

## Westside Water Association April 2019 newsletter

### WWA 2019 Annual meeting

The Annual Meeting for WWA will be at 7 pm on Thursday May 23<sup>rd</sup> at the Havurat Building on Westside Highway. The building will open at 6 pm for socializing and sharing of goodies. A formal announcement will be sent to all members before May 13<sup>th</sup>.

### System leak status

This past fall we experienced significant leakage in the system. Thanks to an alert member this problem was traced to a service line on Westside Highway just north of the Havurat. Since that leak was repaired, we have seen very low leakage from the system leading us to speculate that this service line break (a tree root had impinged on the line) may have been a major contributor to leakage for a long time. Notwithstanding our recent improved leak metrics, the November Sanitary Survey that was performed on site with DOH personnel cited WWA for non-compliance with Water Use Efficiency (WUE) standards (WWA reported a 12.5% leakage loss rate in our last 3-year report against the maximum allowed value of 10%). Thus, WWA must develop a new WUE plan and present that plan to the membership. We plan to provide members with a review of the new plan by e-mail in advance of our May 2019 Annual Meeting. We anticipate that the plan will consist of the following components:

- a. Continued close monitoring of total production on a daily basis and comparing the measured daily values with 7+ year daily statistics,
- b. Installation of a leak detection meter on the main line south of 148<sup>th</sup> St on Westside Highway (there are four such meters north of 148<sup>th</sup> St)
- c. Make it a standard practice to add leak detection meters as part of any Capital Asset Replacement project involving the distribution system where that investment makes sense, and
- d. Plan to establish an Equivalent Residential Unit (ERU) baseline that quantifies WWA water delivery minimum commitment in the event that demand exceeds supply (e.g. extreme summer draught conditions).

We will explain each of these plan components at the annual meeting and call for a member vote on its adoption.

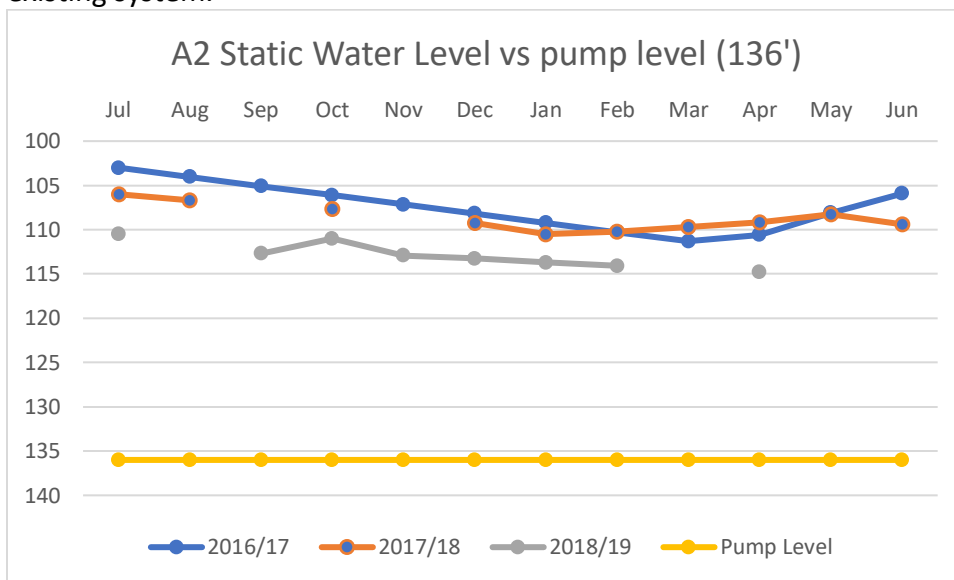
### Fizzy water and the Anderson 2 well

As many members have noted, we recently had a significant number of days when our water supply had small bubbles in it. The source of this phenomenon is when the water level surrounding one of our pumps drops to the pump level such that air is entrained along with the water. The reason this situation persisted for a longer timeframe than normal was because we

assumed that the source was the Anderson 2 well and we reduced that pump's capacity to compensate. But, in fact, it was not the Anderson well in this case but was rather the pump in the Canyon Well house sump (fed by the well points and a spring) whose relay was malfunctioning. This system works much like the filling mechanism in your toilet tank: as the water level drops a float tells the pump when to stop pumping. Once air is pumped, it takes a few days for bubbles to remove themselves from the storage tanks (any physicists out there who would like to explain to us how this can take so long in an open system?) and as we were waiting for the system to clear from having adjusted the Anderson well we were unwittingly pumping more bubbles in from the canyon. The relay problem was corrected but the overall duration of the event was about 2 weeks. Our apologies on this circumstance and in the future we will send out an e-mail to all as soon as we understand the source of the bubbles.

On a related note we continue to observe a slow elevation decline in the ground water level at the Anderson 2 well. Although we don't view this situation as alarming (and previous years have shown some amount of recovery starting this time of year) it does mean that we have reduced capacity from this source unless we do see a recovery. At this point our maximum pumping rate from the A2 well is about 39 gallons per minute. Combined with our other sources we have an overall peak capacity of about 80 gallons per minute. Historically we haven't seen our short term (3-day) summertime usage exceed 80 gallons per minute. But at this point we are right at our limit without blending from the Canyon Well, a source with 32 parts per billion (ppb) arsenic. Though we are allowed by the Washington State Department of Health to use this source and can do so within the monitoring standard of 10 ppb Arsenic, we have been able to avoid using the Canyon Well for the past 4 years in order to provide the purest water to our users.

The Board continues to look for additional high-quality water sources to supplement our existing system.



## Changes in Capital Asset Replacement program

As a reminder to members, in addition to funding the administrative and operating portions of our annual budget our water sales also fund the required Capital Asset Replacement schedule for our roughly \$3.3 million worth of infrastructure. This fund is required for expenditures now and in the future to ensure that our system remains vital.

The replacement of the section of our main distribution line from Cove Road south on 115<sup>th</sup> Avenue this past fall has given us a benchmark on the cost of meeting the new King County Road standards for trench refill. Essentially almost all new trench work along the King County Right of Way now requires excavated materials to be removed and disposed of and new fill material purchased to meet KC Road standards. Since mains replacement is by far the biggest component of the Capital Asset Replacement (CAR) program and since about 2/3 of our distribution system is in the Right of Way, the Board is grappling with these new data. The new requirements approximately double our per foot estimate of replacing our lines.

A recalculation of our expected long-term CAR costs shows that we need to be accruing at a higher rate than we have previously used. Thus, the Board has voted to increase the annual accrual rate from \$30,000 to \$45,000. The good news is: even when we recalculate our needs based on the new estimates back to the start of our CAR program (2016) we are pleased to find the financial strength of the organization is such that as close as we can estimate at this point no rate increases beyond our annual Consumer Price Index adjustment should be necessary to fund this revised accrual program.

The Table below shows an approximate breakdown of our capital assets and the annual cost that we need to be accruing to be able to keep them properly maintained on an ongoing basis

Component	Total Cost	% of Total	Cost/year
Mains	\$2,769,058	76%	\$34,613
Meters	\$68,100	8%	\$3,405
Storage Tanks	\$300,000	7%	\$3,000
Structures	\$80,000	4%	\$1,600
Pumps	\$30,000	3%	\$1,500
Hydrants	\$42,000	2%	\$700
Valves	\$50,000	1%	\$500
Total	\$3,339,158		\$45,318

The detailed analysis behind this table is now on-line in a Google sheet. Any member interested in reviewing this sheet can e-mail [pat.call@cengage.com](mailto:pat.call@cengage.com) for access.

## New capital project: Generator for Anderson Well field

This spring WWA has installed a 22KW propane fired generator as has been requested by members in previous Annual Meetings. The total cost of this installation is approximately \$12,000 and the Board has voted to extend the current assessment for the Anderson Well projects (which was due to expire with the May billing) by approximately 3 billing periods to pay for this new capital project.

## Some odds and ends

The Consumer Price Index (CPI) adjustment for our 2019/20 fiscal year (starting May 1<sup>st</sup>) will be approximately 1.7% (final number will be from the April 10<sup>th</sup> release of the CPI). Both the base water rate and the tiered water usage rates will be adjusted by this factor.

The Board voted to put \$25,000 (out of \$30,000 total) of our Emergency Fund monies and \$15,000 of our Capital Asset Replacement fund into Certificates of Deposit. These CDs are “laddered” to roll over at approximately six-month intervals so that we can use these funds without penalty if needed. This change in financial operations is allowed due to the overall financial strength of the organization and will net us about \$600/year in extra income to be spent on our Capital Asset Replacement projects.

Included with this newsletter is our planned budget for the 2019/20 fiscal year starting May 1<sup>st</sup>, 2019. Water sales is the hardest category to estimate because it is highly dependent on summer time temperature and precipitation conditions. Based on our two most recent year’s actual values, we believe that an annual water sales assumption of \$128,000 is adequately conservative for this year’s budget and with it we can fully fund the CAR accrual of \$45,000 this year with a small buffer of \$2,600. Our current Repairs and Maintenance fund stands at about \$13,000 which is higher than the \$12,000 target level we have set for this category, so we are assuming only a \$5,000 accrual into this fund for 2019/20 to cover new maintenance and repair expenditures for the year. This fund works differently than the CAR fund where we need to continue to put in \$45,000/year to fund *future* expenditures.