**Proposed Process for Designating MDC**

Updated May 13, 2014

*Minimum Design Criteria (MDC):* Design standards that must be met to ensure that a stormwater treatment system functions in perpetuity to protect water quality standards and achieves the pollutant removal rates associated with the system. The MDC apply to stormwater treatment systems regardless of the geographical location of the system, the stormwater program requirements to which it is subject or whether the system is being reviewed under the fast-track or regular review process. Additional design criteria (described below) may also be implemented to address watershed-specific concerns. The design standards to be adhered by are to be based on current state statute or NC Administrative Code.

*\*\*Note: Based on the minimum requirements of current State stormwater rules, the MDC includes measures to remove Total Suspended Solids (85% or maximum extent practicable depending on the BMP)*

*Nutrient Design Criteria:* Supplemental design standards in addition to the MDC to increase the Total Nitrogen (TN) and Total Phosphorus (TP) pollutant removal rates associated with the device. Each nutrient design criteria will have an associated increase in TN and TP reduction for the device.

*Bacteria Design Criteria:* Supplemental voluntary design recommendations in addition to the MDC to optimize the device’s effectiveness in reducing bacteria concentrations in stormwater. (Note: The larger design storm required for SA waters is one means for addressing removal of bacteria.)

*Temperature Design Criteria:* Supplemental voluntary design recommendations in addition to the MDC to optimize the device’s effectiveness in reducing temperature impacts from stormwater.

**Draft process for designating MDC:**

First, the technical workgroup will compile lists of potential MDC (one that applies to all stormwater practices and a specific list for each individual practice). This list will be compiled based on the existing BMP Manual, the products of the TRW and in consultation with the NCSU-BAE Stormwater Group. MDC Team members that are not on the technical workgroup may also recommend potential MDC to any list by contacting Annette.

Then, during our meetings, the MDC Team will analyze each potential MDC on the list and follow this step-by-step process:

1. Does it need to be re-worded?
   * If so, there will be up to 10 minutes allowed to discuss how it should be re-worded (a timer will be used). The time limit is necessary to insure that the team stays on schedule. After the discussion is over, DEMLR staff will go back and re-word the potential MDC based on the MDC Team’s discussion. MDC Team members may also submit written suggestions on re-wording to the technical group. The technical workgroup will re-word the potential MDC based on the team’s input and bring it to the next meeting for reconsideration.
   * If not, go on to Step 2 below.
2. Analyze each potential MDC using the “MDC Scorecard” to guide the categorization of each potential MDC. The MDC Scorecard will ask the following questions of each potential MDC:

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| MDC (Question 1): Is this criterion necessary for the device to function successfully in perpetuity with proper maintenance? |
| MDC (Question 2): Is this criterion necessary for maintaining water quality standards? |
| MDC (Question 3): Is this criterion necessary for removal of Total Suspended Solids? |
| Nutrient DC: Is this criterion necessary for optimal removal of TN and TP? |
| Bacteria DC: Is this criterion necessary for optimal removal of bacteria? |
| Temperature DC: Is this criterion necessary for optimal maintenance of low temperature? |
| Recommended DC: Is this criterion a good design practice but not required above? |

As soon as a potential MDC is considered by the group to be an MDC, then it does not need to be considered as a nutrient, bacteria or temperature DC since it is automatically required for each device. Potential MDCs that do not meet any of the above filters shall be omitted from the list of MDC.

1. DEMLR staff will provide rule citations for all MDCs that are specifically spelled out in the current 2H .1000 rules. If an MDC is not specifically spelled out in the 2H .1000 rules but the team (generally) agrees is necessary for long-term function, maintenance of water quality standards and/or removal of TSS, then there will be a citation for 15A NCAC 02B .0201, the Anti- degradation Policy. In spring 2015, the MDC Team can discuss updating 2H .1008 to better reflect the decisions of the MDC Team.