

**Michigan Department of Environmental Quality
Office of Drinking Water and Municipal Assistance**

**ANNUAL REPORT ON
CAPACITY
DEVELOPMENT
PROGRAM
FISCAL YEAR 2012**

December 2012

**525 West Allegan Street
P.O. Box 30241
Lansing, MI 48909-7741
517-335-2690
<http://www.michigan.gov/deq>**

List of Acronyms	ii
1 Introduction	1
2 New Systems Program.....	1
2.1 Identify Legal Authority	1
2.2 Identify Control Points.....	2
2.3 List New Systems	2
3 Existing Systems Program Tools and Activities Used.....	2
3.1 Sanitary Surveys to Evaluate Systems.....	2
3.2 One-on-One Technical Assistance and Consultation	4
3.3 Other PWS Program Efforts.....	5
3.4 Enforcement	8
3.5 Operator Training and Certification	9
3.5.1 Operator Training and Certification Unit (OTCU)	9
3.5.2 Small CWS and NCWS Training	10
3.6 DWRP.....	10
3.7 Source Water Protection	11
3.7.1 Groundwater Source Protection	11
3.7.2 Water Withdrawal Legislation	12
3.7.3 Surface Water Source Protection	12
3.8 Financial Assessments	13
3.9 Security.....	13
3.10 Electronic Reporting and Data Management.....	14
3.10.1 Electronic Drinking Water Reporting (eDWR).....	14
3.10.2 Tracking Compliance Using Safe Drinking Water Information System/State (SDWIS/State)	14
3.10.3 WaterTrack.....	14
4 Identify Existing Systems in Need	15
5 Identify Capacity Development Needs and Provide Assistance.....	15
5.1 Contingency Planning	15
5.2 Follow Up on Needs Identified	16
5.2.1 Implement New Federal Rules	17
5.2.2 Capture Sanitary Survey Data	17
5.2.3 Implement Newly Revised Nonfederal Provisions of the Administrative Rules	17
5.2.4 Encourage Asset Management	18
5.3 Participate in National Workgroups	18
6 Review Existing Systems Program Implementation and Address Findings.....	18
7 Modify Existing Systems Program Strategy.....	19
8 Summary.....	19
Appendix A: List of New Systems.....	A-1
Appendix B: Outline of a Typical Financial Assessment and Financial Action Plan	B-1

List of Acronyms

ACO	Administrative Consent Orders
AEC	Annual Education Conference
Act 399	Safe Drinking Water Act, 1976 PA 399, as amended
AWWA	American Water Works Association
CCR	Consumer Confidence Report
CDP	Capacity Development Program
CWS	Community Water System
DACO	District-Initiated ACO
DDBPR	Disinfectants and Disinfection Byproducts Rule
DWRF	Drinking Water Revolving Fund
eDWR	Electronic Drinking Water Reporting
ERG	Expense Reimbursement Grant
ERP	Emergency Response Plan
ETT	Enforcement Tracking Tool
FAP	Financial Action Plan
FY	Fiscal Year
GWR	Ground Water Rule
LHD	Local Health Department
MCL	Maximum Contaminant Level
MDEQ	Michigan Department Environmental Quality
MEHA	Michigan Environmental Health Association
MGMT	Michigan Groundwater Management Tool
MOR	Monthly Operation Reports
NCWS	Noncommunity Water Systems
NTNCWS	Nontransient Noncommunity Water Systems
ODWMA	Office of Drinking Water and Municipal Assistance
OTCU	Operator Training and Certification Unit
PPB	Parts Per Billion
PWS	Public Water System
PWSID	Public Water System Identification Number
SDWA	Federal Safe Drinking Water Act
SDWIS/State	Safe Drinking Water Information System/State
SWIPP	Surface Water Intake Protection Program
TMF	Technical, Managerial, and Financial
TOC	Total Organic Carbon
TTHM	Total Trihalomethanes
USEPA	United States Environmental Protection Agency
WHPA	Wellhead Protection Area
WHPP	Wellhead Protection Program

1 Introduction

The 1996 Amendments to the federal Safe Drinking Water Act (SDWA) added provisions for each state to develop a Capacity Development Program (CDP). The objective of the CDP is to enhance public health protection by helping water systems to develop and maintain the technical, managerial, and financial (TMF) capacity they need to consistently deliver a safe, reliable, and abundant supply of drinking water to all customers.

The purpose of this document is to demonstrate to the United States Environmental Protection Agency (USEPA) that the state is implementing a capacity development strategy as required in the SDWA, Section 1420(c)(1)(C), or risk losing 20 percent of the annual Drinking Water Revolving Fund (DWRf) allotment that the state is otherwise entitled to receive under the SDWA, Section 1452.

This report corresponds to the criteria set forth in the USEPA memo "Reporting Criteria for Annual State Capacity Development Program Implementation Reports" dated June 1, 2005. The report is due to the USEPA within 90 days of the end of the reporting period. Michigan's reporting period is the state fiscal year (FY) that ends on September 30, so this report is due by December 31 of each year. Elements discussed in this report are:

- New Systems.
 - Identify legal authority.
 - Identify control points.
 - List of new systems.
- Existing Systems.
 - Identify tools and activities.
 - Identify systems.
 - Identify needs and provide assistance.
 - Review implementation and address findings.
 - Modify strategy.

2 New Systems Program

2.1 Identify Legal Authority

The legal authority remained unchanged during the reporting period. The CDP is implemented by the Michigan Department of Environmental Quality (MDEQ), Office of Drinking Water and Municipal Assistance (ODWMA), through amendments to the Safe Drinking Water Act, 1976 PA 399, as amended (Act 399), by application of capacity development policies and guidance documents and through cooperation and partnerships with other agencies.

2.2 *Identify Control Points*

The control points remained unchanged during the reporting period. As outlined in the *New Community Water System Capacity Guideline Document*, dated May 1, 2000, new systems must demonstrate TMF capacity before serving water to the public. The new systems program relies on two control points: construction permits, which are required by law, and final inspection, which is required by policy. Generally, a construction permit is issued based on the technical capacity of the proposed system. For Community Water Systems (CWS), the financial and managerial capacity requirements may still be pending while the system is under construction. Approval to commence operation is not granted until after an acceptable final inspection and approval of a financial plan and operations plan that address financial and managerial capacity. For nontransient noncommunity water systems (NTNCWS), the ODWMA has delegated the authority to the local health departments (LHDs) to review, approve, and issue construction permits. When water systems begin the permit application process, the LHD helps them outline their technical, managerial, and financial capacity. Prior to receiving approval to commence operation, the NTNCWS must submit a technical plan, managerial plan, financial plan, contingency plan, and designate a certified operator.

2.3 *List New Systems*

Lists of CWS and NTNCWS that became active during the last three FYs are in Appendix A. The lists indicate which systems scored 11 or more (indicator of noncompliance) on the Enforcement Tracking Tool (ETT) during the reporting period. New system compliance data is more meaningful when compared to all systems. The following table shows the number and percent of new systems compared to all systems of the same classification.

FY 2010 to FY 2012	CWS		NTNCWS	
	New	New & Existing	New	New & Existing
Number of systems	11	1,393	35	1,336
Number of systems with ETT score of 11 or more	1	21	0	15
Systems with ETT score of 11 or more	9%	1.5%	0%	1.1%

3 Existing Systems Program Tools and Activities Used

The *Capacity Development Strategy for Existing Public Water Systems*, dated August 1, 2000, lists the programs, tools, and/or activities to help systems acquire and maintain capacity. This section describes each of the major program elements, the target audience, and a discussion of how each helps to achieve and enhance capacity.

3.1 *Sanitary Surveys to Evaluate Systems*

Target: CWS and Noncommunity Water Systems (NCWS)

Capacity of existing systems is assessed through sanitary surveys, on-site surveillance visits, and through the construction permit process.

For NCWS, sanitary surveys are conducted every 5 years. Construction permits and inspections are required when new wells are installed or treatment is added. While change in classification from transient to NTNCWS results in a capacity assessment of the existing system, these systems are not included in the list of new systems in Appendix A.

For CWS, sanitary surveys are conducted every third year by ODWMA field staff. This frequency coincides with the requirements of the series of Surface Water Treatment Rules and the Ground Water Rule (GWR). Sanitary surveys result in systems being rated satisfactory, marginal, or deficient. Ratings are based on compliance with health-based standards, monitoring and reporting requirements, qualified operator requirements, and requirements in Act 399 or TMF sufficiency, such as well construction, general plans, emergency response plans, or financial requirements for privately-owned systems. The ODWMA staff detail their findings and recommendations in a letter to the system. These letters may include a list of milestones with dates, by which the items are expected to be addressed. Options for capacity assistance may also be offered, such as recommending a financial assessment or contacting available technical assistance providers for specific assistance. These evaluation letters help systems understand the severity of the deficiencies and prioritize response activities.

The following table summarizes data on CWS sanitary surveys, visits, and construction permits in recent years.

CWS Evaluations, Visits, and Construction Permits			
	FY 2010	FY 2011	FY 2012
Number of Sanitary Surveys Conducted	419	519	419
Percent Rated Satisfactory	80	85	80
Percent Rated Marginal	11	9	10
Percent Rated Deficient	6	6	5
Percent Not Rated	3	0	5
Number of Visits	1,593	1,785	1,716
Number of Construction Permits Issued	759	717	731
Number of Watermain Permits	590	612	597
Average Number of Days to issue simple Water Main Permits*	Not Available	13	11

* We strive to issue simple water main permits within two weeks

The frequency of surveillance visits above are as follows:

Type of CWS	Smaller/Less Complex	Larger/More Complex
Wholesale customer supplies	Once per year	Once per year
CWS with no treatment*	Once per year	Once per year
CWS with treatment*	Twice per year for systems employing treatment other than "complete treatment"	Four times per year for systems employing "complete treatment"

*Treatment employed for public health protection. Excludes water softeners or other point of entry aesthetic treatment.

In addition to scheduled surveillance visits and sanitary surveys, field staff visits water systems to investigate problems discovered as a result of routine monitoring or arise as a result of emergencies. If water system issues need to be elevated to local officials, the community leadership may include field staff on the agenda of council or board meetings.

3.2 *One-on-One Technical Assistance and Consultation*

Target: CWS and NCWS

The ODWMA and LHD field staff are the primary implementers of the CDP. Water system operators develop a relationship with field staff that are the primary contact for capacity development. Each CWS is served by ODWMA staff from 1 of the 8 district offices, and each NCWS is served by staff from 1 of the 44 LHDs under contract with the ODWMA. A primary objective of the ODWMA field staff and the LHD is to provide excellent customer service from the construction permit process for new infrastructure through the continual assessment and oversight process during operation. Field staff achieves that objective through assistance to systems during site visits, at meetings and conferences, during training events, and consultation by telephone and e-mail. Field staff attends, participates, and presents at periodic regional operator meetings to discuss upcoming regulations, regional issues, and to network with operators and managers.

The NCWS program staff of the ODWMA maintains communication with each of the 44 LHDs during the year. This communication occurs routinely via phone calls, e-mail, joint office and field work, and group and individual training. Also quarterly data reviews and annual evaluations of each of the 44 LHD's work are conducted to assure and maintain water system compliance. Training of LHD staff is conducted to inform, explain, and discuss new and updated program issues and procedures. This training occurs in many ways including formal educational events and during the program evaluation process. New in FY12 has been the implementation of bimonthly webinars on upcoming issues within the public water system (PWS) program for LHD NCWS staff. The MDEQ held five Regional Seminars throughout the State in FY 12, with a full day of information for the 90 LHD staff in attendance. This year's agenda included time for individual LHD staff to present a case study about their experience providing assistance to a particular NCWS in their area.

To increase reliability, gain efficiencies, and improve water quality, field staff serves as consultants to encourage regionalization, foster consolidation, and create partnerships among water systems. For example:

- The City of Leslie has started construction of a new Iron removal plant to replace its existing 38 year old plant. The existing plant is in very poor condition especially the aeration system and detention tank. Temporary emergency repair was performed to cover holes that had developed in the air intake of the aeration system. Also, part of the plant's roof structure was in poor condition. These existing conditions pose as a threat to the water quality and public health and also make the water system not reliable. The City was able to obtain DWRF funding and expect to have the new plant on-line by spring of 2013.
- The village of Sand Lake had Total Trihalomethanes (TTHM) levels at one location up to 98 parts per billion (ppb), although never exceeding the running annual average. District staff visited to consult with the system operator and offered a strategy to reduce the chlorine dosage and implement a regular flushing program. As a result, TTHM levels in 2012 never exceeded 11 ppb and there was a significant improvement in water quality.

- The cities of St. Louis and Alma formed the Gratiot County Water Authority to create a regional water system. The city of St. Louis detected p-Chlorobenzenesulfonic acid in 2004. The source of the contamination is from a Superfund site within the city of St. Louis. Both cities are working with the engineering firm to complete the connection of the water systems by the end of 2014. The project will include new wells, modifications to the Alma Water Treatment Plant, hydraulic modeling, several miles of water main, and additional storage. These improvements will help protect public health, increase reliability for both cities, and help ensure a safe and reliable supply of drinking water is provided to the city of St. Louis customers. Multiple government agencies are involved with this project including USEPA Superfund, MDEQ Remediation and Redevelopment Division, Superfund, MDEQ ODWMA, city of Alma, and city of St. Louis. Funding for this project was through a settlement with the company who owns the Superfund site and USEPA.

Countless other instances of one-on-one technical assistance help water systems gain TMF capacity.

3.3 *Other PWS Program Efforts*

The ODWMA submitted a proposal to the USEPA, Region 5, to modify Stage 2 monitoring in combined distribution systems to achieve the public health protection intended by the rule while minimizing the monitoring costs for the water systems. The USEPA Regional Administrator approved MDEQ's modified consecutive approach to stage 2 monitoring in consideration of Rule 733 (325.10733) of Act 399.

Staff of the ODWMA conducted training sessions in three locations with the greatest numbers of consecutive systems. Instructors review Stage 2 Disinfectants and Disinfection Byproducts Rule (DDBPR) requirements and helped water systems to update their monitoring plan. During the year, the ODWMA central staff drafted a monitoring plan template to consolidate all DDBPR monitoring for each supply. For many consecutive systems, Stage 2 monitoring will be the first monitoring the systems have had to conduct. These training sessions were beneficial to remind water systems to conduct this monitoring and the newly developed monitoring plan detailed specific information to help them conduct proper sampling.

Other tools to help systems comply with monitoring and reporting requirements include:

- Individual monitoring schedules for each CWS and NCWS. These schedules are based on each system's applicable monitoring waivers and schedule in the standard monitoring framework. To supplement the schedule, staff may enclose or provide an Internet link to the following, depending on that year's monitoring requirements:
 - Lead and Copper Report and Consumer Notice of Lead Result Certificate. This form provides a fill-in-the-blank version of the consumer notice for the convenience of systems with limited computer ability.
 - Drinking Water Lead & Copper Sampling Instructions. The system may provide this document to the occupants that will be performing the sampling.
 - Bacteriological Sample Siting Plan. This form incorporates GWR triggered monitoring requirements.

- List of approved laboratories.
- Annual Pumpage/Usage Report For Community Water Supply (applicable to CWS that do not submit Monthly Operation Reports [MOR] with monthly pumpage).
- Cross Connection Report. Systems use this form to demonstrate ongoing implementation of their Cross Connection Control Program.
- Consumer Confidence Report (CCR) Certificate of Distribution.

Venues to communicate monitoring and reporting requirements include:

- Reminder phone calls, e-mails, or post cards.
- Reminder letters. Systems that have not yet completed their annual or less frequent monitoring receive a reminder within 30 to 90 days before the deadline to prevent a violation.
- Lead and copper reminder letters. Lead and copper monitoring is so confusing that this reminder letter also serves as monitoring guidance.
- Lead and Copper 90th percentile letter or action level exceedance letter. These letters outline the results of the system's monitoring and remind systems of further requirements, such as distributing the Consumer Notice of Lead Result, for conducting water quality monitoring or installing corrosion control treatment.
- CCR reminder letter. Each spring, ODWMA field staff reminds systems of the annual requirement and provides the following tools to comply. A variety of templates are made available including the Internet link to the USEPA *CCRwriter*, as well as the guidance documents *Preparing Your CCR* and *Reporting TOC on the CCR*, as applicable.
- The LHDs inform the NTNCWS of the administrative rule requirement to prepare a water quality report that contains a summary of compliance monitoring data for NTNCWS that serve K-12 schools and day care centers.
- Violation letters, discussed in Section 3.4 below, include requirements to post public notice, when applicable. Templates for typical monitoring and reporting violations, and many state drinking water violations, are available to field staff. Staff either provides the template for the system to edit and place on its own letterhead, or staff may prepare the final public notice for the system to distribute.

Tools to help systems manage the operational requirements include:

- MOR templates. Staff reviews each MOR to assure compliance with treatment techniques and to evaluate treatment processes for optimal operating practices.
- Enhanced planning documents: As former contingency plans become outdated, staff are helping CWS to transition to the Emergency Response Plan (ERP) using a template. (See Section 5.2.1)

- Privately-owned CWS Stipulation to Conditions. While it is clear in the administrative rules that new systems must demonstrate technical, managerial, and financial capacity before commencing operation, the 2009 amendments to Act 399 clarified that these requirements also apply to new owners of existing systems. The Stipulation to Conditions that owners must sign covers the minimum elements to ensure owners are able to provide an adequate supply of drinking water.
- Water well site inspections and approvals. The LHD and ODWMA field staff conduct inspections and approvals of water wells serving the NCWS and CWS, respectively.
- Guidance documents: The ODWMA staff develops and distributes guidance documents as needed:
 - *Water Well Disinfection Manual*.
 - *Suggested Practices* outlines design, construction, and operation criteria for CWSs.
 - The *Cross Connection Rules Manual* outlines program requirements.
 - *New Community Water System Capacity Guideline Document* developed in 2000 guides field staff and owners of proposed or new systems through the process. It includes a capacity assessment checklist, a financial workbook, policies related to new systems, and templates and forms for planning purposes.
 - Source water protection guidance documents
 - NCWS program guidance documents include the *Noncommunity Staff Reference Manual*, the *WaterTrack Operators Manual* for LHD staff, and the study guide *Level 5 Drinking Water Operators Guide* for those individuals pursuing certification to operate a NCWS.
- USEPA tools. In addition to state-developed products, the field staff distributes, as needed, USEPA tools and guidance documents, promotes the Check Up Program for Small Systems and other system capacity development and sustainability tools, and promotes USEPA Webinars.

Field staff hosts and presents material at meetings, conferences, and training sessions throughout the year for water system personnel, consulting engineers, and local decision makers. Ongoing activities include serving as instructors at several operator training courses throughout the year, speaking at other meetings and conferences related to drinking water, and attending USEPA sponsored Web casts. Specific activities in FY 2012 include:

- The ODWMA field staff presented the *MDEQ Update* at each of eight Michigan Section, American Water Works Association (AWWA), regional meetings updating participants on new rule implementation. New rules updates and training was also presented at ODWMA drinking water program meetings, usually held quarterly.
- The MDEQ cosponsors a quarterly newsletter, *Water Works News*, with the Michigan Section, AWWA. The newsletter is distributed to members and all CWS, including approximately 700 privately-owned CWS that might not otherwise receive drinking

water-related information. The MDEQ share of the distribution cost is funded by the capacity development set-aside of the DWRP through a Joint Funding Agreement with the Michigan Section, AWWA.

- The NCWS program staff occasionally participates in association conferences relevant to NCWS systems, such as the Michigan Manufactured Housing Recreational Vehicle & Campground Association, the Michigan School Business Officials, the Michigan Ground Water Association, and the annual Groundwater Conference sponsored by the Michigan Environmental Health Association (MEHA).
- The ODWMA program staff worked with the Michigan Department of Community Health, Oral Health Program, to implement a Fluoride Grant Program to promote public water system fluoridation by offering grants to water systems wishing to purchase new or replacement fluoride feed equipment. Fifteen water systems were awarded grants in FY 2012.
- To continue to offer quality training to ODWMA staff and water systems, the ODWMA takes advantage of USEPA and AWWA Webinars. Certified operators can meet continuing education requirements with USEPA or AWWA sponsored Web casts. The ODWMA promotes Webinars and encourages field staff to forward information to water systems so they can participate at their site. The ODWMA will continue to take advantage of other opportunities to interact with water systems and their consulting engineers, municipal leaders, and others interested in drinking water issues.

3.4 *Enforcement*

Target: CWS and NCWS

Evaluations and compliance information become the basis for enforcement.

When a system violates a requirement, they should receive a letter that clearly states what was violated, when the violation occurred, how to return to compliance, and when to respond. It is believed that enforcement will be viewed as more predictable; therefore, systems will make a greater effort to comply to avoid enforcement.

When systems fail to return to compliance, escalated enforcement, including administrative consent orders (ACOs) and unilateral department orders (MDEQ order), can be initiated. Before escalated enforcement is used, many systems return to compliance when they are assessed administrative fines for monitoring and reporting requirements. Water systems generally return to and remain in compliance with monitoring and reporting requirements after receiving a fine. During FY 2010 to 2012, 41 different CWS received a fine at least one time for at least one monitoring violation. Small systems represent all but two of the systems that received fines, which is expected as large systems typically have the resources and systems in place to ensure monitoring is timely and performed correctly.

When a fine is not applicable or does not prevent further violations, the ODWMA moves into an escalating series of enforcement actions that include a district-initiated ACO (DACO), traditional ACO, and in rare cases, an MDEQ Order. However, field staff prefers technical assistance over enforcement to bring systems back into compliance. There were no ACOs entered, but there was one MDEQ Order issued during 2012. There were six DACO's entered in 2012.

To streamline enforcement, the DACO may be used under certain circumstances instead of the traditional ACO. This process bypasses enforcement staff involvement; the ODWMA field staff drafts the DACO using templates and calculates penalties based on enforcement staff guidance. In March 2012, Country Meadows Mobile Home Park entered into a DACO with the ODWMA, as they did not have the minimum number of water wells with separate pumping units to meet reliability requirements under Act 399. After stipulated penalties, the owner properly abandoned the defective well and drilled a new one to meet the firm capacity requirements.

Some water systems are not willing to enter into a DACO or an ACO. In those cases, the ODWMA must escalate the enforcement level to an MDEQ Order. The city of Highland Park water treatment plant had several deficiencies and several attempts were made to enter an ACO. After several unsuccessful attempts to enter an ACO, this case was referred to the Department of Attorney General and a Department Order was issued. While some compliance dates have passed, the city is negotiating with the Detroit Water and Sewer Department to purchase water on a permanent basis.

Each LHD is required to conduct enforcement necessary to address NCWS in noncompliance. The ODWMA field staff assists the LHD upon request, and in extreme cases, the ODWMA central staff may take the enforcement lead or refer it to the USEPA, Region 5, when state resources are unavailable. Typical tools used by the LHD include administrative fines, informal hearing, local license suspension procedures, and bilateral compliance agreements (similar to the DACO for CWS).

3.5 *Operator Training and Certification*

Target: CWS and NCWS

Due to amendments to Act 399, a properly certified operator must be available at each of the 1,406 CWS and 1,371 NTNCWS, and at the 66 transient NCWS that employ treatment for public health purposes. Operators maintain their certification by meeting continuing education requirements through training offered in a variety of venues.

3.5.1 Operator Training and Certification Unit (OTCU)

The ODWMA, OTCU, provides over 30 training courses each year and certifies nearly 80 organizations and training providers that offer other opportunities for continuing education, including online courses. The OTCU has also approved a list of hands-on training or “HOT” programs that can provide operators with at least 50 percent practical experience in a three-or-more-hour training session.

The OTCU also administers the Expense Reimbursement Grant (ERG) Program for operators employed by systems serving fewer than 3,300 people, to cover approved training registration fees up to \$300 per individual. For more information, see the *2012 Operator Certification and ERG Annual Report*, submitted to the USEPA.

Many of the training courses coordinated by the OTCU are taught by ODWMA field staff under a Joint Funding Agreement between the MDEQ and the Michigan Section, AWWA. The ODWMA treatment specialist schedules instructors and also instructs both the Basic and Advanced Cross Connection Control seminars and the Water Treatment and Distribution System 2.5-day Short Courses.

During on-site visits or other consultation opportunities, field staff discusses the certification status of the operator and may suggest training sessions to hone skills or prepare for the examination required to obtain or to upgrade certification.

3.5.2 Small CWS and NCWS Training

Under contract with the ODWMA, 12 LHDs provide continuing education for the level 5 operators. The intent is to provide regional training for NCWS, but any operator employed by a CWS with no treatment and a limited distribution system may attend. In FY 2012, 365 operators earned continuing education credits and 114 attended to prepare to write their level 5 exam.

Staff of the NCWS Program conducted train-the-trainer sessions for LHD staff. Topics range from current requirements and practices to discussions of new requirements and regulations. Surveillance visits and sanitary surveys are additional opportunities for the LHD staff to provide training for NCWS operators.

For the past several years, ODWMA staff has conducted training specifically for small CWS. General topics covered the SDWA, small system maintenance, bottled water, and operational issues. Special topics change each year to keep the participants interested. The special topic in the 2012 training was “Water Accounting – Audits and Leak Detection.” A total of 132 persons attended at one of five locations around the state.

3.6 DWRF

Target: CWS and Nonprofit NCWS

The 1996 Amendments to the SDWA authorized the creation of a revolving fund to provide low-interest loans for repairs or enhancements to help water systems comply with the SDWA. The capacity development provisions of the SDWA are funded through the DWRF allotment.

Michigan's DWRF is coadministered by the MDEQ and the Michigan Finance Authority. The MDEQ handles all programmatic issues, while the Finance Authority serves the DWRF Program with its financial expertise. Prior to the creation of the DWRF, project financing for CWS was left largely to the local unit of government or to individuals investing in their own systems.

In FY 2012, \$27 million in low-interest loans was committed for 15 projects bringing the total since the fund's inception in 1998 to \$719 million for 245 projects. Some systems receive commitments from the DWRF but may not be ready to proceed with the project until they are able to assure the revenues will be generated to repay the loan. In these cases, the system remains on the priority list for the next year. Of the projects committed, 208 have been completed for a total cost of \$562 million, and the loan payments are revolving back into the fund.

Commitments in FY 2012 include projects to increase systems' capacity to reliably provide an adequate supply of water. Many of the projects involve replacing aging distribution infrastructure. The city of Grand Rapids project consisted of the installation of a new 1.5 million gallon storage tank and approximately 1700 feet of 16-inch water main totaling nearly 3.5 million dollars. The city of Leslie is constructing a new 1.6 MGD iron removal water treatment plant, constructing a well house over well #3, installing water meters at individual customer locations, and initiating a new billing program.

Michigan's drinking water program relies heavily on proper water system design and construction to prevent jeopardizing the safety of both the source and finished water. To that end, priority of DWRP projects favors those communities that are participating in a Source Water Protection Program.

3.7 *Source Water Protection*

Systems are continuing to take steps to protect their drinking water sources.

3.7.1 Groundwater Source Protection

Target: Municipal CWS and Not-for-Profit NCWS

Minimum isolation areas around drinking water wells are established in Part 127, of the Public Health Code, Water Supply and Sewer Systems, 1978 PA 368, as amended, and in Act 399. Programs in the MDEQ, such as the Groundwater Discharge Permit Program and the On-Site Waste Water Program, reference these isolation distances as they review applications for discharge permits or site approvals to assure the facility or activity will be protective of the drinking water source. Act 399 requires the isolation area around a proposed water well site be owned or controlled by the CWS.

To expand beyond this long-standing but minimal concept of source water protection, ODWMA staff are actively encouraging municipalities to conduct Wellhead Protection Program (WHPP) activities. Municipalities are encouraged to apply for a WHPP grant using a 50 percent local match to fund activities involved in protecting their public water supply well capture zones (based on a ten-year time-of-travel). Of the 438 municipal systems in Michigan using groundwater as a source of drinking water, 353 are involved in some aspect of wellhead protection, such as performing a delineation, inventorying the potential sources of contamination, and planning for emergencies. Of those 353 systems, 242 have completed all the steps and have an approved WHPP. As a result, 79.4 percent of the population of the state served by municipal systems using groundwater is in communities taking action to protect their groundwater sources or purchase water from communities involved in protecting their sources. The WHPP grants for FY 2012 awarded \$311,800 to 37 communities as compared to the WHPP grant cycle for FY 2011 that awarded \$297,600 to 27 communities.

The MDEQ, Field Operations Section, through a contract with Michigan State University's Department of Civil and Environmental Engineering, developed the Michigan Groundwater Management Tool (MGMT), formally known as Michigan Interactive Groundwater for Wellhead Protection. The MGMT can scientifically map wellhead protection areas for public water supply wells using information from existing statewide databases such as Wellogis, Map Image Viewer, and the Groundwater Inventory Mapping project. The Wellhead Protection Area (WHPA) is the surface and subsurface area contributing groundwater to the well. Michigan's WHPP defines the WHPA with a 10-year time-of-travel. This provides a reasonable length of time to respond to environmental problems within the WHPA while providing an area that can be reasonably managed. The MGMT has developed surprisingly accurate predictions of spatially-detailed and representative groundwater flow patterns and WHPAs. Most of these MGMT delineations closely parallel traditionally developed WHPA's, which cost an average \$36,000.

To promote the benefit of MGMT, the MDEQ and Michigan State University recently hosted two one-day training sessions for CWS, NTNCWS, LHD, and MDEQ staff. Water supply

representatives in attendance were given their water system water well and pump records, source water assessment information, and WHPA maps. Further information was provided specific to their water supply and how groundwater quality can be protected. The ODWMA, Field Operations Section, is in the process of redefining “Substantial Implementation,” allowing smaller systems to obtain this source water protection status, while increasing Michigan’s population that is protected by these implemented activities. In FY 2012, two training sessions were held in Greenville and Traverse City. These outreach trainings provided owners/operators with provisional delineations, well records, source water assessment/checklists, and continuing education credits. MGMT trainings have been attended by 230 operators/owners and 352 provisional delineations have been completed to date. The provisional delineations along with an assessment guide helped them to assess the risk to their source water and prepare an action plan to help reduce risks.

3.7.2 Water Withdrawal Legislation

Target: CWS, NCWS, and Other Interested Parties

The Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, was amended in 2006 and further amended in 2008 in response to increased water use demands, pressure to divert water outside the Great Lakes Basin, and an increase in groundwater use conflicts. The legislative amendments were intended to enhance the state’s ability to manage the water resources of Michigan.

Since 2006, any proposed new or increased large quantity withdrawal, defined as a water withdrawal of 70 gallons per minute or more, requires an environmental assessment and approval prior to making use of the water resource. The new system capacity assessment checklist was amended to address large quantity water withdrawals and ensure authorization is obtained prior to ODWMA district staff issuing a permit.

3.7.3 Surface Water Source Protection

Target: CWS and NCWS Using Surface Water

The Surface Water Intake Protection Program (SWIPP) is the surface water counterpart to the WHPP. Under this program, communities develop partnerships with surrounding communities to identify and take action to protect the area around the intake. The seven communities that have completed an SWIPP serve small- to medium-sized populations. No SWIPP’s were submitted in FY 2012. Like an approved WHPP, an approved SWIPP will result in additional priority points being awarded to DWRf applicants, encouraging more CWS to develop one. A matching grant program, equivalent to that used in the WHPP, was incorporated into the administrative rules in 2009. Budget cuts have prevented the MDEQ from awarding SWIPP grants to date.

Monitoring can alert utility personnel of changes in water quality in time to respond quickly. To achieve this in the connecting channels between Lakes Huron and Erie, the ODWMA worked with federal and local governmental agencies to install a continuous, real-time water quality monitoring network in the St. Clair River, Lake St. Clair, and Detroit River. In FY 2012 ten of the original thirteen drinking water treatment facilities continue to be equipped with a range of analytical devices. The monitoring system includes data transmission, data visualization, automated notification/alarm service, data archiving, and a publicly accessible Web site for data

retrieval. In addition, rapid toxicity test equipment is being used to monitor water distribution systems in Southeast Michigan served by these surface water intakes. Nearly instantaneous communication is key to protecting surface water intakes in the Lake Huron to Lake Erie corridor because of the rapid rate of flow, periodic chemical spills, and corresponding changes in water quality.

3.8 *Financial Assessments*

Target: CWSs Serving Fewer Than 10,000 People That are Either Municipally Owned or Subject to Association Bylaws

To help existing CWS improve financial capacity, the ODWMA conducts financial assessments of systems that serve a population of less than 10,000 and could benefit from a financial assessment. As a result, systems that are concerned about future challenges, such as complying with new rules, are making progress toward that end by improving their financial capacity. Funding for these assessments is from the technical assistance to small systems set-aside of the DWRP. Systems serving more than 10,000 people may also participate in the program, but the funding would be drawn from the capacity development set-aside.

A financial expert in the DWRP Program conducts the assessment of the community's existing financial health and develops a Financial Action Plan (FAP). The assessment is a review of financial and legal documents and an on-site meeting with system representatives.

An FAP is a tailor-made, comprehensive plan to strengthen the system's financial situation based on the assessment. Short- and long-range goals are identified in the FAP followed by a step-by-step process to reach the goals. Information on obtaining funding is provided with the FAP. The system is expected to carry out the FAP, and the ODWMA is available to assist when requested. An outline of a typical assessment report is included in Appendix B.

In FY 2012, only follow-up financial assessments were completed. These follow-ups were done to work with communities to see how they are implementing their financial action plans as recommended in the original assessment. Four communities were visited to include Au Gres, Pinckney, Pigeon, and Maple Ridge Township.

3.9 *Security*

Target: CWS and NCWS

The MDEQ Water Security and Emergency Management Program is responsive to the various federal programs and the needs of the public water systems. Planning, training, and coordinating are all a part of the effort to emphasize emergency management for all hazards; terrorism and malevolent acts, as well as weather-related incidents and accidents.

All-day training was held for the members of the Michigan Section, AWWA, at the *8th Annual Water Security Summit: Water System Resiliency*. Topics included: 2010 Nashville flood, flood regulations, New Madrid earthquake, real time water quality monitoring at Ann Arbor, local emergency planning coordination, Joplin, Missouri 2011 tornado, cyber security, the Michigan Freedom of Information Act, control system security, and the Michigan Army National Guard 51st Civil Support Team.

The USEPA eliminated the Water Sector Security funding as of FY 2010. However, the USEPA Counterterrorism grant was extended until December 31, 2013. It is planned that a contractor will be engaged to perform tabletop exercises during FY 2013 in order to expend the remaining grant balance.

Field staff will continue to be involved in safety and security enhancements through the construction permit process and the operation of new systems.

3.10 Electronic Reporting and Data Management

Target: CWS and NCWS

Electronic reporting and data management are tools to help the central office identify and analyze statewide trends in contaminant levels, treatment, and distribution operations, and compliance. This ability will allow the ODWMA to focus assistance more effectively.

3.10.1 Electronic Drinking Water Reporting (eDWR)

Target: CWS Primarily, Though Elements Designed for Laboratories That Also Serve NCWS

The ODWMA is working to develop electronic reporting systems to provide convenience and accuracy for data reporting. The successful implementation of the Internet-based reporting system for discharge monitoring reports prompted Michigan to expand the project to include eDWR. The eDWR System will provide for online submittal of drinking water laboratory results and treatment plant operational data. The collection of data will allow the ODWMA to query certain parameters to assess capacity on a systemwide and statewide basis. Although competing priorities have delayed the launch of this tool, progress is still being made toward implementation. Future plans include providing other required reports online.

3.10.2 Tracking Compliance Using Safe Drinking Water Information System/State (SDWIS/State)

Target: CWS

SDWIS/State, the federally supported database for tracking drinking water compliance activities, stores actual analytical results entered either manually or via eDWR reporting discussed above. This tool allows for more automated compliance determinations, which is particularly necessary when staff resources are stretched. In FY 2005, the CWS Program began tracking Total Coliform Rule compliance monitoring in SDWIS/State, and in FY 2010, this was expanded to include Lead and Copper Rule tracking. In FY 2012, the CWS Program began to enter Stage 2 DDBPR Schedule 1 and Schedule 2 monitoring schedules to track compliance. In addition, Groundwater Rule monitoring has also been tracked in SDWIS/State beginning in FY 2012.

3.10.3 WaterTrack

Target: NCWS

The LHD staff use the WaterTrack database to track NCWS inventories, certified operator information, sanitary survey reports, capacity development, construction permits, monitoring results, monitoring violations, violations of maximum contaminant level (MCL), and NCWS compliance reports. The information is monitored by the MDEQ staff that oversees the NCWS

Program. WaterTrack uses an outdated platform, is largely unsupported, and does not contain capability to track all current rule requirements. The MDEQ actively pursues information on other options, and in the interim, provides alternatives tracking methods when available.

4 Identify Existing Systems in Need

The strategy used to select and prioritize systems for assistance is outlined in the *Capacity Development Strategy for Existing Public Water Systems*, dated August 1, 2000, and remains unchanged. Briefly, the ODWMA looks at all of the following criteria:

- Compliance information.
- Sanitary surveys and results of surveillance visits.
- Construction permit bans and correspondence from the ODWMA addressing potential bans.
- Operation and maintenance concerns.
- Field staff input.

The sanitary surveys and surveillance visits are ongoing, while identifying which systems may need capacity assistance.

5 Identify Capacity Development Needs and Provide Assistance

The MDEQ continues to recognize and identify capacity development needs and provide assistance in these areas identified. A new capacity development need for contingency planning became apparent to the NCWS program staff after the impact of a major winter storm last spring.

The ODWMA believes the six areas identified below continue to be a focus and recognized the needs that exist at the national level while participating in workgroups to tackle them.

5.1 Contingency Planning

The NCWS Program became increasingly concerned with contingency planning at our NCWS after a winter storm packing high winds and heavy snow caused a quarter-million customers to lose electricity statewide on March 3, 2012.

Benzie, Grand Traverse, and Leelanau Counties declared a State of Emergency in the wake of the storm and power was out for a week in some areas. Through regional partnerships with LHD environmental health staff, the MDEQ provided technical assistance to ensure that any noncommunity PWS that lost system pressure followed their contingency plans and procedures to safeguard the water supply. The cooperative partnership resulted in the LHD personally contacting the vulnerable population facilities such as schools and day cares to review whether they lost system pressure, and if so, if precautionary measures were taken. An informative letter to the system owners along with a public notice were also sent out to the noncommunity PWS in the power outage areas.

A training was presented to other LHD's in the northern region to help educate and prepare them for any future weather related emergencies that could affect public drinking water. An article about the event was published in the *Michigan Environmental Health Association Quarterly Journal*.

Due to this firsthand experience, guidelines are being developed for LHD's to continue educating the system owners and operators on preparing for emergency water events through informative mailings and discussion during sanitary surveys. Recommendations are also being made for transient PWS to complete a one page contingency plan document, and, emergency contact magnets and stickers are being developed for systems to apply in their well house or well equipment room.

Several additional activities are ongoing:

- LHD Evaluations:

Stakeholder meetings began in FY 2012 to comment on NCWS evaluations. To date, most of the stakeholder meetings have focused on the permit process for water well construction and initial inspection process. Upcoming, will be discussion on the evaluation to ensure activities to, among other things to address noncompliance issues proactively instead of addressing them potentially several months to a year later.

Internally, within the ODWMA starting in FY 12, NCWS staff having a smaller geographical area to cover, allowing them to be more readily available for consultations with LHD staff; and allow the NCWS staff to provide more time in the field working directly with LHD staff conducting sanitary surveys, resolving violations, issuing construction permits, overseeing difficult treatment systems, and focusing on those facilities that are in routine noncompliance with both monitoring and MCL violations. Additionally, increased emphasis is being placed on sound water well construction principles, the foundation of drinking water public health protection.

- Training of LHD staff:

The MDEQ, in conjunction with the MEHA, provided LHD training this past year by participating as speakers at a Regional MEHA Seminar and the MEHA Annual Educational Conference (AEC). The MDEQ also continues to provide an annual hands-on training activity at the AEC by providing a show and tell of various water well components, both approved and unapproved. This is in addition to the training mentioned in Section 3.2.

Staff of the MDEQ also continues to present at the Michigan Ground Water Association's annual conference that is attended by LHD personnel. The MDEQ's water well camera continues to be used at several Type II water well investigations to investigate turbidity and chronic coliform bacteria problems. This type of in-the-field outreach will continue, along with additional training in troubleshooting chronic coliform bacteria issues.

5.2 *Follow Up on Needs Identified*

Areas identified are continuing to be addressed.

5.2.1 Implement New Federal Rules

The ODWMA program and field staff has continued to host and participate in training on new rules. As mentioned earlier, new rule information was presented at each of the eight Michigan Section, AWWA regional meetings, at quarterly field staff meetings, and during LHD visits by NCWS staff. Staff of the ODWMA has finalized the Stage 2 DDBPR monitoring plan template to make it shorter and more concise. Additionally, three training sessions have been held to help CWS comply with Stage 2 DDBPR requirements and assist in completing their monitoring plans prior to beginning Stage 2 monitoring. Reminders of new rule changes are included in correspondence with water systems whenever possible.

Staff of the ODWMA will continue training in FY 2013 targeting small system and NTNCWS certified operators. Training programs will include modules developed by the MDEQ, also being used by LHDs, and they will develop new training modules to keep certified operators updated with regulatory compliance, roles, responsibilities, and latest trends and technology in operating, maintaining, and managing public water supplies.

5.2.2 Capture Sanitary Survey Data

Detailed sanitary survey data is captured on individual Excel spreadsheets for every groundwater and surface water CWS. To create a tool to enhance decision making, the ODWMA program staff is continuing to investigate options to capture that data in a queryable format.

Currently, ODWMA staff track basic survey data, specifically survey date, rating of the eight required elements, and significant deficiency tracking in a central database. The ODWMA has begun to transfer this basic survey tracking and all surveys conducted in FY 2013 will have information entered into SDWIS/State.

5.2.3 Implement Newly Revised Nonfederal Provisions of the Administrative Rules

The ODWMA is continuing to implement nonfederal provisions of the administrative rules that were revised along with the adoption of the new federal rules in 2009. The purposes of these revisions, which were discussed more fully in the 2010 report, are listed below:

- Improve capacity in very small systems.
- Provide oversight to NCWS that treat to improve aesthetics.
- Diversify the type of operator training received and update operator certification rules.
- Enhance planning by expanding the requirements of the general plan, reliability study, and contingency plan.
- Provide a source water protection grant program for surface water systems.
- Enhance technical capacity.

The operator training effort included the development of an operator certification program fee package to supplement funding for the OTCU in order to continue offering certification exams, renewals, and Advisory Board training as in the past. On September 20, 2011, Governor Rick

Snyder signed House Bills 447 and 448 into law. These bills contain the specific details of the program fee package and the collection of fees for the services offered by the OTCU.

5.2.4 Encourage Asset Management

As the infrastructure funding gap continues, field staff is stressing asset management concepts during interactions with CWS and their local decision makers. Good water system operation and management cannot be mandated, though the ODWMA hopes the enhanced planning provisions of the recently amended administrative rules will foster better water system management. For example, rules now require a detailed inventory of assets and capital improvement plans for publicly owned systems beginning in 2016. Several staff attended many USEPA hosted Webinars to better understand ways to promote asset management, water efficiency and conservation, in their systems. In addition, ODWMA staff participated in a national asset management workgroup to identify what states are doing in asset management and encourage water system owners to implement asset management practices.

5.3 *Participate in National Workgroups*

Program staff in the ODWMA is involved in national workgroups with other states, USEPA headquarters and regional offices, the Association of State Drinking Water Administrators, and others to improve implementation or affect change to federal regulations and national policy. An NCWS Program representative has provided ongoing input to those working to revise the Total Coliform Rule. An engineer in the NCWS program is participating in a small systems workgroup as it applies to treatment technologies. A NCWS program manager is currently involved in an NCWS USEPA workgroup to enhance capacity development in small systems. An ODWMA manager will be serving as a board member of the Association of State Drinking Water Administrators, participating in a National Drinking Water Infrastructure Needs Survey workgroup and with a perchlorate workgroup consisting of USEPA and state representatives assessing the need for a drinking water standard. Staff of the ODWMA is participating in a national asset management workgroup to identify what states are doing in asset management and encourage water system owners to implement asset management practices. Participating in national efforts to improve implementation of the drinking water program will assist in improving overall capacity.

6 Review Existing Systems Program Implementation and Address Findings

Sanitary surveys are the primary tool to evaluate capacity and identify needs for specific systems. A long-standing MDEQ policy dictates sanitary survey frequencies for all types of CWS and NCWS. Follow-up on deficiencies in any system has been a long-standing practice and is required of the LHD under contract with the MDEQ. As stated in last year's edition of this report, the ODWMA was driven by the federal GWR and the requirement to identify and pursue resolution of significant deficiencies to draft two policies. The first policy sets frequencies for sanitary surveys and the second sets criteria to identify significant deficiencies and establishes procedures to resolve them. Both policies became effective in January 2010. There have been six significant deficiencies identified in FY 2012. All CWS have met their deadlines or escalated enforcement is in place with an acceptable compliance to resolve the deficiencies.

Between sanitary surveys, ODWMA field staff makes routine on-site visits to review the technical, managerial, and sometimes financial aspects of a CWS and to establish channels of communication with the CWS. The knowledge and familiarity gained by both parties as a result

of routine visits are keys to maintaining a cooperative relationship in achieving mutual goals. The frequency of these visits has been dictated in policy based on long-standing practice.

Requests for financial assessments continued to remain sluggish this year. Rather than attempt to increase the number of financial assessments, the ODWMA has begun to follow up with previously assessed water systems informally during routine on-site visits by field staff and more formally by the financial expert that conducted the original assessment. Four communities have been revisited to follow up on how they have implemented their financial action plans.

7 Modify Existing Systems Program Strategy

The strategy remained unchanged during the reporting period. The MDEQ is continuing to implement the original strategy of moving from capacity assessment through assistance to development.

8 Summary

Michigan is continuing to implement a program for new systems and a strategy for existing systems as set forth in May and August 2000, respectively. The new systems' program retains the legal authority and the control points established in 2000. A list of new systems in the last three years is included in this report. Only one new system has appeared on the FY 2010-FY 2012 ETT.

The strategy for existing systems established in 2000 has remained the same though the specific tools and activities used to implement the strategy have been added, removed, or altered as needed. The drinking water program continually identifies systems in need of capacity development primarily through the sanitary survey process. During the reporting period, needs were identified and discussions were held to determine what areas could be enhanced. A review of implementation of various activities of the strategy occurred and changes were made. The strategy was not modified.

Appendix A: List of New Systems

**New CWS
FY 2010 through FY 2012**

PWSID ¹	CWS Name	FY Active in SDWIS/State ²	Date Active CWS	ETT ³
MI0000490	BAY VIEW ASSOCIATION	2012	04/02/12	
MI0003661	KIRTLAND COMMUNITY COLLEGE	2012	11/14/11	
MI0003694	LAKE ANGELA CONDO APTS #4	2012	10/01/11	
MI0007064	WHITE LAKE ASSISTED LIVING CENTER	2012	08/23/12	
MI0000088	ALBEE TOWNSHIP	2011	04/11/11	
MI0040416	SUNSET ESTATES GAYLORD	2011	11/01/10	
MI0000322	AUSTIN COMMONS II	2010	12/21/09	
MI0001258	CEDAR CREEK TOWNSHIP	2010	11/06/09	
MI0004778	NORTH MOORE ESTATES	2010	09/20/10	Yes
MI0006693	TULLYMORE CLUBHOUSE AND CAMELOT VILLAGE	2010	07/01/10	
MI0061700	CURRY HOUSE	2010	08/02/10	

¹ Public Water System Identification Number

² Safe Drinking Water Information System/State

³ CWS indicated by "Yes" are on the FY 2010 to FY 2012 ETT lists with a score of 11 or higher.

FY	New CWS	ETT
2012	4	0
2011	2	0
2010	5	1
Total	11	1

**New NTCWS
FY 2010 through FY 2012**

PWSID ¹	NTCWS Name	FY Active in WaterTrack ²	Date Active NTCWS	ETT ³
MI0820408	DAR HASTINGS	2012	04/19/12	
MI1620460	FERNELIUS AUTO	2012	12/12/11	
MI1620462	RIVER'S EDGE COMMUNITY ASSOCIATION	2012	06/26/12	
MI1820290	FARWELL ALTERNATIVE EDUCATION	2012	02/16/12	
MI2420384	CONCORD CONDOMINIUMS	2012	04/06/12	
MI3920490	VDS FARMS, LLC SCOTTS	2012	09/26/12	
MI3920491	VDS FARMS, LLC FULTON	2012	06/29/12	
MI4120973	TRUSS TECHNOLOGIES	2012	09/06/12	
MI4520271	GLEN LAKE TRAILER PARK	2012	12/02/11	
MI4720657	HOFFMAN FILTER CORPORATION	2012	12/07/11	
MI4720658	ASPEN TECHNOLOGIES INC.	2012	01/25/12	
MI5220202	KENNECOTT EAGLE MINERALS LLC.	2012	01/04/12	
MI6120470	OAKRIDGE LOWER ELEMENTARY SCHOOLS	2012	01/23/12	
MI6322896	ADEPT PLASTIC	2012	03/30/12	
MI7620248	MARLETTE HEAD START	2012	09/26/12	
MI8120608	CHAMPION WATER	2012	05/07/12	
MI0120220	CRYSTAL SPRINGS ESTATES	2011	12/14/10	
MI2521607	ULTRA DEX TOOLING SYSTEMS	2011	01/25/11	
MI4120960	RIVERIDGE PACKING - WORTH BLDG (NORTH)	2011	10/21/10	
MI4120961	CAL PLEX	2011	04/18/11	
MI4720641	STEP BY STEP EARLY LEARNING CENTER	2011	01/07/11	
MI4720642	ALWAYS UNIQUE CHILDCARE	2011	11/29/10	
MI4720644	DYNAMIC TECHNOLOGY, LLC	2011	03/16/11	
MI4720647	COLE TAYLOR MORTGAGE - NORTH	2011	06/06/11	
MI7020654	CONSUMERS ENERGY TRAILER WELL	2011	08/12/11	
MI8020565	MBG MARKETING	2011	02/03/11	
MI8120604	JELLYBEAN DAYCARE AND PRESCHOOL	2011	12/16/10	
MI0320654	MICHIGAN FINE HERBS	2010	04/09/10	
MI2521363	DIPLOMAT PHARMACY	2010	04/30/10	
MI2521460	PEYTON'S LEARNING PLACE	2010	04/23/10	
MI0320651	PARIS RIDGE ELEMENTARY SCHOOL	2010	08/23/10	
MI3320205	MUNTERS	2010	08/30/10	
MI4120954	RIVERIDGE PACKING - STORAGE	2010	12/04/09	
MI5220200	TEACHING FAMILY HOMES SCHOOL	2010	05/19/10	
MI7520304	MONSANTO	2010	02/23/10	

¹ Public Water System Identification Number

² WaterTrack is the database of the NCWS, from which SDWIS/Federal is populated.

³ NTCWS indicated by "Yes" are on the FY 2010 to FY 2012 ETT lists with a score of 11 or higher.

FY	New NTNCWS	ETT FY 2010-2012
2012	16	0
2011	11	0
2010	8	0
Total	35	0

Appendix B: Outline of a Typical Financial Assessment and Financial Action Plan

Financial Assessment

Introduction: Population, location, transportation routes, and community characteristics; description of the water system and major projects or concerns such as expansion, securing loans, and meeting new drinking water standards; and major financial shortfall such as the need for a rate methodology.

Requested Information: Budget, last two years of audited records, water use and water rate ordinances, latest rate ordinance or resolution, recent rate or feasibility study, and contract or service agreements with outside customers.

Submitted Information: List of information provided.

Analysis: Summary or highlights of each of the documents provided by the supply.

On-Site Meeting: Date and attendees; and list of items discussed, such as the financial concerns, the billing method, and major recent projects.

FAP

Goal One: Develop the financial capability to fund present and future needs.

Task 1: Develop a capital improvement projects plan.

- Step 1: List anticipated water projects.
- Step 2: Estimate the cost of each project to be funded.
- Step 3: Project the anticipated date the project is to begin.
- Step 4: Calculate the dollar amount necessary to be set aside annually.
- Step 5: Establish a line item in the budget for capital improvement expenditures.

Task 2: Develop and implement a rate setting methodology.

- Step 1: Identify water system expenses.
- Step 2: Identify replacement expenses and fund the replacement account.

Goal Two: Establish the legal and managerial capability to protect the water system.

Task 1: Develop a penalties section in the water ordinance.

Task 2: Adopt the amendment to the ordinance.

Tools Included With FAP

Sample resolution, sample water use and rate ordinance, service agreement checklist, DWRP informational brochure, project plan preparation guide, and securing a DWRP loan fact sheet.