Water Department Update
By John Lukin, Commissioner
Recently the Water Commissioners established a rate structure for the town water system, which serves nearly all homes and businesses from the historic town center east to the CT River. Since the system started operating in 1985, water users have paid a flat rate per 1000 gallons, a simple "pay for what you use" system that no longer generates enough revenue to meet the cost of pumping, treating, storing and delivering safe drinking water to user taps. And it's not a new system anymore. Repairs and replacements are needed.

Last year we had a consultant complete a Water System Capital Improvement Plan to identify "needed infrastructure improvement projects to correct deficiencies and meet future needs over a 20 year period." The cost estimate for projected work is from one to three million dollars. Add that to an absolute minimum one year operating cost of a bit over $\$ 250,000$ and $\$ 4.65$ per 1000 gallons doesn't come close to paying the bills. (2023 water usage was nearly 45,000,000 gallons, which yields $\$ 209,250$ in revenue at $\$ 4.65$ per 1000 gallons.)

So we clearly need more money to pay for today and help defray the cost of big ticket items in the future. Our objective was to develop a rate structure that fairly distributes the costs across the user base, while also encouraging conservation. Our residential per person usage has been considerably higher than the state DEP desired maximum of 65 gallons per person per day.

We chose to implement a fee structure that will meet the fair cost distribution and conservation goals, while stabilizing revenues for each 6 month billing period. Summer water use is much greater than in winter, which causes a large discrepancy in revenue between spring and fall billings. So water bills now include a "service fee" that appears on the bill as a "meter fee." This will reduce the seasonal revenue discrepancy and it will more evenly distribute maintenance costs among all system users. The fee varies by meter size, since larger meters are needed on larger volume users. Hence the service fee is called a meter fee.

So for households on the system, the annual service fee is $\$ 80$ to have safe drinking water available to your home. Consumption is charged according to metered use. Water that flows through your meter is water you purchase. How to fairly charge for that while encouraging conservation resulted in a three level system.

The median household consumption for 6 months is very close to 25,000 gallons. The median is the one in the middle, if you make a list with the greatest volume user at the top and the least on the bottom. Half use more; half use less. In our system, nearly all households use less or not much more than that 25,000 gallons in six months. So our first tier for pricing is for 1 to 25,000 gallons.

The next tier is 25,001 to 50,000 gallons and the third tier is 50,001 plus. By crunching the numbers at various per 1000 gallons cost, we arrived at $\$ 6$ per 1000 gallons for the first tier, $\$ 7$ for the second and $\$ 9$ for the third. The projected revenue from this rate structure is what's needed to run the system, with some surplus to set aside for unexpected expenses and those looming future capital improvements. We want the rates to be stable and not skyrocket because we need another well or need to build a bigger treatment plant and/or storage tank.

The higher cost for higher consumption is to encourage conservation. How we each use the water is our choice. You can reduce your cost by using less water, if possible. If you water your lawn frequently, you'll use a lot of water. One inch of water (the prescribed weekly watering for lush lawns) over an acre of land amounts to 27,152 gallons sprayed over that acre. Using town water on lawns is not economical.

The bottom line is this: a metered use of 25,000 gallons over six months will result in a total bill of $\$ 190$. Use half that amount and the bill is $\$ 115$. Sounds like a lot? Well, many people say they don't drink the water. (Much more on water quality in a future article) They prefer bottled water. It's a choice; so consider this:

On Walmart's web site, generic "Great Value Purified Drinking Water" costs \$5.36 for forty 16.9 oz bottles. That's $\$ 1.02$ per gallon or $\$ 25,500$ for 1000 gallons! At $\$ 6$ per 1000 gallons, Whately water costs six tenths of a penny for one gallon.

By the way, many bottle water companies take water from a public water system, use reverse osmosis to take everything out of it (distilled water), add measured amounts of minerals (no minerals no "pure fresh taste" - look at a Dasani bottle, Coke's bottled water), disinfect it with ultraviolet light or ozone, and bottle it. You're paying for repackaged municipal tap water.

Whatley's water comes from gravel wells along the Mill River near the Hatfield border. It costs a lot to pump it, take out the manganese, disinfect it, pump it up to the storage tank, test it to be sure it's safe to drink, and deliver it to you. The Water Department exists to keep the potable water flowing as economically as possible. We established the new rate structure with all that in mind.

