



Water Rate Study

4/25/2024



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

Table 1
 Bodega Bay PUD - Water Rate Study
 Current Bi-Monthly Water Rates

Meter Size	Fixed Meter Rates	Volumetric Rates			
	\$ / BiMonthly	Tier 1 Usage	\$/hcf	Tier 2 Usage	\$/hcf
5/8" or 3/4"	\$78.05	0-8 hcf	\$0.00	8+ hcf	\$10.02
1"	\$130.08	0-14 hcf	\$0.00	14+ hcf	\$10.02
1.5"	\$260.15	0-28 hcf	\$0.00	28+ hcf	\$10.02
2"	\$416.25	0-44 hcf	\$0.00	44+hcf	\$10.02
3"	\$832.75	0-89 hcf	\$0.00	89+hcf	\$10.02

Fire Meter Rates ¹	
Fire Meter Size	\$ / BiMonthly
5/8" or 3/4"	\$17.00
1"	\$17.00
1.5"	\$25.50
2"	\$34.00
3"	\$51.00

¹Monthly flat rate charge for private fire service: \$8.50 per month per inch of diameter per connection.

Table 2
Bodega Bay PUD - Water Rate Study
Water Customer Information

Meter Size	Meters Count	Flow Capacity (gpd)	RUE Ratio¹	Water RUEs	Fire Meters Count
3/4" or less	974	30	1.00	974	1
1"	151	50	1.67	252	2
1.5"	16	100	3.33	53	1
2"	8	160	5.33	43	4
3" & Over	<u>7</u>	320	10.67	<u>75</u>	<u>3</u>
Totals	1,156			1,396	11

¹Flow capacities and ratios from American Water Works Association Manual M22

Table 3
 Bodega Bay PUD - Water Rate Study
 Estimated Revenues - Current Fixed & Volumetric Water Revenues

Meter Size	Meter Rate	Meter Count	Fixed Revenue	Tier 1 Water		Tier 1 Water	Tier 2 Water	Tier 2 Water	Tier 2 Water
				Consumption (hcf)	Tier 1 Water Rates	Revenue	Consumption (hcf)	Rates	Revenue
3/4" and below	\$78.05	974	\$456,124.20	29,364	\$0.00	\$0.00	25,451	\$10.02	\$255,019.52
1"	\$130.08	151	117,852.48	4,583	\$0.00	\$0.00	14,991	\$10.02	150,205.51
1.5"	\$260.15	16	24,974.40	2,192	\$0.00	\$0.00	8,321	\$10.02	83,377.92
2"	\$416.25	8	19,980.00	1,562	\$0.00	\$0.00	2,017	\$10.02	20,206.53
3"	\$832.75	<u>7</u>	<u>34,975.50</u>	<u>1,857</u>	\$0.00	<u>\$0.00</u>	<u>2,554</u>	\$10.02	<u>25,586.77</u>
Total Fixed Revenue		1,156	\$653,906.58	39,557		\$0.00	53,333		\$534,396.26

Table 3A
 Bodega Bay PUD - Water Rate Study
 Estimated Revenues - Private Fire Services

Fire Meter Size	Meter Rate	Meter Count	Fixed Revenue
3/4" and below	\$17.00	1	\$102.00
1"	\$17.00	2	204.00
1.5"	\$25.50	1	153.00
2"	\$34.00	4	816.00
3"	\$51.00	<u>3</u>	<u>918.00</u>
Total Fixed Revenue		11	\$2,193.00

Table 4
 Bodega Bay PUD - Water Rate Study
 2023/24 Water Operating Expenses

Water Expenses	2023/24 Estimated	Water Allocation	
		%	\$
Office Wages	\$334,000	50%	\$167,000
Field Wages	552,000	50%	276,000
Employee Benefits			
Health	176,000	50%	88,000
Dental	9,600	50%	4,800
Life	4,000	50%	2,000
Vision	2,600	50%	1,300
SSC	68,000	50%	34,000
Retirement	40,000	50%	20,000
Retire Med	36,000	50%	18,000
Retirement Health	79,000	50%	39,500
Directors Fees	6,000	50%	3,000
Gas-Trucks	12,000	50%	6,000
Gas-Equipment	7,000	50%	3,500
Insurance	73,000	50%	36,500
Membership	23,000	50%	11,500
Permits, Licenses & Fees	55,000	50%	27,500
Office Supplies	17,500	50%	8,750
Chemicals	53,000	20%	10,600
Repairs-Truck	5,000	50%	2,500
Repairs-Generator	2,000	50%	1,000
Professional Services	247,000	50%	123,500
Repairs and Maintenance	175,000	50%	87,500
Small Tools	5,000	50%	2,500
Research & Monitoring	91,000	50%	45,500
Safety Training & Equipment	10,000	50%	5,000
Professional Development	5,000	50%	2,500
PG&E	257,000	25%	64,250
Cell Phones	1,500	50%	750
Voice & Internet	10,000	50%	5,000
Propane	2,100	50%	1,050
Other	<u>500</u>	50%	<u>250</u>
Net of Depreciation & Interest Expense	\$2,358,800		\$1,099,250
Debt Servicing	133,137	100%	133,137
Capital Outlay	327,000	100%	327,000
Total Water Expenses	\$2,818,937		\$1,559,387

Table 5
 Bodega Bay PUD - Water Rate Study
 Water Capital Improvement Projects

	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	Total
Water Production												
WP-002 Salmon Creek Water Treatment Plant Relocation	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$20,000
WP-003 Ropollo Well Water Treatment and Softening	115,000	0	0	0	0	0	0	0	0	0	0	115,000
WP-004 Automated Flushing/Operation of Dunes Well Field	60,000	0	0	0	0	0	0	0	0	0	0	60,000
Water Distribution												
WD-003 Highway 1- 4" Water Main Abandonment (Tides-Smith Bros.)	0	0	0	0	85,000	0	0	0	0	0	0	85,000
Water Storage												
WS-002 Storage Tank Replacements	152,000	405,000	0	0	400,000	0	0	0	0	0	0	957,000
Capital Projects	<u>0</u>	<u>70,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>219,576</u>	<u>230,555</u>	<u>242,083</u>	<u>254,187</u>	<u>266,896</u>	<u>280,241</u>	<u>1,563,537</u>
Total Water CIP Projects - All Projects	\$327,000	\$475,000	\$0	\$0	\$505,000	\$219,576	\$230,555	\$242,083	\$254,187	\$266,896	\$280,241	\$2,800,537
Water Facility Reserves												
<i>Minimum Reserve Target, net of restricted debt²</i>	<i>\$300,000</i>	<i>\$300,000</i>	<i>\$300,000</i>	<i>\$300,000</i>	<i>\$300,000</i>	<i>\$300,000</i>	<i>\$300,000</i>	<i>\$300,000</i>	<i>\$300,000</i>	<i>\$300,000</i>	<i>\$300,000</i>	<i>\$3,300,000</i>
Total Capital Projects and Reserves	\$627,000	\$775,000	\$300,000	\$300,000	\$805,000	\$519,576	\$530,555	\$542,083	\$554,187	\$566,896	\$580,241	\$6,100,537

¹ Source: BBPUD Depreciation and Reserve Policy (August 2017)

Table 6
Bodega Bay PUD - Water Rate Study
Water Debt Summary

Existing Debt Service	% Water Share	2023-24	2024-25	2025-26	2026-27	2027-28
'22 Refunding 2015 Loan & ISA	50% ¹	\$133,137	\$133,203	\$133,203	\$133,148	\$133,034
Total Existing Debt		\$133,137	\$133,203	\$133,203	\$133,148	\$133,034

¹ Composite percentage based on water fund obligation from two prior 2015 loans.

Table 7
 Bodega Bay PUD - Water Rate Study
 Misc Water Revenues

Misc Revenues	2023/24	Water Allocation	
	Estimated	%	\$
Leases	\$46,000	50%	\$23,000
Permits and inspections	0	50%	0
BHHO Effluent ¹	10,000	0%	0
Late Charges	15,000	50%	7,500
Water Connection Charges	9,500	100%	9,500
Interest	50,000	50%	25,000
Taxes	550,000	25%	137,500
Other	<u>0</u>	50%	<u>0</u>
Total Misc Water Revenues	\$680,500		\$202,500

¹ Bodega Harbour Homeowners Assoc.

Table 8
Bodega Bay PUD - Water Rate Study
Water Cash Balances & Fund Reserve Requirements

Account	Total Cash Balance at 06/30/2023	% Water Allocation	Water Fund Cash Balances at 06/30/2023
General Cash Account	\$72,014	50%	\$36,007
Water Facility Reserve	2,639,110	100%	2,639,110
Operational Reserve	<u>1,000,000</u>	50%	<u>500,000</u>
Estimated 6/30/2023 Water Balances	\$3,711,124		\$3,175,117

Table 10
 Bodega Bay PUD - Water Rate Study
 Proposed Cost Allocation

Water Expenses	2024/25	Fixed Charges		Volumetric Charges	
		%	\$	%	\$
Office Wages	\$175,350	55%	\$96,638	45%	\$78,712
Field Wages	289,800	55%	159,713	45%	130,087
Employee Benefits					
Health	96,800	55%	53,348	45%	43,452
Dental	5,040	55%	2,778	45%	2,262
Life	2,100	55%	1,157	45%	943
Vision	1,365	55%	752	45%	613
SSC	35,700	55%	19,675	45%	16,025
Retirement	21,000	55%	11,573	45%	9,427
Retire Med	18,900	55%	10,416	45%	8,484
Retirement Health	41,475	55%	22,857	45%	18,618
Directors Fees	3,150	55%	1,736	45%	1,414
Gas-Trucks	6,300	55%	3,472	45%	2,828
Gas-Equipment	3,675	55%	2,025	45%	1,650
Insurance	38,325	55%	21,121	45%	17,204
Membership	12,075	55%	6,655	45%	5,420
Permits, Licenses & Fees	28,875	55%	15,913	45%	12,962
Office Supplies	9,188	55%	5,063	45%	4,124
Chemicals	11,130	55%	6,134	45%	4,996
Repairs-Truck	2,625	55%	1,447	45%	1,178
Repairs-Generator	1,050	55%	579	45%	471
Professional Services	129,675	55%	71,466	45%	58,209
Repairs and Maintenance	91,875	55%	50,634	45%	41,241
Small Tools	2,625	55%	1,447	45%	1,178
Research & Monitoring	47,775	55%	26,329	45%	21,446
Safety Training & Equipment	5,250	55%	2,893	45%	2,357
Professional Development	2,625	55%	1,447	45%	1,178
PG&E	67,463	55%	37,180	45%	30,283
Cell Phones	788	55%	434	45%	353
Voice & Internet	5,250	55%	2,893	45%	2,357
Propane	1,103	55%	608	45%	495
Other	<u>263</u>	55%	<u>145</u>	45%	<u>118</u>
Total Water Operating Expenses	\$1,158,613		\$638,528		\$520,084
Non Operating Expenses					
Debt Servicing	133,203	55%	73,410	45%	59,793
Capital Outlay	<u>475,000</u>	55%	<u>261,779</u>	45%	<u>213,221</u>
Total Non Operating Expenses	\$608,203		\$335,190		\$273,014
Total Water Expenses	\$1,766,816		\$973,718		\$793,098
Adjustments					
Less: Non Rate Revenue	-203,460	55%	-112,130	45%	-91,330
Less: Use of Reserves	-329,547	55%	-181,618	45%	-147,929
Total Adjustments	(\$533,007)		(\$293,748)		(\$239,259)
Water System Revenue Requirements	\$1,233,809		\$1,267,466		\$1,032,357

Table 11
 Bodega Bay PUD - Water Rate Study
 Proposed Rates - Single Family Home

Fiscal Year			2024/25	2025/26	2026/27	2027/28	2028/29
Effective Date			7/1/2024	7/1/2025	7/1/2026	7/1/2027	7/1/2028
% Rate Revenue Increase			3.5%	3.5%	3.5%	3.5%	3.5%
Meter Size	Ratio	Current Rate	Proposed Bimonthly Fixed Rate				
5/8" or 3/4"	1.00	\$78.05	\$80.78	\$83.61	\$86.54	\$89.57	\$92.70
1"	1.67	\$130.08	\$134.63	\$139.35	\$144.23	\$149.28	\$154.50
1.5"	3.33	\$260.15	\$269.27	\$278.70	\$288.47	\$298.57	\$309.00
2"	5.33	\$416.25	\$430.83	\$445.92	\$461.55	\$477.71	\$494.40
3"	10.67	\$832.75	\$861.92	\$892.12	\$923.38	\$955.71	\$989.11
Tier	Bimonthly Use	Current Rate	Proposed Bimonthly Volumetric Rate				
1	0-8 hcf	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2	8+ hcf	\$10.02	\$10.37	\$10.73	\$11.11	\$11.50	\$11.90

Table 12
 Bodega Bay PUD - Water Rate Study
 Bill Impacts - Single Family Home

hcf/bimonthly		Current Rate	7/1/2024	7/1/2025	7/1/2026	7/1/2027	7/1/2028
Low use:	5						
Fixed Charges		\$78.05	\$80.78	\$83.61	\$86.54	\$89.57	\$92.70
Tier 1		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tier 2		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Bimonthly		\$78.05	\$80.78	\$83.61	\$86.54	\$89.57	\$92.70
Average use:	10						
Fixed Charges		\$78.05	\$80.78	\$83.61	\$86.54	\$89.57	\$92.70
Tier 1		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tier 2		\$20.04	\$20.74	\$21.46	\$22.22	\$23.00	\$23.80
Total Bimonthly		\$98.09	\$101.52	\$105.07	\$108.76	\$112.57	\$116.50
High use:	15						
Fixed Charges		\$78.05	\$80.78	\$83.61	\$86.54	\$89.57	\$92.70
Tier 1		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tier 2		\$70.14	\$72.59	\$75.11	\$77.77	\$80.50	\$83.30
Total Bimonthly		\$148.19	\$153.37	\$158.72	\$164.31	\$170.07	\$176.00

Bimonthly Single Family Residential Water (10 hcf)

