

WAMC Stormwater Survey Instructions

A. General Information

A.1 Name of Utility - The name of utility as used by EGLE in Municipal Separated Stormwater System (MS4) regulatory documents

A.2 Responder information – Contact information for the person filling out this survey.

A.3 System NPDES Permit No. – The NPDES permit numbers associated with your MS4 permit.

B. System Ownership

B.1 Please indicate whether you own and/or operate stormwater system. Please note, this survey only relates to the stormwater assets that are associated with your MS4 permit and does not cover any private stormwater assets in your community or district.

B.2 Do you operate stormwater system on behalf of a drainage district?

Please indicate whether you do not own a stormwater system but operate on behalf of a drainage district.

C. System Inventory

C.1. Please indicate whether you have a Geographic Information Systems (GIS) database for your stormwater system.

C.2 Please fill out the table with the total feet of pipe installed based on diameter and material. If this is not known, please use the unknown size and material row and column. For non-circular pipes, please use the equivalent diameter.

C.3 Please fill out the table with the total footage of pipe installed in each decade.

C.4 Please indicate the total number of each of the assets listed. The “other” category should be used for any other assets that are not included in the categories listed. While most of these are standard assets, a couple clarifications for definitions are:

Retention/Detention Facilities – These should include any above ground ponds or underground storage facilities that are owned and/or operated by the utility.

Structural BMPs – This shall include any structural water quality devices such as stormceptors, vortex separators, etc.

Natural BMPs – This shall include any non-structural best management practices such as rain gardens, infiltration beds, bioretention, etc.

D. System Business Risk Exposure

D.1 Please fill out the table to show the pipe probability of failure rating by footage. Probability of failure (POF) is the likelihood of an asset failing. The range is from 1-5 with 1

being a very low probability and 5 being a very high probability. If a POF analysis has not been completed, please indicate unknown.

D.2 Please indicate what criteria were used to develop the pipe POF. If this step has not been completed, please indicate N/A. Criteria may include physical inspections, sewage blockage history, sewer capacity, age of pipe, or other factors. If multiple criteria were used to develop POF, those should all be indicated.

D.3 Please fill out the table to show the pipe consequence of failure by footage. Consequence of failure (COF) is defined as the impacts on the system should the asset fail and depends on how critical the asset is. The range is from 1-5 with 1 being a very low consequence and 5 being a very high consequence. If a COF analysis has not been completed, please indicate unknown.

D.4 Please indicate what criteria were used to develop the pipe COF. If this step has not been completed, please indicate N/A. Criteria may include pipe diameter, location in system (i.e. under water bodies, railroads, highways, etc.), accessibility, customer impact, or other factors. If multiple criteria were used to develop COF, those should all be indicated.

D.5 Please calculate the Business Risk Exposure (BRE) for the linear assets and show the total footage in each category. The BRE can be calculated by multiplying the POF x COF for a total score of 1-25. The higher the number, the greater the risk to the asset.

D.6 For vertical or other assets as noted, please indicate the overall POF, COF, and BRE for the individual sites. This should be on a total site basis (i.e. for lift/pump station), rather than by assets at each site. If these analyses have not been completed, please indicate N/A. The scale for POF and COF should be from 1-5 similar to linear assets and the BRE should be calculated by multiplying POF x COF for a total score of 1-25.

E. Capital Funding for Stormwater

E.1 Please fill out the table with replacement values (in current \$) of your stormwater assets based categories listed. Depreciation should not be included in these values. The collection system category should include pipes, culverts, manholes, catch basins, end sections, etc.

E.2 Please fill out the table to indicate the percentage of pipe in the system you plan to clean and CCTV on an annual average over the next five (5) years. This does not need to be broken down by diameter. Also, please indicate the average amount you have budgeted annually over the next five years.

E.3 Please fill out the table to indicate the number of catch basins you plan to clean on an annual average over the next five (5) years. Also, please indicate the average amount you have budgeted annually over the next five years.

E.4 Please indicate your anticipated annual average stormwater CIP budget (in current \$) over the next five (5) years. This should not include operation and maintenance.

E.5 Please indicate your anticipated average annual stormwater operation and maintenance budget over the next five (5) years.

E.6 Please indicate your anticipated average annual stormwater revenue for the next five (5) years. This should include revenue from all sources, including grants and loans.

E.7 Please indicate the level of funding you would spend on an average annual basis over five (5) years if funding were available.

E.8 Please indicate whether you are interested in implementing a stormwater utility or if you have an existing utility.

F. Level of Service

F.1 Please indicate whether you have developed Level of Service (LOS) goals for your system. Level of service defines the way in which utility stakeholders want the utility to perform over the long term. Utilities balance the performance of the system with the cost to operate the system in order to provide reliable service to customers. There are several components that can go into LOS including:

- a. Reliability/Resiliency – If there is a failure on a certain asset in the system, can the system continue to provide safe, reliable stormwater service to customers and are assets being properly maintained to assure they are in working order.
- b. Responsiveness – If there is an issue with the system, does the utility have the staff or resources to respond in a timely manner?
- c. Safety – Does the system operate in a way to protect the public.
- d. Capacity – Is the system designed to adequately convey stormwater through all of the pipes without backups or flooding.
- e. Environmental impact – Is the system in good working order to prevent overflows which may impact the environment.
- f. Affordability - Is utility able to provide safe, reliable stormwater services to all customers at an affordable rate or provide programs to assist customers with affordability.
- g. Compliance – System meets all requirement of the National Pollutant Discharge Elimination System Permit (MS4 permit) and any other regulatory requirements.

F.2 Please indicate how far your system is toward reaching its LOS goals for each of the categories listed above per the scores listed in the survey.

0=system has not developed LOS goals

1=system has developed LOS goals but no action has been taken

2=system has developed LOS goals but limited action has been taken

3=system is halfway toward meeting LOS goals

4=system has made significant process in meeting the LOS goals

5=system has reached the desired LOS goals and maintains that level

NA=this information is not available.

F.3 Most communities have not fully implemented their LOS goals. Please indicate the impediments to reaching your LOS goals.

G. Coordination

G.1 Please indicate if you are currently coordinating efforts with other utilities or jurisdictions.

G.2 Please indicate which other types of utilities or jurisdictions you are coordinating with. If none, please indicate that. Individual utilities or jurisdictions do not need to be listed.

G.3 Please indicate where the project planning process you begin coordination.

G.4 Please indicate if you use the MIC project portal for coordinating activities.

G.5 Please indicate if you plan on using the MIC project portal for coordinating activities in the future. More information about the project portal can be found at [MIC Project Portal \(MiDIG\) \(michigan.gov\)](https://micprojectportal.michigan.gov).

G.6 Please indicate what activities are currently coordinated.

G.7 Please indicate if you plan to coordinate activities in the future.

Before you hit the submit button, please be sure you have saved the PDF file to your computer. You will then need to hit the submit button, the email box will open and you will need to attach the file to the email. Add a message if you'd like and hit send.