

NYRWA INTRODUCES OUR NEW ENERGY EFFICIENCY PROGRAM

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Your New York Rural Water Association is continually trying to adapt and find new ways to further serve the needs of the water and wastewater systems within New York State. I started with the word “your” because this is your association as a member system. We are merely staff personnel working to provide a high level of training and technical assistance to help the member systems achieve their goals and regulatory compliance. As we try to evolve and provide new services, we are pleased to announce the addition of an Energy Efficiency Program.

In June 2015, the New York Rural Water Association was provided funding through a grant authorized by the United States Department of Agriculture, Rural Development, to provide Energy Efficiency Assessments to rural water and wastewater systems in New York State. Officially termed the Energy Efficiency Technical Assistance Program, it was authorized for a one year period providing service to our systems from July 1, 2015 – June 30, 2016. It is our hope that this program is successful and is extended for many years to come.

PROGRAM SPECIFICS:

This program was established to provide onsite energy assessments and a completed Energy Efficiency Assessment Report for 30 water and/or wastewater systems in NYS over the course of the one year contract. Our trained staff will identify the systems to be selected, ask the systems permission to participate in the program, and then begin the assessment process.

For each system, our staff completes an onsite energy assessment, recording data on motors, pumps, heating systems, lighting, facilities served, run hours, flow information, and general operational issues. With the help of system personnel, we also collect and analyze at least one year’s worth of utility bills and flow data generally available from the operational reports. Once the onsite assessment and data collection is completed, we utilize an Energy Efficiency Database to input the necessary data, and analyze results showing cost of production or treatment per thousand gallons, cost to run each component (motors, lights, heating units), and utility consumption per unit identified. It is worth noting that when the process is complete, we provide this database to the system as a means for their staff to monitor system efficiency in the future. All they need to do is input the utility cost per month, amount of energy consumed (kWh or ccf), the flow data for the month, and the database will continually update the information. We consider this a means of assisting the system to achieve long term sustainability, which we have determined to

be a priority in the coming years for the NYRWA. This database provides useful graphs and charts, as well as a system report that we hope will allow you to provide detailed information to your managers and board members.

Upon completion of the data input and analysis, we use a number of resources, both electronic and efficiency experts, to review the overall system dynamics and calculate potential savings identified as either operational changes, equipment upgrades or replacements with a specified energy savings payback period. The final reports we submit to the system provide charts on utility consumption trends, flow data, and current system costs. We provide a brief overview of the system components and operation, a detailed recommendation of potential changes, either operational or equipment, as well as information on costs to upgrade, potential savings, and the payback period for these improvements. Finally, we provide details on potential funding agencies and resources to further help the system achieve financial savings through energy efficiency.

REQUIRED INFORMATION:

- 1 year of utility bills with cost and consumption information
- Motor Information (generally available on the nameplate, helpful to have manual info for submersible motors)
- Flow data (how many gallons treated or pumped per month)
- Run hours (how many hours per day a motor runs)
- Overview of the system operation (basically a tour with detailed explanation of equipment and operational procedures)

As of the writing of this article, we have completed (7) system assessments which have yielded a projected savings of \$66,000. For some systems, the savings seem small, but we stress the benefits of any project requiring less than a 3 year payback period. We also encourage systems to consider savings on a percentage scale versus strictly by dollar amount. If a change in operation or equipment yields a 10% savings in utility costs, then that is a very worthwhile project.

We look forward to a successful year working with the remainder of the 30 systems identified for this contract period and hope that the positive results will lead to savings for the systems as well as a continuation of the services provided. The NYRWA is making every attempt to deliver beneficial services to the water and wastewater systems across the entire state in an ever evolving effort to continue to provide...Quality on Tap! 💧💧