

Sruth Fuisce Pond Improvements Lexington, KY March - July, 2023

Few know the importance of water more than the modern farmer. Besides the need for drinking water, there are many benefits to increasing water retention on agricultural land. A space that can hold more water, like a pond or wetland, is more resilient against damage from both flooding and drought. Wetlands also reduce soil erosion, attract beneficial wildlife to a property, and filter out pollutants before reaching other waterways. In late 2022 the owner of Sruth Fuisce farm, Pat Sullivan, approached our team to discuss and come up with a quote for a large restoration project on this beautiful Kentucky horse farm.

A large pond on site was unable to retain water due to a failing earthen dam and several leaks in the clay lining of the pond itself. Water had bypassed the dam, eroding a deep channel. Also, the culvert to convey water underneath the driveway was simply too small to handle the water coming off the dam after heavy rainfall. The team began constructing a temporary driveway to maintain farm operations during construction. This allowed us to upgrade from the old drainage culverts and replace them with larger ones. At the same time, we rebuilt both primary and overflow spillways, ensuring proper drainage from the pond and preventing erosion.

Next was the pond itself. We scraped dirt away to the bedrock to ensure we repaired the source of the leak. Spillways in place, we then built up the dam using clay excavated on-site, using BMP's to ensure a long operating life for the dam. The project nearly complete, last came the finishing touches. Topsoil was added on top of clay to tie in earthworks to existing elevations, and the pond itself was graded smooth and shallow. Finally, fertilizer and native turf seed was spread on site to quickly reestablish disturbed areas and equipment was demobilized, leaving a landscape with more capacity for water than our team found it.









