



## **BUREAU OF WATERSHED MANAGEMENT PROGRAM GUIDANCE**

### **Storm Water Management Program**

### **TMDL Guidance for MS4 Permits: Planning, Implementation, and Modeling Guidance**


### **Addendum B (Internally Drained Areas)**

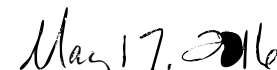
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*This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.*

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APPROVED:

  
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## **A. Statement of Problem**

Permitted Municipal Separate Storm Sewer Systems (MS4s) will be subject to an annual average reduction for the discharge of a pollutant of concern to a surface water that has an approved TMDL. It is not clear in the MS4 TMDL guidance, dated October 2014, as to how an MS4's discharge to an internally drained area factors into compliance with a MS4 TMDL annual average percent reduction.

## **B. Background**

At the time of TMDL development, there commonly is not sufficient information to separate out areas that may be internally drained. Additionally, due to underground storm sewer systems and pumping of runoff from an otherwise internally drained area; the surface drainage area does not necessarily match with the MS4 drainage area. An MS4 will need to determine its actual MS4 drainage areas that are to be assessed for compliance with TMDL annual average reductions.

## **C. Discussion**

At first it may seem appropriate to just not include the internally drained area from the MS4 TMDL analysis. However, internally drained areas may change over time due to storm sewers or even pumping of water from the internal drainage area to control the water level. If the TMDL was based on the internal area draining to the surface waterbody, it may seem appropriate to give pollutant removal credit for the storm water that does not reach the waterbody for which the TMDL was designed. However, treatment credit within a wetland or navigable water is generally not allowed as wetlands and navigable water warrant protection from stormwater pollutant discharges.

## **D. Guidance**

With respect to this guidance, "internally drained area" means an area that is located within a TMDL drainage basin that does not gravity-flow to surface water for which the TMDL was developed. Based on an annual average hydrologic condition, an internally drained area within a permitted MS4 is recommended to have its MS4 TMDL percent reduction analysis evaluated as follows:

### **Gravity versus Pumped Discharge from Internally Drained Area**

1. If an internally drained area that existed in a pre-development condition is no longer an internally drained area because it is drained by gravity in a post-development condition, then the area shall be included in the MS4 TMDL analysis.
2. If storm water discharges from an internal drained area by means other than gravity-flow, modeling the situation will be case specific. The appropriate DNR storm water engineer should be contacted to help determine a representative modeling or other methodology in order to factor the discharge into the MS4 TMDL percent reduction analysis if appropriate. Depending upon the mass of discharged pollutants of concern from the internally drained area; it might be reasonable to remove the drainage area from the MS4 TMDL analysis area. For instance, if the mass of pollutant(s) of concern pumped out of the internally drained area is less than the TMDL WLA for that size of drainage area then removing the internal drainage area and its pumped discharge from the analysis would be acceptable.

**Whether Navigable Water or Wetland Affected within Internally Drained Area**

3. If MS4 runoff enters an internally drained wetland or navigable water, then this internally drained area should be removed from the MS4 TMDL analysis completely. Otherwise, the MS4 may include the internally drained area if the Department's Internally Drained guidance memo, dated April 6, 2009, is followed.

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Runoff Management Policy Management Team approved on May 13, 2016.