

Stormwater Controls Inspection, Maintenance and Effectiveness August 1, 2019 to December 31, 2020

BMPs on Township administration and Fire Station Properties				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Catch basin & storm sewer	every 5 years	every 5 years	Last inspected March 2019	Functioning as designed
Grassy Swales	twice yearly	twice yearly	Inspected annually in March- but crews are on site frequently, any records kept with Maintenance Supervisor	Functioning as designed
Curb & gutter	Yearly	Yearly	Inspected annually in March, any records kept with Maintenance Supervisor	Functioning as designed
Vegetated Swales	Yearly	Yearly	Inspected annually in March, any records kept with Maintenance Supervisor	Functioning as designed
Township Park - Cascade Rec Park				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Detention Pond	Yearly	Yearly	Inspected annually in March, any records kept with Maintenance Supervisor	Functioning as designed
Catch Basin & Storm Sewer	every 5 years	every 5 years	Last inspected March 2019	Functioning as designed
Township Park – Leslie Tassell Park				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation

Catch Basin & Storm Sewer	every 5 years	every 5 years	Last inspected March 2019	Functioning as designed
Township Library				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Detention Pond	Yearly	Yearly	Inspected annually in March, any records kept with Maintenance Supervisor	Functioning as designed
Catch Basin & Storm Sewer	every 5 years	every 5 years	Last inspected March 2019	Functioning as designed

*Kent County will sweep parking lot when they do the roads in Township

*Annual curb and gutter cleaning occurs

Illicit Discharge Elimination Plan (IDEP)

Regional IDEP Activities

A detailed description of the IDEP activities undertaken on an individual basis is included below. The IDEP activities include dry-weather screening of stormwater outfalls, locating possible sources of contamination, responding to reported incidents, correcting the problems, and preventing new illicit connections.

The IDEP is being implemented under a cooperative program administered by GVMC and involving the county agencies and municipal units. The IDEP was approved by EGLE in August of 2013. GVMC conducted outfall screening during the summer of 2018 on behalf of the MS4 communities in the Lower Grand River Watershed.

<p>Please describe any dry-weather screening conducted during the reporting period and the findings of that screening.</p>
<p>Dry weather screening was performed on June 8, 2018. One additional outfall was found at Leslie E. Tassel Park, and added to the Township's list of outfalls. All outfalls were found to be in satisfactory condition. A full summary of the screening that was done can be found attached to this report.</p>
<p>Please list any other known and/or resolved illicit discharges identified during the reporting period and status of elimination. For significant discharges, also list the pollutants involved with an estimate of the volume and loading. Please describe enforcement action, if any.</p> <p>Examples of illicit discharges include: malfunctioning septic systems; sanitary sewer leaks, overflows, or cross-connections; laundry water discharges; leaking fluids from vehicles, barrels, dumpsters, or tanks; concrete truck wash water; polluted runoff from temporary or permanent storage areas; improper fire hydrant flushing; spills from auto accidents; power washing wastewater; industrial/commercial wastewater, dumping; and any other violation of the IDEP ordinance.</p>
<p>None</p>
<p>Please list the status and schedule for elimination for any illicit discharges identified but not eliminated during this reporting period. Also, report the status of any illicit discharges identified but not eliminated during previous reporting periods.</p>
<p>NA</p>
<p>Please describe the actions your community takes when indications of illicit discharges have been identified.</p>
<p>When staff is notified of an issue, they will go investigate and cleanup if necessary. Or the problem is directed to the State or County depending on scale of problem.</p>

Please provide:

- An estimated quantification of the number of discharges eliminated, and
- An estimated quantification of the volume of illicit flow eliminated (*For large spills or, where the amount discharged is possible to estimate*).

NA

Identify any specific coordination with the health department in response to illicit discharge elimination for failed or failing septic fields, or identify if any septic systems have been eliminated in your community and hooked up to the municipal system.

Homes in the Township are required to be connected sewer at point of sale (this rule has been suspended due to COVID).

Township has made it easier to connect to sanitary sewer.

A handful of homes connected to sewer in the past year.

Describe the effectiveness of the program to prevent illicit discharges and the method used to assess effectiveness.

No reported illicit discharges, so the program is effective.

New Point Source Discharges of Stormwater

Do you own or operate any NEW or previously unidentified stormwater discharges? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "yes," please indicate which discharge points are new on your outfall map or list.
Is your stormwater discharge point map attached or provided electronically? <input type="checkbox"/> Map is attached <input type="checkbox"/> Map is provided electronically <input checked="" type="checkbox"/> Other. Please explain in comments section.
Is your stormwater discharge point list attached or provided electronically? <input type="checkbox"/> List is attached <input type="checkbox"/> List is provided electronically <input checked="" type="checkbox"/> Other. Please explain in comments section.
Comments: Lists were submitted to EGLE in Early 2019 as Appendix 2 in the Illicit Discharge Elimination Plan revision as part of the 2016 MS4 Permit Application. Each community maintains an updated map of their MS4, with the help of GVMC Environmental Programs, or REGIS.

Soil Erosion and Sedimentation Control

Part 91 Administration Authority: KCRC

Was the Part 91 agency, or appropriate staff if you are the Part 91 agency, notified when the soil or sediment was discharged to your MS4 from a construction activity in accordance with the approved procedure?

Yes- county handles all of this

Post Construction Controls Activities Completed August 1, 2019 to December 31, 2020

Cascade Charter Township adopted a Stormwater Ordinance (Ordinance 7 of 2002, as amended by Ordinance No. 2 of 2008; 05/14/2008), controlling stormwater in areas of new development and significant redevelopment. The ordinance describes various levels of control depending on zones established based on the sensitivity of the receiving waters.

Article VIII describes the stormwater management zones and the Best Management Practices (BMPs) required in those zones to protect water quality and streambank erosion (Zone A), alleviate downstream impacts (Zone B), and control and prevention of sedimentation (Zone C).

The Stormwater Ordinance includes regulations adhering to the Floodplain Ordinance and the SESC program for the township.

Cascade Charter Township

The township requires LID practices through its stormwater management standards at sites of new development and significant redevelopment if located in Zone A of the township.

The ordinance ensures the owners of facilities constructed to meet stormwater requirements properly operate and maintain the facilities. The owner of the stormwater system is responsible for maintaining the integrity of the stormwater system. Any concerns that Cascade Charter Township receives are typically sent to the Planning Department and/or Building Department for review to inspect the situation and determine whose responsibility it is to correct any issues. This may include other governmental bodies such as the Drain Commissioner, Road Commission, State of Michigan or private developments. To ensure the private developments are maintained correctly, Cascade Charter Township maintains its approval records of each development to determine if the storm system is operating correctly as designed. If any issues are found, the property owner is informed of the corrective actions needed to comply with the approved plan.

Explain the enforcement activities of your comprehensive storm water management program for post-construction controls completed during this reporting period:

All appropriate docs (incl. maint agreements) have to be submitted and on file before construction can start.

How many developments were approved with storm water controls according to PCC?

About 10 with sw maint agreements

Have any long-term operation and maintenance agreements been signed?

10- all with sw controls have signed maint agreements

How many inspections or enforcement/compliance of O&M agreements were conducted?

1 compliance issue in 2020 but worked with the County to resolved.

Explain how the Post Construction Controls have addressed other issues, such as protecting sensitive areas, directing growth to identified areas, encouraging infill development in higher density urban areas and areas with existing infrastructure, and/or maintaining or increase open spaces:

Every project requires review by the Township engineer to ensure that it meets the storm water ordinance. In addition, the review process allows the township to ensure that they are in compliance with zoning, master planning, etc before the project is approved.

Staff and Contractor Training August 1, 2019 to December 31, 2020

Training Topic Area	Employee Group to Receive Training	Date of Training
Annual lunch and learn GVMC provided DVDs	Maint. dept. (3 employees)	2020

Other Actions

<p>Please list any extra efforts your community has conducted above and beyond your commitments recorded above (e.g., stream buffer ordinance adoption, new management techniques, invasive species control, habitat enhancement/protection, logjam removal, stream/beach clean-ups, etc.) that have helped implement the Lower Grand River Watershed Management Plan:</p>
<p>Shared social media posts- septic smart week, County Household Haz waste info</p> <p>Shared LGROW social media posts</p> <p>Completed Schoolhouse Creek drainage improvement in 2020 (ongoing from 2019). Annually meet with a subwatershed group- meet with residents and review their concerns and look for projects and improvements. Township Board provides funding for engineering. Educate residents. The Schoolhouse Creek project was a result of one of these meetings.</p>