

CPv and Qp Detention Standards

1. For LID projects (credits/waiver)
 - a. Re-evaluate requirement to disconnect & reconnect for LID projects
 - i. PA – new manual, ways of calculating CPv
 1. <http://www.depweb.state.pa.us/watershedmgmt/cwp/view.asp?a=1437&q=529063&watershedmgmtNavPage>
 2. http://www3.villanova.edu/VUSP/bmp_research/Outreach/Pdf/PaBMP.pdf
2. For linear projects
 - a. sheetflow over side slopes is not cost effective or feasible
 - b. microponds become a public safety issue
 - c. NC State transportation department
 - d. NCHRP Report 565 – Transportation Research Board
3. Disconnection credits, how to apply CPv standard
4. Revise/clarify “Alternative” CPv standard/waiver
5. Consider revising the 2cfs waiver
6. Research alternative standards
 - a. Runoff reduction (a la CWP/Chesapeake SW Network proposals)
 - b. Distributed Runoff Control (DRC) method
 - c. release rates
 - d. evaluate pre and post development comparison
 - i. if pre-development soils are D, then site doesn’t need to detain as much as a site with A, B, or C soils; reducing over-detaining sites
 - e. evaluate areas and topography of the state instead of using a standardized approach
 - f. Be careful about eliminating CPv when stormwater TMDLs use a flow based surrogate
7. Change to comparison of runoff rates and volume between pre and post development instead of total runoff released over 12 or 24hrs
8. Evaluate/clarify CPv “compliance” method
 - a. Compare results of Harringtons Method to modeled center of mass detention time
 - b. Compare modeled Center of Mass Detention time with original center of mass detention time discussed by original CPv method promulgators (Capucitti) and perhaps even DRC method
 - c. Evaluate/understand/provide guidance on impact of “complex” orifices (WQv-ED orifice + CPv orifice)
 - d. Provide guidance on demonstrating CPv is met when dealing with additional ponds in the drainage area
 - i. Should we revise CPv requirement for discharges to existing ponds with drainage areas <10sq miles

9. Thermal impacts

- a. Should we continue with the 12-hr and 24-hr distinction based on receiving water type (i.e. cold versus warm)?
 - i. 12 hours is a compromise for CPv, not for thermal impacts (?)
 - ii. Encourage smart design: ex) orientation and shading of ponds: north facing, shaded with trees