

Forest View Acres Water District

Operations Report –August 2016

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Arapahoe Water Plant

- The plant produced 49% of demand

Booster Pump Station

- The pumps from the old booster pump station have been removed and saved for possible use in the district elsewhere.

Surface Water Plant

Cleaned SWP Inlet to direct more water flow to plant

Recommendations for improvements to the SWTP

FILTER TO WASTE WITH RAW WATER

Currently the filter to waste utilizes finished water from the tank. This process is typically done with raw water from the creek as it is a better way to stabilize the vessels after a backwash and get them primed to filter water from the creek.

- Currently, the filter to waste portion of the backwash is not metered. We have no idea what the flow rate is coming from the tank. This is some of our unaccounted for water.
- We see a turbidity spike 30 minutes after a backwash due to the chemicals not being injected during a filter to waste. Sometimes these spikes are above the turbidity limit and may require public notice.

PARTS/CONTROLS NEEDED

1. 3 way actuated valve off the discharge side of the booster pumps \$914.40
2. Piping run from new 3 way valve back to the discharge to the pond
3. Controls changes:
 - a. At the end of a timed backwash, close valve B, open valve A
 - b. Slowly ramp booster pump and begin chemical injection
 - c. Filter to waste until either or both happen;
 - i. NTU is <0.3
 - ii. Filter to waste timer times out

Distribution System

- High Pressure Reported, Leak was found on the PRV at Pixie Park and Sandstone causing PRV to open all the way. Warranty issue – Global made repairs
- The meter reads were performed on August 30th.
- More meters have been ordered to swap out those that are currently being estimated.
- Routine bacteriological sample was taken with an acceptable result. Yearly Haa5/TTHM Samples Were Taken
- Please see the chart below detailing production for August.

| Year | Month | SWTP Production -BW | % of Total | AWP Production | % of Total | Total Production | Total Water Sold | Percentage Discrepancy |
|--------------|-------|---------------------|------------|------------------|------------|-------------------|-------------------|------------------------|
| 2016 | Jan | 1,154,805 | 83% | 239,688 | 17% | 1,394,493 | 1,088,057 | 21.97% |
| | Feb | 1,152,820 | 80% | 289,198 | 20% | 1,442,018 | 1,051,373 | 27.09% |
| | Mar | 611,983 | 42% | 828,312 | 58% | 1,440,295 | 1,169,774 | 18.78% |
| | Apr | 0 | 0% | 1,364,448 | 100% | 1,364,448 | 1,133,779 | 16.91% |
| | May | -27,026 | -2% | 1,365,081 | 102% | 1,338,055 | 1,069,178 | 20.09% |
| | Jun | 672,726 | 23% | 2,195,484 | 77% | 2,868,210 | 2,014,164 | 29.78% |
| | Jul | 1,039,209 | 35% | 1,897,364 | 65% | 2,936,573 | 2,073,277 | 29.40% |
| | Aug | 1,442,889 | 51% | 1,400,033 | 49% | 2,842,922 | 1,856,161 | 34.71% |
| | Sep | | | | | | | |
| | Oct | | | | | | | |
| | Nov | | | | | | | |
| | Dec | | | | | | | |
| Total | | 6,047,406 | 39% | 9,579,608 | 61% | 15,627,014 | 11,455,763 | 26.69% |