

March 2<sup>nd</sup>

The daffodils are blooming, grass is being mowed and Vashon enjoyed the warmest February ever. The Westside Water Association took advantage of these favorable conditions to make some important progress.

### Anderson Well Project

As of early March all of the piping and electrical work is complete. We have continuity from the well head to the main line at the corner of 115<sup>th</sup> Ave and 156<sup>th</sup> St. What remains now is to install the chlorine pump, complete testing, submit the final engineering report and gain Department of Health signoff. We are hoping to complete these steps in March so that we have the Anderson Well ready to add its high quality 20 gallons per minute to the system in early April.

### Primary Well Point sources

For many years the primary source of WWA water has been a network of well points in Shinglemill Canyon. These sources fluctuate from year to year in capacity and over the past year we saw them decline to below 30 gallons per minute (gpm). Maintenance (backflushing to clear sediment build up in the collection points) performed in February brought the well points back to about 30 gpm.

### Canyon Well Blending

We are currently operating the Canyon Well (seasonally) under a permit from the Department of Health that allows us to blend Canyon Well water, as needed, with the Primary Well Point water to a maximum Arsenic (As) concentration not to exceed 10 parts per billion -- ppb (the EPA guideline). With our spring and well point sources generating about 30 gpm and with the Canyon Well source at ~30 ppb As this allows us to blend up to about 10 gallons per minute. Since the Anderson Well is adding a source of very low concentration Arsenic (<3 ppb) we expect to apply to DOH later this spring to be able to blend additional Canyon Well water when demand is high enough to call for it.

### Capacity

Overall with the rejuvenated Well Points, Anderson Well and enhanced blending we expect to have 65 gallons per minute capacity for summer. Barring an abnormally hot dry summer (remember those February daffodils!!) this capacity should allow us to stay under the Arsenic limit for the summer (the past few summers we have met the annual guideline but not always the instantaneous limit during peak usage times).

## Canyon Well Arsenic Filtration project

In addition to all of the above work we have received consulting advice and procured additional filtration material to be able to bring our Arsenic filtration system back on line later this spring. The first phase of this system was designed to deliver ~30 gallons per minute of water with the Arsenic concentration below 5 ppb. We operated this system successfully early last summer only to encounter some unexpected challenges that caused us to shut the system off. We believe that we understand those problems from last summer, will be doing another pilot this spring and will receive DOH approval before using the filtration system if needed to meet summer peak demands.

## Capital Expenses

Members have inquired at past WWA membership meetings on the amount of capital expenditures going to these various projects. Here is a summary:

	2010	2011	2012	2013	2014	2015(est)	Total
Olympic View Dr			\$39,338				\$39,338
Arsenic Blending			\$12,839	\$71			\$12,910
Anderson Well				\$20,000	\$49,287	\$18,000	\$87,287
Arsenic Filtration	\$2,894	\$12,000	\$168	\$13,102	\$8,437	\$6,000	\$42,601
S02	\$7,005	\$2,258		\$108			\$9,371
Canyon Well S06	\$6,277						\$6,277
Miscellaneous	\$2,209	\$1,763	\$100	\$1,418	\$6,699	\$10,000	\$22,189
<b>Total</b>	\$18,385	\$16,021	\$52,445	\$34,699	\$64,423	\$34,000	\$219,973

A few comments:

- 1) color coding – **green** = operational; **yellow** – in progress (expected on-line in 2015); **red** = unsuccessful development of new spring sources in the canyon,
- 2) the Anderson Well costs include the well and connection to the existing WWA system. We've planned for additional source development at this site and the costs reflect that planning. This site has a major advantage in that it adds a "disaster recovery" element to our system. Historically all of our sources have been located close together in Shinglemill Canyon which could be subject to flood or landslide challenges. It is our expectation that given some successful operating history with the first Anderson Well we will likely want to consider adding another well source at that site (the original agreement makes provisions for such an expansion),
- 3) Miscellaneous capital expenses include replacement of major components in the system including valves, pumps, and piping.

We are on a strict "two page limit" as per our bookkeeper Sheila so although there is more to be said we will save it to the May edition.

The Westside Water Association Board