

Municipal Roads General Permit – Catch Basin Inventory and Outlet Erosion Evaluation

- All towns will be required to verify paved roads with catchbasins (CB) connections by fall of 2020 as part of their road erosion inventory.
- All towns will be required to evaluate connected CB outlets for erosion by fall of 2020 as part of their road erosion inventory.
- Category 1 towns (Towns >8.5 miles of catchbasin collection system roads) shall implement catch basin outlet stabilization on at least the minimum number of eroded outlets per year, each year from 2021-2036. The minimum number of outlets requiring upgrades annually, until compliance is achieved, will be determined by dividing the total number of eroded outlets by the years remaining in the MRGP implementation schedule.
- Category 2 towns (all other towns) shall implement catch basin outlet stabilization on at least the minimum number of eroded outlets per year, each year from 2024-2036. The minimum number of outlets requiring upgrades annually, until compliance is achieved, will be determined by dividing the total number of eroded outlets by the years remaining in the MRGP implementation schedule.

All Towns must complete the assessment tasks **A & B (1)** for their collected road segments. Maps of these segments will be provided to each Town.

(A) Assessment of directly connected road segments

All towns shall take the state maps¹ of existing collected-road system segment outfalls and verify that these segments have catch basins and/or manholes and the final outfall pipe is 500 feet or less from a water of the state. These criteria would define the collection system subject to these standards. The Agency would need to concur on adjustments to the original list or map of town road segments. A log book of these outfalls must be kept by the Town.

(B) Stormwater Outfall Inventory and Repair Plan

(1) All Towns are required to use the available state maps of existing collected road segments, locate and visit the mapped outfalls for these segments, and assess the soil erosion between the outfall and waters of the state if the outfall is less than 500 feet from the waters. All Towns will develop a written inventory with the below information collected. Note an i-phone application has been developed that is available for use by anyone for the purpose of collecting this data. A paper form is attached.

- A. Outfall ID (automatically generated for each town from the ANR outfall data)
- B. Culvert diameter (inches)
- C. Is outfall perched? (Y/N)
- D. Is outfall directly into waters of the state? (Y/N)
- E. Erosion Rank
 - i. Less than 1" depth is sheet erosion, meets standard
 - ii. 1 to 11" erosion depth is rill erosion, partially meets standard
 - iii. > 11" + is gully erosion, does not meet standard
- F. Slope of Bank where outfall is located (Note: this is not the channel slope but the embankment slope)
- G. Average depth (D) of eroded gully below outfall (Note: value can be measured or estimated but method must be stated)

- H. Length (L) of Eroded gully below outfall (Note: value can be measured or estimated but method must be stated)
- I. Average width (W) of eroded gully below outfall (Note: value can be measured or estimated but method must be stated)
- J. Cubic yards of mass of eroded material = $(D \times L \times W)/27$
- K. Recommended acceptable best management practice:
 - i. Stone lining of eroded swale
 - a.) Recommended 12-24" outfall diameter minimum 12" minus, 24-48" – minimum 24" minus³
 - ii. Stone apron at outfall
 - a.) Recommended 12-24" outfall diameter minimum 12" minus, 24-48" – minimum 24" minus³. For 12-24" diameter apron should be 10' long, for 24-48" diameter apron should be 14' long
 - iii. Stone header to protect pipe in embankment
 - a.) Recommended 12-24" outfall diameter minimum 12" minus, 24-48" – minimum 24" minus³
- L. Digital photo of erosion
- M. Date of repair
- N. Digital photo of repair

(2) From 2021-2025 Category 1 Towns, and from 2024-2028 Category 2 Towns, shall have stabilized the calculated required minimum number of noncompliant outfalls. Alternatively, the Town can eliminate the outfall and/or divert it to a stable conveyance. Towns will report on their Implementation Plans in the Annual MRGP reports. Annual reports will include a list of outfalls to be corrected in the coming year and a list of the outfalls previously noncompliant that are now compliant due to repairs in the previous year. Outfall assessments and outfall stabilization shall not just be within the standard highway ROW but also where the town has a deed of easement or otherwise recorded formal easement².

(3) All Category 1 Towns will first prioritize all eroded outfall gullies with >10% embankment slopes which don't meet the standard partially or completely. Stabilization of all 10% gullies will be completed by 12/1/2025. All Category 2 Towns will first prioritize all eroded outfall gullies with >10% embankment slopes which don't meet the standard partially or completely. Stabilization of all 10% gullies will be completed by 12/1/2028.

Foot Notes

¹ If maps don't exist use the best available information.

² In many cases there are formal easements in place at outfalls (or are supposed to be), or there are prescriptive rights where the discharge has been in place more than 15 yrs. Towns have legal authority to stabilize drainage related erosion or add new drainage ways if needed to support the road needs but then once the work is done the town has some obligation to maintain it. Erosion caused by a pipe to another's land without an easement is a civil issue as well (considered a nuisance and trespass). The condition of the drainage system (DIs, CBs and pipes) should be assessed visually for failures and separations that contribute to erosion. Towns are not required to complete repairs outside of their ROW but many of them will get stabilized outside the ROW while the towns are there doing the work and the landowners will be typically very glad to see it happen.

³ If stone size is hand placed and fitted stone size a 9"minus stone is recommended.