INDUSTRIAL SITE EROSION CONTROL WITH NATIVE PRAIRIE GRASS PLANTINGS AT GRAPHIC PACKING CORPORATION

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Project Costs: **$89,275** **Prairie Planting: $23,978** **K&A: $15,560**

Project Completion: **2002**

KIESER & ASSOCIATES (K&A), in partnership with the Kalamazoo Conservation District, was awarded $17,853 for a project entitled "Industrial Site Erosion Control with Native Prairie Grass Plantings" through the Great Lakes Commission's Great Lakes Basin Program for Soil Erosion and Sediment Control. Through this project, a highly erodible portion of property along the Kalamazoo River, owned by Graphic Packaging Corporation of Kalamazoo, Michigan was experimentally planted with native prairie grasses and wildflowers, a unique method for soil stabilization at industrial properties. The experiment examines the feasibility of using native grass and flower mixes at industrial sites to enhance soil erosion control. Additional benefits of the project include habitat creation for grassland biota, opportunities for prairie education, and a colorful attraction along the river corridor throughout the year.

The planting, part of a much larger bank restoration project at Graphic Packaging, was designed to assess the efficacy of native prairie grass plantings for erosion control versus conventional plantings at an industrial facility. Graphic Packaging sought to become a partner in the Kalamazoo River Water Quality Trading Demonstration Project as an industrial non-point source contributor. After site evaluation, the company was approved for streambank restoration and surface erosion control assistance by the Demonstration Project's Steering Committee. The company was provided technical assistance and partial project funding to implement voluntary non-point source reductions of soil and phosphorus within this section of the Kalamazoo River.

In a unique partnership for an industrial project, the U.S. Department of Agriculture's Natural Resources Conservation Service provided site engineering and design assistance. The slope of over 500 feet of riverbank was stabilized with rock riprap. This design included creation of grass swales and rock aprons, constructed to trap sediments and reduce the velocity of runoff.

As plantings at industrial sites are often high-maintenance turf intended to hold soils and provide a "finished" look, this project provides an opportunity for restoring surplus, low-quality areas to a more natural state through the use of carefully chosen native plant species. The information collected through this demonstration project will be made available to others interested in native plantings at industrial and urban sites.