

## TREATMENT FACILITY UPGRADE

**STATE PROGRAM:** Vermont Department of Environmental Conservation

**ASSISTANCE RECIPIENT:** Town of Waterbury

**ASSISTANCE AMOUNT:** \$343.3M



### PROJECT DESCRIPTION

The Village of Waterbury's Wastewater Treatment Facility discharges its effluent in the Winooski River which then discharges to Lake Champlain. To meet the expected 0.2 mg/l Phosphorus TMDL for Lake Champlain, the Village installed an advanced phosphorus removal system that uses Co-Mag ballasted flocculation technology. Not only does this Co-Mag system achieve the desired flocculation and precipitation outputs, it also removes more organics than can be achieved with the previous aerated lagoon wastewater treatment process. This new system has shown a decrease in effluent concentrations of Biological Oxygen Demand, Total Suspended Solids, and Settleable Solids. A new processing building for the Co-Mag system was built along with a new sludge drying bed structure to dewater and store the chemical sludge prior to disposal in a landfill. This project cost over \$7.3 million in total and was funded mostly by federal and State grants with a CWSRF loan to cover the remaining amount.

To read more about this case study, please visit [https://www.epa.gov/sites/default/files/2018-11/documents/pisces\\_2018\\_compendium\\_0.pdf](https://www.epa.gov/sites/default/files/2018-11/documents/pisces_2018_compendium_0.pdf).