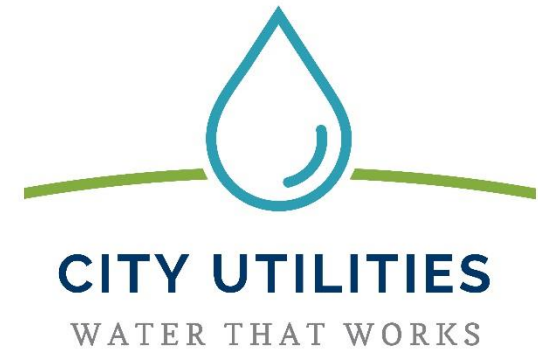


# Water Quality Report & Water Treatment



Victoria Jahn, Water Quality Supervisor  
Jason Anspach, Water Quality Supervisor

Utility Advisory Group - September 16, 2020

# THREE RIVERS WATER FILTRATION PLANT



# Plant History



- Completed in 1933
- Water source is the St. Joseph River
- Original capacity of 24 million gallons per day
- Capacity increased to 48 million gallons per day in 1954
- Capacity increased to present capacity of 72 million gallons per day in 1981





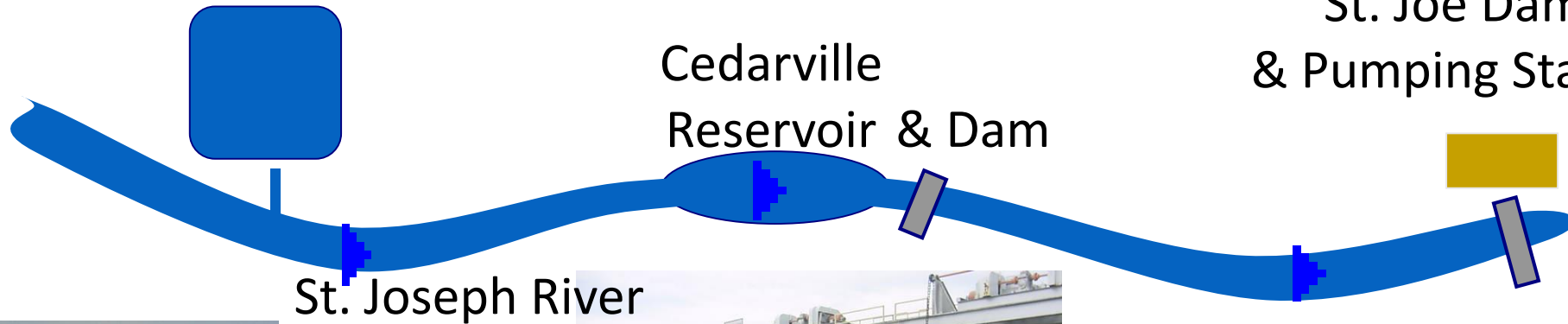
# Source of Supply

Hurshtown  
Reservoir

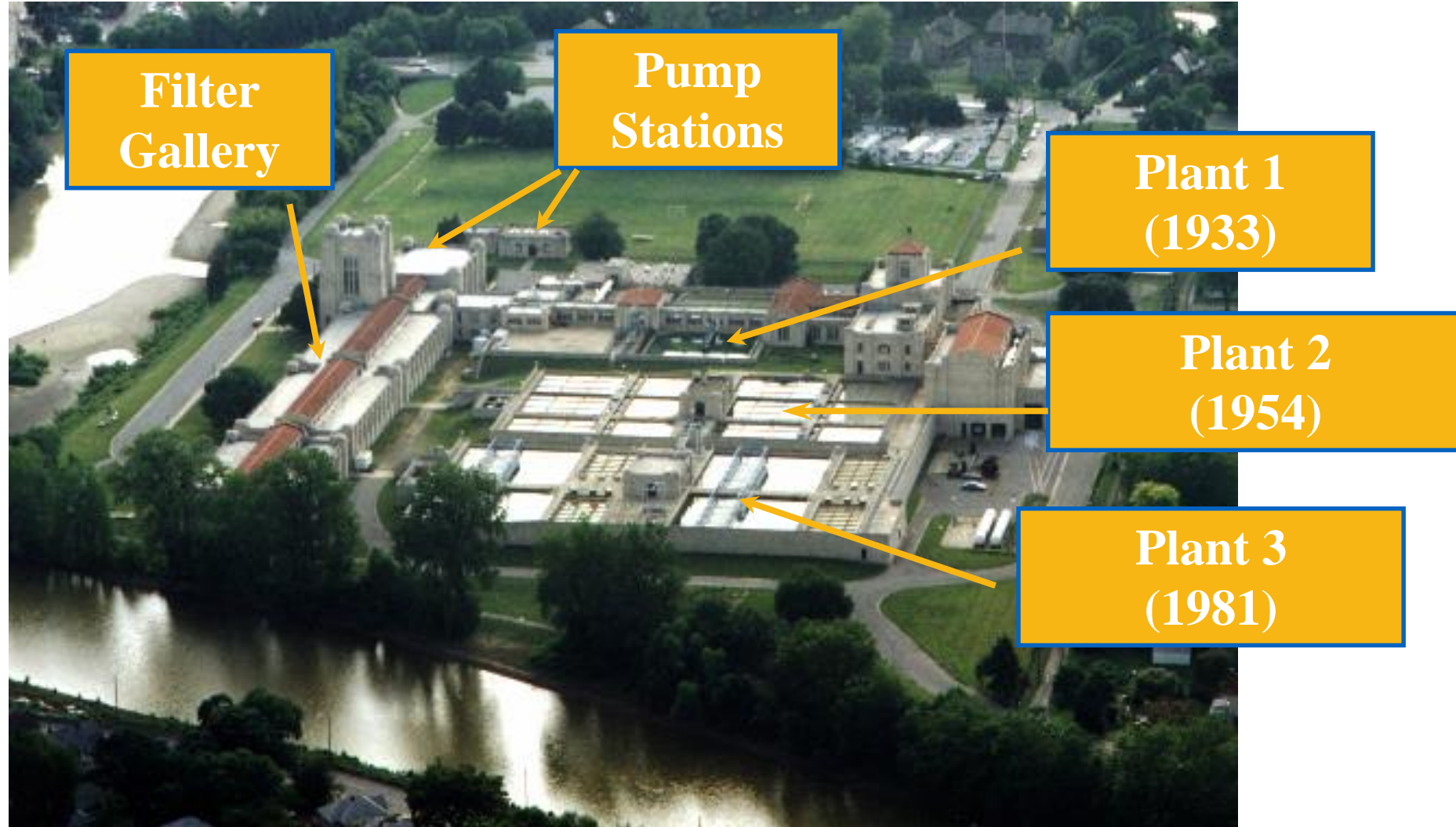


Cedarville  
Reservoir & Dam

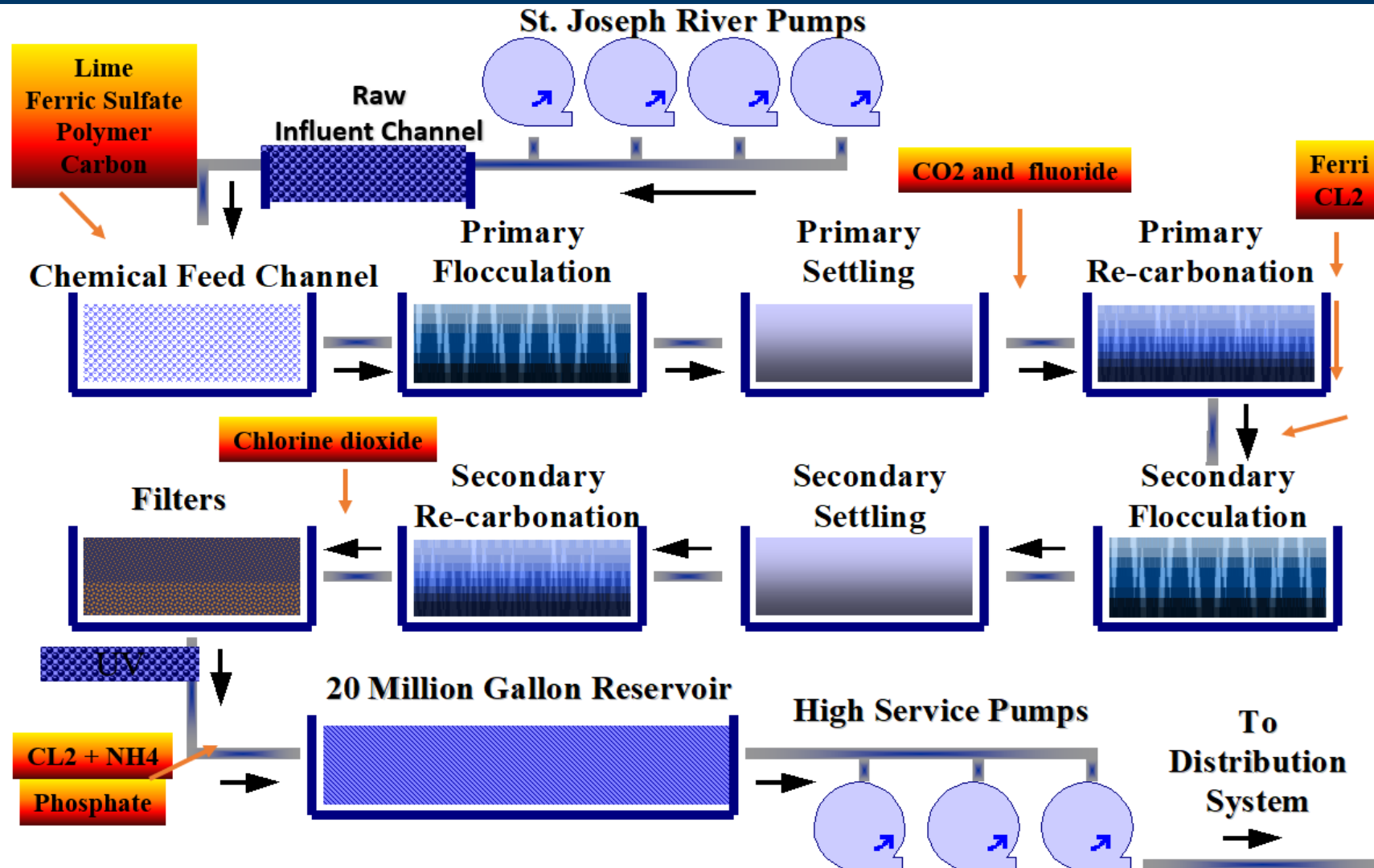
St. Joe Dam  
& Pumping Station



# Treatment Plant - 1,000 ft. Tour

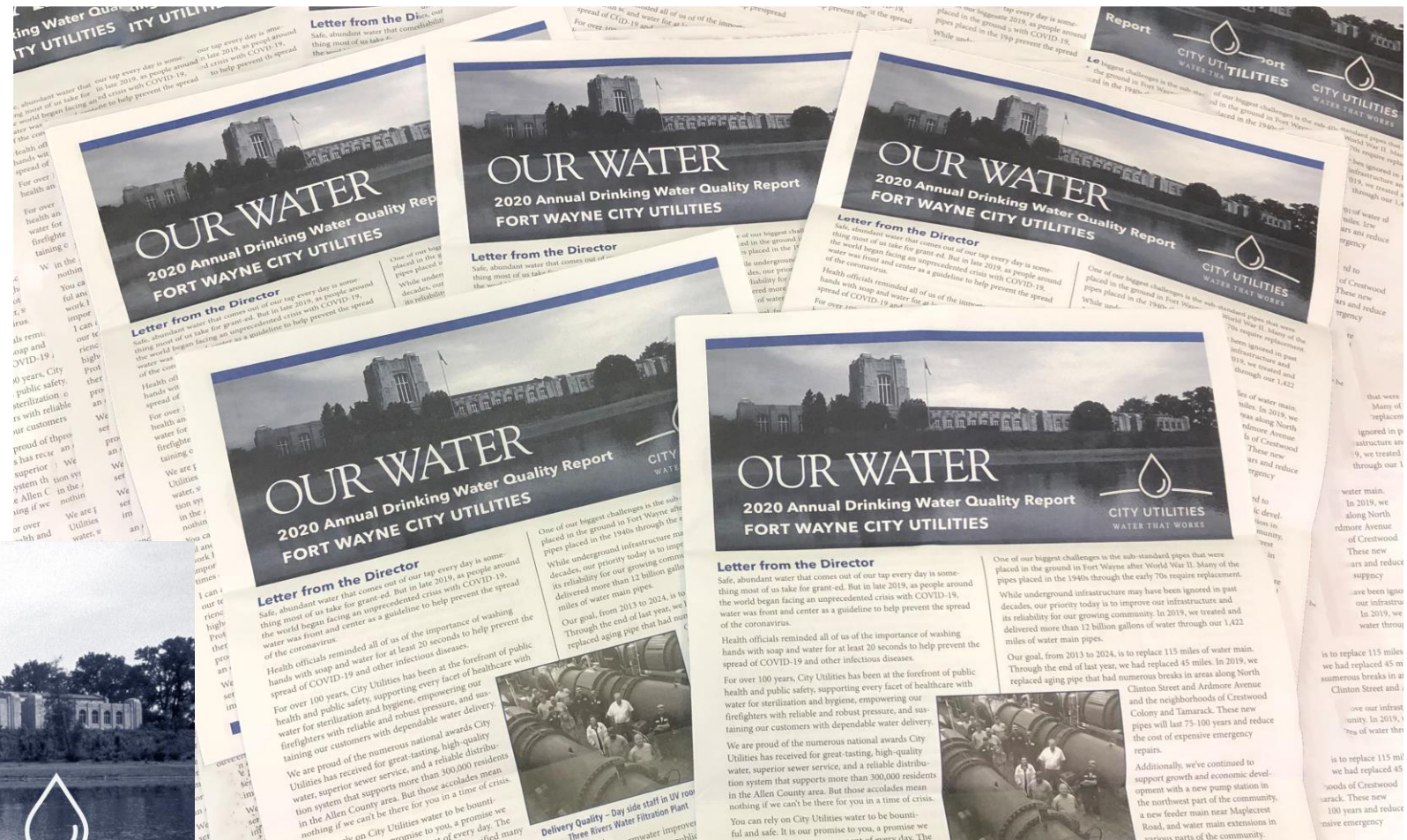


# The Treatment Process





# Water Quality Report



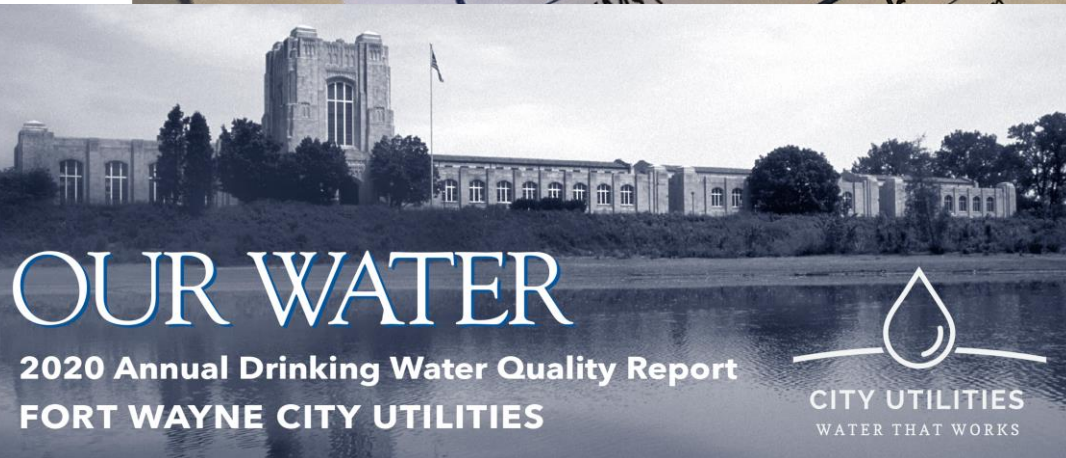
[cityoffortwayne.org/utilities](http://cityoffortwayne.org/utilities)



# Water Quality Report



Water Quality Table				Highest Level Detected in Your Water
Contaminants	Units	MCLG	MCL	Compliance Achieved
<b>Disinfectants &amp; Disinfection By-Products</b>				
Chlorine	ppm	4	4	Yes
Chlorine Dioxide	ppb	800	800	Yes
Chlorite	ppm	0.8	1	Yes
Haloacetic Acids (HAA5)	ppb	NA	60	Yes
Total Organic Carbon (TOC)	mg/L	NA	TT	Yes
THMs (Total Trihalomethanes)	ppb	NA	80	

[illegible]

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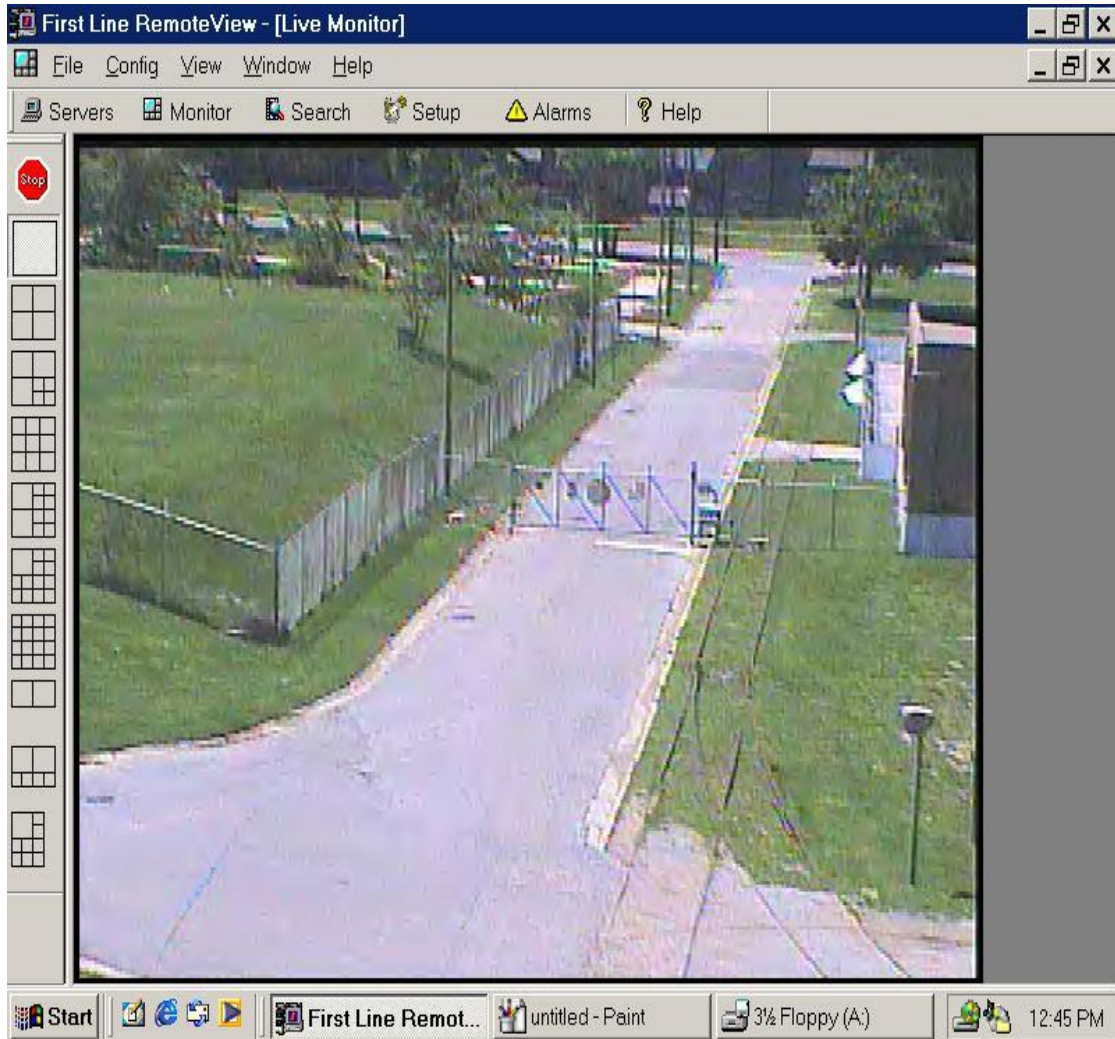
# Quality Control



- Bacteriological testing is performed on finished water every six hours
- Disinfectant residual is monitored continuously
- Finished water is tested for all regulated and non-regulated contaminants
- Approximately 160 samples are collected and analyzed from the distribution system monthly for disinfectant residual, fluoride and microbiological contaminants



# Quality Control Security Upgrades



- Plant gates closed all times
- Security monitoring system installed
- Improved internal procedures



# Quality Control Technology Upgrades



- Supervisory Control and Data Acquisition (SCADA)
  - Created central pressure zone assist mode
  - When a low-pressure event is detected at the plant, the outlying distribution system changes to supply water to the central pressure zone
- SCADA controls the flow-pacing of orthophosphate feed system to enhance corrosion control





# Questions

