**Banklick Creek Regional Wetlands** **Sanitation District 1 - Northern Kentucky $1-$2 Million**

***Overview:*** This project consisted of constructing two 5 acre treatment wetlands along with intake and outfall structures. Observation platforms were built in the wetland cells. A pump station was installed to pump water from Banklick creek into the intake pond structures. This allowed the water to naturally flow into the wetlands.

***Scope:***

- Excavation Outlet & Inlet Headwalls
- Inline Water Control Structures
- Manifold Piping System in the Wetlands
- Underground Piping raging from 8" – 36"
- Gates Valve & Flap Gate Valves
- Natural Stone Liner
- Observation & Sampling Platforms
- Low & High Marsh Emergent Plants
- Floating Leaf & Submergent Plants
- Test Plots for Emergent Plants
- Submersible Pump Station

***Key Issues:***

- Project located in a flood basin
- Sequence of construction activities

***Lessons Learned:***

- A major flood event on this project revealed a design error with the one hundred year flood elevation being shown 12 feet below the actual elevation. The entire project had to be re-designed and that required the entire site to be reworked. The project site flooded more than a dozen times. We learned how to more effectively work in a flood prone area along with different methods of planting and staging materials that reduced damage during flooding events.