## **Stheday**

## It's 'busy season' for dam removals in southeastern Connecticut



Work continues Thursday, Sept. 3, 2015, at the site where the White Rock Dam once stood, with a cofferdam temporarily holding back the waters of the Pawcatuck River in Stonington and Westerly, while crews from SumCo Eco-Contractors excavate the natural river channel. The project is expected to be completed by the end of October. (Judy Benson/The Day)

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## By Judy Benson (/apps/pbcs.dll/personalia?ID=j.benson)

Lyme — When he was growing up, Fritz Gahagan spent many summer days with "all the neighborhood kids" on the pond named for his grandfather.

"It was the community swimming hole, where we all swam and fished," he said Friday, standing at the bridge on Salem Road overlooking Ed Bills Pond.

In the 1950s, he said, his grandfather dug out a basin and raised an existing dam at the site on the East Branch of the Eightmile River to create the pond. Each spring, Gahagan said, his grandfather would have a truckload of sand brought for a small beach along the shore.

But over the decades, the pond has filled in with sediments trapped by the dam. No longer deep enough for recreation, the pond is gradually turning into a swamp.

Gahagan, who now owns the property and is an active member of the Lyme Land Conservation Trust, said that at one time he wanted to excavate the pond to restore it as a swimming hole. After he realized there would be significant permitting and cost obstacles and scrapped the idea, he learned that removing the pond entirely would be a better option.

"It's important for the biotic health of the stream, because it (the dam) is a nutrient trap that heats up the water," he said.

Now, after several years of effort on the part of the Nature Conservancy, American Rivers and other partners, Ed Bills Dam is slated for destruction. In about two weeks, according to project manager Amy Singler, work will begin to remove the concrete and stone structure that pools the flowing waters of the Eightmile into the pond. The work, paid for with about \$600,000 in federal, state and private grants, will take about eight to 12 weeks to complete, she said.

It is one of five dam demolition projects started or about to start in southeastern Connecticut this fall. Begun is the removal of the White Rock Dam on the Pawcatuck River in Stonington and Westerly. Soon to follow will be projects on the Hyde Pond on Whitford Brook in Groton, Ledyard and Stonington, on Straight Pond on the Poquetanuck Brook in Preston and at the Griswold Rubber Co. site on the Moosup River in Plainfield.

"The goal is the have an open river for the next spring season, when the alewife and blueback herring swim through," Singler said of the Ed Bills project.

The fish ladder intended to allow the migratory fish to get over the dam to spawning areas upstream passes only a few fish, she said. The cool waters of the Eightmile pooled by the dam also warm several degrees to a temperature less suitable for species such as brook trout, she said. Warmer waters also hold reduced amounts of dissolved oxygen aquatic species need.

Singler said there has been a dam at the site since the 1800s. The removal, she said, is one of many dam removal projects at various stages throughout New England as the environmental, flood control and long-term economic benefits are becoming better known.

"The rate of dam removal has definitely increased, as owners recognize the cost of maintaining dams and the liability issues," she said. Once the dam is gone, sediments in the pond will be excavated and the historic river channel restored, she said, reducing the risk of flooding of the adjacent road. It is one of many projects being undertaken by the conservancy and American Rivers, she said, as part of their missions to restore fish populations and natural rivers.

Pat Young, program director for the Eightmile River Wild & Scenic Coordinating Committee, said removal of Ed Bills Dam is a significant step in full restoration of the waterway's natural free-flowing conditions, a goal of the group since the river achieved National Wild & Scenic River status in 2008.

"This is the last big dam on the East Branch," Young said.

On the Pawcatuck River, the 106-foot long, six-foot-high concrete White Rock Dam already has been turned to rubble and removed by SumCo Eco-Contractors of Salem, Mass., the company hired for the project. The Nature Conservancy's Rhode Island and Connecticut chapters are spearheading the project, working with both states and other partners, using a \$1.98 million federal grant for the work.

A large cofferdam — basically a temporary dam that curtains off water flow so crews can excavate below that area — is in place. Water is being directed through the old sluiceway for the mill that once stood at the site, until the coffer dam can be removed to let the river return to its natural channel, a condition that has not existed since the first dam was built there in 1770. Like the Eightmile project, removing the White Rock Dam also will restore spawning habitat for migratory fish and reduce flood risk, said John O'Brien, partnership coordinator for the White Rock project.

"We want the river to approach a natural, stable state," he said, adding that after the project will include stabilization of the stream banks.

The project is on schedule to be completed by the end of October.

Stephen Gephard, supervising fisheries biologist for the state Department of Energy and Environmental Protection, said that in preparation for the White Rock Dam removal, DEEP crews gathered and relocated several hundred fish and 2,200 freshwater mussels of five different species from that part of the river and relocated them to the lower Shunock River. That stream, in North Stonington, is a tributary of the Pawcatuck.

Once the project is complete, some of the mussels will be returned. Next spring, when the dam is gone, the Shunock River will see benefits along with the Pawcatuck, he said.



The Ed Bill's Dam on the Eight Mile River in Lyme Friday, Sept. 4, 2015. Demolition of the dam, one of if not the last on the river, will begin September 14th. (Sean D. Elliot/The Day)

"We'll expect to see more fish getting into the Shunock River because of this removal," he said.

This fall is "busy season" for dam removal and fish ladder projects around the state, Gephard said, with the five projects in southeastern Connecticut and two more elsewhere in the state. Much of the funding for the work came from Hurricane Sandy relief funds, he added, as part of a strategy to reduce flood risk for future storms by restoring natural river channels.

Declining populations of migratory fish, key bottom-of-the-food-chain species critical for aquatic ecosystems, have been a focus of his agency's efforts for several years.

"We've been pushing to restore runs of migratory fish, but you can't do a good job with that unless you remove dams," he said. "Fishways are good, but dam removal is better."

In recent years, the momentum to tear down dams has been building as public acceptance has grown, he said.

"When we first started this," he said, "people thought dam removal was radical. Now people understand the liability and costs of maintaining dams, and the myths about them. Hurricane Sandy money was a godsend, because all of a sudden we had the money to do this."

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