



LAKE SULLIVAN OUTFALL REHABILITATION PROJECT

Indianapolis, Indiana

The Lake Sullivan Outfall Structure manages flows from a 20 square mile watershed. It suffered from substantial structural deterioration that caused flooding of the Lake Sullivan Sports Complex and sedimentation of Lake Sullivan. This innovative project completely rehabilitated the structure without taking it (or the roadway above it) out of service. The project restored the outfall structure and Lake Sullivan at a substantially lower cost than complete replacement. Today, the structure and the lake are safe and usable.

Wessler Engineering was the prime engineering firm for the design, bid, construction administration, and inspection of the Lake Sullivan Outfall Rehabilitation Project for the City of Indianapolis Department of Public Works.

In 1934, as a Civil Works Administration Project, Lake Sullivan was dredged from an existing wetlands complex. Fed by Crooked Creek, the lake has a watershed area of approximately 20 square miles and is one of 14 proposed greenways in Marion County. The outfall structure passes flows from Lake Sullivan into the White River. The Lake Sullivan Sports Complex is located immediately upstream of the lake subjecting it to potential flooding.

Partially due to the burial of its low-flow outfall structure, Lake Sullivan was filled with sediment. The Army Corps of



Engineers had planned a wetlands restoration project at the lake, but the project could not proceed due to the condition of the outfall structure - specifically, sediment and flood risk.

The purpose of the project was to correct outfall structure issues and restore the functionality of the outfall

structure. To avoid complete reconstruction of the outfall structure, new concrete headwalls were installed outside existing headwalls. In addition, sections of corrugated metal were installed in the existing outfall pipes to avoid complete replacement.

Before the project began, residents in the surrounding community expressed concerns about the condition of Lake Sullivan. Fishing from the lake side and river side of the outfall structure was (and is) a popular activity, and many questioned when the lake would be ready for community use.

This project not only restored the outfall structure, but also Lake Sullivan - at a cost substantially lower than complete replacement. Today, the structure and the lake are safe and usable. And, they should remain in good condition for many years.

For help with your next project or information regarding rehabilitation, please contact Brent Siebenthal at BrentS@wesslerengineering.com or visit us on-line.



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