

KVCC STORMWATER UPGRADES KALAMAZOO, MI

An MDEQ Clean Water Act Section 319 Grant (319 Grant) awarded to Kalamazoo Valley Community College (KVCC) funded TMDL compliance efforts within the Kalamazoo River Watershed for stormwater upgrades at the Texas Township Campus. The project was designed to treat stormwater runoff from high intensity urban development associated with approximately 31 acres of campus that frequently discharged to West Fork Portage Creek (WFPC) due to undersized existing treatment technology. Stormwater carries pollutants and sediments to the headwater of WFPC and ultimately to the Kalamazoo River, which is under a phosphorus TMDL. Kieser & Associates, LLC (K&A) was part of the project team that developed all planning and design to effectively eliminate remaining surface water discharge from the campus to WFPC by upgrading two existing best management practices that will retain and or infiltrate stormwater.

The major objectives of this project were to design and retrofit two existing stormwater detention ponds to intercept, retain and treat stormwater from a 25-year storm event, minimally. This objective is part of a sustainable campus vision for KVCC and was the last remaining piece to become the second MS4 permit holder within the Kalamazoo River Watershed to attain TMDL compliance and become Stormwater Neutral[®] verified by K&A.



Project benefits included:

- Developed areas 100% treated (80 acres)
- Stormwater Neutral[®] verification
- 3 existing outfalls eliminated
- 33.2 million gallons runoff/year eliminated
- 65 lbs. TP/year eliminated
- 890 lbs. TN/year eliminated
- 13 tons sediment/year eliminated
- Over 0.5 miles public trail connections
- Minimum 25-year storm fully retained
- Cost-effective use of grant funds
- \$10,140/lb. TP
- \$25/lb. sediment
- \$0.02/gal annual runoff volume
- Example for other MS4s



Contact:

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Project Costs:
\$39,100 (K&A)
\$277,230 (Total)

Project Duration:
2014 - 2016