The Town of Blackstone completes the optimization of the Elm Street Well - anticipating a 42% reduction in electricity use and a 9-month payback

In the spring of 2018, the Baker-Polito Administration, though MassDEP's Clean Energy Results Program, with support from the Department of Energy Resources and the Massachusetts Clean Energy Center, awarded $4 million in state Gap II grants to Water and Wastewater Facilities for energy efficiencies and renewable power generation in the Commonwealth.

The Town of Blackstone was awarded a $ 42,521 state Gap II grant, which was combined with a matching National Grid incentive for energy efficiency to complete the project. Previously, the existing drinking water well system was inefficient, since water was lifted out of the ground twice from a redundant pump and motor that was heavily throttled on Well #5. This project removed the existing pumps from Wells 5 and 5A, decommissioned Well # 5, and installed a new VFD-controlled submersible high-lift pump in Well #5A.

Energy savings is expected to be seen by elimination of throttling, eliminating the pump and motor inefficiencies of the redundant pump, and elimination of double lifting the water. This energy conservation measure is estimated to reduce pump station electricity use by 42% per year.

The Town is expected to reduce its electricity usage by 35,108 kilowatt hours (kWh) – resulting in projected cost savings of approximately $6,657 annually.

Total Project Costs:		$56,000
Less: Gap II Grant Award:	$ 42,521	
National Grid Incentive:	$ 8,755	
Subtotal:		$51,276
Town of Blackstone (cost share):		**$4,724**
Projected Annual Cost Savings:		**$6,657**
Projected Annual Electricity Savings:		**35,108 kWh**

Any questions about the project should be directed to James M. Sullivan, Water Superintendent, at 508.883.9331 or jsullivan@townofblackstone.org

Advancing renewable energy & energy efficiency in the Commonwealth
CLEANENERGYRESULTS
www.mass.gov/dep/cerp

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