

Critical Erosion Sites Mitigation Project Kalamazoo River, Michigan



Kieser & Associates, LLC (K&A), as a partner in a coalition with the Kalamazoo Conservation District, three county road commissions, NRCS and the City of Kalamazoo, provided technical and planning assistance to a CMI-funded project addressing several severe erosion sites along the Kalamazoo River. Past estimates suggest that the Kalamazoo River contributes 435,000 tons of sediment each year to Lake Michigan.

The City of Kalamazoo’s Water Reclamation Plant (WRP) is situated on the west bank of the Kalamazoo River approximately one-quarter mile north of Paterson Avenue in the northeast corner of this municipality. Over 900 feet of Kalamazoo River streambanks at the City’s WRP property was exposed

and eroding. Riparian areas were previously maintained as a traditional landscaped lawn to accommodate access to outfalls and other structures. This former approach also resulted in a neglect for streambank stabilization, significant soil loss, bank recession and potential destabilization of soils adjacent to significant WRP structures.

As part of this project, K&A provided technical support through engineering plans and specifications, City meetings and approvals, DEQ engineering review submittals, DEQ permit applications, competitive contractor bids, and construction oversight assistance. This City of Kalamazoo WRP erosion site involved streambank stabilization and riparian buffer restoration in the fall of 2002.

Project benefits included:

- Streambank stabilization = 1,000 ft.
- Native riparian buffer vegetation = 0.6 acres
- Installation of seedlings and native plant plugs
- Riprap toe protection measures = 275 ft.
- Use of photodegradable erosion controls
- Improved wildlife corridor and habitat
- Improved shoreline aesthetics
- Deterrent to resident Canada geese
- Reduced grounds maintenance
- Reduction of 74.5 lbs. total phosphorus/yr.
- Reduction of 29.5 tons sediment/yr.
- Reduction of 50.2 lbs. total nitrogen/yr.

Contact:

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Project Costs:

\$10,500 (K&A)
\$31,200 (Total)

Project Duration:

2002 - 2003