Forest View Acres Water District

Operations Report - Sept/Oct 2021

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Arapahoe Water Plant

- The plant effectively produced 86% of demand for September
- No operational difficulties occurred in September with the AWP equipment.
- The well work was postponed due to difficulties with the rest of the systems.

Booster Pump Station

- We are still awaiting shipment of the replacement check valve for Booster #1.
- Booster #2 is fully functional without difficulties.
- Some abnormal programming resulted in the inability to move water to the tank in early October. Browns Hill was summoned to address the programming issue.

Distribution

- Monthly routine bacteriological samples taken and were absent for bacteria.
- The more user friendly maps have been received are being used.
- The tank level radio transmitter was found inoperable on the Saturday prior to the scheduled well work. This resulted in a low tank level. Immediate actions took place to ensure the tank filled over the next couple of days manually while provisions could be made to remedy the problem.
- Browns Hill responded and found a replacement for the obsolete radio transmitter. The tank level is now operational and the tank is at normal full level.

Surface Water Plant

- The plant produced an effective 14% of demand for September
- Completed monthly MOR report for state with no violations.
- We found the raw flowmeter has been inaccurately reporting flows resulting in shut downs due to a perceived low flow. This occurred the week prior to the scheduled well work. Many processes throughout the treatment facility rely on this flow to work correctly. Browns Hill was called out to make major modifications to the programming in an attempt to run the facility while the AWP was down.
- A new flow meter has been ordered due to the very long lead time for repair parts on the current one. Cost is expected to be \$2800.
- We cleaned the inlet on September 24th where we removed all the material that had built up in the inlet box.
- Sand is getting through the filters and accumulating in the backwash pond, tank and monitoring equipment. We believe the filters may have an underdrain issue allowing sand to pass through. Aqueous Solutions will be consulted. We have valved off Secondary filter #2 as it showed higher amounts of turbidity indicating it is the problem vessel.

Production Totals

| Year | Month | SWTP Production - BW | % of Total | AWP Production | % of Total | Total Production | Total Water Sold | Percentage Discrepancy | | Average Demand (GPM) |
|-------|-------|----------------------------|------------|----------------|------------|---------------------|---------------------|---------------------------|-------|----------------------------|
| 2021 | Jan | 0 | 0% | 1,790,658 | 100% | 1,790,658 | 1,227,042 | 31.48% | 59689 | 41 |
| | Feb | 0 | 0% | 1,548,535 | 100% | 1,548,535 | 1,151,846 | 25.62% | 51618 | 36 |
| | Mar | 0 | 0% | 1,492,529 | 100% | 1,492,529 | 1,239,076 | 16.98% | 49751 | 35 |
| | Apr | 328,318 | 24% | 1,036,751 | 76% | 1,365,069 | 1,246,361 | 8.70% | 45502 | 32 |
| | May | 186,712 | 10% | 1,716,955 | 90% | 1,903,667 | 1,436,780 | 24.53% | 63456 | 44 |
| | Jun | 1,137,880 | 48% | 1,208,321 | 52% | 2,346,201 | 2,181,590 | 7.02% | 78207 | 54 |
| | Jul | 365,760 | 16% | 1,908,550 | 84% | 2,274,310 | 2,182,446 | 4.04% | 75810 | 53 |
| | Aug | 552,913 | 18% | 2,439,620 | 82% | 2,992,533 | 2,296,030 | 23.27% | 99751 | 69 |
| | Sep | 311,113 | 14% | 1,845,666 | 86% | 2,156,779 | 1,986,678 | 7.89% | 71893 | 50 |
| | Oct | | | | | | | | | |
| | Nov | | | | | | | | | |
| | Dec | | | | | | | | | |
| Total | | 2,882,696 | 15% | 14,987,585 | 85% | 17,870,281 | 14,947,849 | 16.35% | 66186 | 46 |