Portland Water District

An Efficiency Maine Case Study

In 2015, the Portland Water District (PWD) prepared its plan for a significant renovation of the East End wastewater treatment facility (WWTP). Built in the 1970s, the facility's original splash aeration system was ageing and underperforming. The renovation plan's full scope of work included new fine-bubble aeration diffusers and infrastructure, new blowers, an aeration basin layout redesign, selector zone controls, and new electrical service equipment.

With the help of an incentive from Efficiency Maine's C&I Custom Program, they were able to invest in more energyefficient equipment models; rather than installing the multistage centrifugal blowers with inlet guide vanes, PWD opted for the more efficient single-stage integrally geared blowers.





- Project Cost: \$415,880 (incremental cost of more efficient blowers)
- Efficiency Maine Incentive: \$203,337
- Annual Energy Savings: 726,204 kWh, 158 kW (summer demand)
- Return on Investment: 2.9 years with incentive, 5.7 years without incentive



