

Clark County - Phase I & WWA Phase II Modification Comments

Permit	Section	Page	Comment
Phase I	S5.C.2.a	12	Adding the newly-created discharge points to mapping requirements creates a new feature that would overlap with existing ditch mapping. Clark County currently has over 23,000 county-owned ditch segments in the stormwater GIS inventory. Each ditch segment would be a discharge point to groundwater under the newly-defined feature. Adding a discharge point to already mapped ditches does not improve stormwater management. The permit language should clearly state that having a map inventory of features defined as discharge points meets the requirement to map discharge points to groundwater.
Phase I	S5.C.2.a	12-13	Ecology's draft guidance on revised definitions notes that there is no intent to require mapping of features such as ditches that are inadvertent discharge points to groundwater. Please include a statement in the permit clearly stating that there is no requirement to map inadvertent discharge points or re-label currently mapped discharge points or previously mapped outfalls redefined as discharge points.
Phase I	S5.C.2.a	12-13	Maintaining records of land ownership and easements for mapped conveyance systems should be adequate to describe where pipes and ditches leave county ownership. Adding discharge points where conveyance systems change ownership will not significantly improve stormwater management.
Phase I	S5.C.2.	12-13	If the point at which an MS4 enters a private stormwater facility is a discharge point, there will be many discharge points created at the inlet to private stormwater facilities treating runoff from ROW in residential subdivisions. The private facilities may then discharge to an outfall to surface water, into groundwater, or both, or into the MS4. Mapping these discharge points to private facilities does not improve the ability to manage stormwater because they are already mapped as conveyance systems. Mapping discharge points where the MS4 ends would have some value in the absence of other information such as land ownership.
Phase I	S5.C.2.	12-13	Consider language that would retain existing outfall mapping. Clark County's storm sewer system includes features tied to existing outfalls such as outfall catchment area polygons and counts of conveyance systems draining to outfalls used to define the IDDE screening performance measure of averaging 12 percent of conveyance systems screened each year. The indirect effect is that the county has to redo useful tools that have been created to help manage stormwater runoff.
Phase I	S5.C.2.	12-13	How does mapping discharge points relate to mapping connections under S5.C.2.a.vi.? Are some connections discharge points on top of being connections draining to another MS4? Can permittees change connections into discharge points rather than have points mapped on points? Please clarify.
Phase I	S5.C.2.		In cases where county right-of-way drains to a private treatment/detention facility containing an outfall pipe, would there be a discharge point to the facility and no MS4 outfall? Please clarify.
Phase I	S5.C.2.	12-13	The outfall definition explicitly includes "facilities designed to infiltrate stormwater" and could capture hundreds of existing facilities in Clark County that: 1) are retention basins and 2) are stormwater detention facilities or wetlands having a design infiltration component. Clark County would need to review the designs of hundreds of facilities to determine if they are outfalls. The permit should clearly state that outfall points do not need to be mapped at mapped infiltration facilities.

Phase I	S5.C.2.a.v.	13	Conveyance system mapping to outfalls and discharge points with a 24 inch diameter will be influenced by the designation of outfalls at infiltration facilities. What was once a single conveyance system to a greater than 24 inch outfall could become a number of conveyance systems with many outfalls less than 24 inches. If the permit requires conveyance mapping to outfalls 24 inches or larger in diameter and includes infiltration BMPs as outfalls, the requirement to map tributary conveyances will be reduced by the areas draining to infiltration BMPs with outfalls (BMP inlet pipes) less than 24 inches in diameter.
Phase I	S5.C.5.a.	16	Changing the equivalent manual after permittees have submitted their draft manual for Ecology review causes problems. Clark County expects Ecology's review to be against the 2012 manual cited by the permit at the time our draft manual was submitted. Many, if not most of the draft manual revisions, are clarifications or edits to improve manual usability. However, clarifications may also be changes in requirements that create a change from the 2012 manual. Also, there may be additional changes when the final manual is published. By this time, permittees will have begun the adoption process with a final published manual. It should be up to the permittee to decide which of the draft manual changes are incorporated into their manual.
Phase I	S5.C.5.c.ii.	21	Clearly state whether or not secondary permittees are required to participate in watershed scale stormwater planning. There are no requirements in S6 for secondary permittees to participate.
Phase I	S5.C.5.c.ii.	third bullet	The requirement to address "any input received from participating entities on the scope of work, modeling exercise, and planning strategies" is overly broad. It could include almost anything. Also, a response to reject input would have to demonstrate the proposed change is infeasible, which is a very high bar. The proposed change could be less effective, more expensive, poor application science and so on but still be feasible. Participating entities is described as permittees subject to a municipal permit which could include secondary permittees such as schools or fire districts. The permit should allow the counties to meet the permit requirement with input only from phase II cities and counties required to fund the work.
Phase I	S5.C.5.c.ii.	21	Remove the language near the end of this section requiring counties to invite governmental entities not subject to a municipal permit. There are two issues with this. The term governmental entity is vague and could lead to a county inadvertently overlook one or more "entity" and creating a permit violation. A governmental entity not subject to the municipal permit would not have an MS4 and no real need to conduct stormwater planning. Such entities are still free to comment on the draft plan. If there are specific agencies with a stake in the outcome of the plan, for example WDFW, perhaps list them as required invitees.
Phase I	S5.C.5.c.ii.	21	The permit should list the municipal permittees and governmental entities that counties are required to coordinate with to avoid confusion and the potential for missing one. The permit should at least define participating entities as cities and counties covered by a phase I or phase II permit.
Phase I	S5.C.5.c.ii.	21	The 2014 WSDOT permit does not clearly require participation in watershed scale stormwater planning beyond providing data upon request from the counties. Perhaps a statement in the permit to this effect be helpful for describing the level of WSDOT involvement.
Phase I	S5.C.5.c.v. and vi.	24	Clarify that this requirement only applies to the shared watershed of King and Snohomish Counties and not to Clark County.

Phase I	S5.C.8.c.i.(1).	32	While the permit clearly states that counties must complete screening within the urban/higher density rural sub-basins before August 2018, there is an opportunity for confusion in stating counties must "average 12 percent of the known conveyance systems each year". "Known conveyance systems" would include the entire rural area where screening is not required. Please change the wording to state counties must average, 12 percent of the conveyances in the urban/higher density rural basins each year.
Phase I	S5.C.8.c.i.(1).	32	The definition of a conveyance system does not lend itself well to the describing the performance measure goal for conveyance system screening. The definition does not define what the terminus of a conveyance system is, making it challenging to define the number of conveyance systems. If each infiltration facility becomes an outfall and the terminus of a conveyance system, almost all of our conveyance system mapping will need to be revised to get a proper count on the number of conveyance systems.
Phase I	Definitions	Conveyance System	The definition of a conveyance system does not state what the terminus of a conveyance system is. Many Clark County conveyance systems draining to a mapped outfall or connection point to another MS4 include a mix of piped development, development with detention facilities and development with retention facility components (that would be explicitly mapped as outfalls under the proposed definition). Considering this, the conveyance system definition should be written to keep the concept of a network of pipes and ditches leading to a single outlet or connection point (but including both areas draining to ground water and areas draining to surface water).
Phase I	Definitions	Conveyance System	The definition of a conveyance system does not include stormwater facilities not owned or operated by the MS4 permittee that receive and treat stormwater from the MS4. If these facilities are not part of the MS4 conveyance system, there is no permit requirement to inspect and maintain them. Please clarify.
Phase I	Definitions	Discharge Point	Ecology added the term discharge point to define some types of discharges to ground water that should not be outfalls and to clarify that a connection to another MS4 or unregulated system is not an outfall. Clark County recommends modifying the definition of a discharge point to also include all discharges to ground water, removing designed infiltration facilities from the outfall definition.
Phase I	Definitions	Outfall	The concept of an outfall, from the very beginning of stormwater management is the point where the manmade storm sewer system ends, discharging to surface water. The definition of an outfall should only include those discharge points to surface water that meet the federal definition. The term discharge point can be used to describe all other discharges to ground water and terminations of the MS4 that are not an outfall to surface water.
Phase I	Definitions	Outfall	Including non-surface water discharge points (infiltration BMPs) as outfalls creates confusion about what an outfall is. A stormwater treatment/retention facility or bioretention facility is not an outfall under federal rules and should be designated a discharge to groundwater.
Phase I	Definitions	Outfall	There are many conveyance systems where treatment/flow control facilities combine retention and conveyance into the MS4 and ultimately to surface water. It seems odd to have a single conveyance system with many outfalls before it discharging to surface water. Structure the definitions of conveyance system and outfall to produce one conveyance system the ends in an outfall to surface water or a discharge point where the MS4 ends but not where there may be multiple smaller conveyance systems within a storm drainage catchment ultimately leading to a single MS4 surface water outfall or otherMS4 termination point.

Phase I	Definitions	Outfall	It appears that permeable pavement would be an outfall under the proposed definition because it is a BMP designed to infiltrate stormwater. This does not make sense. In many cases, permeable pavement will not generate "stormwater" as defined in the permit, before it is soaked into the ground?
Phase I	Definitions	Outfall	In situations where the county MS4 enters a private stormwater control facility with a privately owned outfall, the MS4 terminates in a discharge point at the upstream end of the private facility, and it is no longer part of the MS4. This leaves the permittee free from inspection requirements.
Phase I	Definitions	Receiving water	To simplify the definition of an outfall, do not include groundwater as a receiving water in that definition.
Phase I	Definitions	Receiving water	Ecology should consider going to the legislature to change RCW 90.48 to change the pollutant discharge standard for municipal stormwater discharges from effluent criteria to the federal MEP (maximum extent practicable) pollutant reduction standard.
Phase I	Appendix 9	3	GRAB SAMPLES: The permit requires grab samples from qualifying storms. Grab samples represent a single point in time during a storm and therefore do not need to be from a qualifying storm. The permit should set a predicted minimum depth and antecedent dry period for grab samples. The permit should state that grab samples must be collected during storm events that are predicted to meet qualifying storm criteria at the beginning of the event. If the storm subsequently fails to qualify because the rainfall depth falls short of 0.20 inches, the grab sample will still be considered valid. The justification is as follows: water quality conditions of the grab sample represent the conditions at the beginning of a storm regardless of the amount of total runoff that occurs.
Phase I	Appendix 9	4	FLOW-WEIGHTED COMPOSITE SAMPLES. This section should note that these parameters are for stormwater characterization conducted under S8.B.2. and S8.C.2. Adding this language makes it clear that the monitoring is for a specific permit requirement and not all composite stormwater sampling that could be used to meet a permit requirement.
Phase I	Appendix 9	4	pH and GRAIN SIZE as CONVENTIONAL PARAMETERS: While pH and grain size are conventional parameters, they should not be added to composite stormwater parameters, and should be removed. Under the 2007 permit, these parameters were not required for stormwater characterization (S8.D.). The 2007 permit did include grain size and particle distribution for composite stormwater samples collected to test treatment BMPs under S8.F. The inclusion of pH and grain size in Table A9-2 reflects the need to include all composite storm parameter lab methods, including grain size that was only monitored at treatment BMP effectiveness sites. The 2013 permit has no requirement for treatment BMP testing, so grain size and pH lab methods are not even needed in Table A9-2 because they would be defined in any effectiveness project QAPP. The current parameter of total suspended solids is adequate to characterize land use runoff. Requiring grain size analysis will cost the Clark County an additional \$6,000 per year for no apparent reason. Please remove the parameter or provide reasonable justification.
Phase I	Appendix 10	E.7.b.	This section should state that Clark County is required to use an "Ecology-approved model" rather than specifically citing the WWHM12. There are other models such as MGSflood and various versions of the public domain and proprietary WWHM model that are Ecology-approved and allowed under county code.