

Water Bills and Water Meters in Lake Forest Glen

We get many questions about the high cost of water in Lake Forest Glen and often this is linked with a request as to why we do not have our own water meters for each unit. This brief note addresses the background to this, which while not reducing any of our bills, will hopefully serve to explain the situation.

AB2572 was signed into law in California in 2004 to reduce water waste and encourage conservation. Essentially it required all cities to bill water based on usage, leading to the installation of water meters. All new homes in California after 1992 had to include a water meter, but this bill required all homes to have water meters retrofitted by 1st January 2025 and for water utilities to bill some portion of their charges based on usage.

In 2008 TCPUD announced how they would support this, together with changes to their water billing. This included some substantial rate increases which would be rolled out in the coming years, including rates for use in 2009 and planned increases:

Gallons / mth	0 to 8000	8001 to 20000	20001 to 40000	40001 & above
Charge / 1000 gals	\$0.50	\$0.60	\$0.95	\$1.95

	2009	2010	2011	2012	2013
Base Water Rate	\$47.00	\$50.00	\$55.00	\$55.00	\$55.00
% change		6.4%	10%	0%	0%
Consumption Charge per 1000 gals, use 0 to 8000 gals	\$0.50	\$1.05	\$1.40	\$2.10	\$2.80
% change		110%	33%	50%	33%

LFGHOA worked with TCPUD in 2009 on a single water meter, because the cost and the disruption of installing 234 water meters for each unit would have been significant. The cost to install a water meter per unit would have been approximately \$1000 per unit, adding to the already large capital deficit at the TCPUD. To avoid this, a single, large water meter was installed in August 2009, with the first bills reflecting the metered charges starting in March 2010. For those of you who like the technical details, here is the meter that we have:

Badgermeter, 8"

SPECIFICATIONS

TYPICAL OPERATING RANGE (100% ± 1.5%)	2½-4500 GPM.
MAXIMUM OPERATING PRESSURE	150 PSI.
MAXIMUM OPERATING TEMPERATURE	105° F.
TYPICAL LOW FLOW (95% MIN.)	1½ GPM.
MAXIMUM CONTINUOUS OPERATION	3500 GPM.
MAXIMUM INTERMITTENT FLOW	4500 GPM.
PRESSURE LOSS AT MAXIMUM CONTINUOUS OPERATION	6.3 PSI.



For the HOA, this meant that each of our units would see a water usage that was shared evenly across each of our 234 units. While a unit used part-time uses about 1500 gallons per month and a unit used full time 4200 gallons per month, with the majority of water usage at LFG is from irrigation, which we all benefit from. In 2009, this would have resulted in a maximum bill difference of \$1.35. TCPUD charges a relatively small amount for usage they have a high level of fixed charges which cover a lot of capital costs that had built up over the years and for which we are now paying and it is these high fixed charges that dominate our water bills.

Since 2009, the water rates have increased per their plan and even more since 2013. As of January 2021, the rates for water usage are:

Gallons / mth	0 to 8000	8001 to 20000	20001 to 40000	40001 & above
Charge / 1000 gals	\$3.15	\$4.12	\$5.93	\$11.72

However, the fixed costs for the “meter”, essentially the service, have risen from \$47 in 2009 to \$84.07 in 2021, a compound annual growth rate (CAGR) of 5%, slightly above inflation, while the water charge has increased 17% CAGR. In addition, the sewer charges have increased from \$20.75 to \$49.60, 7.5% CAGR.

If we look at a typical water bill for LFG, it is clear that of the \$142 total bill in March 2021, only \$8.33 is from usage (5.8%) versus the fixed meter charge, which is the same as it would be for an individual residential meter and the sewer pumping charge. Also, as of July 2019, the additional sewage charge from the Tahoe-Truckee Sanitation Agency started to be collected through the annual Placer County Property Tax Bill, itemized as a direct charge of \$306 for 2020/2021, an equivalent of \$25.50/mth which should be considered as part of the overall water and sewer costs.

During 2020, the seasonal variation in water usage charges for LFG was between a low in the winter of \$4.98 and a high in the summer of \$16.74, with an average of \$10.85 (7.92%).

Current Water Charges			
Water Service Description	Quantity		
METER - 0.75 - RESIDENTIAL	1	\$	84.07
	Range (Gallons)	Gallons used	Cost per Gallons
Tier 1	0 - 8000	2646	\$ 0.00315 \$ 8.33
Tier 2	8001 - 20000	0	\$ 0.00412 \$ 0
Tier 3	20001 - 40000	0	\$ 0.00593 \$ 0
Tier 4	40001 +	0	\$ 0.01172 \$ 0
Total Water Charges			\$ 92.40
Current Sewer Charges			
Sewer Service Description	Quantity		
RESIDENTIAL - MO BILLING	1	\$	49.60
Total Sewer Charges			\$ 49.60
Additional Charges			
Additional Charges Description	Quantity		
Total Additional Charges			\$ 0.00
Total Current Charges			\$ 142.00

In summary, the cost of water and sewage in Tahoe City and thus LFG in 2020 averaged \$162.45 per month, including the TTSA charges. This is one of the highest costs for water anywhere in California and is likely driven by the relatively small number of properties in the TCPUD district as well as the costs for pumping sewage out of the basin and the historical under capture of the money needed to maintain investment in the water system. The usage of water only makes up about 8% of the bill, meaning that 92% of the bill is fixed and independent of whether a unit is occupied or not. As a result, this situation continues to support not having individual water meters per unit.