

## 'A window into the past'

How preservationists hope to restore Lake Michigan shoreline



A multimillion dollar project will begin later this year to restore the shoreline, bluffs and ravines at the Jean and John Greene Nature Preserve along Lake Michigan. (Courtesy of Lake Forest Open Lands Association)



The Lake Forest Open Lands Association received a grant to help fund its work to restore the Jean and John Greene Nature Preserve along Lake Michigan. (Courtesy of Lake Forest Open Lands Association)



Work to restore the Jean and John Greene Nature Preserve along Lake Michigan will include replanting rare native plants and improving offshore fisheries. (Courtesy of Lake Forest Open Lands Association)

Some plant species found in the ravines of the Jean and John Greene Nature Preserve along Lake Michigan are so rare you can't buy them.

"It's almost like a window into the past," says Ryan London, president and CEO of Lake Forest Open Lands Association, the conservation organization founded in 1967 that manages the preserve.

Development and modifications along the shoreline have impacted fish, accelerated erosion, resulted in widespread vegetation loss and degraded the habitat of the Lake Forest preserve.

Now LFOA is embarking on a major restoration effort fueled by a \$5.75 million federal grant that hopefully can be replicated across the Great Lakes, London said.

Starting in March and continuing over the next 2½ years, what is described as a model project will restore and stabilize 61 acres of rare and fragile ravine and shoreline habitats.

The work will result in improvements on the northern

portion of a 2-mile stretch of permanently protected and accessible ravines and bluffs along the Lake Michigan shoreline.

The multipronged project is meant to improve the habitat of more than 100 bird species, 48 rare plant species and three threatened fish species unique to the Great Lakes.

"We're hoping this can demonstrate how you can work with nature," London said. "This is a long-term investment with long-term returns."

It also will protect Lake Michigan water quality for more than 285,000 residents in 20 municipalities by improving the capacity to filter stormwater, according to LFOA.

Improvements also are intended to expand public access, conservation education and workforce training for youth, veterans and others, supporters say.

The ravine-bluff system stretches across 22 miles of shoreline north from Chicago, forming steep, wooded corridors that support rare plant and animal species and filter stormwater, according to a news release announcing the project.

In partnership with the Illinois Department of Natural Resources Coastal Management Program, LFOA developed the grant proposal, which was awarded through the National Oceanic and Atmospheric Administration's Office for Coastal Management.

The collaboration allowed funding, science and on-the-ground knowledge to help protect coastal ecosystems and create a more resilient shoreline, noted IDNR Director Natalie Phelps Finnie.

The plan addresses issues onshore and in the water to restore the native landscape, fish habitat, natural hydrology and biodiversity. Offshore reefs, native replantings, grade controls and engineered stormwater improvements are among the planned elements.

On land, the Chicago Botanic Garden's Plants of Concern program, one of several partners supporting the project, will collect and nurture seeds of rare plant species to be replanted as part of the restoration.

In the water, the idea is to create a "fisheries playground," London said.

"We're actually going 500 feet into Lake Michigan with habitat structures," he said. Measures to be installed below the surface are intended as a demonstration project similar to what has been done at Illinois Beach State Park in Zion, London said.

Lake Forest Open Lands owns 600 to 700 feet of shoreline along the McCormick Ravine on the northern portion of an ecosystem complex including the Fort Sheridan Forest Preserve.

There have been other projects and frequent collaborators in Lake County. They include the Illinois Department of Natural Resources with a \$74 million investment at Illinois Beach State Park and the Lake County Forest Preserve District with similar in-lake fish habitat structures, ravine stabilization and stream restoration at Fort Sheridan. Lake Forest and Highland Park also have ravine restoration projects.

"Lake Michigan is almost something we kind of take for granted. It's just a big entity out there but it is fragile," London said. "Part of the goal is to get people involved."