Stormwater Code Updates & Land Disturbance Code

Work Session on Specific Code Amendments 4/12/2022

Stormwater Code Updates SCC14.32

- Most changes are reorganizing and re-writing for clarity and consistency with updated definitions, NPDES Permit Language, and the Stormwater Management Manual for Western Washington (Manual).
- ▶ Substantive changes primarily address single family residential projects outside the NPDES permit area. The proposed SCC 14.32.060 provides review thresholds and minimum requirements for these projects.

Intent of updates for non-NPDES residential projects

- ▶ Improve clarity, consistency, and simplicity for applicants.
- ► More consistency in review of projects.
- ► Remove split requirements for small and large lots outside of NPDES areas.
- Adds flexibility to the Manual's minimum requirements.
- ► Lowers the requirements for residential development on lots less than one acre.
- ▶ Provides for onsite stormwater management on sites one acre and larger.
- ▶ Review thresholds based on impervious surfaces and land disturbance are double the thresholds within the NPDES permit area.

Minimum Requirements – Practical Implications for Non-Engineered Residential Projects

- MR 1 Stormwater Site Plan A site plan that meets PDS site plan standards that also shows:
 - ► Temporary erosion/pollution control BMPs.
 - Permanent stormwater control BMPs and a narrative addressing feasibility criteria for BMPs.
- ▶ MR2- Construction SWPPP The model SWPPP provided by PDS may be used for non-engineered projects. Often designers will add language for the 13 CSWPPP elements to the site plan.
- ▶ MR3- Source Control of Pollution This refers to pollution from the developed land use and generally does not apply to single family sites unless there is a home business with a pollution generating activity.

Minimum Requirements – Practical Implications for Non-Engineered Residential Projects

- ▶ MR4 Preservation of Natural Drainage and Outfalls. Drainage patterns including ditches, natural swales, and shallow subsurface flow must be protected so the flow intensity and location at which it leaves the site is not altered. Sometimes drainage is re-routed around construction area within a site but the location at which it leaves the site must be preserved.
- ▶ MR5 Onsite Stormwater Management The project must demonstrate how stormwater runoff from new/replaced impervious surfaces will be managed onsite. BMPs from List 1 in the Stormwater Manual may be used to accomplish this. Only feasible BMPs may be used. For example, infiltration is not feasible with a high water table. Inside the NPDES area items highest on the list must be selected unless they meet infeasibility criteria. Outside the NPDES area any feasible BMPs may be selected to manage stormwater onsite, except for stub out connections.

Current thresholds for Non-NPDES Residential Projects

- Less than one acre
 - ► Minimum Requirements (MRs) 1-9 required at 4,000 SF impervious surfaces or 14,000 SF land disturbance.
- One acre or greater
 - ► MRs 1,2,4,8,9 required at 7,000 Sf impervious surfaces or 14,000 SF land disturbance.
 - MRs 1-9 required
 - ▶ 20,000 square feet impervious surfaces
 - ► Conversion of 1.5 acres native vegetation to lawn
 - Conversion of 5 acres native vegetation to pasture

Current process for determining MRs

	When Required, By Land Use Intensity		
Minimum Requirement (MR)	Low	Medium	High
MR1 Stormwater Site Plan	≥ 7,000 sq ft of new plus replaced <u>hard surface</u> , or ≥ 14,000 sq ft <u>land disturbing</u> activity	≥ 4,000 sq ft of new plus replaced hard surface, or ≥ 14,000 sq ft land disturbing activity	per manual
MR2 Construction SWPPP	always required		
MR3 Source Control	not required	≥ 4,000 sq ft of new plus replaced hard surface, or ≥ 14,000 sq ft land disturbing activity	per manual
MR4 Preserve Natural <u>Drainage</u>	≥ 7,000 sq ft of new plus replaced <u>hard surface</u> , or ≥ 14,000 sq ft <u>land disturbing</u> activity		per manual
MR5 Onsite Stormwater Management	not required		per manual
MR6 Treatment	not required		per manual
MR7 Flow Control	not required		per manual
MR8 Wetlands Protection	≥ 7,000 sq ft of new plus replaced hard surface, or ≥ 14,000 sq ft land disturbing activity		per manual
MR9 O&M	required only if stormwater facility installed		per manual

Table 14.32.040-2			
Land Use Intensity	Meaning		
Low	Single-family residential and <u>accessory uses</u> on parcels of one acre or larger; construction of <u>agricultural buildings</u> in Ag-NRL; <u>seasonal roadside stands</u> ; <u>roads</u> (other than those exempt as pavement maintenance)		
Medium	Single-family residential and accessory uses on parcels smaller than one acre; land divisions into four or fewer lots; minor utility developments; trails and trailheads		
High	All other uses, including all commercial, industrial, institutional, and urban or multifamily residential uses; land divisions into more than four lots; all uses on parcels bisected by the NPDES Permit Area boundary; any project that results in new plus replaced hard surface greater than or equal to 20,000 sq ft, or 1.5 acres of vegetation-to-lawn conversion, or five acres of vegetation-to-pasture conversion		

Proposed Updated Thresholds for Non-NPDES Residential Projects

► MRs 1-5 (non-engineered)

- 4,000 SF impervious surfaces (NPDES Area is 2000 square feet)
- Or 14,000 SF land disturbance (same threshold as current code)

MRs 1-9 required (engineered drainage report)

- ▶ 10,000 SF of Impervious surfaces (NPDES Area is 5000)
- ▶ 50% or greater impervious coverage of entire lot
- ► Conversion of 1.5 acres native vegetation to lawn (not a change)
- Conversion of 5 acres native vegetation to pasture (not a change)
- Fill or excavation of 500 cubic yards or more (same threshold as current code)

Proposed Updates for Non-NPDES Residential Projects

- These changes are intended to provide consistency for all parcel sizes:
 - Consistent applications of standards to mitigate negative effects of stormwater runoff to downstream properties.
 - ▶ All sites outside the NPDES permit area will have the have the same thresholds.
- Increased flexibility is provided for selecting methods of managing stormwater onsite – primarily MR #5.
- ► Thresholds for MRs and Land disturbance are double those of inside the NPDES Area for single-family residential sites.

BMPs Lists for MR5

Table I-3.2: The List Approach for MR5 Compliance					
List #1	List #2	List #3			
(For MR #1 - #5 Projects That Are Not Flow Control Exempt)	(For MR #1 - #9 Projects That Are Not Flow Control Exempt)	(For Flow Control Exempt Projects)			
Surface Type: Lawn and Landscaped Areas					
BMP T5.13: Post-Construction Soil Quality and Depth	BMP T5.13: Post-Construction Soil Quality and Depth	BMP T5.13: Post-Construction Soil Quality and Depth			
Surface Type: Roofs					
1. <u>BMP T5.30: Full Dispersion</u> or	1. <u>BMP T5.30: Full Dispersion</u> or	BMP T5.10A: Downspout Full Infiltration			
BMP T5.10A: Downspout Full Infiltration	BMP T5.10A: Downspout Full Infiltration				
2. BMP T5.14: Rain Gardens or BMP T7.30: Bioretention	2. BMP T7.30: Bioretention	BMP T5.10B: Downspout Dispersion Systems			
BMP T5.10B: Downspout Dispersion Systems	BMP T5.10B: Downspout Dispersion Systems	3. BMP T5.10C: Perforated Stub-out Connections			
4. BMP T5.10C: Perforated Stub-out Connections	4. BMP T5.10C: Perforated Stub-out Connections				
Surface Type: Other Hard Surfaces					
1. BMP T5.30: Full Dispersion	1. BMP T5.30: Full Dispersion				
2. BMP T5.15: Permeable Pavements	2. BMP T5.15: Permeable Pavements				
or <u>BMP T5.14: Rain Gardens</u>					
or		BMP T5.12: Sheet Flow Dispersion			
BMP T7.30: Bioretention		or BMP T5.11: Concentrated Flow Dispersion			
3. BMP T5.12: Sheet Flow Dispersion	3. BMP T7.30: Bioretention	SINI TO THE CONSCINENCE OF THE BIOCHERS			
or <u>BMP T5.11: Concentrated Flow Dispersion</u>	4. BMP T5.12: Sheet Flow Dispersion or				
	BMP T5.11: Concentrated Flow Dispersion				

SCC 14.32 Stormwater Management – Other Changes

- ▶ 14.32.050 Incremental changes in surfacing in the last five years is appropriate for improved management of stormwater impacts unless BMPs were installed through another permit.
- ▶ 14.32.080 Land Uses and Pollutant Generating Sources. Allows the County to require structural source control BMPs to address pollution generating land uses. Provides for compliance with MR#3 and other Source Control provisions of the NPDES Permit
- ▶ 14.32.150(2) A 20-year sunset date for regional facilities. Stormwater runoff from new development routed to a regional facility that is 20 years old or older must include updated analysis demonstrating the capacity of that facility to meet current standards. The purpose is to prevent negative downstream stormwater effects that could result from stormwater facilities that are not maintained or that do not meet current design standards.

SCC 14.32 Stormwater Management – Other Changes

- ▶ 14.32.040 Adopts the <u>2019 Stormwater Management Manual for Western Washington</u> for design standards and BMPs throughout unincorporated Skagit County. (SCC 14.32.040)
 - ▶ Updates the manual used throughout the County to the 2019 Manual and allows for subsequent updates. The 2019 Manual is already required in NPDES areas. The minimum requirements of the 2019 manual remain essentially the same as the 2012 manual. The 2019 version of the manual is largely a re-organization of the 2012 manual to improve usability.

▶ Land disturbing activity (SCC 14.04):

- Any activity that results in a change in the existing soil cover (both vegetative and nonvegetative) and/or the existing soil topography.
- Land disturbing activities include, but are not limited to, <u>clearing</u>, <u>grading</u>, <u>filling</u> and <u>excavation</u>.
- Compaction that is associated with stabilization of structures and road construction shall also be considered land disturbing activity.
- ▶ Vegetation maintenance practices, including landscape maintenance and gardening, are not considered land disturbing activity. (SCC 14.04)

- ► The code will harmonize the requirements for stormwater management, forest practices, septic system installation, critical areas, cultural resource management, and SEPA when land disturbing activities are conducted.
- Provides a permit pathway for stand-alone clearing and grading activities.

- ► This new code section will not create new review thresholds for land disturbing activities. The existing thresholds and standards will remain:
 - ► Appendix J of the International Building Code.
 - ► Portions of Appendix J incorporated into SCC 15.04, which will be moved to SCC 14.22 for ease of use.
 - ► Land Disturbance/Impervious Thresholds from SCC 14.32 (Stormwater). Land disturbance thresholds will not change with proposed updates to SCC 14.32. Proposed changes affect impervious surface thresholds for certain projects.
 - Critical Areas Requirements.
 - SEPA Thresholds.
 - ► Class IV/Conversion Forest Practice thresholds.

- ► The purpose and expected benefits of this code are:
 - ► Improved clarity for applicants and staff regarding various regulations that control land disturbance.
 - ► Improve efficiency and sequencing of reviews, which will reduce unexpected requirements when building permits are submitted.
 - ► Improve efficiency in site planning to better address spatial limitations and requirements for septic drain fields, onsite stormwater BMPs, well protection areas, critical areas, access, and structures.
 - ▶ Demonstrate compliance with the NPDES Permit and reduce the amount of unpermitted clearing that could compromise the County's NPDES permit compliance.

Land Disturbance Code SCC 14.22 – Practical Implications

- ▶ The Land Disturbance Permit will replace the Clearing and Grading permit.
- Many land disturbing activities can be included with a Building Permit. In that case a separate Land Disturbance Permit will not be required. Review thresholds and performance standards will apply.