

## **Forest View Acres Water District**

Operations Report –March/April 2012

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### **Treatment Plants:**

Arapahoe Water Plant:

- We have been successful in pumping water from the AWP and through the booster station during March and April.
- Please see the attached quote for replacement manganese greensand media for the filters. There is an analysis that can be performed to determine the relevant life left of the media in the filters. Brenda and I will perform this analysis and will add this to the routine O&M to occur every other year to see how we are progressing.

Surface Water Plant:

- We have been mostly successful in keeping the SWTP running throughout period of runoff. We have not had to manually shut it down due to high turbidity.
- In early April we took the secondary filters offline to rake and scour the media with a water/air mixture in an attempt to clean and recharge the media. At this time, we also super-chlorinated the garnet as suggested by the state inspector. We have done this in hopes of getting a greater removal rate of microorganisms out of the SWTP. Our last test results did not indicate that we are getting any removal of microorganisms through the filters.

### **Distribution system**

Storage Tank

- The tank project began late March with the installation of the temp tanks, reprogramming of the PLC at the ATP to operate at a new level. Approximately 3' (36,000 gallons) of water had to be wasted and pumped out of the main tank due to the lack of a drain valve on the main tank. Norvell constructed a manifold pipe to connect to the temp tanks, which will be kept by the district for future use. We were able to keep the SWTP running throughout the project as a buffer against high usage which occurred during the first part of the rehab project. However, more loss occurred as the temp tanks overflowed every night for the first week.
- Norvell stated that as they worked their way around with the sand blaster removing the failed coating, that the southern facing side was harder to remove. The northern sides peeled off easier, indicating that the original coating froze during the cure time. Please see the attached cure test report from Norvell.

- We found a small leak on the bottom lip of the south side of the main tank. Norvell welded this closed and applied more coating to this area.
- Norvell also installed a pneumatic plug in the south overflow pipe to prevent the tank from overflowing through this pipe (pipe does not daylight and an overflow event could undercut the substrate and compromise stability of the tank), and divert the overflow to the north overflow pipe which properly daylights. The district will be invoiced roughly \$300 for the additional tasks that Norvell performed.

#### Master Meters

- From our preliminary figures, we can safely say that MM zone #2 is calculating the flow more accurately than MM zone #1. MM zone #1 is located on a stretch of asbestos concrete pipe, which is rough, has a slightly inconsistent wall thickness and is currently operating off of one 12v battery that we have not been able to hold a consistent charge on. All of these things create a less accurate reading for totalizing gallons going through that zone.
- MM zone #2 currently operates on 3, 6v batteries in series, providing more amp hours and steady voltage. It is located on a 6" PVC pipe which has more consistent wall thickness, and probably less buildup on the inside diameter of the pipe. We believe this meter system is more accurate in totalizing flows going to zone #2. Please see the attached (available at the meeting) spreadsheet for more information on discrepancies associated with the zone meter use.

#### Tank Road

- Prior to the 2010 tank rehab, the tank road had been neglected for some time and had to be cleared of trees and brush to enable trucks and equipment to travel safely up to the tank. This road is still an issue as there are many short stumps within it, muddy pits and deep tire marks. We are obtaining an estimate from J&K to re-grade and apply rock to areas that need it to ensure that access is available to reach the tank.

#### Unauthorized Usage

- Attached is the most recent spreadsheet of unauthorized usage. We are revising an inspection checklist and the certified letter residents receive in an attempt to make the inspections more pleasing to all parties while still allowing us to document the information we need.
- I ask the board to make a decision on meter pit responsibility if and when unauthorized usage is confirmed.

## **Capital Improvement Projects**

### Source Water Protection Grant

- We are in the process of obtaining the \$5000, matching funds, source water protection grant. Please see the attached paperwork (available at the meeting) to be submitted to the state.