

'We're going to have a different river.' Without Milburnie Dam, the Neuse comes alive.

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RALEIGH - Matthew Starr did something on the Neuse River this month that wouldn't have been possible for more than two centuries: He kayaked through the rapids where the Milburnie Dam once stood.

The re-emergence of these whitewater falls 6 miles east of downtown Raleigh is the most obvious change to the Neuse since [the dam was dismantled last fall](#). But it's not the only one.

Dams built here to harness the river's power created a long narrow lake upstream starting in the late 1700s. The most recent dam, built about 1900 out of large pine timbers, stone and concrete, backed the Neuse up for 6 miles, to about where U.S. 401 crosses today.

Since workers clawed the dam apart with machines in November, the water has flowed freely. And as the Neuse becomes a river again here, everything within and along its banks – fish, animals, wetlands, even people – are adjusting.

Starr got to see those changes firsthand this month on a canoe trip arranged by George Howard, co-founder and CEO of [Restoration Systems](#), the Raleigh company that took down the dam. Starr works for the environmental group [Sound Rivers](#) as the Upper Neuse Riverkeeper, making him a paid advocate for the river. Also along for the trip was Tiffani Bylow, Milburnie project manager for the company, and Steve White of [American Rivers](#), a national advocacy group in Durham.



Image Credit:

Paddlers take a break on the Neuse River north of where the Milburnie Dam used to be in Wake County in Raleigh, N.C., Tuesday, May 1, 2018.

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All three organizations are hosting a celebration of the reborn river called [Raleigh River Fest @ Milburnie Falls](#) on Saturday, May 19, from 12 to 3 p.m. at the old dam site, including fried fish, Cheerwine and craft beer, a fishing rodeo and a river race.

Restoration Systems is spending millions to take down the Milburnie Dam and restore this stretch of the Neuse River. The company will make that back by selling mitigation credits to governments or developers who are required to compensate for destroying streams and wetlands elsewhere.

It's not just a matter of demolishing the dam and moving on. Under its permit from the U.S. Army Corps of Engineers, Restoration Systems must monitor the health of the river and the wetlands along it for seven years, and will only get full credit when the river reaches certain goals, including the return of migratory fish such as American shad and striped bass.



Image Credit:

A heron catches lunch where the Milburnie Dam once stood on the Neuse River in Raleigh, N.C., Wednesday, May 2, 2018.

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Starr and the others began their trip at the Buffalo Road canoe launch, about 3 miles upstream from the old Milburnie Dam site. Spring rains had swelled Falls Lake, and The Army Corps of Engineers was releasing water from that dam upstream at a rate of 1,100 cubic feet per second — about five times the normal rate.

The absence of the Milburnie Dam downstream was evident as soon as the group put in.

"I'm moving," Starr said as he put his paddle across the kayak, sat back and let the current carry him downstream. "It's a river.

"This is beautiful."

There were no houses or buildings visible from the river downstream of Buffalo Road; the occasional cyclist on the Neuse River Greenway Trail were the only people seen. Even the distant thrum of motors and traffic – sounds that are almost inescapable in Wake County, let alone Raleigh – soon fell away.

"You're in a county with a million people," Starr said. "What better escape than this. If I'd shut up, you wouldn't hear anything."

A distant river

Most of America's big cities were founded on waterways — big rivers, bays or great lakes that often define the city, giving it a focal point and an essential part of its self image.

Raleigh was not one of them. The land deal that established North Carolina's new capital in the late 1700s put the center of town on a rise above a few small creeks. The Neuse did not seem to be part of the equation. Even today, most Raleigh residents don't see the river, except in quick glances as they cross on highways north and east of town.

Its distance from the city center has enabled the Neuse to remain relatively unspoiled, with some exceptions such as the dams at Milburnie.

The power derived from the dams was put to all sorts of uses. Early on, it ran mills for grinding grain or sawing lumber. In 1853, the Neuse Manufacturing Co. acquired the site and built a factory that turned cotton rags into paper until the Union army burned it in 1865. In 1900, the Raleigh Ice & Electric Co. built a new dam, using stones from the paper mill, to make power for the city's lights and streetcars.

With the water running high, the Neuse is only a foot or 2 lower at the Buffalo Road canoe launch than it was when the dam was in place. The difference is that now the water is moving. White of American Rivers and Howard of Restoration Systems both use the term "dead" to describe the river during its time as a source of power.

With movement, the river also smells better, or more precisely, smells less.

"Stagnant water stinks," Starr said.



Image Credit:

An aerial view of the rapids located where the Milburnie Dam was located on the Neuse River in Raleigh, N.C., Wednesday, May 2, 2018.

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Unseen are changes taking place under the surface of the water. Howard says mussels that adapted to lake water are now finding there's more sunlight and a current overhead and are probably struggling. He hopes mussels that have adapted to rivers, with more sunlight, more oxygen and more current, will eventually move to this stretch of the Neuse.

But Howard's attention this month is on migratory fish. Spring is the time of year when shad and striped bass that live in the Atlantic Ocean swim up the coastal rivers of North Carolina to spawn, and until this year the fish could go no farther upstream in the Neuse than Milburnie.

To get mitigation credits for restoring the Neuse, Restoration Systems has to document several things, including that migratory fish like American shad, hickory shad and striped bass have made it through this section of river to Falls Lake Dam. So the company has divers looking for the fish near the dam and has put up flyers asking anyone who catches one to give them a call.

So far, at least 10 American shad have been caught just below the Falls Lake Dam, probably the first time they've made it that far upstream since the founding of the United States.

"That is historic stuff," Howard said.

'How do you like your river?'

Not quite a mile downriver from Buffalo Road, the first houses came in to view along the west bank, including one with a lawn that leads down to a dock.

For years, Ed Smallwood kept a pontoon boat at this dock from which he and his wife would ride up and down the lake made by Milburnie Dam. Smallwood's relationship with the lake made him one of the most vocal critics of plans to demolish the dam.

On this day, Smallwood was on his back porch, and Howard shouted up to him from his canoe: “Hey, Ed, how do you like your river?”

“I hate to admit this, George,” he shouted back. “But I like it.”

In an interview later, Smallwood said he fought the removal of the dam for seven years because he liked the river the way it was. A founding professor at N.C. State University’s College of Veterinary Medicine and now retired, Smallwood says he and his wife bought the house on Willow Bluff Drive 25 years ago because it had navigable water out back year-around.

On a recent day, when the Army Corps of Engineers had cut its release from Falls Lake to 500 cubic feet per second, Smallwood’s dock was high and dry, as was his boat ramp. After years of confrontation, he asked Restoration Systems to buy his pontoon boat for \$5,500 and donate it to charity for a tax write-off. The company agreed without dickering. (It gave the boat to Sound Rivers).

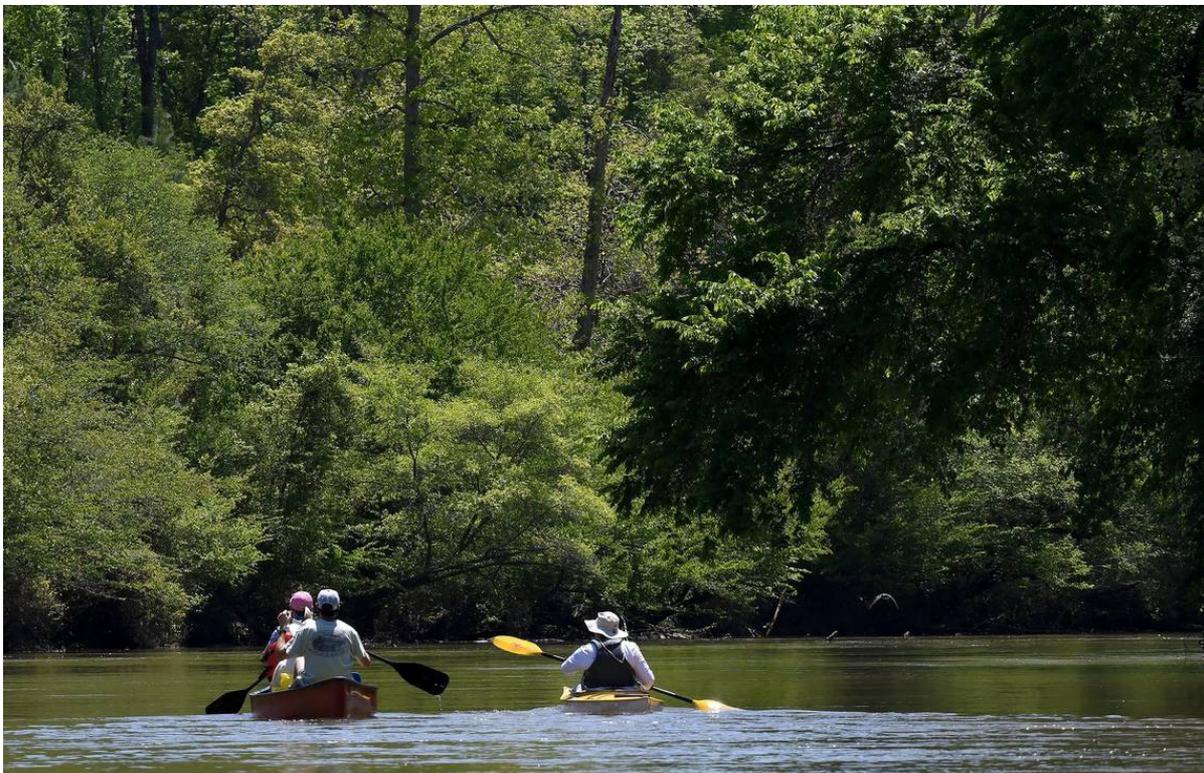


Image Credit:

Paddlers enjoy the gentle breezes and steady flow on the Neuse River north of where the Milburnie Dam once held the river at a standstill in Raleigh, N.C., Tuesday, May 1, 2018.
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Smallwood now has a bass boat that he takes up to Falls Lake.

“I could probably put it on the river,” he said. “But with the changes on the river and the fluctuation of the water level, I may encounter something I don’t expect and damage the prop.”

Smallwood made his peace with the dam going away last year and plans to be at next weekend's River Fest. He will present a plaque to Howard made from a piece of heart pine pulled from the

base of the dam during demolition.

“It’s going to be fine,” he says of life without the dam. “We’re going to have a different river. It’s going to have a nice flow. It’s not going to be the end of the world.”

'It looks like a river'

The Army Corps of Engineers is making Restoration Systems keep an eye on the wetlands along the river. If they change – become drier, with different kinds of plants in them – that’s OK. But if after seven years any of the wetlands along the river are lost completely, the company will have to make up for them elsewhere. There is to be no net loss of wetlands, even those that only existed because of the dam.

A couple of miles downstream from Buffalo Road, the exposed muddy banks are getting larger and logs that line the river are still coated with mud from when they were submerged.

“You can see it’s getting more obvious that the river has dropped,” Howard said.

The flotilla comes upon a big sandbar on the right side of the river, another vestige of the lake. Silt and sediment carried by the river sank to the bottom in the sluggish water. The buildup was heaviest just behind the dam, but much of that has already washed downstream. With enough high water, this sandbar will, too.

“This is actually looking great through here,” Tiffani Bylow of Restoration Systems said from the front of her canoe. “People say it’s going to be muddy banks and everything. I think it looks like a river.”

“Look how much the sediment is greening up,” Howard added, pointing to the grass growing from mud that had once been under water. “So full of seed. It just never had the chance to grow. I have to take a picture of that.”

Howard was still taking pictures as the group – one kayak and two canoes – approached the dam site. The rough water they all expected was visible now. The falls at the old dam site differ depending on whether the water is high, as it is today, or normal. To boaters, Howard said, “Both of them seem to be challenging and fun.”

It was agreed that Starr would go first with his kayak and point the way. But he quickly got in trouble and was spilled out of the kayak. The canoeists knew they were doomed. Howard’s canoe went first, filling with water when the first big wave came over the bow. The same happened to White and Bylow. All were soaked but able to walk their canoes over to the shore below the dam site.

Howard had said that it seems more people are coming to this part of the Neuse now, particularly those with canoes and kayaks attracted to what may be Wake County’s only whitewater. White said he’s not surprised that demolishing the dam has brought people back to the Neuse..

“It’s lots more interesting as a river,” he said.

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Image Credit:

An American shad caught just below the Falls Lake Dam on May 1. These migratory fish have not been able to swim this far up the Neuse River in more than 200 years because of the dams at Milburnie, now gone.

Courtesy of Restoration Systems