

DRAFT-KITSAP COUNTY STORMWATER UPDATE-DRAFT

Commissioners Deliberation Discussion Topics

After the close of the public comment period on the Stormwater Design Manual and Title 12 update, on September 21, 2020, the Kitsap County Board of Commissioners asked staff to evaluate certain topics for allowance as authorized by the Washington State Department of Ecology. These deliberation topics would only apply to certain areas in unincorporated Kitsap County and take into consideration other local guiding policies such as Water as a Resource. These topics are further addressed below and will be a discussion topic for upcoming deliberations scheduled to resume tentatively on October 19, 2020.

TOPIC	PURPOSE	DESIGN MANUAL AND CODE SECTIONS	PROPOSED REVISION/ALLOWANCE	PROS/CONS
Threshold Discharge Areas (TDA)	An area within a project site draining to a single natural discharge location that combine within one-quarter mile downstream (as determined by the shortest flow path). TDAs could have multiple discharge points.	-Permit Materials (Brochures, worksheets, etc.) -Training Materials -KCC Title 12 -Stormwater Design Manual <ul style="list-style-type: none"> • Volume I – Project Minimum Requirements and Site Planning <ul style="list-style-type: none"> ○ Chapter 2 – Site Assessment and Planning ○ Chapter 3 – Determining Minimum Requirements ○ Figure I-2.2: Example Composite Site Map ○ Chapter 4: Minimum Requirements for New and Redevelopment <ul style="list-style-type: none"> ▪ 4.2.5 MR #5: Onsite Stormwater Management ▪ 4.2.6 MR #6: Runoff Treatment ▪ 4.2.7 MR #7: Flow Control ▪ 4.2.8 MR #8: Wetlands Protection • Volume II – Design Standards and Requirements <ul style="list-style-type: none"> ○ Chapter 1 – Plans and Reports <ul style="list-style-type: none"> ▪ 1.4.2.2 Basic Site Plan Requirements ▪ 1.4.4 Drainage Reports ○ Chapter 5 – Stormwater Management BMPs <ul style="list-style-type: none"> ▪ 5.3.4 Select BMPs for Runoff Treatment ▪ 5.3.5 Select BMPs for Flow Control ▪ 5.4.4 Dispersion BMPs • Appendix A - Glossary 	<ul style="list-style-type: none"> • Allow in Rural Areas for Residential Only that are 5 acres or greater. • Reference 2019 Ecology Manual minimum definition and requirements (Volumes I, III). • Require Downstream Analysis and demonstration of BMPs adequate for site conditions and soils report. • Require time of concentration analysis for flow path. • Other technical reports may be required and dependent on-site conditions (e.g critical areas assessment, GeoTech, etc). • Directors authority to require additional analysis if warranted. • Feasibility informs BMP selections. 	Pros: <ul style="list-style-type: none"> • Allowed by Ecology in their 2019 Stormwater Design Manual Cons: <ul style="list-style-type: none"> • May have downstream and watershed impacts • May impact maintenance planning and costs, as infrastructure would be built to different standards in different parts of the County.

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Grain Size Analysis	Method to determine infiltration Best Management Practices (BMPs) design and infiltration rate. Grain size analysis is one method to determine infiltration rate under certain site conditions and soils. The results of the infiltration rate determine sizing of facilities.	-Permit Materials (Brochures, worksheets, etc.) -Training Materials -Stormwater Design Manual <ul style="list-style-type: none"> • Volume II – Design Standards and Requirements <ul style="list-style-type: none"> ○ Chapter 5 – Stormwater Management BMPs <ul style="list-style-type: none"> ▪ 5.3.2 Determine Infiltration Feasibility ▪ Table II-5.4: Summary of Minimum Investigation and Testing Requirements for Shallow Infiltration • Appendix G – Subsurface Investigation and Infiltration Testing for Infiltration BMPs 	<ul style="list-style-type: none"> • Allow in Rural Areas for Residential Only • Reference 2019 Ecology Manual minimum requirements/characteristics to estimate infiltration rate (Volumes I, III, V), <i>for example outwash soils, number of areas tested, initial saturated hydraulic conductivity rate, etc).</i> 	Pros: <ul style="list-style-type: none"> • Allowed by Ecology in their 2019 Stormwater Design Manual • Limited in scope. • Provides relief to rural property owners and easier method for determining infiltration rates. Cons: <ul style="list-style-type: none"> • Limited accuracy and outwash soils of sufficient depth are not that common in Kitsap. • Under or oversized facilities. May impact watershed and downstream neighbors.
Tables 4.2 and 4.3	Outlines in table format in Volume I, (pages 4-18 and 4-20 to 4-21) requirements for onsite stormwater management.	-Permit Materials (Brochures, worksheets, etc.) -Training Materials -Stormwater Design Manual <ul style="list-style-type: none"> • Volume I – Project Minimum Requirements and Site Planning <ul style="list-style-type: none"> ○ Chapter 4 – Minimum Requirements for New and Redevelopment <ul style="list-style-type: none"> ▪ 4.2.5.1 Project Thresholds 	<ul style="list-style-type: none"> • Clarification is sought to confirm allowance of full dispersion for roofs and hard surfaces outside of UGAs and census defined areas. <ul style="list-style-type: none"> • Add clarifying language to draft proposal (Table 4.2) to continue to allow full dispersion for roofs and hard surfaces in rural areas. 	Pros: <ul style="list-style-type: none"> • Provides clarification on interpretation of tables during project review. • Reaffirms full dispersion as an

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	Specifically, in discussions to testimony received, there is confusion on how the draft is prepared for MR #5 for large projects in rural areas (Table 4.2) and in Table 4.3, which provides a list approach for MR #5 for rural areas.	<ul style="list-style-type: none"> ▪ Table I-4.2: Onsite Stormwater Management Requirements (MR #5) for Large Projects ▪ Table I-4.3: The List Approach for Minimum Requirement #5 Compliance 	<ul style="list-style-type: none"> • Add clarifying language to draft proposal and remove requirement permeable pavement in rural area for hard surfaces (Table 4.3) 	<p>appropriate method for hard surfaces in rural areas.</p> <p>Cons:</p> <ul style="list-style-type: none"> • N/A provides clarification
New Ordinance Section	In future stormwater manual and code updates, discussion with Commissioners at that time on whether considering instead of Kitsap’s own design manual, discuss reformatting to adopt Ecology Manual for Western Washington communities with Kitsap appendices.	N/A	<p>New Section 56:</p> <p>In order to improve consistency between Kitsap jurisdictions, as well as reduce confusion on what is state mandated versus local discretion by identifying Washington State Department of Ecology requirements versus local policies, such as Water as a Resource (Resolution #134-2016), the Kitsap County Board of Commissioners recommend prior to formal draft preparation of future stormwater updates both the Departments of Public Works and Community Development evaluate reformatting Kitsap’s stormwater design manual. This discussion should include adopting the most recent Ecology’s stormwater management manual for Western Washington and providing Kitsap specific policies and requirements as an addendum.</p>	<p>Pros:</p> <ul style="list-style-type: none"> • Does not bind future Boards • Possible cost reduction for future updates if replacing Kitsap specific manual with Ecology manual and separation of Kitsap appendices • Clearly delineates what is state requirements versus local policies (i.e Water as a Resource) • Simplifies training needs prior to implementation for applicants, as well as reviewers.

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				Cons: <ul style="list-style-type: none"> • Does not obligate County to take this formatting approach in next update. • Cost implications to reformatting shift.