

## REGIONAL STORMWATER WETLANDS AND TRAILWAYS FACILITY PORTAGE, MICHIGAN



Anticipating Phase II Stormwater regulations and a regulatory need for phosphorus reductions, the City of Portage took proactive steps to address the pending need for water quality improvement. In a unique project, a regional stormwater treatment system for Consolidated Drain # 1 was constructed, serving to significantly increase the quality of life for city residents and in-stream biota in Portage Creek while meeting and exceeding regulatory requirements. To help finance such a unique project, K&A successfully developed applications for Clean Michigan Initiative (CMI) and Clean Water Act Section 319, and private research foundation grant awards of \$800K. A 25-acre area required wetland delineation, staking, reporting and permitting by K&A as well.

This new storm water treatment facility was integrally linked to a recreational trailway system that doubled the length of existing trailways in the city, provided treatment for runoff from 463 acres within the highly commercialized urban core and targeted 80% pollution removal rates from urban stormwater runoff. As designed the new facility substantially enhances and improves flood protection. This regional facility allowed for reclamation of several private, poorly maintained and failing on-site detention basins that were eliminated. These replaced basins were ineffective at pollutant removal and flow moderation.

The consolidated drain had emptied directly into Portage Creek, a designated coldwater trout stream, seriously impacting the fishery and accompanying habitat.

The new facility is municipally-owned and maintained by the City of Portage. Its design integrates several large-scale stormwater treatment options, including a sediment pond, wet detention basin and both existing and created wetland treatment areas. More than a mile of accessible scenic trailways, bridges and overlooks, integrated into the site plan, now connect major retail and recreational facilities. Trailways also provide limited access to the 25-acres comprising the stormwater treatment area. At the headwaters of this regional stormwater treatment system is a public fountain/refrigerated outdoor ice rink and pavillion, all part of the project led by K&A to attract year-round users and visitors to the core commercial district and the trailway. Wildlife habitat, a restored, more-meandering stream corridor to maintain and protect more favorable cold water characteristics, the recreational access, and several environmental education stations provide unique public amenities within the core of this urbanized area.

### *Contact:*

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### *Project Costs:*

\$250,000 (K&A)  
\$4,700,000 (total)

### *Project Duration:*

1999-2002