

# Pawtucket Water Supply Board cited as model by EPA

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**PAWTUCKET** — The city and the Pawtucket Water Supply Board are being held up as a model by the U.S. Environmental Protection Agency for the successful transformation of its antiquated water supply system.

Mayor James E. Doyle announced this week that the city is being featured in an EPA publication entitled: "Pawtucket, Rhode Island: A Drinking Water State Revolving Fund Success Story." The publication cites Doyle as being instrumental in the project and praises him for making the improvements to the city's water supply one of his main priorities since being elected as mayor in 1997.

The 14-page publication details the history of the water system from 1878, when it began supplying water, through the commissioning of the city's new treatment plant earlier this year. It also outlines the decision made in 1997 by city officials to move from the "maintenance" mode of previous years to a proactive plan for a complete rehabilitation.

The end result was the construction of a state-of-the-art surface water treatment plant and the complete upgrade of the 263-mile pipe network. The upgrades improved both the quality of water being produced as well as the water being delivered to the tap through the pipe network, thereby putting an end to the days of rusty water that plagued the system.

James DeCelles, chief engineer for the Pawtucket Water Supply Board, noted that many other municipalities are facing the same problems of having an antiquated water system and aging infrastructure at a time when funding is tight. He said that the EPA knew about Pawtucket's system improvements, so "when they were looking for a model for other communities to emulate, they chose us."

The EPA will use this publication to demonstrate to water systems throughout the U.S. that aging systems can be rebuilt utilizing the "Pawtucket model" of proper rate and debt structure, sound engineering principals, Drinking Water State Revolving Fund (DWSRF) loans, and coordinated leadership from city officials, local water boards and water supply personnel.

In its overview, the EPA noted that, despite providing water for over 100 years, by the end of the 1980s, Pawtucket was struggling to provide safe drinking water and cus-

tomers satisfaction. It had a treatment plant that was nearing the end of its useful life and a distribution system that was falling apart.

The severity of the problems started becoming apparent in 1987 when an EPA sanitary survey found major system deficiencies related to the old distribution system and circa-1938 water treatment plant. In 1992, problems worsened and the system was found in violation of the Total Coliform Rule that resulted in a two-month boil water order for residents. Taste and odor issues related to the system's old pipes, some of which dated back to the 1800s, also arose, while a perpetual lack of funding compounded the matter.

With limited funds, city officials turned to the state to help obtain financing. Working together, the city and state officials found a way to restructure the water system's existing debt and secure low-interest Drinking Water State Revolving Fund (DWSRF) loans for the infrastructure improvements.

Pawtucket received over \$70 million—the largest DWSRF assistance package in the state's history, and embarked on a comprehensive overhaul of its system. Despite some setbacks along the way, Pawtucket's "source-to-tap" overhaul is now nearing completion. The new treatment plant, which came on line in March, has received positive feedback from customers. The distribution rehabilitation is approximately 73 percent complete, and customer complaints about water quality have decreased dramatically, according to the overview.

In addition, Pawtucket has not had a Total Coliform Rule violation since 1992 and has been able to decrease its chlorine use and the level of disinfection by-products (DBPs) in its water, according to the EPA.

The EPA summary concluded, "Pawtucket faced staggering obstacles but chose to deal with them proactively rather than wait for them to get worse. The system worked with the local government and the state to find flexible, low-cost financing for an ambitious project."

The EPA noted that the below-market rate loans from the DWSRF made the overhaul possible by making the improvements affordable to the city and its ratepayers. It added that, "Together, the state, city, and system have made investments that, with proper asset management and operation, will ensure safe drinking water for decades to come."

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