2011 WMSC Summary of Proposed Changes

The current regulations can be found at:
http://building.clermontcountyohio.gov/2007WMSCRegulations.pdf

The following definitions were added:

- **Qualified inspection personnel:** A person knowledgeable in the principles and practice of erosion and sediment controls, who possesses the skills to assess all conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activity.
- **Settling Volume:** The volume within the sediment storage zone of the settling ponds which shall either be 1000 cubic feet per disturbed acre within the watershed of the basin or shall be the volume necessary to store the sediment as calculated with Revised Universal Soil Loss Equation (RUSLE) or similar generally accepted erosion prediction model. (See section 630.4-1)
- **Surface waters of the State:** All streams, lakes, reservoirs, ponds, marshes, wetlands or other waterways which are situated wholly or partially within the boundaries of the state, except those private waters which do not combine or effect a junction with natural surface or underground waters.

Section 310.1-1 was modified as follows:

- The fourth sentence (~~The settling volume of the basin must be indicated on the plans.~~) was deleted.
- The following was added: The sale of individual lots or sections within the development does not relieve the permit holder from the continued responsibility to maintain the site in compliance with these regulations until one or more of the following conditions are met:
  a. Final stabilization has been achieved on all portions of the site for which the permittee is responsible;
  b. Another operator has assumed control over all areas of the site that have not been finally stabilized;
  c. (For residential construction only), temporary stabilization has been completed and the lot, which includes a home, has been transferred to the homeowner.

Section 310.2 has been modified as follows:

- The words (~~On Site~~) were deleted in two places
- The following was added: **Exception #2:** On-site detention may not be required in systems approved in accordance with Section 500.4.

Section 310.2.1 has been modified as follows:

- The words (~~On Site~~) were deleted from the first sentence.
- The critical storm was changed from five (5) to two (2) years

Section 310.2.2 has been modified to read as follows:

Post-construction BMPs cannot be installed within a surface water of the State (e.g., wetland or stream) unless it's authorized by a CWA 401 water quality certification, CWA 404 permit, or Ohio EPA non-jurisdictional wetland/stream program approval.

Section 310.2.3 has been modified to read as follows:

Capacity of detention shall be determined by the amount of runoff draining to the detention structure, including that coming from off-site.

The release point(s) of any detention/retention basin and/or other stormwater management system shall be designed such that the post-development released stormwater flow emulates the pre-developed flow volume and characteristics as it is released onto the adjacent property for the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year rainfall events. If the pre-development flow characteristics cannot be emulated, the engineer must demonstrate that there is adequate capacity in the downstream storm sewer system, ditch, culvert, stream, overland flow route, etc. to accept the discharge from the above rainfall events and that the downstream topographic features will not be eroded or flooded by modifications to the storm flow characteristics. It may be necessary for the engineer to provide a detailed hydraulic analysis of the downstream stormwater system or overland flow route to demonstrate that there is adequate capacity in the downstream system. "Adequate capacity" is determined by engineering analysis to confirm that downstream structures, if properly maintained, would be capable of accommodating the flow, velocities would not increase to erosive speeds, and proposed uses of off-site properties would not be impaired. If analyses indicate that the downstream system is properly maintained and would not be able to accommodate the change in flow rate or characteristics, or is not adequate to accept the proposed peak discharges, the allowable detention/retention basin discharge must be reduced or the downstream system must be modified to accommodate the changed flow characteristics by the applicant as part of the overall development. If the downstream stormwater system is not properly maintained, the engineer shall notify the department. This analysis shall extend to the convergence with the first downstream perennial stream.
Exception: Existing culverts that are within the Road Right of Way and installed in compliance with ODOT or other locally approved standards.

Section 310.2.4 has been modified as follows:

- The word (~~required~~) has been deleted from the sentence.

Section 330.1 has been modified as follows:

- The words (or authorized representative) were added at the end of the first sentence.

Section 410.1-1 has been modified as follows:

- Numbers (8) & (9) were added to section G. as follows:
  (8) Indicate previous land use.
  (9) Indicate the extent of and provide a description of any wetlands.

Section 410.1-2 has been modified as follows:

- The words(including previous land use) were added to Section E. number (4)
- The words(existing and proposed) were added to Section E. number (11)
- Number (20), (21) and (22) were added to Section E as follows:
  (20)The location and description of discharges associated with dedicated asphalt and/or concrete plants and the BMPs.
  (21The settling volume of the basin.
  (22)Indicate the extent and provide a description of any wetlands. If the project contains any surface natural watercourses or wetlands, the permittee must contact the appropriate U.S. Army Corps of Engineer's District Office.
- Section (H) was added as follows:
  Areas designated for the storage or disposal of solid, sanitary and toxic wastes, including dumpster areas, areas designated for cement truck washout, and vehicle fueling. No solid or liquid waste, including building materials, shall be discharged in storm water runoff. Under no circumstances shall concrete trucks wash out directly into a drainageway, storm sewer or watercourse.
- The balance of the Sections were renumbered to reflect the addition of Section (H):
  (~~H~~) to (I), (~~I~~) to (J), (~~J~~) to (K), (~~K~~) to (L) and (~~L~~) to (M)

Section 410.1-3 has been modified as follows:

- The sentence (The holder of the permit must maintain an inspection log as required by Ohio EPA's Construction General Permit (Ohio EPA Permit Number OHC000003). The log must be maintained on site and made available for review by Clermont County Building Inspection Department personnel or its agent upon request.) was added at the end of the section.

Section 500.1 has been modified as follows:

- The words (~~On Site~~) were deleted from the first sentence.

Section 500.2 has been modified to read as follows:

- The site design shall incorporate stormwater runoff volumes that are kept to a minimum. Site development practices that reduce impervious areas, utilize infiltration and preserve the existing natural conditions are encouraged.

Section 530.1-6 B. has been modified to read as follows:

- All basins shall have emergency spillways that will safely pass the peak flow for a one hundred (100) year frequency storm under post development conditions at an acceptable velocity.

Section 530.1-7 has been modified to read as follows:

- For large construction activities of five (5) or more acres, BMPs shall be designed such that the drain time is long enough to provide treatment, but short enough to provide storage available for successive rainfall events as described in Table 2 below.

- Table 2 has been modified as follows:

Table 2. Target Draw Down (Drain) Times for Structural Post-Construction Treatment Control Practices

Best Management Practice	Drain Time of WQ_v
Infiltration Basin^	24 – 48 hours
Enhanced Water Quality Swale	24 hours
Dry Extended Detention Basin*	48 hours
Wet Extended Detention Basin**	24 hours
Constructed Wetland (above permanent pool)+	24 hours
Sand & Other Media Filtration	40 hours
Bioretention Cell^	40 hours
Pocket Wetland#	24 hours
Vegetated Filter Strip	24 hours

- * Dry basins serving a drainage area of ten (10) or more acres must include forebay and micropool each sized at 10% of the WQv
- ** Provide both a permanent pool and an EDv above the permanent pool, each sized at 0.75* WQv
- + Extended detention shall be provided for the full WQv above the permanent water pool.
- ^ The WQv shall completely infiltrate within 48 hours so there is no standing or residual water in the BMP.
- # Pocket wetlands must have a wet pool equal to the WQv, with 25% of the WQv in a pool and 75% in marshes. The EDv above the permanent pool must be equal to the WQv.

A new section 530.2-4 was added as follows:

- Concentrated Flow to Wetlands
  Concentrated storm water runoff to natural wetlands shall be converted to diffuse flow before the runoff enters the wetlands. The flow should be released such that no erosion occurs downslope. If the applicant proposes to discharge to a natural wetlands, a hydrologic analysis shall be performed. The applicant shall assess whether the construction activity will adversely impact the hydrologic flora and fauna of the wetland.

Section 610.2-2 has been modified as follows:

- The sentence (All sediment controls must be capable of ponding runoff to be considered functional.) was added to the end of the section.

Section 610.2-2 (a) has been modified as follows:

- A sediment settling pond is required for any one of the following conditions:
  • concentrated storm water runoff (e.g., storm sewer or ditch);
  • runoff from drainage areas, which exceed the design capacity of silt fence or other sediment barriers;
  • runoff from drainage areas that exceed the design capacity of inlet protection; or

• runoff from common drainage locations with 10 or more acres of disturbed land.

Section 620.1-1 has been modified as follows:

- Added the sentence (Temporary stabilization must be applied to denuded areas within seven (7) days after the most recent disturbance, and permanent stabilization must be applied to denuded areas within seven (7) days of reaching final grade on any portion of the development or project area.)to the end of the section.

Section 620.1-2 has been modified as follows:

- Added the sentence (Any area within fifty (50) feet of State surface water and at final grade shall be stabilized within two (2) days of reaching final grade.)to the end of the section.

Section 620.2-2 has been modified to read as follows:

- If vegetative buffers are to be used as part of the sediment control plan to protect waters of the State, they should only be used on development sites or project areas where only sheet flow runoff is expected. The recommended undisturbed buffer along a surface water of the State is a minimum of 25 feet as measured from the ordinary high water mark of the surface water.

Section 620.2-3 has been modified to read as follows:

- If vegetative buffers are to be used as part of the sediment control plan to protect properties adjacent to the site, they should only be used on development sites or project areas where only sheet flow runoff is expected. Also, the buffer strips shall be a minimum of fifteen (15) feet in width.

Section 620.2-3 has been modified to read as follows:

- Earthen sediment and erosion control structures must be stabilized (vegetative cover) within seven. (7) days of installation.

Section 630.4-1 has been modified to read as follows:

- **Sediment settling ponds:** Concentrated storm water runoff which exceeds the design capacity of silt fence or inlet protection shall pass through a sediment settling pond. The permittee may request approval from the Building Inspection Department if it can demonstrate that alternative controls are equivalent in effectiveness to a sediment settling pond. The sediment settling pond shall provide a dewatering zone of at least 67 cubic yards of storage per acre with a minimum drain time of 48 hours for the contributing drainage area. The drain time shall be modified in accordance with Section 310.2.6 when applicable. When determining the total contributing drainage area, off-site areas and areas which remain undisturbed by construction activity must be included, unless runoff from these areas is diverted away from the sediment settling pond and is not co-mingled with sediment laden runoff. The sediment storage zone shall either be 1000 cubic feet per disturbed acre within the watershed of the basin or shall be the volume necessary to store the sediment as calculated with Revised Universal Soil Loss Equation (RUSLE)

or similar generally accepted erosion prediction model. The configuration between inlets and the outlet of the basin must provide at least two units of length for each one unit of width. Sediment must be removed from the sediment settling pond when the design capacity has been reduced by 40 percent (this is typically reached when sediment occupies one-half of the basin depth).

Section 630.4-3 has been modified as follows:

- At the end of the second paragraph, the following was added:

Maintenance plans must include at a minimum:

A. The entity that will be responsible for post-construction operation, inspection and maintenance,
B. Routine and non-routine maintenance tasks that should be undertaken
C. A recommended schedule for inspection and maintenance.

Section 720 has been modified to read as follows:

SECTION 720 PERFORMANCE/MAINTENANCE SURETY OR BOND

720.1 All water management and sediment control facilities that are directly related to the drainage of or from the roads, streets, alleys, ditches, sidewalks, or other such improvements located in a private development, in an unincorporated area of Clermont County, shall be included in the Performance/Maintenance Surety (bond) as required by the Clermont County Engineer.

720.2 A Performance/Maintenance Surety Bond of 130% (amount to be approved by the Building Inspection Department) will be required for work covered by the Water Management and Sediment Control Regulations before the record plat can be recorded for any and prior to the release of any permit or partial permit by the Clermont County Building Department. The bond is to remain in effect until the project is complete and the final approval is made.

720.3 Periodic inspections by the Building Inspection Department or authorized representative will be required throughout the project to assure the site remains in compliance with these regulations.

720.4 If inspections reveal the construction activities are not in compliance with these regulations, the Performance Maintenance Bond may be forfeited to achieve such compliance.

720.5 The bond is to remain in effect until all inspections of the site are completed and the basin verification has been submitted to and approved by the Clermont County Building Inspection Department.

Section 810 has been modified to read as follows:

SECTION 810 DISCHARGE PROHIBITIONS AND EXEMPTIONS (to correct a spelling error)

*** **End of corrections and updates** ***