

# Proposed Amendments to Chapter 14

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## 1. Subchapter I and II Removal

**Issue:**

Because Subchapter I has been moved to Chapter 49, Subchapter II is the only subchapter in Chapter 14.

**Solution:**

Remove references to Subchapters I and II, making Chapter 14 “Erosion Control and Stormwater Management”.

**Proposed Amendment:**

Various removals of Subchapter I and II references throughout Ordinance.

## 2. 14.41(6)

**Issue:**

No definition for “Closed Watershed”, which is used in a new stormwater standard.

**Solution:**

Create definition for “Closed Watershed”, based on the Stormwater TAC’s language.

**Proposed Amendment:**

Create definition 14.41(6) “Closed Watershed” to state:

*(6) Closed watershed means an area that does not have a surface outlet, with water only able to leave through evaporation, infiltration, or mechanical means. For the purposes of this ordinance, the following are considered closed watersheds:*

*(a) Internally drained watersheds that are at least 20,000 square feet in area and at least 1 foot in depth from invert to lowest surface outlet.*

*(b) Watersheds with no surface outlet discharges from a 2-year, 24-hour design storm.*

*(c) Areas that have historically not drained through surface outlets, as determined by the local approval authority*

## 3. 14.41(21)

**Issue:**

No definition for “Green Infrastructure”, which is used in a new stormwater standard.

**Solution:**

Create definition for “Green Infrastructure”, based on City of Madison’s definition.

**Proposed Amendment:**

Create definition 14.41(21) “Green Infrastructure” to state:

*(21) Green Infrastructure means practices that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspire stormwater and reduce flows to sewer*

*systems or to surface waters. Green Infrastructure includes, but is not limited to, the following practices: rainwater harvesting/reuse, rain gardens, bioretention systems, infiltration basins, planters that are connected to roof drainage, vegetated swales, permeable pavement, green roofs, and rain barrels.*

4. **14.41(45)**

**Issue:**

Redevelopment definition contains applicability reference that is defined in other parts of the ordinance. Definition does not clearly define the difference between redevelopment and new development.

**Solution:**

Remove applicability language and revise definition to better define redevelopment.

**Proposed Amendment:**

Revise 14.41(45) to state:

*(45) Redevelopment means development any that replaces existing impervious surfaces or results in the cumulative increase of less than 20,000 square feet of impervious surface to a site since August 21, 2001 on sites predominately developed as commercial, industrial, institutional or multifamily. Sites may be a combination of new development and redevelopment.*

5. **14.45 (5) and 14.46(2)**

**Issue:**

Condo plats were not being required to obtain permits because the trigger specifies “subdivision plat”.

**Solution:**

Remove the “subdivision” modifier from the trigger to require permits for all plat developments.

**Proposed Amendment:**

Strike “subdivision” from the language.

6. **14.46(4)**

**Issue:**

The “redevelopment” stormwater trigger references the redevelopment definition, which has created confusion when new development standards are required. The redevelopment definition is also proposed to be changed with this amendment, making it more necessary for the language to be revised.

**Solution:**

Remove reference to definition and explicitly define the trigger.

**Proposed Amendment:**

Revise 14.46(4) to:

*(4) Land disturbing activity in excess of 4,000 square feet on sites predominately developed as commercial, industrial, institutional or multifamily.*

7. **14.47(4)**

**Issue:**

Infiltration exemptions for some specific land uses had been copied over from State regulations. These exemptions are too broad and are not consistent with County goals of reducing flooding.

**Solution:**

Remove broad infiltration exemptions, but add exemption for expansion of existing municipal or county roads which are often limited in space for new infiltration practices.

**Proposed Amendment:**

Strike 14.47(3)(e) and 14.47(3)(f) and add section 14.47(3)(e) to state:

*(e) Expansion of municipal or county roads.*

8. **14.49(2)(a)1.**

**Issue:**

Easement holders are not able to apply for erosion control or stormwater permits on behalf of landowners. Even if the easement allows for the work described in the application, the applicant would need to get approval from each landowner. This is especially problematic for utility projects that often require work across dozens of different properties.

**Solution:**

Allow for easement holders to apply for permits.

**Proposed Amendment:**

Revise 14.49(2)(a) to state:

*(a) Completed application form signed by the landowner or easement holder. If the applicant is not the landowner or easement holder, a notarized statement authorizing the applicant to act on behalf of the landowner or easement holder must be provided. By signing the statement, the landowner or easement holder shall be bound by all requirements of this ordinance and the terms of any permit issued to the applicant;*

9. **14.49(3)(d)**

**Issue:**

Current language does not require publicly owned -stormwater practices to be deed recorded. Just like private property, public sites may be sold in the future and a recorded maintenance agreement will notify prospective purchasers of the existence of a stormwater permit.

**Solution:**

Require all stormwater practices to be deed recorded by a stormwater maintenance agreement.

**Proposed Amendment:**

Revise 14.49(3)(d) to remove reference to “privately owned” practices:

*(d) Where stormwater practices will be implemented, an affidavit which describes the property by legal description, notifying future prospective purchasers of the existence of a stormwater permit...*

**10. 14.49(7)**

**Issue:**

Last sentence states that “maximum of five permits revisions may be allowed” when there is no limit to the number of revisions.

**Solution:**

Remove language restricting number of revisions.

**Proposed Amendment:**

Strike last sentence of 14.49(7).

**11. 14.50(2)**

**Issue:**

Minimum requirements for a simplified erosion control permit are not specified and applicability in wrong section.

**Solution:**

Add minimum checklist requirements and move applicability to proper section.

**Proposed Amendment:**

Revise 14.50(2) to state:

*(2) Simplified plan materials. Sites meeting the conditions of sec. 14.49(d)1. may instead provide, at a minimum, the following information:*

*(a) Narrative describing the project;*

*(b) Site plan of known scale that includes property lines, disturbed area limits, impervious area limits (existing and proposed), natural and artificial water features, 100-yr flood plain, delineated wetland boundaries, and location of all proposed erosion control practices;*

*(c) Contours (existing and proposed);*

*(d) Watershed size for each drainage area, including areas draining to the site;*

*(e) Provisions to prevent tracking sediment onto public roads;*

*(f) Provisions to prevent sediment delivery to, and accumulation in, any proposed or existing stormwater conveyance systems;*

*(g) Proposed erosion control practices*

*(h) Construction schedule that includes dates of erosion control practice installation, start of land disturbance and site stabilization.*

*(i) Culvert sizes (existing and proposed)*

*(j) Any other information necessary to reasonable determine the location, nature and conditions of any physical or environmental features of the site.*

**12. 14.50(3)(b)**

**Issue:**

The DNR uses a slightly different calculation to determine soil loss. Because of this difference, there are two versions of the soil loss calculator, which can create confusion for applicants.

**Solution:**

Change the County standard to mirror the DNR's. This will not affect the amount of soil loss from sites or what practices would be required.

**Proposed Amendment:**

Revise 14.50(3)c to state:

*(b) Limit total off-site permissible annual aggregate soil loss for exposed areas resulting from sheet and rill erosion to an annual, cumulative soil loss rate not to exceed 5.0 tons sediment yield per acre annually, as determined using the U.S. Natural Resources Conservation Service Technical Guide...*

**13. 14.50(3)(c)**

**Issue:**

The stable outlet requirement was intended to apply to all sites however, the ordinance language reads "Discharge from new construction sites...". "New construction" is not defined, which introduces inherent confusion about what sites are considered to be new construction.

**Solution:**

Clarify the stable outlet standard to apply to all site outlets.

**Proposed Amendment:**

Revise 14.50(3)c to state:

*(c) Provide stable outlet capable of carrying designed discharge flow as required in s. 14.51(2)(c), at a non-erosive velocity. Outlet design must consider flow capacity and flow duration. This requirement applies to both the site outlet and the ultimate outlet to stormwater conveyance or waterbody.*

**14. 14.50(3)(d) and 14.50(4)**

**Issue:**

Prescriptive erosion control standards in NR 151 that apply to all land disturbance are not included in Chapter 14.

**Solution:**

Include the language from NR 151 into Chapter 14.

**Proposed Amendment:**

Create subsections 14.50(3)(d) and 14.50(4) to state:

*(d) Prevent or reduce all of the following:*

- 1. The deposition of soil from being tracked onto streets by vehicles.*
- 2. The discharge of sediment from disturbed areas into on-site storm water inlets.*
- 3. The discharge of sediment from disturbed areas into adjacent waters of the state.*
- 4. The discharge of sediment from drainage ways that flow off the site.*
- 5. The discharge of sediment by dewatering activities.*
- 6. The discharge of sediment eroding from soil stockpiles existing for more than 7 days.*
- 7. The transport by runoff of chemicals, cement and other building compounds and materials on the construction site during the construction period.*

*(4) Implementation. The BMPs used to comply with this section shall be implemented as follows:*

- (a) Erosion and sediment control practices shall be constructed or installed before land disturbing construction activities begin.*
- (b) Erosion and sediment control practices shall be maintained until final stabilization.*
- (c) Final stabilization activity shall commence when land disturbing activities cease and final grade has been reached on any portion of the site.*
- (d) Temporary stabilization activity shall commence when land disturbing construction activities have temporarily ceased and will not resume for a period exceeding 14 calendar days.*
- (e) BMPs that are no longer necessary for erosion and sediment control shall be removed.*

**15. 14.50(5)(e)**

**Issue:**

Grading within 5 feet of adjacent property lines shall remain unchanged, except if authorized by the Department. The ordinance does not state what needs to be provided for such grading to be authorized.

**Solution:**

Add requirements for requests to grade within 5 feet of adjacent property..

**Proposed Amendment:**

Create subsection 14.50(5)(e) to state:

*(e) The director may authorize grading resulting in changes to the existing topography at and within five (5) feet of any property line, if the following are provided:*

- 1. The intent of the grading and an explanation of its necessity, and*
- 2. Documentation showing that stormwater runoff will not negatively affect adjacent properties.*

**16. 14.51(1)(k)**

**Issue:**

Ordinance does not currently require flood elevations or lowest structure openings to be shown on stormwater plans, leading to construction of structures more likely to flood.

**Solution:**

Require that all stormwater management plans include flood elevations for the 200-yr storm and proposed lowest structure opening.

**Proposed Amendment:**

Create subsection 14.51(1)(k) to state:

*(k) Flood elevation for the 200-yr design storm and proposed minimum opening elevation.*

**17. 14.51(2)(a)2.**

**Issue:**

The redevelopment sediment control standard was originally intended to apply only to parking lots and surface areas, but the language can be interpreted as applying to the whole site.

**Solution:**

Revise language to only apply redevelopment sediment control to parking and drive areas.

**Proposed Amendment:**

Revise subsection 14.51(2)(a)2. to state:

*2. For redevelopment resulting in exposed surface parking and drive areas, design practices to retain soil particles greater than 20 microns on those areas (40% reduction) resulting from a one-year design storm, according to approved procedures, and assuming no sediment resuspension*

**18. 14.51(2)(a)2.i.**

**Issue:**

The recently amended Madison stormwater ordinance now requires that green infrastructure be used for redevelopment projects. The Department agrees that green infrastructure is a preferred practice for achieving stormwater goals and wants to promote its use similarly to the City.

**Solution:**

Require green infrastructure for redevelopment projects with same language used by Madison.

**Proposed Amendment:**

Create subsection 14.51(2)(a)2.i. to state:

*i. For redevelopment with proposed impervious surface area greater than 80% of existing, the first 0.5 inches of runoff must be captured using green infrastructure.*

**19. 14.51(2)(c)1.**

**Issue:**

The recently amended Madison stormwater ordinance now requires peak rate control for the 200-year design storm to help reduce flooding from larger and more frequent storms. The County has experienced similar flooding problems and the need to control for larger storms.

**Solution:**

Add peak rate control for 200-yr storm. Also moved specific design storm type and depths to “Design Storm” definition.

**Proposed Amendment:**

Revise section 14.51(2)(c)1. to state:

*1. For new development, design practices to maintain pre-development peak runoff rates for the 1, 2, 10, 100, and 200-year, 24-hour design storms.*

**20. 14.51(2)(d)**

**Issue:**

The stable outlet requirement was intended to apply to all sites however, the ordinance language reads “Discharge from new construction sites...”. “New construction” is not defined, which introduces inherent confusion about what sites are considered to be new construction.

**Solution:**

Clarify the stable outlet standard to apply to all site outlets.

**Proposed Amendment:**

Revise 14.51(2)(d) to state:

*(d) Outlets. Provide stable outlet capable of carrying designed discharge flow as required in s. 14.51(2)(c), at a non-erosive velocity. Outlet design must consider flow capacity and flow duration. This requirement applies to both the site outlet and the ultimate outlet to stormwater conveyance or waterbody.*

**21. 14.51(4)**

**Issue:**

There are no requirements or standards for closed watersheds. When these areas are developed, the stormwater storage volume they historically contained is often filled and not mitigated through the use of stormwater practices. This results in an increase of runoff volume, increasing the chance of downstream flooding.

**Solution:**

Add requirements for closed watersheds that will mitigate downstream flooding problems.

**Proposed Amendment:**

Create subsection 14.51(4) to state:

*(4) Closed Watersheds. Pre-development modeling must include closed watersheds areas. Sites within closed watersheds must be designed to achieve 90% Stay-on without exemption. Sites with areas subject to inundation (ground elevations below the watershed outlet elevation) must include:*

- (a) a stable outlet capable of handling overflow events.*
- (b) an emergency drawdown or pumping plan.*
- (c) storage capacity for back-to-back 100-yr storm events.*

**22. 14.55(2)(b)**

**Issue:**

Significant permit revisions can take considerable time to review, but the base fee (review fee) is only paid at initial application. This may result in the plan being reviewed twice, but the review fee only paid once.

**Solution:**

Add review fee for significant plan revisions to permits that have already been issued.

**Proposed Amendment:**

Create subsection 14.55(2)(b)

*(b) Permit Revisions. The fee for significant permit revisions shall be the base fee.*