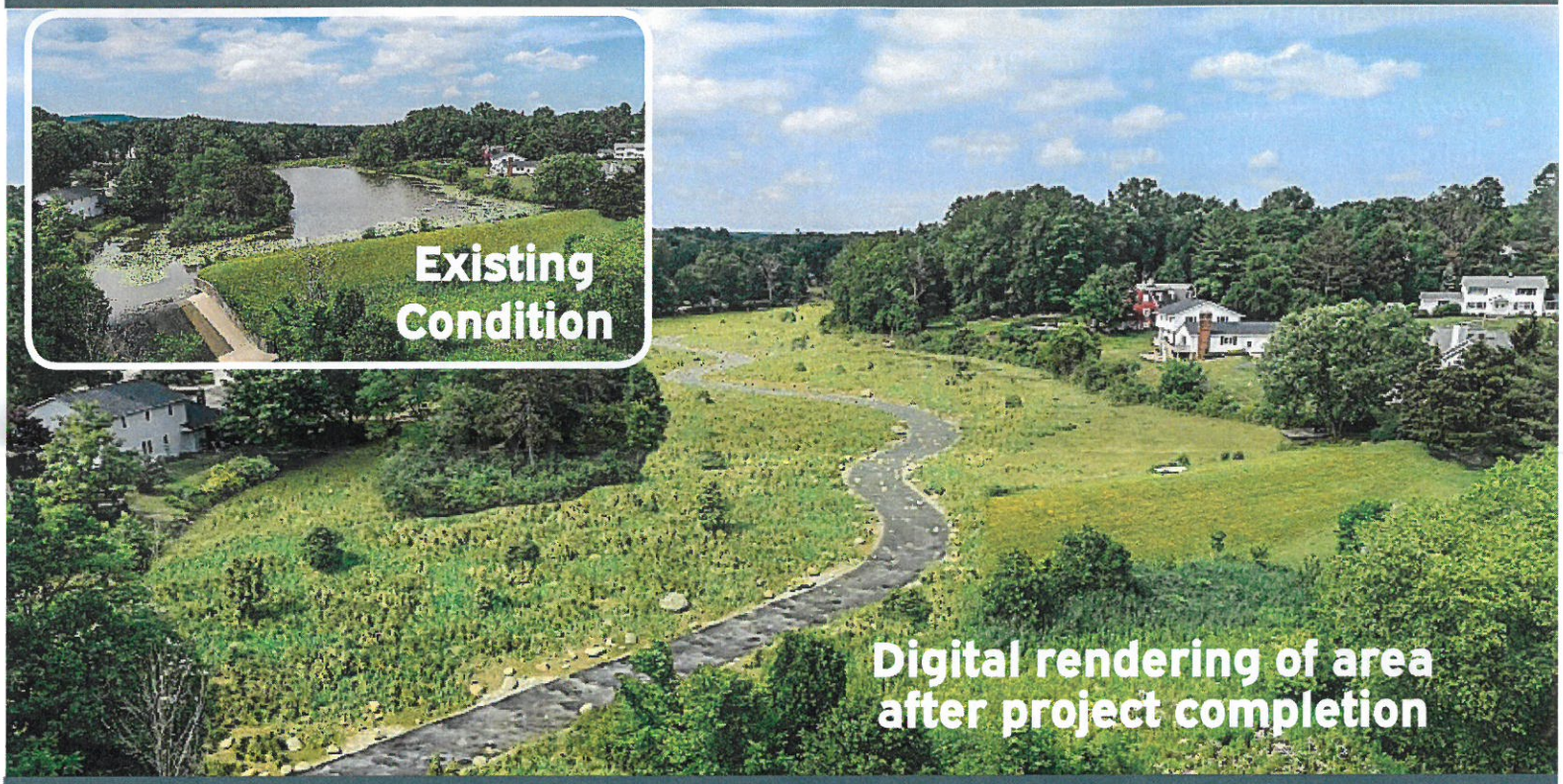
Brightwood Lake Dam Removal and Kellogg Creek Stream Restoration



The dam removal and restoration project is completely funded by the Ohio EPA Water Resource Restoration Sponsor Program (WRRSP)

Formed with the construction of a dam along Kellogg Creek in 1967, the 11.4 acre Brightwood Lake was created for aesthetics for nearby housing. Complete dam removal is being completed to address dam deficiencies and to improve overall water quality in Kellogg Creek. The dam removal project will include restoration of approximately 1,800 feet of Kellogg Creek and 9 acres of floodplain, which drains to the Grand River. The riparian corridor, or the land right next to the creek, will be vegetated with native plants.

Why remove the dam?

The 16 ft high dam consists of a 340 ft long earthen embankment with a 55 ft spillway. The Ohio Department of Natural Resources (ODNR) performed an inspection of the dam in 2004. The dam was determined to be a High Hazard Class 1 dam that is now considered failing to meet current standard. There is also a significant buildup of sediment in the lake, contributing to the risk of downstream flooding and stream habitat degradation.

Based on a 2006 Engineering study, different options and their associated cost were determined. The options included repair of the dam and dredge the lake, partial removal of the dam, or complete removal and stream restoration. Local and State officials and dam property owners weighed all options and their associated risks with flooding hazards, effects on downstream housing/infrastructure and stream health. It was decided that complete dam removal and stream restoration were the best option.

PROPOSED RESTORATION BENEFITS

Safety and Security

- Removal of dam and dam owner liability
- Stabilization of sediment
- Minimized long-term maintenance

Ecological Impacts

- Improved water quality in Kellogg Creek
- Increase macroinvertebrate and fish habitat and provide fish passage.

Reestablish natural flow channels to Kellogg Creek, restore natural floodplain access and detain stormwater.

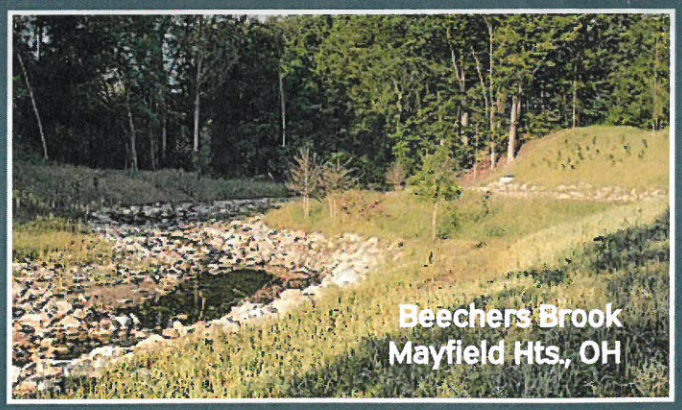
There will not be development in the future; the area will be protected from development in perpetuity.

What happened to the fish in the lake?

Cleveland Metroparks performed electroshocking in the lake. This is a process where the fish can easily be collected from the surface of the water with a net. Over 400 fish were collected and transferred to other ponds within the Cleveland Metroparks.

What will the area look like when the project is completed?

The natural, meandering stream channel for Kellogg will be restored. The floodplain will also be restored with native vegetation. Adjacent areas will be reforested with native species that were most likely present before the dam was constructed. Photos of similar projects completed in other areas are pictured below.



Beechers Brook
Mayfield Hts., OH

Kenston Lake

For more information:
Lake County Stormwater Management Department

lakecountyohio.gov/smd