

Forest View Acres Water District

Operations Report – December 2022

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Arapahoe Water Plant

- The plant effectively produced 100% for December due to the frozen inlet at the SWTP.
- We need to purchase a new chlorine sensor for the AWP as the old one is providing faulty readings. We have had to manually operate the automatic equipment due to this. A new sensor and associated equipment is \$7800. ORC can do the install.

Booster Pump Station

- The booster station has been running without issue.

Distribution

- Monthly routine bacteriological sample taken and was absent for bacteria.
- I have found some resources for remote monitoring of pressure zones throughout the distribution system. There are a couple of different options that I can get pricing on. See more information here. The i2o water logging monitors the PRV itself providing real time data on the status of the PRV. The Mueller remote pressure monitoring simply monitors pressure in the system and reports to a cloud where alarms can be dispatched.

<https://en.i2owater.com/solutions/data-logging/>

<https://www.muellercompany.com/water-works/hydro-guard/remote-pressure-monitoring-system/>

Surface Water Plant

- The plant produced 0% in December due to the frozen piping coming from the inlet.
- Completed monthly operations report (MOR) for state with no violations.
- The new turbidimeter display unit stopped outputting signals needed for the treatment process. This unit is no longer under warranty and will need to be sent back to HACH for service. This has yet to be serviced.
- The entry point chlorine meter has been giving false readings. We have yet to fix this issue. To remain in compliance without this equipment functioning, we had to shut the plant down. The pipe froze during the shut down even with the bypass valve open and running water through the pipe.
- We will fix the chlorine meter and get the facility ready for operations next spring.

Production Totals

Year	Month	SWTP Production - BW	% of Total	AWP Production	% of Total	Total Production	Total Water Sold	Percentage Discrepancy	<i>GPD Produced</i>	Average Demand (GPM)
2022	Jan	697,598	35%	1,315,054	65%	2,012,652	1,289,430	35.93%	67088	47
	Feb	1,012,201	70%	425,603	30%	1,437,804	1,149,039	20.08%	47927	33
	Mar	827,884	58%	602,692	42%	1,430,576	1,199,555	16.15%	47686	33
	Apr	927,643	59%	654,296	41%	1,581,939	1,323,806	16.32%	52731	37
	May	1,061,409	39%	1,681,527	61%	2,742,936	1,815,837	33.80%	91431	63
	Jun	32,536	2%	2,076,308	98%	2,108,844	2,090,661	0.86%	70295	49
	Jul	1,455,492	52%	1,362,059	48%	2,817,551	1,882,091	33.20%	93918	65
	Aug	193,675	9%	2,007,894	91%	2,201,569	1,750,601	20.48%	73386	51
	Sep	1,203,355	53%	1,068,339	47%	2,271,694	1,838,422	19.07%	75723	53
	Oct	945,551	41%	1,386,753	59%	2,332,304	1,394,021	40.23%	77743	54
	Nov	0	0%	1,497,939	100%	1,497,939	1,175,756	21.51%	49931	35
Dec	0	0%	1,552,986	100%	1,552,986	1,247,965	19.64%	51766	36	
Total		8,357,344	35%	15,631,450	65%	23,988,794	18,157,184	24.31%	66636	46

Comments:
Jan suspected overflows of tank increased the discrepancy
July water leak increased discrepancy
November leak lost approximately 60K