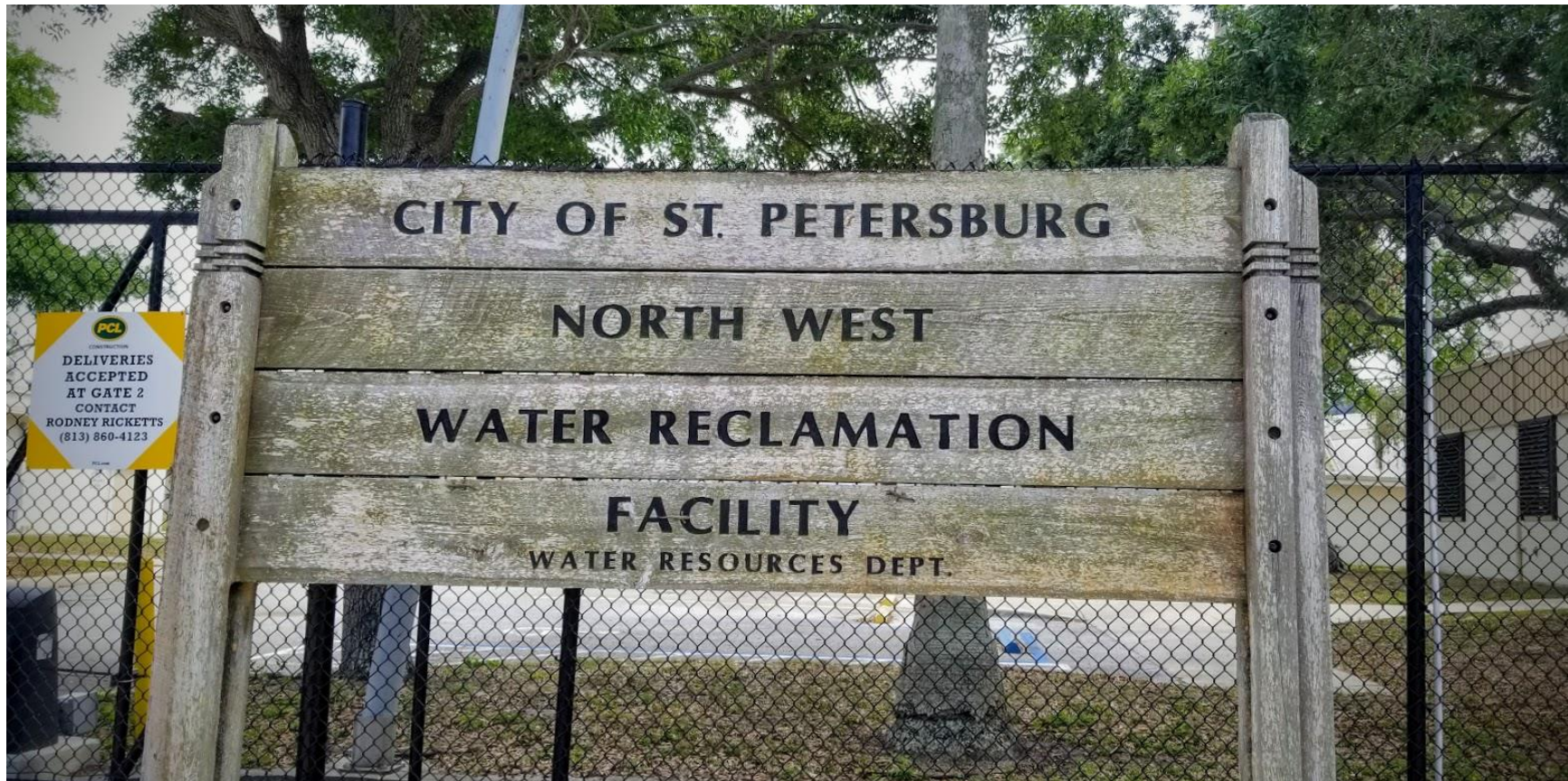


Tour of the Northwest Water Reclamation Facility

7500 26th Ave N, St. Petersburg, FL 33710

April 6, 2019



Fun Facts

City of St. Petersburg processes, on average, 30 Million gallons of raw sewage daily

Headworks – houses the equipment used in the preliminary treatment by removing sticks, rags, hair, sand and other non-biodegradable artifacts.



Fun Facts

There are over 900 miles of sewer mains

Equipment to remove grit.



Fun Facts

There are almost 20,000 manholes in the city

After the solids are removed these two pipes move the sewage to the Aeration Basins.



Fun Facts

There are over 120 lift stations throughout the city

The Aeration Basins where the microbes get to work on the sewage devouring the carbon-based compounds.



Fun Facts

There are 287 miles of reclaimed water mains

After the Aeration Basin the water is placed in the Clarifier which allows solids to settle out while any remaining lighter than water solids are skimmed off the top.



Fun Facts

312 Reclaimed Water hydrants

The water now makes it way to the filters in preparation for disinfection.



Fun Facts

Northwest facility can process 20 million gallons per day

Chlorine Contact Chamber is where the water is disinfected to kill any pathogens.



Fun Facts

Northeast facility can process 16 million gallons per day

Water leaving the Chlorine Contact Chamber making its way to storage tanks. The water is now considered Reclaimed Water and can be used for lawn irrigation. Any excess water is pumped down Deep Injection Wells.



Fun Facts

Southwest facility can process 20 million gallons per day

The plant has 3 large diesel generators to keep the plant operational in case of a power outage.



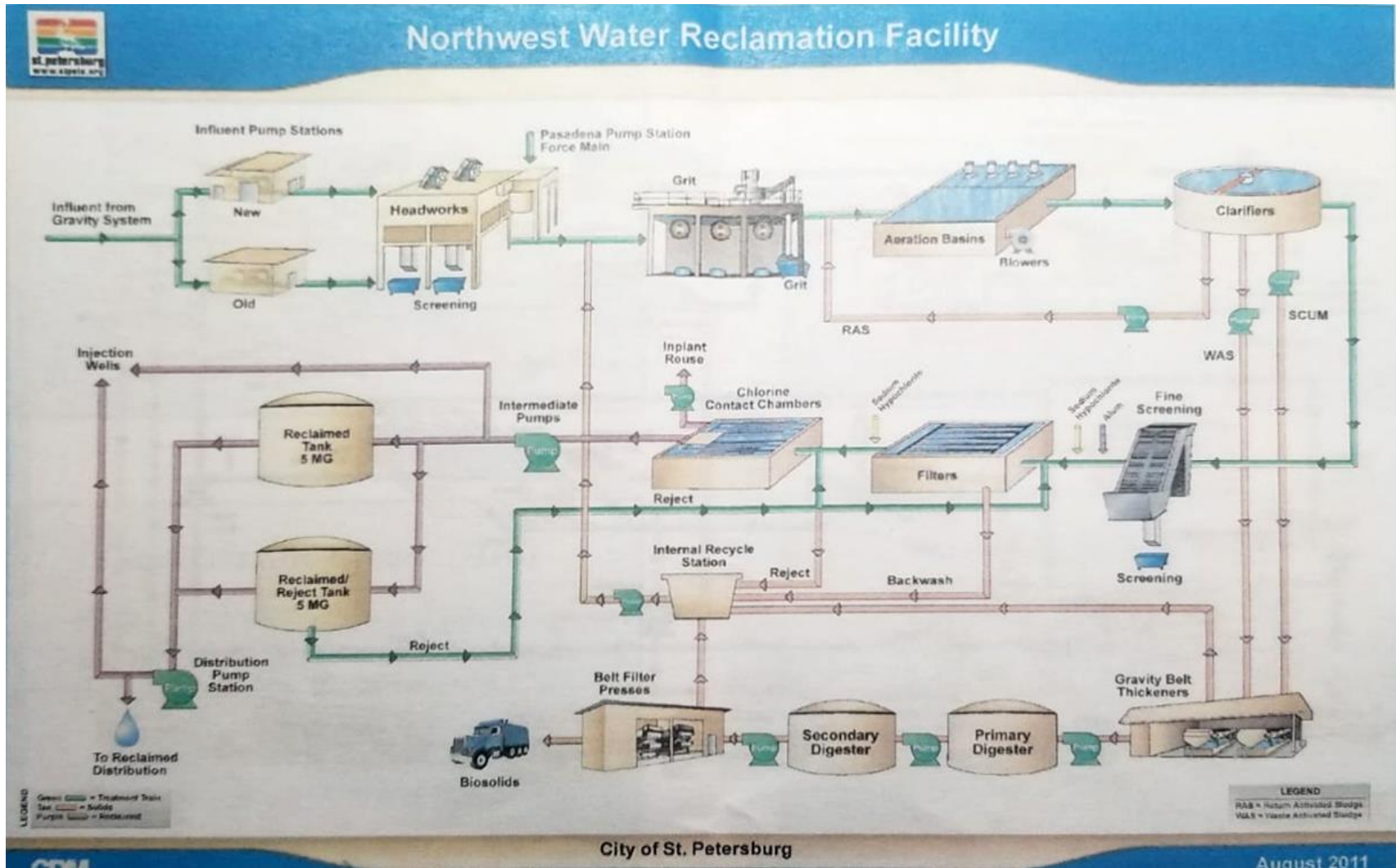
Fun Facts

All 3 facilities can process 56 million gallons per day

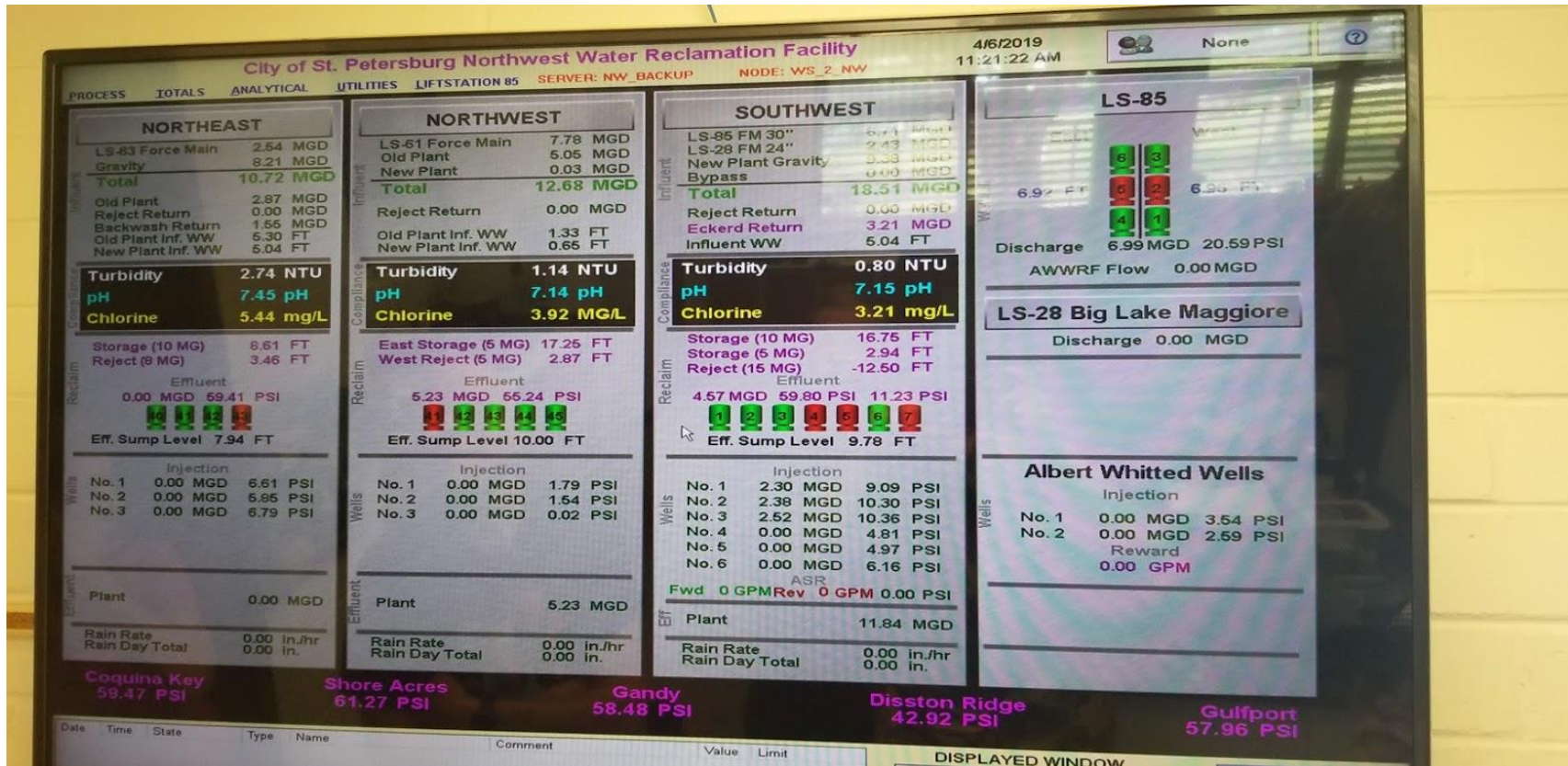
Snorkel truck for cleaning out blockages from the sewer.



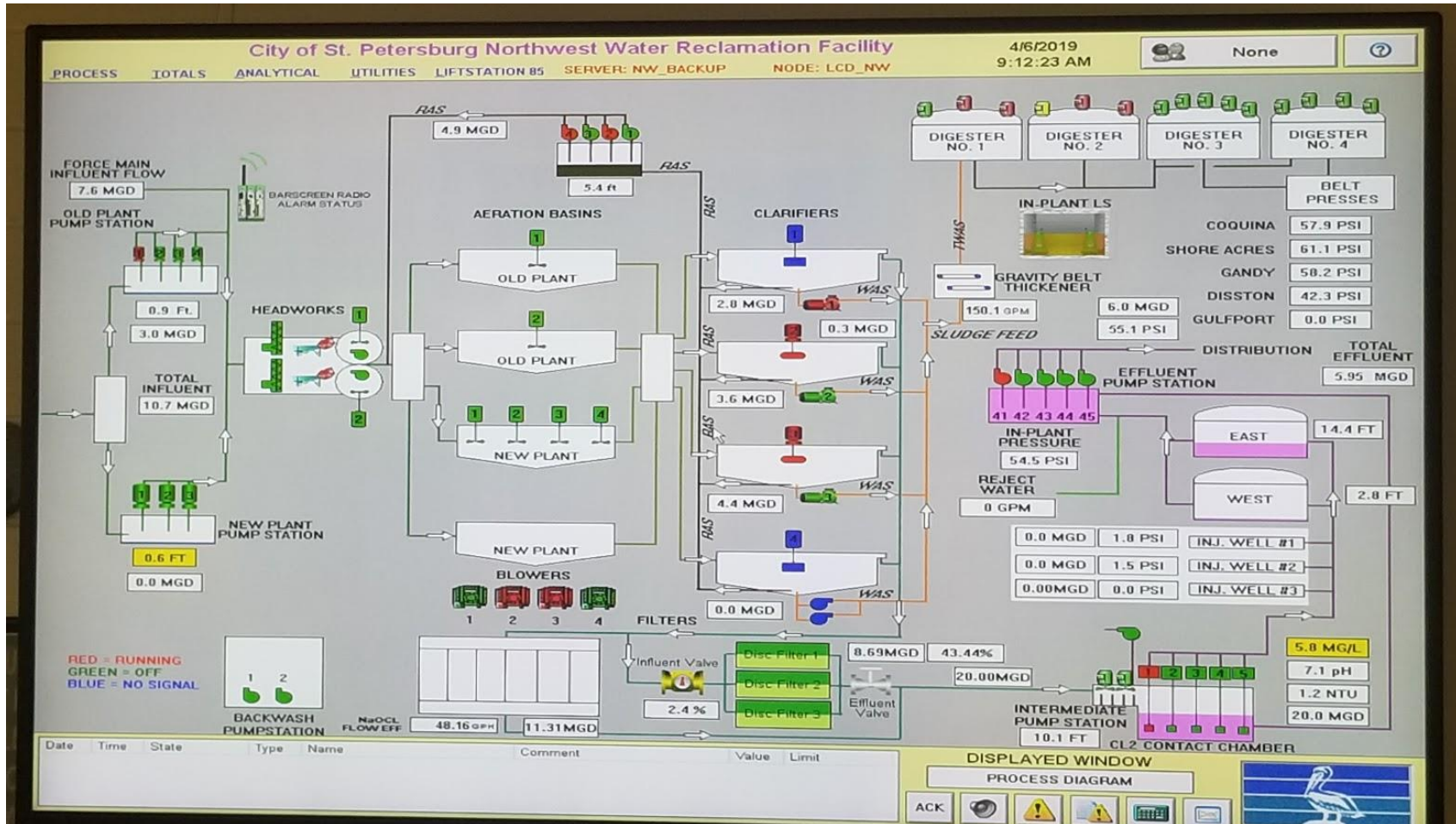
Overview of the process



Reclaimed water monitoring screen. This show the city's 3 facilities, Northeast, Northwest and Southwest.



Monitoring the Plant



Fun Fact stats source: City of St. Petersburg Water Resource Department 10-13-16

Presentation prepared by Mark Siler

Photos taken by Mark Siler on public tour April 6, 2019