

Subchapter III - Non-Agricultural Performance Standards

NR 151.10 Purpose. This subchapter establishes performance standards, as authorized by s. 281.16(2)(a), Stats., for non-agricultural facilities and practices that cause or may cause nonpoint runoff pollution. These performance standards are intended to limit nonpoint runoff pollution in order to achieve water quality standards. Design guidance and the process for developing technical standards to implement this section are set forth in subch. V.

NR 151.11 Construction site performance standard ~~for new development and redevelopment.~~

(1) DETERMINATION OF AVERAGE ANNUAL BASIS. In this section, average annual basis is calculated using the appropriate ~~annual~~ rainfall or runoff factor, also referred to as the R factor, or an equivalent design storm using a type II distribution, with consideration given to the geographic location of the site and the period of disturbance.

Note: The USLE and its successors RUSLE and RUSLE2, utilize an R factor which has been developed to estimate ~~annual~~ soil erosion, averaged over extended time periods. The R factor can be modified to estimate monthly and single-storm erosion. ~~A design storm can be statistically calculated to provide an equivalent R factor as an average annual calculation.~~

(2) APPLICABILITY. Except as provided under sub. (3), this section applies to ~~all the following:~~

~~(a) A construction site that has 5 or more acres of land disturbing construction activity, unless any of the following are met:~~

~~1. The department has received a notice of intent for the construction project in accordance with subch. III of ch. NR 216 before October 1, 2002.~~

~~**Note:** Prior to submitting a notice of intent pursuant to subch. III of ch. NR 216, a construction site erosion control plan in conformance with s. NR 216.46 and a storm water management plan in conformance with s. NR 216.47 must be developed.~~

~~2. The department of commerce has received a notice of intent for the construction project in accordance with s. Comm 61.115 before October 1, 2002.~~

~~3. A bid is advertised or construction contract signed where no bid is advertised, before October 1, 2002.~~

~~(b) After March 10, 2003, any construction site that has at least one acre of land disturbing construction activity, except where bids are advertised, or construction contracts signed where no bids are advertised, before October 1, 2002.~~

~~**Note:** The 5- and 1-acre land disturbance thresholds are consistent with subch. III of ch. NR 216 and EPA phase II storm water discharge rules regarding applicability of land disturbing construction permits.~~

(3) EXEMPTIONS. This section does not apply to the following:

~~(a) Construction projects that are exempted by federal statutes or regulations from the requirement to have a national pollutant discharge elimination system permit issued under 40 CFR 122, for land disturbing construction activity.~~

~~(b) Transportation facilities, except transportation facility construction projects that where they are part of a larger common plan of development such as local roads within a residential or industrial development.~~

~~**Note:** Transportation facility performance standards are given in subch. IV.~~

~~(ea) Nonpoint discharges from agricultural facilities and practices.~~

~~**Note:** This exemption is for nonpoint discharges from agricultural facilities and practices such as cropping and pasturing. Subch. III of ch. NR 216 also exempts nonpoint discharges, but regulates point source discharges of storm water, such as the construction of structures such as barns, manure storage facilities, sand settling lanes and barnyard runoff control systems. Under s. NR 216.42(2) these construction sites are subject to the construction performance standards of this section.~~

~~(db) Nonpoint discharges from silviculture activities.~~

~~(e) Routine maintenance for project sites that have less than 5 acres of land disturbance if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.~~

~~(c) A construction site where the department has received a notice of intent in accordance with subch. III of ch. NR 216 before October 1, 2002.~~

~~(d) A construction site where the department of commerce has received a notice of intent in accordance with s. Comm 61.115 before October 1, 2002.~~

~~(4) RESPONSIBLE PARTY. The landowner or other person performing services to meet the performance standards of this subchapter, through a contract or other agreement, shall comply with this section. The landowner of the post-construction site, the transportation facility authority or other person contracted or obligated by other agreement to implement and maintain construction BMPs shall comply with this section. However, BMPs no longer necessary for erosion and sediment control shall be removed by the authority in charge of maintenance.;~~

~~**Note:** Other persons include anyone responsible for disturbing the land or implementing or maintaining BMPs, such as a general contractor or landscape architect.~~

(5) PLAN. A written plan shall be developed and implemented for each construction site and shall incorporate the requirements of this section.

Note: The written plan may be that specified within s. NR 216.46, TRANS 401.07, the erosion control portion of a construction plan or other plan.

(6) REQUIREMENTS. The plan required under sub. (5) shall include the following:

(a) Best management practices that, by design, achievedischarge, no more than 5 tons/acre/year of the sediment load carried in runoff, from initial grading to final stabilization to the maximum extent practicable, ~~a reduction of 80% of the sediment load carried in runoff, on an average annual basis, as~~

~~compared with no sediment or erosion controls, until the construction site has undergone final stabilization.~~ No person shall be required to exceed ~~an 80%~~ the 5 tons/acre/year sediment reduction performance standard to meet the requirements of this paragraph unless specified under an approved TMDL pursuant to section 151.005. Erosion and sediment control BMPs may be used alone or in combination to meet the requirements of this paragraph. Credit toward meeting the sediment reduction performance standard shall be given for limiting the duration or area, or both, of land disturbing construction activity, or other appropriate mechanism.

Note: Soil loss prediction tools such as RUSLE2 that estimate the sediment load leaving the construction site under varying land and management conditions, or methodology identified in subch. V., may be used to calculate sediment reduction.

(b) Notwithstanding par. (a), if BMPs cannot be designed and implemented to ~~reduce-meet~~ the maximum sediment discharge load by 80%, performance standard of 5 tons/acre/year - on an average annual basis, the plan shall include a written and site-specific explanation why the ~~80% reduction~~ 5 tons/acre/year goal performance standard is not attainable and the sediment load shall be reduced to the maximum extent practicable.

(c) Where appropriate, the plan shall include sediment controls to do all of the following to the maximum extent practicable:

1. Prevent tracking of sediment from the construction site onto roads and other paved surfaces.
2. Prevent the discharge of sediment as part of site de-watering.
3. Protect separate storm drain inlet structures and culverts from receiving sediment where sediment may be delivered off-site or to on-site waters of the state.

(d) The use, ~~storage and disposal~~ of chemicals, cement and other compounds and materials ~~used~~ on the construction site shall be managed during the construction period to prevent their transport by runoff into waters of the state. However, projects that require the placement of these materials in waters of the state, such as constructing bridge footings or BMP installations, are not prohibited by this paragraph.

(7) LOCATION. The BMPs used to comply with this section shall be located prior to runoff entering waters of the state.

Note: While regional treatment facilities are appropriate for control of post-construction pollutants they should not be used for construction site sediment removal.

Note: In accordance with subch. V, the department has developed technical standards to help meet the construction site performance standards. These technical standards are available on the department web page at: <http://dnr.wi.gov/runoff/stormwater/techstds.htm>

NR 151.12 Post-construction performance standard ~~for new development, and redevelopment and in-fill development~~. (1) GENERAL. In this section:

~~(a)~~ "Post-construction site" means a construction site subject to regulation under this subchapter, after construction is completed and final stabilization has occurred.

Note: The threshold for evaluating the post-construction condition is the same as the construction phase, unless otherwise noted in this section. This means that it is based on the area of land disturbance.

~~(b) Average annual rainfall is determined by the following years and locations: Madison, 1984 (Mar. 12-Dec. 2); Green Bay, 1969 (Mar. 29-Nov. 25); Milwaukee, 1969 (Mar. 28-Dec. 6); Minneapolis, 1959 (Mar. 13-Nov. 4); Duluth, 1975 (Mar. 24-Nov. 19). Of the 5 locations listed, the location closest to a project site best represents the average annual rainfall for that site.~~

(2) APPLICABILITY. This section applies to a post-construction site or transportation facility that is or was subject to the construction performance standards of s. NR 151.11, except any of the following:

(a) A post-construction site where the department ~~has~~ received a notice of intent for the construction projectsite, in accordance with subch. III of ch. NR 216, ~~within 2 years after~~by October 1, ~~2002~~2004.

(b) A post-construction site where the department of commerce ~~has~~ received a notice of intent, in accordance with ~~s. Comm 61.115~~its regulations adopted pursuant to s. 101.1205, Wis. Stats., ~~within 2 years after~~by October 1, ~~2002~~2004.

~~(c) A redevelopment post-construction site with no increase in exposed parking lots or roads.~~

~~(d)~~ A post-construction site or transportation facility with less than 10% connected imperviousness based on the area of land disturbance, based on complete development of the post-construction site, provided the cumulative area of all parking lots and rooftops impervious surfaces is less than one acre. However, this does not include exemption from the protective area standard of s. NR 151.12(5)(d).

~~————— Note: Projects that consist of only the construction of bicycle paths or pedestrian trails generally meet this exception as these facilities have minimal connected imperviousness.~~

~~(e)~~ Agricultural facilities and practices.

Note: This exemption includes both point and nonpoint discharges from agricultural facilities and practices. Therefore post-construction structures such as barns, manure storage facilities, sand settling lanes and barnyard runoff control systems will be covered under subch. II and will not be subject, under s. NR 216.47(1), to the post-construction performance standards of this section.

~~(f) An action for which a final environmental impact statement was approved before October 1, 2002.~~

~~(g) An action for which a finding of no significant impact is made under ch. NR 150 before October 1, 2002.~~

~~(h)~~ Underground utility construction ~~such as water, sewer and fiberoptic lines~~, but not including the construction of any above ground structures associated with utility construction.

(gf) Reconditioning or resurfacing of a highway.

(3) RESPONSIBLE PARTY. The landowner of the post-construction site, [the transportation facility authority](#) or other person contracted or obligated by other agreement to implement and maintain post-construction storm water BMPs shall comply with this section.

(4) STORM WATER MANAGEMENT PLAN. A written storm water management plan shall be developed and implemented for each post-construction site and shall incorporate the requirements of this subsection.

Note: Examples of storm water management plans that may be used to comply with this section may be that specified within s. NR 216.47 or the municipal storm water management program specified within s. NR 216.07(75) [or the plan specified in s. TRANS 401.07.](#)

(5) REQUIREMENTS. The plan required under sub. (4) shall include:

(a) *Total suspended solids.* Best management practices shall be designed, installed and maintained to control total suspended solids carried in runoff from the post-construction site as follows:

1. For new development, [and in-fill development of 5 acres or more and new transportation facilities](#), by design, reduce ~~to the maximum extent practicable,~~ the total suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls, [to the maximum extent practicable](#). No person shall be required to exceed an 80% total suspended solids reduction to meet the requirements of this subdivision [unless specified under an approved TMDL pursuant to section 151.005.](#)

2. For redevelopment, [highway reconstruction and any increase in impervious area associated with the minor reconstruction of a highway](#), by design, reduce ~~to the maximum extent practicable,~~ the total suspended solids load [by 60% from all impervious surfaces other than disconnected rooftops, by 40%, based on an average annual rainfall as compared to no runoff management controls, to the maximum extent practicable,](#) ~~as compared to no runoff management controls.~~ No person shall be required to exceed a 40% total suspended solids reduction to meet the requirements of this subdivision [unless specified under an approved TMDL pursuant to section 151.005.](#)

[or highway reconstruction](#)

3. For in-fill development under 5 acres ~~that occurs within 10 years after October 1, 2002~~ [where the department or the department of commerce receives a notice of intent by October 1, 2012](#), by design, reduce ~~to the maximum extent practicable,~~ the total suspended solids load by 40%, based on an average annual rainfall, as compared to no runoff management controls [to the maximum extent practicable](#). No person shall be required to exceed a 40% total suspended solids reduction to meet the requirements of this subdivision [unless specified under an approved TDMSL pursuant to section 151.005.](#)

4. For in-fill development [under 5 acres where the department or the department of commerce receives a notice of intent after October 1, 2012](#) ~~that occurs 10 or more years after October 1, 2002~~, by design, reduce ~~to the maximum extent practicable,~~ the total suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls [to the maximum extent](#)

practicable. No person shall be required to exceed an 80% total suspended solids reduction to meet the requirements of this subdivision unless specified under an approved TDMSL pursuant to section 151.005.

Note: The following table summarizes the TSS reduction requirements of paragraph (a).

<u>Summary Table for TSS reduction performance standard.</u>	
<u>Development Type</u>	<u>Performance Standard – TSS Reduction</u>
<u>New Development</u>	<u>80% compared to no controls</u>
<u>In-fill > 5 acres</u>	<u>80% compared to no controls</u>
<u>New Transportation Facilities</u>	<u>80% compared to no controls</u>
<u>Redevelopment</u>	<u>60% of load from impervious surfaces other than disconnected rooftops compared to no controls</u>
<u>Highway Reconstruction</u>	<u>60% of load from impervious surfaces compared to no controls</u>
<u>Minor Road Reconstruction</u>	<u>60% of load from impervious surfaces compared to no controls for increase in impervious surface associated with minor road reconstruction</u>
<u>In-fill < 5 acres and before 10-1-12</u>	<u>40% compared to no controls</u>
<u>In-fill < 5 acres and on or after 10-1-12</u>	<u>80% compared to no controls</u>

5. Notwithstanding subs. 1 to 4., if the design cannot achieve the applicable total suspended solids reduction specified, the storm water management plan shall include a written and site-specific explanation why that level of reduction is not attained and the total suspended solids load shall be reduced to the maximum extent practicable.

Note: Pollutant loading models such as DETPOND, SLAMM, P8 or equivalent methodology may be used to evaluate the efficiency of the design in reducing total suspended solids. Information on how to access SLAMM and P8 these models is available at:

<http://dnr.wi.gov/runoff/models/index.htm><http://www.dnr.state.wi.us/org/water/wm/nps/slam.htm> or by contacting contact the storm water coordinator in the runoff management section of the bureau of watershed management program at (608) 267-7694.

Note: For performance standards based on an average annual rainfall, specific rainfall files for five geographic locations around the state will be used. Information on which annual rainfall files to use when modeling the TSS reduction goal as well as which particle distribution file to use when modeling the TSS reduction efficiency of a BMP are available from the DNR website at:

<http://dnr.wi.gov/runoff/models/index.htm> or by contacting the storm water management program at (608) 267-7694.

Note: The TSS reduction performance standards apply to the area of land disturbance. However, runoff from off-site drainage areas can affect the efficiency of practices designed to control total suspended solids. When designing best management practices, off-site runoff must be taken into account in determining the treatment efficiency of the practice. Any impact on the efficiency must be compensated for by increasing the size of the best management practice accordingly.

(b) *Peak discharge*. 1. By design, BMPs shall be employed to maintain or reduce the 1-year, 24-hour and the 2-year, 24-hour post-construction peak runoff discharge rates, ~~to the maximum extent practicable, as compared to the 1-year, 24-hour and the 2-year, 24-hour pre-development conditions~~ peak runoff discharge rate for the 2-year, 24-hour design storm applicable to the post-construction site to the maximum extent practicable. Pre-development conditions shall assume “good hydrologic conditions” for appropriate land covers as identified in TR-55 or an equivalent methodology. The meaning of “hydrologic soil group” and “runoff curve number” are as determined in TR-55. However, when pre-development land cover is cropland, rather than using TR-55 values for cropland, ~~t~~he runoff curve numbers in Table 2 shall be used for the pre-development condition.

Hydrologic Soil Group	A	B	C	D
<u>Runoff Curve Number</u>	<u>56</u>	<u>70</u>	<u>79</u>	<u>83</u>
	<u>30</u>	<u>55</u>	<u>70</u>	<u>77</u>

~~**Note:** The curve numbers in Table 2 represent mid-range values for soils under a good hydrologic condition where conservation practices are used and are selected to be protective of the resource waters.~~

2. This paragraph does not apply to:

a. A post-construction site where the ~~change in hydrology due to development does not increase the existing surface water elevation at any point within the downstream receiving surface water by more than 0.01 of a foot for the 2-year, 24-hour storm event.~~ discharge is directly to a lake over 10 acres or a first order stream.

~~**Note:** Hydraulic models such as HEC-RAS or another methodology may be used to determine the change in surface water elevations.~~

b. A redevelopment post-construction site, including a transportation facility that is part of a redevelopment project.

c. Areas of the post-construction site in hydrologic soil group A, if the requirements of par. (c) cannot be met.

d.e. An in-fill development area less than 5 acres.

e. A highway reconstruction or minor road reconstruction site.

Note: The intent of par. (b) is to minimize streambank erosion under bank full conditions.

(c) *Infiltration*. BMPs shall be designed, installed and maintained to infiltrate runoff ~~to the maximum extent practicable~~ in accordance with the following to the maximum extent practicable, except as provided in subds. 5. to 8.:

1. For ~~new residential developments~~development with 10% to 40% connected imperviousness, ~~one of the following shall be met:~~

~~a. I~~infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 90% of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 1% of the project siteland disturbance is required as an effective infiltration area.

2. For new development with more than 40% to 80% connected imperviousness infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 75% of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the land disturbance is required as an effective infiltration area.

~~b. Infiltrate 25% of the post-development runoff volume from the 2-year, 24-hour design storm with a type II distribution. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes and not composite curve numbers as defined in TR-55. However, when designing appropriate infiltration systems to meet this requirement, no more than 1% of the project site is required as an effective infiltration area.~~

~~23. For non-residential~~new development, including commercial, industrial and institutional development with more than 80% connected imperviousness, ~~one of the following shall be met:~~

~~a. For this subdivision only, the "project site" means the rooftop and parking lot areas.~~

~~b. I~~infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 60% of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the project siteland disturbance is required as an effective infiltration area.

~~c. Infiltrate 10% of the post-development runoff volume from the 2-year, 24-hour design storm with a type II distribution. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes and not composite curve numbers as defined in TR-55. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the project site is required as an effective infiltration area.~~

34. Pre-development conditions shall assume "good hydrologic conditions" for appropriate land covers as identified in TR-55 or an equivalent methodology. The meaning of "hydrologic soil group" and "runoff curve number" are as determined in TR-55. However, when pre-development land cover is cropland, rather than using TR-55 values for cropland, the runoff curve numbers in Table 3 shall be used.

<u>Hydrologic Soil Group</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
<u>Runoff Curve Number</u>	<u>55</u>	<u>69</u>	<u>78</u>	<u>83</u>

Note: The curve numbers in Table 3 represent legume crops in soils under a good hydrologic condition where conservation practices such as contouring are used and are selected to be protective of the resource waters. Pre-development condition shall be the same as specified in par. (b).

Note: A model that calculates runoff volume, such as SLAMM, P8 or an equivalent methodology may be used. For performance standards based on an average annual rainfall, specific rainfall files for five geographic locations around the state will be used. -Information on how to access SLAMM and P8 and the rainfall files is available at: <http://dnr.wi.gov/runoff/models/index.htm> ~~<http://www.dnr.state.wi.us/org/water/wm/nps/slam.htm>~~ or by contacting the storm water management program contact the storm water coordinator in the runoff management section of the bureau of watershed management at (608) 267-7694.

4. Before infiltrating runoff, pretreatment shall be required for parking lot runoff and for runoff from new road construction in commercial, industrial and institutional areas that will enter an infiltration system. The pretreatment shall be designed to protect the infiltration system from clogging prior to scheduled maintenance and to protect groundwater quality in accordance with subd. 8. Pretreatment options may include, but are not limited to, oil/grease separation, sedimentation, biofiltration, filtration, swales or filter strips.

~~**Note:** To achieve the infiltration requirement for the parking lots or roads, maximum extent practicable should not be interpreted to require significant topography changes that create an excessive financial burden. To minimize potential groundwater impacts it is desirable to infiltrate the cleanest runoff. To achieve this, a design may propose greater infiltration of runoff from low pollutant sources such as roofs, and less from higher pollutant source areas such as parking lots.~~

5. ~~Source Area Exclusions~~Prohibitions. To protect groundwater, BMPs to infiltrate tThe runoff from the following areas ~~are prohibited~~ shall not be utilized unless demonstrated to meet the conditions of subd. 11. from meeting the requirements of this paragraph:

a. Areas associated with a tier 1 industrial ~~facilities~~ facility identified in s. NR 216.21(2)(a), including storage, loading, ~~rooftop~~ and parking. Rooftops may be infiltrated with the concurrence of the regulatory authority.

b. Storage and loading areas of a tier 2 industrial ~~facilities~~ facility identified in s. NR 216.21(2)(b)).

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Note: Runoff from the employee and guest tier 2 parking and rooftop areas of a tier 2 facility may be infiltrated but runoff from the parking area may require pretreatment.

c. Fueling and vehicle maintenance areas. Rooftops may be infiltrated with the concurrence of the regulatory authority.

6. ~~d~~Infiltration Site Prohibitions. To protect groundwater, infiltration practices shall not be located in the following areas.

~~a. Areas within 1000 feet upgradient or within 100 feet downgradient of karst featured direct conduits to groundwaters.~~

~~b. Areas within 400 feet of a community water system well as specified in s. NR 811.16(4) or within the separation distances listed in s. NR 812.08 for any private well or non-community well for runoff infiltrated from commercial (including multi-family residential), industrial and institutional land uses or regional devices for one- and two-family residential development.~~

~~c. Areas where contaminants of concern, as defined in s. NR 720.03(2), are present in the soil through which infiltration will occur.~~

~~7. Infiltration Site Limitations. Infiltration practices shall be located only in the following areas unless demonstrated to meet the conditions of subd. 11.~~

~~a.e. Any aAreas where the with less than 3 feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock, exhibits the characteristics in Table X~~

<u>Table X.</u>	
<u>Development Type</u>	<u>Separation Distance</u>
<u>Industrial, commercial, institutional parking lots and roads and residential roads</u>	<u>5 feet of native soil or engineered soil</u>
<u>All other impervious surfaces other than rooftop</u>	<u>3 feet of native soil or engineered soil</u>
<u>Rooftop draining to subsurface infiltration practice</u>	<u>1 foot of native soil or engineered soil finer than coarse sand.</u>
<u>Rooftop draining to vegetated surface infiltration practice or lawn</u>	<u>No separation requirement</u>

~~except this subd. 5.e. does not prohibit infiltration of roof runoff.~~

~~f. Areas with runoff from industrial, commercial and institutional parking lots and roads and residential arterial roads with less than 5 foot separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock. b. Notwithstanding subdivision paragraph a., applicable requirements for injection wells classified under ch. NR 815 shall be followed.~~

~~g. Areas within 400 feet of a community water system well as specified in s. NR 811.16(4) or within 100 feet of a private well as specified in s. NR 812.08(4) for runoff infiltrated from commercial, industrial and institutional land uses or regional devices for residential development.~~

~~h. Areas where contaminants of concern, as defined in s. NR 720.03(2), are present in the soil through which infiltration will occur.~~

~~ic. Any area where the soil does not exhibit one of the following characteristics between the bottom of the infiltration system and seasonal high groundwater and top of bedrock exhibits the characteristics in Table XX:~~

<u>Table XX.</u>	

<u>Soil Layer Depth</u>	<u>Percent Fines</u>
<u>3 feet minimum</u>	<u>20% or greater</u>
<u>5 feet minimum</u>	<u>10% or greater</u>
<u>Variable depth</u>	<u>Engineered soil provides equivalent level of protection.</u>

~~1. At least a 3-foot soil layer with 20 percent fines or greater.~~
~~2. At least a 5-foot soil layer with 10 percent fines or greater.~~
~~3. Where the soil medium within the infiltration system does not provide an equivalent level of protection. Any area where the soil does not exhibit one of the following characteristics between the bottom of the infiltration system and the seasonal high groundwater and top of bedrock: at least a 3-foot soil layer with 20 percent fines or greater; or at least a 5-foot soil layer with 10 percent fines or greater. This subdivision paragraph 5.i. does not apply where the soil medium within the infiltration system provides an equivalent level of protection. This subd. 5.i. division paragraph. does not prohibit infiltration of roof runoff.~~
Note: The areas listed in subd. 5. are prohibited from infiltrating runoff due to the potential for groundwater contamination.

~~68. Source Area Exemptions. The following areas are not required to meet the requirement of this paragraph but will be credited toward meeting the requirement when runoff from these areas is infiltrated~~are not required to meet the requirements of this paragraph:

~~a. Areas where the infiltration rate of the soil is less than 0.6 inches/hour measured at the bottom of the infiltration system.~~

~~b. Parking areas and access roads less than 5,000 square feet for commercial development and parking areas and access roads less than 5,000 square feet for industrial development not subject to the prohibitions under subdiv. 5.~~

~~eb. Redevelopment post-construction sites.~~

~~ec. In-fill development areas less than 5 acres.~~

~~d. Roads in commercial, industrial and institutional land uses, and arterial residential roads.~~

~~f.e Transportation facility reconstruction and minor road reconstruction sites.~~

~~gf. Highways.~~

~~e9. Infiltration Site Exemptions. For practical purposes, location of infiltration practices in the areas identified in Table XXX. will not be required to meet the requirements of this paragraph, but will receive credit if used.~~

<u>Table XXX.</u>	
<u>Soil Test Method</u>	<u>Results</u>
<u>A scientifically credible field test method, measured</u>	<u>Infiltration rate of the soil is less than 0.6</u>

at the proposed bottom of the infiltration system	inches/hour
USDA method of soils analysis	The least permeable soil horizon to five feet below the proposed bottom of the infiltration system is one of the following: sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, or clay.

~~Infiltration areas during periods when the soil on the site is frozen.~~

~~f. Roads in commercial, industrial and institutional land uses, and arterial residential roads.~~

~~710.~~ Where alternate uses of runoff are employed, such as for toilet flushing, laundry or irrigation [or storage on green roofs where an equivalent portion of the runoff is captured permanently by rooftop vegetation](#), such alternate use shall be given equal credit toward the infiltration volume required by this paragraph.

~~811.~~ a. Infiltration systems designed in accordance with this paragraph shall, to the extent technically and economically feasible, minimize the level of pollutants infiltrating to groundwater and shall maintain compliance with the preventive action limit at a point of standards application in accordance with ch. NR 140. However, if site specific information indicates that compliance with a preventive action limit is not achievable, the infiltration BMP may not be installed or shall be modified to prevent infiltration to the maximum extent practicable.

b. Notwithstanding subd. ~~8par.~~ a., the discharge from BMPs shall remain below the enforcement standard at the point of standards application.

[12. Before infiltrating runoff, pretreatment shall be required for parking lot runoff and for runoff from new road construction in commercial, industrial and institutional areas that will enter an infiltration system. The pretreatment shall be designed to protect the infiltration system from clogging prior to scheduled maintenance and to protect groundwater quality in accordance with subd. 11. Pretreatment options may include, but are not limited to, oil/grease separation, sedimentation, biofiltration, filtration, swales or filter strips.](#)

(d) *Protective areas.* 1. In this paragraph, “protective area” means an area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. However, in this paragraph, “protective area” does not include any area of land adjacent to any stream enclosed within a pipe or culvert, such that runoff cannot enter the enclosure at this location.

a. For outstanding resource waters and exceptional resource waters, and for wetlands in areas of special natural resource interest as specified in s. NR 103.04, 75 feet. [However, protective area distances adjacent to wetlands identified under s. NR 103.04\(4\), as within an advanced delineation and identification \(ADID\) study, are given in subs. 1.h. and 1.i of this subd. Information on ADID](#)

[wetlands and primary corridors is available from Southeastern Wisconsin Regional Planning Commission.](#)

b. For perennial and intermittent streams identified on a United States geological survey 7.5-minute series topographic map, or a county soil survey map, whichever is more current, 50 feet.

c. For lakes, 50 feet.

d. For highly susceptible wetlands, [50-75](#) feet. Highly susceptible wetlands include the following types: ~~fens, s~~[Edge meadows, open and coniferous bogs, low prairies, coniferous swamps, lowland hardwood swamps and ephemeral ponds.](#)

~~e. For moderately susceptible wetlands, 50 feet. Moderately susceptible wetlands are wetlands not included in subd. par. (d) or (f) such as: shrub swamps, other forested wetlands-carrs, alder thickets, fresh wet meadows, shallow marshes, deep marshes and seasonally flooded basins floodplain forests and seasonally flooded basins. Wetland boundary delineation shall be made in accordance with s. NR 103.08(1m). This paragraph does not apply to wetlands that have been completely filled in accordance with all applicable state and federal regulations. The protective area for wetlands that have been partially filled in accordance with all applicable state and federal regulations shall be measured from the wetland boundary delineation after fill has been placed.~~

~~ef. For less-least susceptible wetlands, 10 percent of the average wetland width, but no less than 10 feet nor more than 30 feet. Less-Least susceptible wetlands include degraded wetlands dominated by invasive species such as reed canary grass, cultivated hydric soils and any gravel pits, or dredged material or fill material disposal sites that take on the attributes of a wetland.-~~

~~f. In subd. 1.a., d. and e., determinations of the extent of the protective area adjacent to wetlands shall be made on the basis of the sensitivity and runoff susceptibility of the wetland in accordance with the standards and criteria in s. NR 103.03.~~

g. [For wetlands identified within an ADID and where the impervious surface is within the primary environmental corridor, 75, feet. Information on ADID wetlands and primary corridors is available from Southeastern Wisconsin Regional Planning Commission.](#)

[h. For wetlands identified within an ADID and where the impervious surface is outside the primary environmental corridor, 50 feet. Information on ADID wetlands and primary corridors is available from Southeastern Wisconsin Regional Planning Commission.](#)

[i. Notwithstanding subd. 1.h., for calcareous fens, 75 feet.](#)

[j. Wetland boundary delineation shall be made in accordance with s. NR 103.08\(1m\). This paragraph does not apply to wetlands that have been completely filled in accordance with all applicable state and federal regulations. The protective area for wetlands that have been partially filled in accordance with all applicable state and federal regulations shall be measured from the wetland boundary delineation after fill has been placed.](#)

k. In subd. 1.a., d-i. determinations of the extent of the protective area adjacent to wetlands shall be made on the basis of the sensitivity and runoff susceptibility of the wetland in accordance with the standards and criteria in s. NR 103.03.

l. For concentrated flow channels with drainage areas greater than 130 acres, 10 feet.

m. Notwithstanding subd. par. (a) – (l), the greatest protective area width shall apply where rivers, streams, lakes, and wetlands are contiguous.

Note: Most wetlands require a protective area width of at least 50 feet and certain wetlands require at least 75 feet. Regardless of the quality of a wetland adjacent to a stream or lake, a stream or lake is not eligible for a protective area width of less than 50 feet.

2. This paragraph applies to post-construction sites located within a protective area, except those areas exempted pursuant to subd. 4.

3. The following requirements shall be met:

a. Impervious surfaces shall be kept out of the protective area to the maximum extent practicable. The storm water management plan shall contain a written site-specific explanation for any impervious surfaces proposed in parts of the protective area ~~that are disturbed during construction.~~

~~nb.~~ No impervious surface of a transportation facility may be constructed within a protective area, unless the transportation facility authority determines, in consultation with the department, that there is no practical alternative. If there is no practical alternative to locating a transportation facility within a protective area, the transportation facility may be constructed in the protective area only to the extent the transportation facility authority, in consultation with the department, determines is reasonably necessary. ~~T and~~ the transportation facility authority shall state in the design plan prepared pursuant to s. NR 151.212(44)(a), why it is necessary to construct the transportation facility within a protective area.

~~bc.~~ Where land disturbing construction activity occurs within a protective area, ~~and where no impervious surface is present~~, adequate sod or self-sustaining vegetative cover of 70% or greater shall be established and maintained where no impervious surface is present. The adequate sod or self-sustaining vegetative cover shall be sufficient to provide for bank stability, maintenance of fish habitat and filtering of pollutants from upslope overland flow areas under sheet flow conditions. Non-vegetative materials, such as rock riprap, may be employed on the bank as necessary to prevent erosion such as on steep slopes or where high velocity flows occur.

Note: It is recommended that seeding of non-aggressive vegetative cover be used in the protective areas. Vegetation that is flood and drought tolerant and can provide long-term bank stability because of an extensive root system is preferable. Vegetative cover may be measured using the line transect method described in the university of Wisconsin extension publication number A3533, titled "Estimating Residue Using the Line Transect Method".

~~e-d.~~ Best management practices such as filter strips, swales or wet detention ~~basins, that ponds~~ that are designed to control pollutants from ~~non-point sources~~ stormwater runoff may be located in the protective area.

Note: Other regulations, such as ch. 30, Stats., and chs. NR 103, 115, 116 and 117 and their associated review and approval process may apply in the protective area.

4. Exemptions. This paragraph does not apply to:

a. Redevelopment post-construction sites.

b. In-fill development areas less than 5 acres.

c. Structures that cross or access surface waters such as boat landings, bridges and culverts.

d. Structures constructed in accordance with s. 59.692(1v), Stats.

e. Areas of pPost-construction sites from which the runoff does not enter the surface water, including wetlands, without first being treated by a BMP to meet the requirements of this section, except to the extent that vegetative ground cover is necessary to maintain bank stability.

Note: A vegetated protective area to filter runoff pollutants from post-construction sites described in subd. 4.e. is not necessary since the runoff is not treated prior to entering the surface water at that location. Other practices necessary to meet the requirements of this section, such as a swale or basin, will need to be designed and implemented to reduce runoff pollutants prior to runoff entering a surface water of the state. The requirements of ch. NR 103 still apply and should be considered before runoff is diverted to or from a wetland.

~~gf.~~ Non-highway transportation redevelopment sites.

(e) *Fueling and vehicle maintenance areas.* Fueling and vehicle maintenance areas shall, to the maximum extent practicable, have BMPs designed, installed and maintained to reduce petroleum within runoff, such that the runoff that enters waters of the state contains no visible petroleum sheen.

Note: A combination of the following BMPs may be used: oil and grease separators, canopies, petroleum spill cleanup materials, or any other structural or non-structural method of preventing or treating petroleum in runoff.

(f) *Location.* To comply with the standards required under this subsection, BMPs may be located on-site or off-site as part of a regional storm water device, practice or system, but shall be installed in accordance with s. NR 151.003.

(g) *Timing.* The BMPs that are required under this subsection shall be installed before the construction site has undergone final stabilization.

Note: In accordance with subch. V, the department has developed technical standards to help meet the post-construction performance standards. These technical standards are available on the department web page at: <http://dnr.wi.gov/runoff/stormwater/techstds.htm>.

(h) Swale Treatment. (1) Applicability. Except as provided in parsubdiv. (2), transportation facilities that use swales for runoff conveyance and pollutant removal meet all of the requirements of this

section except subsection (d), if the swales are designed to the maximum extent practicable to do all of the following to the maximum extent practicable:

a. Swales shall be vegetated. However, where appropriate, non-vegetative measures may be employed to prevent erosion or provide for runoff treatment, such as rock riprap stabilization or check dams.

Note: It is preferred that tall and dense vegetation be maintained within the swale due to its greater effectiveness at enhancing runoff pollutant removal.

b. Swales shall comply with a technical standard developed under subch. V to the maximum extent practicable.

Note: Check dams may be included in the swale design to slow runoff flows and improve pollutant removal. Transportation facilities with continuous features such as curb and gutter, sidewalks or parking lanes do not comply with the design requirements of this subsection. However, a limited amount of structural measures such as curb and gutter may be allowed as necessary to account for other concerns such as human safety or resource protection.

Note: In accordance with subch. V, the department has developed technical standards to help meet the post-construction performance standards. These technical standards are available on the department web page at: <http://dnr.wi.gov/runoff/stormwater/techstds.htm>.

(2) Exemptions.

a. Notwithstanding parsubdiv. (1), the department may, consistent with water quality standards, require other provisions of this section, in addition to swale treatment, be met on a transportation facility with an average daily traffic rate greater than 2500 and where the initial surface water of the state that the runoff directly enters is any of the following:

1. An outstanding resource water.

2. An exceptional resource water.

3. Waters listed in s. 303(d) of the federal clean water act that are identified as impaired in whole or in part, due to point and nonpoint source impacts.

4. Waters where targeted performance standards are developed pursuant to s. NR 151.004.

b. The transportation facility authority shall contact the department's regional storm water staff or the department's liaison to the department of transportation to determine if additional BMPs beyond a water quality swale are needed under this paragraph.

NR 151.13 Developed urban area performance standard for incorporated municipalities.

(1) INCORPORATED MUNICIPALITIES INFORMATION AND EDUCATION. (a) *Applicability.* This subsection applies to any incorporated municipality with an average density of 1,000 people per square mile or greater, based on the latest decennial census made by the United States census, as well as any commercial and industrial areas contiguous to these areas.

Note: The municipality has primary responsibility for complying with this section. However, the general population is expected to follow municipal ordinance requirements and requests to carry out activities such as: proper curbside placement of leaves for collection, relocating vehicles for street [sweeping-cleaning](#) and utilizing proper disposal methods for oils and other chemicals.

(b) *Requirements.* For areas identified under par. (a), all of the following shall be implemented by [March 10, 2008\(TBD\)](#):

1. A public information and education program, utilizing materials identified by the department, promoting beneficial on-site reuse of leaves and grass clippings and proper use of lawn and garden fertilizers and pesticides, proper management of pet wastes and prevention of dumping oil and other chemicals in storm sewers. Information and education materials shall include instruction on how to apply fertilizers in accordance with a nutrient application schedule, based on appropriate soil tests, and the application of pesticides in accordance with an integrated pest management plan.

2. A municipal program, as appropriate, for the collection and management of leaf and grass clippings, including public education about this program.

[Note: This does not necessarily require that all municipalities implement a leaf and grass collection program, but rather a municipality implements a collection program where it is appropriate and or necessary. On-site beneficial reuse of leaf and grass clippings should also be utilized to manage such material.](#)

~~3. *Reserved.* The application of lawn and garden fertilizers on municipally controlled properties, with pervious surface over 5 acres each, shall be done in accordance with a site specific nutrient application schedule based on appropriate soil tests. The nutrient application schedule shall be designed to maintain the optimal health of the lawn or garden vegetation.~~

4. Detection and elimination of illicit discharges to storm sewers.

(2) PERMITTED MUNICIPALITIES. (a) *Applicability.* This [sub](#)section applies to municipalities that are subject to the municipal storm water permit requirements of subch. I of ch. NR 216.

Note: A municipal separate storm sewer system could become subject to subch. I of ch. NR 216 if it is designated by the department to be a significant contributor of pollutants to waters of the state under s. NR 216.02(4).

(b) *Program.* A municipality shall develop and implement a storm water management program, including the adoption and administration of any necessary ordinance, to meet the following requirements:

Note: The program to meet the requirements of this section may be the same as the municipal storm water management program required by s. NR 216.07([75](#)) or some other plan.

1. *Stage 1 requirements.* The municipalities listed under par. (a), shall implement the following [by March 10, 2008within 2 years of receiving permit coverage under subch. I of ch. NR 216:](#)

a. All of the requirements contained in ~~sub. (1)(b)~~[s. NR 216.07.](#)

b. ~~To the maximum extent practicable, a~~ 20% reduction in total suspended solids in runoff from existing development that enters waters of the state as compared to no controls, to the maximum extent practicable.

2. Note: It is expected that the municipality will be able to achieve the 20% reduction by municipal street sweeping, using either conventional or high efficiency sweepers, regular catch basin cleaning, de-icer management, and education to change human behavior toward reducing pollution.

2. Stage 2 requirements. The municipalities listed under par. (a) shall implement one of the following to the maximum extent practicable:

a. To the maximum extent practicable, the municipalities listed under par. (a) shall implement a 40% reduction in total suspended solids in runoff from existing development that enters waters of the state as compared to no controls, by March 10, 2013, if coverage was received under subch. I of ch. NR 216 prior to [effective date of the rule].

b. A 40% reduction in total suspended solids in runoff from existing development that enters waters of the state as compared to no controls within 7 years of the date of receiving permit coverage for municipalities listed under par. (a) but receiving coverage under subch. I of ch. NR 216 after [effective date of the rule].

3. Model requirements. Evidence of meeting the performance standard of subd. 2. shall require the use of a model or an equivalent methodology approved by the department. Acceptable models and model versions include SLAMM version 9.2 and P8 version 3.4 or subsequent versions of those models.

Note: Information on how to access SLAMM and P8 and the relevant parameter files is available at: <http://dnr.wi.gov/runoff/models/index.htm> or by contacting the storm water management program at (608) 267-7694.

Note: ~~It is expected that the municipality will be able to achieve the 40% reduction through the use of high efficiency street sweeping or structural BMP retrofit practices.~~ The stage 2 requirements of this paragraph may be met by include including application of BMPs to on privately owned lands, such as shopping centers if the municipality can ensure that the BMPs will be maintained.

(c) *Location.* To comply with the standards required under this subsection, BMPs may be located on-site or off-site as part of a regional storm water device, practice or system, but shall be installed in accordance with s. NR 151.003.

(d) ~~Exclusion~~Exemption. ~~This~~ The requirements of subd. 1(b) and (2) do section does not apply to areas subject to subch. II of ch. NR 216, but may be included at the discretion of the permitted municipality.

NR 151.135 Developed urban area performance standard for transportation facilities. (1) APPLICABILITY. This section applies to transportation facilities under the sole and exclusive jurisdiction of the department of transportation that are located within each municipalities municipality regulated under subch. I of ch. NR 216.

Note: Transportation facilities that are not under the sole and exclusive jurisdiction of the department of transportation are subject to the performance standards in s. NR 151.13.

(2) REQUIREMENTS. (a) The department of transportation shall develop and implement a storm water management plan in consultation with the department to control pollutants from transportation facilities described in sub. (1). The plan shall do the following, to the maximum extent practicable:

1. Beginning not later than March 10, 2008(TBD), by design, implement a storm water management plan that attains a 20% reduction in total suspended solids in runoff from existing development that enters waters of the state as compared to no storm water management controls. ~~for transportation facilities under the sole and exclusive jurisdiction of the department of transportation that are located within each municipality regulated under subch. I of ch. NR 216. A transportation facility under the sole and exclusive jurisdiction of the department of transportation shall be required to meet a different total suspended solids reduction goal than the requirements of this subdivision if a different standard is specified under an EPA approved TMDL pursuant to s. 151.005, or a state targeted performance standard pursuant to s. 151.004.~~

2. Beginning not later than March 10, 2013(TBD), by design, implement a storm water management plan that attains a 40% reduction in total suspended solids in runoff from existing development that enters waters of the state as compared to no storm water management controls. ~~for transportation facilities under the sole and exclusive jurisdiction of the department of transportation that are located within each municipality regulated under subch. I of ch. NR 216. A transportation facility under the sole and exclusive jurisdiction of the department of transportation shall be required to meet a different total suspended solids reduction goal than the requirements of this subdivision if a different standard is specified under an EPA approved TMDL pursuant to s. 151.005, or a state targeted performance standard pursuant to s. 151.004.~~

3. Evidence of meeting the performance standard of paragraph (a) shall require the use of a model or an equivalent methodology approved by the department. Acceptable models and model versions include SLAMM version 9.2 and P8 version 3.4 or subsequent versions of those models.

Note: Information on how to access SLAMM and P8 and the relevant parameter files is available at: <http://dnr.wi.gov/runoff/models/index.htm> or by contacting the storm water management program at (608) 267-7694.

(b) The department of transportation shall inform and educate appropriate department of transportation staff and any transportation facility maintenance authority contracted by the department of transportation to maintain transportation facilities owned by the department of transportation regarding nutrient, pesticide, salt and other deicing material and vehicle maintenance management activities in order to prevent runoff pollution of waters of the state.

NR 151.14 ~~Non-municipal property fertilizer~~Turf and garden nutrient management performance standard. (1) APPLICABILITY. This section applies when all of the following conditions are met:

- (a) ~~The property has over 5 acres of turf or garden where nutrients are applied. The property is not owned by a municipality.~~
- (b) ~~The property discharges runoff to waters of the state. The property has over 5 acres of pervious surface where fertilizers are applied.~~
- (c) ~~The property is not an agricultural facility or practice. The property discharges runoff to waters of the state.~~
- (d) ~~The property is not a silviculture activity. The property is not a transportation facility under the jurisdiction of the department of transportation.~~

(2) RESPONSIBLE PARTY. The landowner shall comply with this section.

(3) REQUIREMENTS. No later than March 10, 2008, the application of ~~lawn-turf~~ and garden fertilizers on these properties shall be done in accordance with site-specific nutrient application schedules based on appropriate soil tests. The nutrient application schedule shall be designed to maintain the optimal health of the ~~lawn-turf~~ or garden vegetation.

Note: In accordance with subch. V, the department has developed a technical standard to help meet the nutrient management performance standard. The technical standard is available on the department web page at: <http://dnr.wi.gov/runoff/stormwater/techstds.htm>

Note: The landowner should consider using slow release fertilizers or “spoon feeding” nutrients to reduce the concentration of nitrates reaching groundwater.

NR 151.15 Implementation and enforcement. (1) IMPLEMENTATION. This subchapter shall be implemented as follows:

(a) *Construction sites and post-construction sites.* ~~For sites defined in ss. NR 151.11 (2) and 151.12 (1) and (2):~~

~~1-~~The provisions of ss. NR 151.11 and 151.12 shall be implemented through s. 216.07(4) and (5) of subch. I and subch. III of ch. NR 216.

~~2-~~The department shall make available model ordinances that reflect and implement the performance standards in ss. NR 151.11 and 151.12.

Note: The department has made available model ordinances that reflect and implement the performance standards in ss. NR 151.11 and 151.12. These model ordinances are in ch. NR 152. Municipalities are encouraged to adopt the requirements of ss. NR 151.11 and 151.12, into local ordinances that reflect these models. Incentives are included in the grant programs identified in chs. NR 153 and 155, for municipalities that adopt the performance standards into their ordinances, provide an information and education program and track and report their enforcement activity.

(b) *Developed urban areas.* ~~1. The provisions of ss. NR 151.13(1) and 151.14 shall be enforced under sub. (2).~~

~~2.~~ The provisions of s. NR 151.13 (2) shall be implemented through subch. I of ch. NR 216.

(2) ENFORCEMENT. (a) The department shall enforce this subchapter under s. 281.98, Stats.

Note: The department may also enforce performance standards implemented through ch. NR 216 under ss. 283.89 and 283.91, Stats.

~~(b) If a transportation facility that is exempted from prohibitions, permit or approval requirements by s. 30.12(4), Stats., does not comply with the performance standards of this subchapter, the department shall initiate the conflict resolution process specified in the cooperative agreement between the department of transportation and the department established under the interdepartmental liaison procedures under s. 30.12(4)(b), Stats.~~

Subchapter IV – ~~Transportation Facility Performance Standards~~ Reserved for future

~~**NR 151.20 Purpose and applicability.** (1)(a) This subchapter establishes performance standards, as authorized by s. 281.16(2)(a), Stats., for transportation facilities that cause or may cause runoff pollution, except as provided in sub. (2). These performance standards are intended to limit runoff pollution in order to achieve water quality standards. Design guidance and the process for developing technical standards to implement this subchapter are set forth in subch. V.~~

~~(b) Transportation facilities that are directed and supervised by the department of transportation and that are regulated by an administrative rule administered by the department of transportation, where the department determines in writing that the rule meets or exceeds the performance standards of this subchapter and is implemented in accordance with the administrative rule provisions, shall be deemed to meet the requirements of the portions of this subchapter determined by the department.~~

~~(2)(a) This subchapter does not apply to any of the following:~~

- ~~1. Actions for which a final environmental impact statement is approved before October 1, 2002.~~
- ~~2. Actions for which a finding of no significant impact is made under ch. Trans 400 before October 1, 2002.~~
- ~~3. Actions that are documented in an environmental report, as defined in s. Trans 400.04 (10), completed before October 1, 2002, that fit the criteria or conditions for approval as a categorical exclusion in 23 CFR 771.117, April 1, 2000, or has met the review criteria of paragraph 23.a. of chapter 3 of federal aviation administration order 5050.4A issued on October 8, 1985.~~

~~(b) Notwithstanding par. (a), the construction site performance standards under s. NR 151.23 and the protective area requirements under s. NR 151.24 (6) apply to transportation facilities subject to this subchapter.~~

~~(3) In s. NR 151.23, average annual basis is calculated using the appropriate annual rainfall or runoff factor, also referred to as the R factor, or an equivalent design storm using a type II distribution, with consideration given to the geographic location of the site and the period of disturbance.~~

~~**Note:** The USLE and its successors RUSLE and RUSLE2, utilize an R factor which has been developed to estimate annual soil erosion, averaged over extended time periods. The R factor can be modified to estimate monthly and single storm erosion. A design storm can be statistically calculated to provide an equivalent R factor as an average annual calculation.~~

~~(4) In s. NR 151.24, average annual rainfall is determined by the following years and locations: Madison, 1981 (Mar. 12-Dec. 2); Green Bay, 1969 (Mar. 29-Nov. 25); Milwaukee, 1969 (Mar. 28-Dec. 6); Minneapolis, 1959 (Mar. 13-Nov. 4); Duluth, 1975 (Mar. 24-Nov. 19). Of the 5 locations listed, the location closest to a project site best represents the average annual rainfall for that site.~~

~~**NR 151.21 Definitions.** In this subchapter:~~

~~(1) "Airport" means any area of land or water which is used, or intended for use, for the landing and take-off of aircraft, and any appurtenant areas which are used, or intended for use, for airport buildings or other airport facilities or rights of way, together with all airport buildings and facilities located thereon.~~

~~(2) "Borrow site" means an area outside of a project site from which stone, soil, sand or gravel is excavated for use at the project site, except the term does not include commercial pits.~~

~~(3) "Highway" has the meaning given in s. 340.01(22), Stats.~~

~~(4) "Material disposal site" means an area outside of a project site, which is used, for the lawful disposal of surplus materials or materials unsuitable for use within the project site that is under the direct control of the contractor. A municipally owned landfill or private landfill that is not managed by the contractor is excluded from this definition.~~

~~(5) "Minor reconstruction" means reconstruction that is limited to 1.5 miles in continuous or aggregate total length of realignment and that does not exceed 100 feet in width of roadbed widening and that does not include replacement of a vegetated drainage system with a non-vegetated drainage system except where necessary to convey runoff under a highway or private road or driveway.~~

~~**Note:** A road reconstruction project that will convert an open drainage system into a curb and gutter drainage system does not qualify as minor reconstruction.~~

~~(6) "Prime contractor" means a person authorized or awarded a contract to perform, directly or using subcontractors, all the work of a project directed and supervised by the transportation facility authority.~~

~~(7) "Private road or driveway" has the meaning given in s. 340.01(46), Stats.~~

~~(8) "Public-use airport" has the means meaning given in either of the following as described in 49 USC 47102(17):~~

~~(a) A public airport.~~

~~(b) A privately owned airport used or intended to be used for public purposes that is either:~~
~~1. A reliever airport as designated by the secretary of the United States department of transportation to relieve congestion at a commercial service airport and to provide more general aviation access to the overall community.~~

~~2. Determined by the secretary of the United States department of transportation to have at least 2,500 passenger boardings each year and to receive scheduled passenger aircraft service.~~

~~(9) "Public mass transit facility" means any area of land or water which is used, or intended for use, by bus or light rail, and any appurtenant areas which are used, or intended for use, by bus or light rail, including buildings or other facilities or rights of way, either publicly or privately owned, that provide the public with general or special service on a regular and continuing basis.~~

~~(10) "Public trail" means any of the following: a "state ice age trail area" designated under s. 23.17 (2), Stats., a state trail under s. 23.175(2)(a), Stats., an "all terrain vehicle trail" under s. 23.33(1)(d), Stats., an "off the road motorcycle trail" under s. 23.33(9)(b)4, Stats., a "recreational trail" under s. 30.40(12m), Stats., a "walkway" under s. 30.40(22), Stats., a state trail under s. 84.06(11), Stats., a "bikeway" under s. 84.60(1)(a), Stats., a "snowmobile trail" under s. 350.01(17), Stats., a "public snowmobile corridor" under s. 350.12(3j)(a)1, Stats., or any other trail open to the public as a matter of right.~~

~~(11) "Railroad" means any area of land or water which is used, or intended for use, in operating a railroad as defined in s. 85.01(5), Stats., and any appurtenant areas which are used, or intended for use, for railroad buildings or other railroad facilities or rights of way, together with all railroad buildings and facilities located thereon.~~

~~(12) "Reconditioning" has the meaning given in s. 84.013(1)(b), Stats.~~

~~(13) "Reconstruction" has the meaning given in s. 84.013(1)(c), Stats.~~

~~(14) "Resurfacing" has the meaning given in s. 84.013(1)(d), Stats.~~

~~(15) "Transportation facility authority" means any person or entity that is authorized to approve work on a transportation facility by contract, permit or with its own forces or by force account. A permit or approval granted by the department pursuant to ch. 283, Stats., does not qualify as authorization needed to meet this definition.~~

~~**NR 151.22 Responsible party.** (1) TRANSPORTATION FACILITY AUTHORITY. (a) The transportation facility authority shall develop a design plan to meet the performance standards of ss. NR 151.23 and 151.24 for land disturbing construction activity at the transportation facility construction site.~~

~~**Note:** This design plan may be the erosion control plan specified in s. Trans 401.07.~~

~~(b) The transportation facility authority, in consultation with the department, shall approve the implementation plan submitted under sub. (2)(a). The transportation facility authority shall incorporate the implementation plan into the contract for project construction.~~

~~(c) The transportation facility authority shall administer and enforce the implementation plan submitted by the prime contractor under sub. (2)(a) under the contract for project construction. The transportation facility authority shall ensure that the prime contractor follows and maintains the implementation plan under par. (b). If the prime contractor does not follow the implementation plan incorporated into the contract for project construction, the transportation facility authority shall control erosion and sediment at the construction site consistent with the design plan prepared under par. (a) or implementation plan prepared under sub. (2)(a).~~

~~(d) Before accepting the completed project, the transportation facility authority shall verify in writing that the prime contractor has satisfactorily completed the implementation plan pursuant to sub. (2)(b). The transportation authority shall submit the written verification to the prime contractor and to the authority in charge of maintenance of the transportation facility. Upon written verification by the transportation facility authority under this paragraph, the prime contractor is released from the responsibility under this subchapter, except for any responsibility for defective work or materials, damages by its own operations, or as may be otherwise required in the project construction contract.~~

~~(2) PRIME CONTRACTOR. (a) The prime contractor shall develop and submit to the transportation facility authority an implementation plan that identifies applicable BMPs and contains a schedule for implementing the BMPs in accordance with design plan to meet the performance standards under sub. (1)(a). The implementation plan shall identify an array of BMPs that may be employed to meet the performance standards. The implementation plan shall also address the design and implementation of BMPs required in ss. NR 151.23 and 151.24 for land disturbing construction activity within borrow sites and material disposal sites that are related to the construction project.~~

~~**Note:** This implementation plan may be the erosion control implementation plan specified in s. Trans 401.08.~~

~~(b) The prime contractor shall implement the implementation plan as required by the contract for project construction prepared pursuant to sub. (1)(b).~~

~~(c) A transportation authority that carries out the construction activity with its own employees and resources shall comply with the prime contractor requirements contained in this subsection, including preparing and carrying out an implementation plan.~~

~~**(3) SINGLE PLAN OTHER TRANSPORTATION PROJECT.** For transportation projects that are not administered under ch. Trans 401, the requirements of this subchapter may shall be developed under one a design plan to meet the performance standards of ss. NR 151.23 and 151.24 for land disturbing construction activity at the transportation project construction site instead of 2 separate plans as described under subs. (1)(a) and (2)(a). A plan created under this subsection shall contain both the design components required under sub. (1)(a) and the implementation components required under sub. (2)(a).~~

~~**Note:** This single design plan may be the erosion control plan specified in s. NR 216.46.~~

~~(4) MAINTENANCE AUTHORITY. Upon execution of the written verification prepared under sub. (1)(d) by the transportation facility authority, the authority in charge of maintenance of the transportation facility shall maintain the BMPs to meet the performance standards of this subchapter. However, BMPs no longer necessary for erosion and sediment control shall be removed by the maintenance authority.~~

~~**NR 151.23 Construction site performance standard.** (1) APPLICABILITY. Except as provided under sub. (2), this section applies to all of the following:~~

~~(a) A transportation facility construction site that has 5 or more acres of land disturbing construction activity, unless any of the following are met:~~

~~1. The department has received a notice of intent for the transportation construction project in accordance with subch. III of ch. NR 216 before October 1, 2002.~~

~~**Note:** Prior to submitting a notice of intent pursuant to subch. III of ch. NR 216, a construction site erosion control plan in conformance with s. NR 216.46 and a storm water management plan in conformance with s. NR 216.47 shall be developed.~~

~~2. A bid is advertised or construction contract signed where no bid is advertised, October 1, 2002.~~

~~(b) After March 10, 2003, any transportation facility construction site that has at least one acre of land disturbing construction activity, except where bids are advertised, or construction contracts signed where no bids are advertised, before October 1, 2002.~~

~~(2) EXEMPTION. This section does not apply to the following:~~

~~(a) Transportation facility construction projects sites that are exempted by federal statutes or regulations from the requirement to have a national pollutant discharge elimination system permit issued under 40 CFR 122, for land disturbing construction activity.~~

~~(b) Transportation facility construction projects sites that are part of a larger common plan of development, such as a residential or industrial development, and are in compliance with the performance standards of subch. III.~~

~~(c) Routine maintenance for transportation facilities that have less than 5 acres of land disturbance if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.~~

~~**Note:** Construction projects such as installations of utilities within a transportation right-of-way that are not directed and supervised by the department of transportation are subject to the performance standards of subch. III and are not subject to this subchapter.~~

~~(3) PLAN. (a) A written design plan shall be developed for each construction site and shall incorporate the requirements of this section.~~

~~**Note:** The design plan may be the erosion control plan specified in s. NR 216.46 or the design plan in s. NR 151.22 (1)(a).~~

~~(b) The plan required under s. NR 151.22 (2)(a) or (3) shall be properly installed to implement the plan under s. NR 151.22 (1)(a).~~

~~(4) REQUIREMENTS. The design plan required under sub. (3) shall include the following:~~

~~(a) BMPs that, by design, achieve discharge, to the maximum extent practicable, a reduction of 80% no more than 5 tons/acre/year of the sediment load carried in runoff, on an average annual basis from initial grading to final stabilization, as compared with no sediment or erosion controls, as specified in s. NR 151.22 (1)(a) or (3), until the construction site has undergone final stabilization. No person shall be required to exceed an 80% go below the sediment reduction goal to meet the requirements of this paragraph unless specified under an approved TMDL pursuant to section 151.005, or a state targeted performance standard pursuant to section 151.004. Erosion and sediment control BMPs may be used alone or in combination and shall be installed according to any associated implementation plan to meet the requirements of this paragraph. Credit toward meeting the sediment reduction goal shall be given for limiting the duration or area, or both, of land disturbing construction activity, or other appropriate mechanism.~~

~~**Note:** Soil loss prediction tools such as RUSLE2 that estimate the sediment load leaving the construction site under varying land and management conditions, or methodology identified in subch. V, may be used to calculate sediment reduction.~~

~~(b) Notwithstanding par. (a), if BMPs cannot be designed and implemented to reduce meet the maximum sediment load discharge goal of 5 tons/acre/year by 80%, based on an average annual rainfall, the design plan shall include a written and site specific explanation why the 80% reduction 5 tons/acre/year goal is not attainable and the sediment load shall be reduced to the maximum extent practicable.~~

~~(c) Where appropriate, the design plan shall include sediment controls to do all of the following to the maximum extent practicable:~~

- ~~1. Prevent tracking of sediment from the construction site onto roads and other paved surfaces.~~
- ~~2. Prevent the discharge of sediment as part of site de-watering.~~
- ~~3. Protect the separate storm drain inlet structures and culverts from receiving sediment where sediment may be delivered off site.~~

~~(d) The use, storage and disposal of chemicals, cement and other compounds and materials used on the construction site shall be managed during the construction period to prevent their transport by runoff into waters of the state. However, projects that require the placement of these materials in waters of the state, such as constructing bridge footings or BMP installations, are not prohibited by this paragraph.~~

~~(5) LOCATION. The BMPs used to comply with this section shall be located prior to runoff entering waters of the state.~~

~~**Note:** While regional treatment facilities are appropriate for control of post-construction pollutants, they should not be used for construction site sediment removal.~~

~~**Note:** In accordance with subch. V, the department has developed technical standards to help meet the construction site performance standards. These technical standards are available on the department web page at: <http://dnr.wi.gov/runoff/stormwater/techstds.htm>~~

~~**NR 151.24 Post-construction performance standard.** (1) APPLICABILITY. This section applies to a transportation facility that is or was subject to the construction performance standards of s. NR 151.23, based on land disturbance, except any of the following:~~

~~(a) A transportation construction site where the department has received a notice of intent for the construction project site in accordance with subch. III of ch. NR 216 within 2 years after by October 1, 2002/2004.~~

~~(b) A transportation facility construction site that has undergone final stabilization within 2 years after October 1, 2002.~~

~~(c) Reconditioning or resurfacing of a highway.~~

~~(d) Minor reconstruction of a highway. Notwithstanding the exemption under this paragraph, the protective areas requirements in sub. (6) apply to minor reconstruction and the requirements of sub. (3) and (4) apply to any increase in impervious area associated with the minor reconstruction of a highway.~~

~~(e) A redevelopment transportation facility with no increase in exposed parking lots or roads.~~

~~(f) A transportation facility with less than 10% connected imperviousness based on complete development of the transportation facility, provided the cumulative area of all parking lots, roads and rooftops is less than one acre. This does not include exemption from the protective areas standard of s. NR 151.24(6).~~

~~**Note:** The department has developed a guidance document to indicate when an impervious source areas such as a roof or parking lot is considered connected.~~

~~**Note:** Projects that consist of only the construction of bicycle paths or pedestrian trails generally meet this exception as these facilities have minimal connected imperviousness.~~

~~(g) Protective area requirements under sub. (6) do apply to actions described in s. NR 151.20 (2).~~

~~(h) A transportation facility, the construction of which involves activity described in s. NR 151.23 (1)(a)2, but that has less than one acre of land disturbing construction activity.~~

~~(i) Transportation facility construction projects that are part of a larger common plan of development, such as a residential or industrial development, that are in compliance with the performance standards of subch. III.~~

~~(j) Routine maintenance for transportation facilities if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.~~

~~(2) PLAN. A written plan shall be developed and implemented for each transportation facility and shall incorporate the requirements of subs. (3) to (10).~~

~~**Note:** Examples of plans that may be used to comply with this section may be that specified within s. NR 216.47, the municipal storm water management program specified within s. NR 216.07(7) or the erosion control plan specified in s. Trans 401.07.~~

~~_(3) TOTAL SUSPENDED SOLIDS. Best management practices shall be designed, installed and maintained to control total suspended solids carried in runoff from the transportation facility as follows:~~

~~(a) For new transportation facilities, by design, reduce to the maximum extent practicable, the suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80% total suspended solids reduction to meet the requirements of this paragraph.~~

~~(b) For highway reconstruction and non-highway redevelopment, by design, reduce to the maximum extent practicable, the total suspended solids load by 40%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40% total suspended solids reduction to meet the requirements of this paragraph.~~

~~(c) Notwithstanding pars. (a) and (b), if the design cannot achieve the applicable total suspended solids reduction specified, the design plan shall include a written and site-specific explanation why that level of reduction is not attained and the total suspended solids load shall be reduced to the maximum extent practicable.~~

~~**Note:** Pollutant loading models such as SLAMM, P8 or equivalent methodology may be used to evaluate the efficiency of the design in reducing total suspended solids. Information on how to access SLAMM and P8 is available at: <http://www.dnr.state.wi.us/org/water/wm/nps/slamm.htm> or contact the storm water coordinator in the runoff management section of the bureau of watershed management at (608) 267-7694.~~

~~_(4) PEAK DISCHARGE. (a) By design, BMPs shall be employed to maintain or reduce the peak runoff discharge rates, to the maximum extent practicable, as compared to pre-development site conditions for the 2-year, 24-hour design storm applicable to the transportation facility. Pre-development conditions shall assume "good hydrologic conditions" for appropriate land covers as identified in TR-55 or an equivalent methodology. The meaning of "hydrologic soil group" and "runoff curve number" are as determined in TR-55. However, when pre-development land cover is cropland, rather than using TR-55 values for cropland, the runoff curve numbers in Table 2 of subch. III shall be used.~~

~~**Note:** The curve numbers in Table 2 represent mid-range values for soils under a good hydrologic condition where conservation practices are used and are selected to be protective of the resource waters.~~

~~(b) This subsection does not apply to:~~

~~1. A transportation facility where the change in hydrology due to development does not increase the existing surface water elevation at any point within the downstream receiving surface water by more than 0.01 of a foot for the 2-year, 24-hour storm event.~~

~~**Note:** Hydraulic models such as HEC-RAS or another methodology may be used to determine the change in surface water elevations.~~

~~2. A highway reconstruction site.~~

~~3. A transportation facility that is part of a redevelopment project.~~

~~**Note:** The intent of sub. (4) is to minimize streambank erosion under bank full conditions.~~

~~(5) INFILTRATION. (a) Except as provided in pars. (d) to (g), BMPs shall be designed, installed and maintained to infiltrate runoff to the maximum extent practicable in accordance with one of the following:~~

~~1. Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 60% of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the project site is required as an effective infiltration area.~~

~~2. Infiltrate 10% of the post-development runoff volume from the 2-year, 24-hour design storm with a type II distribution. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes and not composite curve numbers as defined in TR-55. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the project site is required as an effective infiltration area.~~

~~(b) Pre-development condition shall be the same as specified in sub. (4)(a).~~

~~**Note:** A model that calculates runoff volume, such as SLAMM, P8 or an equivalent methodology may be used. Information on how to access SLAMM and P8 is available at:~~

~~<http://www.dnr.state.wi.us/org/water/wm/nps/slamm.htm> or contact the storm water coordinator in the runoff management section of the bureau of watershed management at (608) 267-7694.~~

~~(c) Before infiltrating runoff, pretreatment shall be required for parking lot runoff and for runoff from new road construction in commercial, industrial and institutional areas that will enter an infiltration system. The pretreatment shall be designed to protect the infiltration system from clogging prior to scheduled maintenance and to protect groundwater quality in accordance with par. (g). Pretreatment may include, but is not limited to, oil/grease separation, sedimentation, biofiltration, filtration, swales or filter strips.~~

~~**Note:** To minimize potential groundwater impacts it is desirable to infiltrate the cleanest runoff. To achieve this, a design may propose greater infiltration of runoff from low pollutant sources such as roofs, and less from higher pollutant source areas such as parking lots.~~

~~(d) The following are prohibited from meeting the requirements of this subsection:~~

~~1. Areas associated with tier 1 industrial facilities identified in s. NR 216.21(2)(a), including storage, loading, rooftop and parking.~~

~~2. Storage and loading areas of tier 2 industrial facilities identified in s. NR 216.21(2)(b).~~

~~**Note:** Runoff from tier 2 parking and rooftop areas may be infiltrated but may require pretreatment.~~

~~3. Fueling and vehicle maintenance areas.~~

~~4. Areas within 1000 feet upgradient or within 100 feet downgradient of karst featured direct conduits to groundwaters.~~

~~5. Areas with less than 3 feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock.~~

~~6. Areas with runoff from industrial, commercial and institutional parking lots and roads and residential arterial roads with less than 5 feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock.~~

~~7. Areas within 400 feet of a community water system well as specified in s. NR 811.16(4) or within 100 feet of a private well as specified in s. NR 812.08(4) for runoff infiltrated from commercial, industrial and institutional land uses or regional devices for residential development.~~

~~8. Areas where contaminants of concern, as defined in s. NR 720.03(2), are present in the soil through which infiltration will occur.~~

~~9. Any area where the soil does not exhibit one of the following characteristics between the bottom of the infiltration system and seasonal high groundwater and top of bedrock:~~

~~a. At least a 3-foot soil layer with 20 percent fines or greater.~~

~~b. At least a 5-foot soil layer with 10 percent fines or greater.~~

~~c. Where the soil medium within the infiltration system does not provide an equivalent level of protection.~~

~~**Note:** The areas listed in par. (d) are prohibited from infiltrating runoff due to the potential for groundwater contamination.~~

~~(e) Transportation facilities located in the following areas and otherwise subject to the requirements of this subchapter are not required to meet the requirements of this subsection:~~

~~1. Areas where the infiltration rate of the soil is less than 0.6 inches/hour measured at the bottom of the infiltration system.~~

~~2. Parking areas and access roads less than 5,000 square feet for commercial and industrial development.~~

~~3. Redevelopment post-construction sites.~~

~~4. In-fill development areas less than 5 acres.~~

~~5. Infiltration areas during periods when the soil on the site is frozen.~~

~~6. Roads in commercial, industrial and institutional land uses, and arterial residential roads.~~

~~7. Highways.~~

~~(f) Where alternate uses of runoff are employed, such as for toilet flushing, laundry or irrigation, such alternate use shall be given equal credit toward the infiltration volume required by this subsection.~~

~~(g) 1. Infiltration systems designed in accordance with this subsection shall, to the extent technically and economically feasible, minimize the level of pollutants infiltrating to groundwater and shall maintain compliance with the preventive action limit at a point of standards application in accordance with~~

~~ch. NR 140. However, if site-specific information indicates that compliance with a preventive action limit is not achievable, then the infiltration BMP may not be installed or shall be modified to prevent infiltration to the maximum extent practicable.~~

~~2. Notwithstanding subd. 1., the discharge from BMPs shall remain below the enforcement standard at the point of standards application.~~

~~(6) PROTECTIVE AREAS. (a) In this subsection, "protective area" means an area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. However, in this paragraph, "protective area" does not include any area of land adjacent to any stream enclosed within a pipe or culvert, such that runoff cannot enter the enclosure at this location.~~

~~1. For outstanding resource waters and exceptional resource waters, and for wetlands in areas of special natural resource interest as specified in s. NR 103.04, 75 feet.~~

~~2. For perennial and intermittent streams identified on a United States geological survey 7.5-minute series topographic map, or a county soil survey map, whichever is more current, 50 feet.~~

~~3. For lakes, 50 feet.~~

~~4. For highly susceptible wetlands, 50 feet. Highly susceptible wetlands include the following types: fens, sedge meadows, bogs, low prairies, conifer swamps, shrub swamps, other forested wetlands, fresh wet meadows, shallow marshes, deep marshes and seasonally flooded basins. Wetland boundary delineation shall be made in accordance with s. NR 103.08(1m). This paragraph does not apply to wetlands that have been completely filled in accordance with all applicable state and federal regulations. The protective area for wetlands that have been partially filled in accordance with all applicable state and federal regulations shall be measured from the wetland boundary delineation after fill has been placed.~~

~~5. For less susceptible wetlands, 10% of the average wetland width, but no less than 10 feet nor more than 30 feet. Less susceptible wetlands include degraded wetlands dominated by invasive species such as reed canary grass.~~

~~6. In subsd. 1., 4. and 5., determinations of the extent of the protective area adjacent to wetlands shall be made on the basis of the sensitivity and runoff susceptibility of the wetland in accordance with the standards and criteria in s. NR 103.03.~~

~~7. For concentrated flow channels with drainage areas greater than 130 acres, 10 feet.~~

~~(b) 1. Beginning with land acquired within a protective area for a transportation facility on or after October 1, 2002, no impervious surface of a transportation facility may be constructed within a protective area, unless the transportation facility authority determines, in consultation with the department, that there is no practical alternative. If there is no practical alternative to locating a transportation facility within a protective area, the transportation facility may be constructed in the protective area only to the extent the transportation facility authority, in consultation with the department, determines is reasonably necessary;~~

~~and the transportation facility authority shall state in the design plan prepared pursuant to s. NR 151.22(1)(a), why it is necessary to construct the transportation facility within a protective area.~~

~~2. If a transportation facility is constructed within a protective area, adequate sod or self-sustaining vegetative cover of 70% or greater shall be established and maintained in the area that is the width of the protective area, or the greatest width practical, and throughout the length of the protective area in which the transportation facility is located. The adequate sod or self-sustaining vegetative cover required under this paragraph shall be sufficient to provide for bank stability, maintenance of fish habitat and filtering of pollutants from upslope overland flow areas under sheet flow conditions. Non-vegetative materials, such as rock riprap, may be employed on the bank as necessary to prevent erosion such as on steep slopes or where high-velocity flows occur.~~

~~**Note:** It is recommended that seeding of non-aggressive vegetative cover be used in the protective areas. Vegetation that is flood and drought tolerant and can provide long-term bank stability because of an extensive root system is preferable. Vegetative cover may be measured using the line transect method described in the university of Wisconsin extension publication number A3533, titled "Estimating Residue Using the Line Transect Method".~~

~~3. Best management practices such as filter strips, swales or wet detention basins, that are designed to control pollutants from nonpoint sources may be located in the protective width area.~~

~~**Note:** Other regulations, such as ch. 30, Stats., and chs. NR 103, 115, 116 and 117 and their associated review and approval process may apply in the protective area.~~

~~4. This subsection does not apply to:~~

~~a. Non-highway transportation redevelopment sites.~~

~~b. Transportation facilities that cross or access surface waters, such as boat landings, bridges and culverts.~~

~~c. Structures constructed in accordance with s. 59.692(1v), Stats.~~

~~d. Transportation facilities from which runoff does not enter the surface water, except to the extent that vegetative ground cover is necessary to maintain bank stability.~~

~~**Note:** A vegetated protective area to filter runoff pollutants from transportation facilities described in subd. 4.d. is not necessary since runoff is not entering the surface water at that location. Other practices necessary to meet requirements of this section, such as a swale or basin, will need to be designed and implemented to reduce runoff pollutants prior to runoff entering a surface water of the state.~~

~~(7) FUELING AND VEHICLE MAINTENANCE AREAS. Fueling and vehicle maintenance areas shall, to the maximum extent practicable, have BMPs designed, installed and maintained to reduce petroleum within runoff, such that the runoff that enters waters of the state contains no visible petroleum sheen.~~

~~**Note:** A combination of the following BMPs may be used: oil and grease separators, canopies, petroleum spill cleanup materials, or any other structural or non-structural method of preventing or treating petroleum in runoff.~~

~~(8) LOCATION. To comply with the standards required under this section, BMPs may be located on-site or off-site as part of a regional storm water device, practice or system, but shall be installed in accordance with s. NR 151.003.~~

~~(9) TIMING. The BMPs required under this section shall be installed before the construction site has undergone final stabilization.~~

~~(10) SWALE TREATMENT. (a) Applicability. Except as provided in par. (b), transportation facilities that use swales for runoff conveyance and pollutant removal meet all of the requirements of this section, if the swales are designed to the maximum extent practicable to do all of the following:~~

~~1. Be vegetated. However, where appropriate, non-vegetative measures may be employed to prevent erosion or provide for runoff treatment, such as rock riprap stabilization or check dams.~~

~~**Note:** It is preferred that tall and dense vegetation be maintained within the swale due to its greater effectiveness at enhancing runoff pollutant removal.~~

~~2. Carry runoff through a swale for 200 feet or more in length that is designed with a flow velocity no greater than 1.5 feet per second for the peak flow generated using either a 2-year, 24-hour design storm or a 2-year design storm with a duration equal to the time of concentration as appropriate. If a swale of 200 feet in length cannot be designed with a flow velocity of 1.5 feet per second or less, the flow velocity shall be reduced to the maximum extent practicable.~~

~~**Note:** Check dams may be included in the swale design to slow runoff flows and improve pollutant removal. Transportation facilities with continuous features such as curb and gutter, sidewalks or parking lanes do not comply with the design requirements of this subsection. However, a limited amount of structural measures such as curb and gutter may be allowed as necessary to account for other concerns such as human safety or resource protection.~~

~~(b) Exemptions. 1. Notwithstanding par. (a), the department may, consistent with water quality standards, require other provisions of this section, in addition to swale treatment, be met on a transportation facility with an average daily traffic rate greater than 2500 and where the initial surface water of the state that the runoff directly enters is any of the following:~~

~~a. An outstanding resource water.~~

~~b. An exceptional resource water.~~

~~c. Waters listed in s. 303(d) of the federal clean water act that are identified as impaired in whole or in part, due to nonpoint source impacts.~~

~~d. Waters where targeted performance standards are developed pursuant to s. NR 151.004.~~

~~2. The transportation facility authority shall contact the department's regional storm water staff or the department's liaison to the department of transportation to determine if additional BMPs beyond a water quality swale are needed under this paragraph.~~

~~**NR 151.25 Developed urban area performance standard.** (1) APPLICABILITY. This section applies to transportation facilities under the sole and exclusive jurisdiction of the department of transportation that are located within municipalities regulated under subch. I of ch. NR 216.~~

~~**Note:** Transportation facilities that are not under the sole and exclusive jurisdiction of the department of transportation are subject to the performance standards in s. NR 151.13.~~

~~(2) REQUIREMENTS. (a) The department of transportation shall develop and implement a storm water management plan to control pollutants from transportation facilities described in sub. (1). The plan shall do the following to the maximum extent practicable:~~

~~1. Beginning not later than March 10, 2008, by design, implement a storm water management plan that attains a 20% reduction in total suspended solids in runoff from existing development that enters waters of the state as compared to no storm water management controls for transportation facilities under the sole and exclusive jurisdiction of the department of transportation that are located within each municipality regulated under subch. I of ch. NR 216. A transportation facility under the sole and exclusive jurisdiction of the department of transportation shall be required to meet a different total suspended solids reduction goal than the requirements of this subdivision if a different standard is specified under an EPA approved TMDL pursuant to s. 151.005, or a state targeted performance standard pursuant to s. 151.004.~~

~~2. Beginning not later than March 10, 2013, by design, implement a storm water management plan that attains a 40% reduction in total suspended solids in runoff from existing development that enters waters of the state as compared to no storm water management controls for transportation facilities under the sole and exclusive jurisdiction of the department of transportation that are located within each municipality regulated under subch. I of ch. NR 216. A transportation facility under the sole and exclusive jurisdiction of the department of transportation shall be required to meet a different total suspended solids reduction goal than the requirements of this subdivision if a different standard is specified under an EPA approved TMDL pursuant to s. 151.005, or a state targeted performance standard pursuant to s. 151.004.~~

~~3. Evidence of meeting the performance standard of paragraph (a) shall require the use of a model or an equivalent methodology approved by the department. Acceptable models and model versions include SLAMM version 9.2 and P8 version 3.4 or subsequent versions of these models.~~

~~**Note:** Information on how to access SLAMM and P8 and the relevant parameter files is available at: <http://dnr.wi.gov/runoff/models/index.htm> or by contacting the storm water management program at (608) 267-7694.~~

~~(b) The department of transportation shall inform and educate appropriate department of transportation staff and any transportation facility maintenance authority contracted by the department of transportation to maintain transportation facilities owned by the department of transportation regarding nutrient, pesticide, salt and other deicing material and vehicle maintenance management activities in order to prevent runoff pollution of waters of the state.~~

~~**NR 151.26 Enforcement.** This subchapter shall be enforced as follows:~~

~~(1) If a transportation facility that is exempted from prohibitions, permit or approval requirements by s. 30.12(4), Stats., does not comply with the performance standards of this subchapter, the department shall initiate the conflict resolution process specified in the cooperative agreement between the department of transportation and the department established under the interdepartmental liaison procedures under s. 30.12(4)(b), Stats.~~

~~(2) The department shall enforce this subchapter where applicable for transportation facilities not specified in sub. (1) under s. 281.98, Stats.~~

Subchapter V – Technical Standards Development Process for Non-Agricultural Performance Standards

NR 151.30 Purpose. This subchapter specifies the process for developing and disseminating technical standards to implement the performance standards in subchs. III ~~and IV~~, as authorized by s. 281.16 (2)(b), Stats., and establishes the procedures that the department shall use to determine if technical standards adequately and effectively implement, as appropriate, the performance standards in subchs. III ~~and IV~~. This subchapter applies to technical standards developed or implemented by any agency of the state of Wisconsin.

NR 151.31 Technical standards development process. (1) The department shall develop and revise technical standards to implement the performance standards in ss. NR 151.11, 151.12, 151.13, 151.135, and 151.14 ~~151.23, 151.24 and 151.25~~ through a process outlined as follows:

(a) The department may decide that a new or revised technical standard is necessary to implement a performance standard.

(b) Any person may request the department to develop or revise a technical standard designed to meet a performance standard. The request shall be made in writing to the director of the department's bureau of watershed management and shall include the performance standard for which technical standard development or revision may be needed, and an explanation why a new or revised technical standard is requested.

(c) The department shall evaluate a request submitted pursuant to par. (b), to determine if it is necessary to develop or revise a technical standard to implement a performance standard. If the department determines that a new or revised technical standard is not necessary to implement a performance standard, it shall reply to the requester in writing as to the reasons that a technical standard does not need to be developed or revised.

(d) If the department determines that a new or revised technical standard is necessary to implement a performance standard, it shall:

1. Determine the state agency responsible for the technical standard.

2. If the responsible state agency is not the department, request the responsible state agency to develop or revise a technical standard.

3. If the responsible agency denies the request to develop or revise a technical standard, the department may initiate conflict resolution procedures outlined under any existing memorandum of understanding or agreement between the department and the responsible agency. If no conflict resolution procedures exist, the department may attempt to resolve the disagreement through stepped negotiations between increasing higher levels of management.

(e) The department shall use the following procedures when it acts to develop or revise technical standards to implement the performance standards in subchs. III ~~and IV~~.

1. Convene a work group to develop or revise the technical standard that includes agencies and persons with technical expertise and direct policy interest. The work group shall include at least one representative from the agency or person that made an initial request to develop or revise the technical standard.

2. The work group shall publish a class 1 public notice and consider public comments received on the technical standard prior to providing recommendations to the department under subd. 3.

3. The work group shall provide a recommended technical standard to the department within 18 months of its formation unless the director of the bureau of watershed management grants an extension to this deadline.

(f) 1. Notwithstanding other provisions of this section, and acting jointly with the department of transportation and in consultation with other appropriate stakeholders, the department shall:

a. Develop a technical standard that, by design, meets the performance standard established in s. NR 151.23-11(36) for transportation facility construction sites. This technical standard shall address slope erosion and channel erosion and identify BMPs that may be used given a variety of site conditions.

b. Annually review this technical standard.

Note: This technical standard is sometimes referred to as the standardized erosion control reference matrix for transportation.

2. For transportation facility construction sites, the technical standard developed under this paragraph shall also indicate any conditions under which it may not be used to implement the performance standard established in s. NR 151.23-11(36).

3. This technical standard and future revisions become effective upon signatures from both secretaries of the department and the department of transportation, or their designees.

(2) (a) Upon receipt of a proposed technical standard or technical standard revision, either developed by the department or a responsible state agency, the department shall determine if the technical standard will effectively achieve or contribute to achievement of the performance standards in subchs. III ~~and IV~~. The department shall provide its determination in writing to the responsible state agency that prepared the proposed technical standard.

(b) If the department determines that a proposed technical standard will not adequately or effectively implement a performance standard in subchs. III ~~and IV~~, the proposed technical standard may not be used to implement a performance standard in whole or in part.

(c) If the department determines that a proposed technical standard will adequately and effectively implement a performance standard in subchs. III ~~and IV~~ in whole or in part, the new or revised technical standard shall be used in lieu of any existing standards to implement the performance standard beginning with plans developed after the date of this determination.

(d) The department may determine a portion of a technical standard is adequate and effective to implement the performance standards under subch. III ~~or IV~~.

(3) The department shall accept technical standards and best management practices developed by the department, the department of commerce, the department of transportation or other appropriate state agencies, existing on October 1, 2002, unless the department identifies a technical standard as not adequate or effective to implement a performance standard in subchs. III ~~and IV~~ in whole or in part, and informs the responsible state agency of this determination and the basis for it.

(4) Until the processes under subs. (1) and (2) are completed, an existing technical standard identified by the department under sub. (3), or previously accepted by the department as adequate and effective to implement a performance standard under subch. III ~~or IV~~ shall be recognized as appropriate for use under this chapter.

(5) The department may identify technical standards that exist or are developed by qualified groups or organizations as adequate and effective to implement the performance standards under subch. III ~~or IV~~.

(6) Except as provided in s. NR 151.26, if a technical standard that the department determines is not adequate or effective to implement a performance standard in whole or in part is used to implement a performance standard under subch. III ~~or IV~~, the department may initiate enforcement proceedings for failure to meet the performance standard under s. 281.98, Stats.

NR 151.32 Dissemination of technical standards. (1) Technical standards developed or revised under this section may be made available through the responsible state agency's appropriate rules, manuals or guidance in keeping with normal publication schedules. If the responsible state agency does not publish appropriate manuals or guidance, the department shall request the agency provide the department with a copy of the technical standard. Where provided, the department shall publish or reproduce the technical standard for public use.

(2) The department shall maintain a list of technical standards that it has determined adequate and effective to implement the performance standards under subch. III ~~or IV~~ and make the list available upon request.

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on [January 22, 2002 and May 22, 2002????](#).

The rules shall take effect on the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22(2)(intro.), Stats.

Dated at Madison, Wisconsin _____

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By _____
~~Darrell Bazzell~~ [Matthew J. Frank](#), Secretary

| (SEAL)