

Saved Water = Saved \$\$ at Mount Vernon Mills



being used. Through the use of metering and the auditing of various processes, facility management discovered several inexpensive methods for conserving precious water resources.

Introduction

Most people are easily convinced that water conservation is a great idea. Making that idea a reality is a much more difficult task. Water conservation ideas can be easy to sell if the water in a particular region is expensive or if the water supply is running out. However, if the water is cheap, the region is experiencing little growth, or the region is drought tolerant, the job of achieving commitment on a water conservation project becomes a greater challenge.

The Trion Facility of Mount Vernon Mills, a textile greige and finishing operation, recognized that water conservation could be used not only to prepare for water restrictions and limits but also to improve the overall competitiveness of the facility. Mount Vernon also recognized that the first step toward water conservation was determining how much and where the water was

Inexpensive Ideas that Worked

1. Non-contact cooling water from air conditioning and compressors can be reclaimed and used for boiler stack scrubbing in venturi scrubber systems, and as feed water for steam generation after softening.
2. Hot water (condensate) from the multistage evaporators on caustic recovery systems can be recovered and used to meet most hot water demand in a facility.
3. Reclaimed water can be used for all general wash down and cleaning-water activities.
4. Plant effluent can be used at a wastewater treatment plant as make-up water for dewatering polymer mixes, backwashing

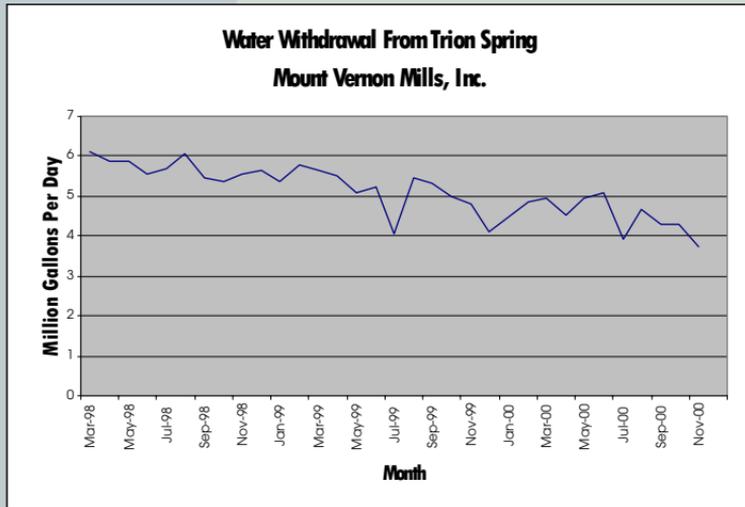
influent screening structures, and other plant utility (non-potable) needs.

- Slasher wastewater can be fed through a vibrating filter and reused for make-up water in size mixes, minimizing freshwater demand, creating minimal discharge. solid waste, and lowering biochemical oxygen demand (BOD) in the final discharge.

Results

In 1996, water demand was 5.7 million gallons per day (MGD), including approximately 0.5 MGD for the municipal needs of the Town of Trion. In 2000, the water demand was 4.7 MGD, including the Town of Trion. This represents an overall reduction of **950,000 gallons per day** or

18.9%. In 1996, manufacturing required 31 gallons of water per thousand pounds of product. In 2000, only 24 gallons of water per thousand pounds of product was required. These reductions in water use took place during a time period in which product output increased by 3%.



Also as a result of their water conservation efforts, Mount Vernon was able to sign a letter of intent to supply a neighboring community with water during emergency situations as part of a local disaster relief effort.



Pollution Prevention Assistance Division

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