Stormwater Performance Standards and Retrofits

WTWG Meeting 2/4/2013

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Questions from jurisdictions

- Would a complete change in reporting requirements post-calibration (2017) result in “violating the calibration” for what-if scenarios?
- What volume or runoff parameters should states report to receive the reductions for these new practices?

Table 3 How to Define Runoff Capture for New Development in Each Bay State		
	Specific Engineering Parameter (EP) Defining Runoff Volume Captured	**Source**
DC	Divide SWRv (stormwater retention volume, cubic feet) by 43,560 and insert into Equation X	Cell C-30 in 2012 DDOE Compliance Spreadsheet
DE	Runoff Reduction Depth (inches)	Directly from DE DURMM v. 2 Model Output
FED	D (95% rainfall depth, inches) less initial abstraction for predevelopment condition	EPA, 2009 and DOD, 2010
MD	Divide ESD Runoff Volume (cubic feet) by 43,560 and insert into Equation X	Cell C-66 in MD ESD TO MEP Spreadsheet (2012)
NY	Insert WQv (water quality volume, acre-feet) into Equation X	See 2010 Design Manual
PA	Divide 2-year Volume Increase of Runoff Volume between the proposed conditions and the existing conditions (cubic feet) by 43,560 and insert into Equation X	Cell C-51 in Tab WS4 of 2012 CSN PA Stormwater Spreadsheet
VA	Post Development treatment volume (acre-feet) inserted into Equation X	Cell B-49 on Site Data page (tab 1) in 2012 VA DCR Compliance Spreadsheet
WV	Target Tv (treatment volume, acre-feet) inserted into Equation X	Cell A-80 in 2011 WVDEP Compliance Spreadsheet

Equation X is a site specific conversion factor equation:

$$= \frac{(12 * EP)}{IA}$$

Where:

EP = State-Specific Engineering Parameter (in acre-feet)
IA = Impervious Area (acres)

Recommendation for jurisdictions to consider

- The WTWG could agree to a date (such as 2018) when all new stormwater BMPs must be reported using the new method, with the understanding that this recommendation could change based upon future analysis.
- Future analysis: Some jurisdictions will begin tracking and reporting the required elements for the state stormwater performance standard and retrofit BMPs over the next few years. The WTWG could discuss the progress made by each jurisdiction after each progress reporting season. The WTWG will have the ability to delay the implementation date discussed above if need be.

March Meeting

- Review how various projects would be reported under the ST or RR reporting requirements.
- Seek approval of reporting requirements and default rate.
- Jurisdictions should submit any comments on the reporting requirements and default rate before March 4th meeting.

Recommended Defaults

- If a jurisdiction does NOT submit impervious acres, the jursidiction will receive NO reduction credit for the practice. The new curves are entirely dependant upon the number of impervious acres for each practice.
- If a jurisdiction submits impervious acres and some, but not all other required reporting elements, Scenario Builder will assume the practice achieved 1 inch of runoff storage volume per impervious acre (per suggestion by Tom S rds E

	TN	TP	TSS
RR	56%	66%	71%
ST	33%	52%	66%

Recommended Reporting Requirements

- Required Fields to be recorded in CAST and submitted by states:
  - State unique identifier to track practice through time
  - Indicate if new, re-development or retrofit practice
  - Date installed
  - Duration of practice (lifespan)
  - Indicate if runoff reduction or stormwater treatment
  - Retrofit class (new vs. existing)
  - Indicate if degraded or if reporting retrofit at an incremental improvement rate
  - **Runoff or storage volume (acre-feet)**
  - **Impervious acres**
  - Total drainage area (acres)
  - Location (lat/long)