Part IV: Response to Comments on Phase I Permit

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See Part I of the Response to Comments (RTC) for additional comments on the Phase I permit that also apply to at least one other permit. See Part V of the RTC for Phase I and Western Washington Phase II comments on Appendix I, Low Impact Development (LID), and watershed-based stormwater planning.

IV- 1 Legal Authority (S5.C.1)

IV-1.1 Interagency Agreements

Permit reference: S5.C.1.b.iv

Commenters: King County, City of Seattle, Snohomish County

Summary of the range of comments

- Ecology deleted the co-applicant language from this section. If this provision is intended to require agreements among county agencies, it constitutes make-work, is unnecessary and constitutes a needless interference with local government operations and organization. There is not a need to have an agreement between King County agencies to prevent discharge of pollution from one portion of the MS4 to another – Recommend removing this section.
- Retain the language "among co-applicants" in the permit. This was included in the 2007-2012 permit to match the federal rule and account for parties choosing to apply for permit coverage together. A new, broader obligation is not intended by Ecology.
- As written, this requirement is unfair and unworkable. This subsection should be deleted. The County cannot force any other agency to contract with the County. This requirement compromises the County's ability to comply with the Permit by placing mandatory Permit components in the hands of third parties.

Response to the range of comments

- Ecology kept the deletion of the term "co-applicant" from Section S5.C.1.b.iv because it was not a defined term, was only used in this section, and created confusion. Interagency agreements may be made between, but not limited to, agreements with other Phase I Permittees, Phase II Permittees, Co-Permittees, or Secondary Permittees. This section does not require intra-governmental (internal) coordination agreements.
- Ecology recognizes controlling the contribution of pollutants from adjoining municipalities or co-permittees whose storm sewers interconnect with those of the permittee may be difficult, particularly if the adjoining municipality is not covered under a municipal stormwater NPDES permit. However, the permittee cannot passively accept pollutants into their MS4 from outside sources. If a Permittee cannot establish an interagency agreement with an entity then they should not allow the contribution of pollutants from that entity.

IV-1.2 General Comments

Permit reference: S5.C.1.b.iv

Commenter: Snohomish County

Summary of the range of comments

- Clarify in multiple places in this section that the requirements apply only to municipal separate storm sewers covered by the Permit.
- Section S5.C.1.a: It should not be necessary for a Permittee to "demonstrate" that it has authority to control discharges to its MS4. What should be necessary is for the Permittee to have that authority.
- Section S5.C.1.b.v: This requirement is overbroad. As written, this requirement applies to any and all ordinances, permits, contracts or orders, regardless of the subject matter of said document and regardless of whether or not the document was enacted by Snohomish County. Limiting language is needed.
- Section S5.C.1.b.vi: This sentence is unnecessarily convoluted and confusing. The language should be simplified to clarify the actions required. Additionally, the language should be revised to acknowledge that Permittees must comply with federal as well as state laws.

Response to the range of comments

- Ecology did not add language regarding the application of requirements only to MS4s covered by the permit, but relies on special condition S2.A Authorized Discharges and S3.A., Responsibilities of Permittees, to establish the conditions that apply to Permittees.
- Ecology did not agree to change Sections S5.C.1.a, S5.C.1.b.v, and S5.C.1.b.vi because the language in these Sections is taken almost directly from 40CFR122.26(d)(2)(i). Ecology acknowledges that Permittees must comply with federal as well as state laws but does not agree that it is necessary to state so in this section.

IV-2 Mapping (S5.C.2)

Comments on mapping related to both the Phase I and Phase II permits are in Part I of the RTC.

IV-2.1 Clarify requirements for mapping existing, known connections

Permit reference: Phase I Permit – S5.C.2.b
Western Washington Phase II Permit – No comments received

Commenters: Clark County, King County, Pierce County, Regional Road Maintenance Forum, Snohomish County, City of Tacoma, WSDOT

Summary of the range of comments

- Clarify what connections to tributary conveyances are required to be mapped. Does it include non-piped connections like driveways and private ditches? Clearly specify that this means pipes 8 inches in nominal diameter or larger.
- New mapping requirements for known connections are confusing and appear duplicative.
- Delete the words "existing" and "known" from S5.C.2.b.ii since it is impossible for Permittees to make non-existent or unknown connections.
- Mapping connections greater than 8 inches will be very costly and time consuming. Recommend using existing language requiring mapping of all connection 24 inches or larger.
- Mapping existing known connections equal to 8 inches is infeasible and unnecessary. This would require mapping of 18,300 catch basin leads in the MS4 and would not add value to IDDE and spill control activities. Eliminate this requirement of further define.

Response to the range of comments

- Ecology edited language to improve clarity on required connection mapping. The previous Phase I permit required mapping of existing, known connections more than 8 inches in diameter. This permit adds the requirement to map connections equal to 8 inches in diameter. Permittees must map piped and ditch connections to the MS4. Driveways and other dispersed discharges to the MS4 are not connections and do not require mapping.
- The terms "existing" and "known" are used to clarify that it is not a permit violation if a permittee's stormwater system map does not include any given connection that is unknown to the permittee or that is planned in the future but not yet built.
- Phase I permittees are only required to map tributary conveyances upstream of outfalls 24 inches or larger. Mapping existing, known connections to these tributary conveyances that are greater than 8 inches was already a requirement under the previous permit.
- Ecology clarified that catch basin leads located within a permittee's MS4 are not connections to the MS4. They are part of the MS4 tributary conveyance.
- Requirements to map tributary conveyances upstream of 24-inch or larger outfalls includes mapping of catch basin leads within those tributary conveyances. Ecology believes that such connectivity in a stormwater system map will aid in IDDE and spill response activities. See comments under the Definitions section for "permanent stormwater control plans" for more on acceptable mapping formats.

IV-2.2 Provide more local control and flexibility to prioritize mapping needs

Permit reference: Phase I – S5.C.2
WWA Phase II – No comments received

Commenters: Clark County, King County, Pierce County, Regional Road Maintenance Forum, Snohomish County, City of Tacoma

Summary of the range of comments

- Permit should allow more flexibility for prioritizing mapping, especially for counties. For example, allow prioritization of basins where TMDLs exist or watershed planning is proposed or underway. The focus on urban/higher density rural sub-basins for counties forces much more mapping since other requirements, like TMDLs, force mapping in rural areas.
- Mapping all of the listed characteristics in the timelines identified without allowing for prioritization is counter-productive. Include language to qualify that the mapping will occur as the permittee becomes aware of them and prioritized as necessary to meet the needs of the SWMP.
- Extend or remove the six-month update requirement for on-going mapping. This is too restrictive and unnecessary.

Response to the range of comments

- Ecology recognizes that TMDLs may require mapping beyond the basic requirements in S5.C.2. This is consistent with other requirements for managing stormwater where additional requirements are necessary to address impaired waters. Ecology does not agree to allow prioritization of basins outside of the areas where mapping is required in S5.C.
- Ecology agreed that requiring all updates to be complete within six-months of additional features being found, modified, or constructed is too restrictive, and changed the language. Ecology recommends that Permittees establish procedures, which include timelines for updating mapping features, ensuring that updated maps are available for staff conducting illicit discharge and source control inspections.

IV-2.3 Clarify the distinction between new and ongoing mapping requirements

Permit reference: Phase I Permit – S5.C.2
Western Washington Phase II Permit – Not applicable

Commenters: King County, Puget Sound Partnership, Snohomish County, City of Tacoma

Summary of the range of comments

- Clarify that Phase I counties are to map the other half of mapping completed under the 2007 permit.
- Clarify language for ongoing mapping. Language confuses some new and ongoing requirements.
- Support the new mapping requirements in the draft permit.

Response to the range of comments

- Ecology clarified the permit language to clearly distinguish new mapping requirements from requirements to maintain mapping completed under the previous permit. This includes new language to clarify that counties are required to complete mapping of the entire area for which one half of the area was required to be mapped under the previous permit. Permittees who completed mapping prior to the previous permit may count that mapping towards compliance if it is consistent with requirements in the 2007-2012 permit.

IV-2.4 Extend completion dates for new mapping

Permit reference: Phase I Permit – S5.C.2
Western Washington Phase II Permit – Not applicable

Commenters: King County, City of Seattle

Summary of the range of comments

- Extend the deadline for completing new mapping requirements to the end of the permit term.
- Provide a 24 month phase-in period for mapping all connections allowed or authorized after February 16, 2007. The 2007 permit required that permittees initiate a program to map these.
- It is not feasible to expect all connections authorized or allowed by the Permittee after Feb. 16, 2007 are mapped within six months. It is reasonable and necessary to have a program in place to update maps. Suggest a return to 2007 permit language.

Response to the range of comments

- Ecology acknowledges that it will be challenging for Phase I permittees to complete new mapping by August 1, 2017. Ecology adjusted the deadline for new mapping requirements to December 31, 2017. This is consistent with adjustments made to deadlines for illicit discharge screening requirements.
- Ecology disagreed with providing a phase-in period for mapping connections allowed or authorized after February 16, 2007. The connections requiring mapping under this requirement would have been allowed or authorized after the date that permittees were required to initiate the program under 2007 permit requirements. For this reason, there should be no backlog of connections necessitating the suggested phase-in period.
- Ecology agreed that specifying a six month window to update maps was not necessary and returned to the 2007-2012 permit language relying on an ongoing program for mapping, including updates.

IV-3 Runoff Controls for New Development, Redevelopment and Construction Sites (S5.C.5)

Comments on general site plan review and timing of implementation are in Part I of the RTC. Comments on Appendix I, LID and watershed-based stormwater planning are in Part V of the RTC.

IV-3.1 Clarify permittee responsibilities for areas not served by MS4

Commenter: Snohomish County

Summary of the range of comments

- The permit should explicitly state in this section that these requirements apply only in areas that drain to the MS4 owned and operated by the Permittee that is covered by the permit.

Response to the range of comments

- Ecology disagreed with adding this language to individual sections of the permit. Ecology relies on special condition S3A Responsibilities of Permittees, to establish these conditions for the permit as a whole.

IV-3.2 Basin Planning

Commenters: Clark County, Rosemere Neighborhood Association

Summary of the range of comments

- S5.C.5.a.i. Tailor Minimum Requirements to local circumstances, Page 17, line 27, Code revisions through basin assessments: The language in the current permit as interpreted by the PCHB makes it difficult to alter a minimum requirement without completing a full-blown basin plan. The permit should include alternative language that allows for results of technical assessments that provide programs equivalent protection.
- Regarding alternative plans and Ecology's equivalency review, Rosemere advocates for opportunities to offer public comment for any alternative proposed by a permittee under Ecology's consideration. Stormwater management is a public interest, and the public should not be excluded from participating in review of alterations to state standards, especially when alternatives could result in public subsidy of stormwater programs that should only be the responsibility of private interests. Furthermore, the funding pathways for any alternative program should be clearly defined by the permittee, and should be subject to public review.

This did not happen with Ecology's Agreed Order with Clark County that was found to be inadequate by the PCHB. It is important for all capital improvement projects to be implemented in such a way as to bring the projects as far upstream in a wastershed as possible, and for projects to be situated as close to development projects as possible in order to ensure that stormwater capital projects adequately offset development impacts. This should be the baseline paradigm going forward in watershed management practices of the future, otherwise placement of capital projects could become arbitrary.

Response to the range of comments

- Ecology disagreed with altering the permit language specifically for "technical assessments". S5.C.5.a.i already includes "other similar water quality and quantity planning efforts", which can include technical assessments that provide programs equivalent protection, as alternatives to the use of basin plans.
- Ecology modified the Phase I Permit in 2009 to name approved alternative documents within Appendix 10 of the permit in order to allow, through the major permit modification requirements in WAC 173-220-060, a public review, public comment and appeal process on Ecology's decision. Ecology will continue to follow the modification process for approved alternative documents as necessary.
- Failure to adequately fund and implement permit requirements is a permit compliance issue and not an equivalency issue. In terms of funding sources and local budgeting issues, the permit does not require prescriptive requirements for any Phase I permittee and allows flexibility to the permittee to establish and maintain funding mechanisms to implement permit requirements. Phase I permittee budgeting and planning for funding varies from jurisdiction to jurisdiction.

IV-3.3 Ecology approval of local programs

Permit reference: S5.C.5.a.ii, S5.C.5.a.iii, S5.C.5.b.i

Commenters: City of Seattle, King County, Snohomish County

Summary of the range of comments

- In Section S5.C.5.a.ii, the Permit is ambiguous regarding whether or for how long continued use of the documents listed in Appendix 10 will be considered compliant with this Permit. The manuals and ordinances listed in Appendix 10 are documents approved under the previous Phase I Permit. Those manuals and ordinances have not been approved as meeting the requirements of this draft 2013-18 Phase I Permit. Please revise the language to clarify this issue.

- The words "local manual and ordinances" in S5.C.5.a.iii conflicts with language in S5.C.5.a.i, which states that Permittees may use "ordinances or other enforceable documents" to attain the objectives of Section S5.C.5. Please revise for consistency and to clarify what documents are required.
- In the event of appeals related to the terms of Section S5.C.5.a.iii and before Permittees begin expending limited resources to respond to requirements under this section, Ecology should have the explicit authority under this Permit to unilaterally extend Permit deadlines under such circumstances.
- In light of the PCHB's decision in the Rosemere Appeal, Ecology should have the permit in S5.C.5.b.i explicitly authorize Ecology to grant extensions to permit deadlines for individual permittees without formally modifying the permit, upon request by the permittees and for good cause shown. "Good cause" could include demonstrations by the permittee that it has diligently undertaken actions to meet the permit deadline, but due to circumstances beyond the permittee's control, it is unable to meet the deadline.

Response to the range of comments

- Ecology revised Appendix 10 to include two separate parts; Part 1 describes programs that are equivalent to the 2007-2012 permit requirements, and Part 2 will describe programs deemed equivalent to the 2013-2018 permit requirements. Ecology revised Section S5.C.5.a.ii to refer to Appendix 10, Part 2 where Ecology will list enforceable documents approved as functionally equivalent to Appendix I in the Phase I Permit effective August 1, 2013 and the required portions of Ecology's 2012 Stormwater Management Manual for Western Washington. In accordance with S5.B, Permittees should continue implementing their existing Stormwater Management Program, and therefore continue using the enforceable documents listed in Appendix 10, Part 1, until they make effective a local program per S5.C.5.a.iii.
- Section S5.C.5.a.i does not conflict with S5.C.5.a.iii. The language in S5.C.5.a.i is generalized and includes the more specific items, which are required for submission, in S5.C.5.a.iii.
- Deadlines are substantive permit requirements. Allowing an extension to the deadline to adopt the manual modifies the terms of the permit, and cannot be done in an informal process.

IV-3.4 Compliance measure for inspections

Permit reference: S5.C.5.a.v

Commenters: City of Tacoma

Summary of the range of comments

- Section S5.C.5.a.v.(3): Remove ", including LID." The definition for stormwater facilities already includes LID BMPs.
- Section S5.C.5.a.v.(4): Revise to read: "Compliance during this permit term shall be determined by achieving at least 80% of scheduled required inspections described in sections S5.C.5.a.v.(2) and (3)." As written, it is unclear whether inspections are required for all sites being constructed and/or those sites already constructed during a given year.

Response to the range of comments

- Ecology revised Section S5.C.5.a.v(4) to include clearer references to sections S5.C.5.a.v(2) and (3), this revision should clarify the timelines associated with construction inspection. Permittees that have an established inspection program as required by S5.C.5.a.v(4) should have these inspections scheduled per the timelines in S5.C.5.a.v(2) and (3); therefore Ecology disagreed with the suggestion to revise "scheduled" to "required".
- Ecology revised Section S5.C.5.a.v.(3) to remove "including LID."

IV-3.5 Construction phase inspection requirements

Permit reference: S5.C.4.a.v
Commenters: King County, Rosemere Neighborhood Association, City of Tacoma

Summary of the range of comments

- Appendix 7 and related permit condition S5.C.4.a.v(2): For a city in which the majority of development sites fall under the HSTP definition, the permit requires evaluating each site according to Appendix 7. Recommend Ecology include permit language allowing permittees to choose to inspect all construction sites that meet the minimum thresholds.
- S5.C.5.a.v(2) and (3)." As written, it is unclear whether inspections are required for all sites being constructed and/or those sites already constructed during a given year.
- S5.C.5.a.v(4), Revise to read: "Compliance during this permit term shall be determined by achieving at least 80% of scheduled required inspections described in sections…"
- S5.C.5.b.v(3) Final Inspection of Permanent Stormwater Facilities, Remove the added language "ensure" and retain the word "verify" when describing actions around the final inspection of permanent stormwater facilities. The permittee cannot ensure the actions of others and should not be required to do so as a regulator.
- Large construction projects similar to large-scale WSDOT projects should be regularly inspected during construction, especially during storm events.

Response to the range of comments

- Ecology agreed that inspection of all sites in lieu of evaluating sites for high sediment transport potential is a reasonable alternative and revised permit language to allow it.
- Ecology retained the requirements of S5.C.5.a (2) and (3) as written. These provisions apply to inspections for specific phases of construction regardless of whether they occur in a given year, with (2) inspections "prior to clearing and construction" and (3) "during construction."
- Ecology retained the term "scheduled" for the compliance measures for inspections, to provide flexibility for permittees to combine inspections as allowed in (4).
- Ecology retained the term "ensure" for inspection of permanent stormwater facilities. An inspection of these facilities should be conducted by staff qualified to evaluate whether facilities are properly installed.
- The requirements of this section currently require local government inspections of large projects during construction. Minimum Requirement #2 in Appendix 1 requires ongoing maintenance of construction phase BMPs to prevent erosion and sedimentation, and a Certified Erosion and Sediment Control Lead for larger sites.

IV-3.6 Training requirements

Permit reference: S5.C.5.a.vii

Commenters: Clark County, City of Tacoma

Summary of the range of comments

- Many of the detailed training requirements in this section and elsewhere in the permit are redundant and onerous. We suggest using consistent language for all five staff training sections in the permit based on the language for IDDE staff training in Section S5.C.8.e.
- The training requirement seems minor but creates an additional tracking process for training that is not needed because it would normally take place as part of doing business.

Response to the range of comments

- Ecology evaluated the training language for this and other program elements, and believes that the training language in S5.C.5.a.vii is consistent with the IDDE staff training requirement.
- Ecology retained the requirement to track training, including the training provided and the staff trained. Permittees may be required to provide these records during program audits to demonstrate that the program is designed to protect water quality to the MEP.

IV-4 S5.C.6 – Structural Stormwater Controls

IV-4.1 Clarify qualifying project types

Permit reference: S5.C.6.a

Commenters: Clark County, King County, Pierce County, City of Seattle, Snohomish County, City of Tacoma

Summary of the range of comments

- Consistently list the qualifying project types in S5.C.6.a and Appendix 11.
- Eliminate the "New LID BMPs" project type because these facilities fall under "New flow control facilities" and "New water quality treatment facilities."
- Add "High-efficiency street sweeping" as a required project type.
- Clarify S5.C.6.a.i(6). Include "repairs" and delete reference to "capital construction costs" because of its specific accounting and tax rule meaning. Include maintenance projects that reach the cost threshold on an area-wide or system-wide basis (e.g., within the project area).
- Clarify "other projects to address stormwater runoff into or from the MS4 not otherwise required in S5.C." Revise to read "other actions" rather than "other projects." Clarify that the maintenance projects are related to the MS4. Add a provision for maintenance projects which exceed standards ("enhanced maintenance"), are significant and benefit water quality.
- Allow stream restoration projects that compensate for impacts caused by excessive stormwater runoff peak flow and geomorphologically significant flows.
- Allow projects that remove fish barriers or stabilize down cutting to preserve riparian wetlands because they provide greater direct benefit than stormwater facility projects.
- Allow wetland restoration projects to improve stream hydrology and water quality.
- Allow floodplain reconnection projects because of flow reduction and water quality benefits.
- Add capital projects per a basin or watershed plan under S5.C.6.a.ii.
- Allow in-stream culvert replacement or in-channel restoration projects if they address problems caused (or are likely to be caused) or contributed to by the MS4, or that are designed and intended to reduce erosion by restoring channel complexity. These projects often produce near-immediate benefits to beneficial uses or prevent a near certain loss of beneficial uses.
- Support the flexibility that new flow control and new water quality facilities that qualify under this program need not be regional or meet the standards applied to new and redevelopment.
- Concerned that Permittees are obligated to include all projects that may fall into one of these categories, regardless of size. Include a minimum bar/lower cutoff for projects required to be reported under this program; don't want to be required to report minor, incidental structures. Suggestions include "post 1990 standards" and "40% removal rate of TSS" and "$25,000"

- Clarify how "small scale projects that are not planned in advance" fit into the Appendix 11 calculations. Must all projects be listed?

Response to the range of comments

- Ecology revised the lists of project types to be consistent between Appendix 11 and S5.C.6.a.
- Ecology agreed that new LID BMPs are also new flow control and/or new treatment facilities and edited the permit language accordingly. Ecology also removed "application of LID Principles" because projects that apply LID Principles in a retrofit setting should be accommodated in other specified qualifying project types (such as property acquisition and restoration of forest cover).
- High efficiency street sweeping is an allowed project type under S5.C.6.a.ii (5).
- Ecology retained the project type "maintenance with capital construction costs ≥ $25,000" because it is directly related to Operations and Maintenance Program requirements at S5.C.9.a.ii. Ecology intends that maintenance projects, including repairs, that require capital construction ≥ $25,000 and thus are not subject to the required 2-year window for completing the maintenance, must be reflected in the Structural Controls Program. Ecology does not intend to invoke specific accounting or tax rule meaning. Permittees may develop criteria for identifying maintenance projects that reach the capital construction cost threshold on an area-wide or system-wide basis per the requirement in S5.C.6.b.ii (7).
- Ecology revised this provision now at S5.C.6.a.ii (5) to clarify these project types are actions. Ecology intends this category to encompass "enhanced maintenance" projects, such as high efficiency street sweeping. In order for any maintenance action to receive credit under the Structural Control Program, it must have a quantifiable hydrologic or water quality benefit. All projects or actions under this permit must be associated with the MS4.
- Stream restoration projects are not included because the purpose of the Structural Controls Program is to reduce impacts from the MS4, not to mitigate or compensate for impacts.
- Projects that remove fish barriers are not included as they do not reduce impacts from the MS4. Projects to stabilize down cutting typically only temporarily mitigate for impacts from the MS4 and do not prevent or reduce such impacts.
- Wetland restoration projects may be considered if existing degraded wetlands are designed to become treatment wetlands in accordance with the SMMWW. Such a project would be a "new treatment facility."
- Ecology added floodplain reconnection projects only on water bodies that are not flow control exempt per Appendix 1.
- Ecology added capital projects related to the MS4 which implement an Ecology-approved basin or watershed plan to provide flexibility.
- In-stream culvert replacement projects carry an independent obligation and are not associated with the MS4. In-channel restoration projects are not included as they mitigate for impacts from the MS4 and do not prevent or reduce such impacts.

- Ecology expects Permittees to establish criteria for selecting Structural Stormwater Control projects, including small projects not planned in advance, per the requirement in S5.C.6.b.ii(7). In order for any project or action to be counted under the Structural Control Program and be documented as specified in Appendix 11, Ecology expects it to have a quantifiable hydrologic or water quality benefit and/or receive incentive points.

IV-4.2 Add requirements to Phase II and Secondary Permittees

Commenters: EarthJustice, USEPA Region 10, US Fish and Wildlife Service

Summary of the range of comments

- Require a structural control program for Phase II jurisdictions.
- Structural stormwater control program requirements and incentives should be included for secondary permittees, including the Ports of Seattle and Tacoma.

Response to the range of comments

- The Federal Rules (40 CFR 122) do not require a retrofit program for small MS4s (Phase II Permittees and Secondary Permittees).
- Ecology is trying out the improved reporting requirements reflected in Appendix 11 for Phase I Permittees during this permit term in order to make informed decisions regarding possible future retrofit requirements for all municipal stormwater permittees.

IV-4.3 Retain Ecology review and approval

Permit reference: S5.C.6.b

Commenters: EarthJustice, Northwest Indian Fisheries Commission

Summary of the range of comments

- Include a deadline for submission of the retrofit program.
- Do not eliminate the provision for Ecology's review and approval of the structural controls program.

Response to the range of comments

- Ecology specified that Permittee shall submit the first version of the list of planned individual projects by March 31, 2014, and that Permittees shall submit Structural Controls Program documentation with each annual report thereafter. Structural Controls Program documentation consists of programmatic-level information included in the SWMP Plan as

required in S5.C.6.b, and project-specific information as required in S5.C.6.c and Appendix 11.

- The 2007-2012 Phase I Permit did not require Ecology's approval of the structural controls program. Ecology has prepared the improved reporting requirements reflected in Appendix 11 to facilitate Ecology's review of each Permittee's Structural Control Program and provide detailed and consistent information to assist Ecology's evaluation of Permittee's compliance with MEP and AKART standards.

IV-4.4 Add a minimum performance metric/level of effort

Permit reference: S5.C.6

Commenters: Clark County, EarthJustice, People for Puget Sound, Thom McConathy, Northwest Indian Fisheries Commission, US EPA Region 10, US Fish & Wildlife Service

Summary of the range of comments

- Add a minimum performance metric. Suggested metrics include: treat or control 0.5% of the impervious area (with little or minimal stormwater controls) within each Phase I jurisdiction over the 5 year term of the permit; apply a numeric effluent limit or clearly prescribe a quantity and quality for retrofit practices; level of investment or funding.
- There is an expectation that the financial level of effort from year to year is maintained, but that this removes flexibility that EPA intended in its initial rules. Adding a retrofit metric is a simple approach to measure retrofit in aggregate, but it should not be expected to measure overall benefit.
- Support for the Structural Stormwater Controls Program requirements and incentives included in the draft Phase I general permit. Protecting and restoring the beneficial uses of the State's waters requires a permit framework that proactively addresses existing sources of water quality impairment. Significant upgrades to existing stormwater systems, prioritization, and additional funding are needed to ensure significant progress.

Response to the range of comments

- Ecology has established the hydrologic benefit, water quality benefit, and retrofit incentive calculations and reporting requirements in Appendix 11 to in order to make informed decisions regarding possible future minimum performance metrics. Among other things, an appropriate metric would be comparable across jurisdictions and focus on achieving maximum environmental benefit from any MS4 structural stormwater control project. Ecology does not believe that at this time a general % impervious area metric or a specified

level of investment metric would be appropriate. A metric based on stormwater quality or quantity will probably be the most appropriate in the next Phase I permit.

IV-4.5 Annual reporting requirements

Permit reference: S5.C.6

Commenters: Pierce County, City of Tacoma, US EPA Region 10, US Fish and Wildlife Service

Summary of the range of comments

- Do not require annual updates to the written SWMP description of the Structural Stormwater Control Program goals and planning process, as these are unlikely to change during the term of the permit.
- Do not require annual updates of the list of planned, individual projects so that projects can be completed and new projects can be developed on a timeline consistent with capital project construction cycles. The list should be updated at least once during the permit term.
- Require reporting of annual expenditures on stormwater retrofit projects, including a separate accounting of local, state, and federal funds for each specific project.
- Please clarify if the Phase I permittees' annual report should and may include planned, individual projects scheduled for implementation by secondary permittees.

Response to the range of comments

- If part of a Permittee's SWMP Plan changes, the Permittee must update it. If there are no changes, Permittees do not need to update it, but Permittees still need to submit the SWMP Plan each year with their annual report.
- Ecology expects that the list of planned, individual projects as reflected in the Appendix 11 documentation will need to be updated each year as, at a minimum, the status of qualifying projects and actions will change.
- Ecology agreed that permittees should report the actual costs and funding sources. Ecology added this information to the reporting requirements in Appendix 11.
- Secondary Permittee requirements are found in S6. Phase I city and county permittees are not responsible for reporting activities of Secondary Permittees unless the parties enter into a Co-permittee arrangement that specifies collective reporting.

IV-4.6 Editorial comments

Permit reference: S5.C.6

Commenters: Snohomish County, City of Tacoma

Summary of the range of comments

- Section S5.C.6.a.i.: Section number appears incorrect and should be iii and iv.
- Clarify that this program applies to MS4s covered by this permit.

Response to the range of comments

- Ecology corrected the section numbers.
- Refer to Special Condition S1 for permit coverage information, including geographic area and permittees, which applies to the entire permit.

IV-5 Source Control Program for Existing Development (S5.C.7)

IV-5.1 Legal limits of the program

Permit Reference: S5.C.7

Commenters: Clark County, Pierce County, City of Seattle, Snohomish County

Summary of the range of comments

- Retain the deleted sentence at S5.C.7.a.iii because: cities and counties do not control an industry's compliance with their NPDES permit; the State should not shift its delegated authority for full responsibility of pollution by retaining potential liability against local governments in the even the state does not meet its responsibilities to control pollution from facilities it is legally required to permit.
- Clarify that permittees have no obligation to enforce third party compliance with their NPDES or state waste discharge permits.
- Clarify that this program applies only to MS4s covered by the permit.
- This program should not refer to groundwater standards because the permit should not apply to groundwater discharges.

Response to the range of comments

- Ecology reinserted the sentence that clarifies Permittees' obligations and limits of liability associated with facilities subject to industrial and other NPDES permits.
- The applicability of the entire permit to the Permittee's MS4 is stated in Special Condition S3.A, Responsibilities of Permittees. Ecology disagreed that this should be restated repeatedly throughout the permit.
- The permit does refer to groundwater standards because it is issued as both an NPDES and a State Waste Discharge Permit. Refer to Special Condition S2.A.2.

IV-5.2 Follow-up compliance inspections

Permit Reference: S5.C.7.b.iii(2)

Commenters: Clark County, King County, Pierce County, City of Seattle, Snohomish County, City of Tacoma

Summary of the range of comments

- Do not limit follow up compliance inspections to two because the intensive work with a problem discharger pays high dividends in water quality; follow up inspections should be encouraged as part of a progressive enforcement policy; do not place a disincentive to continue to work with a business until they are in full compliance; more beneficial and cost effective to invest additional time and effort to achieve long term improvement at one site than to inspect a higher number of sites but achieve little or only temporary improvements; reported level of effort should match actual body of work.
- Clarify the meaning of "compliance inspections" (i.e., inspections conducted to assure previously identified corrective actions are adopted).
- Revise S5.C.7.b.iv(2) so as not to undermine the Permittee's independent enforcement discretion; "shall take enforcement action, if, in the judgment of the Permittee, enforcement is needed, as established…"

Response to the range of comments

- Attaining compliance at difficult sites has a significant environmental benefit and municipalities should be allowed to count repeat inspections necessary to achieve such environmental benefit. Ecology removed the draft language that limited the number of repeat inspections that could count toward the permit requirement.
- Permittee conduct follow up compliance inspections to assure previously identified corrective actions are adopted. Compliance inspections are documented and include having a physical presence on the inspected site; a drive by check is not a compliance inspection.
- Ecology does not agree that the language at S5.C.7.b.iv(2) undermines the Permittee's enforcement discretion. Ecology expects that such discretion and other aspects of an

progressive enforcement policy (or compliance strategy) is based on the authority in municipal codes and ordinances as referenced in S5.C.7.b.iv(2). Refer also to the last sentence in S5.C.7.b.i, which is unchanged.

IV-5.3 Ordinance update and review

Permit Reference: S5.C.7.b.i

Commenters: Columbia Riverkeeper, EarthJustice, Northwest Indian Fisheries Commission, People for Puget Sound, River Network/American Rivers, Snohomish County, City of Tacoma

Summary of the range of comments

- Clarify whether the ordinance update must also be effective by Feb. 2, 2018.
- 2018 is too late to require compliance with the source control program; require compliance no later than 2014.
- Do not eliminate the provision for Ecology's review and approval of the source control program. Clarify whether draft ordinance amendments must be submitted to Ecology for review and approval.
- Clarify the language in S5.C.7.b.i (which section, what requirements).

Response to the range of comments

- Ecology revised the permit language to clarify that the ordinance update must be effective by Feb. 2, 2018.
- The source control program was required under the Phase I Permit issued in 2007and will continue to be implemented through the 2013-2018 permit term. Compliance is continually required. The deadline of Feb. 2, 2018 is provided in case the Permittee's codes or enforceable documents become outdated. This date is consistent with the deadline for updating illicit discharge detection and elimination-related codes in S5.C.8.b.
- Because only minor changes have been made to the permit requirements, Ecology does not expect Permittees to make substantial changes to the Permittees codes or enforceable documents that support the source control and IDDE programs, and thus a review and approval process similar to the requirement in the 2007-2012 Phase I Permit is not necessary. Any noncompliance with the minimum performance measures specified for the source control program will be addressed per Ecology's enforcement authority.
- The permit refers to "the requirements of this section" and means all the requirements specified under S5.C.7, Source Control Program for Existing Development.

IV-5.4 Source control staff training

Permit Reference: S5.C.7.b.v

Commenters: Clark County, King County, People for Puget Sound, Puget Sound Partnership, City of Seattle, Snohomish County, City of Tacoma

Summary of the range of comments

- Eliminate the special source control staff training and evaluation requirements under S5.C.7.b.v that exceed other staff training requirements in the permit, as they are excessive, costly and unnecessary.
- Delete the proposed requirement that Permittees conduct evaluations of staff involved in the source control program as it is unnecessary and trends into employment challenges not necessary for this permit.
- Delete the entire requirement for a regular training program for source control staff.
- Supports annual training of source control staff.
- Remove the training reporting requirements as source control inspections involve extensive contact with the public and municipalities are not going to send untrained staff to meet the public.

Response to the range of comments

- Ecology agreed that the training requirements for staff responsible for implementing the source control program should be consistent with other staff training requirements in the permit and has revised the section accordingly.
- Ecology does not agree to remove the training reporting requirements for source control.

IV-5.5 Business education

Permit Reference: S5.C.7.b.iii(1)

Commenters: Columbia Riverkeeper, King County, Northwest Indian Fisheries Commission, Rosemere Neighborhood Association, City of Tacoma

Summary of the range of comments

- Add electronic communications (email and websites) as an approved means of providing information to all identified sites with a business address.
- Eliminate the requirement to provide information by mail and phone to all sites with a business address because it is extremely inefficient, difficult or impossible to do (no phone numbers, commercial lists are inaccurate, etc.); in person distribution and websites are better.
- Remove the provision that businesses self-certify compliance with the source control requirements.

Response to the range of comments

- Ecology added "electronic communications" as an acceptable means of providing source control information to businesses.
- Ecology eliminated the provision that businesses may self-certify compliance with the source control requirements as it is confusing and does not affect the Permittees' minimum performance measures.

IV-5.6 General comments and clarifications

Permit Reference: S5.C.7

Commenters: Clark County, Columbia Riverkeeper, EarthJustice, King County, Pierce County

Summary of the range of comments:

- Permittees should provide more extensive information to the public about their source control efforts and the results of these efforts in their annual reports.
- Ecology should have a program to notify municipalities when an industrial stormwater permittee receives a notice of violation from the PARIS database.
- Supports a rigorous source control program.
- S5.C.7.a.iv – change "reduction of" to "efforts to reduce"
- Include a specific list of "pollutants associated with" or refer to "polluted runoff from" for clarity.

Response to the range of comments:

- Permittees are required to provide summaries of each illicit discharge addressed, and this will include additional information regarding Phase I Permittees' source control program activities to locate and address illicit discharges. Ecology also encourages interested parties to provide comments to Permittees on the level of detail and descriptions of their source control program activities documented in the Permittees' SWMP Plans.
- At this time, Ecology's PARIS database cannot send such notifications, but Ecology encourages municipalities and interested parties to consult PARIS database information at http://www.ecy.wa.gov/programs/wq/permits/paris/paris.html.
- Ecology made the suggested grammatical corrections and clarifications.

IV-6 Operations and Maintenance (S5.C.9)

See Part I of the RTC for Operations and Maintenance comments that apply to both the Phase I and the Western Washington Phase II comments.

IV-6.1 Inspections until 90% of lots are constructed

Permit reference: Phase I - S5.C.9.b.iv

Commenters: Clark County, King County, Pierce County, City of Seattle, Snohomish County, City of Tacoma

Summary of the range of comments

- Keep the original language ("during the period of heaviest construction") because it is an undue burden to inspect the BMPs/facilities every 6 months given that it may be years before 90% of the lots are constructed. The requirements in Phase I S5.C.5 and Appendix 1 required that these type of developments have temporary and permanent erosion and sediment control methods in place, and these BMPs should be sufficient to prevent excessive sediment from entering and damaging the stormwater treatment or flow control BMPs/facilities.
- Keep the original language as generally sufficient for most cases. Permittees may and likely will conduct more frequent inspections as plats are developed.
- In this economic climate, many subdivisions have been abandoned part way through construction, as banks have foreclosed on the properties or developers wait for a more favorable housing market to recommence construction.
- Move the six-month facility inspections from the Phase I O&M section to the construction phase requirements in S5.C.5.a.v. It is a development inspection activity to address construction phase issues.

Alternatives to proposed requirement:

- Update language for this inspection requirement so inspections will not be required for fully stabilized sites where construction has stopped and no activity is occurring: "…*every 6 months, until 90% of the lots are constructed (or when construction has stopped and the site is fully stabilized) to identify maintenance needs and enforce compliance with maintenance standards as needed*."
- Reword section to defer to the jurisdiction's schedule or program that has comparable coverage.
- Move section S5.b.iv to S5.c. iv. Edit the following text: "E*ach Permittee shall manage maintenance activities to inspect all permanent stormwater treatment and flow control BMPs/facilities, including catch basins, in new residential developments every 6 months, until 90% of the lots are constructed, more frequently during the periods of heaviest*

impact from development, to identify maintenance needs and enforce compliance with maintenance standards as needed.

- "*Each Permittee shall inspect all stormwater facilities regulated by the Permittee that are located in new residential developments no less frequently than every 12 months during active development and construction to identify the need for and enforce performance of any necessary maintenance. For purposes of this subsection, active development and construction shall be deemed to cease either when homes have been constructed on at least 90% of the residential lots within the development, or when the developer's maintenance security device for the drainage facilities expires, whichever occurs first.*"

Response to the range of comments

- Ecology added language to clarify that construction phase inspections for permanent residential developments must occur every six months until 90% of the lots are constructed, or when construction has stopped and the site is fully stabilized. This provides a clear performance measure for meeting the requirement. Ecology acknowledges that residential developments may occur over a long time frame as individual lots are built out. This is also a time when the potential for polluted runoff is high if temporary erosion and sediment control BMPs are not properly implemented and maintained. Permittees are not required to complete these inspections if the site is dormant for an extended period of time, provided it is fully stabilized.
- Ecology acknowledges that these requirements occur during the construction phase of residential development, and the Western Washington Phase II permit includes this requirement in its S5.C.4 new and redevelopment section. In Phase I, this requirement is contained within the O&M section for stormwater facilities regulated by the permittee because these facilities will require ongoing inspections post-construction. Ecology retained the Phase I requirement in S5.C.9.
- Ecology disagreed with linking this requirement with release or expiration of a developer's maintenance security device. Conditions at the development dictate the potential for polluted runoff. The release or expiration of a security device will often coincide with final stabilization of the site.

IV-6.2 Clarify compliance measures

Permit reference: S5.C.9.a.ii, and S5.C.9.b, c and d.

Commenters: Clark County, King County, Thom McConathy , Pierce County, Regional Road Maintenance Forum, Snohomish County

Summary of the range of comments

Maintenance of facilities regulated by the Permittee (S5.C.9.b)

- S5.C.9.b.v - Add the following text:"*Compliance with the inspection requirements of S5.C.9.b.ii. and iv. above shall be determined by the presence of an established maintenance program designed to inspect all sites and achieving inspection of 80%.*
- Maintenance of stormwater facilities regulated by the permittee. The 80% requirement should be increased to 100% as this permit should build on the last.
- S5.C.9.b.v In the absence of a measure such as 80%, the permit appears to require 100% compliance, which is not practicable or reasonable. Recommend a compliance standard of 80% as realistic.
- S5.C.9.b.vi - Maintenance and enforcement of private catch basins – Add the following text at the end of the section. "*The maintenance schedule for regulated catch basins will be confirmed to be held to one-year to be concurrent with the regulated facility inspection schedule unless required by other permit requirements."*
- S5.C.9.b.vi - Maintenance of private catch basins - *Compliance with these maintenance requirements shall be determined by the presence of an established a progressive enforcement program designed to address all non-compliant catch basins and achieving compliance at 90% of the sites*.
- S5.C.9.b.iii - This language is unclear. Recommend inserting an example of what is meant by the term "maintenance records of double the length of time of the proposed inspection frequency." Add such as: "*For example, if the Permittee proposes a 5 year inspection schedule for a particular facility, the Permittee must have 10 years of maintenance records regarding that facility."*

Maintenance of facilities owned and operated by the permittee (S5.C.9.c.iii)

- Recommend changing it to 80% to be consistent with inspection requirement for facilities regulated by the permittee.
- Remove reference to subsection ii in this requirement.
- Add the following text: "*Compliance with the inspection requirements of S5.C.9.c.i. and ii above shall be determined by the presence of an established maintenance program designed to inspect all sites and achieving at least 95% of required inspections*."

Maintenance of catch basins owned and operated by the Permittee (S5.C.9.d.iii)

- Recommend changing it to 80% to be consistent with inspection requirement for facilities regulated by the permittee.
- Add the following text: "*Compliance with the inspection requirements of S5.C.9.d.i. above shall be determined by the presence of an established inspection program designed to inspect all catch basins and achieving at least 95% of required inspections. Compliance with the maintenance requirements of S5.C.9.a.ii shall be determined by the*

presence of an established maintenance program designed to maintain all catch basins and achieving maintenance of 95% of the sites "

- Revise to: "*Each Permittee shall continue to annually inspect catch basins and inlets owned or operated by the Permittee, except as provided below."* This language should be revised to clarify that the requirement only applies to catch basins and inlets that comprise portions of the Permittee"s MS4 that are covered by the Permit. *"Each Permittee shall continue to annually inspect catch basins and inlets owned or operated by the Permittee that constitute a portion of the Permittee "s MS4 that is covered by this Permit, except as provided below."*

Compliance alternatives for follow-up maintenance (S5.C.9.a.ii)

- Suggest adding: *"Compliance with the maintenance requirements of S5.C.9.a.ii shall be determined by the presence of an established maintenance program designed to maintain all sites and achieving maintenance of 90%.*"
- Include performance measures to recognize it is not possible to comply with the maintenance standards for 100% of the facilities where "circumstances beyond the permittee's control" do not exist. Examples could be 80% of regulated facilities and 95% of permittee-operated facilities.
- Delete schedule listed in section ii. Move the scheduling requirements to the jurisdiction's design manual and allow jurisdictions to develop appropriate schedules for public and private facilities assuring environmental protection through the equivalency process.
- Add 80% inspection standard as none is listed and it is assumed to be 100%
- Change timelines for maintenance to be performed:
    - Within 18 months for typical maintenance of facilities, except catch basins.
    - Within 12 months for catch basins. Six months is too restrictive, and one year is consistent with other maintenance requirements.
    - Within 2 years for maintenance that requires capital construction of MORE than $25,000.

Response to the range of comments

- Ecology disagreed with matching compliance measures, currently at 95%, to the 80% measure for stormwater facilities regulated by the permittee. The 80% measure in S5.C.9.b acknowledges the additional difficulties in completing inspections of facilities that are not owned or operated by the permittee.
- Ecology does not agree to exclude spot check inspections from the compliance measure.
- Refer to S1 and S2.A for permit applicability to the MS4 owned and operated by the permittee.

- Ecology disagreed with adding a compliance measure to S5.C.9.b.vi, or modifying maintenance timelines in S5.C.9.a.ii, or allowing permittees to set them. The timelines are consistent with those in the 2007-2012 permit.
- Maintenance of private catch basins is required only after they are found to be out of compliance during inspections required under S5.C.7, S5.C.8, or S.5.C.9. Permittees may refer to compliance measures under the applicable section.
- Ecology does not agree that further clarification of "maintenance records of double the length of time" is required.
- Ecology does not agree to edit compliance with timelines for completing maintenance under S5.C.9.a. A provision is already included for extending the timelines under circumstances beyond the permittee's control. Percentages for determining compliance with required inspections are addressed in the appropriate sections of S5.C.9 (b, c, and d).

IV-6.3 Adjust deadlines for updating maintenance standards

Permit reference: S5.C.9.a

Commenters: Clark County, King County, City of Seattle, Snohomish County

Summary of the range of comments

Concerns about proposed deadline

- Maintenance standards are not yet included in the draft 2012 *Stormwater Management Manual for Western Washington* and thus are not available for comment.
- Support the operation and maintenance requirements; however, it's unclear why permittees, with existing, very similar requirements, are given until 12/31/15 to develop a verification program. Shouldn't this activity be ongoing?

Recommendations and alternatives

- Move the scheduling requirements to the jurisdiction's design manual and allow jurisdictions to develop appropriate schedules for public and private facilities assuring environmental protection through the equivalency process.
- Change the date the Permittees update their maintenance standards from "December 31, 2014" to "June 30, 2015" to be consistent with recommendations in comments on timelines for S5.C.5 deadlines.

Response to the range of comments

- The deadlines for adopting maintenance standards should coincide with requirements for stormwater code updates. Consistent with legislative direction for Phase II to delay some deadlines, Ecology extended the deadline for updating maintenance standards to June 30, 2015.

IV-6.4 Clarify requirements for stormwater facility inspections

Permit reference: S5.C.9.b.ii

Clarify definition of "stormwater treatment and flow control BMPs/facilities"
Commenters: King County, Snohomish County, City of Tacoma

Summary of the range of comments

- The term "stormwater treatment and flow control BMPs/facilities regulated by the Permittee" is not defined, while the term "stormwater facilities regulated by the Permittee" is defined. For clarity the defined term should be used.
- S5.C.5.a.v (3) – Phase II reference: S5.C.4.b.iv. Remove "*, including LID.*" The definition for stormwater facilities already includes LID BMPs.

Response to the range of comments

- Ecology defines both "stormwater treatment and flow control BMPs/facilities" and "stormwater facilities regulated by the Permittee" in the Definitions section.
- Ecology deleted the reference to LID BMPs in S5.C.5.a.v.(3).

IV-6.5 Clarify requirements for facilities owned and operated by the Permittee

Permit reference: S5.C.9.c.i

Commenters: City of Seattle, Snohomish County, City of Tacoma

Summary of the range of comments

- Please add language saying that the obligation applies to Permittee-owned and operated stormwater facilities which are part of the Permittee's MS4 and located within the jurisdictional boundaries of the Permittee.
- Retain the language "(other than catch basins)" in this section as it makes it clear that catch basins owned or operated by the Permittee are not, by definition, stormwater facilities/BMPs.

The maintenance requirements for catch basins owned or operated by the Permittee are defined in S5.C.9.d.

Response to the range of comments

- Refer to S1 for permit applicability.
- Ecology disagreed with retaining "(other than catch basins)" because this language is unnecessary; catch basins are not stormwater treatment and flow control BMPs/facilities.

IV-6.6 Clarify requirements for follow-up maintenance after inspections

Permit reference: S5.C.9.a

Commenters: King County, Clark County, City of Seattle, Snohomish County

Summary of the range of comments

- Edit the following text: "*Circumstances beyond the Permittee's control include denial or delay of access by property owners, denial or delay of necessary permit approvals, major weather events, and unexpected reallocations of maintenance staff to perform emergency work.*"
- Add the words "*for public and private stormwater facilities/BMPs*" so that the permit reads: "Each Permittee shall implement maintenance standards for public and private stormwater facilities/BMPs that are as protective…"
- S5.C.9.a.ii Being required to do non-function critical repairs in the turn-around time listed in this section King County should not have non function critical repairs held to the same schedule as function critical repairs; the text should be edited to allow that flexibility "*…when an inspection identifies an exceedences of a function critical maintenance standard,…"*
- Include language to note that only maintenance needed to retain or restore facility functions is required under the permit schedule, such as: *"…an exceedence of a maintenance standard for a water quality or flow control function, maintenance shall be performed…."*
- S5.C.9.a - Clarify precisely what type of program must be implemented by the Permittee: "*Each Permittee shall implement a program requiring the proper operation and maintenance of those stormwater facilities that comprise a portion of or that discharge into an MS4 that is owned or operated by the Permittee and covered by this Permit. The operation and maintenance program shall apply both to stormwater facilities that are owned or operated by the Permittee and to stormwater facilities that are regulated by the*

Permittee. The objective of the operation and maintenance program shall be to prevent or reduce negative stormwater impacts."

Response to the range of comments

- Reallocations of maintenance staff to perform emergency work may include work due to major weather events.
- S5.C.9.a applies to both public and private stormwater facilities.
- Maintenance inspections may be limited to determining compliance with maintenance standards that are protective of facility function. Refer to existing language in S5.C.9.a.
- Ecology does not agree to proposed edits to S5.C.9.a. Refer to S1 and S2.A for permit applicability.

IV-6.7 Clarify requirements for stormwater facilities regulated by the Permittee

Permit reference: S5.C.9.b.i and ii

Commenters: Clark County, King County, Snohomish County, City of Tacoma

Summary of range of comments

- Add the following text back into S5.C.9.b.i "*The permittee will have a program that enforces compliance with maintenance standards on facilities that the permittee regulates*"
- S5.C.9.b.i - This provision should be revised to clarify the purpose and scope of the required inspections and reduce the requisite frequency of such inspections to once during the permit term. Suggested language: "*Each Permittee shall implement an on-going inspection program to enforce compliance with adopted maintenance standards, pursuant to which all stormwater facilities regulated by the Permittee shall be inspected at least once during the term of this permit.*
- S5.C.9.b.ii: Modify to state: "*Permittee shall implement on on-going inspection program to annually inspect all <u>known</u> stormwater treatment and flow control BMPs/facilities regulated by the Permittee*."
- S6.C.9.b.i – Limit this to catch basins within regulated facilities as part of the regulated stormwater facility inspection program. While it makes sense to inspect inlets during facility inspections, it should not be a specific part of a facility inspection. If Ecology believes regulated inlet should be inspected, there should be a separate requirement similar to S5.C.9.c (permittee-operated catch basins) that clearly defines expectations.

- S5.C.9.b.vi states: "The Permittee shall require cleaning of catch basins regulated by the Permittee if they are found to be out of compliance with established maintenance standards in the course of inspections conducted at facilities under the requirements of S5.C.7. (Source Control Program), and S5.C.8. (Illicit Connections and Illicit Discharges Detection and Elimination), or if the catch basins are part of the stormwater facilities inspected under the requirements of S5.C.9. (Operation and Maintenance Program)." This subsection is confusing. Either delete or revise to clarify Ecology's intent. First, the term "catch basins regulated by the Permittee" is not defined by this Permit. Next, why does this subsection contain cross references to S5.C.7 and S5.C.8? If Ecology desires to require maintenance of catch basins as a part of the Source Control Program (S5.C.7) and/or the Illicit Connections and Illicit Discharges Detection and Elimination Program (S5.C.8), Ecology should edit those sections of the Permit to require the desired maintenance activities.
- Section S5.C.9.b.ii. Please revise the language to state: *"The inspection program is limited to facilities to which the Permittee can legally gain access, provided the Permittee shall ~~seek~~ request access to all stormwater treatment and flow control BMPs/facilities."* This will help Permittees avoid any expectations to pursue an administrative search warrant from Superior Court if access is denied; since those can be extremely difficult to get.

Response to the range of comments

- The definition of stormwater facilities regulated by the MS4 already limits the term to facilities "known" to discharge to the MS4.
- Requirements in S5.C.9.b apply to catch basins associated with stormwater treatment and flow control BMPs/facilities. The ordinance or other enforceable documents called for in S5.C.9.b must establish the authority to require cleaning of catch basins.
- The intent of S5.C.9.b.vi is to require that catch basins associated with facilities inspected for source control, illicit discharge, or operations and maintenance purposes be included in any requirements to bring the facilities into compliance with maintenance standards. The permit does not require annual inspection of privately owned catch basins.
- Ecology did not agree to edit S5.C.9.b.ii to "request access". Permittees may determine the extent to which they pursue access to stormwater treatment and flow control BMPs/facilities, provide a request for access is made.

IV-6.8 Clarify recordkeeping requirement

Permit reference: S5.C.9.e

Commenters: King County, City of Tacoma

Summary of the range of comments

- Section S5.C.9.h - Please list which "inspections and maintenance or repair activities conducted by the Permittee" require documentation. We suggest listing the requirement under each of the applicable sub-sections of S5.C.9.
- Record requirement is very broad. Please specify exactly which types of records must be maintained.
- Delete "…under the functional control of…" as this section has already specified all lands owned or maintained by the permittee.

Response to the range of comments

- Permittees must maintain records that verify actions taken to comply with permit requirements.
- Ecology retained the addition of "under the functional control" after road maintenance activities to clarify that permittees are responsible to ensure applicable requirements are implemented even when they are completed through contracts or other agreements with entities other than the permittee.

IV-6.9 Editorial comments

Commenters: King County, Snohomish County

Summary of the range of comments:

- S5.C.9 Errata delete "The program shall include:"
- S5.C.9 Clarify intent of O&M program Permit is seeking to reduce impact - *"to prevent or reduce stormwater impacts"* "*to prevent or reduce adverse stormwater impacts."*
- S5.C.9.d.i - "Each Permittee shall continue to annually inspect catch basins and inlets owned or operated by the Permittee, except as provided below." This language should be revised to clarify that the requirement only applies to catch basins and inlets that comprise portions of the permittee's MS4 that are covered by the permit. "*Each Permittee shall continue to annually inspect catch basins and inlets owned or operated by the Permittee that constitute a portion of the Permittee's MS4 that is covered by this Permit, except as provided below."*

Response to the range of comments:

- Ecology deleted "The program shall include:"
- Ecology agrees that the O&M program seeks to prevent or reduce adverse stormwater impacts. No change.
- *Refer to S1 and S2.A for permit applicability.*

IV-7 Appendix 10 – Equivalent Programs for Runoff Controls for New and Redevelopment and Construction Sites

Commenters: Clark County, City of Tacoma, Rosemere Neighborhood Association, WSDOT

Summary of the range of comments

- It appears that only the 2008 City of Tacoma SWMM is equivalent. Does this mean that whenever there is an update it needs an equivalency review? Consider changing language to include updated versions of local manuals that do not substantially change content that relates to equivalency.
- Please correct so Section G. refers to the most recent version of the Ecology-approved Highway Runoff Manual (HRM). This appendix would be useful in the Phase 2 permits also, especially since many city and county road departments use the HRM.
- None of the language referencing Clark County Code should be stricken due to the PCHB ruling that applies to the flow control standard. The PCHB did not strike down Clark County code and manuals, only the program to apply Minimum Requirements 7 of the permit Appendix 1, the "Flow Control Mitigation Program." Ecology should retain the language adopting code and manuals and add a footnote or other language noting that the pre-development land cover must be historical forest in order to use MR 7 under the county code.
- There may be Phase II Permittees who reference Clark County manuals. They would also be impacted by removal of this Clark County Program language in its entirety.
- The footnote on Clark County's section in Appendix 10 is in error. See the Agreed Order (7273) and the PCHB ruling for correct information. The PCHB ruling did not invalidate Clark County's regulatory program in its entirety. Only the flow control portion under the agreed order and subsequent permit modification in September 2010 was appealed.
- The entire section pertaining to Clark County has been redlined with a footnote stating that Clark County's program is in the appeals process in the courts. However, in Rosemere et al. V. Clark County et al, Case No. C11-5213RBL in US District Court of Western Washington, Judge Leighton issued an order granting Rosemere's request for a preliminary injunction. Clark County is enjoined from issuing any permit or authorization that fails to meet condition S.5.C.5 of the Phase I Permit until further notice from the court, pending further decisions from the Washington State Court of Appeals. Clark County is not under a building moratorium, they are simply enjoined by the court to revert to the state's default flow control standards until the court process has been exhausted. Thus, Clark County will continue to issue permits and review plans, and projects will continue to be built. It is confusing for Ecology to simply leave the section on Clark County blank, especially when it could a year or more before the cases in question are settled. Ecology should update this section to reflect the current findings from the court. Clark County has been in violation of the PCHB findings since January 2011, and has continued issuing permits and plan approvals that do not adhere to the PCHB rulings. Clark County justified its position by saying Ecology had been silent on

the matter. Thus, it would be prudent for Ecology to add clarifying language to this section in adherence to the various findings on these matters. It is not helpful for Ecology to refrain from doing so because it is inconvenient or cumbersome within the administration of the permit cycle.

Response to the range of comments

- If a Permittee revises their codes or manual following Ecology's equivalency review and subsequent incorporation into Appendix 10, Permittees will need to submit the revisions to Ecology. Ecology will work with permittees on a case by case basis to decide if such revisions affect the original equivalency determination. Changes that affect the determination would likely necessitate a modification to Appendix 10.
- Ecology revised Appendix 10 to reference the most recent, Ecology approved, version of WSDOT's Highway Runoff Manual (HRM).
- Ecology agreed that the entirety of Clark County's manual program should not be deleted from Appendix 10; Ecology modified Appendix 10 accordingly.

IV-8 Appendix 11 – Structural Stormwater Controls Project List

IV-8.1 Appendix 11 General comments

Commenters: People for Puget Sound, King County, Snohomish County, WSDOT

Summary of the range of comments

- Delete Appendix 11 and all references to it. The quantitative methodology would not generate accurate data. A more rigorous methodology such as the Western Washington Hydrology Model might provide somewhat more reliable data, however we do not recommend substituting it.
- Rather than estimating *TSS reduction* (which can be highly variable), it would be more beneficial to report *acres treated* as well as the pollutant categories targeted (i.e., TSS, dissolved metals, oil and grease, and phosphorous). Similarly, rather than reporting estimates of average *hydro benefit,* it would be more beneficial to report *acres receiving flow control.* Also, a more appropriate label for the "retrofit incentive" column would seem to be *project objective.*
- Do we need to inform when facilities are absorbed from the county by city annexation (i.e. no longer our jurisdiction), and if so, how would that be reflected here? What about the reverse case, i.e., what if a city disincorporates and we inherit facilities?
- Need to specify which geodetic system (datum) lat/long is based on; either prescriptively, or as a reporting requirement.

- Require, at a minimum, annual reporting on projects undertaken above a certain budget, benefits projected or observed, other outcomes, and total budget expended. This should help capture current level of effort, benefits and outcomes of projects, and rationale for increased future funding (from state, federal and local sources) and effort.

Response to the range of comments

- Ecology retained Appendix 11 to provide a standardized method for reporting. Ecology considered more, and less, rigorous methodologies in developing this format; and believes it will provide useful information, while not creating a significant new reporting burden on permittees.
- Acres treated and acres receiving flow control are valuable data. The retrofit incentive calculation combines land area (acres) with water quality and/or flow control benefit to produce a standard metric without requiring complex calculations. Ecology did not agree with adding additional pollutant categories at this time. The retrofit incentive calculation allows consideration of the level of flow control provided in addition to the acres receiving flow control.
- All facilities constructed under the structural controls program must be added to the list. If a facility is annexed during the permit term, it should remain on the list until the end of the permit term with a note in the comments field. A permittee receiving a new facility from another jurisdiction would not add that facility to their list unless the permittee modifies the facility through a project that meets the requirements at S5.C.6.
- Ecology encourages permittees to use latitude/longitude information from: http://itouchmap.com/latlong.html.
- Ecology added columns to Appendix 11 so that Permittees will report on the break down of local, state, and federal funding used for each project. This information may assist Ecology and others in determining funding needs for structural retrofit projects.

IV-8.2 Comments on Water Quality Benefit

Commenters: King County, City of Seattle

Summary of the range of comments

- In the table, and in the table's footnotes, WQ Benefit and Hydro Benefit come before Retrofit Incentive. It's a bit awkward that the calculation examples don't appear in the same order. However, the table's landscape orientation somewhat dictates its location. Recommend changing "below" references to specific page numbers.
- Water Quality Benefit footnote should more closely match the reporting form table and calculation page title.
- Recommend that the benefits of maintenance projects read as follows: "*For maintenance projects involving solids removal, estimated reduction is the ~~sum of~~ estimated dry weight of*

the total solids (TS) removed in pounds." Total solids (TS) is different than total suspended solids (TSS). Note this also needs to be noted in the title of this section as follows; "*Water Quality Benefit (Estimated TSS or TS reduction) Calculation*."

- In the Estimated TSS Reduction Formula, clarify if the land use area excludes Pollution generating pervious surfaces (PGPS). If the intent is to exclude PGPS, then the first block of text (on the left) should say, "Land use category PGIS contributing to project (acres)".
- The TSS calculation seems reasonable in principle, albeit crude (high degree of uncertainty), but usefulness of the result metric is not clear.
- We appreciate Ecology's effort to provide a standardized TSS benefit that is easily implemented. However, Ecology should qualify that this method provides only a rough estimate. The Estimated TSS Reduction Formula is not suitable for purposes beyond a high-level summary for reporting, and may not represent all projects. This simplified method approach has multiple limitations, some of which are due to the limited data Permittees collected during the 2007-2012 permit.

Response to the range of comments

- Ecology agreed with many of the suggested edits and updated the section accordingly. Total solids (TS) is added for reporting of solids removal associated with maintenance projects.
- Ecology deleted the reference to impervious acres in the overview of the water quality benefit calculation. All areas addressed by the structural control should be included in the calculation. This is consistent with Phase I S8.D data collected by the permittees which includes all impervious and pervious surfaces.
- Ecology acknowledges that water quality benefit calculations are rough estimates of pollutant removal. The estimates are not suitable for detailed analysis and not inclusive of all potential pollutants. Ecology believes the estimates do provide a standard and useful measure comparable across jurisdictions.

IV-8.3 Comments on Retrofit Incentive

Commenters: Clark County, King County, Pierce County, City of Seattle

Summary of the range of comments

- Use of percent in the table and decimal fraction in the calculations is awkward, as is syntax in the 'Incentive Points' column. Split the Incentive Points column into two columns. The first becomes 'Incentive Factor' and is simply the factor multiple that goes in the calculation; e.g. what was 175 (percent) becomes 1.75, as that's the value that goes into the equation. The second column becomes 'Applicable Area (acres)'"
- Include the formula before the example calculation

- Add term "unitless" to the column heading in the retrofit incentive cell.
- In table footnote 3: Delete term "Estimated total suspended solids (TSS) reduction"; replace with "WQ Benefit"
- In table footnote 3: Replace "below" with "on page 3."
- In table footnote 4: Replace "below" with "on pages 3 - 4."
- In table footnote 5: Replace "Calculate the incentive points as shown in the table and example below." with "Calculate the incentive points as shown in the Retrofit Incentive table and example on page 2."
- Add title above table on Page 2: "Retrofit Incentive Table"
- Insert immediately below table on Page 2: "Retrofit Incentive Formula: Retrofit Incentive = incentive factor * applicable area (acres, but drop units."
- Replace "Example of Incentive Computation:" with "Example:"
- In formula: Replace "=.23 x 1.5 (150%) = 0.345" with "1.5 x 0.23 = 0.345"
- Add rows to the Retrofit Incentive Table for High-efficiency street sweeping.
- Maintenance Activity, Page 2: base incentive points on "*impervious area*" instead of "*area*."
- As the Incentive Point concept is further developed for future permits, the Incentive Points should be refined to account for the land use and source type of the impervious area. For example, providing water quality treatment for one acre of a commercial parking lot should receive more points than treating one acre of rooftop.
- The retrofit incentive concept is new, and permittees need experience implementing it to refine and determine if it can be used as a minimum performance standard in future permits. Permittees encourage Ecology to engage with them during the upcoming permit cycle to refine this standardized reporting approach after evaluating how well it works during this permit cycle.
- Add the following sentence to the end of the footnote "[5]*Retrofit Incentive*: *Ecology may approve other Project Achievements and Incentive Points if the Permittee justifies their appropriateness.*" This would provide information for the potential refinement of this table for future permits.
- Add the following notes to the table in Appendix 11: Retrofit incentive points are only one aspect of determining priority. Other aspects include available budget, cooperating partners for projects, willing property owners, and land availability.
- Provide a better definition of "start and end year" since this can be defined in many ways.
- The term "retrofit incentive is confusing. Use "capital project value" or something similar.
- Elaborate on how Appendix 11 was developed and the expectation for its use by permittees, Ecology, and the public. Ecology should explain that it is a rating system that places greater value on certain types of projects.
- Retrofit Incentive Table and Example Calculation - Is there a modeled or other mathematical basis for the incentive factors, or are these judgment calls?"

Response to the range of comments

- Ecology agreed with many of the suggested edits on formatting and clarifications and revised Appendix 11 accordingly.
- Ecology did not agree to add high-efficiency street sweeping as a separate category in the table. High-efficiency street sweeping may be reported under S5.C.6.a.ii.(5).
- Ecology did not agree to limit the calculation of the retrofit incentive for maintenance activities to impervious surfaces. Unlike new facilities where impervious area is a significant factor in design calculations, maintenance activities are likely to occur in areas not associated with newly constructed facilities. Consistent with edits to the water quality benefit, Ecology retains the inclusion of a broader area where contributions from pollution generating pervious surfaces are also considered. The comparatively lower incentive points (25) for this category are intended to retain a level of consistency with other categories where only impervious area is included.
- Ecology acknowledges that the retrofit incentive concept is new and intends to refine the approach after evaluating how well it works during this permit term. Ecology looks forward to working with permittees during the permit term but does not agree to approve alternative methods for calculating the incentive. Consistent reporting over the permit term is critical for evaluating its usefulness.
- Retrofit incentive points reflect limited aspects of how permittees prioritize projects; Ecology did not agree to add a footnote to the table stating this.
- Permittees might define the start and end of projects in different ways. Project status, requested in the table, is one way Ecology is working to standardize this determination. The first status for many projects will be planning. Permittees should list projects as started when they are added to the structural controls program, even if the project is in the planning stage. This way the project can be updated as appropriate throughout its full life. End year will vary based on project category. Construction project end year is the year when all major construction has ceased. Maintenance projects end when implementation of the maintenance has ceased. Property acquisition ends when the property is acquired.
- Ecology acknowledges that the term retrofit incentive is new. The term was chosen to avoid potential confusion with existing terms such as capital project value which may have meaning outside of the permit.
- Ecology designed the retrofit incentive to place a higher value on projects with a greater benefit to water quality. The incentive points were derived from the best professional judgment of Ecology staff.

IV-8.4 Comments on Hydro Benefit

Commenters: City of Seattle, King County

Summary of range of comments

- The intent of providing high credit for projects using volume reduction strategies such as LID is an important concept to capture.
- Include calculations to explicitly demonstrate the volume reduction. One approach is to quantify the degree to which the LID performance standard is achieved. Another approach is to develop a simplified volume based calculation based on regionally appropriate precipitation data.
    - For example: "Volume required if the project had to meet the Standard Flow Control Requirement: Choose either (1) The amount of detention/retention storage required to match developed discharge durations to pre-developed durations for the range of pre-developed discharge rates from 50% of the 2-year peak flow up to the full 50-year peak flow, or (2) the amount of retention required to achieve the LID performance target to match developed discharge durations to pre-developed durations for the range of pre-developed discharge rates from 8% of the 2-year peak flow to 50% of the 2-year peak flow. This is determined using WWHM (or an approved equivalent modeling program) and assuming a forested pre-developed condition.[1]"
    - Add a second simplified calculation for the LID performance standard to demonstrate hydro benefit, and delete all the LID bullets except "uses full dispersion…".
    - If a more simplified hydro benefit calculation is desired, relative to the second option for the volume ratio calculation, an equation could be developed based on impervious area and presized sizing information such as COS calculator and Kitsap County's GSI-Calc, eliminating the need for additional modeling.
- What is the benefit of routing roof runoff below permeable pavement as opposed to e.g. a rain garden or some other infiltration system?
- Why is there need to incur the cost of routing below permeable pavement as opposed to less costly dispersion onto permeable pavement?"
- Shouldn't there be some roof area to infiltrative criteria spelled out here, or at least a pointer to criteria given elsewhere?
- Replace "Infiltrates all of the 25-year, 24-hour storm on-site" with "Achieves LID performance standard through volume reduction strategies," since relating it to the LID standard is more appropriate.
- The list for 100% hydro benefit is technically imbalanced. A high standard is required for bioretention (infiltrating all of the 25-year storm) while sites with only 50% of non roof hard surfaces being infiltrated receives the same credit.
- Why should there be a hydro benefit if "the volume ratio of the projects is" less than 25%? Please explain why this makes sense rather than a straight hydro benefit = project's volume ratio?
- Provide a footnote when referencing WWHM that indicates: "Other approved models or pond sizing methodologies providing comparable data are acceptable." For projects that have

detailed SWMM or MGS Flood modeling, the need to quantify hydro benefit should not require the effort to remodel the project in WWHM.

- Add language to allow Permittees to propose equivalent methods.
- Add the following paragraph to the end of the "Overview" section. "Ecology may approve other methods of calculating an estimated Hydro Benefit if the Permittee justifies the method is appropriate for the relevant project type." This addition is especially needed due to the potential for the denominator in the Volume Ratio Calculation to be zero.
- Clarify that the Hydro Benefit calculation provides only a rough estimate that is not suitable for purposes beyond a high level summary for Project List reporting as it may not be representative for all projects.
- The hydro benefit only reports % flow reduction only. Are we not also concerned with peak flow reduction? (. . . and possibly flow duration?)

Response to range of comments

- Ecology agrees that providing high credit for projects using volume reduction strategies such as LID is an important concept to capture.
- Ecology agreed to quantify the degree to which the LID performance standard is achieved and edited Appendix 1 accordingly. This is in lieu of specifying a 100% hydro benefit for: infiltration all of the 25-year, 24-hour storm on-site; using a vegetated roof or an impervious roof with runoff routed below permeable pavement; or using permeable pavement for a minimum of 50% of the project's hard surface area.
- Ecology retained the 100% hydro benefit for projects that use "Full Dispersion…"
- Ecology agreed on calculating the hydro benefit equal to the project's volume ratio and edits Appendix 11 accordingly. This is in lieu of allowing projects that have a volume ratio equal to or less than 25% to have a hydro benefit of 25%.
- Ecology does not intend for the hydro benefit calculation to require extensive additional modeling. Ecology edited Appendix 11 to allow Permittees to use other approved models and other approved pond sizing methodologies to determine the projects' Volume Ratio.
- Ecology examined using GSI-Calc for the Volume Ratio Calculation and determined that the current version of GSI-Calc cannot separate meeting the LID Performance Standard from meeting the Standard Flow Control Requirement, therefore it is not appropriate for determining the Hydro Benefit based solely on the LID Performance Standard.
- Ecology does not agree to allow Permittees to propose equivalent methods of calculating the Hydro Benefit, regardless of Permittees justifying the method based on a relevant project type. Consistent reporting over the permit term is critical for evaluating the usefulness of the Hydro Benefit metric. Ecology believes projects classified as Types 1-4 and 9-10 should be able to determine the Hydro Benefit per Appendix 11. Projects classified as Type 5 should put "NA" within the Hydro Benefit columns. Projects classified as Types 6-8 should determine the Hydro Benefit per Appendix 11 and/or consider themselves as meeting Hydro

Benefit Option #2, Full Dispersion. Projects classified as Type 11 should determine the Hydro Benefit per Appendix 11 or put "NA" within the Hydro Benefit columns.

- The Hydro Benefit calculations are only rough estimates and not suitable for detailed analysis. Ecology believes the estimates will provide a standard and useful measure comparable across jurisdictions. Ecology edited the Hydro Benefit Column name to clarify that it represents only an estimated average percent flow reduction.
- Peak flow reduction and flow duration are also concerns. Ecology has not addressed these within the Hydro Benefit calculation in order to minimize reporting requirements.