

'Living shorelines' bringing life back to Niagara River on Grand Island



Buffalo Niagara Riverkeeper officials coordinated plantings at the Sandy Beach Park Club last spring. (Buffalo Niagara Riverkeeper image)

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Some of Sandy Beach Park Club's newest members this year include barking mudpuppies, pinching crayfish and paddling mink. Wood ducks, walleye and egrets also joined. All found a natural spot at the Buffalo Niagara Riverkeeper's first-of-its-kind "[Living Shorelines](#)" restoration pilot project along this nearly 200-foot stretch of newly restored Niagara River shoreline on Grand Island's northern end. Riverkeeper's modest \$150,000 project – funded through the Niagara Greenway Ecological Standing Committee and in-kind contributions from the private beach club – is the latest example in the overall revival of ecosystems from the Buffalo River's Old Bailey Woods to the mouth of the Niagara in Youngstown.

"All these steps are starting to add up to miles around the watershed," said Jill Jedlicka, Riverkeeper's executive director. "One step at a time." Consider:

American bald eagles now nest at Strawberry Island, Grand Island and Navy Island in the Niagara River corridor.

Ancient lake sturgeon are being found in greater numbers on both the upper and lower sections of the river.

Great blue herons, cormorants and egrets enjoy plentiful populations on the islands in the river.

Turtles, salamanders and other species are also being found on area shorelines in greater numbers.

"Nature will find a way," Jedlicka said. "If you build it, they will come."

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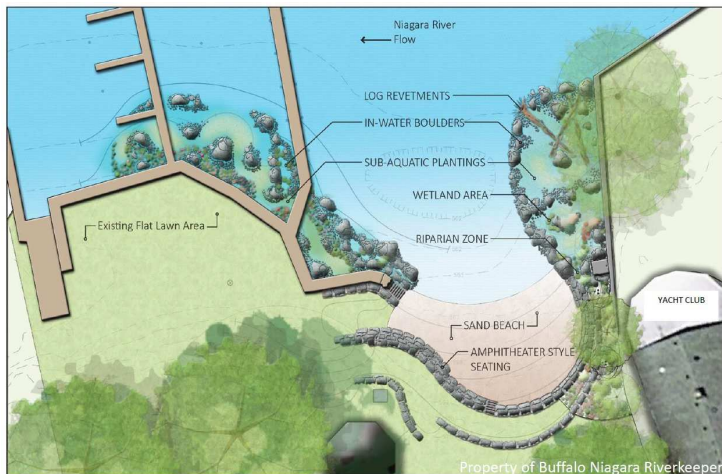
Because of pressures by development and other human activities, the natural condition of more than 80 percent of the Niagara River's shoreline has been altered. It's why picking the best spots for restoration projects in the Niagara River corridor is essential. "Having that connectivity is really important for (nature) to have that ability to travel and expand," said Emily Sadowski, Riverkeeper's natural resource planner. The 5625 East River Road beach club site – not far from Grass Island, a top-listed Department of Environmental Conservation wetland – is a high impact spot on the river.



Underwater plantings were placed in the Niagara River last spring to aid in habitat for aquatic life near the Sandy Beach Park Club on Grand Island. (Buffalo Niagara Riverkeeper image) “We wanted to pick a location that would be more protective and have more oversight over time,” Jedlicka said. Metal sheet piling shore walls formerly marked this part of the river. But, if you’re a fish, bird or other aquatic species, they’re not so homey. Riverkeeper ripped out 100 feet of sheet pile at the beach club. In its place is a three-zoned habitat for shoreline life. And, marine life can really carve out a shoreline spot in an ecologically-productive habitat with more than 1,000 new native plants, logs and natural boulders.

Under the water, in the aquatic zone, there’s now submerged vegetation like the American Water Willow, Eel Grass and Softstem Bullrush. These absorb pollutants and add oxygen, improving water quality. They also serve as places where aquatic life can feed, rest, nurse – and hide from predators. Also here, are rocks and boulders to help protect plantings from erosive forces and provide resting spots for fish. Rushes and reeds – like Soft Rush, Prairie Cordgrass and Elk Sedge – planted in the riverbed emerge from the water in the second zone, which is considered a wetland area. They absorb rising waters, can regulate fluctuations in water levels and provide a habitat for wildlife, Riverkeeper officials said.

And, in the third zone – the upland transition area where the water meets the land – Riverkeeper planted trees, shrubs and other perennials like dogwoods, willows and asters. Their roots keep the soil together, cutting down on erosion and helps filter run-off from the land into the water. The trees also offer perching spots for birds and throw some shade to cool things down in the hot summer months.



CONCEPTUAL PLAN

The conceptual design by Buffalo Niagara Riverkeeper integrated a recreational beach area with a natural shoreline that expands habitat for wildlife at the Sandy Beach Park Club on Grand Island. (Buffalo Niagara Riverkeeper image) “It’s recreating an entire ecosystem,” Jedlicka said. The project was constructed earlier this year with plantings done during the spring.

It’s one of three such shoreline projects Riverkeeper is undertaking. The others are at Hyde Park in Niagara Falls and at Ellicott Creek Park in the Town of Tonawanda. The project also marks Riverkeeper’s first “in-water” restoration effort. Jedlicka said Riverkeeper intends to apply what it learns for future projects. Before and after construction data will be evaluated by the Buffalo State College’s Department of Geography and Planning to gauge the environmental achievements and limitations of the project. It can also be used in future academic conversations and studies. “It’ll be like a living laboratory, a living classroom,” Jedlicka said. “We’ll be using lessons learned from this.”



Aquatic fish and animals once fought steel sheet metal pilings in this stretch of the Niagara River near Sandy Beach Park Club. They have a new home now after a collaboration between the club and Buffalo Niagara Riverkeeper's "Living Shorelines" initiative. (Buffalo Niagara Riverkeeper image) Tim DePriest, a habitat ecologist at the DEC and a Greenway committee chairman, said Riverkeeper's "Living Shorelines" project was an easy one to embrace. "It advances the vision of restoring, improving and enhancing the Greenway habitat – and with 1,000 new, thriving plants – makes the Greenway greener," DePriest said.

Jedlicka views Grand Island as an opportune place to really put restoration efforts into overdrive. "Grand Island is the heart of the Niagara River," Jedlicka said. "It's like 40 miles of shoreline." What's most challenging is private landowners occupy a lot of Grand Island's shoreline. Riverkeeper officials said getting buy-in from some of those landowners will be keys to future success. And, Sandy Beach provides a model for that. Although technically a private beach club, the Sandy Beach Park Club is open to nearby residents on the island for a modest annual fee.

Beach club officials initially approached Riverkeeper after learning ecological funding was available through Greenway, according to Brian Murphy, a Beach Club board member.

[\[Buffalo Niagara Riverkeeper's Guide for Waterfront Landowners\]](#)

The beach club provided \$51,000 to the project that also included developing a sand beach and amphitheater-style seating using boulders. "It doesn't preclude recreational use," Jedlicka said. "We specifically designed this site for the human animal, too." Murphy – who's also a senior construction manager with Anchor QEA, an upstate environmental engineering firm that's worked with Riverkeeper in ecosystem restoration work along the Buffalo River – hopes its community effort in teaming up with Riverkeeper provides an example for others. "The environment needs our help and everybody can be part of it," Murphy said. "Every small project and every win has a bigger influence than people realize."