
MEMORANDUM

TO: KYLE SIPES
FROM: JEFFREY HEREDIA
SUBJECT: VISIT OF THE ARCATA WASTEWATER TREATMENT FACILITY
DATE: OCTOBER 7, 2016

Purpose

To discuss what I learn about wastewater treatment through visiting the local treatment facility here in Arcata, CA. Students were led through the facility by an operator who works there and got to listen to her explain how each piece of the treatment plant functioned to provide an improved quality of the water.

Discussion

Directly prior to the treat the students met in the classroom where a brief history of the plant and the basics of how it functioned were explained through a combined effort of both Mr. Sipes and Dr. Cashman. Unfortunately, the power in Arcata went out shortly after this began. This meant that the students were unable to see any aerial pictures of the facility. While it surely would have been interesting to see the facilities prior to actually arriving, I was still able to view the pictures afterwards. Seeing them after already visiting the plant gave far more context than if I had seen them prior.

Afterwards, we boarded a bus that brought us to the wastewater treatment facility. Instantly a slight order was noticed, although it was surprisingly mild considering the contents of the facility. A question and answer guide was provided by one of the operators of the wastewater treatment plant. She was very insightful, and at times even humorous, joking about her days of pulling money out of the foul water are over.

At the start, we viewed the headworks section of the plant. This is where pretreatment occurs. The guide explained that on average 2.3 million gallons of water per day were brought through this section of the plant. With such a large amount for such a small town, I can hardly even imagine the strain of constructing a wastewater treatment plant for a large city such as San Jose or New York must be like.

Afterwards we arrived at the treatment wetlands where the majority of the trip was held at. The Arcata Treatment plant has several of these, and by the time you reach them the odor is gone. It looks much like any other wetlands that simply had man made gravel roads through it. There was plentiful wildlife such as ducks and mosquitos. The process of the removing BOD was explained and the issues of a natural treatment plant were addressed at this point. The primary issue was sludge buildup which was only now being addressed after thirty years of operation.

Conclusion

Overall the trip was very informative. The realization of the absurdly large amount of wastewater we as people create finally sunk in. I found the brief lecture on the Blue Frogs exceptionally entertaining. I am very optimistic with their current progress. Hopefully the Blue Frogs will be successful and this will ultimately led to a larger number of communities adopting the unique style of wastewater treatment that Arcata employs.

