	\$ / Eq. Mtr.
Assets			
Collection	\$104,338,696	41,358	\$2,523
Treatment	59,054,605	41,358	1,428
General	10,199,040	41,358	247
FY 2022 CIP	<u>10,422,677</u>	41,358	<u>252</u>
Total Assets	\$173,592,341		\$4,449
Debt Service Credit			
20004/16 Revenue Bond	(\$5,995,000)	41,358	(\$145)
CWSRF Loan – FOG	(1,205,261)	41,358	(29)
CWSRF Loan – Headworks	(3,235,491)	41,358	(78)
Aeration Loan	(28,148,839)	41,358	(681)
FY 2022 SRF	<u>(0)</u>	41,358	<u>(0)</u>
Total DS Credit	(\$38,584,590)		(\$933)
Cash Reserves	\$9,425,271	41,358	\$228
Total Capacity Charge			\$3,744