

FOREST VIEW ACRES

MAY WATER OPERATION'S REPORT

This report will include any and all work and projects during the months of April & May.

- The chlorine analyzer is working. A new analyzing cell was replaced under warranty. We can now analyze chlorine 24 hours a day.
- Collected *water samples* according to the 2007 Monitor Schedule. Radiology tests are due for both water plants this year. In addition, I am collecting monthly TOC from the source water. If the values are below 4.0 mg/l, Forest View will be able to go on annual testing for TTHM and Haa5 tests. This will save about \$1,500 a year in testing.
- A new chemical pump was purchased and put on line at the AWP. We have one spare chemical pump presently. The spare pump will be sufficient for feeding chlorine and or KMnO₄ (potassium permanganate). I will be requesting one more chemical pump in the future to have for the poly. Poly pumps are a more specialized pump. If one goes out, we loose our treatment at the surface water plant.
- Because of the transmission line leak, our project for locating valves and the last two prvs, has been put on hold. Once the Arapahoe is able to be put on line again, we will finish this project.
- Inspections and curb stop identification is another project that is in progress. The water leak at the AWP has paused this program but will start up again soon. We know of a couple of residents that need to re-plumb their water line in front of the meter, instead of after it. A resident on Oxbridge has a water line going to his barn that is after the meter. Instead of connecting up a new meter, the resident needs to have a curb stop and re-plumb this water line properly.
- The transmission line leak was very difficult to find. The first problem was finding the exact location of the line. Once the line was found, blue plastic markers were put in. The water table was another contributing factor. After about a foot of digging, water had to be pumped out in order to find the line and to install valves. Valves were installed between the plant and the Dawson site in order to isolate the area of where the leak was.

Water pressure tests were done by closing a valve and verifying if the line held pressure. A line camera was used, dyes were used, and helium gas was used in the effort to locate the leak.

As of date, it is believed that we have a minor leak between the first and second leak based on the line holding pressure for a short period of time, and the high chlorine residual (0.92 mg/l) that was found near the service of the first valve.

It is also believed that there is a major leak between the second and the third valve (near the old Dawson). This is based on the fact that the line did not hold pressure for more than a second when Brown's Hill and AAA tested the line. Water pressure test stopped when we lost more water from the tank. The plant went into a backwash cycle, which takes about a foot of water from the tank each time it backwashes.

- The surface water plant was ran continually in order to keep water in the tank. Spring run-off (dark colored water with high turbidity) reduced production because the plant had to be backwashed frequently because of the head loss that occurred. Chemical adjustments were made in order to optimize the efficiency of turbidity removal. The intake was cleaned several times the first part of May, but never caused a problem since.

The booster pump that is on line at the surface water plant was locked up mechanically and had to be forced to turn. The motor was also bound up. After plenty of lubrication and force, the pump is running. The pump is what saved us from running out of water while the AWP was off line. The pump provides a continually flow, unlike using the gravity process. As head loss comes up, in the filters, the flow decreases and drops below the 45 gpm demand, thus loosing ground in the tank. Yes, we still need to backwash as often, but the pump holds the gpm being treated, allowing us to get more water in the tank.

- The new pump that has been sitting at the SWP to be installed, is the wrong pump. It has been sitting there for years to be installed after the contact line was completed. It is actually the wrong design. The company is no longer in business that FVA's purchased the pump from. I will provide you with the right pump and design that needs to be done if the board decides to go with the larger pump. I recommend that we cover this at the next work session.
- On top of the AWP leak, the distribution had three leaks as well. One at 4575 Sandstone (service line leak), one at 17970 Granite, and another at Pixie Park and Red Rock Ranch Rd.

- Leroy Schmidt was turned off April 16th.

**FOREST VIEW ACRES WATER DISTRICT
PRODUCTION REPORT FOR 2007**

ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2007
SURFACE WATER PLANT:													
Effluent	1,292,500	1,857,300	1,338,900	1,978,800									5,925,500
Backwash	79,500	123,700	217,200	171,600									592,000
Filler to Waste	0	0	0	0									0
Combined Backwash & Waste Usage	79,500	123,700	217,200	171,600									592,000
Usage Required for Production	6.3%	6.7%	6.2%	15.9%									11.3%
Time Online	23.0	28.0	29.0	25.0									105.0
Net Production	1,173,000	1,733,600	1,121,700	1,807,200									4,933,500
Average Flow Rate Per Minute	35.4	43.0	26.3	25.1									32.6
Average Flow Rate Per Day	51,000	61,914	38,673	35,208									46,950
Percentage of Total Production	55.5%	100.0%	62.8%	51.8%									67.5%
2008 Effluent	2,576,000	2,989,800	2,085,000	2,584,500	2,678,200	1,461,700	1,600,600	364,400	1,000,300	990,400	1,388,900	901,900	19,181,900
Effluent Difference from 2006	105.7%	59.9%	56.7%	140.0%									90.3%

ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2007
ARAPAHO WELLS WATER PLANT:													
Effluent	1,021,931	0	699,795	895,525									2,617,251
Backwash	71,690	0	29,377	42,006									143,073
Well to Waste	8,593	0	6,348	11,324									26,265
Combined Backwash & Waste Usage	80,283	0	35,725	53,330									169,338
Usage Required for Production	7.9%	0.0%	5.1%	6.0%									4.7%
Recharge Line Usage @ Booster Station	0	0	0	0									0
Time Well Pump Online	8.1	0.0	5.3	7.0									20.4
Time Booster Pump Online	7.4	0.0	6.5	6.5									19.0
Net Production	941,648	0	664,070	842,195									2,447,913
Average Flow Rate Per Minute	87.8	0.0	91.5	89.5									67.2
Average Flow Rate Per Day	128,656	0.0	131,716	128,825									98,752
Percentage of Total Production	44.5%	0.0%	37.2%	45%									32.5%
2008 Effluent	1,133,300	1,178,800	861,700	1,000,000	259,200	1,594,300	2,467,800	2,076,700	1,284,937	1,028,258	534,060	1,145,559	13,804,384
Effluent Difference from 2006	28.5%	100.0%	48.3%	100.0%									5.0%

ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2007
TOTAL PRODUCTION:													
Storage Tank Difference	-26,415	-21,698	47,170	3,774									-411,322
Clear Lines Post Repair (Estimate)	0	0	0	0									0
Effluent	2,274,431	1,857,300	2,038,895	1,972,925									8,142,751
Backwash	181,190	123,700	246,577	213,666									735,073
Filler to Waste	8,593	0	6,348	11,324									26,265
Combined Backwash & Waste Usage	189,783	123,700	252,925	224,990									761,338
Usage Required for Production	7.0%	6.7%	12.4%	11.4%									9.4%
Net Production	2,114,648	1,733,600	1,785,970	1,747,935									7,381,413
Average Flow Rate Per Minute	48.23	43.00	36.43	38.48									41.53
Average Flow Rate Per Day	69,456	61,914	52,458	55,407									59,809
Production Unaccounted For (Loss)	818,531	529,898	606,666	429,721									2,384,817
Percent Loss	38.7%	30.6%	34.0%	24.6%									32.0%
2008 Effluent	3,889,300	4,588,400	2,447,000	2,584,500	2,937,400	3,058,000	2,668,400	2,444,100	2,285,937	2,018,658	1,922,960	2,047,439	32,885,384
Effluent Difference from 2006	-63.9%	-170.4%	-37.0%	-47.9%									-84.6%

ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2007
REVENUES:													
Residential (Includes Waste)	1,320,532	1,223,400	1,129,934	1,311,400									4,985,266
Dollars	\$10,638,065	\$9,787,200	\$9,039,477	\$10,491,200									\$39,955,939
Nevin's Stable Usage	2,000	2,000	2,000	2,000									8,500
Dollars	\$0.00	\$0.00	\$0.00	\$0.00									\$0.00
Number of Taps Being Served	284	285	285	282									284
Total Service Fee Billed	\$9,236.00	\$8,265.00	\$8,265.00	\$9,178.00									\$32,944.00
Dollars	\$7,394.00	\$7,410.00	\$7,410.00	\$7,332.00									\$29,536.00
Total Debt Service Fee Billed	\$11,928.00	\$11,970.00	\$11,970.00	\$11,844.00									\$47,712.00
Dollars	\$13,222,532	\$12,254,400	\$11,311,934	\$13,133,900									\$39,955,939
Total Water Sales	\$10,638,065	\$9,787,200	\$9,039,477	\$10,491,200									\$39,955,939
Average per Gallon Billed	\$0.0080	\$0.0080	\$0.0080	\$0.0080									\$0.0080
Dollars	\$27,548.00	\$27,645.00	\$27,645.00	\$27,354.00									\$110,192.00
Total Fees Billed	\$35,166.06	\$37,432.20	\$36,684.47	\$37,845.20									\$150,147.93
Grand Total Billing (Usage + Fees)	4,985,266	4,300,000	3,972,000	4,693,000									15,497,439
Average Usage Per Tap	\$134.46	\$133.34	\$136.72	\$134.20									\$134.18
Dollars													

NOTES:
 *4/106 Est Value of Water Rights \$2000-\$12000/AcreFoot
 *4/106 Est Usage Allowance per day per person per household per the state is 75 Gallons