



Stormwater, Asset Management, Wastewater (SAW)

**September
2013**

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SAW Overview

- January 2, 2013
- \$450 million – Proposal 2 (Great Lakes Water Quality Bond) passed Nov 2002
- SAW Workshop Committee
- \$97 million available FY14 (grants and loans)
 - \$30 million max for loans, \$10 million per applicant for FY14
- First come, first served

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Grant and Loan Program

Grant

- Planning and Design of wastewater and stormwater projects
- Development of stormwater management plans (MS4, NPS, SAW)
- Development of wastewater and stormwater asset management plans
- Testing and Demonstration of Innovative Technology

Loan

- Construction of projects identified in approved stormwater management plan
- Construction of projects identified in approvable asset management plan
- Testing and Demonstration/Construction of projects of proven Innovative Technology

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Who can apply? MUNICIPALITIES

"A city, village, county, township, authority, or other public body, including an intermunicipal agency of 2 or more municipalities, authorized or created under state law; or an Indian tribe that has jurisdiction over construction and operation of sewage treatment works or other projects qualifying under section 319 of title III of the federal water pollution control act, 33 USC 1329."

Public bodies (other than cities, villages, counties, and townships) and Authorities applying for SAW grants or loans must indicate the relevant authorizing statute in the application.

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Grant

- \$2 million cap
- 90% grant/10% local match for 1st million, 75% grant/25% local match for 2nd million (can't use SRF or SAW for match)
- 100% grant to disadvantaged communities, municipalities in receivership, municipalities operating under an emergency manager, municipalities operating under a financial consent agreement

Applications

- Accepted on or after December 2, 2013
- No prior review, but questions answered
- 120 day DEQ review period
- Disbursements not processed before April 2014
- Grant and Loans issued on quarterly schedule
- Applicant prepared
- Review procedure

Grant Application Format

- Project Information
- Authorizing Resolution
- Sample Grant Agreement

Appendices

- Appendix A: Wastewater Planning and/or Design (including User Charge System)
- Appendix B: Planning and/or Design of Stormwater and/or Nonpoint Source of Water Pollution
- Appendix C: Asset Management Plan for Stormwater and Wastewater (requires certification)
- Appendix D: Stormwater Management Plan
- Appendix E: SAW Innovative Wastewater and Stormwater Technology (requires certification)
- Appendix F: Disadvantaged Community Status Determination Worksheet

Grant Application

D - Disclosure of Conditions Requiring Repayment of Grant

F - Ownership of System Facilities or Assets (If the applicant does not own the system facilities or assets described in the proposed scope of work, certification of this legal relationship must be provided prior to the applicant receiving SAW grant assistance. The applicant must have the authority to establish a rate structure necessary to demonstrate significant progress with implementing a wastewater asset management plan if applicable.)

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J. Is the applicant in receivership? YES NO

Is the applicant operating under an emergency manager or an emergency financial manager appointed under state law? YES NO

Is the applicant operating under a consent agreement as provided under the local government fiscal responsibility act, 1990 PA 72, MCL 141.1201 to 141.1291?
 YES NO

If a disadvantaged community status determination is being requested, then complete and submit the worksheet in Appendix F. Communities considered disadvantaged by the DEQ can be awarded up to \$500,000 in grant funds to construct projects identified in an asset management plan.

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K. Project Cost Worksheet

Read the instructions below before completing the Project Cost Worksheet.

Grant Budget Item	Incurred Project Costs A	Estimated Project Costs B	Cost Supporting Documents Attached?	Total Project Costs A+B
1. Project Planning Costs			<input type="checkbox"/> YES	
2. Design Engineering Costs			<input type="checkbox"/> YES	
3. User Charge System Development Costs			<input type="checkbox"/> YES	
4. Wastewater Asset Management Plan Costs			<input type="checkbox"/> YES	
5. Stormwater Asset Management Plan Costs			<input type="checkbox"/> YES	
6. Stormwater Management Plan Costs			<input type="checkbox"/> YES	
7. Innovative Wastewater and Stormwater Technology Costs			<input type="checkbox"/> YES	
8. Disadvantaged Community Construction Cost			<input type="checkbox"/> YES	
9. Cost Subtotal				
10. LESS Local Match				
11. Requested SAW Grant Amount (Line 9 minus Line 10)				

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Contracts for services with costs greater than \$50,000.

An executed copy of each contract, with a clear identification of the scope of the service(s) and a contract period, must be submitted prior to reimbursements of costs.

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Eligible

- Force account work. Fringes limited to 40 percent of salary - no overtime or indirect costs. (timesheet/payroll records showing hours worked or anticipated billable force account hours, scope of work, employee hourly wage rates (fringes split out), and title/classifications)
- MACP/PACP training for municipal staff
- Costs for work performed on or after Jan. 2, 2013

Ineligible

- Local government administrative activities or activities unrelated to project
- Funding for growth

Planning and Design

- Appendix A – Wastewater Planning and Design Activities
- Appendix B - Stormwater and/or Nonpoint Source Planning and Design Activities

Planning Grant Requirements

- RD – Preliminary Engineering Report and Environmental Report
- SAW or other – Project Proposal
- SRF/SWQIF – Project Plan

Design Grant Requirements

To be submitted with application:

- RD – Preliminary Engineering Report and Environmental Report
- SAW or other – Project Proposal
- SRF/SWQIF – Project Plan

Required to develop and submit plans and specs

User Charge Development costs can be included in either a planning or design grant

SAW Project Proposal

Minimum Requirements

1. Study Area Identification and Description
 - a. Cover the geographic area served by or affected by the proposed project
 - b. Population Data – include if relevant
 - c. Environmental Setting
 - d. Do NOT include land use and economic characteristics, unless relevant to the project.
2. Existing Facilities
3. Project Need
4. Description of Project Options Considered
5. Proposed Project
6. Evaluation of Environmental Impacts

Requirements

- Must address a water quality problem
- Must start construction of the project within 3 years of grant award

Innovative Technology

Appendix E - SAW Innovative Wastewater and Stormwater Technology

Innovative Technology

Must meet one or more of the following:

- The technology has not been previously used in Michigan or the region, if influenced by climate
- The technology has not been previously used in the United States, if independent of climate influences
- The technology is an application of an existing technology applied to a different media (e.g. a water supply treatment technology applied to the wastewater field)
- The technology is an application of an existing technology applied to a different pollutant (e.g. previously used to address pollutant 'X', proposed to address pollutant 'Y')

Innovative Technology

- Businesses not eligible, only municipalities
- Must address an existing problem or need (water quality issue, lower costs, less energy, green innovative)
- Must demonstrate whether project is feasible within 3 years of grant award
- If the demonstration results in a project that is not technically or financially feasible, no further commitment required. If have feasible project, must implement and construct project.
- Certification – available on website

SAW Loan

Asset Management Plan

Stormwater Management Plan

Innovative Technology

Loan Application

- Part A – Financial information and project costs and project proposal and resolution – estimated loan amount set aside
- Part B – Contract documents, resolution to tentatively award, estimated disbursement schedule

FY14 Financing Schedule

Part A of Loan Application, Project Proposal, Resolution				
Notification of Application Approval				
Fact Sheets Published No Later Than				
Plans and Specs approved (if applicable)				
Part B of Loan Application, Bid Data (With Tentative Contract Award)				
DEQ Order of Approval Issued*	11/22/2013	03/11/2014	06/03/2014	08/26/2014
Borrower's Pre-Closing with the MFA	12/03/2013	03/28/2014	06/13/2014	09/05/2014
MFA CLOSING	12/12/2013	04/09/2014	06/25/2014	09/17/2014
Notice to Proceed Issued No Later Than	02/10/2014	06/08/2014	08/24/2014	11/16/2014

Milestone Dates

- Draft plans & specifications due within 6 months of loan approval date
- Notice to Proceed due within 1 year of loan approval date

Loan

- No Davis-Bacon
- No public participation requirements
- Project Proposal vs. Project Plan
- Fact Sheet vs. Environmental Assessment
- Costs for construction not retroactive (need Fact Sheet issued, final plans and specs, construction permit issued)
- Interest Rate – 2.5% for FY2014

Website

www.michigan.gov/cleanwaterrevolvingfund

SAW Program Highlights

- Loan Application (October 1st)
- FAQ
- Laws & Regulations
- SAW Committee Minutes

Revolving Loan Section 517-284-5433

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SAW Grant Funding for Stormwater



SAW Grants for Stormwater Management Plans

Stormwater Management Plans can include

- An MS4 SWMP
- A Nonpoint Source (319/CMI) Watershed Management Plan
- A SAW SWMP
 - Must meet the minimum requirements outlined in Appendix D of Grant Application.

Information Needed with the Grant Application for SWMP

- Description and map of planning area
- Description of water quality issue or system deficiencies to be addressed
- Percent of land use in planning area (NPS and SAW SWMPs)
- For NPS SWMP
 - Description of watershed and boundary, current water quality conditions, and list of pollutants to be addressed.

What goes into a SWMP

- MS4: BMPs to be implemented to meet the following minimum control measures:
 - Public Participation/Involvement Program
 - Public Education Program*
 - Illicit Discharge Elimination Program*
 - Construction Stormwater Runoff Control Program
 - Post-Construction Stormwater Runoff Program*
 - Pollution Prevention/Good Housekeeping Program*
 - TMDL Implementation Plan*

What goes into a SWMP, cont.

- MS4, cont.
 - A measurable goal for each BMP
- Nonpoint Source:
 - Nine minimum elements of watershed planning (EPA)
 - List of targeted pollutants (must include pollutants listed in MI's 2012 Integrated Report as causing designated use impairments)
 - Wetlands component must also be considered

What goes into a SWMP, cont.

- SAW:
 - Description and map of planning area
 - Description of major components of stormwater system
 - Description of significant publically and privately owned BMPS
 - Description of stormwater sources and stormwater related water quality problems
 - Recommendations and analysis of projects
 - Timeline for implementation of the plan

What goes into a SWMP, cont.

- SAW, suggested components (NOT required):
 - General maintenance plan
 - Desired level of service determined through public involvement
 - Public Education program or activities
 - General description of land use percentages

SAW Planning and Design Grants for Stormwater or Nonpoint Source Projects

- The project must address a water quality issue.
- Grant recipient must proceed with a project within 3 years of Grant Award.
- Applicants can receive a Design Grant for a TMDL implementation project

Information Needed with the Grant Application for Planning and Design

- Description of water quality issue or system deficiencies that will be addressed
- If the project results from a Stormwater Management Plan, a copy will be needed.
- Indicate which funding source will be used to construct the project

SAW Grant for Stormwater Asset Management Plans

- Not just for Wastewater!
 - Eligible to do a complete inventory of all existing system assets
- Requirement to implement the plan within three years of Grant Award
 - Submittal of “Stormwater AMP Certification of Project Completeness” required
- A stormwater funding structure is not required however an analysis of the costs to maintain the system and support the AMP is required.

Information Needed with the Grant Application for AMP

- Description of water quality issue or system deficiencies to be addressed
- Description of specific activities to be grant funded for the development of the AMP
- Description of current AMP, if any

What is the difference between

Stormwater Management Plan	Asset Management Plan
<ul style="list-style-type: none">• Water quality issues• Plan to address water quality issues	<ul style="list-style-type: none">• Inventory of assets• Long term needs• Funding needed to maintain assets and meet level of service

Grant Application Review

- DEQ Revolving Loan Section and District staff will review the grant applications
- What to look out for:
 - That there is a need for the grant funded activity
 - That the grant period contains a sufficient amount of time to complete grant funded activities and approvals, if necessary

FAQ

- Q: Are the legal fees associated with developing a Stormwater Utility grant eligible?
 - A: Yes, however, legal fees to defend creation of a stormwater utility are not grant eligible.
- Q: Can a county drain commissioner include waters of the state in a SWMP?
 - A: Yes, but including waters of the state in a Stormwater Asset Management Plan is not eligible

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Appendix C – Asset Management Plan for Stormwater and Wastewater

It's the active practice of managing (operating, maintaining, and upgrading) the physical assets of an enterprise to achieve the maximum benefit from that asset while providing the desired level of service

Who is eligible

A municipality that has jurisdiction over construction and operation of the system.

Grand Ledge/Oneida Twp.
Lansing/Delta Twp./Capitol City Airport Authority.

Asset Management Plan (AMP)

1. Asset Inventory
2. Level of Service
3. Critical Assets
4. O&M Strategies
5. Capital Improvement Planning

Grant Eligible

- AMP/Geographic Information System (GIS) mapping software/hardware/training. Total limits are as follows:

Service Area Population Limit	Dollar
Less than or equal to 5,000	\$60,000
5,001 to less than or equal to 20,000	\$85,000
20,001 to less than or equal to 50,000	\$110,000
Greater than 50,000	\$160,000

Attach justification when assistance is sought for an applicant with an existing GIS system or for when an exception is being made to the above dollar limits.

Asset Management Overview

- Asset condition assessment (manhole inventory, cleaning and televising)
 - Work done in PACP requirements and by PACP certified personnel.
 - Costs based on per foot basis
- Equipment rental costs for cleaning and televising.
 - Sewers must be at least 20 years old

A justification is needed to clean and televise sewers installed or relined within the last 20 years. The limit is to encourage communities to focus on sewers installed or relined prior to 1993.

- Any specific tasks named as a condition of an NPDES permit not identified elsewhere in this guidance
- Aerial data collection at the 12-inch resolution when it is purchased from the county or obtained from the state (for GIS purposes only).
- Stormwater utility development costs.

Expectations

- Funds can be used to address any or all of the 5 AMP components; however **after the 3 year grant period** the final product is a **complete and approvable AMP covering all 5 components**.
- The applicant will **need to certify** that all grant activities have been completed at the end of three years.
- For wastewater systems the applicant must **demonstrate significant progress** towards funding the AMP.
- A stormwater funding structure is not required however an **analysis of the costs** to maintain the system and support the AMP is required.

Cross-Sectoring

Section 2504 e (2)(i) states that “The municipality shall coordinate, as feasible, with other infrastructure activities in the same geographic area.” Asset management encourages cross-sector utilization (for water utility, roads, gas, phones, etc.); however grant assistance may only be requested for those costs directly related to the requested asset management grant.

If the wastewater AMP identifies a gap in the current revenue needs to meet expenses, then significant progress must be made toward achieving the funding structure necessary to operate the system. Significant progress is defined as a **5-year plan to eliminate the gap** with a **minimum initial rate increase to close at least 10 percent of the funding gap**. The first rate increase must be implemented within three years of the executed grant.

SAW/NPDES Interface

- Under the SAW grant the asset analysis can involve grouping of asset types, i.e. 50 manholes. Under the NPDES asset management requirements DEQ will require a detailed asset analysis, i.e. manhole 1, manhole 2.... This will have to be done in 1 year for WWTP assets and 3 years for collection system assets.
- For Majors, those with discharges greater than 1 MGD, when the NPDES comes up for renewal the NPDES asset management requirements take effect. NPDES requirements will supersede the SAW asset management requirements. So for example if you get a grant in 2013 and your NPDES permit comes up for renewal in 2015, you can begin with a broad asset analysis in 2014 but in 2015 the NPDES permit requirement for a detailed analysis will come into effect.
- For Minors, it is understood that when their NPDES permit comes up for renewal, asset management will be a part of that permit, however the implementation schedule in the permit will follow that of SAW. If the applicant does not have a detailed asset analysis, the timeframe for completing that requirement will be negotiated with the Permits Section.

Simplified Asset Management Plan

- Asset Inventory and Criticality
- Level of Service
- Rate Methodology
- Capital Improvement Plan

CUPSS – Check Up Program for Small Systems

Free, easy to use software
 Supported by EPA
 For water and wastewater systems
 Tutorials, training guidebooks available
www.epa.gov/cupss

Asset Inventory and Criticality Table 1

Directions
 A. List assets
 B. Enter asset information
 C. To add more assets use insert function and add rows. Then copy first asset row to new rows to transfer formulas.
 D. Enter information in highlighted cells
 E. Remaining cells will calculate automatically.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Collection Assets	Capacity (MGD)	Material	Location	Last Inspected	Longevity (Years)	Manufacturer	Tag Number	Original Cost	Replacement Cost	Depreciation Value	Year Installed	Remaining Useful Life (Years)	Probability of Failure	Consequence of Failure	Criticality Factor	
Pump #1												0	0	2	2	
Enter asset												0	0	2	2	
Enter asset												0	0	2	2	
Enter asset												0	0	2	2	
Enter asset												0	0	2	2	
Enter asset												0	0	2	2	
Enter asset												0	0	2	2	

Criticality Factor is greater than 16 cell will turn RED
 # Criticality Factor is greater than 16

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Treatment Assets	Capacity (MGD)	Material	Location	Last Inspected	Longevity (Years)	Manufacturer	Tag Number	Original Cost	Replacement Cost	Depreciation Value	Year Installed	Remaining Useful Life (Years)	Probability of Failure	Consequence of Failure	Criticality Factor	
Pump #1												0	0	2	2	
Enter asset												0	0	2	2	
Enter asset												0	0	2	2	
Enter asset												0	0	2	2	
Enter asset												0	0	2	2	
Enter asset												0	0	2	2	
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Enter asset												0	0	2	2	
Enter asset												0	0	2	2	
Enter asset												0	0	2	2	

Criticality Factor is greater than 16 cell will turn RED
 # Criticality Factor is greater than 16

Asset Management Overview

APPENDIX F
Disadvantaged Community Status Determination Worksheet

In order to determine the disadvantaged status of a community, the Revolving Loan Section will first look to see if:

- 1) More than 50 percent of the area served by a proposed sewage treatment works project or stormwater treatment project is identified as a poverty area by the United States Census Bureau;
- 2) The median annual household income of the area served by a proposed sewage treatment works project or stormwater treatment project is less than the most recently published Federal poverty guidelines for a family of 4 in the 48 contiguous United States. In determining the median annual household income of the area served by the proposed sewage treatment works project or stormwater treatment project, the municipality shall utilize the most recently published statistics from the United States Census Bureau, updated to reflect current dollars, for the community which most closely approximates the area being served by the project.

If no determination can be made by either criteria 1 or 2 then the following information will be used:

1. Is the applicant seeking a planning or design grant? YES NO
If YES, provide the total estimated construction amount \$ _____
2. Annual payment on the existing debt for the wastewater or stormwater system (if applicable):
\$ _____
3. Total operation, maintenance and replacement expenses for the wastewater or stormwater system on an annual basis \$ _____
4. Number of "residential equivalent users" in the system: _____

If you any questions about this worksheet, then contact Mr. Robert Schneider at 517-388-6466.

Note: If the total estimated construction amount is provided, the result of this determination is temporary until actual bid costs are submitted.

Bob Schneider
Revolving Loan Section

517-388-6466

schneider@michigan.gov

Step 1: Enter amount of total debt for project	Amount of Debt	\$0
Step 2: Enter term up to 20 years	Terms	20
Step 3: Enter present target rate of interest (call DEQ)	Rate	2.00%
Step 4: Enter projected annual OM & R after completion	OM & R	\$221,956
Step 5: Annual debt payment is computed	New annual debt	\$0
Step 6: Total annual cost of system is computed	existing debt	\$141,696
Step 7: Enter total number of system users in service area	Total Annual Cost	\$363,652
Step 8: Annual user cost is computed	# of Users	1132
Step 9: Updated State Wide MAHI is:	Annual User Cost	\$321
Step 9: Enter 1990 census median annual household income	Updated MI MAHI	\$43,141
Step 10: Updated MAHI is calculated on Detroit CPI-U to 1997	MAHI - 2010 census	\$28,173
Step 11: The percentage of MAHI is computed	Updated MAHI:	\$29,917
Step 12: If the annual user cost exceeds the percentage of MAHI, the community may qualify as a disadvantaged community	MAHI Threshold \$	\$299
	Disadvantaged???	YES

Bessemer			
SRF			
pop 1995			
A = No	28.00%	-15.7%	not verifiable
B = NO	28173		