

PROJECT: Stormwater Treatment Retrofits (New Germany, 2012)
CLIENT: Carver County Watershed Management Organization (CCWMO)

CHALLENGE: Adding stormwater treatment to a city's existing stormwater management system can be difficult due to space restrictions and other physical or economic limitations. In New Germany, the City was already set to reconstruct much of its existing infrastructure, and the CCWMO desired to take advantage of the timing and save on construction costs by piggybacking treatment retrofits with the project.

SOLUTION: Hydromethods was consulted to evaluate the area for potential retrofit opportunities, and determine what BMPs would provide the highest treatment benefit for the least costs. An initial assessment of the Street Reconstruction Project area narrowed the choices down to three feasible options, including: proprietary hydrodynamic treatment structures, bioretention/rain gardens, and media filtration systems.

The associated costs and benefits of each option were explored to arrive at a preliminary recommendation. The key factors considered in the evaluation of the treatment configurations included: installation costs, maintenance requirements, and expected treatment effectiveness. Treatment effectiveness was analyzed with the WinSLAMM software, which quantified the pollutant load reductions that could be expected in a given year with each design. Ultimately, Hydromethods prepared construction documents to install a bioswale, a bioretention area, and custom catch basin media filters into the conveyance system.

