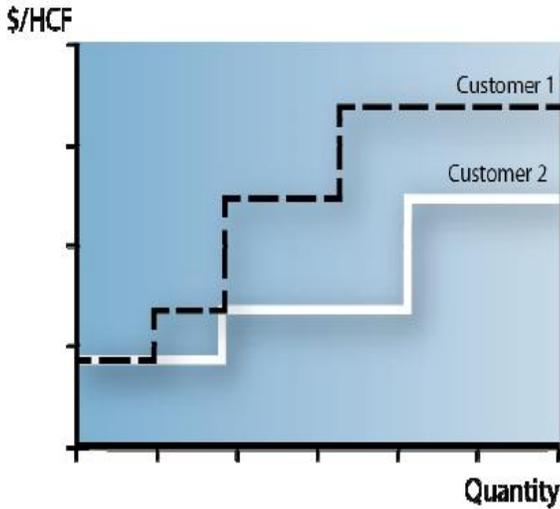


EQUINOX CENTER

Water Budget Billing In San Diego – Is It Worth It?

What is Water Budget Billing (WBB)?



Customer 1 = Low Need
Customer 2 = High Need

With a WBB structure, customers with higher basic water needs stay in low-priced tiers for longer than customers with lower basic water needs. As seen in the figure, Customer 2 has greater water needs than Customer 1 (larger yard, or more residents in household, or lives in a drier climate) so Customer 2 pays a lower rate for a larger quantity of water than Customer 1, who progresses to a higher-rate tier sooner. The Key to successful water budgets is defining “Need” in a manner that’s consistent with the region’s and customers’ water requirements.

History of WBB in San Diego

- 2009 – Drought** in San Diego. Mandatory cutbacks imposed. Customers dissatisfied with burden on already-efficient users, city harmed by revenue instability.
- 2010 – Pilot Study:** Mayor and City Council initiate and complete Pilot Study on WBB as alternative to fixed tiers.
- 2012 – Phase I:** Mayor and City Council initiate and complete Phase I study to assess WBB for all customer classes in San Diego (**\$123,000**)
- 2013 – Phase II (Pending):** IROC and NR&C recommend progressing to Phase II of study for irrigation customers only (**\$20,000**) instead of all customer classes (**\$35,000**).

SFR Water Bills Under WBB vs. Fixed 4-Tier:

WBB:

High need user = 6 person house, large yard, inland location (hot + dry)
Low need user = 2 person house, smaller yard, coastal location (cool + wet)

Tier	Use	Multiplier	High Need User – Using efficiently		Low Need User – Using inefficiently	
			Use (in HCF)	Charge (\$)	Use (in HCF)	Charge (\$)
1	Indoor	1	14	51	5	17
2	Outdoor	1.5x	7	35	1	7
3	Excess	2.1x	0.3	2	15	114
SUM			21	89 \$	21	138 \$

Fixed 4-Tier:

Both pay \$106

WBB During a Drought:

	Normal-Use Bill	Drought-time Bill
2.74-person house + 10,000 SF irrigable yard area	\$83	\$107
2.74-person house with no yard	\$23	\$23

*Under fixed-tiers, both would be asked to cut back equally, although the no-yard customer was already at minimal use.

Pros:

1. **Real Wasters Pay More** – Customers that don't "need" as much water pay more for it.
2. **Budgets Are More Flexible** – Outdoor allocations can be eliminated in droughts to put cutback burdens on those who can afford to cut back, during drought or not.
3. **More Information to Customers about their Water Use** – Arguably the best outreach/education tool.
4. **Revenue Stability** – Revenues recovered in water budgets + meter charges, instead of all 4 tiers.
5. Targeted Conservation Efforts – Can identify inefficient use more amply, and target conservation efforts there.
6. **Drought-Time Equity** – Mandatory cutbacks applied evenly hurt already efficient users. WBB better identifies already-efficient users, and can spare them from cutbacks during droughts.

Cons:

1. WBB "rewards" customers with large outdoor irrigation needs.
 - **Recommendation** : Eliminate outdoor size variable or allow decreasing allocations above specific size thresholds.
2. It is unknown whether increased water savings will be achieved. Will water savings and other features of WBB make the required investments worthwhile?
 - **Recommendation**: Complete Phase II study
3. 80-90% of Customers fit into water budgets currently. With so few reaching excess-use tiers, will the achieved conservation be worth the \$\$ to implement WBB?
 - **Recommendation**: Consider lowering or eliminating allocations for outdoor use to limit allocations in water budgets.

Conclusions:

The complaints about the current rate structure that existed when City officials decided to investigate WBB as an alternative to fixed-tiers for SFRs and flat-rates for all other customers still exist. With the investment already made to study WBB for all customer classes thus far, the additional \$15,000 to complete the study for all customer classes is negligible, and justifiable. Drought conditions will occur in the future. Without transitioning to a billing system that gives the water district more information about its customers, the unequal burden of cutbacks placed on already-efficient and high-need users during the last drought will occur again. The system will be equally ill-equipped to identify with the most accuracy where room for cutbacks exist. Additionally, with 'water conservation' placed increasingly high on the priority list for long range plans, continuation of the current rate structure makes the serious conservation spoken about in planning documents a real problem for the City's revenue stream. Whether or not WBB appears to be a viable option after the study, the Phase II study should help decision-makers gain a better understanding of what they *do* want in an altered rate structure: a structure designed more intelligently than the current one.