

# Island's Watershed Council Takes Aim at Runoff

Part 2 of a 2-part series

By Jill Connors

Many projects and strategies are underway to protect Aquidneck Island's watershed areas this summer—in large part thanks to grass roots efforts begun by concerned citizens several years ago. Make that concerned citizens who are passionate about the water—be it the quality of the ocean water for surfing, swimming, or fishing, or the clarity of the drinking water.

Clean Ocean Access (COA) is one such group whose actions are vital to protecting the health of Aquidneck Island's water environment. When Dave McLaughlin, the group's leader, presents a report to Newport City Council on July 27 on the condition of the water, he will be speaking from a firsthand vantage point. His group, made up of local surfers, has been testing the water for several years. The group formed in the summer of 2006 to figure out why some surfers were getting sick after being in the water.

"We were finding that water quality got worse in the off-season based on what we were seeing when we were surfing, but there was no data because the state only tests the water during the summer," McLaughlin, a native Newporter and lifelong surfer, explained.

In the past five years, COA has conducted 40 beach cleanups (once a month from September to May), and has developed a water sampling program—approved by the Dept. of Health and funded by the City of Newport—where volunteers take water samples at nine Aquidneck Island coastal locations year-round, and transport the samples with proper chain of custody to a state-approved lab in Providence.

"We want people to enjoy the water—and to do so, it's got to be accessible, the coastline



Craig Knowles, a volunteer with Clean Ocean Access (COA), takes a water sample at Marine Beach in Newport. COA volunteers test nine different locations on Aquidneck Island every Thursday morning, year-round; samples are evaluated by the Dept. of Health in Providence. (Photo by Rob Thorn)

needs to be clean, and the water needs to be clear," said McLaughlin.

For the Aquidneck Island Watershed Council, another grassroots organization, it all starts with data, as well. "We started doing baseline testing of the watershed areas on the Island more than three years ago," said Jim Marshall, an executive director of the Council. The group has worked with Salve Regina University to raise awareness of watershed issues by organizing an annual Watershed Conference for the past two years, held in the autumn.

"It isn't just Bailey's Brook and other well-known rivers that need protecting," said Marshall. "There are lots of named and unnamed waterways that are affected by what we do along the banks."

Marshall's group advocates a 400-foot buffer around watershed areas—those parts of Aquidneck Island where rainwater and snowmelt drain—and a canopy of foliage to act as a filter for storm-water runoff. "Homeowners

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need to generate less storm-water into the system," said Marshall, who proposes such practices as planting rain gardens (whose grade and plant choices are designed to absorb storm-water), and minimizing impervious surfaces by using gravel or paving-stone driveways. "One way or another, all storm-water eventually ends up in the ocean," said Marshall.

Julia Forgue, Director of Utilities for the City of Newport, is acutely aware of the importance of watershed health, particularly in relation to the raw source of drinking water on Aquidneck Island. The city's water division is responsible for treating and distributing drinking water to Newport, Middletown, part of Portsmouth, and Naval Station Newport. "We generate 6 to 11 million gallons of water daily," said Forgue, with the higher volume typically occurring during the summer months.

The source of that drinking water is surface water that collects in the reservoirs located within Aquidneck Island's seven watershed areas: Gardiner Pond, Nelson Pond, Maidford River, Bailey's Brook, Sisson Pond, St. Mary's Pond, and Lawton Valley Reservoir. (In addition, Watson Reservoir, in Little Compton, and Nonquit Pond, in Tiverton, are part of Newport's water supply.)

"I don't know if people really understand that surface water is the raw source of drinking water here," Forgue said. "We treat the water of course, but we don't start with the best raw quality source water, so it's more costly to treat."

In other parts of the country, limiting or prohibiting access to drinking water reservoirs is a common practice, to protect the quality of the raw source. "From a pure water-supplier perspective, limited access to Aquidneck Island's watershed areas would be best, but that's simply not possible on a small island where land is at a premium," said Forgue. "Our watersheds are in developed areas."

One result of the varying quality of the raw source water is that the City of Newport will be investing \$75 million to construct two advanced water treatment centers. The City is currently in the process of reviewing the design-build proposals for the treatment centers, according to Forgue.

Of the many projects currently underway across the Island (see sidebar), several are aimed at managing storm-water runoff so that polluted runoff never enters the watershed or the ocean. Such projects as the redirecting of the outfall in the Esplanade-Easton's Beach

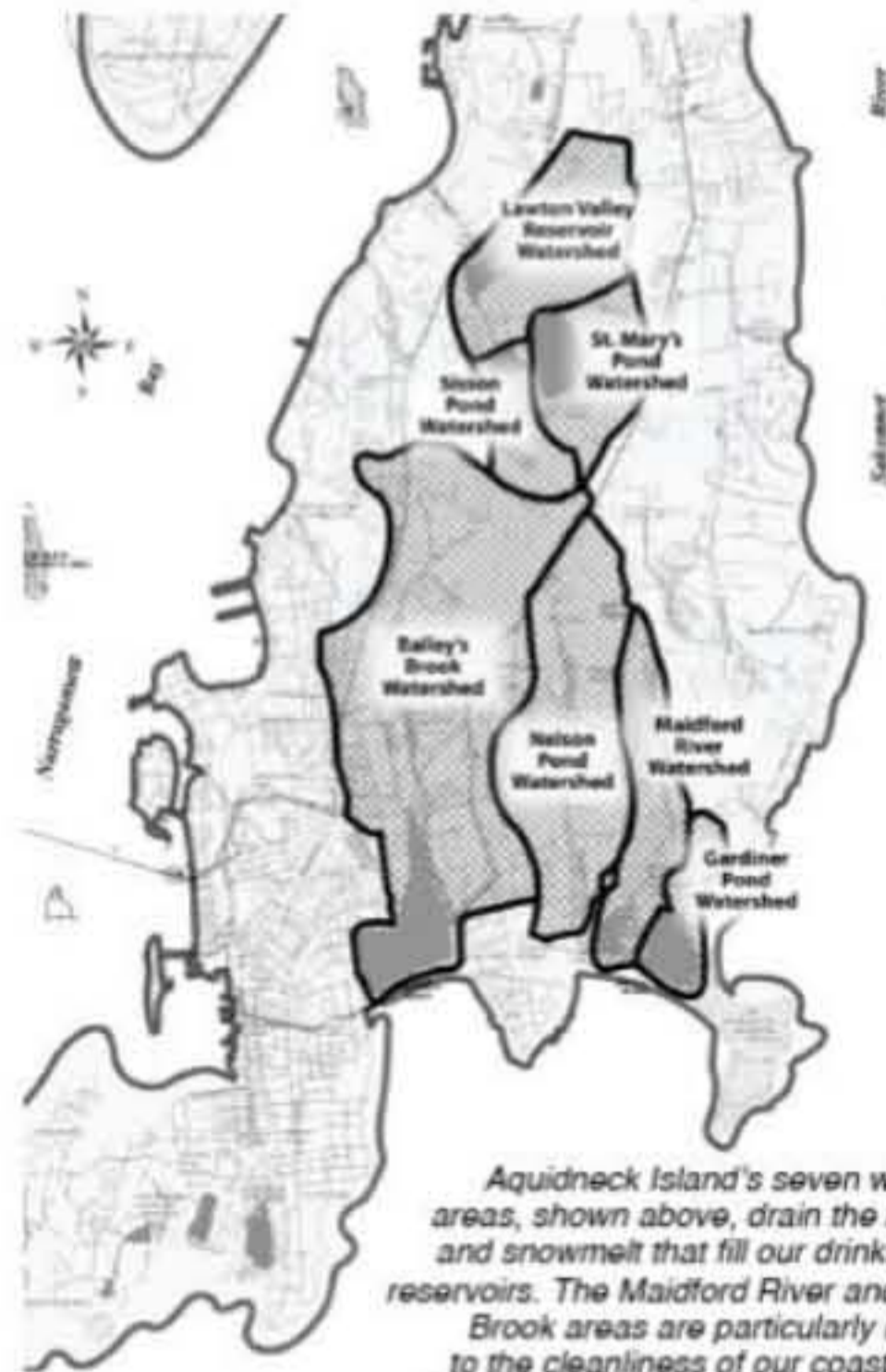
area, the rebuilding of the Easton's Pond dam, a study of the bacteria in the Maidford River, the state's cesspool phase-out, and the state's TMDL (total maximum daily load) program are all aimed at protecting the watershed.

But you don't have to be a state or local official to help: Homeowners and pet owners can take a few simple steps to protect the watershed themselves—by keeping bacteria from entering storm-water runoff.

Suggestions include:

- Pick up after pets: Dog waste is a significant source of bacteria; don't leave it in the yard to be swept away by the rain.
- Do not put garbage in catch basins.
- Use a rain barrel to collect rainwater from your roof.
- Connect downspouts to landscaped or grassy areas vs. paved areas.
- Use low-impact development (LID) techniques such as rain gardens.

As Tom O'Loughlin, Middletown's Public Works Director, noted: "Storm-water is everyone's responsibility." The Town of Middletown will be holding a storm-water workshop this fall with more information on ways to help.



Aquidneck Island's seven watershed areas, shown above, drain the rainwater and snowmelt that fill our drinking-water reservoirs. The Maidford River and Bailey's Brook areas are particularly important to the cleanliness of our coastal waters because the river and brook carry storm-water to the ocean.

## Watershed Projects In Progress

Here's a roundup of projects currently underway that share a similar goal: Preserve the watershed areas and in so doing, preserve the quality of life on Aquidneck Island.

Project Description	Location	Responsible Party
Storm-water Utility Feasibility Study	Middletown	RIDEM working with Town of Middletown
Esplanade Project, to redirect storm-water outfall; in permitting and public notice phase	Esplanade & Easton's Bay area of Middletown	Middletown Public Works Dept.
Study of Maidford River, report expected in August	Middletown	Town of Middletown
Cesspool phase-out; any cesspool located with 200 feet of a coastal shoreline, public well, or drinking water reservoir must be inspected or replaced	Across State	RIDEM Office of Water Resources
New TMDL (total maximum daily load) program will establish water quality standards for Maidford River (and other water bodies); expected in August	Across State	RIDEM Office of Water Resources
Water sampling of beach and watershed areas, every Thursday morning	Entire island	Volunteers from Clean Ocean Access, Aquidneck Island Watershed Council
Fundraising for St. Mary's land by ALT	Portsmouth	Aquidneck Land Trust
Reviewing design-build proposals for advanced water treatment plants	Newport	City of Newport Dept. of Utilities
Rebuilding Easton's Pond dam	Newport	City of Newport Dept. of Utilities
Water sampling annual report completed; will be presented to Newport City Council July 27	Newport	Clean Ocean Access