

Public Notice 6/26/2019

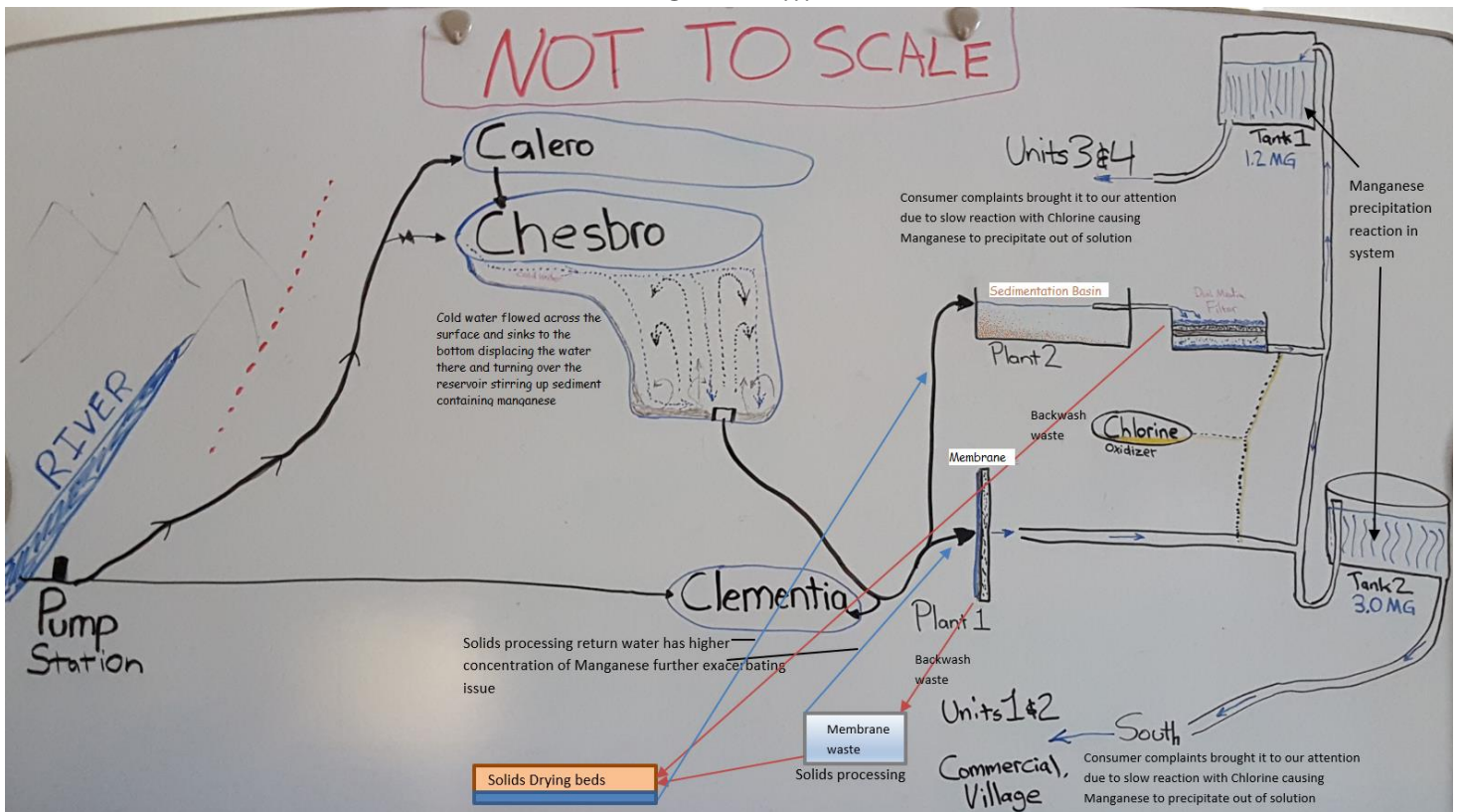
Update on Water Quality Issue in the System

We are currently experiencing some yellow water in our system again after having the water system run clear. The water has been and continues to be safe to drink within the Rancho Murieta Community Services District service area. This is confirmed with laboratory results from the certified laboratory, California Laboratory Services, that the District sends its samples to. Some areas of the District experienced little to no issues, however some areas have cleared up but occasionally are getting some lightly yellow colored water as pockets of the system work themselves out. We have also had a few days of slight manganese carry through our filtration process this week so the potential for color may exist for the next two days or so. This is the result of our filtration processes solids handling system, which recovers and returns water from the backwash water from the plant, from a sand filtered collection drain back to the front end of our filtration process, and this water contains high levels of manganese. To resolve that issue, we are currently sending the backwash into our sewer system instead of back into our water treatment process. As of this morning results with District lab equipment shows that the water quality results are very good with effluent manganese at 0.01 mg/l which is just at the detection limit for it.

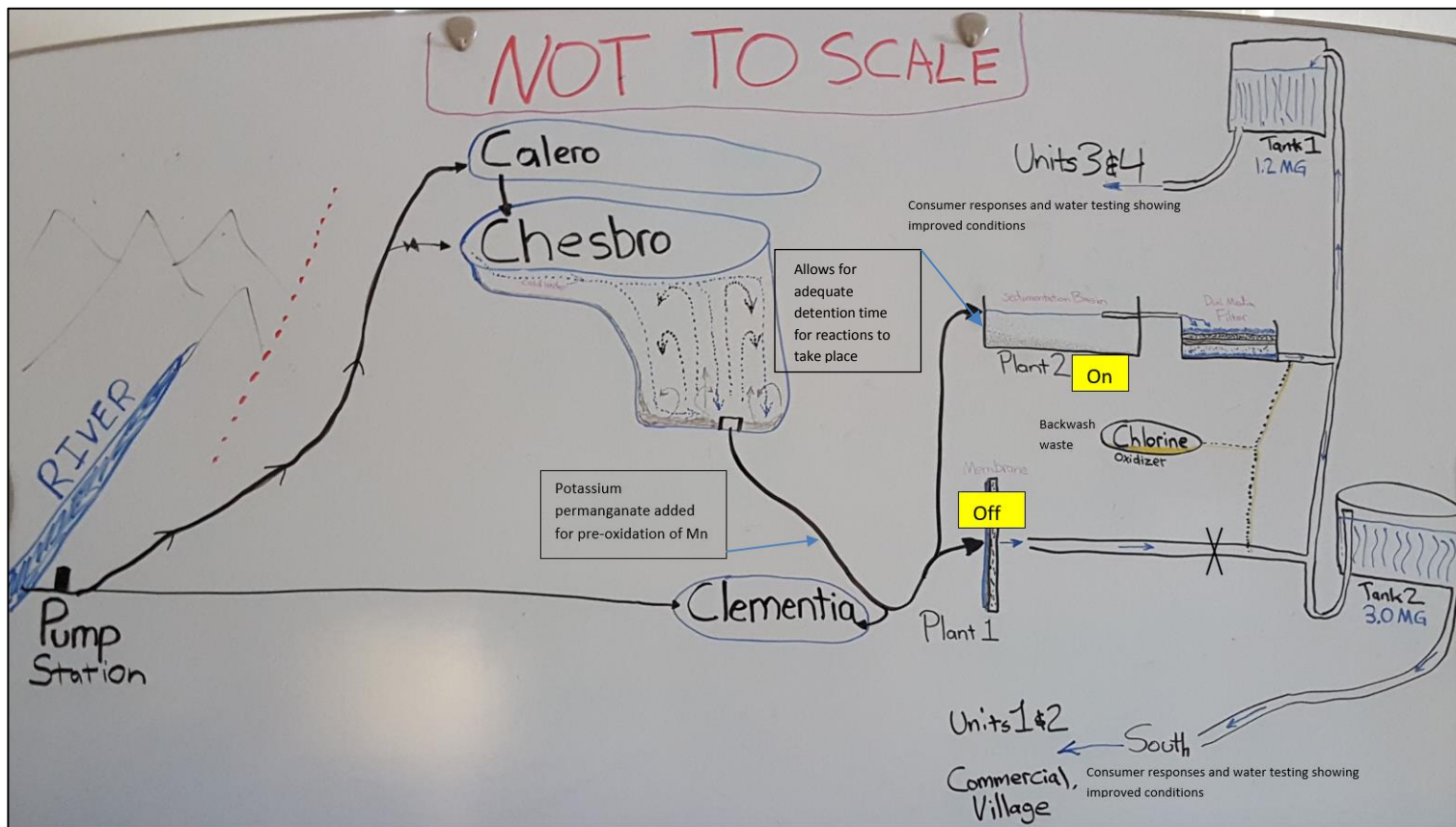
Our water supply source for the Water Treatment plants, the Chesbro Reservoir, appears to be finally settling out after turning over. This is based on certified lab data showing that the incoming manganese levels are finally dropping.

The patience of the community is greatly appreciated as we continue to work to resolve the appearance of colored water and prevent it in the future. Based on current operations, there should not be any further issue with colored water after the next few days as water in the system is used up. What has occurred is summarized in the drawing below.

PROBLEM...



SOLUTION...



Since this issue has begun, we have been in contact with the State agency that regulates our water system to apprise them of the issue and the steps we have been taking to resolve it, the State Water Resources Control Board – Division of Drinking Water. They have been helpful in providing feedback and contacts of other agencies that are dealing with manganese issues. The feedback we have gotten from other agencies that have persisting manganese issues is to purchase and install proprietary treatment equipment specifically to deal with the manganese. We are looking into this.

As noted in a previous update, the State public notification level is 0.5 mg/L and our water never reached that high of a concentration of manganese in water supply or even in the Chesbro water source for the water plants. The State's secondary (aesthetic level) maximum contaminant level (mcl) for manganese is 0.05 mg/L and was exceeded twice this past week with a certified result level of 0.062 mg/L on June 23, 2019 with the water distribution tank levels at 0.027 and 0.045 mg/L just below the mcl, and June 21, 2019 at 0.015 mg/L with the tanks at 0.045 and 0.026 mg/L. The results on June 22, 2019 for the plant was 0.028 mg/L and tanks were at non-detect levels. Plant 2's tested levels of manganese were also non-detect June 14-18, 2019. There is no federal maximum contaminant level for manganese.

There have not been any issues of bacterial contamination or with any other constituent, confirmed by certified laboratory results.

State's Website https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Manganese.html

Federal EPA website <https://www.epa.gov/ccl/regulatory-determination-1-support-documents-manganese>

Future Prevention

We are looking into various solutions and preventative measures including: piping modifications in the Calero Reservoir to pull water from surface where it is warmer vs the bottom where the water is colder to keep the Chesbro Reservoir from turning over; online manganese monitoring equipment that would help alert staff to potential issues with the water supply reservoir before they become a problem, and are currently obtaining budgetary quotes from two different suppliers; bringing in consultants to provide expert analysis to this situation; oxidation with ozone; greensand filtration media for our conventional water plant; and looking into other proprietary filtration processes. We are also putting better procedures in place to direct staff on how to identify and deal with the issue of manganese in the water supply for the water treatment plants.

In addition, an operations specialist from GE, the manufacturer of the membrane plant, will be arriving next week to provide direction on what can be done to operate the ultrafiltration membrane plant with dissolved manganese present in our source water.