Case Study

USCAWW-2803.001

Large Energy Savings For Equalization (EQ) Basins

AP Series Air-Powered Wastewater Mixers provide better mixing with less CFM.

Topics: energy savings, eq basins, mixing

Fifteen (15) AP2000 Air-Powered Wastewater Mixers were deployed in the East Basin.

Location & Contact Information:
Further information may be available upon request. Please contact Ixom Watercare by phone at 866-437-8076 or by e-mail, watercare@ixom.com

Basin Overview:

- **West Basin:** 30,000 square feet. For raw sewage influent.
- **East Basin:** 20,000 square feet. For a mix of secondary effluent and raw sewage influent.

Operating depths for both basins ~4 - 6 feet.

Pre-Deployment Conditions: Both basins contained grids of coarse bubble "tube style" diffusers for mixing. They were powered by three (3) 75HP blowers, one dedicated for each basin, and a third for use as a spare.

Project Objectives: To provide thorough mixing and solids suspension with less CFM as well as to eliminate the need for a high-horsepower mechanical mixing system.

Solution: A total of forty (40) AP2000 Air-Powered Wastewater Mixers and two (2) 25HP blowers.

- **West Basin:** Twenty-five (25) AP2000 mixers.
- **East Basin:** Fifteen (15) AP2000 mixers.

Results: Improved mixing requiring substantially less CFM. The Customer observed significant energy savings estimated to be upwards of 135HP.

Update (Feb. 2019): The Customer continues to be very happy the AP2000 mixing system.

Update (Sep. 2020): The Customer purchased (12) AP8000 mixers for another part of their system.

Before

After