

WATER RESOURCES

JANUARY TO MARCH 2008

KEY PROJECT STAFF:

MINAL HAHM, PE, CFM
PROJECT MANAGER

MATT HAHM, PE
QUALITY ASSURANCE/CONTROL

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CLIENT:

Milwaukee County/Bonestroo

CONTACT:

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SERVICES & SOLUTIONS

- Hydraulic & Hydrologic Analyses
- Water Quality Improvement Analysis
- Stormwater Management
- Permanent BMP's



MILWAUKEE COUNTY PONDS RETROFIT MILWAUKEE COUNTY, WI

M Squared Engineering (**M²**) was retained to evaluate the possibility of retrofitting existing structural flood control facilities to provide improved water quality treatment benefits as part of Milwaukee County's NPDES Permit.

M² analyzed each of the twelve (12) existing dry detention ponds to provide a variety of alternatives for each. The alternatives included mechanical pre-treatment methods, potential for increased infiltration, wet bottom reconstruction, plantings and artificial wetlands, biofiltration swales, and restrictor adjustments. **M²** rated the options for each basin in order of preference / feasibility, and provided recommendations to the County.

Flood control facilities at or near General Mitchell International Airport and Timmerman Fields were excluded from the wet bottom option in observance of FAA regulations.



M SQUARED ENGINEERING, LLC
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