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Stormwater Management Funding

The Wisconsin Department of Natural Resources (WDNR) and the Federal Emergency Management Association (FEMA) have a long history of providing funding for stormwater management planning, design, and construction. Some of the WDNR and FEMA programs include Urban Nonpoint Source and Stormwater Grants (UNPS & SW), Municipal Flood Control Grants, Lake and River Planning and Management Grants, Targeted Runoff Management Grants, Clean Water Fund – Urban Runoff Loans, and FEMA – Hazard Mitigation Grants. In the last three years, we have been successful in helping a number of our clients procure stormwater and lake grants. A representative list is shown in the table below.

Community	Project	Grant Type	Grant Amount
Algoma, WI	Regional Detention Basin Plan *	U	\$10,976
Bonduel, WI	Stormwater Management Plan	U	\$16,450
Bristol, WI	North Lake George Flood Reduction Project	M	\$333,603
Bristol, WI	Detention Pond A Restoration and Enhancement *	U	\$121,000
Bristol, WI	Stormwater Quality Management Plan – Phase II *	U	\$19,950
Dodgeville, WI	Stormwater Utility	U	\$28,840
Hartland, WI	Stormwater Management Plan	U	\$35,700
Janesville, WI	Ordinances and Regional Detention Basin Plan	U	\$84,000
Lake Mills, WI	Owen Street Regional Detention Basin	U	\$45,750
Lancaster, WI	Stormwater Utility	U	\$28,000
Lancaster, WI	Kolar Property Regional Detention Facility	U	\$55,920
Marshfield, WI	Stormwater Utility and Ordinances	U	\$73,010
Marshfield, WI	Stormwater Management Plan	U	\$36,800
Monona, WI	Stormwater Utility Feasibility Study	U	\$28,000
Monona, WI	Stormwater Management Plan and Mapping	U	\$24,220
New Glarus, WI	Stormwater Management Plan	U	\$23,100
Omro, WI	Northeast Stormwater Management Plan	U	\$4,270
Oshkosh, WI	Murdock Detention Basin Property Acquisition	M	\$330,000
Oshkosh, WI	Anchorage Basin Relief Channel Construction *	M	\$698,500
Oshkosh, WI	Sawyer Creek Floodway Land Acquisition	M	\$101,500
Prairie du Sac, WI	Stormwater Utility	U	\$30,000
Whitewater, WI	Cravath & Tripp Lakes Stormwater & Erosion Ord. *	L	\$7,500
Total:			\$2,137,089

M = Municipal Flood Control Grants
U = Urban Nonpoint Source and Stormwater Grants
L = Lake Planning and Management Grants

* Project Description Inside

Grant-Funded Stormwater Projects

Oshkosh - Anchorage Basin Flood Relief Channel

The Anchorage Basin is a 428-acre residential/commercial area in east Oshkosh currently experiencing frequent flooding. This project, which is slated to begin design in 2004, will convert an abandoned railroad line into a flood relief channel to alleviate this flooding. The proposed flood relief channel will provide a positive outlet to Lake Winnebago to augment the currently undersized storm sewer system serving the area. Construction and replacement of culverts are an integral component of the proposed project. An associated project in this basin, as shown in the table on the front of this brochure, is the Murdock Detention Basin. This detention basin is a component of the overall flooding relief plan for the Anchorage Basin and received funding for property acquisition.

Estimated Construction Cost: \$2 million

Whitewater - Cravath and Tripp Lakes Stormwater and Erosion Control Ordinances

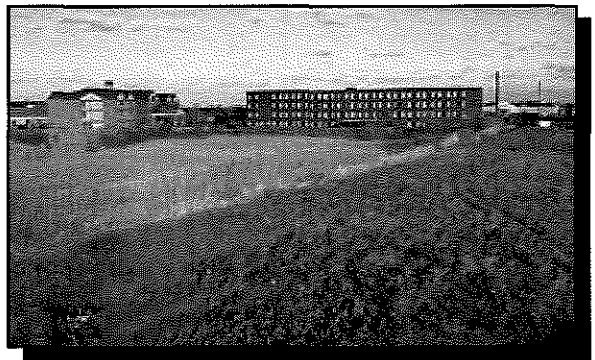
This project was prompted by a study showing that Year 2000 pollutant loadings were expected to result in total phosphorus concentrations in Cravath and Tripp Lakes that exceed the recommended levels for recreational use and for the maintenance of a warm-water fishery. To begin to address these findings, the City of Whitewater sought to establish administrative authority to control stormwater discharge from construction and post-construction sites. The stormwater and erosion control ordinances will minimize impacts of future development and prevent lake degradation. In addition, watershed divide and land use mapping was completed to facilitate future analysis of pollution sources and resultant water quality problems in the lake.

Technical Assistance Cost: \$10,000

Bristol - Pond A Restoration and Enhancement

Pond A was originally built as a flood control pond but provided minimal water quality benefits. This project rehabilitated the existing pond that had filled in with sediment and was becoming a nuisance and potential hazard because of stagnant water and steep slopes. The project design included 4:1 side slopes, a 10' safety shelf, sediment forebay, outlet control structure, 100-year emergency overflow, and shoreline/wet edge seed mix around the perimeter of the pond. The restoration brought the pond into compliance with WDNR Wet Detention Basin Standard and will remove 80% of the total suspended solids reaching the pond from the 73-acre commercial land use watershed. In addition, the pond will control up to a 100-year storm.

Pond Construction Cost: \$148,000



Before



After

Algoma - Regional Detention Basin Plan

The Town of Algoma is served almost exclusively by ditches along street systems that ultimately discharge to Lake Winnebago. The topography in the area is flat and much of the development occurred prior to the implementation of strong guidelines for stormwater management. Therefore, the Town has many areas that are prone to flooding and water quality degradation. This plan focuses on solutions to flooding and water quality issues with a system of regional detention basins. The plan addresses location and sizing of the regional basins, coordination and consistency with the Town Comprehensive Land Use Plan, projected costs for implementation of the regional detention basin plan including land acquisition, funding of construction, and maintenance of the basins, and a public information and education program relating to the plan.

Technical Assistance Cost: \$18,000

Bristol - Phase II Stormwater Quality Management Plan

Compliance with the USEPA Phase II NPDES Stormwater Program prompted the need for this plan. The Town was recently designated a Phase II community because two population areas meet the 1,000 persons/square mile density threshold for entry into the program. A Notice of Intent (NOI) to Apply for Coverage Under Municipal Storm Water Discharge Permit Application was submitted to WDNR on March 10, 2003. This project includes technical assistance to meet the seven components (Public Education and Outreach, Public Involvement and Participation, Illicit Discharge Detection and Elimination, Construction Site Pollution Control, Post-Construction Site Pollution Control, Pollution Prevention, and Storm Sewer System Map) of the Proposed DNR MS4 General Permit, which is tentatively slated to be issued in late 2004.

Technical Assistance Cost: \$28,500

Fitchburg-Nine Springs Creek Streambank Restoration

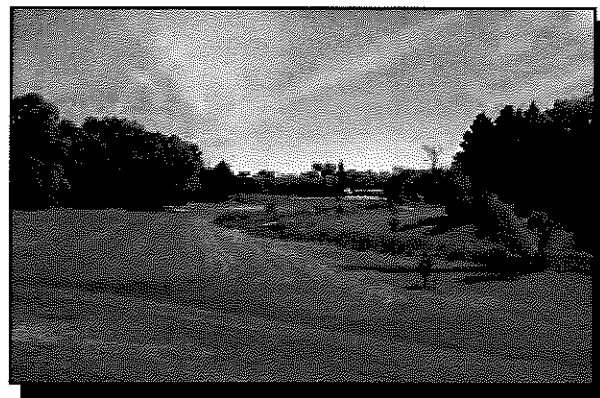
Nine Springs Creek is a major watercourse in the Lake Monona watershed, draining approximately 6 square miles upstream from Fish Hatchery Road in Fitchburg. The Nine Springs Creek watershed has experienced rapid urbanization over the past decade. Increased peak discharges resulting from this development have contributed to significant erosion of the streambanks through a City-owned golf course. Streambank erosion has created an aesthetic concern and has contributed to a degradation in water quality downstream from the golf course.



Before

We were hired to develop a streambank restoration plan for critical stream reaches in the golf course. The final design stabilized stream banks, improved aesthetics of the watercourse, and reduced sediment loss to downstream areas. The design featured toe of slope stabilization using buried gabion rolls, erosion control mats on 2:1 banks, and native seeding. Implementation of the plan included measures to minimize impacts on the existing golf course. Funding for this project was procured by the City of Fitchburg.

Construction Cost: \$110,000



After



Summarized below are a number of the more popular WDNR grant programs.

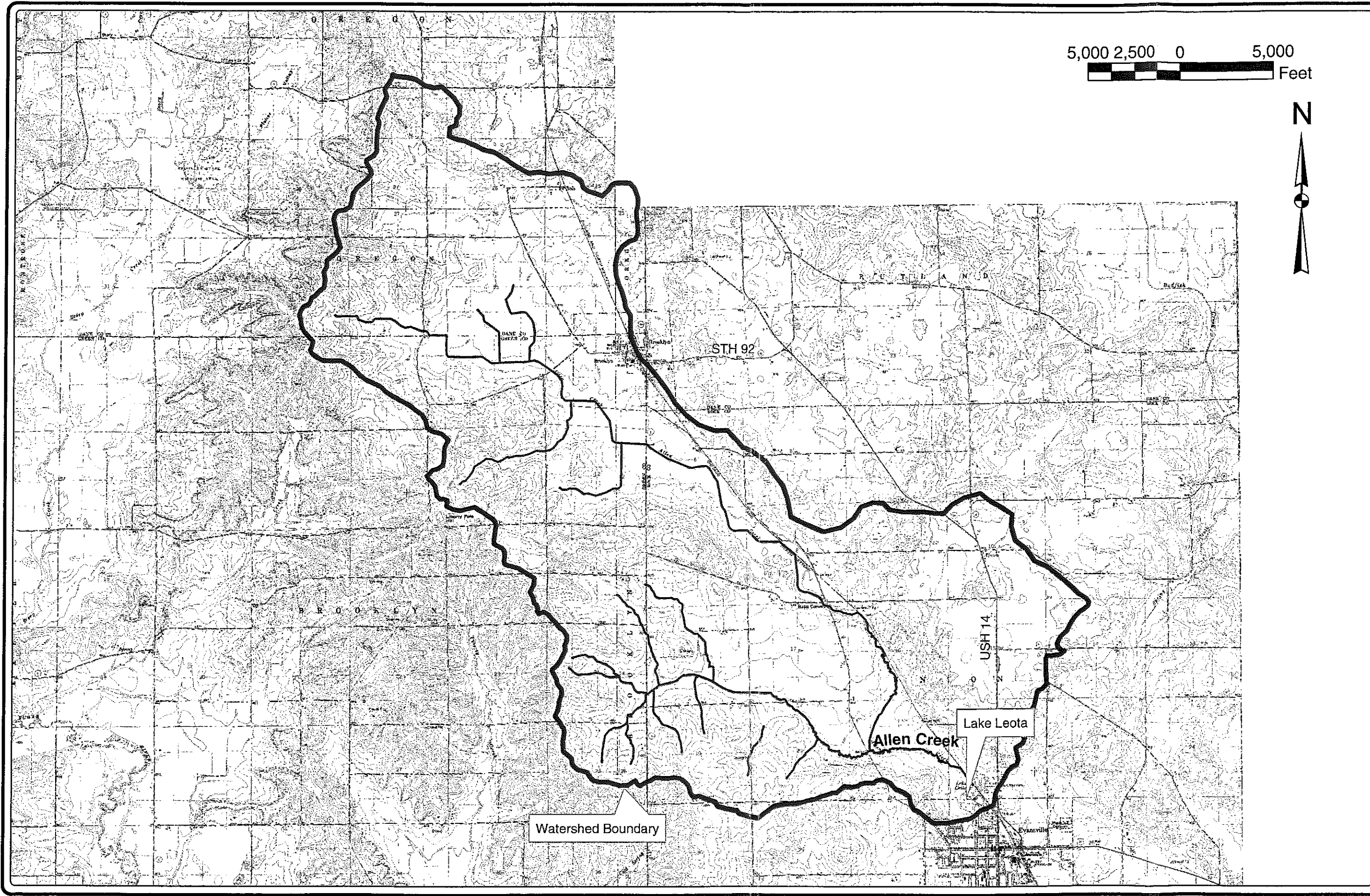
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Funding Type	Application Date	State/Local % Cost Share	Eligible Projects	Non-Eligible Projects	Restrictions/Details
Urban Nonpoint Source & Stormwater Grant – WDNR <i>Priority: Urban Area Water Quality-Based Projects. Planning, Design, and Construction.</i> <i>Wisconsin administers the USEPA Section 319 monies through this program.</i>	April 15 of each year	Planning: 70/30 Design: 50/50 Construction: 50/50 Acquisition: 50/50 <ul style="list-style-type: none"> Max of \$85,000 for Planning Project Max of \$150,000 for Construction Project Projects Involving Land Acquisition and/or Permanent Easements can request an additional \$50,000. 	<ul style="list-style-type: none"> Streambank/ Shoreline Restoration Wet Detention Ponds Stormwater Utilities Stormwater Mapping Stormwater Management Plans Stormwater/ Erosion Control Ordinances Public Information/ Education Street Sweepers* 	<ul style="list-style-type: none"> Best Management Practice (BMP) construction for new development Projects that are not water quality based, such as projects to solely solve drainage flooding problems Dredging Projects 	<ul style="list-style-type: none"> <i>Urban Area Definition:</i> Population Density of 1,000/sq miles or Commercial Land Use or for Planning Projects, projected to be urban in 20 years. Check NPS Ranking on Watersheds and Lakes List for basin priorities.
Targeted Runoff Management Grant (TRM) - WDNR <i>Priority: Control Polluted Runoff from both Urban and Rural Sites . . . Design and Construction of BMPs.</i>	April 15 of each year	70/30 up to a maximum of \$150,000 50/50 for property acquisition (included in the \$150,000 maximum)	<ul style="list-style-type: none"> Streambank Restoration Wetland Construction Detention Ponds Cropland Protection Livestock Waste Management Practices Property Acquisition 	<ul style="list-style-type: none"> BMP construction for new development Projects that are not water quality based, such as projects to solely solve drainage/flooding problems Dredging projects Rural projects in priority watershed areas. Projects to control pollution regulated under WI law as a point source (i.e., NR 216 permitted communities). Planning projects. 	<ul style="list-style-type: none"> Design and construction of BMPs (previously construction only). No Phase I or Phase II NR 216 Permitted Communities
Municipal Flood Control Grant – WDNR <i>Priority: See eligible projects column . . . Planning, Design, Construction, and Administrative Activities.</i>	April 15, 2005 Every two years.	70/30 Maximum allowed per applicant: 20% of funding available in that grant cycle. Available funding determined by DNR on November 14, 2004.	<ul style="list-style-type: none"> Acquisition & Removal of Structures Floodproofing and elevation of structures Streambank Restoration Dam Removal Fish & Native Plant Habitat Restoration Acquisition of Vacant Land for Flood Storage and Conveyance Flood collection, retention, detention, storage facilities. Flood Insurance Studies and Flood Mapping Projects 		<ul style="list-style-type: none"> Eligible projects are in order of DNR priority. (Projects near bottom have less chance of being funded.) Must have appraisal done prior to grant application for acquisitions (must include copy with application).
Lake Planning Grant – WDNR (Large Scale) <i>Note: wetland restoration grants also available.</i>	February 1 and August 1 of each year	75/25 Maximum of \$10,000 per grant. Maximum of two grants per grant cycle.	<ul style="list-style-type: none"> Physical, chemical, biological, and sociological data collection Water quality assessment Watershed Evaluation Wetland Restoration Ordinance Development Management/ Implementation plans for lake protection rehabilitation 		<ul style="list-style-type: none"> Each lake eligible for more than one planning grant with a lifetime maximum of \$100,000
River Protection Grant – WDNR <ul style="list-style-type: none"> Planning Management 	May 1 of each year	75/25 <ul style="list-style-type: none"> Plan: Maximum of \$10,000 per grant. Mgmt: Maximum \$50,000 per grant. 	<ul style="list-style-type: none"> Plan: River organization development, information and education, water quality/fish/aquatic life assessment, non-point source assessments. Mgmt: In-stream/ shoreland habitat restoration, land/ easement purchase, local ordinance development. 	<ul style="list-style-type: none"> Dam repair/operation Dredging 	

To learn how Strand can secure funding for your project or for additional information regarding stormwater or water resources funding, please contact Jon Lindert at our Madison office, 608-251-4843 or e-mail at jon.lindert@strand.com You may also visit us at www.strand.com

*DNR will fund the incremental cost to go from a conventional brush streetsweeper to a high-efficiency sweeper when buying a high efficiency sweeper.



LAKE LEOTA WATERSHED MAP

LAKE LEOTA-LAKE DREDGING PLAN
 CITY OF EVANSVILLE
 EVANSVILLE, WISCONSIN



FIGURE 1
 1-354.003