

COUNTY DRAIN STREAMBANK STABILIZATION KALAMAZOO, MI

Abandoned railroad tracks slowly collapsing into the creek, failed concrete culverts blocking rather than directing the flow of water, and as much as 60,000 pounds of eroded soil and 45 pounds of phosphorus washing downstream annually have all been issues facing Davis Creek in recent years.

The Kalamazoo County Drain Commissioner teamed up with 10 governmental and local organizations to target specific areas of Davis Creek for restoration, with funding from a two-year grant from the Michigan Department of Environmental Quality (DEQ). The \$156,980 Michigan Non-Point Source Watershed Program Grant awarded in 2012 included a local match of \$39,280. The funding followed a federal stimulus grant received in 2009 by the Drain Office to study the management of stormwater flowing into Davis Creek.

Davis Creek runs through Pavilion, Comstock, and Kalamazoo Townships and the cities of Kalamazoo and Portage. Concerns for potential flooding along Davis Creek in Kalamazoo Township and portions of Pavilion Township caused municipalities to petition the Kalamazoo County Drain Commissioner for assistance in the mid-1970's. A special hearing was held in September 1976 regarding the need to establish a county drain for Davis Creek. An order of determination was entered on October 7, 1976 wherein the Olmsted-Davis Creek Drain was established under Chapter 20 of Act No. 40 of the Public Acts of 1956, as amended (the Michigan Drain Code). As a Chapter 20, "intracounty" drain, the entire stream corridor was placed under the jurisdiction of the County Drain Commissioner and a three person Olmsted-Davis Drain Board. This designation was important because when improvements are warranted for the intracounty drain, assessments are made by the Drain Commissioner to the local jurisdictions benefiting from the project rather than residents. This Drain

is located within a series of low-income neighborhoods. As a result, the intracounty assessments were essential to acquire the matching funds needed to implement this grant project.



This project involved highly cost-effective design plans, regulatory permitting and construction of stable

channel patterns and in-stream structures for select problem areas within Davis Creek. Specific measurable goals achieved during this project include: 1) corrected erosion sites that were documented and surveyed in 2011, 2) established no-mow and native plant buffers, 3) reduced sediment and TP loading to the Kalamazoo River from inputs originating in Davis Creek, 4) re-aligned channel segments with existing road/stream crossings, and 5) protection a high-pressure gas main within 15-feet of one critical erosion area along the Interstate I-94 business loop.

Contact:

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Project Costs:
\$39,280 (K&A)
\$92,725 (Total)

Project Duration:
Oct 2012 – Sep 2015