STREAM RESTORATION AT NEWELL CREEK:

# A HEALTHIER FUTURE FOR OUR NEIGHBORHOOD

#### A GLIMPSE INTO THE PAST

The land we now call Newell Creek was once the Norton Estate, a 372-acre country retreat built in the early 1900s by Cleveland businessman David Z. Norton. The property featured a mansion, gardens, and a large pond created by damming the stream known as Newell Creek. This scenic pond reflected Norton's passion for nature and farming. Over the years, the pond filled with sediment, and the aging dam became a safety concern. That's where our story of restoration begins.

#### WHY RESTORE THE STREAM?



The dam was deteriorating, and the built-up unstable sediment posed a safety risk



The stream's natural flow was blocked, which hurt local plants and wildlife



Sediment buildup reduced the pond's usefulness and health

To improve safety and bring nature back into balance, a team of local partners launched a stream restoration project right here in our community.



### **PROJECT PARTNERS:**











With support from a \$382,001 grant from the U.S. EPA's Great Lakes Restoration Initiative (GLRI), the project began in Fall 2024 and finished in Summer 2025.

Davey Resource Group contracted to do the restoration work.

#### WHAT WAS DONE?

880 feet of stream restored



290 feet of brand-new stream channel created



**0.3** acres of new wetlands created



Over 60 species of native plants added

#### **PLANTINGS INCLUDED:**



**57** container shrubs and trees



400 live stakes



Native plant species included buttonbush, serviceberry, black gum, and sycamore.



Native wetland and streambank seed mixes



Invasive plants treated in multiple phases

### NATURE INSPIRED ENGINEERING

To slow down water and prevent erosion, engineers installed:



**6** step pools - like natural staircases for water



**9** log sills and debris jams - made from wood to hold the stream's shape and create homes for fish and insects

### WHAT HAPPENS TO THE POND?

The stream was rerouted around the old dam and sediment-filled pond. Instead of removing the pond and dam, they were transformed into a new kind of habitat.

The pond was dewatered and planted with native wetland vegetation. It now serves as a floodplain wetland – a natural feature that helps manage stormwater and creates a rich habitat for birds, amphibians, and other wildlife.





#### WHY IT MATTERS?



Healthier habitat for fish, birds, and pollinators



Cleaner water and less erosion



Stronger ecosystem right in our backyard



A safer, greener space for the whole community to enjoy

### WANT TO GET INVOLVED?

If you have questions or want to get involved in local conservation, contact Lake Soil & Water Conservation District:



440-350-2730



soil@lakecountyohio.gov



<u>lakeconservation.org</u>

TOGETHER, WE'RE CREATING A HEALTHIER, MORE BEAUTIFUL NEWELL CREEK FOR TODAY AND GENERATIONS TO COME.

### **NOTES**

### STREAM RESTORATION AT NEWELL CREEK

## BEFORE RESTORATION: INCISED STREAM CHANNEL

# DAM POOL FILLED WITH SEDIMENT (VIEW FROM FOOT BRIDGE)



This photo shows the deeply incised stream channel prior to restoration efforts. The banks were unstable, and erosion was evident.

The pond area was heavily filled with sediment, disrupting natural stream function and limiting habitat for aquatic life.

# DURING CONSTRUCTION (FALL 2024)

# POST-CONSTRUCTION (SPRING 2025)



This photo, taken during construction, shows the newly constructed step pools. The cut dam can be seen in the center left. After construction water no longer flowed through the dam pool except during high flow events. The stream was rerouted around the dam to the west (center right).

This photo, taken shortly after construction, shows the newly restored stream bank. Erosion control fabric and native seed mixes were installed to stabilize the bank and promote healthy vegetation. Herbaceous plugs, trees, and livestakes were also installed. The footbridge can be seen in the background.





