

SACO WASTEWATER TREATMENT FACILITY



- 1.8 kW windmill to augment power for administration building
- Solar heated headworks building
- High efficiency motors and pumps
- Variable Frequency Drives (VFD) on most equipment
- Plans to use geothermal heat captured from wastewater to heat and cool process building
- Programmable thermostat temperature controls
- Other equipment upgrades designed to optimize energy efficiency and conservation include energy efficient lighting, computer monitors and refrigerator replacement, wind driven exhaust fans, a photovoltaic light as well as numerous equipment upgrades



68 FRONT STREET
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Facility Overview

- The facility is a conventional activated sludge plant that was placed into service in 1971 to treat an average daily flow of 1.57 million gallons per day (MGD). Through major upgrades in 1988 and 2006, the facility is now able to handle an average flow of 4.2 MGD with a peak of 8.4 MGD, as well as facilitating primary treatment of an additional 5.6 MGD of storm water.
- The wastewater entering the facility is primarily of a domestic and commercial origin with only a small percentage of the total flow being industrial.
- The crew of 9 at the facility maintains and operates the treatment plant as well as 29 pump stations located throughout the city of Saco.
- The facility is funded through an enterprise fund that utilizes sewer use fees as well as other miscellaneous funds and currently has 4,538 accounts, which it handles internally.

Recent upgrades Included the following:

- Increasing gravity pipe to facility from 18" to 24"
- Diversion structure to control flows to facility
- Storm King to handle up to 5.6 MGD of storm water
- Grit King to improve grit removal prior to treatment
- Anoxic zones in aeration basins for nitrogen removal
- Waste Activated Sludge (WAS) holding tank to optimize dewatering equipment and plant efficiency
- New blower for building odor control and WAS aeration
- Centrifugal blowers and fine bubble diffusers for aeration basins
- Rotating sludge thickener
- Primary clarifier drive, sludge chopper pump, enhanced supervisory control and data acquisition and many other facility improvements

