RESOLUTION NO. 14-00318

In the matter of approving storm water regulations for Lake, Middleton, and Perrysburg Townships and one county municipal separate storm water system (MS4s) pursuant to R.C. §307.79 and the Federal Water Pollution Control Act and the Ohio Water Pollution Control Act	))))))	County Commissioners' Office Wood County, Ohio February 25, 2014

WHEREAS, the Federal Water Pollution Control Act and the Ohio Water Pollution Control Act require designated political jurisdictions to acquire permits to discharge storm water under the National Pollutant Discharge Elimination System (NPDES) to the receiving surface waters of Ohio;

WHEREAS, the designated political jurisdictions of Lake, Middleton, and Perrysburg Townships and Wood County, Ohio, by and through the Wood County Board of Commissioners, have submitted a Joint Permitees Storm Water Management Program and received Permits from the Ohio EPA in 2003 and 2008 authorizing storm water discharges associated with construction activity and separate storm sewer discharges under the NPDES requirements, respectively;

WHEREAS, the Ohio EPA requires that the designated political subdivisions promulgate regulations for NDPES permits to discharge storm water associated with construction activity in Lake, Middleton, and Perrysburg Townships; and

WHEREAS, pursuant to R.C. §307.79 Wood County may "adopt, amend, and rescind rules . . . to achieve a level of management and conservation practices that will abate wind or water erosion of the soil or abate the degradation of the waters of the state by soil sediment in conjunction with land grading, excavating, filling, or other soil disturbing activities on land used or being developed for nonfarm commercial, industrial, residential, or other nonfarm purposes, and establish criteria for determination of the acceptability of those management and conservation practices," ". . . to implement the applicable area wide waste treatment management plan prepared under section 208 of the 'Federal Water Pollution Control Act,' . . . and to implement phase II of the storm water program of the National Pollutant Discharge Elimination System (NPDES) established in 40 C.F.R. Part 122"; now, therefore, be it

RESOLVED, that the Wood County Board of County Commissioners pursuant to its authority under R.C. §307.79 hereby adopts the Wood County Erosion and Sediment Control Resolution, attached hereto, and incorporates the same as if fully rewritten herein; and, be it further

RESOLVED, that said rules shall be in full force and effect from and immediately upon the adoption of this resolution.

Commissioner Herringshaw moved and Commissioner Kuhlman seconded the resolution and the roll being called on its adoption, the vote resulted as follows:

JOEL M. KUHLMAN Yes DORIS I. HERRINGSHAW, Ed.D Yes JAMES F. CARTER Yes

Attest: Sandy A. Lowe
Clerk of said Board

sal
xc: Wood County Engineer

Wood County Erosion and Sediment Control

1. Purpose and Scope

The Wood County Board of Commissioners adopts these Erosion and Sediment Control Rules, pursuant to Ohio Revised Code, Section 307.79, to establish technically feasible and economically reasonable standards to achieve a level of management and conservation practices in order to abate soil erosion and degradation of the waters of the State by soil sediment on land used or being developed for non-farm commercial, industrial, residential or other non-farm purposes, to establish criteria for determination of the acceptability of such management and conservation practices, and to promote the health, safety and well-being of the residents of Wood County. Specifically, the Rules are intended to protect:

1.1 County and township ditches, culverts and storm sewers from loss of capacity due to siltation.

1.2 Adjacent landowners from property loss due to sedimentation, erosion and flooding.

1.3 Water quality and habitat in streams and wetlands.

These Rules apply to soil-disturbing activities on land within the unincorporated area of Wood County used or being developed for non-farm commercial, industrial, residential, or other non-farm purposes, including, but not limited to, individual or multiple lots, subdivisions, multi-family developments, commercial and industrial developments, recreational projects, general clearing and grading projects, underground utilities, highways, building activities on farms, redevelopment of urban areas and all other uses unless expressly excluded as follows:

1.4 Activities related to producing agricultural crops or sylvan culture operations or areas regulated by the Ohio Agricultural Sediment Pollution Abatement Rules.

1.5 A Storm Water Pollution Prevention Plan (SWP3) is not required before clearing, grading, excavating, filling or otherwise wholly or partially disturbing less than one (1) acre of land owned by one (1) person or operated as one (1) development unit for the construction of non-farm buildings, structures, utilities, recreational areas or other similar non-farm uses; however, areas of less than one (1) acre are not exempt from compliance with all other provisions of these Rules.

2. Terms Defined

2.1 INTERPRETATION OF TERMS AND WORDS

(2.11) Words used in the present tense include the future tense and the singular include the plural, unless the context clearly indicates the contrary.

(2.12) The term "shall" is always mandatory and not discretionary. The word "may" is permissive. The term "should" is permissive but indicates strong suggestion.

(2.13) The word or term not interpreted or defined by this section shall be construed according to the rules of grammar and common usage so as to give these Rules their most reasonable application.

2.2 DEFINITIONS

Accelerated Soil Erosion: Is the increased loss of the land surface that occurs as a result of human activities.

Acre: A unit of measure equaling 43,560 square feet.

Administrator: The person or entity having the responsibility and duty of administering and ensuring compliance with these Rules. The Administrator shall be appointed by the Board of Wood County Commissioners.

Applicant: The individual developer, owner, or operator who is responsible for the implementation of erosion and sediment controls on the development site.

Best Management Practices (BMP): Structural or nonstructural facilities or activities that control soil erosion and/or storm water runoff at a development site. This includes treatment requirements, operating and maintenance procedures, or other practices to control site runoff, leaks, or waste disposal.

Buffer Area: A designated transitional area around a stream or wetland left in a natural, usually vegetated state, so as to protect a stream or wetland from runoff pollution. Construction activities in this area shall be restricted or prohibited based on the sensitivity of the stream or wetland and the recommendation of the Administrator.

Channel: A natural bed that conveys water or a ditch excavated for the flow of water.

Critical Area: Any portion of an area subject to this Rule the disturbance of which would cause soil erosion and sediment run-off and damage to private properties, water courses, storm sewers or public lands due to topography, soil type, hydrology or proximity to a water course. These areas include, but are not limited to, riparian areas, wetlands and highly erodible soils.

Development Area: A contiguous area owned by one (1) person or persons, or operated as one (1) development unit, and used or being developed for non-farm commercial, industrial, residential or other institutional construction or alteration which changes the runoff characteristics of a parcel of land.

Disturbed Area: An area of land subject to erosion due to the removal of vegetative cover and/or soil moving activities, including filling.

Ditch: An excavated channel for the purpose of drainage or irrigation. It may or may not be maintained by a county agency.

Drainage: The removal of excess surface water or groundwater from land by surface or subsurface drains.

Drainage Improvement: An improvement as defined in O.R.C. 6131.01(C), and/or conservation works of improvement as defined in O.R.C. 1511 and 1515.

Drainage Way: A natural or manmade channel, ditch, or waterway that conveys surface water in a concentrated manner by gravity. See also watercourse, channel, or stream.

Earth Material: The soil, sediment, rock, sand, gravel and organic material or residue associated with or attached to the soil.

Engineer: A Professional Engineer registered in the State of Ohio.

Erosion: The process by which the land surface is worn away by the action of wind, water, ice, gravity or any combination of those forces.

Erosion and Sediment Control: The control of soil material, both mineral and organic, during soil-disturbing activity to prevent its transport out of the disturbed area by means of wind, water, ice or gravity.

Farm: Land or water devoted to growing crops or cultivated in connection with raising or harvesting any agricultural or horticultural commodity, including nursery stock, and the raising, shearing, feeding, caring for, training, and management of livestock and poultry.

Final Stabilization: All soil disturbing activities at the site have been completed and a uniform perennial vegetative cover with a density of at least 80% cover for the area has been established or equivalent stabilization measures, such as the use of mulches or geotextiles, have been employed.

Grading: The excavating, filling, or stockpiling of earth material, or any combination thereof, includes the land in its excavated or filled condition.

Impervious: That which does not allow infiltration.

Land disturbance: Any clearing, grading, excavating, filling, or other alteration of land surface where natural or man-made cover is destroyed in a manner that exposes the underlying soils.

Landscape Architect: A Professional Landscape Architect registered in the State of Ohio.

Landslide: A rapid mass movement of soil and rock moving downhill under the influence of gravity.

Larger Common Plan of Development: A contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one (1) plan.

Multi-family Development: Apartments, condominiums, duplexes or other similar buildings housing more than one family.

Maximum Extent Practicable: The level of pollutant reduction that operators of Small Municipal Separate Storm Sewer Systems (MS4) regulated under 40 C.F.R. Parts 9, 122, 123, and 124, referred to as NPDES Storm Water Phase II, must meet.

Natural Waterway: A waterway that is part of the natural topography which usually maintains a continuous or seasonal flow during the year and is characterized as being irregular in cross-section with a meandering course.

NPDES: National Pollutant Discharge Elimination System; a regulatory program in the Federal Clean Water Act that prohibits the discharge of pollutants into surface waters of the United States without a permit.

Ohio EPA General Construction Permit: A general storm water permit issued by the Ohio EPA is required for discharges associated with construction activities of $\geq$ 1 acre.

One Hundred Year Frequency Storm: A storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in one hundred (100) years. It may also be expressed as an exceedence probability with a one (1) percent chance of being equaled or exceeded in any given year.

Person: An individual, corporation, firm, trust, commission, board, public or private partnership, joint venture, agency, unincorporated association, municipal corporation, county or state agency, federal government or any combination thereof.

Phasing: Clearing a parcel of land in distinct sections, with the stabilization of each section before the clearing of the next.

Post-Development: The conditions which exist following the completion of the soil-disturbing activity in terms of topography, vegetation, land use and rate, volume or direction of storm water runoff.

Pre-Construction Meeting: A meeting between the Administrator and all principal parties, prior to the start of any construction, at a site that requires an Storm Water Pollution Prevention Plan (SWP3).

Post-Construction Runoff Control- A BMP designed to manage storm water quantity (and often quality) after construction is complete.

Rainwater and Land Development Manual: Ohio's standards for storm water management, land development, and urban stream protection. It was developed by the Ohio Department of Natural Resources, the U.S. Department of Agriculture Natural Resource Conservation Service, and the Ohio Environmental Protection Agency. The most current edition of these standards shall be used with this regulation.

Runoff: The portion of rainfall, melted snow, or irrigation water that flows across the ground surface and is eventually returned to water resources or wetlands.

Retention Structure: A permanent structure whose primary purpose is to permanently store a given volume of storm water runoff for release by infiltration and/or evaporation.

Sediment: The soils or other surface materials that can be transported or deposited from its site of origin by the action of wind, water, ice or gravity as a product of erosion.

Sedimentation: The deposit of sediment in water bodies.

Sediment Basin: A temporary barrier or other suitable retention structure built across an area of water flow to intercept runoff and allow transported sediment to settle and be retained prior to discharge into waters of the State.

Sediment Pollution: The degradation of waters of the State by sediment as a result of failure to apply management or conservation practices to abate wind or water soil erosion, specifically in conjunction with soil-disturbing activities on land used or being developed for commercial, industrial, residential or other non-farm purposes.

Sloughing/Slumping: Is a slip or downward movement of an extended layer of soil resulting from the undermining action of water or the soil-disturbing activity of man.

Soil Conservation: The use of the soil within the limits of its physical characteristics and protecting it from unalterable limitations of climate and topography.

Soil-Disturbing Activity: A clearing, grading, excavating, filling or other alteration of the earth's surface where natural or man-made ground cover is destroyed, which may result in, or contribute to, erosion and sediment pollution.

Soil and Water Conservation District (SWCD): An entity organized under Chapter 1515 of the Ohio Revised Code referring either to the Soil and Water Conservation District Board or its designated employee(s), hereinafter referred to as the Wood SWCD.

Soil Loss: The soil moved from a given site by the forces of erosion, measured using "T."

Stabilization: The installation of vegetative and/or structural measures to establish a soil cover in order to reduce soil erosion by storm water runoff, wind, ice, and gravity.

Storm Drain: Is a conduit, pipe or human-made structure, which serves to transport storm water runoff.

Storm Water Management: Runoff water safely being conveyed or temporarily stored and released at an allowable rate to minimize erosion and flooding.

Storm Water Runoff: The direct response of a watershed to precipitation, which includes the surface and subsurface runoff that enters a stream, ditch, storm sewer or other concentrated flow during and following the precipitation.

Storm Water Management Standards Manual: A standards manual prepared by the Maumee RAP and TMACOG that provides guidelines on BMP design and performance criteria.

Stream: A body of water running or flowing on the earth's surface in which flow may be perennial and/or seasonally intermittent.

Subsoil: That portion of the soil below the topsoil or plow layer, beginning 6" -12" below surface down to bedrock parent material.

Temporary Soil Erosion and Sediment Control Measures: Interim control measures, which are installed or constructed to control soil erosion or sedimentation until permanent soil erosion control measures are established.

Ten Year Frequency Storm: A storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in ten (10) years. It may also be expressed as an exceedence probability with a ten (10) percent chance of being equaled or exceeded in any given year.

Two Year Frequency Storm: A storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in two (2) years. It may also be expressed as an exceedence probability with a fifty (50) percent chance of being equaled or exceeded in any given year.

Topsoil: The upper layer of soil that is usually darker in color and richer in organic matter and nutrients than the subsoil.

Unstable Soils: A portion of land surface or area which is prone to slipping, sloughing, landslides or is identified by Natural Resource Conservation Service, USDA methodology as having low soil strength.

Watercourse: A definite channel with bed and banks within which concentrated water flows, either continuously or intermittently.

Water Resource: Any public or private body of water including lakes or ponds, and streams, gullies, swales, or ravines having banks, a defined bed, and a definite direction of course, either continuous or intermittent flows.

Watershed: The total drainage area contributing runoff to a single point.

Wetland: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas (40 CFR 232, as amended).

3. Disclaimer of Liability

Compliance with the provisions of this regulation shall not relieve any person from responsibility for damage to any person otherwise imposed by law. The provisions of this regulation are promulgated to promote the health, safety, and welfare of the public and are not designed for the benefit of any individual or for the benefit of any particular parcel of property.

4. Conflicts, Severability, Nuisances and Responsibility

4.1 Where this regulation is in conflict with other provisions of law or ordinance, the most restrictive provisions shall prevail.

4.2 If any clause, section, or provision of this regulation is declared invalid or unconstitutional by a court of competent jurisdiction, the validity of the remainder shall not be affected thereby.

4.3 This regulation shall not be construed as authorizing any person to maintain a private or public nuisance on their property, and compliance with the provisions of this regulation shall not be a defense in any action to abate such a nuisance.

4.4 Failure of the County of Wood to observe or recognize hazardous or unsightly conditions or to recommend corrective measures shall not relieve the site owner from the responsibility for the condition or damage resulting there from, and shall not result in the Community, its officers, employees, or agents being responsible for any condition or damage resulting there from.

5. Development of Storm Water Pollution Prevention Plans (SWP3)

5.1 This regulation requires that a Storm Water Pollution Prevention Plan (SWP3) be developed and implemented for all parcels where disturbance of one (1) acre or more will occur for non-farm commercial, industrial, residential or other non-farm purposes.

5.2 The SWP3 required by this regulation is not synonymous with the SWP3 required by the Ohio EPA. Although based on the Ohio EPA general construction permit, minor variations do exist. Therefore, acceptance by the Ohio EPA does not replace the need to adhere to the requirements of this regulation.

6. Application Procedures

6.1 SOIL DISTURBING ACTIVITIES SUBMITTING A STORM WATER POLLUTION PREVENTION PLAN (SWP3): The applicant shall submit (2) sets of the SWP3 and the applicable fees to the Wood County Engineer:

(6.1.1) For Subdivisions: After the approval of the preliminary plat and with submittal of the infrastructure improvement plans.

(6.1.2) For other construction projects: Before approval to commence land disturbance.

(6.1.3) For general clearing projects: Before approval to commence land disturbance.

6.2 The Wood County Engineer's Office shall review the plans submitted for conformance with this regulation and approve, or return for revisions with comments and recommendations for revisions.

6.3 Soil disturbing activities shall not begin and zoning permits shall not be issued without an approved SWP3.

6.4 Approvals issued in accordance with this regulation shall remain valid for one (1) year from the date of approval. If construction is not initiated within (1) year, a new approval will be required before earth disturbing activities may occur.

7. Compliance with State and Federal Regulations

7.1 Approvals issued in accordance with this regulation do not relieve the applicant of responsibility for obtaining all other necessary permits and/or approvals from the Ohio EPA, the US Army Corps of Engineers, and other federal, state, and/or county agencies. If requirements vary, the most restrictive requirement shall prevail. These permits may include, but are not limited to, those listed below. All submittals are required to show

proof of compliance with these state and federal regulations and shall be submitted with Storm Water Pollution Prevention Plans.

(7.1.1) Ohio EPA NPDES Permits authorizing storm water discharges associated with construction activity or the most current version thereof: Proof of compliance with these requirements shall be the applicant's Facility ID number from Ohio EPA, a copy of the Ohio EPA Director's Authorization Letter for the NPDES Permit, or a letter from the site owner certifying and explaining why the NPDES Permit is not applicable.

(7.1.2) Section 401 of the Clean Water Act: Proof of compliance shall be a copy of the Ohio EPA Water Quality Certification application tracking number, public notice, project approval, or a letter from the site owner certifying that a qualified professional has surveyed the site and determined that Section 401 of the Clean Water Act is not applicable. Wetlands, and other waters of the United States, shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.

(7.1.3) Ohio EPA Isolated Wetland Permit: Proof of compliance shall be a copy of Ohio EPA's Isolated Wetland Permit application tracking number, public notice, project approval, or a letter from the site owner certifying that a qualified professional has surveyed the site and determined that Ohio EPA's Isolated Wetlands Permit is not applicable. Isolated wetlands shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.

(7.1.4) Section 404 of the Clean Water Act: Proof of compliance shall be a copy of the U.S. Army Corps of Engineers Individual Permit application, public notice, or project approval, if an Individual Permit is required for the development project. If an Individual Permit is not required, the site owner shall submit proof of compliance with the U.S. Army Corps of Engineer's Nationwide Permit Program. This shall include one of the following:

A. A letter from the site owner certifying that a qualified professional has surveyed the site and determined that Section 404 of the Clean Water Act is not applicable

B. A site plan showing that any proposed fill of waters of the United States conforms to the general and special conditions specified in the applicable Nationwide Permit. Wetlands and other waters of the United States shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.

(7.1.5) Ohio Dam Safety Law: Proof of compliance shall be a copy of the ODNR Division of Water permit application tracking number, a copy of the project approval letter from the ODNR Division of Water, or a letter from the site owner certifying and explaining why the Ohio Dam Safety Law is not applicable.

8. Storm Water Pollution Prevention Plan (SWP3)

8.1 In order to control sediment pollution of water resources and wetlands, an applicant disturbing property subject to section 5.1 of this regulation shall submit a SWP3 in accordance with this regulation.

8.2 The SWP3 shall be certified by a professional engineer (P.E.), certified professional erosion and sediment control specialist (CPESC), or a registered landscape architect.

8.3 The SWP3 shall incorporate measures as recommended by the most current edition of Rainwater and Land Development as published by the Ohio Department of Natural Resources (ODNR) or the most current edition of the Storm Water Management Standards Manual as developed by TMACOG and the Maumee RAP and shall include the following information:

(8.3.1) Site description and data: The SWP3 shall provide:

A. A description of the nature and type of the construction activity (e.g. residential, shopping mall, highway, etc.).

B. Total area of the site and the area of the site that is expected to be disturbed (i.e., grubbing, clearing, excavation, filling or grading, including off-site borrow areas).

C. Calculation of runoff coefficients for both the pre-construction and post-construction condition.

D. An estimate of the impervious area and percent of imperviousness created by the soil-disturbing activity.

E. Existing data describing the soil and, if available, the quality of any known pollutant discharge from the site such as that which may result from previous contamination caused by prior land uses.

F. A description of prior land uses at the site.

G. An implementation schedule which describes the sequence of major soil-disturbing operations (i.e., grubbing, excavating, grading, utilities and infrastructure installation) and the implementation of erosion and sediment controls to be employed during each operation of the sequence.

H. The location and name of the immediate receiving stream or surface water(s) and the first subsequent receiving water(s).

I. The aerial (plan view) extent and description of wetlands or other special aquatic sites at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project.

J. For subdivided developments where the SWP3 does not call for a centralized sediment control capable of controlling multiple individual lots, a detail drawing of a typical individual lot showing standard individual lot erosion and sediment control practices.

K. Location and description of any storm water discharges associated with dedicated asphalt and dedicated concrete plants associated with the development area and the best management practices to address pollutants in these storm water discharges.

L. The name of the applicant (person responsible for implementation of the SWP3).

(8.3.2) Site map: The SWP3 shall provide:

A. Limits of soil-disturbing activity of the site, including off site spoil and borrow areas.

B. Soils types should be depicted for all areas of the site, including locations of unstable or highly erodible soils.

C. Existing and proposed one-foot (1') contours. This must include a delineation of drainage watersheds expected during and after major grading activities as well as the size of each drainage watershed in acres.

D. Surface water locations including springs, wetlands, streams, lakes, water wells, etc., on or within 200 feet of the site, including the boundaries of wetlands or stream channels and first subsequent named receiving water(s) the applicant intends to fill or relocate for which the applicant is seeking approval from the Army Corps of engineers and/or Ohio EPA.

E. Existing and planned locations of buildings, roads, parking facilities, and utilities.

F. The location of all erosion and sediment control practices, including the location of areas likely to require temporary stabilization during the course of site development.

G. Sediment ponds, including their sediment settling volume and contributing drainage area.

H. Permanent storm water management practices to be used to control pollutants in storm water after construction operations have been completed.

I. 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.

J. The location of designated stoned construction entrances where the vehicles will ingress and egress the construction site.

K. The location of any in-stream activities including stream crossings.

L. Submittal of any drawings of the site in electronic format, preferably CAD or GIS Shapefiles.

(8.3.3) A soils engineering report.: The Wood County Engineer may require the SWP3 to include a Soils Engineering Report based upon his/her determination that the conditions of the soils are unknown or unclear to the extent that additional information is required to protect against erosion or other hazards. This report shall be based on adequate and necessary test borings, and shall contain all the information listed below. Recommendations included in the report and approved by the Wood County Engineer shall be incorporated in the grading plans and/or other specifications for site development.

A. Data regarding the nature, distribution, strength, and erodibility of existing soils.

B. If applicable, data regarding the nature, distribution, strength, and erodibility of the soil to be placed on the site.

C. Conclusions and recommendations for grading procedures.

D. Conclusions and recommended designs for interim soil stabilization devices and measures, and for permanent soil stabilization after construction is completed.

E. Design criteria for corrective measures when necessary.

F. Opinions and recommendations covering the stability of the site.

9. Performance Standards

The SWP3 must contain a description of the controls appropriate for each construction operation and the applicant must implement such controls. The SWP3 must clearly describe for each major construction activity the appropriate control measures; the general sequence during the construction process under which the measures will be implemented; and the contractor responsible for implementation (e.g., contractor A will clear land and install perimeter controls and contractor B will maintain perimeter controls until final stabilization). Activities not requiring a SWP3 in accordance with section 5.1 shall comply with the applicable controls required in this section. Only storm water will be permitted in storm water discharges.

The controls shall include the following minimum components:

9.1 NON-STRUCTURAL PRESERVATION MEASURES: The SWP3 must make use of practices that preserve the existing natural condition to the maximum extent practicable. Such practices may include preserving riparian areas, preserving existing vegetation and vegetative buffer strips, phasing of construction operations in order to minimize the amount of disturbed land at any one time, and designation of tree preservation areas or other protective clearing or grubbing practices.

9.2 EROSION CONTROL PRACTICES: The SWP3 must make use of erosion controls that are capable of providing cover over disturbed soils. A description of control practices designed to restabilize disturbed areas after grading or construction shall be included in the SWP3. The SWP3 must provide specifications for stabilization of all disturbed areas of the site and provide guidance as to which method of stabilization will be employed for any time of the year. Such practices may include: temporary seeding, permanent seeding, mulching, matting, sod stabilization, vegetative buffer strips, phasing of construction operations, the use of construction entrances, and the use of alternative ground cover. Erosion control practices must meet the following requirements:

(9.2.1) Stabilization: Disturbed areas must be stabilized as specified in Tables 1 and 2 below.

Area requiring permanent stabilization	Time frame to apply erosion controls
Any area that will lie dormant for one year or more.	Within 7 days of the most recent disturbance.
Any area within 50 feet of a stream and at final grade.	Within 2 days of reaching final grade.
Any area at final grade.	Within 7 days of reaching final grade within that area.

Table 1 - Permanent Stabilization

Area requiring temporary stabilization	Time frame to apply erosion controls
Any disturbed area within 50 feet of a stream and not at final grade.	Within 2 days of the most recent disturbance if that area will remain idle for more than 21 days.
For all construction activities, any disturbed area, including soil stockpiles that will be dormant for more than 21 days but less than one year, and not within 50 feet of a stream.	Within 7 days of the most recent disturbance within the area.
Disturbed areas that will be idle over winter.	Prior to November 1.
Note: Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques must be employed. These techniques may include mulching or erosion matting.	

Table 1-Temporary Stabilization

(9.2.2) Permanent stabilization of conveyance channels. Applicants shall undertake special measures to stabilize channels and outfalls and prevent erosive flows. Measures may include seeding, dormant seeding, mulching, erosion control matting, sodding, riprap, natural channel design with bioengineering techniques, or rock check dams, all as defined in the most recent edition of Rainwater and Land Development or the Field Office Technical Guide available at www.nrcs.usda.gov/technical/efotg/.

9.3 RUNOFF CONTROL PRACTICES. The SWP3 shall incorporate measures that control the flow of runoff from disturbed areas so as to prevent erosion. Such practices may include rock check dams, pipe slope drains, diversions to direct flow away from exposed soils and protective grading practices. These practices shall divert runoff away from disturbed areas and steep slopes where practicable.

9.4 SEDIMENT CONTROL PRACTICES. The SWP3 shall include a description of, and detailed drawings for, all structural practices that shall store runoff, allowing sediments to settle and/or divert flows away from exposed soils or otherwise limit runoff from exposed areas. Structural practices shall be used to control erosion and trap sediment from a site remaining disturbed for more than 14 days. Such practices may include, among others: sediment settling ponds, silt fences, storm drain inlet protection, and earth diversion dikes or channels which direct runoff to a sediment settling pond. All sediment control practices must be capable of ponding runoff in order to be considered functional. Earth diversion dikes or channels alone are not considered a sediment control practice unless used in conjunction with a sediment settling pond. Sediment control practices must meet the following requirements:

(9.4.1) Timing. Sediment control structures shall be functional throughout the course of earth disturbing activity. Sediment basins and perimeter sediment barriers shall be implemented prior to grading and within seven (7) days from the start of grubbing. They shall continue to function until the upslope development area is restabilized. As construction progresses and the topography is altered, appropriate controls must be constructed or existing controls altered to address the changing drainage patterns.

(9.4.2) Sediment settling ponds. Areas of disturbance 10 acres or greater or concentrated runoff from drainage areas that exceed the design capacity of silt fence or inlet protection, as determined in Table 3 below, shall pass through a sediment settling pond or equivalent best management practice upon approval from the Wood County Engineer.

The sediment-settling pond shall be sized to provide at least 67 cubic yards of storage per acre of total contributing drainage area. 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 depth of the sediment-settling pond must be less than or equal to five (5) feet. The configuration between the inlets and the outlet of the basin

must provide at least two units of length for each one unit of width (> 2:1 length: width ratio). Sediment must be removed from the sediment-settling pond when the design capacity has been reduced by 40 percent. This limit is typically reached when sediment occupies one-half of the basin depth. When designing sediment settling ponds, the applicant must consider public safety, especially as it relates to children, as a design factor for the sediment basin and alternative sediment controls must be used where site limitations would preclude a safe design. The use of a combination of sediment and erosion control measures in order to achieve maximum pollutant removal is encouraged.

(9.4.3) Silt fence and diversions. Sheet flow runoff from denuded areas shall be intercepted by silt fence or diversions to protect adjacent properties, water resources, and wetlands from sediment transported via sheet flow. Where intended to provide sediment control, silt fence shall be placed on a level contour and shall be capable of temporarily ponding runoff. The relationship between the maximum drainage areas to silt fence for a particular slope range is shown in Table 3 below. Storm water diversion practices shall be used to keep runoff away from disturbed areas and steep slopes. Such devices, which include swales, dikes or berms, may receive storm water runoff from areas up to 10 acres.

Maximum Drainage Area (acres) to 100 linear feet of silt fence	**Range of Slope for a drainage area (%)**
0.5	< 2
0.25	≥ 2 but < 20
0.125	≥ 20 but < 50

Table 3-Maximum Drainage Area To Silt Fence

(9.4.4) Inlet protection. Erosion and sediment control practices, such as boxed inlet protection, shall be installed to minimize sediment-laden water entering active storm drain systems. Straw or hay bales are not acceptable forms of inlet protection.

(9.4.5) Off-site tracking of sediment and dust control. Best management practices must be implemented to ensure sediment is not tracked off-site and that dust is controlled. These best management practices must include, but are not limited to, the following:

A. Construction entrances shall be built and shall serve as the only permitted points of ingress and egress to the development area. These entrances shall be built of a stabilized pad of aggregate stone or recycled concrete or cement sized greater than two (2) inches in diameter, placed over a geotextile fabric, and

constructed in conformance with specifications in the most recent edition of the Rainwater and Land Development Manual.

B. Streets directly adjacent to construction entrances and receiving traffic from the development area shall be cleaned daily to remove sediment tracked off-site. If applicable, the catch basins on these streets nearest to the construction entrances shall also be cleaned weekly. Based on site conditions, the Wood County Engineer may require additional best management practices to control off site tracking and dust. These additional BMPs may include:

C. Silt fence or construction fence installed around the perimeter of the development area to ensure that all vehicle traffic adheres to designated construction entrances.

D. Designated wheel-washing areas. Wash water from these areas must be directed to a designated sediment trap, the sediment-settling pond, or to a sump pump for dewatering in conformance with section 9.52 and 9.7 of this regulation.

E. Applicants shall take all necessary measures to comply with applicable regulations regarding fugitive dust emissions, including obtaining necessary permits for such emissions. The Wood County Engineer may require dust controls including the use of water trucks to wet disturbed areas, tarping stockpiles, temporary stabilization of disturbed areas, and regulation of the speed of vehicles on the site.

(9.4.6) Stream protection. Construction vehicles shall avoid water resources and wetlands. If the applicant is permitted to disturb areas within 50 feet of a water resource or wetland, the following conditions shall be addressed in the SWP3:

A. All BMPs and stream crossings shall be designed as specified in the most recent edition of the Rainwater and Land Development Manual.

B. Structural practices shall be designated and implemented on site to protect water resources or wetlands from the impacts of sediment runoff.

C. No structural sediment controls (e.g., the installation of silt fence or sediment settling pond in-stream) shall be used in a water resource or wetland.

D. Where stream crossings for roads or utilities are necessary and permitted, the project shall be designed such that the number

of stream crossings and the width of the disturbance are minimized.

E. Temporary stream crossings shall be constructed if water resources or wetlands will be crossed by construction vehicles during construction.

F. Construction of bridges, culverts, or sediment control structures shall not place soil, debris, or other particulate material into or close to the water resources or wetlands in such a manner that it may slough, slip, or erode.

(9.4.7) Modifying controls. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the applicant shall replace or modify the control for site conditions.

9.5 NON-SEDIMENT POLLUTANT CONTROLS: No solid or liquid waste, including building materials, shall be discharged in storm water runoff. The applicant must implement site best management practices to prevent toxic materials, hazardous materials, or other debris from entering water resources or wetlands. These practices shall include but are not limited to the following:

(9.5.1) Waste Materials: A covered dumpster shall be made available for the proper disposal of garbage, plaster, drywall, grout, gypsum, and other waste materials.

(9.5.2) Concrete Truck Wash Out: The washing of concrete material into a street, catch basin, or other public facility or natural resource is prohibited. A designated area for concrete washout shall be made available.

(9.5.3) Fuel/Liquid Tank Storage: All fuel/liquid tanks and drums shall be stored in a marked storage area. A dike shall be constructed around this storage area with a minimum capacity equal to 110% of the volume of all containers in the storage area. All storage areas will be lined with clay to prevent the contamination of groundwater resources.

(9.5.4) Toxic or Hazardous Waste Disposal: Any toxic or hazardous waste shall be disposed of properly.

(9.5.5) Contaminated Soils Disposal and Runoff: Contaminated soils from redevelopment sites shall be disposed of properly. Runoff from contaminated soils shall not be discharged from the site. Proper permits shall be obtained for development projects on solid waste landfill sites or redevelopment sites.

9.6 COMPLIANCE WITH OTHER REQUIREMENTS. The SWP3 shall be consistent with applicable State and/or local waste disposal, sanitary sewer, or septic system regulations,

including provisions prohibiting waste disposal by open burning, and shall provide for the proper disposal of contaminated soils located within the development area.

9.7 TRENCH AND GROUND WATER CONTROL. There shall be no sediment-laden or turbid discharges to water resources or wetlands resulting from dewatering activities. If trench or ground water contains sediment, it must pass through a sediment-settling pond or other equally effective sediment control device, prior to being discharged from the construction site. Alternatively, sediment may be removed by settling in place or by dewatering into a sump pit, filter bag or comparable practice. Ground water dewatering which does not contain sediment or other pollutants is not required to be treated prior to discharge. However, care must be taken when discharging ground water to ensure that it does not become pollutant-laden by traversing over disturbed soils or other pollutant sources.

9.8 INTERNAL INSPECTIONS. All controls on the site shall be inspected at least once every seven calendar days and within 24 hours after any storm event greater than one-half inch of rain per 24 hour period. The applicant shall assign qualified inspection personnel to conduct these inspections to ensure that the control practices are functional and to evaluate whether the SWP3 is adequate, or whether additional control measures are required. Qualified inspection personnel are individuals with knowledge and experience in the installation and maintenance of sediment and erosion controls. These inspections shall meet the following requirements:

(9.8.1) Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system

(9.8.2) Erosion and sediment control measures identified in the SWP3 shall be observed to ensure that they are operating correctly. The applicant shall utilize an inspection form provided by the Wood County Engineer or an alternate form acceptable to the Wood County Engineer.

(9.8.3) Discharge locations shall be inspected to determine whether erosion and sediment control measures are effective in preventing significant impacts to the receiving water resource or wetlands.

(9.8.4) Locations where vehicles enter or exit the site shall be inspected for evidence of off-site vehicle tracking.

(9.8.5) The applicant shall maintain for three (3) years following final stabilization the results of these inspections, the names and qualifications of personnel making the inspections, the dates of inspections, major observations relating to the implementation of the SWP3, a certification as to whether the facility is in compliance with the SWP3, and information on any incidents of non-compliance determined by these inspections.

9.9 MAINTENANCE. The SWP3 shall be designed to minimize maintenance requirements. All control practices shall be maintained and repaired as needed to ensure continued

performance of their intended function until final stabilization. All sediment control practices must be maintained in a functional condition until all up slope areas they control reach final stabilization. The applicant shall provide a description of maintenance procedures needed to ensure the continued performance of control practices and shall ensure a responsible party and adequate funding to conduct this maintenance, all as determined by the Wood County Engineer. When inspections reveal the need for repair, replacement, or installation of erosion and sediment control BMPs, the following procedures shall be followed:

(9.9.1) When practices require repair or maintenance. If an internal inspection reveals that a control practice is in need of repair or maintenance, with the exception of a sediment-settling pond, it must be repaired or maintained within three (3) days of the inspection. Sediment settling ponds must be repaired or maintained within ten (10) days of the inspection.

(9.9.2) When practices fail to provide their intended function. If an internal inspection reveals that a control practice fails to perform its intended function as detailed in the SWP3 and that another, more appropriate control practice is required, the SWP3 must be amended and the new control practice must be installed within ten (10) days of the inspection.

(9.9.3) When practices depicted on the SWP3 are not installed. If an internal inspection reveals that a control practice has not been implemented in accordance with the schedule, the control practice must be implemented within ten (10) days from the date of the inspection. If the internal inspection reveals that the planned control practice is not needed, the record must contain a statement of explanation as to why the control practice is not needed.

9.10 FINAL STABILIZATION. Final stabilization shall be determined by the Wood County Engineer.

10. Post-Construction Runoff Control

10.1 So that a receiving stream's physical, chemical and biological characteristics are protected and stream functions are maintained, post-construction storm water practices shall provide perpetual management of runoff quality and quantity. To meet the post-construction requirements of this regulation, the SWP3 must contain a description of the post-construction BMPs that will be installed during construction for the site and the rationale for their selection. The rationale must address the anticipated impacts on the channel and floodplain morphology, hydrology, and water quality

10.2 Detail drawings and maintenance plans must be provided for all post-construction BMPs. Maintenance plans shall be provided by the permittee to the post-construction operator of the site (including homeowner associations) upon completion of construction activities. For sites located within a community with a regulated municipal separate storm sewer system (MS4), the permittee, land owner, or other entity with legal control of the

property may be required to develop and implement a maintenance plan to comply with the requirements of the MS4. Maintenance plans must ensure that pollutants collected within structural post-construction practices are disposed of in accordance with local, state, and federal regulations.

This regulation does not preclude the use of innovation or experimental post-construction storm water management technologies. Linear construction projects, (e.g., pipeline or utility line installation), which do not result in the installation of impervious surface, are not required to comply with this regulation. However, linear construction projects must be designed to minimize the number of stream crossings and the width of disturbance.

10.3 Large Construction Activities. For all large construction activities (involving the disturbance of five (5) or more acres of land or will disturb less than five (5) acres, but is a part of a larger common plan of development or sale which will disturb five (5) or more acres of land), the post-construction BMP(s) chosen must be able to detain storm water runoff for protection of the stream channels, stream erosion control, and improved water quality. Structural (designed) post-construction storm water treatment practices shall be incorporated into the permanent drainage system for the site. The BMP(s) chosen must be sized to treat the water quality volume (WQv) and ensure compliance with Ohio's Water Quality Standards in OAC Chapter 3745-1. The WQv shall be equivalent to the volume of runoff from a 0.75-inch rainfall and shall be determined according to one of the two following methods:

(10.3.1) Through a site hydrologic study approved by the local municipal permitting authority that uses continuous hydrologic simulation and local long-term hourly precipitation records or

(10.3.2) Using the following equation:

$WQv = C * P * A / 12$ where:
WQv = water quality volume in acre-feet
C = runoff coefficient appropriate for storms less than 1 inch (See Table 4)
P = 0.75 inch precipitation depth
A = area draining into the BMP in acres

Land Use	C
Industrial & commercial	0.90
High Density Residential (5 to 8 dwellings/acre)	0.70
Medium Density Residential (2 to 4 dwellings/acre)	0.55
Low Density Residential (1 dwelling/acre)	0.30
Open Space and Recreational Areas	0.25
Agricultural	0.15

Table 4-Runoff Coefficients Based on Type of Land Use

(10.3.3) Where land uses will be mixed, the runoff coefficient should be calculated using a weighted average. For example, if 60% of the contributing drainage area to the storm water treatment structure is Low Density Residential, 30% is High Density Residential, and 10% is Open Space, the runoff coefficient is calculated as follows (0.6)(0.3) + (0.3)(0.7) + (0.1)(0.25) = 0.42.

(10.3.4) An additional volume equal to 20 percent of the WQv shall be incorporated into the BMP for sediment storage and/or reduced infiltration capacity. The Wood County Engineer and Ohio EPA recommend that BMPs be designed according to the methodology included in the Rainwater and Land Development manual. 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 5 below:

Best Management Practice (BMP)	Drain Time of WQv
Infiltration	24-48 hours
Vegetated Swale and Filter Strip	24 hours
Extended Detention Basin (Dry Basins)	48 hours
Retention Basins (Wet Basins)	24 hours
Constructed Wetlands (above permanent pool)	24 hours
Media Filtration, Bioretention	40 hours

Table 5-Target Drain Times for Post Construction BMP's

* Provide both a permanent pool and an extended detention volume above the permanent pool, each sized at 0.75 * WQv

(10.3.5) The permittee may request approval from the Wood County Engineer to use alternative structural post-construction BMPs if the permittee can demonstrate that the alternative BMPs are equivalent in effectiveness to those listed in Table 5 above. Construction activities shall be exempt from this condition if it can be demonstrated that the WQv is provided within an existing structural post-construction BMP that is part of a larger common plan of development or if structural post-construction BMPs are addressed in a regional or local storm water management plan. Public entities (i.e., the state, counties, townships, cities, or villages) shall comply with the post-construction storm water management requirements of Section 10 for roadway construction projects. For redevelopment projects (i.e., developments on previously developed property), post-construction practices shall either ensure a 20 percent net reduction of the site impervious area, provide for treatment of at least 20 percent of the WQv, or a combination of the two.

10.4 Small Construction Activities. For all small land disturbance activities (which disturb one (1) or more, but less than five (5) acres of land and is not a part of a larger common plan of development or sale which will disturb five (5) or more acres of land), a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed must be included in the SWP3. Structural measures should be placed on upland soils to the degree attainable.

(10.4.1) Such practices may include, but are not limited to: storm water detention structures (including wet basins); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices). The SWP3 shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed pre-development levels.

(10.4.2) Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel to provide non-erosive flow velocity from the structure to a watercourse so that the natural physical and biological characteristics and functions are maintained and protected (e.g., no significant changes in the hydrological regime of the receiving water).

11. Fees

Pursuant to ORC Section 307.79 (A), the Storm Water Pollution Prevention Plan (SWP3) review, filing, and inspection fee is part of a complete submittal and is required to be submitted to the Wood County Engineer before land disturbance of one (1) or more acres. Please consult with the Wood County Engineer for current fee schedule.

12. Bond

If a Storm Water Pollution Prevention Plan (SWP3) is required by this regulation, soil disturbing activities shall not be permitted until a security bond, escrow account, cash bond or certified check has been deposited with the Wood County Engineer Finance Department. The bond amount shall be a $1,500 minimum, and an additional $1,500 paid for each subsequent acre or fraction thereof. The bond will be used for the Wood County Engineer to perform the obligations otherwise to be performed by the owner of the development area as stated in this regulation and to allow all work to be performed as needed in the event that the applicant fails to comply with the provisions of this regulation. The bond shall be returned, less Wood County Engineer administrative fees after all work required by this regulation has been completed and final stabilization has been reached, all as determined by the Wood County Engineer. Ohio counties may require performance bonds or other guarantees for water management improvement as stated in the ORC Chapter 711.101

13. Enforcement

13.1 All development areas are subject to external inspections by the Wood County Engineer to ensure compliance with the approved SWP3 and the performance criteria detailed in Section 9.

13.2 After each external inspection, the Wood County Engineer shall prepare and distribute a status report to the applicant.

13.3 If an external inspection determines that operations are being conducted in violation of the approved SWP3, the Wood County Engineer may issue a Notice of Violation (NOV).

14. Violations

14.1 No person shall violate or cause or knowingly permit to be violated any of the provisions of this regulation, or fail to comply with any of such provisions or with any lawful requirements of any public authority made pursuant to this regulation, or knowingly use or cause or permit the use of any lands in violation of this regulation or in violation of any permit granted under this regulation.

14.2 If it appears that a violation of any of these Rules has occurred, the owner and developer will be notified of deficiencies or noncompliance in the form of a Notice of Violation (NOV), return receipt requested. If within three (3) working days after receipt of the letter from the Board of Wood County Commissioners or representative, the operator has not rectified the deficiency or received approval of plans for its correction. The deficiency or noncompliance shall be reported to the Board of Wood County Commissioners for consideration of a "finding of violation."

14.3 If the Board of Wood County Commissioners determines that a violation exists and requests the Prosecuting Attorney of Wood County in writing, the Prosecuting Attorney shall seek an injunction or other appropriate relief to abate excessive erosion or sedimentation and secure compliance with these Rules. In granting relief, a court may order the construction of sediment control improvements or implementation of other control measures.

15. Appeals

Any person aggrieved by any order, requirement, determination, or any other action or inaction by the County of Wood in relation to this regulation may appeal to the court of common pleas. Such an appeal shall be made in conformity with Ohio Revised Code Chapter 2505 and Chapter 2526. Written notice of appeal shall be served on the County of Wood.

16. Penalty

16.1 The Board of the Wood County Commissioners or representative may issue an immediate stop work order if the violator failed to obtain any federal, state or local permit necessary for erosion and sediment control, earth movement, clearing or cut and fill activity pursuant to chapter 307.79 of the ORC.

16.2 Any person, firm, entity or corporation; including but not limited to, the owner of the property, his agents and assigns, occupant, property manager, and any contractor or subcontractor who violates or fails to comply with any provision of this regulation is guilty of a misdemeanor of the third degree and shall be fined no more than five hundred dollars ($500.00) or imprisoned for no more than sixty (60) days, or both, for each erosion and sediment control violation. A separate offense shall be deemed committed each day during or on which a violation or noncompliance occurs or continues.

16.3 The imposition of any other penalties provided herein shall not preclude Wood County instituting an appropriate action or proceeding in a Court of proper jurisdiction to prevent an unlawful development, or to restrain, correct, or abate a violation, or to require compliance with the provisions of this regulation or other applicable laws, ordinances, rules, or regulations, or the orders of Wood County."