

Forest View Acres Water District

Operations Report – March 2024

Prepared by Gabby Begeman -ORC Water Professionals

Arapahoe Water Plant

- The plant produced 48% of all water made in March
- A new booster pump has been received.
- The well production has decreased from 90 GPM to 60 GPM. This is consistent with a potential pump or piping failure down hole. I have received an estimate from Applied Ingenuity to obtain a pump, pull the well pump and piping, replace what is needed and video the well casing to observe any other issues. See the attached quote. We have signed off on this proposal and have the well pump on order.

Booster Pump Station

- The seal on pump 1 has again failed and will be replaced asap. We are awaiting new seals.
- The station has been operable with issues to fail safe shut down the pumps. We believe there are glitches in the programming that are allowing the pumps to run without water flowing which are wrecking the seals. We are scheduling the controls company to come out next week and have a look at the programming.

Distribution

- Monthly routine bacteriological sample taken and was absent for bacteria.
- Remote monitoring devices have been ordered and partially received for the PRV's. They will be installed asap as soon as we receive the remaining parts.
- The tank has 2 overflows, one of which works. The overflow does not daylight. This overflow needs to be dug up and either rerouted or abandoned. We are looking into this further.
- Mission Unit has been received and will be installed ASAP.

Surface Water Plant

- The plant produced 52% in March.
- Completed monthly operations report (MOR) for state with no violations, however we are having exceedances of the rule for brief periods requiring explanation to the state.
- In late March, the raw water turbidity increased and the facility has not been able to operate within compliance. It is shut down until the raw water turbidity decreases.

Production Totals

Year	Month	SWTP Production - BW	% of Total	AWP Production	% of Total	Total Production	Total Water Sold	Percentage Discrepancy	GPD Produced	Average Demand (GPM)
2024	Jan	1,100,500	54%	953,000	46%	2,053,500	1,269,837	38%	66242	46
	Feb	607,000	45%	748,000	55%	1,355,000	1,094,549	19%	43710	30
	Mar	847,750	52%	795,000	48%	1,642,750	1,176,503	28%	52992	37
	Apr		#DIV/0!		#DIV/0!	0	1,172,053	#DIV/0!	0	0
	May		#DIV/0!		#DIV/0!	0	1,352,166	#DIV/0!	0	0
	Jun		#DIV/0!		#DIV/0!	0	1,444,258	#DIV/0!	0	0
	Jul		#DIV/0!		#DIV/0!	0	2,049,479	#DIV/0!	0	0
	Aug		#DIV/0!		#DIV/0!	0	1,878,186	#DIV/0!	0	0
	Sep		#DIV/0!		#DIV/0!	0	1,704,294	#DIV/0!	0	0
	Oct		#DIV/0!		#DIV/0!	0	1,497,348	#DIV/0!	0	0
	Nov		#DIV/0!		#DIV/0!	0	1,250,543	#DIV/0!	0	0
	Dec		#DIV/0!		#DIV/0!	0	1,304,772	#DIV/0!	0	0
Total		2,555,250	#DIV/0!	2,496,000	#DIV/0!	5,051,250	17,193,988	#DIV/0!	13579	9

Comments:

Jan confirmed overflows of tank increased the discrepancy due to tank level communication problems



14920 Harvest Rd.
Brighton, Colorado, 80603
Phone: (303) 289-2280
Fax: (303) 289-1026

Applied Ingenuity, LLC.

Client: Forest View Acres Water District

**From: Devin Cary
Applied Ingenuity, LLC**

Project: Well A-1

Thank you for the opportunity to provide pricing for services at Well A-1. The discharge from the well contains air on start up and a reduction in flow has occurred. This could be attributed to a hole in the drop pipe or other factors. It will be necessary to pull the equipment from the well to identify and correct the issue.

Scope of Work

New Equipment: \$29,319.00

- 1- Submersible pump sized for 100 GPM at 1500'. **\$18,055.00**
- 1- 8" 60 HP 460 Volt submersible motor. **\$6,875.00**
- 2- 3 1/2" EUE high pressure check valves. **\$2,844.00**
- Splice kits, banding, and service supplies to install the equipment. **\$1,545.00**

Labor: \$18,066.00

- Mobilize to the site
- Remove the pumping equipment
- Perform a well video
- Reinstall the pumping equipment
- Disinfect the well
- Provide start up services and installation records

Total Cost, Equipment and Labor: \$47,385.00

Notes: Pricing for additional items that may be required such as replacement pipe or power cable can be provided once the equipment has been removed and evaluated. The cost for replacement pipe if required is \$20.50 per foot.

Scheduling: Equipment delivery is estimated at 5-6 weeks from receipt of order.