Carmans River seeing higher water temps due to Yaphank dams, advocates say

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Environmentalists Kevin McAllister, left, and Doug Swesty, at Upper Lake in Yaphank on Thursday, Dec. 10, 2015, say that after monitoring the Carmans River, they found water temperatures rising. (Credit: Newsday / John Paraskevas)

Colonial-era dams in Yaphank are causing higher water temperatures in parts of the Carmans River and should be removed or opened, environmental advocates say.

The groups Defend H2O and Sea-Run Brook Trout Coalition say the dams create thermal pollution by artificially spreading out the water and slowing it down, allowing it to collect heat. Restoring the flow would reduce temperatures, halt the spread of invasive species and return natural fish passage routes to the river, reducing the need for costly dredging and other treatments, they say.

"It's essentially being a giant solar collector," said Doug Swesty, a director with Sea-Run, a nonprofit regional group founded to protect and restore brook trout populations and coastal watersheds.

The two dams, built in the 1700s, created Upper Lake and Lower Lake and were home to successful sawmills that provided lumber to area residents and business.

Several government agencies would have to sign off on removing or breaching the dams because the Carmans River is state-designated as a "wild, scenic and recreational river"; is an important trout habitat; and is within the central pine barrens, where use and development are limited.

The two environmental groups placed temperature sensors in both lakes between May and September, and found that water in Lower Lake was above 80 degrees at times — as
much as 10 degrees higher than Upper Lake — because the thermal pollution had so warmed the Upper Lake’s water before it traveled to the nearby Lower Lake.

“It’s clearly having an effect on water temperature,” Defend H2O founder and President Kevin McAllister said. “All roads lead to these impoundments.”

The Carmans is one of Long Island’s largest rivers. Eight of its 10 miles are freshwater, fed by groundwater from the aquifer.

Several years ago, attempts to remove the dams created an outcry among residents, prompting Town of Brookhaven officials to focus on building fish ladders and other passages to enable movement of trout and other species, said Anthony Graves, Brookhaven Town’s chief environmental analyst.

“The first thing you need is community buy-in. We didn’t have that,” he said. “The community was dead set against the removal of the dams. They consider them to be the heart of the community.”

Residents formed the Coalition to Save the Yaphank Lakes and continue to advocate for keeping the dams in place because of their historical significance. In conjunction with the Yaphank Historical Society, they also petitioned to have Upper Lake renamed Willow and Lower Lake to Lily to match historical records, said Robert Kessler, who is president of both groups and lives along one of the lakes.

“Yaphank grew up between the two lakes. They drew people to Yaphank from all over,” he said. “The dams are not coming down. That is not happening.”

Because the Carmans is a certified trout spawning river, state law prohibits thermal discharges above 70 degrees into the water body, Swesty and McAllister said.

During the summer, they documented water temperatures above 70 degrees in Lower Lake, beneath the first dam.

“We are going to push the issue,” McAllister said.

Department of Environmental Conservation spokesman Jomo A. Miller, however, said the regulation does not apply to “water flowing over an existing dam,” but to discharges from human activity, such as sewage treatment plants or industrial operations.

Both dams are considered low hazard and are inspected as needed, Miller said. Some deficiencies were found in Upper Lake’s dam when it last was inspected, in May 2009, but no formal violations were filed. Lower Lake’s inspection was in October 2011.

Invasive species — such as cabomba, a weed — have infested the two water bodies. Brookhaven Town’s plans to dredge Lower Lake were postponed in 2014 after cost overruns and delays. A year earlier, the project was canceled because Upper Lake dredging flushed too much sediment into the water, turning it cloudy and violating a DEC permit, Graves said.

“Those invasive species don’t do well in a free-flowing river,” he acknowledged.

Nationally, removing dams has grown in popularity as a means of restoring wetlands and reducing the need to dredge or treat for invasive species every few years.

“Dams are like any infrastructure,” said Amy Kober, senior communications director for American Rivers, a nonprofit conservation group based in Washington, D.C. “Any time they age, they need what may be costly repairs. They can also outlive their usefulness.”
An estimated 1,185 dams from California to Maine have been removed since 1936, with 72 taken down in 2014, according to American Rivers.

“The wonderful thing about rivers is they’re so resilient,” Kober said. “They can really come back to life pretty quickly.”

DEC recommends dam owners inspect their impoundments every three months and after big storm events. Design guidelines revised in 1989 say trees and brush are not permitted because they can hide sinkholes, animal burrows and other stability threats.

“Trees eventually die and their roots decay and rot,” the DEC said on its website. “The root cavity leaves a void within the dam through which water can enter and flow.”

At the Upper Lake dam, trees and brush cover the slope of the structure, while branches, leaves and other debris are in the river bed. Steel bars have been installed across the width of the opening, appearing to shore up the concrete walls.

At Lower Lake, wire fencing obscures much of the dam, which is bordered by crumbling sidewalks and plant and tree growth.

“Just from the standpoint of crumbling infrastructure, something is going to have to be done pretty soon,” Swesty said.

The 2013 Carmans River Conservation and Management Plan recommended that the integrity of Lower Lake’s dam be evaluated, and if rebuilding is decided, a manufactured fish passage should be considered.

A fish passage for Upper Lake dam also was recommended. Funding is approved for a new spillway and fish passage, and should happen next year if permits are approved, Graves said.