

telegram.com

To print this article open the file menu and choose Print.

[Click here to return to previous page](#)

Article published May 6, 2007

May 6, 2007

The river runs through it

EPA mandates for Blackstone questioned

By Milton J. Valencia TELEGRAM & GAZETTE STAFF

The forgotten jewel known as the Blackstone River runs 46 miles to Pawtucket, releasing into the ocean in Rhode Island and beginning in Worcester with the junction of rivers, a lake and 56 million gallons of discharge each day from the sewage treatment plant in Millbury.

Donna Williams likes to tell grade-school pupils that if they spit in Lake Quinsigamond, it will release into the Atlantic Ocean.

“And they get it,” said Ms. Williams, president of the Blackstone River Coalition and an advocacy coordinator with the Massachusetts Audubon Society.

But the science is far more complicated when dealing with levels of phosphorus and nitrogen — two nutrients that also make their way into the ocean and have been blamed for spoiling an ecosystem and killing fish and ocean plant life.

An environmental movement attributed to the Clean Water Act of the 1970s is working to reduce such nutrients, in hopes of re-stocking the plant and fish life in Narragansett Bay. Coupled with efforts to clean the historic Blackstone River, the tool of the Industrial Revolution, it's been a campaign uniting environmental groups and state and federal agencies charged with protecting local waterways.

But the movement has also pitted those efforts against public agencies working on behalf of residents and taxpayers, who could see their costs for operating wastewater treatment plants multiply under new mandates meant to reduce the discharge of phosphorus and nitrogen. In Worcester, for instance, ratepayers whose bills have doubled over the last four years could find them doubling again under new U.S. Environmental Protection Agency requirements.

Worcester officials, led by the Upper Blackstone Water Pollution Abatement District (which runs the plant that serves Worcester and surrounding towns), have questioned the science the EPA is following in instituting the mandates. They also questioned the timing of the new requirements, saying a \$180 million plant upgrade is already under way, and that more work would be too costly.

Beyond scientific debate, however, the differences between municipal government and environmentalism underscore a deeper ethical issue, of hardship versus public policy. It's become the equivalent of raising taxes versus cutting school budgets, finding new resources or laying off city workers.

Here, residents are faced with accepting an increase in sewer bills, or opposing EPA orders that the federal agency says will benefit the environment and help clean the Blackstone River, once called the hardest-working river in the country for



The advertisement features the MassHousing logo at the top, which consists of a stylized red and white graphic above the text "MASSHOUSING". Below the logo, the text "Think you can't afford to own a home? Think again." is displayed in a white serif font against a dark red background. At the bottom of the ad, there are two small images: on the left, a smiling family of three (a man, a woman, and a baby), and on the right, a white two-story house with a red door and a green lawn.

its contributions to the Industrial Revolution.

"It's not just the treatment plant; it's not just industry," said Ms. Williams, who supports the EPA orders. "It's them and all of us who have to be much more aware of water quality and how it can affect our environment."

The EPA has scheduled a public hearing for 7 p.m. Wednesday at Quinsigamond Community College, as part of the public input process for the draft permit it issued last month for the Upper Blackstone plant. Permits last five years, and in the latest proposal, the EPA has asked the treatment plant to further reduce the discharge nutrients: phosphorus levels to .1 milligrams per liter and nitrogen to 5 milligrams per liter.

The two nutrients have been identified as the cause of low oxygen levels in the Seekonk River in Pawtucket, R.I., where the Blackstone River ends. EPA officials explained that the nutrients have produced intruding algae that, when they die, reduce oxygen levels, contributing to the impairment of fish and plant life.

The Seekonk River flows into Narragansett Bay, where an impairment of fish and plant life has triggered alarm. For instance, eel grass, a critical habitat for fish, has been reduced to less than 100 acres in Narragansett Bay. Historically, there has been close to 16,000 acres of the plant in the bay. And the EPA has cited nitrogen levels as the problem.

"That's a bad habitat for many species," said Karen McGuire, a staff lawyer for the EPA's New England office.

"When we have evidence pollutants are causing harm, we have a responsibility to address that harm."

Teaming with the Rhode Island Department of Environmental Management and other environmental groups, the EPA has set a series of mandates for the treatment of water from sources along the waterways, including storm water management and tributaries that feed into the Blackstone River.

The upper part of the Seekonk River, where it meets with the Blackstone River, has been identified as a particular cause of concern because it has the highest concentration of nitrogen and phosphorus, among other pollutants. The majority of pollutants are attributed to the Blackstone River, according to Angelo S. Liberti, chief of surface water protection for the R.I. DEM.

That agency has set standards for wastewater treatment facilities that feed into the Seekonk River. And there's been a renewed focus on the Blackstone River — beyond existing attempts to clean the historic waterway — because of its direct feed into the Seekonk River.

"The very upper part of the estuary is most vulnerable, and that's where the Blackstone River dumps into," said Ms. McGuire, of the EPA.

The wastewater treatment facility in Woonsocket, R.I., the last major facility before the Blackstone River ends, faces similar mandates to those for the Upper Blackstone facility in Millbury, where the river begins.

The EPA has also set a series of regulations for the treatment of other facilities in Massachusetts, where it has authority, from Douglas to Hopedale.

But no other facility along the Blackstone River is as large as the Upper Blackstone — it's three times the size of the plant in Woonsocket — with a design to discharge 56 million gallons a day into the Blackstone River.

Environmental officials are quick to point out, too, that the Upper Blackstone facility is located at the top of the river, where the flow begins at the junction of five rivers in Worcester. During summer months, during low-flow seasons, the discharge from the Upper Blackstone facility makes up some 70 percent of the river flow in the Millbury area, at times reaching as high as 90 percent of the river flow.

"It overwhelms the Blackstone River at this point," said Ms. McGuire, of the EPA.

EPA officials stress there's a coordinated response to address pollutants coming from all points along the Blackstone River.

But they stress that the focus on the Upper Blackstone plant is in relation to the volume of water it discharges into the river, and with it, the high concentrations of phosphorus and nitrogen.

EPA officials are proposing similar standards for all wastewater treatment facilities that discharge into the Blackstone River, but the new requirements for the Upper Blackstone come as the plant is already seeing a \$180 million upgrade, expected to be completed in 2009.

Robert L. Moylan Jr., Worcester's commissioner of public works and chairman of the Upper Blackstone District, questioned the timing and the necessity for the new mandates. He said the limits the EPA set in the permit issued in 2002

were called adequate at the time.

He also argued that the new mandates aren't based on any new science, adding that mandates without any scientific basis are a costly request for a facility already being renovated.

Mr. Moylan said the Upper Blackstone has commissioned a study of the Blackstone River to determine ways to reduce nutrients at all sources along the river, from detention ponds and dams to storm water runoff areas and the other wastewater treatment facilities.

He has argued that, by the time the upgrades are completed in 2009, those other sources will contribute more levels of phosphorus and nitrogen than the plant.

For Ms. Williams, of the Blackstone River Coalition, it's all selective science. The EPA will select its science, and so will the Upper Blackstone.

But she does know there's been a nationwide focus on the discharge of nitrogen and phosphorus into waterways.

It's not just the Upper Blackstone, she said.

"Unfortunately, I think the city feels it's getting picked on," she said. But she stressed there's been a movement to look at the whole river. Homeowners are educated on the use of substances such as laundry detergents and the dangers of animal waste along the watershed. If you wash your car, do it on the lawn rather than in the driveway, as the runoff will just lead into a drain that leads into the river.

"Everyone's working on the river, everyone's working to improve the river," she said. "It's not just the Upper Blackstone."

Order the Telegram & Gazette, delivered daily to your home or office! www.telegram.com/homedelivery

Copyright 2007 Worcester Telegram & Gazette Corp.