

DEQ Response to Comments

**NPDES Permits: Portland Group, Gresham Group, Clackamas Group,
City of Eugene, City of Salem, Multnomah County**

Permit numbers: 101314, 101315, 101348, 101244, 101513, 103004 (Respectively)
September 15, 2021



Water Quality Permitting

700 NE Multnomah
Portland, OR 97232
Phone: 503-229-5696
800-452-4011
Fax: 503-229-6124

www.oregon.gov/DEQ

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Overview

The Public Comment Period for the proposed permits was from October 23, 2020 to December 16, 2020.

No public hearing was held for any of the proposed permit renewals, and no requests were one were received.

The following individuals or entities submitted written comments during the public comment period, named with abbreviations for use later in this document:

List of Commenters	
#	Commenter
1	Oregon Association of Clean Water Agencies (ACWA) ¹
2	Clackamas River Water Providers (CRWP)
3	City of Eugene
4	City of Gladstone
5	Gresham Group Co-Permittees (Gresham Group)
6	City of Lake Oswego
7	J. Lehman, of Contech Engineered Solutions, LLC
8	City of Milwaukie
9	Multnomah County
10	J. Nicita
12	Northwest Environmental Defense Center (NEDC), Columbia Riverkeeper, Tualatin Riverkeepers, Willamette Riverkeeper, respectively (collectively, “NEDC et al.”)
13	Oak Lodge Water Services District (OLWSD)
14	J. Oberlander
15	Oregon City
16	Portland Group Co-Permittees (Portland Group)
17	City of Salem
18	Santiam Water Control District (SWCD)
19	Water Environment Services (WES)
20	City of West Linn
21	City of Wilsonville
22	Yakama Nation Fisheries

This document provides DEQ’s responses to comments received on the six draft MS4 NPDES permits posted. In some cases, the exact phrasing of the comment is presented. In other cases, substantive portions of the comment were excerpted or summarized. Similar comments are grouped below with DEQ’s response following the comment. Several respondents submitted comments in the form of both a letter describing major concerns and line-by-line edits over complete draft permit and permit evaluation report (PER) text, which

¹ Comments submitted by ACWA were noted as fully supported and endorsed by several co-/permittees, including City of Eugene, Gladstone, Milwaukie, OLWSD, Wilsonville, West Linn, and Salem

included inserted comments and provided spelling or grammatical suggestions. In such cases, not every single comment, correction, or suggested wording modification is described below, but all comments are accounted for in corrections to the final issued permits and expansions to the permit evaluation reports for clarity. Complete original comments are on file with DEQ.

This document is organized to address first the comments that are applicable to topics or language common among the permits being renewed, and then topics or language specific to a permit that deviates from the common issues addressed collectively.

Collective General Phase I Permit Public Comment Categories

This section addresses comments received during the Public Comment Period which relate to topics or language common to all the permits.

General Comments on the MS4 permits

1. **Comment from Yakama Nation Fisheries regarding reference to TMDLS and other documents cited in permits:** Many provisions in this permit refer to other documents or requirements. While we recognize the need for the permit to maintain flexibility when those other documents or requirements are updated, this approach makes it extremely difficult to understand what is required under this permit. This will make it more difficult for permittees to confirm whether they are in compliance, and for third parties to understand whether the permittees are in compliance. We recommend adding more explicit references to the relevant documents and requirements.

Response: DEQ has added the reference information for TMDL documents to each permit in front of the table of contents.

2. **Comment from J. Nicita on Land Use:** "The current Phase I NPDES MS4 permit renewal proceedings completely ignore DEQ's statutory land use planning obligations under ORS 197.180. [...] The Permit Evaluation Report would have to evaluate whether DEQ has to comply directly with the statewide planning goals, or whether it may rely on a determination of compatibility with local acknowledged comprehensive plans. OAR 340-018-0040.

DEQ has not made any determination as to whether the renewal permits involves a substantial modification or intensification of the permitted activity, despite the fact that several of the applications contain information on which to base, at least in part, such an evaluation." [...discussion of Oregon City as an example, referring to the 2017 renewal application...] Needless to say, an additional estimated 289 acres is more than enough additional "property" to make a determination that there is an intensification or modification of activity: i.e., new waste stormwater discharges from the City's MS4. But it is now nearly 2021: Almost an entire permit term has passed since the City's estimate, and the additional acreage that will be covered during the permit term will have to be increased by additional acreage additions in the years between the City's estimate of 2022 and the permit term as now calculated from the currently-scheduled permit issuance.

[...]

Finally, the City's whole premise does not even respond to the rule. OAR 340-018-0050(2)(b)(ii) is based on a "significant increase in discharge," not a significant increase in pollutant load. The City would be

required to quantify the amount of anticipated additional stormwater discharge to address this rule, whether or not this additional discharge is going to be, allegedly, incrementally less polluted upon discharge. The City has provided no such information. It is likely that all of the other applications share similar shortcomings. DEQ should go through its required determinations for each jurisdiction and demand resubmission in compliance with the rule. Then DEQ should make its required determination, and once it has met its statutory obligations under ORS 197.180, it should re-notice the permits for public comment.

Response: DEQ's obligations with respect to statewide land use planning requirements are established by ORS 197.180 and the state agency coordination rules adopted by the Environmental Quality Commission and Land Conservation and Development Commission in OAR chapter 340, division 18. Under these rules, the NPDES permitting program has been designated as a program affecting land use. OAR 340-018-0030(5)(d). Therefore, NPDES permitting decisions require evidence that the activity will comply with the statewide planning goals. This is typically done by a local government determination that the activity is compatible with local comprehensive plans and land use regulations through the submittal of a land use compatibility statement (LUCS) confirming this consistency. Each of the MS4 communities have acknowledged plans and regulations and have supplied DEQ with LUCSs. In general, DEQ shall rely on an affirmative LUCS submitted by an applicant. OAR 340-018-0050(2)(a)(B).

As described in the comment, a LUCS is typically not required for permit renewals unless DEQ determines that the permit involves a “substantial modification or intensification of the permitted activity.” OAR 340-010-0050(2)(b). In the case of these permit renewals, the MS4 permit conditions are expected to result in a net reduction in pollutant discharges to receiving waters. This is because the MS4 Phase I permits have increased requirements to reduce pollution in the municipal discharges. Additionally, the volume of municipal discharges does not significantly change from permit term to permit term. While municipalities may expand, or the amount of impervious surface may change, the use of low impact development and green infrastructure also increases, which reduces the volume. Also, the MS4 Phase I permits include retention requirements for post-construction stormwater, thus reducing the amounts of post-construction stormwater discharged to waters of the state. Therefore, DEQ does not anticipate any permitted MS4 would significantly increase in the discharge to state waters as outlined in OAR 340-018-0050(2)(b), and these renewals do not constitute a substantial intensification of the permitted activity such that new LUCS submittals are required.

3. **Comments from several stakeholders (ACWA, Portland Group, City of Lake Oswego, City of Milwaukie, others) on timing:** Wording changes were suggested in numerous places to address concerns about the due date of the renewal application and other submittals, as well as dates of implementation of various program elements vs dates of approval by DEQ.

Response: As detailed below, DEQ has addressed these comments with wording changes to provide clarity and consistency where needed, including adjustments to account for the time delay between release of the draft documents and permit issuance.

4. **Comment from J. Oberlander on inclusion of Deschutes County and City of Bend:** The City of Bend and Deschutes County should be added to the MS4 group in order to protect the Deschutes River, which is subject to high recreational usage and being affected by a rapidly growing population.

Response: The City of Bend is a permittee with an individual MS4 Phase II NPDES Permit. Deschutes County has been granted a waiver from being designated as a regulated MS4 entity under the criteria used for such designations to date, which include location within an Urbanized Area as defined by the 2010 US Census, and a population of over 10,000 or greater and a population density of 1,000 people per square mile. DEQ will reevaluate all Urbanized Areas designated in Oregon by the 2020 US Census when the details are available to determine which need MS4 permit coverage.

5. **Comment from NEDC et al. on Climate Change:** Climate Change Impacts Should be Considered and Incorporated in the Phase I Permits. EPA has noted that for stormwater, climate change impacts on water resources and climate resiliency are factors that municipalities must consider, and technical assistance for green infrastructure may be available. We would like to see more direct and specific action in the Draft Permits related to climate change, and proposed by the Phase I permittees as part of their permit applications and storm water management plans. Such an approach would also be consistent with Governor Brown's Executive Order 20-04 (March 10, 2020), which included in its directives that DEQ must, in all decisions, consider and integrate the impacts of climate change.

Response: Governor Brown's Executive Order (EO 20-04) on climate change is specific to Greenhouse Gas Emissions Reduction Goals. The Executive Order does not apply to review and issuance of water quality permits under state water quality laws and the federal Clean Water Act.

DEQ recognizes that climate change is critical to the State of Oregon and that stormwater management plays an important role protecting our state resources. The new requirements in the MS4 permits regarding the management of post-construction stormwater are focused on Low Impact Development and prioritizing infiltration where possible, all which will help reduce pollution associated with post-construction stormwater now and as the climate in Oregon changes. As Governor Brown's Executive Order is implemented in the coming years, stormwater permitting will adapt as necessary to conform to the Order.

6. **Comment from ACWA, Portland Group, City of Eugene, City of Salem, and other co-/permittees on permit flexibility regarding COVID-19, wildfires, and other potential natural disaster disruptions to municipal operations:** The NPDES MS4 Phase I permits are being issued amidst a time of unprecedented economic and organizational challenges for the local government agencies that implement them. The economic impacts of the pandemic and resulting economic crisis have had short-term revenue impacts and will have lasting stormwater fee and general fund revenue impacts. Our members report that, even with the immediate impacts they are experiencing, they anticipate a lag time in understanding the full economic and organizational consequences that will result. Economists project that Oregon's economic recovery will be slow.

For stormwater management agencies, program budgets are impacted by reduced utility fee revenues due to business and industry shutdowns and increased delinquent payments, as well as reduced general fund revenues. [...] All of these factors are driving stormwater and operations/maintenance personnel to prioritize their work with inadequate resources to cover all the bases. [...] Their priority emphasis should be on performing the work needed to protect Oregon's water quality now and to avert degradation of water quality. Their priorities should not forego critical water quality protection activities simply to meet even more aggressive permit deadlines for reporting and development of new stormwater management program elements. DEQ recognized this need earlier this fall when MS4 Stormwater permittees requested extensions of the annual report deadline due to their involvement in the widespread wildfire response and recovery efforts. [...] The permittees request that DEQ apply this same flexibility to other aspects of the permit to the degree allowed by the Clean Water Act. Perhaps a force majeure-type clause that would enable DEQ to extend timelines and reporting timeframes within the context of the permit could be included.

And: It is important that DEQ include language allowing for extensions of permit-required due dates beyond just Annual Reports. As DEQ acknowledges in Schedule B.3, MS4 permittees and other entities are facing unprecedented obstacles associated with the current pandemic and government restrictions, wildfires and other natural disasters, and the increasing likelihood of major economic challenges. These pressures will almost certainly affect co-permittees' budgets and resources in ways that cannot be fully anticipated or planned for. Allowing the option of deadline extensions across the board would be an immensely helpful tool for both DEQ and co-permittees. We request that the following language be added:

"DEQ may extend deadlines upon request provided the co-permittee requests an extension beforehand in

writing and provides all documentation available regarding the specific justification as to why a deadline cannot be met. In that circumstance, DEQ will respond to the extension request in writing and will document any revised due date when applicable.”

Response: DEQ added language to the beginning of Schedule A.3, as follows:

“Table 1 identifies required due dates for new program control measures. DEQ may extend the due date(s) or implementation date(s) for any individual stormwater management plan control measure in the event of any extraordinary circumstances including but not limited to pandemic, wildfire, earthquake, flood or other natural disaster provided that the permittee requests an extension in advance and provides all documentation available regarding the specific impacts as to why the deadline cannot be met. In that circumstance, DEQ will respond to the extension request and will document any revised due date(s) when applicable.”

7. **Comment from Yakama Nation Fisheries on general MS4 permit goals:** The permit focuses excessively on outreach and public education and insufficiently on pollution-related outcomes. The metrics identified (e.g. page 4) include the number of citizens engaged by outreach efforts, but should instead focus on chemical concentrations and actions more directly related to contamination, such as number of catch basins inspected and cleaned. Particularly for Portland Harbor, contaminants of greatest concern for recontamination are banned legacy contaminants (PCBs, DDT) that will not be significantly affected by citizen behavior and outreach.

Response: The focus on public education and outreach is required by law and known to be effective, both because it ensures greater support for municipal stormwater programs and because it helps achieve greater compliance as the public awareness increases regarding the personal responsibilities expected of all in the community, including the individual actions each can take to protect or improve the quality of waterways. Matters related to source control for the Portland Harbor Superfund Site and control of industrial pollutants are not directly applicable under this permit. Measurable goals are intended to gauge permit compliance and program effectiveness, have direct links to pollution-related outcomes, and are required for each of the minimum control measures. As such, measurable goals must be developed for Public Education & Outreach (Schedule A.3.a) as well as for Pollution Prevention and Good Housekeeping for Municipal Operations (Schedule A.3.f). Because these MS4 Phase I permits are into their fourth iteration, the co-/permittees may rely on existing measurable goals that are effective and were developed under previous permit terms, or develop new ones as required by the permit and subject to review by DEQ upon submission of the SWMP Documents required in Schedule A.2.

8. **Comments from J. Lehman, ACWA, Portland Group, Gresham Group, City Lake Oswego, City of Salem, and several other co-/permittees on issues relating to LID terminology and definitions, particularly for LID, GI, bioretention, and extended infiltration:** In particular, the terms “LID,” “GI,” “extended filtration,” and “bioretention” are confusing and are used in ways that appear to be inconsistent with their respective definitions. For example, language in this section states that “remaining runoff ... may be directed to one or more bioretention facilities,” which implies that bioretention facilities are to be used only when retention is infeasible, but the term’s definition is broad enough to include retention. Indeed, it is unclear how bioretention is at all different from green infrastructure (GI). Similar issues arise with other terms such as “extended filtration” which is also used in a manner suggesting that it is mutually exclusive from LID/GI when, in fact, the term is defined as a type of LID/GI. We request that DEQ review these terms and simplify or clarify how they are used and defined in the permit.

And: The definition of Extended Filtration is vague and potentially conflicting in its use throughout the document. While DEQ’s intent to direct permittees to the use of LID/GI standards is consistent, extended filtration as defined is loose enough to allow for interpretation in sites where infiltration/on site reuse is not feasible in some situations, but seems to direct users toward a strict interpretation of bioretention in others.

A more clear distinction of filtration as a water quality stormwater control is recommended to allow permittees more flexibility in meeting the permit standard when on-site volume reduction is not feasible.

Response: DEQ reviewed the use and definitions of these terms and modified for clarity in several locations, as described in further detail in responses to a number of comments below. The definition of extended filtration has been modified to not conflict with LID/GI, and the use (and definition) of bioretention has been removed to eliminate confusion around its similarity to GI, as discussed further below.

9. **Comment on DEQ’s Antidegradation Review as described in the PER, from Portland Group:** Significant amendments have been made to the Antidegradation Review narrative from the previous PER, presumably because DEQ is introducing, without any justification, permit language requiring compliance with water quality standards. The Portland Group agrees with the conclusion of the review, but we do not agree that Antidegradation Policy is applicable to this proposed permit. DEQ’s own language in the previous PER for Antidegradation Review states: “*It is unclear whether the antidegradation policy in OAR 340-041-0004 applies to MS4 permits given that the antidegradation policy is part of the state’s water quality standards (WQS), and the permit already requires stormwater controls to the MEP and the effective prohibition of non-stormwater discharges.*” Antidegradation Policy applies only to permits that require compliance with water quality standards. MS4 permits are not required to comply with water quality standards per Section 402(p) of the Clean Water Act (see Comment #1). Please replace the Antidegradation Review narrative in this PER with that of the 2011 MS4 PER.

Response: DEQ has determined that the language in the antidegradation review section of the PER is appropriate and has declined to make the requested edits.

Schedule A.1 Authorized Discharges

10. **Comment from Portland Group on requirement to reduce discharge of pollutants and MEP:** Please correct the Oregon Administrative Rule reference and edit the paragraph under Schedule A.1.a as follows to more clearly articulate the Maximum Extent Practicable (MEP) standard established for MS4s in the Clean Water Act:

“The co-permittees must continue to implement, adaptively manage, and enforce the Stormwater Management Program (SWMP) designed to reduce pollutants from the MS4 to the Maximum Extent Practicable (MEP), ~~to protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act.~~ Compliance with this permit and implementation, adaptive management, and enforcement of the DEQ-approved SWMP Document in accordance with Schedule A.2 establishes the Clean Water Act requirement to reduce pollution from the MS4 to the MEP requirement, unless DEQ reopens the permit as provided in Oregon Administrative Rules (OAR) 340-045-0055 ~~40 and 0050~~ to require additional controls.”

Response: Thank you for the OAR reference recommendation. The reference has been updated. The other language in this section is clear and consistent with DEQ’s intent and has not been changed as requested.

11. **Comment from ACWA on MEP and water quality criteria:** An ongoing concern is the technical challenge of ensuring that each stormwater discharge could practically comply with instream WQC [water quality criteria]. Permittees may not have control over the constituents of each discharge; for example, a permittee could be found in violation of the bacteria WQC due to wildlife contributions to the discharge. DEQ is likely aware that Oregon permittees believe there is a strong legal basis to back the MEP requirement as the standard for MS4 permits, and that WQC were not developed or intended to apply to stormwater discharges from MS4s.

Response: The permit takes important steps toward ensuring that water quality standards are addressed by requiring that if at any time a permittee or co-permittee becomes aware of a water quality standards exceedance, the permittee must follow specific requirements for documenting, investigating and taking corrective action.

Schedule A.1.b Water Quality Standards

12. **Comment from Portland Group regarding water quality standards:** Schedule A.1.b requires compliance with water quality standards and potentially mandates controls that would exceed the statutory Clean Water Act requirement that an MS4 reduce its discharges of pollutants to the maximum extent practicable, resulting in unjustified and significantly increased compliance costs and legal risks. DEQ's intent for introducing Schedule A.1.b is unclear. No rationale is provided in the PER.

In fact, in the most recent MS4 permit issuance, DEQ concluded: "To the extent that water quality standards are not being met [in water quality limited receiving waters], the Department determines that implementation of the measures set out in the permit will reduce the relevant waste load contributions to the MEP, as required by federal law." As such, DEQ's own regulatory analysis affirms that Schedule A.1.b is both unnecessary and unwarranted. Furthermore, our MS4 permits have required numerous impairment and TMDL pollutant evaluations to determine, in part, "whether there is a reasonable likelihood for stormwater from the MS4 to cause or contribute to water quality degradation of receiving waters" (Schedule D.2.a). These evaluations have largely demonstrated improving water quality trends and increased progress toward pollutant reduction goals. Indeed, they have highlighted the overall effectiveness of our SWMPs under existing MS4 permits. This again raises the question as to why DEQ has introduced Schedule A.1.b in the proposed permit.

We request that DEQ remove Schedule A.1.b. to comport with Section 402(p)(3)(B)(iii) of the Clean Water Act to determine and implement the best management practices necessary and practicable for our respective communities to control discharges to the MS4. Not only is this flexibility prescribed for MS4 permittees, it will be critical moving forward as we collectively face severe economic challenges ahead associated with the ongoing pandemic and other natural and social crises. Given that the Portland Group expends substantial resources to comply with MS4 requirements, regulatory certainty of the MEP standard of practicability is paramount.

Response: The permit does not require compliance with water quality standards. The PER states DEQ's intent clearly: "*This framework is appropriate to ensure any MS4 discharges that are causing or contributing to an exceedance of an applicable water quality standard are documented, investigated and managed appropriately.*"

DEQ has not affirmed that Schedule A.1.b is unnecessary and unwarranted. The intent of the permit requirement is clear. While some impairment pollutants on the 303(d) list have TMDLs and associated water quality management requirements, there are many water quality impairments across Oregon that do not have TMDLs.

DEQ disagrees with this assessment and the request to remove Schedule A.1.b. The permit is consistent with the Clean Water Act and applicable implementing regulations. The final permit includes the appropriate flexibility for MS4's and regulatory certainty.

13. **Comment from Portland Group on corrective actions:** If Schedule A.1.b remains in the permit, language related to corrective actions should be edited in a manner that recognizes the MEP standard. The requirement to develop a corrective action plan to achieve water quality standards may exceed the statutory

Clean Water Act requirement that an MS4 reduce its discharges to the MEP. While the Portland Group understands that DEQ expects MS4s to achieve progress toward attaining water quality standards over the permit term through implementation of DEQ-approved SWMPs, it is neither reasonable nor appropriate for DEQ to require additional new controls that exceed the statutory standard. Please edit Schedule A.1.b.iii.C as follows to require a reduction of pollution to the MEP:

“(C) Corrective actions taken or planned to reduce the co-permittee's MS4 discharge of pollutants to the maximum extent practicable, including the date corrective action was completed or is expected to be completed.

DEQ will review the report submitted and either approve it or require modifications. The co-permittees must implement the corrective action(s) in accordance with the schedule approved by DEQ. DEQ may include the corrective action plan proposed by the co-permittee in a compliance schedule. The details of all corrective actions implemented associated with Schedule A.1.b.iii must be included in the subsequent annual report.”

Response: The proposed change to A.1.b.iii.C is unwarranted. However, the text below it has been modified. The updated permit requirement now reads:

“DEQ will review the report submitted and either approve it or require modifications. The co-/permittee(s) must implement the corrective action(s) in accordance with the schedule approved by DEQ. DEQ may require a timeline and enforceable milestones for completion of the corrective action plan. The details of all corrective actions implemented associated with Schedule A.1.b.iii must be included in the subsequent annual report.”

14. **Comment on compliance schedule from City of Lake Oswego:** A compliance schedule is a defined term in the CWA and indicates that the co-permittee is in violation of its permit whereas this section was understood in the ACWA-DEQ discussions previous to this permit draft that this section was not to be construed as a violation of the permit. The City respectfully requests that DEQ adopt [...] proposed language allowing a timeline or modification of the timeline in the proposed corrective action plan.

And, from City of Eugene: Eugene is concerned about the new provision, added following the Applicant Review draft MS4 permit, stating that "DEQ may include the corrective action plan in a compliance schedule." Based on our understanding (and DEQ's own 2010 Internal Management Directive on compliance schedules in NPDES permits"), a compliance schedule indicates that the permittee is in violation of the permit. However, if the City is meeting all its permit requirements then we are in compliance with our permit, and furthermore we are in compliance with applicable water quality standards per the draft MS4 permit, Schedule A.1.b. first paragraph. A compliance schedule is not appropriate or necessary.

And, from WES: We are concerned with the language in this section that says, “DEQ may include the corrective action plan in a compliance schedule.” A compliance schedule is a defined term in NPDES permits and may be a very different mechanism from what the co-permittee will be developing in the 60 days that it has to submit its “corrective action plan.” Based on the term’s definition, a compliance schedule also indicates that the permittee is in violation of the permit, and it is our understanding that if the co-permittee is in compliance with all permit requirements then it is in compliance with applicable water quality standards.

Response: Thank you for the suggestion. DEQ modified the “compliance schedule” language as indicated above to refer instead to a timeline and enforceable milestones.

15. **Comment from City of Eugene on Schedule A.1.b.iii’s required report on corrective actions:** We request that DEQ include a maximum time period for its review of our report, after which, if we have not received a response, we can assume that approval is granted, and can proceed with implementing the corrective actions. This is good shared accountability and we would appreciate it.

Response: It is not appropriate to assume approval is granted without actual approval or response. DEQ prioritizes feedback to regulated entities related to compliance and will do so when and if reports associated with A.1.b are submitted to DEQ for review.

16. **Comment from WES on “Cause & Contribute” language:** The draft permit’s “cause and/or contribute” language about exceedances of instream water quality criteria still assumes that written reports submitted by permittees will always have a known description of the conditions which led to the exceedance. Unfortunately, in our experience, the cause will often be unknown, and never will be known. The non-point source nature of stormwater pollution, and the difficulty in identifying and controlling sources of pollution, is an underpinning of the Clean Water Act Maximum Extent Practicable Standard for municipal stormwater permits. In these instances, closure of a cause and/or contribute case will be needed for the permittee. Please revise the draft permit’s language to account for these situations, and at the proper time for each incident, to provide closure for the co-permittee. This closure should be in the form of a written notice from DEQ which states that due to the lack of information, the co-permittee has acted appropriately if no clear corrective action can be taken given the totality of the circumstances, and that the appropriate corrective actions have been taken by the co-permittee (for example, after all of the corrective actions in a DEQ-approved written report have been completed).

Response: Schedule A.1.b is appropriate as is and includes a DEQ response. It does not assume anything regarding the source or knowledge of the cause of any exceedance. DEQ understands that there may be situations where pollution sources cannot be determined.

17. **Comment from WES on water quality criteria standards:** Given that some existing and persistent water quality criteria exceedances are already being addressed by TMDL requirements (e.g. bacteria), this requirement could lead to continuous reporting, investigation and corrective action planning that is open-ended, of dubious value and ultimately impracticable. We understand from DEQ that the intent of this section is to address significant and unanticipated discharges not previously identified by the co-permittee. Please clarify this intent in the Permit Evaluation Report. Although the term “TMDL Implementation Plan” is present in this section of the Oct. 2020 draft PER, this should be removed, since TMDL Implementation Plans are for non-point sources of water pollution, not point sources covered by NPDES permits.

Response: Schedule A.1.b requires actions if permittees or DEQ determines that a pollutant in the permittee’s MS4 discharge is causing or contributing to an exceedance of an applicable water quality standard based on site-specific credible evidence. If the permittee determines that the exceedance is already being addressed by actions associated with a Total Maximum Daily Load, documentation of the situation is required in the subsequent annual report. It is important that MS4s include the documentation in the annual reports regardless of the information is also reported to DEQ’s TMDL program since the MS4 permit is the regulatory pathway for compliance associated with TMDLs for MS4 discharges.

18. **Comment from City of Lake Oswego on Schedule A.1.b.vi's reference to "TMDL-applicable requirements":** TMDLs have actions agreed to by a DMA and DEQ to reduce water quality impairments. Proposed revision:

"The ~~TMDL-applicable-requirements~~ actions of the co-permittee's DEQ-approved TMDL Implementation Plan that ~~are~~ were being implemented."

Response: DEQ agrees and has modified the text similar to what was proposed.

19. **Comment from Gresham Group on applicability of TMDL requirements:** The majority of stormwater pollutants come from individual activity that is very difficult to control, such as personal transportation choices, private landscape/yard management choices, and use of products and building materials that contain iron, zinc, copper, cadmium, and atmospheric deposition of mercury from global air currents, etc.

Gresham and other ACWA members do not believe that water quality standards are meant to be applied to stormwater discharges because TMDLs are issued to multiple point sources, so based on this concept, it is impossible to know which specific permitted discharger is causing the exceedance of a water quality standard. Again, we note that based on the MEP standard, permittees have already optimized their stormwater programs within their approved SWMPs, so this section of the permit may ultimately result in permittees being the proverbial dog chasing its tail and using limited resources to investigate and report to DEQ around monitoring, findings, and investigations it typically already reports to DEQ.

Response: The requirements outlined in Schedule A.1.b requires corrective actions for situations where pollutants in permittee's MS4 discharge are causing or contributing to an exceedance of an applicable water quality standard based on site-specific credible evidence. If actions and reporting in those situations are relevant for pollutants associated with a TMDL, that information only needs to be included in the subsequent annual report.

20. **Comment from ACWA on corrective actions:** ACWA understands that the corrective actions taken or planned may, depending on the nature of the instream WQC exceedance, be a site-specific, time-limited, targeted set of actions or may be a longer- term iterative process. ACWA requests that DEQ clarify this in the PER.

Response: DEQ agrees that any corrective actions taken or planned will be based on the specifics of each situation that caused the exceedance and has added that to the Permit Evaluation Report. As such, DEQ added the following sentence to the PER: *"The actions implemented by the co-/permittee will be based on the specifics of each situation that causes the exceedance."*

21. **Comment from WES on water quality standards exceedances:** More clarity is needed to ensure that exceedances do not necessarily reflect a permit violation. While a permittee may be meeting all permit conditions in this section, and reducing pollutants to the Maximum Extent Practicable, ongoing exceedances of water quality standards may still occur. See above for additional discussion. Please add the following sentence to this portion of the permit: *"Provided the co-permittee follows the requirements in this section, the co-permittee remains in compliance with the permit despite any on-going exceedances of any water quality standards which may occur."* This sentence is very similar to language in the Washington State Department of Ecology Phase I MS4 Permit issued on August 1, 2012. See Schedule S(4)(F)(3)(f) in this DOE Permit.

Response: Schedule A.1.b states: “*Compliance with all permit requirements is deemed compliance with applicable water quality standards as established in OAR 340-041.*” As such, the permit is clear that exceedances of water quality standards are not in themselves a violation.

22. **Comment from Yakama Nation Fisheries:** The permit refers to effluent limitations in the definitions sections, but does not appear to actually establish any effluent limitations. Please clarify whether there are any effluent limitations under this permit. Regarding effluent limitations, we agree with comments from Columbia Riverkeeper, Willamette Riverkeeper, Rogue Riverkeeper, and the Northwest Environmental Defense Center on the 2020 ODOT MS4 permit encouraging the adoption of numeric effluent limitations in DEQ’s stormwater permits.

Response: The MS4 Phase I permits do not include numeric effluent limitations. If the permittee or DEQ determines that an MS4 discharge is causing or contributing to an exceedance of water quality standards, the MS4 must follow the requirements of schedule A.1.b. This requirement includes notifying DEQ of the water quality exceedance and submitting a report with all relevant information to DEQ.

23. **Comment from NEDC et al. on Schedule A.1.b:** Language in Schedule A.1.b may pose a barrier to DEQ imposing additional water quality based effluent limits in the future, if and when it becomes evident that compliance with permit conditions alone is insufficient to comply with water quality standards. EPA has made it abundantly clear that MS4 permitting—for both Phase I and Phase II municipalities—must be an iterative process with the ultimate goal being attainment of water quality standards. [...] In a significant, irrational, and unlawful departure from the 2011 MS4 Phase I Permits (and from the current Oregon MS4 Phase II General Permit), the Draft Permits state “[c]ompliance with all permit requirements constitutes compliance with applicable water quality standards as established in OAR 340- 041.” Draft Permits Sch. A.1.b. DEQ lacks legal or factual justification for that permit language, and it should be removed. In sum, there is no legal or factual justification for DEQ’s proposed language codifying a relationship between permit compliance and water quality standards compliance. Further, there is no sensible reason to include it in this permit, as doing so is unnecessary and could make it more difficult for DEQ to protect water quality in the future—when evidence demonstrates additional water quality-based limitations are needed. The proposed language in Schedule A.1.b should be removed from the final Permit.”

Response: DEQ disagrees with the assertions in this comment. , DEQ modified the language that is the subject of this comment in order to more directly track the language and intent of the “Effect of a Permit: Purpose” rule at OAR 340-045-0080(1): “*A permittee in compliance with a National Pollution Discharge Elimination System (NPDES) permit during its term is considered to be in compliance for purposes of enforcement, with Sections 301, 302, 306, 307, 318, 403 and 405(a)-(b) of the federal Clean Water Act (CWA) and ORS 468B.030, 468B.035 and 468B.048, and implementing rules, applicable to effluent limitations, including effluent limitations based on water quality basin standards, and treatment systems operations requirements....*” Rather than making an unsupported factual determination as suggested, the updated language makes a conclusion consistent with the relevant rule that compliance with the permit is deemed to be compliance with the listed requirements of state and federal law. Additionally, the updated permit evaluation report makes clear that this version of the permit does not require compliance with water quality standards.

However the permit does take important steps toward ensuring that water quality standards are addressed by requiring that if at any time a permit registrant becomes aware of a water quality standards exceedance, the permit registrant must follow specific requirements for managing and reporting the situation.

In addition, DEQ disagrees that any condition in Oregon’s MS4 Phase I permits would impact any future decisions. Each permit renewal or permit issue process is conducted independently based on the facts and information available at the time the permit renewal or development work is being conducted. DEQ expects each permit iteration to be different, but to provide equal or greater environmental protection than the last, and this permit does not limit future decision making.

24. **Comment from J. Nicita on water quality standards:** The proposed permits state they are being issued pursuant to state law, namely ORS 468B.050. Because they are issued pursuant to state law, they are also governed by ORS 468.065(1), which states: “*Any permit issued by the department shall specify its duration, and the conditions for compliance with the rules and standards, if any, adopted by the Environmental Quality Commission pursuant to...468B.*”

The proposed permits must therefore specify conditions for compliance with the water quality standards set forth in OAR chapter 340, division 41, which have been promulgated pursuant to ORS 468B.048.

The Court of Appeals mentioned ORS 465.065(1) in the case Tualatin Riverkeeper v. ODEQ, 235 Or. App. 132, 143 (2010). However, this statute was not at issue in that case. The petitioners in that case only raised ORS 468B.025(1)(b) as a basis for their principal claim. Therefore, the Court of Appeals’ statements in Tualatin Riverkeeper regarding ORS 465.065(1) is only dicta. The latter statute, by its express terms, requires the permits at issue in the current proceeding to specify conditions for compliance with the water quality standards in OAR chapter 340, division 41.

The “exception” language in ORS 468B.025(1) does not relieve DEQ from its obligations in ORS 468.065(1) to specify conditions for compliance with state water quality standards. The former statute makes no reference to, and does not qualify in any way, the latter statute.

In addition, the legislative history of ORS 468B.025 (formerly ORS 449.079) itself makes clear that the “exception” language was not meant to even be any kind of exception or exemption for the prohibitions in ORS 468B.025(1)(a) and (b), to say nothing of the permit requirements contained in ORS 468.065(1).

The language was part of 1973 Senate Bill 77. The “exception” language was in no way intended to except or exempt discharges from compliance with water quality standards. It was introduced merely as a flag to direct readers of the statute to the actual permit provision in ORS 468B.050 (formerly ORS 449.083). As demonstrated by the excerpt attached to this email, in the SB 77 Discussion Draft, Section 109, the bill drafters made clear that the reason for the language was to “clarify the locus of permit provisions.” (App. 3, bottom of page.)

The original language of Section 109 read “*authorized under.*” The bill drafter, Kathleen Beaufait of the Office of Legislative Counsel, noted at pp. 11-12 of a November 24, 1972 memorandum to the Law Improvement Committee and Legislative Counsel Committee that Kenneth Spies of DEQ objected to the amendment because he felt it would authorize pollution. The notation to the left of his comments reads “Adopted as Modified.” App. 6-7. In other words, after Spies’ expressed his concerns, the legislature changed the language from “*authorized under*” to “*provided in,*” precisely to clarify further that the amendment was not authorizing violations of Water Quality Standards but simply flagging the fact that there was a permit requirement in another part of the statute.

Applied to the MS4 proposed permits, they are not consistent with ORS 468.065(1) because they do not specify conditions for compliance with the state water quality standards in OAR chapter 340, division 41.

Rather, Schedule A(1)(b) of each sentence opens with this sentence: “*Compliance with all permit requirements constitutes compliance with applicable water quality standards as established in OAR 340-041.*”

Legally, this seems to be an impermissible statement. The statement appears to equate (or perhaps conflate) the “maximum extent practicable” standard in 33 U.S.C. 1342(p) with compliance with state water quality standards. This goes directly contrary to the intent of Congress in passing 33 U.S.C. 1342(p)(3)(b) as part of the 1987 Clean Water Act Amendments to exempt MS4 permits from prior NPDES permit requirements to comply with state water quality standards. See Tualatin Riverkeeper, supra, at pp. 140-142, citing *Defenders of Wildlife v. Browner*, 191 F3d 1159, 1163-1165 (9th Cir. 1999). MEP compliance and compliance with water quality standards are not the same thing.

In contrast to the Clean Water Act, Oregon Law, namely, ORS 468.065(1), requires compliance not with MEP but with state water quality standards. The proposed permits do not specify conditions for compliance with the water quality standards in OAR chapter 340, division 41.

Schedule A(1)(b) of each permit goes farther than prior MS4 permits in requiring corrective actions if a determination is made that water quality standards are being violated. But the corrective actions are not specifically tied to attaining or achieving compliance with water quality standards, but rather only to reducing levels of pollution. This section should be changed to specify that the corrective actions must achieve or attain compliance with the state water quality standards in OAR chapter 340, division 41.

Response: The permit language this comment focuses on in Schedule A.1.b (“*Compliance with all permit requirements...*”) makes a conclusion consistent with the relevant rule that compliance with the permit is deemed to be compliance with the listed requirements of state and federal law. The “Effect of a Permit: Purpose” rule at OAR 340-045-0080(1) states: “*A permittee in compliance with a National Pollution Discharge Elimination System (NPDES) permit during its term is considered to be in compliance for purposes of enforcement, with Sections 301, 302, 306, 307, 318, 403 and 405(a)-(b) of the federal Clean Water Act (CWA) and ORS 468B.030, 468B.035 and 468B.048, and implementing rules, applicable to effluent limitations, including effluent limitations based on water quality basin standards, and treatment systems operations requirements....*”

Additionally, the permit evaluation report makes clear that this version of the permit does not require compliance with water quality standards. DEQ disagrees with the interpretation of the statute and case law discussed in the comment. However, the permit does take important steps toward ensuring that water quality standards are addressed by requiring that if at any time a permit registrant becomes aware of a water quality standards exceedance, the permit registrant must follow specific requirements for managing and reporting the situation.

Schedule A.1.d Allowable Non-Stormwater Discharges

25. **Comment from Portland Group on emergency firefighting activities:** It is unclear why “emergency firefighting activities” is listed as a stand-alone allowable discharge and not included with the other authorized allowable non-stormwater discharges. It would be much more helpful for tracking and administrative purposes to move this item to the list under Schedule A.1.d.iii.

Response: DEQ has moved emergency firefighting activities to be included below as suggested, added to

item (R) with fire hydrant flushing.

26. **Comment from Portland Group on water line flushing:** Please remove the term “uncontaminated” from item (A) water line flushing to match our current permit. The term “uncontaminated” is highly problematic to the City’s management of the municipal drinking water supply system. The City may experience “boil water” events due to native surface water microorganisms that can occur in the water supply system. For public health purposes, this could be considered “contaminated” drinking water, but it does not pose an environmental risk. The need to perform drinking water line flushing in these cases is both urgent and necessary. By treating this as a prohibited discharge, the language, as written, could seriously impede critical public health protocols in times of emergency.

Response: “Uncontaminated” for the purposes of this permit does not mean completely free of constituents that may render water unfit for human consumption. A definition has been added to the permit in Schedule D.4 to clarify, drawing from a similar use of the term and definition in an MS4 permit written by the EPA Region 10, as follows:

Uncontaminated, for the purposes of this permit, means that the MS4 discharge does not: result in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 117.21 or 40 CFR 302.6 at any time since November 16, 1987; or result in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 110.6 at any time since November 16, 1987; or contribute to a violation or exceedance of an applicable Oregon water quality standard.

27. **Comment from WES on landscape irrigation:** This section of the draft permit says: “For co-permittee owned or operated areas, landscape irrigation will be considered allowable only if pesticides and fertilizers are applied in accordance with manufacturer’s instructions.” Please remove this sentence, because it is unnecessary. Public employees who apply pesticides already know it is the law to follow the instructions on a pesticide product label. And public employees who apply fertilizer already know that they should follow the manufacturer’s instructions when using fertilizer.

Response: DEQ has determined that this language is necessary in the MS4 permits to ensure clarity for all permittees and the public regarding expectations.

28. **Comment from Portland Group on charity car washing:** Please remove the de minimis restrictions on charity car washing. The restrictions are nearly impossible to evaluate and enforce. The language is highly problematic due to the ephemeral nature of the activity, the potential impacts to charitable causes, and lack of a clear responsible party (e.g., property owner, organization, event participants). This activity does not pose significant environmental risk and the allowance as written in the current permit should remain. We strongly prefer to take an education and outreach approach with charity car washing activities.

Response: DEQ disagrees that the activity does not pose significant risk as dozens of cars may be washed in a weekend for a single fundraiser, generating hundreds of gallons of discharge. However, DEQ recognizes that education and outreach is an effective means of reducing pollutant discharge, and has modified the text as follows:

“(O) Charity car washing (provided that steam, and heated water are not used, and that washing is restricted to the outside of the vehicle with no rinsing or washing of engines, transmissions or undercarriages). Permittees should also consider requiring that only phosphate-free soaps/detergents are used and providing educational materials on the harmful effects that other chemicals, soaps, detergents, and heated water or steam can cause.”

29. **Comment from WES on dechlorinated swimming pool discharges:** Permit Schedule A(1)(d)(iii)(Q): This section of the draft permit says “Dechlorinated swimming pool discharges including hot tubs (heated water must be cooled for at least 12 hours prior to discharge)” are allowed to be discharged to the MS4. Other types of disinfectants, besides chlorine, are also used in Oregon, so we recommend that this be re-phrased to encompass all types of swimming pool and hot tub disinfectants which are used, such as bromine and copper. When a disinfectant such as copper is used, it is our understanding that these wastewaters should not be discharged to the MS4, and if DEQ agrees, we recommend the addition of MS4 permit language here which says these discharges are prohibited.

Response: DEQ thanks WES for the suggestion, and has added a sentence to allowable discharge (Q) reading: “*Swimming pool and hot tub discharges with other pollutants such as bromine and copper may not be discharged to the MS4.*”

30. **Comment from City of Eugene on street washwaters:** Consider modifying street washwaters to include bridge and pedestrian bridge washwaters, consistent with the new ODOT MS4 Phase I.

Response: DEQ’s intent was for the language of this item to be interpreted broadly. The language has been modified as requested for clarity.

31. **Comment from WES on street washwaters:** This section of the draft permit says: “*Street and pavement washwaters (provided that chemicals, soaps, detergents, steam or heated water are not used)*” can be discharged to the MS4. We recommend that permit language be added here which recommends the street or pavement be swept first prior to washing. The recommendation would also say the sweepings should be collected and properly disposed of before washing.

Response: DEQ agrees with the proposed suggestion and has modified the permit accordingly.

Schedule A.2 Permittee’s Responsibilities

32. **Comment from Yakama Nation Fisheries:** Section A.2 of the permit requires the City and the Port to take certain actions to control discharges into and out of the MS4 by November 1, 2023 [as dated in draft, prior to timeline update for final]. What are the requirements now and over the next three years? If those were described in the previous permit, which is then replaced by the new permit, how do they apply?

Response: Permittees have an obligation to maintain programs developed under the previous permit while new program modifications are being made to meet the terms of the new permit. The new permit being in place does not imply the co-permittees may halt ongoing work or implementation of existing programs until new systems are ready to implement, and in fact, the permit language reinforces that the Stormwater Management Plan approved under the previous permit is to continue to be in effect as a management tool until such time as DEQ has approved the SWMP Document under the new permit. The permit renewal is intended to add flexibility to existing co-permittee programs for adaptive management and to improve on them, not to require that the programs are replaced.

Schedule A.2.b Maintain Adequate Legal Authority

33. **Comment from Gresham Group on the requirement to adopt, update, or maintain all legal authorities required by the permit by November 1, 2023:** Phase I communities have had to obtain legal authority since 1995 and affirm with every annual report. Given the other deadlines associated with accomplishing

program elements in this permit, we recommend that DEQ stick with program deadlines, as the legal authority is always inherent to those processes and/or already exists and is not impacted one way or the other. In our opinion, this serves to alleviate potential deadline confusion or conflict, but is not a deal breaker. We also comment that having to submit Legal Authority annually is simply an administrative action that serves no benefit to DEQ. Suggest that DEQ may benefit from reporting on when an agencies code is updated with the annual report and legal authority, but affirming the same thing year after year is not a useful exercise. [...] Once this is in our SWMP can we please not report on this annually? We suggest that DEQ request that permittees report annually IF THEY UPDATE code and summarize the changes. Suggestion was made in the permit and we request a description here.

Response: The permit language this comment addresses is intended to ensure that by the deadline listed, the permittees have updated local ordinance(s), code(s), interagency agreement(s), contract(s), and/or other mechanisms as necessary in order to meet the requirements of the renewed permit, which in some cases may be different than the previous permit term. In some cases, co-/permittees may have all proper authorities based on actions taken under the previous permit, and in other cases may not. The November 1, 2023 (now revised to 2024) deadline is how long the co-/permittees have to update legal authorities as necessary. Thereafter, this only requires the co-/permittees to include the reference to the proper legal authorities in the SWMP Document to verify that they remain in place. This is important to ensure the current permit records have all relevant documentation because Oregon’s records retention regulations require that documents be destroyed at specific time intervals. This is not an annual reporting requirement. No change was made in response to this comment

Schedule A.2.c SWMP Document

34. **Comment from Gresham Group on Public Comment period for SWMP Document:** We recommend DEQ include a minimum comment period of 30 days for such an important document.

Response: The sentence on which this comment was made concludes with reference to “*the publicly accessible website required in Schedule A.3.b.i*” later in the permit. As noted in A.3.b.i.B, “*Drafts of documents listed in this permit as requiring public comment must be posted and available for public comment for a minimum of 30 days, and comments must be considered prior to final issuance. Final reports, plans and other documents relevant to the MS4 programs must also be posted, as appropriate.*” No changes have been made in response to this comment.

35. **Comment from Gresham Group on SWMP Document submission:** We request that an agency be able to turn in their SWMP for DEQ review prior to this deadline so as not the “force” the agency to work under the current and outdated SWMP longer than necessary. Recommend that DEQ include language in the PER to this effect.

Proposed revision: “The DEQ-approved Stormwater Management Plan currently in effect at the time of this permit renewal should continue to be implemented until the updated SWMP Document has been approved by DEQ.”

Response: Language has been added to the PER to ensure clarity of the intent by DEQ to accept early submissions of draft SWMP Documents. However, the language in the permit was not modified to include the word “updated,” as suggested, because the first submission of the SWMP Document is not an update. The Stormwater Management Program Document (“SWMP Document”) is a separate and distinct submission from the Stormwater Management Plan submitted under the previous permit; the SWMP Document serves similar purposes but also has a different scope and greater flexibility than the previous permit’s Stormwater Management Plan.

36. **Comment from WES on SWMP Document inclusion of BMPs:** In Schedule A(2)(c), please add “Best Management Practices (BMP)” to the portion of this section which refers to the “SWMP Document”. Although BMPs have been the core of our Stormwater Management Plans since 1993, we’re unsure how BMPs are to be featured in the “SWMP Document”.

Response: BMPs were intended to be included by language in the permit describing how the SWMP Document should describe in detail how the co-/permittees implement the required control measures and reduce the discharge of pollutants. In concept, the SWMP Document is an expansion on the Stormwater Management Plans developed under the previous permit. DEQ has added BMPs to this section of the permit as well as clarifying language to the PER’s discussion of this section of the permit for clarity.

37. **Comment from City of Salem on SWMP Document:** Salem requests the draft permit language in this section is modified as follows:

“The SWMP Document is due to DEQ on November 1, 2022, after which DEQ will review and approve or require modification(s) of it. If the Department does not respond to the permittee within 60 days, the permittee may proceed with implementation of the proposed SWMP Document without written approval.”

Response: It is not appropriate to assume approval is granted without actual approval or response. DEQ prioritizes feedback to regulated entities and intends to provide timely responses to all required submittals. No change was made in response to this comment.

Schedule A.2.e SWMP Resources

38. **Comment from Gresham Group on text in this section:** Gresham suggests adding “...which is part of its maximum extent practicable analysis when updating its SWMP” to the end of the last sentence of this section.

Response: No changes were made in response to this suggestion. The Stormwater Management **Program Document** is different than the previous permit’s Stormwater Management **Plan** (previously identified in that permit by the acronym “SWMP”), with greater scope and flexibility. The SWMP Document is intended to allow updates without in-depth re-evaluation of every part and without requiring the permit to be reissued, so the MEP analysis, while still part of the initial SWMP Document submission and renewal application, is not separately required again for SWMP Document updates, as described in Schedule A.2.f.

Schedule A.2.f Review and Modification of the SWMP Document

39. **Comment from ACWA on wording regarding rationales for updates to SWMP Document (supported substantively by City of Eugene, City of Milwaukie, City of Salem, Gresham Group, City of Lake Oswego, City of Oregon City, Oak Lodge Water Services District, City of West Linn, and City of Wilsonville):** 1) The language limits the ability of a permittee to make modifications to only those instances when a current activity is deemed ineffective, infeasible, or cost prohibitive. Activities that permittees would typically update in their SWMPs have been implemented over long periods of time, and updates most likely will not be due to the activities being ineffective, infeasible, or cost prohibitive. More likely, changes to the SWMP will be related to the identification of more effective options that they have developed and evaluated through adaptive management. Continuous improvement in stormwater programs necessitates that former processes/activities are improved and replaced as the science, development of better BMPs, and understanding of cost-effectiveness vs. water quality benefit continue to advance. Therefore, it would be

difficult to show in an analysis that the original action is ineffective, infeasible, or cost prohibitive when it most likely is not. 2) This language does not allow for modifications to be made to address the specific permit requirements to update the SWMP as stipulated in A.3.c.v., A.3.d.v., and A.3.e.ii of the draft permit.

While the permittees appreciate this move to include permit language that will allow flexibility for making SWMP modifications, as written, this language limits the ability of permittees to continually improve programs through adaptive management strategies that produce better water quality results in a more cost-effective manner. The ability to continuously improve the effectiveness of storm water programs through adaptive management is at the heart of the MS4 permit approach and permittee programs. We recommend that DEQ revise permit language to enable ongoing improvements in the MS4 program through adaptive management.

ACWA requests that DEQ replace the language in 2.f.ii.(A) with the following: *An analysis of why the new action is a better alternative from the standpoint of effectiveness, feasibility and/or cost.*

ACWA also requests that DEQ add a new Section 2.f.iii. as follows: *Modifications may be made to address permit requirements for SWMP updates as stipulated in Sections A.3.c. v., A.3.d. v., and A.3.e.ii. of this permit.*

Response: Though modification and addition of elements to meet permit terms is implied to be allowed, the permit language was modified in response to both of these comments for clarity. Schedule A.2.f.ii.(A) now requires an analysis of improvements rather than of ineffectiveness, and reference to Schedules A.3.c.v, A.3.d.v, and A.3.e.ii was added into the paragraph above, in the body paragraph at the beginning of Schedule A.2.f.

Schedule A.3 Stormwater Management Program Control Measures

40. **Comment from NEDC et al. on control measures generally:** When establishing MEP, DEQ is required to take into account what other permittees have accomplished. See *Natural Res. Def. Council v. EPA*, 808 F.3d 556, 570 (2d Cir. 2015). Before establishing MS4 permit terms under the MEP standard, DEQ must critically review other MS4 permits and determine whether such permit terms are more effective at reducing pollution.

Response: DEQ reviewed MS4 permits from other states, other Oregon permits, the prior MS4 Phase I permits, and other resources such as the EPA's various Compendia of Permitting Approaches. Due to the long-standing consequence of co-/permittees being unable to effectively adaptively manage their programs because the Stormwater Management Plans are currently included as part of the administratively extended permits by reference and thus unable to be easily updated, DEQ determined that one of the most effective pollution reduction actions is to shift from the previous permit's Stormwater Management Plan paradigm to the new SWMP Document system. In addition, improvements were made in all portions of the permit, drawing on the current scientific literature and relevant documents available, with the intent of improving pollutant discharge reductions overall.

41. **Comment from Portland Group on implementation vs scheduling of proposed program elements in Schedule A.3:** Adjustments to this section and others are needed to resolve conflicts with DEQ's intent to allow schedules for implementation and proposed program elements as specified in both Schedule A.2.c and Table 1. Schedule A.2.c. states "The SWMP Document... must describe programs or refer to publicly available documents detailing the co-permittees' schedules for implementation of any control measure components to be developed during the term of this permit." Similarly, Table 1 lists due dates for several key program control measures as "Complete description of proposed program no later than..." "Please adjust

the language in Schedule A.3 as follows:

“The co-permittees must... begin to revise their SWMP control measures, as needed, in order to implement any new control measure components required by this permit. Table 1 identifies required due dates for new program control measures. required by the implementation deadline specified for that control measure.”

Response: DEQ modified the permit language in this instance as proposed for clarity, and elsewhere to varying degrees. However, DEQ has retained the dates stated in permit body text rather than simply referring to Table 1 to ensure clarity for all.

Schedule A.3.a. Public Education and Outreach

42. **Comment from Gresham Group and City of Salem on priority audiences in A.3.a.ii:** Request that DEQ make it clear in the PER that agencies are permitted to change and concentrate their efforts over the course of a permit cycle on various priority audience initiatives. It is simply not possible without hundreds of thousands dollar budget for outreach to focus equally on all priority audiences each and every year. Also, focus helps the agencies conduct pilot testing and adaptive management of outreach to ensure effectiveness and provide time for post program analysis needed to assess success measurements.

Response: DEQ understands that not all priority groups can be engaged at the same depth and does not have an expectation that all will receive the same amount of outreach. DEQ has added additional language in the PER on this topic in response to this comment as follows: *“DEQ understands that not all priority groups can be engaged at the same depth and does not have an expectation that all will receive the same amount of outreach. The co-permittees are expected to prioritize based on an understanding of their own communities, and to shift priorities, conduct pilot testing, and engage in adaptive management as the permit cycle proceeds in order to make the most effective use of their budget capacity and engagement.”*

43. **Comment from City of Eugene on priority audiences:** Eugene proposes adding the same caveat to priority audiences (Schedule A.3.a. iii.) that is provided for priority topics (“as applicable to the community and water quality concerns”) so that the education and outreach program can customize the priority audiences to align with community-specific and water quality-specific concerns.

Response: DEQ modified the text as requested for clarity.

44. **Comment from City of Lake Oswego and Portland Group on Tracking and Assessment:** Requiring a description of lessons learned and plans for the following year is a more effective and efficient use of resources than completing periodic reviews or assessments. The City respectfully requests that DEQ either 1) remove the language requiring periodic reviews and assessments or 2) define “periodic reviews and assessments” in the PER as “a general overview of changes that could be implemented to more effectively reach the target audiences.”

Response: Adaptive management is already a vital element of the permit and the SWMP Document structure, and that fact renders part of this draft text redundant. DEQ removed the unnecessarily redundant language for clarity.

Schedule A.3.b. Public Involvement and Participation

45. **Comment from NEDC et al. on Public Involvement:** We believe that to comply with requirements for public involvement at 40 C.F.R. § 122.34(b), Phase I permittees must provide proof of specific actions they plan on taking under the permit, that they have not done so, and that DEQ is not constructively encouraging such action in the Draft Permit.

Response: DEQ disagrees, and maintains that the permit meets the requirements of 40 C.F.R. § 122.34(b). DEQ has expanded the requirements for public involvement and participation from the previous permit, and included provisions addressing the need for the public to be included in developing, implementing, and reviewing the stormwater management program and requiring that the public participation process make efforts to reach out and engage a diversity of economic and ethnic groups. The co-/permittees' existing programs met this requirement with tracking in the Stormwater Management Plans and annual reporting, and are required to maintain the existing programs until the new SWMP Document is approved. DEQ will not approve a new SWMP Document if it does not appropriately meet all the same requirements or "backslides" on effectiveness. In addition, all co-/permittees "must make the first iteration of the SWMP Document(s) available for public review prior to submission to DEQ, by at a minimum, posting to the publicly accessible website..." per Schedule A. 2.c.

46. **Comment from Gresham Group and Lake Oswego on Publicly Available Website:** Proposed text to read instead, "The website must be maintained with current information, and be reviewed for accuracy, annually and updated, if needed at least annually."

Response: DEQ modified the text for clarity and to eliminate implication that updates must occur even when substantive modifications are unnecessary.

47. **Comment from City of Eugene on public comment of stormwater program documents:** Edits proposed to be very clear about which documents of the many referenced in the permit require a 30-day review period. Thirty days is longer than typical in Eugene. Most of Eugene's administrative rules have to be posted for two full weeks.

Response: DEQ modified the text for clarity as requested.

Schedule A.3.c Illicit Discharge Detection and Elimination

48. **Comment from NEDC et al. on IDDE program elements generally:** The IDDE program requirements revolve around responses to complaints, how to report those complaints, timelines/schedules, and enforcement of illicit discharges. In comparison, New York City's MS4 permit identifies requirements to detect and eliminate illicit discharges, including illegal dumping. New York's program goes even further by providing examples of sampling programs and procedures, such as for fecal coliform, ammonia, surfaces, or residual sewer. Additionally, New York's permit requires developing and implementing priority areas of concern. All of these measures would strengthen the Draft Permits and help ensure illicit discharges are reduced to the maximum extent practicable.

By not setting the floor for how many outfalls must be inspected or how many priority locations must be identified, DEQ is again creating a race to the bottom.

We again note that the applications pre-date the EPA Compendium Reports (published in 2016-2018), which may be one reason for the gap in detailed examples contained in the Draft Permit and the applications.

Finally, the training requirements in the Draft Permits' IDDE section are too restrictive, and do not include

any language requiring follow up training. In contrast, New York’s permit requires all staff “whose job duties include implementing the IDDE program and/or performing IDDE operations.” The New York permit also includes a specific requirement for follow up training “as needed to address changes in procedures, techniques, or staffing.” Modeling the training requirements after the New York permit will help ensure all relevant staff are capable of effectively executing the IDDE program.

Response: The co-/permittees have already established IDDE programs, which met the requirements of the previous permit and satisfied federal requirements. What is practicable in New York for a city with New York’s budget, landscape and precipitation patterns, and population and density, may not be practicable or appropriate for municipalities in Oregon, though many of the same described elements are included in this permit. The new permit language strengthens these programs in several ways suggested by the EPA’s Compendium of Permitting Examples.

The new permit language expands on the requirements to map the MS4 with land use and catchment area characteristics associated with outfalls, which will improve the capacity for informed decision making and tracking of illicit discharges. Minimum expectations are set for investigations of complaints and field screening, and procedures and pollutant parameter action levels must be documented with the SWMP Document. The permit does not provide examples of sampling programs and procedures, but relies on the co-/permittees to review their programs and the state of knowledge of urban stormwater in order to update to improve effectiveness, subject to DEQ review and approval.

It is worth noting that the EPA’s 2016 Compendium includes a provision from West Virginia that required only a single field assessment for IDDE per year. Florida does not require any dry weather screening, but does require proactive investigations. The permits do not include specific arbitrary floors for number of outfalls to be inspected because field screening and outfall inspection is not the solely most effective method of IDDE. Unless an inspection occurs at the moment an illicit discharge is leaving an outfall, illicit discharges may not be detected. However, the permit language does require establishment of new priority field screening locations based on risk factors about which information is to be collected in the mapping exercise. The PER makes specific reference to recent research on the importance of tying procedures to risk factors associated with illicit discharges to assist the co-/permittees in updating their programs to be more effective. Additional reference to an IDDE manual published by the Center for Watershed Protection was also added to the PER.

Finally, DEQ disagrees that the training requirement of Schedule A.3.c is too restrictive or does not include a requirement to provide follow up training. The language clearly states that all staff must be properly trained and that “training strategies and frequencies for staff must be documented and included or referenced in the SWMP Document.” The word “frequencies” requires recurrence, but DEQ leaves it to the co-/permittee to establish such strategies and the timing of training frequencies based on their experience running their own programs and their own staffing situations, subject to DEQ’s approval when the SWMP Document is reviewed. If DEQ determines that the program is inadequate when submitted for approval, DEQ will notify the co-/permittee and require the appropriate modifications.

49. **Comment from WES on mapping requirements:** The MS4 map requirements should be moved to a general section of the permit-such as Schedule A.1 or A.2.

Response: DEQ disagrees, and retained the language as drafted. Though the mapping is valuable for many reasons, a major function of the expansion in requirements for mapping is to improve decision-making capacity around reducing risk factors associated with IDDE.

50. **Comment from Portland Group on Mapping:** We require confirmation that the “MS4 Map” may be in a digital or electronic, web-based format. This appears to be DEQ’s intent based on narrative in the PER, but the language in this section of the permit could be interpreted to mean that paper copies of the MS4 asset

maps are required, which is infeasible. Our MS4s and associated asset inventories are far too extensive and data-dense to maintain and produce paper map copies. Moreover, they are updated daily and are thus considered “living” maps. Please amend the language as follows:

“The MS4 map and may be in the form of a spatial digital inventory and must include the location of outfalls and an outfall inventory...”

Response: The permit language has been modified to make clear the intent expressed in the PER that the map may be maintained in a digital or web-based format.

51. **Comment from Portland Group and Gresham Group on Outfall Inventory:** Commenters requested clarity around requirements for additional data to be maintained with outfall inventory, including the insertion of “e.g.” where details of collection area are listed and confirmation that dry weather flows need not be documented for each and every outfall given the high water tables in the region and need to prioritize.

Response: DEQ has added “e.g.” to the parenthetical, and did not modify text further in response to this comment, but confirms that not every outfall must have documentation of every dry-weather discharge, as that would be an impracticable requirement. The intent of the language, which is preceded by the words “To the extent data are available,” is to list opportunities for improving knowledge the co-/permittees may then use in prioritizing and improving IDDE investigations and assessing risk factors for chronic or other illicit discharges. Screening of outfalls conducted during dry weather should at least note if discharge is occurring and to what the screener attributes the discharge. The IDDE manual published by the Center for Watershed Protection and referenced above and in the PER includes an “Outfall Reconnaissance Inventory Field Sheet” example that all co-/permittees should consider using, adapting, or drawing on for their own screening activities, which includes assessing the physical condition of the outfall (whether it appears damaged, or to be crowded by abnormal vegetation, or shows staining of sediments or piping, etc).

52. **Comment from Lake Oswego on Outfall Inventory:** Commenter requests text on “presence of dry weather flows and details of the collection area for each (approximate acreage and relative proportions of land uses contributing to the outfall, impervious area contributing stormwater, tree cover, etc.)” be removed entirely. “The City respectfully requests that DEQ either remove the additional information requirement or provide context in the PER as to how the information is useful from a water-quality perspective. Tree cover can mean anything from taking a picture to determining completing an analysis of the effective shade. Impervious area may not provide relevant temperature information since a slow-moving stream in a treeless meadow may be hotter than the discharge from a canopied impervious section. Impervious area may also provide erroneous expectations of stormwater discharge velocities since pipe size, slope, and outfall protection can affect discharge velocity more than the amount of contributing impervious area.”

Response: DEQ disagrees and has not removed the language, though it is modified slightly. See comment on outfall inventory above. Mapping outfall catchment area characteristic is a vital part of understanding contributing risk factors for IDDE and establishing proactive investigation practices. The intent of this requirement is to ensure the co-/permittees have data over time to understand the contributing factors for pollutant load discharging at each outfall. This information is intended to contribute to decision making on where to work on urban canopy or elevate certain proposed Capital Improvement Projects higher up the priority list. The intent is to require co-/permittees to conduct a GIS exercise (or similar data-oriented system) to tap existing data sets where available, and indicate where further data may be needed, and allow for better adaptive management system-wide. Though impervious area alone may provide erroneous expectations of stormwater discharge velocities if evaluated in isolation, as the commenter suggests, it would not do so if coupled with other readily available data that reduces confusion. Further, impervious area is not important solely for determining discharge velocities but also for determining potential accumulation of pollutants. Impervious area of parking lots and high-traffic roads is particularly associated with pollutant load in stormwater. In addition, tree cover is known to be incredibly effective as “decentralized green

infrastructure [that] leverages the capabilities of soil and vegetation to infiltrate, redistribute, and otherwise store stormwater volume, with the potential to realize ancillary environmental, social, and economic benefits.”² The complex interactions among land-covers have several direct implications for the ongoing management of urban watersheds,³ and co-/permittees are required to gather this information in order to better understand their landscape, their infrastructure and opportunities within that landscape, and the effect of each on stormwater. Co-/permittees should be familiar with the literature on the relationships between urban tree cover and stormwater pollutant load and runoff and consider the implications in their adaptive management. The rationale for this requirement has been expanded in the PER.

53. **Comment from Yakama Nation Fisheries on responses to complaints:** As noted in comments on the 2020 ODOT MS4 permit, the requirement [in the IDDE section] for prompt responses to complaints of illicit discharges should not only specify the average time for response but also the maximum.

Response: DEQ added the phrase “and no greater than four working days” to the permit condition.

54. **Comments from several co-/permittees (City of Salem, City of Milwaukie, Lake Oswego, ACWA, Oak Lodge Water Services District, WES, others) on Chronic Illicit Discharges and Dry Weather Flows:** “Maintenance and updates to the City’s mapping are iterative and intended to reflect information that is useful to City staff and the public. Mapping updates are also not typically conducted by the same staff as those performing dry weather field screening activities, so there will be a time delay in mapping of chronic illicit discharges. It is our view that chronic illicit discharges should not be mapped. These discharges need to cease as soon as possible per the investigation requirements outlined in Schedule A.3.c.iv. and, as a result, an associated map will become outdated after publication. The City requests that the provision to map chronic illicit discharges be removed or that the language under Schedule A.3.c.i.A reflects chronic discharges “as applicable,” consistent with language provided in A.3.c.iv.D.”

And: “Chronic illicit discharges shouldn’t be mapped, they need to be stopped. Geologic conditions, dispersed open channel collection and conveyance systems, and springs/high ground water result in a significant number of outfalls with dry weather flows. Dry weather flows shouldn’t have to be mapped, either.”

And: “Many older systems were built to capture groundwater resulting in many outfalls with constant flow. The City feels that these outfalls should be tested when inspected and that placing them on a map would create more confusion than relevant information. For example, if an outfall has a discharge during an inspection and is flagged as “ongoing dry weather flow”, the inspector (or citizen) would logically determine that no further action is needed when it could be that a new illicit discharge is occurring. Not flagging these outfalls means that any flow would be tested for basic water quality characteristics and, perhaps, catch an illicit discharge that would not be found if flagged as an ‘ongoing dry weather flow.’”

And: Term “ongoing illicit discharge” doesn’t seem substantially different than “chronic illicit discharge”. Seems like the use of “ongoing” is only in the section heading, so maybe retitle this as “Illicit Discharge Elimination”

Response: The definition of Chronic Illicit Discharge has been expanded to provide clarity. The permit does not require illicit connections be added to asset mapping as soon as discovered and then stopped, as that would cause counterproductive delays. The intent of the requirement is to ensure there is comprehensive communication within each jurisdiction. For example, the staff or programs that conduct the dry-weather

² Berland, A., Shiflett, S. A., Shuster, W. D., Garmestani, A. S., Goddard, H. C., Herrmann, D. L., & Hopton, M. E. (2017). The role of trees in urban stormwater management. *Landscape and Urban Planning*, 162, 167-177.

³ Beck, S. M., McHale, M. R., & Hess, G. R. (2016). Beyond Impervious: Urban Land-Cover Pattern Variation and Implications for Watershed Management. *Environmental Management*, 58(1), 15–30. <https://doi.org/10.1007/s00267-016-0700-8>

field screening should be in communication with programs or staff who conduct mapping updates (or should themselves have field GIS tools to allow them to update mapping) to ensure reports on the condition of an outfall in need of repair or maintenance get to the programs or staff that would conduct those separate efforts. DEQ agrees and encourages that chronic illicit discharges must be stopped as soon as practicable and not allowed to continue but uses the term broadly; a chronic discharge is not necessarily ongoing. The intent is to include not only illicit connections (sanitary or industrial drains leading improperly to the MS4 which may be stopped as a result of a single investigation), but also areas with suspected patterns of periodic illegal dumping and/or risk factors associated with illicit discharge or illicit connections for which discharges may not be continuous, as part of the co-/permittees ongoing adaptive management efforts to reduce entry of pollutants to the MS4. As explained in the PER, “*Priority locations [for dry-weather screening of outfalls] must be based on an equitable consideration of hydrological conditions, total drainage area of the location, population density of the location, traffic density, age of the structures or buildings in the area, history of the area, land use types, personnel safety, accessibility, and historical complaints or other appropriate factors as identified by the co-permittees,*” which are all risk factors for IDDE. For mapping purposes, chronic illicit discharges may include locations of outfalls where illicit discharge was noted by investigators or reported by the public but investigations (or repeated investigations) proved inconclusive. This information may prove valuable in, for example, determining the history or duration of a chronic illicit discharge once a source is found.

Those conducting field screening of outfalls should also know about the tendency of priority outfalls to contain groundwater seepage or other sources of dry-weather flow. This is because if a priority outfall is regularly showing dry-weather discharge, that flow may mask contaminants rather than being composed entirely of illicit discharge or entirely of groundwater seepage, and field staff should be trained and prepared to investigate more closely, not less. Chapter 11 of the Center for Watershed Protection’s IDDE Manual focuses on the process of dry-weather screening, which they call the “Outfall Reconnaissance Investigations (ORIs),” and includes discussion of the importance of, and instructions for, characterizing flowing outfalls.

55. **Comments on pollutant parameter action levels vs lab analysis from City of Eugene, City of Salem, Gresham Group, and WES:** Some parameters listed under Pollution Parameter Action Levels might make more sense to list under lab analysis below, given the length of time getting results can take.

Response: DEQ modified the section according to the comments received and guidance from EPA.

Schedule A.3.d Construction Site Runoff Control

56. **Comment from NEDC et al on construction thresholds:** We appreciate that Portland’s Draft Permit contains a construction site threshold of 500 sq. ft. However, this should be the threshold in each of the Phase I individual permits. DEQ has provided no basis for the large difference between Portland’s threshold and the 1,000 sq. ft threshold for Clackamas County (and the 9 cities therein), Eugene, Gresham, Multnomah County, and Salem. To ensure the state’s waters are adequately protected, the 500 sq. ft threshold should be a requirement for each of the Phase I permittees.

Response: The thresholds were set according to an analysis DEQ performed prior to the previous permit term and were not updated because simply changing the threshold is not the most effective way to improve outcomes. This analysis included an evaluation of multiple factors, including: a) the level of resources (personnel, financial, time) needed to review, approve, inspection and enforce erosion prevention and sediment control plans; b) the number and type of potential construction projects; c) the potential for water quality impacts associated with typical construction projects; d) the permittee’s then-current minimum threshold (which in several cases had not yet been established); and, e) the construction site minimum

threshold incorporated into MS4 permits by other permitting authorities. The thresholds in each permit are appropriate for each jurisdiction based on these factors. All of these factors and others will be considered in future evaluations. This is important because if the threshold were changed beyond the co-/permittee's capacity to administratively manage, or beyond what is likely to be effective or useful for a co-/permittee given the nature and type of construction projects within a jurisdiction, resources could be wasted that would be better spent elsewhere reducing stormwater runoff more effectively.

Portland's permit includes a construction site threshold set at 500 sq. ft. because that is appropriate and achievable specifically in the City of Portland. Different co-/permittees have different capacity for implementation. According to the EPA's Compendia of Permitting Examples, for example, many states do not require MS4s to inspect sites with less than an acre of disturbance.

57. **Comment from NEDC et al. on BMPs for construction sites smaller than the threshold:** We appreciate the addition of language in the Draft Permits which would allow permittees to create a list of standard BMPs for smaller construction projects that are otherwise not covered under the permit. However, this language does not go far enough. To adequately protect Oregon waters, this should be a mandatory requirement. If DEQ is concerned with the additional burden of regulating the smaller construction projects, we suggest giving the permittees one year to adopt a list of BMPs that the smaller construction sites would need to follow. There is precedent for requiring BMPs for smaller projects, and developing this list should be a matter of reviewing work already done in other states such as California. As noted in our July 23, 2020 comments other states have had success regulating all construction projects with this BMP strategy and we again encourage DEQ to do the same.

Response: For this MS4 Phase I permit renewal, DEQ focused on increasing specificity in requirements for Erosion & Sediment Control Plans (ESCPs), specifically in ESCP plan review and site inspection procedures, recordkeeping, and enforcement procedures. This approach will improve the overall effectiveness of the co-/permittees' Construction Site Runoff Control programs, as well as DEQ's ability to review the results of the program with annual reporting, inspections and/or audits.

58. **Comment from Portland Group on PER text related to Construction Site Runoff Control:** Rationale is needed for the increased specificity for Construction Site Runoff Control program requirements. The PER states "The requirements are similar to those in the previous permit, but are more specific about certain actions that the co-permittees are required to perform", but no justification is provided.

Response: DEQ has added a sentence to the PER clarify that the new requirements increase program flexibility and effectiveness, as well as transparency and adaptive management capacity.

59. **Comment on requirement for ESCPs to be kept on site, from Gresham Group:** Many plans are now digital. Inspectors are assigned and trained and do not need to rely on plans being onsite in order to assess if a site is in compliance. They walk sites and look for erosion and improper storage, broken fences, etc. Keeping plans on site is specific to the 1200C permit and should not be applied to all sites. If an inspector needs a plan copy for the first visit or to fill in for another inspector, they have the ability to request it or review it online, typically. As noted in the PER, small sites have one person in charge who is not always there and is the only person in charge of erosion maintenance, the subcontractors are not responsible and cannot be held accountable for direct management of an issue (unless they cause it). Thus, having a simple plan/list onsite, doesn't actually help protect water quality, the inspections do. Moreover, small sites often don't even have a place to keep a plan set.

Proposed revision: *Require Erosion and Sediment Control Plans to be kept on site, for sites that require a 1200C permit, and made available for review by the co-permittees, DEQ, or another administrating entity during site inspections or upon request for all sites not requiring a 1200C permit; and,*

Response: The ESCP is a working document, and the visual monitoring inspector must document and revise any changes necessary to the ESCP to meet permit compliance. This creates a record that can be reviewed when co-/permittee inspections are conducted, for example, after a storm has required changes in BMP implementation or layout onsite. The 1200-C and the 1200-CN include the same visual monitoring requirements post-inspection (i.e. inspection report and ESCP revisions), so this is not an additional burden on the MS4 entities that is not otherwise required. The combination of an ESCP and robust visual monitoring inspection process ensures the plan is revised as necessary to protect water quality. The requirement is less intended to simply keep a physical copy of an ESCP present onsite at all times, and more to ensure a record is maintained of the current ESCP and revisions to implemented BMPs, and that this record is accessible to inspectors at all times. Providing an ESCP on-site, whether paper or electronic, provides MS4 permittee and DEQ inspectors an historical record of erosion and sediment control measures implemented on site.

60. **Comment on substantive requirements for ESCPs for sites equal to or greater than an acre, and regarding 1200-CN permit agents, from OLWSD, Oregon City, and City of Milwaukie:** Schedule A.3.d.ii.(D) requires the permittee to “Continue to ensure that ESCPs for construction sites disturbing one acre or greater are consistent with the substantive requirements of the State of Oregon’s 1200-C permit ESCPs.” This requirement does not consider jurisdictions such as ours that are covered by the 1200-CN permit. Milwaukie, Wilsonville, Oak Lodge Water Services District, West Linn, and WES are all 1200-CN permit agents. Under the 1200-CN permit, for construction sites greater than 1 acre and less than 5 acres, an owner or operator of construction activities that meet the conditions of the local agency’s (i.e., MS4 permittee’s) construction site runoff program automatically receives coverage under the 1200-CN permit, and therefore, does not also have to obtain a 1200-C permit. The permit language as written does not make sense for those jurisdictions that operate under a 1200-CN permit, as it requires ESCPs for construction sites disturbing one acre or greater be consistent with the requirements of the 1200-C permit ESCPs when, between 1 acre and 5 acres, conditions of the 1200-CN permit are in place. The intent of the 1200-CN permitting program was to provide for efficiencies and reduce redundancies in the construction site permitting requirements. This permit requirement adds that redundancy and associated administrative burdens while not resulting in any further water quality improvements. Furthermore, permittees that are not agents have no authority to implement DEQ’s erosion control 1200-C requirements. The City requests that this requirement is removed from the draft permit. Include alternative language that clarifies that, for jurisdictions operating under a 1200-CN permit, jurisdictions should refer owners or operators of construction sites greater than five acres to DEQ to obtain a 1200-C permit.

And, from Salem: Unless a jurisdiction has an agreement with DEQ to act as an agent for the state, review of ESCPs (Erosion and Sediment Control Plans) is the responsibility of DEQ, which also has the authority to require consistency with state requirements. Permittees that are not agents do not have the authority to implement DEQ’s erosion control 1200-C permitting requirements. The City has an aggressive construction site erosion and sediment control program that applies to sites disturbing 1,000 square feet and greater. This meets our current permit requirements and has been developed and improved through years of adaptive management. Inclusion of this permit language would require an additional parallel and administratively burdensome process to ensure consistencies with the State’s/DEQ’s program and it would not result in additional water quality benefits. The City requests that this requirement is removed from the draft permit or is revised to clarify that jurisdictions should refer owners or operators of construction sites greater than one acre to DEQ in order to obtain a 1200-C permit.

Response: This is not a new requirement, simply a re-wording and carrying-forward of the requirement in the previous permit iteration that read: “At a minimum, construction site erosion prevention and sediment control plans for sites disturbing one acre or greater must be consistent with the substantive requirements of the State of Oregon's 1200-C permit site erosion prevention and sediment control plans.” Note that the new permit language starts with “continue to ensure...” This is not a requirement that non-1200-CN permit registrants administer 1200-C-like requirements across the board, it merely requires that all co-/permittees

require ESCPs that meet the substantive requirements of the ESCPs required under the 1200-C permit, for sites disturbing one acre or more, which they were already required to do regardless of their 1200-CN status. Even though sites over an acre are covered by DEQ-issued 1200-C permits, the requirement was instituted to induce more localized site regulation and enforcement efforts, and to enable the MS4 co-/permittees to control construction site discharges into their MS4s more effectively.

DEQ anticipates the 1200-CN permit will be renewed around the same timeframe of the issuance of this MS4. The 1200-CN Jurisdictions submitted applications to DEQ to be designated as “local qualified programs” in August, 2020. The stormwater programs of local qualified programs were evaluated for their ability to meet the substantive requirements of the 1200-C permit. While each local qualified program was given latitude in how the conditions of the 1200-C were met, meeting the substantive requirements (e.g. no turbid discharge, inspection frequency, ESCP requirements) of the 1200-C permit must be validated before an Agency can be designated as a local qualified program or 1200-CN Jurisdiction. 1200-CN Agents have already committed to refer sites 5 acres or larger to DEQ for a 1200-C permit, so that language does not need to be added to this permit.

There is no added redundancy or new administrative burden associated with this requirement. No changes were made in response to these comments.

61. **Comment on the definition and use of “extended filtration” in Schedule A.3.e.ii and iii, from WES:** In these sections DEQ requires, due to infeasibility of LID/GI and retention, the use of “extended filtration” and also the use of “extended filtration stormwater controls” to target the removal of TSS for development projects. DEQ defines extended filtration as, “...*the technique of using LID stormwater facilities designed to promote stormwater runoff filtration through natural or engineered media.*” Requiring the use of LID stormwater facilities on development sites where LID/GI or retention are infeasible is highly problematic for permittees. We believe DEQ’s intent in these sections is to require the use of “structural stormwater controls,” as defined in the permit, to target pollutant removal when LID/GI or retention are infeasible due to site constraints, such as sites with limited infiltration rates or high groundwater. As such, DEQ should replace the terms “extended filtration” and “extended filtration stormwater controls” in these sections with “structural stormwater controls”, which include high performing treatment BMPs like wet ponds and grassed swales. This is consistent with other sections of the permit where DEQ refers to “structural stormwater controls” as treatment BMPs to be used in situations where retention is infeasible.

And, from ACWA: [...] In other words, extended filtration is required where LID/GI is not feasible. However, in the definitions section of the permit for "extended filtration" (Schedule D.4), it states that "*extended filtration is the technique of using LID stormwater facilities designed to promote stormwater runoff filtration through natural or engineered media.*" So, in essence this permit language is stating that when LID is not feasible, LID is required. ACWA requests that DEQ revise the language as follows: *In development of this strategy, the permittee must review ordinance and development code for opportunities to reduce the volume of discharge by design, engineering, and planning methods that prioritize onsite retention and infiltration where feasible, in order to make LID/GI the preferred and commonly-used approach to site development, ~~and to require extended filtration where LID/GI is not feasible.~~ Where LID/GI controls that incorporate infiltration are not feasible, filtration shall be required.*

And, from J. Lehman: The definition of Extended Filtration is vague and potentially conflicting in its use throughout the document. While DEQ’s intent to direct permittees to the use of LID/GI standards is consistent, extended filtration as defined is loose enough to allow for interpretation in sites where infiltration/on site reuse is not feasible in some situations, but seems to direct users toward a strict interpretation of bioretention in others. A more clear distinction of filtration as a water quality stormwater control is recommended to allow permittees more flexibility in meeting the permit standard when on-site volume reduction is not feasible.

Response: The use of the term extended filtration was not intended to be defined as only applying to LID/GI facilities. The definition of extended filtration has been modified in response to this comment to not include LID as part of the definition, as follows: “**Extended Filtration** within ~~LID~~ stormwater facilities is designed to promote stormwater runoff filtration through natural or engineered media. The runoff is treated through physical, biological, and chemical processes as it filters through the media of the facility...”

With the modified definition, it is clear that extended filtration is an element or technique that can be applied to multiple types of stormwater controls, including structural or hardscaped facilities such as detention basins, and including sites where infiltration is infeasible.

62. **Comment on standard BMPs for sites smaller than the threshold, from NEDC et al.:** The permit should require standard BMPs for all sites smaller than the threshold for site-specific controls. We appreciate the addition of language in the Draft Permits which would allow permittees to create a list of standard BMPs for smaller construction projects that are otherwise not covered under the permit. However, this language does not go far enough. To adequately protect Oregon waters, this should be a mandatory requirement. If DEQ is concerned with the additional burden of regulating the smaller construction projects, we suggest giving the permittees one year to adopt a list of BMPs that the smaller construction sites would need to follow. There is precedent for requiring BMPs for smaller projects, and developing this list should be a matter of reviewing work already done in other states such as California. As noted in our July 23, 2020 comments other states have had success regulating *all* construction projects with this BMP strategy and we again encourage DEQ to do the same.

Response: Prescriptive BMP lists limit the erosion and sediment control options available to ESCP developers. The narrative ESCP requirements allow the permittee flexibility in creating erosion and sediment control plan conditions. Pollutant or site-specific BMPs may be developed that are not included in a permittees’ standard BMP list. The overarching goal of the ESCP is controlling erosion and sediment discharge from construction project sites, thus BMPs should not be the goal of permit compliance. In addition appropriate BMPs for construction sites shift over time and it is important that the permits allow for adaptive management so permittees can shift when new information or BMPs for erosion and sediment control are available.

Schedule A.3.e. Post-Construction Site Runoff for New Development and Redevelopment

63. **Comment from NEDC et al. on Post Construction requirements generally:** We note initially that there are specific examples for this minimum control measure that EPA has provided, both in its Compendium of MS4 Permitting Approaches Part 1: Six Minimum Control Measures, EPA-810-U-16-001 at 22-37, and its Compendium specifically targeted to “Post Construction Standards” (Part II), EPA-810-R-16-017. At the time EPA issued Part II (Nov. 2016), forty states had already developed numeric performance and/or design standards to control post-construction stormwater and EPA stated that “[c]lear, specific and measurable permit conditions ... ensure that requirements can be met.” EPA’s Compendium Part II focused on 26 states that had established clear standards, and refers to a separate guidance document, “Summary of State Post-Construction Stormwater Standards.” EPA-810-R-16-017 at i. The MS4 Phase I applications appear to pre-date these guidance documents from EPA. We therefore ask that the applicants provide more updated information to DEQ and integrate these specific provisions (including their methods of implementation) into their permits and storm water management plans, consistent with EPA publication examples, prior to any MS4 Phase I Permit being authorized and issued.

Response: The applications submitted by co-/permittees do predate the EPA’s Compendia guidance documents, but the draft permit language for renewal was written with them as a resource. The post

construction requirements are new for the permittees and get at the outcomes needed in Oregon to protect water quality by keeping stormwater onsite where possible by focusing on infiltration and retention. DEQ will evaluate each permittee's proposed SWMP Document and require revisions if necessary before granting approval. The improvements made to Schedule A.3.e are appropriate for this permit renewal and in line with national trends. Delaying permit issuance for a new round of studies to update application information is not appropriate as it would result in delays to much-needed improvements in processes and procedures that are intended to improve water quality.

64. **Comment from NEDC et al. on 5,000 square foot post-construction threshold:** The Conservation Groups continue to have concerns about the 5,000 sq. ft threshold minimum requirements for some of the municipalities (e.g. Salem), where other municipalities have a much lower threshold (e.g. Portland and Multnomah County at 1,000 square feet). Given the extent of hydromodification impacts throughout Oregon, and the legacy impacts that will not be addressed in a wholesale manner in these permits, a 5,000 sq. ft threshold continues to allow a policy of “death by 1,000 cuts” or in this case, 5,000 cuts. If Oregon is to make progress on the hydromodification problem, it is essential that significantly more new and re-development projects be required to offset stormwater impacts.

Response: DEQ disagrees with the assumptions inherent in the comment, and notes that thresholds were selected after an analysis of multiple factors, as in the case of construction thresholds. Further, many states have threshold values set at higher square footage area than are imposed in these permits. A smaller threshold is not the sole or most effective means of protecting from hydromodification impacts. As mentioned above, the City of Portland, has greater resources and more infill-type development, which is why a smaller threshold there makes sense. For Multnomah County, the threshold is set at 1,000 square feet because though it lacks Portland's resources, its construction activity where not overseen by adjacent municipalities under intergovernmental agreements is almost entirely roadwork related, and thus easier for the County itself to manage.

DEQ agrees that hydromodification is a significant concern. The permit language in this section was improved to steer co-/permittees away from practices and tools known to contribute to hydromodification. Such practices include heavy reliance on engineered approaches to runoff management that can transfer hydrologic impacts (e.g., habitat loss, flooding, channel widening, and erosion) to downstream areas through the construction of paved channels, stormwater pipes, and bank stabilization (e.g., riprap, cutbacks, plantings, bulkheads). The permit's increased emphasis on stormwater retention and infiltration is anticipated to have great benefits in fighting the hydromodification effects of urban stormwater. Further, Schedule A.3.h requires the co-/permittees to update DEQ on how their practices have shifted with regard to the consideration of hydromodification since the development of the Hydromodification Assessment report of the previous permit term, and to identify any remaining data gaps regarding the effects of hydromodification within their jurisdictions, due with the third annual report. This effort is to be done in conjunction with a similar update on developments or progress made since the Retrofit Strategy of the previous permit term, in order to synergize the two projects so that opportunities may be found to improve surface water conditions through both means. No permit language was changed in response to this comment.

65. **Comment on LID/GI Strategy submission timing from City of Lake Oswego:** The revised SWMP is due in November 2022, municipal code revision is due in November 2023, and the stormwater strategy is due in November 2023. The permit is also requiring that the strategy be incorporated into the SWMP which, with the SWMP revision of the permit renewal package, creates 3 revisions of the SWMP (and the public involvement required) within 1 permit cycle. The City respectfully requests that DEQ consider that the LID/GI strategy be provided as a stand-alone planning document or incorporated into the SWMP as part of the permit renewal package.

Response: As described above, the SWMP Document is intended to be a living document capable of being updated at frequencies determined by the adaptive management processes of the co-/permittees. The SWMP

Document does not require public review at every revision or update, only upon its first drafting prior to submission to DEQ. The LID/GI Strategy document, though a stand-alone submission, is not required to be made available for public input prior to submission to DEQ and does not require that the whole SWMP Document be posted for public comment again. As indicated in the PER, updates to the SWMP Document may be easily and effectively tracked with a “version notes” or “change log” page inserted at the beginning of the document. No permit language was changed in response to this comment.

66. **Comment on timing of post construction requirements timing, from WES:** The timelines in these sections are problematic for co-permittees. There are three main components required by these sections: by November 1, 2023 develop a strategy to require LID/GI for development projects; and by November 1, 2023 develop codes/design standards to require LID/GI, or where infeasible require structural stormwater controls, for development projects; and develop options for offsite approaches where appropriate. These components are interrelated and the latter two are largely dependent on the first, the strategy. Code and standard updates to remove barriers to LID/GI and to require new design standards are likely going to be the main components of the LID/GI strategy. Therefore, these requirements should be sequential not concurrent, and the deadline for the code/standards updates should be after the strategy is developed, approved, and implemented. Furthermore, the deadlines for strategy implementation are misaligned, as the strategy needs to be developed and implemented by November 1, 2023, and then submitted to DEQ for approval with the next annual report due sometime after June 30, 2024, thus permittees will be implementing a strategy that hasn't been approved by DEQ. WES recommends that DEQ revise the language in this section as follows, *“The co-permittees must by November 1, ~~2023~~2024 develop and implement enforceable post-construction stormwater management requirements in ordinance or other regulatory mechanism that, at a minimum, prioritize onsite retention of stormwater and pollutant removal, and include technical standards according to either of the following options:...”* This will allow more time to implement the code/standard updates after the strategy is developed, and allow DEQ time to review and approve the strategy before those updates are made.

And, from City of Eugene: There is inconsistency between A.3.e.ii. and Table 1 with respect to the timing, deliverable, and sequence of events related to the LID/GI strategy. Please clarify.

Response: In response to these comments, DEQ modified the date of the requirement for the code/design standard development as requested by WES, and clarified the separate dates in Table 1.

67. **Comment from WES on “reuse” of stormwater:** There is concern about the term “reuse” in many places in this section of the permit. Please remove the references to reuse in this section of the permit. It is already covered as a Low Impact Development approach in the definitions section in Schedule D(4). The language from the draft permit could imply that if reuse is feasible, then the permittee would have to exhaust possibilities of implementing stormwater reuse for retention before moving to treatment. Rainwater reuse should be considered as a tool, similarly to how pervious pavement is considered as a tool for retaining stormwater. While reuse may be feasible in many cases, such as commercial buildings, it is not nearly as practical when compared to other stormwater controls and operations and maintenance requirements. Rainwater harvesting for landscape irrigation in Clackamas County is not as effective as in other parts of the Country due to the continuous nature of rainfall (i.e., storage fills up early) and limited need for irrigation during the wet season (i.e., uses are limited to empty storage between events). And if stormwater can be collected and legally reused for toilet flushing, the cost of building and operating this system can be significant, especially when compared with typical potable water rates from the local potable water provider. These irrigation and toilet flushing limitations are particularly true for single-family residential construction projects.

And, from ACWA: ACWA is concerned about use of the term "reuse" in this section of the permit. In order for reuse as a LID/GI measure to be effectively used/operated, it needs to be optional. We appreciate DEQ's modification of the applicant review draft version of the PER to clarify that reuse should be optional. It

states that: "Co-permittees may include evapotranspiration and reuse of stormwater in accounting for retention volumes, but are not required to exhaust those options prior to allowing treatment or off/site options." We agree with and support this PER language. However, while this issue was clarified in the PER, the draft permit language contains [...] statements of concern in Section A.3.e.ii.

Requiring reuse facilities, if "feasible" on site, ignores the fact that reuse only occurs based on the desire for, and need of property owners to conserve and reuse the water. While facilities/infrastructure can be mandated, use of stormwater from the facilities cannot be required or policed. In addition, rainwater harvesting in the Northwest is not as effective as in other parts of the country due to the seasonal and continuous nature of rainfall (i.e., storage fills up quickly during the onset of the wet season) and there is limited need for irrigation during the wet season when storage fills up. Hence storage facilities are not emptied on a routine basis based on need. Therefore, requiring reuse facilities on a property as a stormwater quality BMP may result in a reduction the water quality benefits that DEQ and permittees seek to achieve because stormwater will bypass facilities once full.

And from City of Eugene: Please delete "reuse" here [in the first sentence of Schedule A.3.e.ii, and add it, along with clarifying context, at the end of ii (copied from the draft PER).

Response: The permit language is clear in its intent to not require any specific form of reuse of stormwater, only to promote reuse where it is feasible. Water in Oregon will become an increasingly more expensive commodity as demand for fixed water supply increases with population growth and economic development. Not only does water reuse have potential to play a significant role as Oregon explores opportunities to extend water supplies to meet future demands, every gallon reused is a gallon not contributing to urban runoff or hydromodification of receiving waters. However, to reduce confusion, one instance of the word "reuse" was removed from the permit language in the first sentence of Schedule A.3.e.ii, where it may have appeared to be given disproportionate importance, and clarified language in the PER added at the end of the same paragraph, as requested by the City of Eugene.

68. **Comment on first sentence of Schedule A.3.e.iii(A), from City of Lake Oswego:** As currently written, a retention pond would rank higher than porous pavement since porous pavement does not encourage evapotranspiration. The City requests that DEQ prioritize onsite retention and leave the specifics of retention to the co-permittee or specify in the GI definition that it means infiltration raingardens, infiltration planters, porous pavement, and pervious pavers.

Response: DEQ has added to the definition of GI to eliminate confusion, as discussed further in the Definitions section of this Response to Comments document.

69. **Comment on use of "hardscaped" in Schedule A.3.e.iii(A), from Portland Group:** Please adjust the terms in this language as noted for clarity. DEQ's reference to "hardscaped" structural stormwater controls is not well defined. The examples listed in parentheses "(such as concrete, piping, or other static man-made infrastructure)" is so broad in scope as to unintentionally include certain kinds of Green Infrastructure (GI) facilities. Many GI stormwater features consist largely of concrete, piping, rebar, etc. and are considered "static man-made infrastructure." Proposed "manufactured stormwater technology" in place of "hardscaped," with no parenthetical.

And, from Gresham Group: Suggest replacing the term "hardscaped" with "proprietary" or "manufactured treatment devices." With the exception of sedimentation manholes (which would not meet the TSS removal goal), there are not any non-GI BMPs any of us use that aren't proprietary or manufactured treatment devices

And, from City of Salem: Drywells and pervious pavement may be considered hardscaped structural

stormwater controls and may be priority options. Please add a definition for hardscaped controls that indicates that drywells and pervious pavement are not considered hardscaped structural controls.

Response: DEQ modified the permit language as follows: “*The co-permittee must give priority to implementing green infrastructure before considering hardscaped structural stormwater controls (such as concrete vaults and piping, proprietary technologies, or other static man-made non-GI facilities infrastructure) for stormwater treatment.*” This is further supported with inclusion of pervious pavement in the definition of GI, and the two modifications together should clear any confusion on the points raised in the comments.

70. **Comment on use of “remainder” in Schedule A.3.e.iii.(A), from City of Eugene:** The use of the term “remainder” is confusing in that it is not appropriate for some Phase I permittees and thus has ambiguous implications for all Phase I permittees. Edits [proposed in a “tracked changes” version of the permit] are aimed at achieving the same thing we understand DEQ is aiming to achieve, namely retention and treatment on the order of a water quality storm, without using the term “remainder.”

And from ACWA: This requirement to treat the "remainder" of the NSRR volume is highly problematic for some permittees. For example, some cities have aggressively set their retention storm to be the 10- year storm event (approximately 3.4" in 24 hours). Based on this draft permit language, treatment of the 10-year storm would then be required when retention of the 10-year storm is infeasible. That is far beyond the standard practice of treating a water quality storm of 80% of average annual runoff as required in the current permits. In the Willamette Valley, a storm representing 80% of average annual runoff is on the order of a 1" to 1.4" storm depending on location. We assume that DEQ's intent is retention and treatment of a storm that is on the order of a water quality storm. The PER includes [...] language which supports this [...] We request permit language adjustments to reflect this intent without requiring jurisdictions to have to scale back goals for prioritizing retention of larger storms. These draft permit requirements could necessitate a lowering of the larger retention storms in order to meet the treatment requirements (i.e., treat the remainder) of the permit resulting in less overall retention.

Proposed edit: *The first priority of this option is onsite retention, but at sites where the NSRR cannot be met due to technical infeasibility and/or site constraints (including zoning or land use regulations), the permittee must develop a process whereby the remainder of the NSRR runoff volume must be treated with require treatment of the runoff volume up to a specified water quality design storm, or at least 80% of average annual runoff, in a structural stormwater control prior to discharge.*

Response: DEQ modified the language as requested.

71. **Comment on hydromodification impacts as discussed in Schedule A.3.e.iii.(A), from Cities of Salem and Milwaukie:** Schedule A.3.e.iii.(A) includes a requirement under performance standard Option A (Numeric Stormwater Retention Requirement Site Performance & Treatment Standards or NSRR) to include requirements in the co-/]permittee’s post-construction program to address potential hydromodification impacts. Specifically, the language states that, “*All stormwater discharged offsite must target natural surface or predevelopment hydrology (in terms of rate, duration, and volume) to minimize the potential for hydromodification impacts offsite.*”

Similar language is also provided for performance standard Option B (Alternative Performance Standard). However, for performance standard Option B, additional language was provided as follows (underlined shows the additional language): “*Stormwater discharged offsite must target natural surface or predevelopment hydrology (as measured by rate, duration, and volume of discharge) to minimize the potential for hydromodification impacts, except in circumstances where the permittee can demonstrate that the risk of hydromodification impacts are negligible, (e.g., large tidally-influenced waterways or flow-*

managed waterways).”

This additional language in Option B is important, as some receiving waters (e.g. the Willamette River) are not susceptible to hydromodification impacts and requiring developers to address hydromodification impacts in these areas is unnecessary. The City requests that the additional language (underlined above) applicable to hydromodification in Option B be included in the performance standard language for Option A as well.

Response: DEQ modified the text as requested.

72. **Comment on “treatment trains” in Schedule A.3.e.iii(A), from WES:** The following requirement is present in this section: *“The use of treatment trains of post-construction stormwater controls should be encouraged where appropriate for treating stormwater runoff that is managed offsite before discharging to receiving waters, to improve stormwater runoff quality and reduce discharge quantity.”* Please remove this proposed requirement. Co-permittees should not be required to encourage the use of a treatment train. If one treatment structure accomplishes the goal and is the most efficient and cost-effective option, this requirement to consider the addition of other treatment “cars” in the “train” is excessive and limits flexibility, and is inconsistent with the BMP-based approach of the MS4 permit structure.

Response: A stormwater treatment train incorporates at least two processes to maximize the control of pollutants from the runoff. The BMP(s) selected may consist of one or multiple practices, depending on many considerations, including available space, physical conditions at a site, and regulatory requirements. Hydraulic and physical processes remove larger solids and associated pollutants during storm events while biological and chemical processes that treat the finer solids and dissolved pollutants occur between storms. The resulting stormwater treatment train may result in a single BMP, such as a stormwater wetland, that utilizes multiple treatment train processes and by definition can be considered a stand-alone stormwater treatment train. Or it could become a multi-BMP treatment train with BMPs operating in series or parallel to each other.

The text of the permit includes the phrase “where appropriate” deliberately to make the requirement something the co-/permittees can tailor to circumstance, to maximize effectiveness and flexibility. No changes were made in response to this comment.

73. **Comment on predevelopment hydrology from Portland Group:** The predevelopment hydrology verbiage in Options (A) and (B) is problematic but easily remedied. The language states that “... stormwater discharged offsite must target natural surface or predevelopment hydrology (in terms of rate, duration, and volume) to minimize the potential for hydromodification impacts offsite...”

Different engineering, design and modeling approaches consider the rate, duration or volume of stormwater, but commonly accepted design methods do not consider all three simultaneously. For example, the Santa Barbara Urban Hydrograph Method, a standard approach for designing stormwater flow control and used extensively throughout the region does not take into account flow durations. Further, it is technically and mathematically impossible to match predevelopment runoff volumes on sites that cannot infiltrate. We request a simple solution to this language by adding an “and/or” to the parenthetical list to read: “as measured by rate, duration, and/or volume of discharge.”

Response: Based on the type of model proposed for the treatment of stormwater, this suggestion is appropriate. DEQ modified the text of the permit as suggested.

74. **Comment from City of Wilsonville on minimum set of specific onsite controls:** Schedule A.3.e.iii.(B) includes a requirement for co-permittees to set requirements *“for site layout plans and a minimum set of specific onsite stormwater controls based on the objective of achieving infiltration, evapotranspiration*

and/or harvest/reuse of the design storm runoff event.” It is unclear from the draft permit and PER what constitutes as a “minimum set of specific stormwater controls.” This requirement would be overly prescriptive in relation to multiple development activities including single family homes and industrial sites. The City requests that DEQ remove the language underlined above.

Response: The permit clearly leaves it to the co-/permittees to establish and define their own minimum set of site design measures as part of the alternative performance standard. The minimum set of requirements for single family residential development may be different from commercial development and may also vary with vegetative and impermeable cover percentage, soil type and infiltration rates, and zoning. The intent is not to be overly prescriptive, but for the co-/permittee to set a standard for practices that must be implemented, according to circumstance. DEQ will evaluate the co-/permittee’s program and determine whether changes or additions are needed. No language was changed in response to this comment.

75. **Comment from Lake Oswego on Reuse, Extended Filtration, and LID/GI:** Rainwater harvesting (reuse water) and green roofs are both GI stormwater management techniques which may be feasible at a site but not practical. For example, a homeowner with no stormwater experience or interest will not have the inclination nor the expertise required to maintain a rainwater harvesting system or a green roof.

The definition for GI in this permit is vague and could be interpreted to include detention ponds but not pervious pavers or porous pavement. The City requests that DEQ prioritize onsite retention and leave the specifics of retention to the co-permittee or specifying in the GI definition that it means infiltration raingardens, infiltration planters, infiltration swales, porous pavement, and pervious pavers.

The definition for extended filtration is vague could be interpreted to include detention basins. The City suggests that DEQ specify that extended filtration be defined as the use of flow-through planters and raingardens.

While not a LID/GI technique, drywells and infiltration trenches provide the same onsite retention, infiltration, stormwater volume reduction, and stream baseflow recharge as a traditional LID/GI technique. In the same vein, an extended filtration structure (flow-through planter for example) provides treatment and detention but no stormwater volume reduction. The City requests that DEQ consider prioritizing onsite retention and stormwater volume reduction and, where these are not technically feasible, onsite water quality treatment before offsite discharge occurs.

Response: DEQ applauds and encourages efforts to infiltrate onsite to reduce discharge of pollutants by reducing the volume of discharge as a primary measure, and the permit language was written to require the co-/permittees to allow and consider options as they see fit. The permit language grants co-/permittees the latitude to determine how and where and in which circumstances to promote effective water reuse or any specific LID/GI technologies or practices. The permit language clearly emphasizes onsite retention, and reduction of discharge volumes is a goal throughout.

The definition of GI states that “At the scale of a neighborhood or site, green infrastructure refers to stormwater management systems designed to mimic nature by reducing and/or storing stormwater through infiltration, evaporation, and transpiration.” This would clearly include pervious pavement/concrete, and not likely include detention ponds unless the detention ponds were engineered in some way so as to mimic natural processes.

The definition of extended filtration is written to require that runoff is treated “*through physical, biological, and chemical processes as it filters through the media of the facility,*” and “*with media of an appropriate infiltration rate and an underlying aggregate rock reservoir, [and] may require an underdrain to convey to a discharge location.*” Such a definition clearly includes rain gardens and flow-through planters and would not include detention basins unless the basins meet the defined extended filtration requirements.

No permit language was changed in response to this comment.

76. **Comment on “Site design measures” in Schedule A.3.e.iii(B), from City of Salem:** The PER defines “site design measures” as including: soil quality improvement and maintenance, tree planting and preservation, rooftop and impervious area disconnection, porous pavement, green roofs, vegetated swales, rain barrels and cisterns. It is confusing that DEQ is requiring these and then states that remaining runoff is directed to a bioretention facility. Isn’t a swale a bioretention facility? Please stick with consistent terminology of LID/GI. If site planning measures are specified separately, then those should be unique from LID/GI which is also required.

Response: DEQ modified the text to remove use of “bioretention facility” for clarity, and improved the consistency of LID/GI terminology with expansion of definitions and narrowing of application in the permit language.

77. **Comment on treatment standard and use of “design storm” in Schedule A.3.e.iii(B) from ACWA:** The following language in this section of the permit states:

"At sites where retention is infeasible due to technical and/or site constraints, the permittee must develop a process whereby the runoff volume up to a specified water quality design storm, or at least 85% of average annual runoff, must be treated with an extended filtration stormwater control prior to discharge, to target removal of TSS."

This new 85% treatment requirement is a significant change from the Applicant Review Draft of the permits. Moreover, contemplation of 85% was never discussed with the permittees, and without any explanation and justification in the PER, it appears to be an arbitrary and unsupported requirement. It would be a significant policy leap to include a requirement for a water quality design storm of 85% of average annual runoff, increasing the current requirement for treatment of 80% of average annual runoff, and no analysis or rationale was provided for this change.

MS4 Phase I programs worked with DEQ over an extended period to develop the 80% treatment performance metric that is a component of the current MS4 Phase I permits. Rainfall analyses were conducted for selected jurisdictions in the Willamette Valley and BMP performance (pollutant removal) and cost-effectiveness studies were performed for varying sized water quality events. A standard of 80% of average annual runoff for treatment was established by DEQ because of the clear and studied demarcation of water quality treatment performance and cost-effectiveness. The results from one of these studies is included as Attachment #1. These studies, which were reviewed and discussed with DEQ, demonstrated that, the estimated increased cost was substantial, with significantly diminished cost effectiveness relative to treatment efficacy as the design storm was increased beyond 80%.

DEQ did not update the previous analyses or discuss this rainfall metric with the permittees in the development of this draft MS4 Phase I permit, and the new design storm was not included in the Applicant Review Draft permits. Increasing the average annual rainfall percentage metric from 80% to 85% would drive substantial changes to stormwater programs and development costs, as demonstrated by the rainfall and BMP cost-effectiveness studies that were conducted and reviewed with DEQ for development of our current permits. BMP sizing tools and software have been programmed based on our current permits to size facilities based on the 80% storm. Especially given the rigorous assessment and determination, spearheaded by DEQ, for the 80% metric, that have set the parameters for performance, we urge DEQ to continue the use of the 80% average annual rainfall percentage metric.

ACWA requests revising the language in this section as follows:

"At sites where ~~retention~~ infiltration is infeasible due to technical and/or site constraints, the permittee must develop a process whereby the runoff volume ~~up to a specified water quality design storm,~~ ~~or~~ of at least 85% 80% of average annual runoff, must be treated with an extended filtration stormwater control prior to discharge, to target removal of TSS."

And, from City of Lake Oswego: The alternative performance standards were supposed to provide an alternative for jurisdictions that use a flow duration matching standard instead of a design storm. This section now refers to a design storm which negates the reason for the alternative performance standard.

And, from Portland Group: This terminology doesn't work with rigorous flow-duration matching engineering methods. Design storm runoff events refer to statistically derived events in order to represent typical rainfall patterns. Whereas continuous simulation modeling (used for flow-duration matching) uses actual rainfall data, not derived design storm events. The language, as written, might preclude co-permittees from using more rigorous, advanced engineering methods.

And, from WES: The alternative approach is outcome-based rather than prescriptive. Per the requirement, *"co-permittees must demonstrate how alternative compliance approaches prioritize infiltration and LID/GI, include pollutant removal performance goals, target natural surface or pre-development site hydrology, and reduce the discharge of pollutants from new and/or replaced impervious surfaces"*. The burden is clearly on the co-permittee to evaluate the proposed site performance standard and make a case for its equivalency to the default approach. As such, it is unnecessary and indeed counter-productive for DEQ in this section to specify a design storm for a site performance requirement. In fact, it defeats the purpose and intent of the alternative site performance approach. WES asks that DEQ remove this language in this section of the permit altogether.

Response: DEQ modified the requirement from 85% to 80% as requested, and also removed the mention of a water quality design storm. The use of "retention" was left in place, because it is a deliberately broad term that includes infiltration (as well as evapotranspiration and various forms of reuse) and DEQ allows for other forms of retention onsite to count toward the design standard.

78. **Comment on use of evapotranspiration in A.3.e.iii(B), from City of Lake Oswego:** The City believes that evapotranspiration does not rise to the level of stormwater management except as an ancillary benefit in the Mediterranean climate of the Pacific Northwest. In addition, the City believes that, while rainwater harvesting (reuse) and greenroofs are valid techniques, they should not be prioritized given their extensive and highly technical maintenance requirements especially in single family residential applications.

Response: The permit is clear that evapotranspiration is one of several forms of onsite retention and is not necessarily an option that must be implemented to the maximum extent. Impracticalities such as Single Family Residential maintenance constraints are reasonable rationales to not require green roofs or rainwater harvesting in certain situations. No change was made in response to this comment.

79. **Comment from City of Salem and Portland Group on review of technical justification:** Please adjust the language in this section to accommodate co-permittees' need to approve or disapprove a site's technical infeasibility justification. The current language is problematic in that it omits disapproval of infeasibility justification and essentially forces co-permittees to approve a site's justification even in cases where it's inappropriate or dangerous. Please make the following two adjustments to Schedule A.3.e.v:

"The co-permittees must require and subsequently review ~~and approve~~ the written technical justification to evaluate any technical infeasibility..."

"The written technical justification must be in the form of a site-specific hydrologic or ~~design~~ technical analysis.; ~~and~~ The co-permittee must establish criteria or circumstances under which such analysis must

be conducted, *and the results of the co-permittee's review must be documented*. Such *infeasibility or constraint factors may include, but are not limited to, low infiltration rates, shallow bedrock, high groundwater, groundwater contamination, soil instability as documented by geotechnical analysis, or land use or zoning constraints. The determination that the NSRR or Alternative Site Performance Standard cannot be achieved at a project site must be based on documented infeasibility criteria or constraints considering multiple technical factors.*"

Response: DEQ modified the permit language for clarity in the first portion of the suggested text, and as suggested in the second.

80. **Comment on cost considerations in evaluation of eligibility for water quality benefit offset programs, from WES:** In this section, the following requirement is present: "Economic considerations alone are insufficient reason for not requiring adherence to the retention or treatment standards above." This language is inconsistent with the current understanding of the Maximum Extent Practicable (MEP) standard. The costs of stormwater management for new development and redevelopment are closely linked to site constraints, and the inherent feasibility of required planning and engineering measures. Development sites where infiltration is largely infeasible will result in greatly escalating costs try and do so. The two are not unrelated. Also please consider that economic considerations are a significant element of the MEP standard, and excessive cost will typically result in a finding that the MEP standard has been exceeded. This language seemingly modifies the MEP standard on this issue for this permit in a manner that is inconsistent with broader applicable language. Therefore, this language should be removed or modified to make clear it is consistent with current MEP practices and understanding.

And, from NEDC et al: We appreciate DEQ recognizing the unintentional loophole which would have allowed municipalities to use fee-in-lieu as a mitigation measure for economic considerations alone. The new language in the Draft Permits, "[e]conomic considerations alone are insufficient reason for not requiring adherence to the retention or treatment standards above," is an important restriction and should remain in the final permits. This language should prevent the type of loophole that was accidentally created in the Clean Water Services permit, mentioned in our initial comments dated July 23, 2020. Thank you for addressing our concern and we hope this additional language will become standard in all MS4 permits going forward.

Response: The MEP standard applies to the co-/permittees' capacity to reduce discharge of stormwater pollutants and cost burden to the co-/permittee may be a factor. For example, a permit requirement to monitor every discharge at every outfall would be extremely expensive and would bankrupt permittees without reducing pollutants discharged, so such a requirement would be beyond the maximum extent practicable. The MEP standard does not apply to developers operating within the co-/permittee's jurisdiction. The language discussed in the comment is addressing requirements the co-/permittee must impose on developments and does not directly represent a cost to the co-/permittee. The permit language states that in evaluating the rationale for a development's need for the use of a water quality benefit offset program, the development cost to the landowner or developer alone may not be deemed an adequate reason for not requiring adherence to the retention or treatment standards in Schedule A.3.e.iii. DEQ thanks both commenters for their input, no permit language was changed in response to these comments.

81. **Comment from City of Eugene on post-construction plan review:** Please add "steep slopes" as a constraint [to the sentence listing constraints which may prevent onsite management of the runoff amount stipulated by Schedule A.3.e.iii]. Most retention and detention BMPs require a level pool.

Response: The sentence this comment refers to begins with "*Such feasibility or constraint factors may include, but are not limited to...*" and thus steep slopes may be considered by the permittee. No permit language was changed in response to this comment.

82. **Comment regarding long term O&M of manufactured stormwater technology from City of Milwaukie:** Schedule A.2.e.vi.D includes a requirement that “*for manufactured stormwater technology, O&M requirements must include documentation of the model number, manufacturer and supplier list of components scheduled for replacement at regular intervals, as well as plans or contracts for an appropriate supply of such components to ensure proper treatment function and timely maintenance.*”

It is unclear from the draft permit and PER why this level of detailed information is needed. In most cases, such as with proprietary stormwater filters, filter cartridges are inspected annually and replaced on a regular basis by the owner of the facility. This language is overly prescriptive with respect to documentation. For some entities, collection and tracking of this information is simply not practicable and the City’s oversight of this level of information is also not practicable.

The City requests that DEQ remove the reference to “...and supplier list of components scheduled for replacement at regular intervals, as well as plans or contracts for an appropriate supply of such components to ensure proper treatment function and timely maintenance” in Schedule A.2.e.vi.D.”

And, from City of Salem: It is unclear from the draft permit and PER why this level of detailed information is needed. Nor has DEQ documented any cost benefit received in relation to the added cost to develop and maintain this documentation. In some cases, such as with proprietary stormwater filters, filter cartridges are replaced on a regular basis by the vendor or a supplier, and a supply of cartridges, cartridge components and/or cartridge media is not kept on hand by the property owner. This language is overly prescriptive with respect to documentation and assumes that owners of proprietary systems are responsible for conducting maintenance. Additionally, for some entities, collection and tracking of this information is simply not practicable and our oversight of this level of information is also not practicable. We see increased costs for no added benefit in this requirement.

And, from Gresham Group: The inclusion of language at the bottom referencing holding a private entity responsible for "plans or contracts to have an appropriate supply for maintenance" is not reasonable. It is beyond the expectation of authority for government to manage a private entities contracts for resupply. We simply acknowledge when a facility is expected to need to be maintained and we require facilities to be maintained at the point that they have reached a performance threshold (such as sediment accumulation).

And, from Portland Group: Documentation requirements for manufactured stormwater technology in the Long- Term O&M section is problematic because the listed attributes don’t exist for many stormwater devices. For example, registered proprietary devices often do not have model numbers, only product names. In addition, supplies and components change routinely and are kept by third-party vendors, not facility/site owners. Please make the following adjustments to the language to reflect common O&M requirements:

“For manufactured stormwater technology, O&M requirements must include documentation of the product name, model number, manufacturer or equivalent identifiers where available, information about ~~and~~ supplier list of component suppliers and/or vendors, and schedules for maintenance or component replacement at regular intervals, as well as plans or contracts for an appropriate supply of such components to ensure proper treatment function and timely maintenance.”

Response: The intent of the requirement is not for the co-/permittee to maintain records of the maintenance and upkeep and manufacturer’s details of every private manufactured stormwater facility in their jurisdiction, but to ensure that the co-/permittee holds the site owners to a minimum expectation of maintenance of their facilities. Co-/permittees are not required to manage contracts for maintenance, only to verify that, where maintenance requires expertise or proprietary tools or equipment, site owners have arranged for it.

The language has been modified to clarify the intent of this requirement at the beginning of Schedule

A.3.e.vi.D, to include “as applicable” in order to allow for situations where certain elements of the requirement may not apply, and to incorporate the suggestions by the Portland Group.

Schedule A.3.f. Pollution Prevention and Good Housekeeping

83. **Comment from NEDC et al. on Pollution Prevention and Good Housekeeping for Municipal Operations:** As written, we believe the requirements in the Draft Permits fall far short of measures other states have implemented for several years. Virginia permits also have more concrete street sweeping requirements and detailed tracking requirements. For example, Arlington, VA’s permit includes an explicit requirement that the permittee sweep a minimum of 25,000 lane miles during the permit cycle.

Although the Draft Permits do require the use of “*integrated pest management principles to the extent practicable*,” this alone does not provide the information needed to determine the extent of pesticide and fertilizer contribution to water quality degradation. DEQ should incorporate more detailed reporting and contaminant management requirements to protect Oregon waterways.

Response: Street sweeping is a key best management practice in reducing pollution discharged from MS4’s. That said, the amount of lane miles alone does not make the best management practice more effective than targeting the timing of when the sweeping occurs (such as after certain events, when dry, before the wet season, etc). The permit clearly requires the co-/permittees to “*review and update existing procedures and schedules for inspection and maintenance of the MS4*,” including “*operation and maintenance of public streets, roads, and highways, and associated stormwater controls, ditches, and pipes*,” to describe or reference those procedures in the SWMP Document, and to maintain records of activities. The details reported to DEQ during this permit term will help evaluate future permit requirements.

Regarding integrated pest management, a primary element of integrated pest management is the gathering the information needed to determine the extent of the need for pesticide and fertilizer use prior to deployment. Recordkeeping, monitoring, and adaptive management are central to IPM, and involve minimal cost increase, which is why this element was included. After monitoring and considering information about a given pest, its biology, and environmental factors, co-/permittees can decide whether the pest can be tolerated or whether it is a problem that warrants control. If control is needed, this information also helps select the most effective management methods and the best time to use them. DEQ expects that the information gathering and monitoring elements and the shift in practice will yield improvement in water quality, as well as information that can be used by the Pesticide Stewardship Partnerships for larger, systemic evaluation of the impacts of pesticides and fertilizers on water quality.

Again, all interested parties will also have opportunity to provide input directly to co-/permittees during the required public review process prior to the submission of the SWMP Document(s) to DEQ.

84. **Comment from Portland Group on PER rationale for Schedule A.3.f:** Rationale is needed for the increased specificity in Pollution Prevention and Good Housekeeping for Municipal Operations conditions, particularly for the MS4 inspection, maintenance, and cleaning requirements.

Response: DEQ disagrees that insufficient rationale is provided. The PER is clear that the new requirements are intended to maximize debris and pollutant removal while improving recordkeeping for adaptive management purposes. No change was made in response to this comment.

85. **Comment on O&M for existing controls from WES:** The following requirement is in this section: “*For existing stormwater controls, the co-permittees must continue to maintain or develop and implement an operation and maintenance strategy for both co-permittee-owned controls and controls owned and operated by another entity discharging to the MS4.*” This requirement is beyond the authorized scope of the permit in that it implies and assumes that co-permittee have authority over another entity within its jurisdiction, which it may not have – indeed, rarely does so. The permit may not seek to impose jurisdiction over another entity that is not a party to the permit. Two example situations when this arises are where transportation facilities, such as ODOT highways, discharge stormwater runoff from storm systems controlled by ODOT, that co-permittees have no authority over. Another is where connected storm systems flow from one co-permittees’ jurisdiction to another, for example city-to-city or city-to-district connections. Co-permittees have no authority over how stormwater controls are managed in other jurisdictions, so cannot comply with this permit requirement to include another entities’ stormwater controls in their pollution prevention strategies. WES recommends the following permit language that excludes discharges from entities covered by their own MS4 permits, “*For existing stormwater controls, the permittee must continue to maintain or develop and implement an operation and maintenance strategy for both co-permittee-owned controls, and controls owned and operated by another **public entity** discharging to the **permittee’s MS4, excluding discharges from MS4-permitted entities.***”

And, from City of Salem: Schedule A.3.f.i. regarding an Operations and Maintenance Strategy for Existing Controls states the following: “*For existing stormwater controls, the permittee must continue to maintain or develop and implement an operation and maintenance strategy for both permittee-owned controls and controls owned and operated by another entity discharging to the MS4.*” This language is written very broadly and could be interpreted to mean that “another entity” refers to another permitted MS4 jurisdiction outside of Salem’s MS4 area such as Marion County or the Oregon Department of Transportation (ODOT), for example. The City would not have authority in these areas and should not be required to maintain, or have an operation and maintenance strategy for stormwater controls owned by these entities that are outside of Salem’s jurisdiction but are otherwise regulated as an MS4 by DEQ. The City requests that the draft permit language is modified as follows (see underline): “*For existing stormwater controls, the permittee must continue to maintain or develop and implement an operation and maintenance strategy for both permittee-owned controls and controls owned and operated by another **non-MS4 permitted public entity that are located within the MS4 permit area and discharging to the MS4.***”

And from Multnomah County: We understand that the phrase “*another entity*” is intended to refer to other permitted entities industrial facilities under NPDES permit within the permit area, per 40 CFR 122.26(a)(4). This phrase may be misinterpreted in the Multnomah County permit where the County stormwater system is tied to stormwater systems of neighboring cities of Wood Village, Fairview, and Troutdale. The County owns and maintains arterial roadways within these cities. These cities maintain their own NPDES stormwater permits, and are responsible for implementing their respective maintenance strategies. We appreciate your review of this language to make clear the intent to reference industrial facilities within the permit area.

Response: The language is intended to include public and private stormwater facilities operating within the MS4’s jurisdiction or discharging into the co-permittee’s MS4 and is not specifically focused on entities that require NPDES permit authorization of their own. Stormwater controls that discharge into the co-permittee’s MS4 can influence the pollutant loads discharged from this MS4. When these public or privately-owned stormwater controls are used to satisfy a permit requirement, the co-permittee must ensure that stormwater controls are operated and maintained to meet the site performance standard. With regard to facilities not owned by a co-permittee, the intent is not for the co-permittees to develop a strategy to manage O&M for those facilities, only for the co-permittees to require O&M agreements, requirements, and/or other processes, and conduct inspections to confirm proper management with the goal to ensure the MS4 is not being burdened with pollutant load from improperly managed facilities. If another entity discharging into the MS4 is covered by its own permit, that other permit regulates the entity. In the case of a

business park or restaurant parking lot or other private facility discharging into the MS4, where a separate NPDES permit is not required, the co-/permittee under this NPDES Phase I MS4 permit is required to verify that the discharge to the MS4 is appropriate. DEQ encourages co-/permittees to work collaboratively with adjacent MS4s and communities to ensure that stormwater controls discharging to the co-/permittee's MS4 are properly maintained. As indicated throughout the permit, PER and this document, properly functioning stormwater controls is an integral component to minimize the stormwater impact of urbanization on the receiving waterbodies.

For clarity and consistency with the recently updated Phase II MS4 permit, the permit language has been modified to read as follows:

*“For existing structural stormwater controls installed or permitted by the co-permittees prior to the effective date of this permit, the co-permittees must develop and implement an operation and maintenance strategy for both co-permittee-owned controls and controls owned and operated by **other non-MS4 and non-NPDES entities** discharging to the MS4.”*

86. **Comment from Portland Group and City of Wilsonville on inspection of co-/permittee owned catch basins and inlets:** Schedule A.3.f.ii requires permittees to “ensure inspection of the co-permittee owned or operated catch basins and inlets within the MS4 at least once every five years...” the same paragraph states “co-permittees may establish an inspection prioritization system for its catch basins and other structural MS4 elements, and establish alternate inspection frequency ever year...” This language provides contradicting time frames for catch basin inspection frequency, and does not effectively support large scale asset management practices that prioritize based on system performance issues and risk that includes a “triple bottom line” approach considering multiple environmental, equity, social, and economic factors. DEQ is requested to review the permit language for consistency, clarity, and flexibility.

Response: The intent of the language referenced was to allow flexibility according to the co-/permittee’s adaptive management evaluations. The text has been modified both to include in the first quoted section the words “*unless an alternate schedule is established in the SWMP Document and approved by DEQ,*” and in the second section as follows:

*“The co-permittees may establish an inspection prioritization system for its catch basins and other structural MS4 elements, and **adjust** inspection frequency **as needed for adaptive management**, provided the co-permittee describes all relevant factors it uses to prioritize its inspections to specific **geographic or land use** areas of its MS4 in the SWMP Document or another document cited/referenced therein.”*

87. **Comment from Lake Oswego on winter maintenance due date:** As currently written, the winter maintenance program metrics are to be reported prior to the SWMP approval. Since the winter maintenance program proposal is due with the SWMP, it will be a waste of resources to implement a program which may then need modification depending on DEQ’s conditions of approval. Proposed revision:

*“Winter maintenance activities must be included in the ~~second~~ **third** annual report or no later than after DEQ approval of the SWMP (due Nov 2022).”*

Response: DEQ modified the permit text similarly to the suggested wording, as follows: “*Winter Maintenance activities for streets and roads must be included as an element of the MS4 Annual Report required by this permit beginning in the second Annual Report or no later than upon DEQ’s approval of the SWMP Document.*”

Schedule A.3.g. Industrial and Commercial Facilities

88. **Comment on screening industrial and commercial facilities - from WES:** The following requirement is in this section: *“The screening must be done on a routine basis, and in no case may screening of new facilities take place less often than once a year.”* WES has never conducted annual or routine screening of our entire service area for potential 1200-Z/1200-A permitted facilities before. During the current permit term (permit renewed March 2012), we screened our entire service area once, and this was very resource-intensive. Screening routinely and no-less-than-annually is burdensome, excessive, and inappropriate. Administration of the 1200-Z/1200-A permit program is DEQ’s job, not ours. This proposed MS4 permit requirement should be revised so that screening of these industrial facilities shall be conducted once during the term of the renewed MS4 permit. If DEQ will not revise this proposed requirement, definitions for “routine screening” and “annual screening” must be provided so that we can, at a minimum, understand the meaning of this proposed requirement. Does no-less-than-annual screening mean that our entire MS4 must be screened at least once each year?

And, from Portland Group: A small but very important edit is needed in the industrial facility screening section. Language in this section states that screening “of” facilities must take place annually, rather than screening “for” facilities. This can be easily interpreted to mean that all facilities must be fully inspected/evaluated annually, as opposed to an annual scan to identify new facilities. We believe this is not DEQ’s intent and request the following edit to ensure that the language supports the intent as noted in the PER and to match the title header of this permit schedule: *“... and in no case may screening ~~of~~ for new facilities take place less often than once a year.”*

Response: DEQ disagrees that the requirement is excessive and inappropriate. The intent of this language is not to require co-/permittees to inspect all facilities annually, but to require that they conduct at least an annual search for new facilities that may require 1200-Z NPDES permit coverage. This is not intended to be a labor intensive process, but a review of available data, and may be conducted as a stand-alone activity at least annually, or it may be built into existing processes, for example as part of the establishment of business licensure, the granting of land use approvals, or the connection of water utilities for commercial and industrial uses. Such routine processes would not only assist in the flagging of sites which may require 1200-Z NPDES permit coverage, but could also bring to the co-/permittee’s attention sites which do not qualify for 1200-Z NPDES coverage but may require oversight or education regarding stormwater controls under the Strategy to Reduce Pollutants from Industrial and Commercial Facilities in Schedule A.3.g.ii, based on outdoor equipment storage, chemicals in use, NAICS codes of interest to the co-/permittee, or other factors. This can be done by cross-training staff to add a step to their work flow when dealing with new businesses as easily as it can be assigned to staff that inspect facilities for other purposes, and does not require site visits.

Sources of information for the screening exercise might include, where available, business licensure information or questionnaires sent to new businesses, a pretreatment program’s Industrial User Survey, NAICS codes, or other resources. Where these resources do not yet exist, they can be instituted at low cost. In the case of an entity like WES where jurisdiction overlaps with co-permittees, a shared responsibility agreement may be efficient.

The comment from Portland Group was correct in suggesting the misplaced “of,” as supported by the fact that the introductory paragraph for this section uses “for” in a similar wording. The wording has been corrected.

89. **Comment from WES on coordination with DEQ:** In regards to the following requirement in this section, *“Within 30 days after determining a facility may be subject to a DEQ-issued industrial stormwater permit, the co-permittees must notify the industrial facility and DEQ.”* Please add the following language after this proposed requirement: *“DEQ will then notify the co-permittee within 30 days that this referral has been*

received. When the decision about the facility's eligibility for a 1200-Z or 1200-A permit has been made, DEQ shall notify the co-permittee within 30 days of the date of the decision. If a 1200-Z or 1200-A permit has been issued to a facility referred to DEQ by the co-permittee, or if a No Exposure Certification waiver has been applied for by the facility and approved by DEQ, DEQ will provide a copy of the Permit or the waiver to the co-permittee within 30 days of issuance or approval."

Response: DEQ makes every effort to provide timely responses to all co-/permittee notifications, but will not commit to a 30 day limitation on its review and response as requested. DEQ's new electronic data management system, Your DEQ Online, will allow all interested to track stormwater permit applications, review stormwater pollution control plans, No Exposure Certifications and other related documents. No change was made in response to this comment.

90. **Comments on records requirement, from WES:** The following proposed requirement is in this section: *"The co-permittees must maintain records of activities conducted to meet the requirements of the Commercial & Industrial Facilities program requirements and include a descriptive summary of their activities in the corresponding Annual Report, as well as relevant metrics or tracking measures. Each annual report should include a list of entities referred to DEQ based on co-permittee screening activities, a list of categories of facilities inspected, and an overview of the results of inspections."* Because this proposed requirement directly pertains to MS4 Permit annual reports, please also mention this proposed requirement in Schedule B(3)(j), which is titled MS4 *"Annual Report... Additional Annual Report requirements found in these sections of the permit shall also be complied with."*

Response: The requirement has been added to the list of additional annual reporting requirements in the indicated section.

91. **Comment on public review of Industrial/Commercial Strategy document, from Portland Group:** DEQ is requiring the Industrial/Commercial Strategy to be posted for public comment before incorporating it into the SWMP, which is then posted for public comment. This requirement is duplicative, incongruent with all other Schedule A.3 program elements, and unsupported by any justification in the PER. The industrial program strategy will be made available to the public via the SWMP, so the unnecessary requirement should be removed as such:

"The Strategy must be posted on the co-permittees' websites for public comment for a minimum of 30 days prior to finalization and incorporation into the SWMP Document, and include, at a minimum..."

And, from Gresham Group: We will seek the input of representative community stakeholders when creating an updated list of stormwater controls and program to include in the SWMP as described in the PER. The SWMP is already required to be released for public comment and therefore there does not seem to be additional value in this and request that it be removed.

Response: The intent of this requirement is not to be duplicative. The Industrial/Commercial Strategy document is an important element that DEQ has determined should invite public input. However, because the deadline was changed to not match the SWMP Document so that co-/permittees have more time to focus their efforts, and because elements of the SWMP Document, including the Industrial/Commercial Strategy, may be referred to or described in brief with links or reference to external documentation rather than contained entirely within the SWMP Document, it was listed as explicitly requiring public review to reduce potential for misunderstanding or being missed by reviewers or public commenters. If the Strategy is to be incorporated wholly within the SWMP Document, it does not require separate review if it was included when the SWMP Document was posted for comment. DEQ edited this condition for clarity.

Schedule A.3.h. Infrastructure Retrofit and Hydromodification Assessment Update

92. **Comment from NEDC et al. on infrastructure retrofits:** The Draft Permits still do not require a specific number of retrofit projects be completed during the permit term. This is completely inconsistent with the “maximum extent practicable” requirement of the CWA’s MS4 program. The CWA is a technology-forcing statute; DEQ’s proposal turns the federally approved MS4 program on its head. We encourage DEQ to comply with the CWA by adding to this section, at a minimum, an additional number of projects to be completed. Permit language such as “continue making progress” is not strong enough, lacks in any kind of specificity or benchmark goals, and will allow the pace of progress to slow considerably. This only creates a race to the bottom, which again is contrary to the primary purposes and goals of the CWA. As DEQ knows, legacy stormwater issues are a major water quality problem in Oregon, and as our state’s population increases our issues will only magnify during the next permit term. Therefore, it is imperative that we continue to make more progress retrofitting stormwater problems at a more robust pace, not by riding the brakes on the permitting program’s largest permittees. DEQ must take advantage of the unique opportunity to make this happen in the Phase I Individual Permits.

Response: DEQ disagrees that requiring a minimum number of infrastructure projects is necessary to avoid a “race to the bottom.” The previous iteration of the permits did require specific infrastructure projects of the co-/permittees, but also required the development of a Stormwater Retrofit Strategy (or Plan), which has guided the co-/permittees since, and has been informed by adaptive management and changes in technology. The proposed permit language does not require a minimum number of projects or list specific projects that must be completed, but it does require co-/permittees to not only revisit their strategy and update DEQ on its use, but also to describe progress in implementation of priority projects listed in that Strategy/Plan document. This information will assist DEQ in developing permit requirements for retrofits and Capital Improvement Projects in future permits.

Schedule B.1 Monitoring Program

93. **Comment on Monitoring Objectives from Multnomah County:** (Table 2) in Section 1.b. includes two monitoring types: instream monitoring and macroinvertebrate monitoring. The monitoring objectives in Section 1.a. refer to BMP effectiveness and storm water characterization, which are consistent with previous permit cycle iterations of the NPDES stormwater permit, but do not reflect the custom monitoring requirements in this draft permit. We would appreciate a review of these monitoring objectives to align with the monitoring requirement determined in Table 2 with the monitoring objectives.

Response: The co-/permittee’s must design a monitoring plan to meet both the specific minimum requirements listed in the Table, and the general objectives listed in Schedule B.1.b. The two are not in conflict because a monitoring plan may be developed that meets the table requirements by monitoring the required number of outfalls, and studies BMP effectiveness by collecting water at a BMP’s inlet , or by grouping sampling locations for comparison. Co-/permittees are also encouraged to conduct their own studies beyond the minimum requirements of the table to learn more about their stormwater and ways to manage it, and to participate in larger studies or collaborative efforts with outside entities as described in Schedule B.1.e, both strategies that would allow pursuit of the larger objectives listed in Schedule B.1.a. No change was made in response to this comment.

94. **Comment from NEDC et al. on adequacy of monitoring:** The Conservation Groups would like an explanation regarding how such a small amount of monitoring can reasonably demonstrate the permittees are meeting the goals of the CWA and the MS4 program. Information collected from sampling is essential to an accurate assessment of municipalities' stormwater impacts on water quality, and the overall effectiveness of DEQ's MS4 permitting strategy.

Response: As acknowledged by the National Research Council⁴ (NRC), because of a long-standing effort to collect and analyze monitoring data from MS4s nationwide, "the quality of stormwater from urbanized areas is well characterized." Combining results from many thousands of storm events, systematically compiled and widely accessible, "it is now possible to accurately estimate stormwater pollutant concentrations from various land uses." This is why one expanded requirement of this permit is mapping and characterization of the catchment areas of municipal outfalls, to better identify where benefits to receiving water quality can be maximized by infrastructure or BMP improvements. Monitoring by itself does not improve water quality, and urban streams are subject to a multitude of impacts caused by altered hydrology, altered habitat, and polluted runoff. Focusing on only one of these factors is not an effective management strategy. For example, even without noticeably elevated pollutant concentrations in receiving waters, alterations in their hydrologic regimes are associated with impaired biological condition.

While pollutant load by land use type is well characterized in general, there is extreme variability in urban stormwater pollutant loading both within a single storm across hours of discharge, and between storms. This variability is due to several factors, including antecedent dry period, fluctuations in storm intensity, and activities by the public over which the co-/permittees have no control. Continuous, flow-weighted sampling for every storm at every outfall would be cost-prohibitive, well beyond the limits of what is practicable, and would likely waste resources better spent on programs aimed at reducing discharge of stormwater or quantifying program effectiveness for adaptive management.

There is a direct relationship between land cover and the biological condition of downstream receiving waters. The NRC's comprehensive review of scientific literature on urban stormwater has established that "flow and related parameters like impervious cover should be considered for use as proxies for stormwater pollutant loading." These analogs for the traditional focus on the discharge of pollutants have great potential as a stormwater management tool because they provide specific and measurable targets, while at the same time they focus attention on water degradation resulting from the increased volume as well as increased pollutant loadings in stormwater runoff. This is the reason for the permit's emphasis on stormwater retention onsite under the Post-Construction measures in Schedule A.3.e, for the continuing focus toward retrofits and Capital Improvement Projects, and for the emphasis on better characterization of stormwater outfall catchment areas.

Emphasizing the monitoring of highly variable discharges for which general chemical constituents and trends are already known cannot come at the expense of strategies known to be effective at pollution reduction. Monitoring will not reduce pollutant loading but reducing pollution in discharges and reducing discharges overall will. The monitoring requirements in the permit, along with the submittals required in Schedule D, will continue to provide adequate data for understanding of the MS4 Phase I discharges in Oregon.

95. **Comment on timing of monitoring plan from City of Lake Oswego:** The proposed monitoring plan must be provided with the first annual report but requires DEQ approval. It would be a waste of resources to implement a program prior to receiving DEQ's approval or conditions of approval.

Proposed revision: "*The environmental monitoring program must ~~incorporate~~ include the requirements*

⁴ National Research Council (NRC). 2009. Urban Stormwater Management in the United States. Washington, DC: The National Academies Press. <https://doi.org/10.17226/12465>.

...no later than ~~with the first annual report~~ 60 days after DEQ approval.”

And, from Gresham Group: Given that this is the earliest deadline in the permit, perhaps DEQ could provide that “Monitoring plan must be updated and submitted to DEQ within [8?] months of the permit issuance, in the event that the issuance is delayed.

And, from City of Milwaukie and WES: The [Clackamas Group] co-permittees must update their monitoring plan by November 1, 2021. Given the extensive coordination that needs to be conducted by co-permittees in accordance with the Comprehensive Clackamas County Stormwater Monitoring Plan, this time frame would be highly challenging, especially if the permit is issued any time after January, 2021. The City requests that DEQ allow for additional time to update the comprehensive monitoring plan with an allowance for a minimum of one year from the date of permit issuance.

Response: DEQ has made a change for clarity on the timing of DEQ approval vs implementation/start date, similar to the language proposed by the City of Lake Oswego. DEQ has also modified the due date to accommodate the time needed after permit issuance. Co-/permittees will have around a year to submit the monitoring plan.

96. **Comment from Yakama Nation Fisheries on elimination of analytes after consistent non-detection:** Schedule B Table 2 includes a list of Special Conditions that allows eliminating analytes from routine monitoring if the analyte was non-detect in a specified number of monitoring events in the current or previous permit term. Please include a list identifying which of these analytes had sufficient non-detect results in the previous permit term and are therefore no longer required. Please explain what happens in the next term after a term in which the analyte was not monitored at all- is that analyte reinstated as a requirement? We recommend that analytes not be eliminated permanently. At a minimum, there should be a reduced frequency for sampling.

Response: The special condition in the table specifies that analytes may be eliminated from routine monitoring after consistent non-detection. This does not mean that DEQ cannot require monitoring for it in the future based on new information regarding specific streams or urban stormwater in Oregon, or in the specific community or co-/permittee jurisdiction, as needed. At this time, no analytes have specifically been identified as eliminated, though DEQ will work with the co-/permittees to determine if or where this condition applies. DEQ continues to evaluate trends in water quality statewide through a variety of programs and will reassess this special condition and the analytes affected upon permit renewal. No change was made in response to this comment.

97. **Comment on elimination of analytes after consistent non-detection from Portland Group:** There is no clear rationale for requiring all but 2 of the 20 instream events to be completed before allowing elimination of analytes for which there have been non-detects 90% of the time. Proposed revision – “If after 9-18 Instream Monitoring events a pollutant parameter analyte value is reported as a non-detect greater than 90% of the samples, or was during the previous permit term, the pollutant parameter analyte may be eliminated from routine monitoring.”

And, from City of Lake Oswego: Please clarify in the PER whether the 90% ND occurrence must occur at all sites before an analyte can be eliminated or whether it can be eliminated from 1 site at a time. This is especially important for expensive lab analyses such as pesticides and mercury.

Response: The wording of the special condition makes clear that monitoring under the previous permit term may count toward the nondetection events, so it is not necessarily the case that all but 2 of 20 instream events must be completed before an analyte may be eliminated. No change was made in response to the comment from Portland Group. In response to Lake Oswego’s comment, the text was modified to clarify

that the possible elimination of analytes is intended to be location specific.

98. **Comment on “field condition assessment” special condition for monitoring of bacteria, from Milwaukie, Lake Oswego, Oak Lodge Water Services District, City of Gladstone, Oregon City, West Linn, WES, Wilsonville, Eugene, and Salem:** This requirement has limited benefit, considering the contributing drainage area and/or size of many of the outfalls associated with the City’s stormwater monitoring locations. Additionally, this would add a significant amount of resources to complete for each sampling event and the PER is silent on the purpose and value of such assessment in addition to what specifically would be expected. The City requests that DEQ remove reference to conducting a field condition assessment in conjunction with stormwater sampling for bacteria.

Response: The intent of the draft language was to include in field notes and discussions of monitoring results any known facts likely to be influencing the data, but given the noted variability in size of catchment areas and land uses at municipal outfalls, it does appear its utility would be limited. The field condition assessment requirement has been removed from the special conditions.

99. **Comment on mercury monitoring methods footnote from Gresham Group:** Would like clarity in footnote 12 that this applies to stormwater samples and that both the sample collection and analytical methods have the possibility of other methods, if approved by DEQ. For example, the lab that processes our samples has indicated that method 200.8 is more accurate for total Hg in samples with high TSS (such as stormwater samples) because the digestion method allows for more of it to unbind from the sediment. Therefore, since most of our stormwater samples are above the reporting limit (~97% of samples are quantifiable), it is likely more accurate to use method 200.8.

And, from City of Milwaukie and Oak Lodge Water Services District: Given typical mercury concentrations in urban runoff, EPA method 200.8 should be allowable. This method has a quantitation limit low enough to yield measurable results in samples. It is also considered to be more accurate for total Hg in samples with high TSS (such as stormwater samples) because the digestion method allows for more of the mercury to unbind from the sediment and get measured. In addition, there is a cost differential between these two methods with method 200.8 providing a significant savings when compared to method 1631E (i.e., approximately \$20.00 per sample as opposed to \$60.00 per sample). Similar to the ultra clean sampling protocol, we request that another method may be approved by DEQ per Schedule B.1.d.iii.

And, from WES: Please remove the proposed requirement to obtain permission from DEQ to use a sample collection method other than EPA Method 1669 ultra clean sampling protocol. The Public Comment draft MS4 Permit says Method 1669 is to be used to collect samples, unless another method is approved by DEQ... We believe we shouldn’t have to request approval from DEQ for the use of another sample collection method, because water quality data results obtained with standard sample collection methods have been comparable, and the use of a standard sample collection method also reduces the generation of solid waste (i.e., elimination of Tyvek suits). [...] Total Recoverable Mercury by EPA Method 1631E using EPA 1669 sampling methodology will add a significant burden for the co-permittees. While DEQ acknowledges alternative procedures can be proposed, there will likely be widespread labor issues encountered by co-permittees in planning to have two staff available for each stormwater and instream monitoring event for a single parameter. A suggestion is DEQ proposes a single-person Method 1669 modification a priori to offer a consistent methodology all co-permittees can use to provide data of known quality while providing a less laborious option to address this single pollutant. Furthermore, the 1631E methods (QL: 0.5 ng/L) carry a premium over the alternative EPA 245.1 CVAA methodology (QL: 0.2 ug/L), adding approximately \$30/sample and \$2,880/permit year. For reference, the added mercury parameter alone, with the 1631E methodology, will add \$60/sample and \$5,760/permit year in analytical costs.

Response: Footnote 12 applies to all monitoring for mercury conducted to satisfy requirements of the

Monitoring Requirements Table. As specified in the referenced Schedule B.1.d.iii, alternative methods may be used with DEQ approval. The co-/permittees must describe and provide rationale for their methods and procedures for monitoring and analysis in the monitoring plan to be submitted for DEQ's approval. No change has been made in response to this comment.

100. **Comments on special condition for pesticide monitoring from WES:** Does this proposed requirement only apply to stormwater quality monitoring? Or does it also apply to instream water quality monitoring?

Response: As indicated in the table above the special condition, yes, this pesticide related requirement is only for where pesticide monitoring is required, which is in stormwater. This does not preclude the co/permittees from similarly monitoring receiving waters for purposes of contributing to the Integrated Report, conducting studies of interest to their own jurisdiction or community, or participating with or contributing to studies by other groups like the Pesticide Stewardship Partnerships. It also does not imply exemption from TMDL monitoring if a TMDL requires instream monitoring for specific pesticides or other pollutants that impair a waterbody.

101. **Comment from WES on special condition for pesticide monitoring:** Please include the Chemical Abstract Service (CAS) number for each pesticide as they often have synonyms and common names which differ from their IUPAC names.

Response: The names of the pesticides listed in the permit are common use names intentionally. If there are specific questions about the monitoring requirements, DEQ will respond them. No change was made in response to this comment.

102. **Comment from WES on special condition for pesticide monitoring:** Permittees who hold other Phase I MS4 Permits in Oregon (City of Salem, for example) which has a similar pesticide monitoring requirement may choose to partner with one or more co-permittees on the Clackamas County group's permit on a larger pesticide monitoring study. Please consider adding a sentence here which authorizes broader cooperation between communities with different Phase I MS4 Permits.

Response: The requested addition is unnecessary, as Schedule B.1.e already states that "Each co-permittee may utilize data collected by another co-permittee, a third party, or in another co-permittee's jurisdiction to meet a permit condition in Table 2 provided the co-permittee establishes an agreement prior to conducting coordinated environmental monitoring." Text has been added to the PER to clarify that DEQ "encourages co-/permittees to engage in larger coordinated efforts to conduct studies and share data with entities not subject to the permit, whether those entities have MS4 permits of their own or not."

103. **Comment from Yakama Nation Fisheries on legacy pesticide monitoring:** The Special Conditions list mentions legacy pesticide monitoring for streams where an established TMDL requires it. Please cite the source where the reader can find which streams this applies to. Please also identify where updates to that list will be found if any updates are made during the permit period.

Response: A list of applicable TMDLS has been added to each permit, and the TMDLS refer to the individual waterbodies and their impairments. DEQ's website on TMDLS (available at <https://www.oregon.gov/deq/wq/tmdls/Pages/default.aspx>) lists TMDLS by basin, references implementation guidelines and tools, and includes a list of Basin Coordinators who may be contacted with questions or requests for updates.

104. **Comment on monitoring plan timing from City of Milwaukie:** The co-permittees must update their monitoring plan by November 1, 2021. Given the extensive coordination that needs to be conducted by co-permittees in accordance with the Comprehensive Clackamas County Stormwater Monitoring Plan, this time frame would be highly challenging, especially if the permit is issued any time after January, 2021. The City

requests that DEQ allow for additional time to update the comprehensive monitoring plan with an allowance for a minimum of one year from the date of permit issuance.

And, from Gresham Group: Given that this is the earliest deadline in the permit, perhaps DEQ could provide that “Monitoring plan must be updated and submitted to DEQ within [8?] months of the permit issuance, in the event that the issuance is delayed.

And, from WES: Depending on when the permit is issued and effective, this deadline is far too soon for co-permittees to do an effective job of updating monitoring plans, particularly in the case of Clackamas co-permittees who implement a coordinated joint-monitoring plan. Incorporating new and complicated mercury and pesticide monitoring will take additional analysis and planning. Furthermore, the requirement for public involvement and a minimum 30-day comment period compresses the timeline even more. DEQ should consider editing the language to read, “The co-permittees must update their monitoring plan within one (1) year of the effective date of the permit, and begin implementation upon notification of approval by DEQ.” If DEQ chooses to keep a date in the permit, then it should be extended out a year to November 1, 2022.

Response: DEQ moved the submission date to late 2022 as requested.

105. **Comment on 14-day spacing of instream monitoring events, from City of Salem:** This requirement is limiting for no apparent reason. Depending on the question you are trying to answer with the data, the right sampling opportunity can easily present itself more than once in a 14 day period. The proposed 1200-Z Industrial Stormwater Discharge Permit revised the language from 14 days to 72 hours between sampling events. Is there a reason why that would not/could not apply here?

Response: DEQ modified the requirement as requested.

106. **Comment on monitoring for applicable TMDLs from WES:** Schedule B(1)(d), titled “Sampling and Analysis”, includes the following sentence: “The co-permittees must continue to exercise due diligence in collecting and analyzing all environmental monitoring samples required by this permit, as well as conduct any monitoring required by applicable TMDLs.” The portion of the sentence which says “...as well as any monitoring required by applicable TMDLs” needs to be removed from the draft permit because any monitoring required by an applicable TMDL needs to be specifically included in the permit, and cannot be referenced in this open-ended way. An alternative way to address this would be to state that after an applicable TMDL has been written and issued as Order by DEQ, and subsequently approved by EPA, the DEQ can choose to modify or renew this MS4 Permit to include additional MS4 Permit monitoring requirements.

Response: DEQ removed the text as requested.

107. **Comment on antecedent dry period requirement for stormwater monitoring, from WES:** Schedule B(1)(d)(ii)(B) specifies that an antecedent dry period shall be present when possible for stormwater quality monitoring. We ask that this be removed because it obligates us to monitor the very first volume of runoff from all monitored storms, because we use a time-based method of sample collection for composite-able pollutants. Another option is to add permit language which says when a storm arrives in the area following an antecedent dry period, the permittee can choose to begin sample collection 12-18 or more hours after stormwater runoff begins to be present. The bottom line is that revised permit language should be used in the renewed permit which allows permittees to also collect stormwater samples during the middle and final portions of storm events. Other meteorological conditions can also yield high or higher pollutant loads and concentrations, such as during periods of heavy rainfall (1/3rd inch or more/hour, for example). For rainfall in the Willamette Valley, true “first flush” runoff following a 24 hour or longer antecedent dry period often produces lower pollutant levels during the initial phase of the storm, given the small amount of light rain which often falls at the beginning of storm events. In WES’ experience, the highest pollutant levels in

stormwater in urban areas in the Northern Willamette Valley are often present during non-“first flush” conditions, such as when the rainfall intensity is high. The current permit requirement could create a bias towards lower measured levels of pollution in our data.

And, from City of Eugene: We propose an antecedent dry period of 12 hours to reduce the number of cancelled sampling events. Setting up the equipment to collect storm-event runoff is resource intensive and time consuming. Quite often, 0.1-inch of precipitation will not produce any runoff whatsoever – a heavy fog can produce 0.1-inch of measured precipitation. Reducing the time period to 12 hours will greatly improve our ability to collect representative storm events.

Response: The requirement for an antecedent dry period prior to a storm that may be used as a sampling event does not dictate when in a given storm event the co-/permittees may conduct their sampling for that storm. Thus, WES’ concern that the very beginning of a storm’s generated runoff must be what is captured is inaccurate. If a co-/permittee decides that their sampling would be more meaningful 12-18 hours into a storm event, the procedure should be written into their monitoring plan with the rationale explaining it. Requiring that explicitly in the permit would be limiting to other co-/permittees that may choose to sample with other procedures, and one of the major goals of this permit revision has been to increase flexibility. No modification is necessary to allow the procedure described by WES. However, the permit language has been modified to meet the City of Eugene’s request (a 12-hour antecedent dry period), to allow greater flexibility.

108. **Comment on monitoring plan collaboration by WES:** Schedule B(1)(c), titled “Monitoring Plan”, would be improved if the following sentence were to be added to the first paragraph: “The plan may be prepared by a collective group of co-permittees and/or by individual co-permittees.”

Response: Schedule B.1.c has been modified to include text similar to the proposed sentence, and referencing Schedule B.1.e’s passage on coordinated monitoring.

109. **Comment on conditions in Schedule B.1.c.v, from Milwaukie:** This language includes an inconsistency which will lead to confusion in that in the first sentence, the permit language states that the plan may only be modified if conditions A and B are met, and in the subsequent listing of conditions, it states that the conditions that must be implemented are A or B. The City requests that, for clarity, the first sentence is modified to say: “The monitoring plan may be modified without prior DEQ approval if one of the following conditions (A) or (B) are met.”

And, from Lake Oswego: In the specified conditions, an “or” is used. Using “or” instead of “and” is more logical given that one condition references other permits and the other condition references common permit language.

And, from Yakama Nation Fisheries: Schedule B.1.c.v lists two conditions for when monitoring plans may be modified without DEQ approval. The first sentence of this paragraph states that both of these conditions are required, but after condition A, the word “or” implies that only one of the two conditions would need to be met. Please change “or” to “and”.

Response: This was a typo, which has been corrected. The “or” was the intended wording, as it was used in a similar clause in the previous permit, and the text has been corrected.

110. **Comment on approval of the monitoring plan from DEQ in Schedule B.1.c.v, from WES:** Please add a statement here which says, for conditions not covered by (A) and (B) in this section, if the co-permittees provide DEQ with the proposed modification to the monitoring plan, and written approval from DEQ isn’t received within 60 days, the proposed modified monitoring plan is automatically approved and may be implemented.

And, from City of Salem: We understand that DEQ intends to review and approve proposed changes in a reasonable amount of time, but having never received verbal or written approval of changes proposed in the past, it was helpful having language that allowed for approval of proposed changes within some period of time. Request inclusion of the following language in our previous/current permit: “If the Department does not respond to the permittee within 30 days, the permittee may proceed with implementation of the proposed modification without written approval.”

Response: It is not appropriate to assume approval is granted without actual approval or response. DEQ prioritizes feedback to regulated entities and intends to provide timely responses to all required submittals. No change was made in response to this comment.

Schedule B.3 Annual Report

111. **Comment on timing of first annual reporting period from City of Portland:** Please modify the start of the first-year reporting period from “Permit Issuance” to “July 1, 2020.” This is our standard annual reporting period and we cannot easily adjust our data tracking systems to a shortened timeframe. The language, as written, also results in a skewed data record that impedes our adaptive management review.

Response: The change has been made as requested, for consistency with the previous permit.

112. **Comment on annual report requirements for Schedule A.1.b.iii, from WES:** Please include the proposed requirement, “The details of all corrective actions implemented associated with Schedule A.1.b.iii must be included in the subsequent annual report.” In the requirements for Schedule B(3), titled “Annual Report”

Response: A change has been made similar to the requested language, as follows: “*The details of all corrective actions implemented associated with Schedule A.1.b.iii during the reporting year.*”

113. **Comment on reporting of enforcement actions in Schedule B.3.e, from WES:** Schedule B(3)(e) says the following item is needed in each annual report: “A summary describing the number and nature of enforcement actions, inspections, and public education programs, including results of ongoing field screening and follow-up activities related to illicit discharges.” This requirement is somewhat vague and confusing. Please rewrite it to clarify what DEQ wants to know about our IDDE program in each annual report.

Response: The language of concern is identical to a requirement in the previous permit and has not proven problematic in annual reporting up to this point. The intent is to require that enforcement actions, whether conducted under the Construction program or under the IDDE program or programs developed under requirements elsewhere in the permit, are summarized for DEQ and the public. Similarly, inspections are to be conducted for various types of facilities and activities under multiple programs, and summaries should be included with the annual report. Public education efforts related to IDDE may be broadly distributed to households under either the Public Outreach & Education requirements or may be targeted to specific business communities under the Industrial/Commercial strategy as follow up to inspections or in response to IDDE findings, and these efforts should also be summarized. Field screening and follow-up on illicit discharges should also be summarized. This is not a new requirement, and no change has been made in response to this comment.

114. **Comment on additional items to include in annual reporting requirement text, from WES:** Schedule A(3)(g)(iv) – “Industrial and Commercial Facilities/Tracking and Assessment”: The following proposed requirement is in this section: *“The co-permittees must maintain records of activities conducted to meet the requirements of the Commercial & Industrial Facilities program requirements and include a descriptive summary of their activities in the corresponding Annual Report, as well as relevant metrics or tracking measures. Each annual report should include a list of entities referred to DEQ based on co-permittee screening activities, a list of categories of facilities inspected, and an overview of the results of inspections.”* Because this proposed requirement directly pertains to MS4 Permit annual reports, please also mention this proposed requirement in Schedule B(3)(j), which is titled MS4 *“Annual Report... Additional Annual Report requirements found in these sections of the permit shall also be complied with”*.

And, Schedule A(3)(h)(i) – “Infrastructure Retrofit...”: The following proposed requirement is in this section: *“The co-permittees are required to include in the third Annual Report of this permit term, an assessment of any outcomes related to the Hydromodification Assessment and Stormwater Retrofit Strategy reports. This update may be an appendix or a subsection of the report, and must include, at a minimum...”*. Because this proposed requirement directly pertains to MS4 Permit annual reports, please also mention this proposed requirement in Schedule B(3)(j), which is titled MS4 *“Annual Report... Additional Annual Report requirements found in these sections of the permit shall also be complied with”*.

Response: DEQ added to the list in Schedule B.3 to include both items the commenter requested for inclusion.

115. **Comment on Education & Outreach Summary from Portland Group:** ...the term "lessons learned" is vague and doesn't necessarily address program adaptive management. It's unclear if this language is referring to lessons learned by the co-permittees or the priority audiences. Additionally, the requirement to provide “enhancements to occur in the following year” is infeasible, in part, due to the mismatch in timing between the Nov. 1 reporting deadline and summer/school educational activities that will have been well underway by that time. Also, our education and outreach activities will be described and posted in the SWMP, so this verbiage is duplicative and burdensome. The periodic review and assessment requirement in the permit along with the annual reporting of program metrics sufficiently supports our adaptive management process. Please remove the problematic language as noted here: *“A summary of education & outreach activities, their measurable goals, and any relevant assessment of those activities. This should include lessons learned and planned adaptive management or other program enhancements to occur in the following year.”*

Response: The permit language has been modified in response to this comment, largely as requested, with slight modification as follows: *“A summary of education & outreach activities, progress toward or achievement of measurable goals, and any relevant assessment of those activities. This should include planned adaptive management or other program enhancements to occur in the following years.”*

Schedule B.4 MS4 Permit Renewal Application Package

116. **Comment on permit renewal application timing, from Lake Oswego:** The renewal package is due at the same time as the November 2024 report. To provide an annual report and a permit renewal package at the same time will require significant time and resources. The City requests that DEQ clarify, either in the permit or the PER, whether the renewal package is a substitution for the annual report or whether it is a separate submittal. If it is a separate submittal and will be used to determine the requirements of a future permit, the City respectfully requests that the deadline be changed to the standard permit language of 180 days before the permit expiration date.

And, from Gresham Group: Having the permit renewal due with the 4th annual report (Nov, 2024) means that permittees will be planning, preparing and submitting the permit renewal package almost a year sooner than usual. Our request would be that DEQ begin drafting its next permit update in years three and four and provide concepts before the permit renewal submittal. We would further ask that the submittal not be due more than 180 days prior to permit expiration so that we can remain on target to receive our next permit in early 2026.

And, from ACWA: This section of the permit requires the permit renewal package to be submitted with the fourth year annual report. This timeframe is much earlier than 180 days prior to permit expiration as required in all of our previous permits and as stipulated in typical General Conditions sections of NPDES permits (see Schedule F, Section A.4. Duty to Reapply). This 180-day timeline is also specified in 40 CFR 122.21 (d). If this draft permit is issued in January of 2021, it will expire January 2026 and the permit renewal package will then be due over a year prior to permit expiration in November, 2024. At this point we will have been operating under our new SWMP document for two years or less depending on DEQ approval and under the updated postconstruction program for one year or less. Additional time for the permit renewal package will allow for more run time with our new programs before considering a new focus. ACWA requests that DEQ change to this language to reflect our previous requirement of submitting the permit renewal application 180 days prior to permit expiration.

And from City of Eugene: The draft permit requires the permit renewal package to be submitted with the fourth-year annual report. [...] We request sticking with the 180 day prior to expiration timeline for the permit renewal. Additional time for the permit renewal package will allow for more run time with our new programs before considering a new focus, and the permit renewal will represent a fresher view toward the future than if it was submitted an entire year prior to expiration.

Response: DEQ intends to work with permittees throughout the permit term to identify permit improvement concepts and develop a framework for next steps so that permits are timely renewed and do not require administrative extension. Tying the renewal application to the fourth-year annual report was based on guidance from EPA suggesting that the two efforts may effectively be consolidated into one report or document, and it should be noted that the statute specifies a renewal application may be due no less than 180 days prior to expiration. Per OAR [340-045-0030](#):

“(1) Any person wishing to obtain a new or renewal NPDES or WPCF permit from DEQ must submit a written application at least 180 days before an NPDES permit is needed or at least 60 days before a WPCF permit is needed on a form DEQ provides.” [emphasis added]

However, DEQ modified the renewal application due date to match the 180 days of the previous permit.

117. **Comment on inclusion of a monitoring objectives matrix in the renewal application, from Gresham Group:** The current permit allows for proposed changes to be made to the monitoring plan annually. While there may be discussions with DEQ about changes that will occur in the following permit, does it make more sense to submit a monitoring plan that tries to address what we think we will be in the next permit, or to just add the changes to the monitoring plan that are required to meet whatever requirements are in the permit once issued. Suggest deleting this from the permit renewal application requirements.

Response: The intent is not for the co-/permittees to attempt to create a monitoring plan that addresses requirements that have not yet been made, but rather to suggest objectives to DEQ for incorporation into the next permit, using a simplified objectives matrix and narrative, as a step in the ongoing discussions with DEQ about what monitoring could or should look like in the next permit term. No changes have been made in response to this comment.

118. **Comment on fiscal evaluation in renewal application, from Gresham Group:** The fiscal evaluation is part of the MEP process done when the SWMP is created. Suggest deleting this from the permit renewal application requirements.

Response: As noted in other comments, there is unpredictability in budgets in the era of global warming, wildfires, and COVID-19. The fiscal evaluation required in the renewal application, which will inform permit writing for renewal, is separate from the requirement that co-/permittees demonstrate in the SWMP Document that they can provide adequate finances, staff, equipment and other support capabilities to implement the control measures and other requirements outlined in the permit once it has been issued. This is not a duplicate requirement. No change was made in response to this comment.

119. **Comment on renewal application’s requirement for updated estimate of pollutant loads, from WES:** In Schedule B(4), the draft permit says: “*An updated estimate of total annual stormwater pollutant loads for applicable TMDL pollutants or applicable surrogate parameters, and the following pollutant parameters: BOD, COD, nitrate, total phosphorus, dissolved phosphorus, cadmium, copper, lead and zinc. The estimates must be accompanied by a description of the procedures for estimating pollutant loads and concentrations, including any modeling, data analysis and calculation method*”. We haven’t monitored stormwater for cadmium and COD in many years. Please remove those pollutants from this requirement. Or if they will not be removed, please explain in the PER how DEQ expects us to determine the average current pollutant concentrations to use for these pollutants. Will we be required to start monitoring stormwater for these pollutants so that we’ll have the data we’ll need to generate these estimated pollutant loads?

And, from City of Salem: As part of our stormwater monitoring, the City is not required to collect and analyze samples for BOD, COD, dissolved phosphorus or cadmium. Therefore, we do not see the value or use in providing updated estimates of annual stormwater pollutant loads for these parameters. The City requests that BOD, COD dissolved phosphorus and cadmium are removed from the requirement to update estimates of total annual pollutant loads for the permit renewal application.

And, from City of Lake Oswego: In Footnote 1 of Table 3, it says that BOD5 is only included in monitoring requirements if the jurisdiction has a stream where it has an established TMDL for BOD5. COD and cadmium are not required monitoring parameters and no stream in the City’s jurisdiction is impaired for these 2 parameters. Ortho-phosphate is the parameter generally associated with plant/algae growth and is part of the monitoring requirements in Sched B, Table 3. The City would like clarification that submission of the reports required in Sched D.2 and Sched D.3, which are also due in November 2024, will satisfy the requirements of this paragraph. Proposed revision: *An updated estimate of...applicable TMDL pollutants or applicable surrogate parameters, and the following pollutant parameters: BOD, COD, nitrate, total phosphorus, ortho-phosphate, dissolved phosphorus, cadmium, copper, lead and zinc.*

And, from City of Milwaukie: As part of our stormwater monitoring, we do not collect and analyze samples for BOD, COD, or cadmium. Therefore, the value or use in providing updated estimates of annual stormwater pollutant loads for these parameters is unknown. The City requests that BOD, COD and cadmium are removed from the requirement to update estimates of total annual pollutant loads.

Response: DEQ modified the permit text in response to these comments. The permit no longer requires estimates of BOD, COD, dissolved phosphorous, or cadmium, and ortho-phosphorous has been added to the list in place of dissolved phosphorous.

Schedule D Special Conditions

120. **Comment on due date for Schedule D items, from Portland Group:** Please remove the requirement to submit Schedule D items with the 4th-year annual report. We object to this proposed deadline and prefer Schedule D items to be included as part of the permit renewal application with a specified due date of “180 days prior to permit expiration.” The purpose of these comprehensive reports is to assess the state of MS4 discharges relative to instream water quality, the effectiveness of controls enacted through the permit term, and to inform the next permit cycle. These items belong with the renewal application with a deadline that’s closer to permit expiration. Requiring submittal with the 4th-year annual report compresses the timeline substantially, which not only places undue burden on co-permittees, but also truncates the data we have available to provide a complete and accurate assessment of the MS4 discharges relative to the permit term. Please remove this item from Schedule B.3 and make the [appropriate corresponding] adjustments to items in their respective permit schedules.

Response: DEQ separated the due dates for the 4th year annual report and the renewal application as requested, and has adjusted the due dates for the Schedule D items to be due with the renewal application specifically.

Schedule D.2 303(d) Listed Pollutants

121. **Comment from NEDC et al. on 303(d) evaluation:** Schedule D.2.a.i Allows Permittees Too Much Time to Evaluate Whether MS4 Discharges may Cause or Contribute to the Degradation of Waters on the 303(d) List, and Too Much Time to Determine BMP Success or Failure.

Because of these unnecessarily long timetables, the Draft Permits are inadequate to protect Oregon’s impaired waters, as they fail to ensure in a timely manner that permittees will not cause or contribute to water quality standard excursions.

The final Permits should ensure that the Phase I permittees are evaluating their contribution to water quality standard excursions, and the effectiveness of existing practices in addressing impairment pollutants, on an expedited basis. Certainly, four years is too long to allow for evaluations for which the permittees should already have relevant information for some or all relevant pollutants.

Response: This comment appears to misunderstand the purpose and application of the analyses required. This evaluation is the continuation of an iterative process that cannot be repeated more frequently than the updates to the 303(d) list itself, is specific to waters listed as impaired and for which TMDL Wasteload Allocations have not been established, and is only a part of the collective analyses required by Schedule D. The analyses required in Schedule D are largely repetitions of efforts conducted in the previous permit term and are being conducted to show progress across permit terms.

In the case of this analysis, it is required once per permit term because the Integrated Report is based on assessment units at the sub-watershed (HUC-12) level, and changes to surface water quality are tracked long term. Changes in infrastructure or landscape required to shift a water body from an impaired condition (planting riparian corridors of restoration habitat, installing rain gardens, substantively changing the effective impervious area of a large catchment basin, etc) may take years. Over the course of two integrated reports, the co-/permittee can see if existing BMPs and strategies are proving effective or are proving insufficient. If changes in water quality occur, the co-permittee can examine the stormwater catchment areas in the sub-watershed and evaluate the relationship between the 303(d) listed pollutants and the MS4 discharges contributing to that sub-watershed.

This condition requires the co-/permittees continue to examine the impacts of discharges from the MS4s to

receiving waters, even where a TMDL is not established. It also ensures that BMPs effective for pollutants contributed by the MS4 continue to be implemented outside of waters with established TMDLs, and that such practices keep pace with the state of knowledge as the permit evolves from one term to the next.

As noted by the Portland Group in the comment on Schedule D submittals generally, the purpose of these comprehensive reports is to assess the state of MS4 discharges relative to instream water quality, as well as the effectiveness of controls enacted through the permit term, and to inform the next permit cycle. No change was made in response to this comment.

122. **Comment from Yakama Nation Fisheries on the applicable pollutants on the 2018/2020 Integrated Report's 303(d) list:** Schedule D.2.a.i requires the permittee to review the applicable pollutants on the 2018/2020 Integrated Report's 303(d) list or the most recent approved USEPA list. The permit should provide a direct citation to where the list may be found and should provide sufficient explanation for the reader to understand which pollutants are covered under this requirement. In discussion with the permit writer, we obtained a reference to a web map showing results of the integrated report, but from that website, it is not apparent which pollutants are applicable to each water body. In further discussion with the permit writer, we were told that the applicable pollutants are those listed as Category 5 for a given water body, but that is not stated explicitly in the permit. As discussed in our general comment, the permit should provide more clarity.

Response: DEQ expanded the use and citation of reference material where appropriate. In this case, because the Integrated Report is its own separate reference tool, no material has been added to the MS4 permits. The Integrated Report's website, FAQ, and Fact Sheet describe the four ways to access the Integrated Report, the differences in the 5 categories of waterbody assessment, and key findings. All of those are available at <https://www.oregon.gov/deq/wq/tmdls/Pages/default.aspx>.

123. **Comment on reduction of impairment pollutants, from Yakama Nation Fisheries:** Schedule D.2.a.ii calls for permittees to evaluate whether BMPs are effective in addressing and "reducing" listed pollutants. It is unclear what happens if they determine that the BMPs are reducing the pollutants by only a very small amount. Please state the amount of change that would be considered a reduction.

Response: Because of the scale of municipal stormwater management, the pace and cost of infrastructure retrofits and land use changes, and the fact that populations and impervious area continue to grow, co-/permittees are required to demonstrate that they are reducing the discharge of pollutants to the Maximum Extent Practicable (MEP). Evaluating pollutant reduction in MS4 permits is difficult because there can be many outfalls and often several jurisdictions whose discharges are authorized by the same MS4 permit that are assigned one numeric WLA value, so the commonly used approach is the iterative implementation of programmatic BMPs consistent with the MEP standard, and the MEP evaluation is required to be repeated with every renewal application. Any reduction in pollutant load is a reduction, but the Schedule D reporting items (Pollutant Load Reduction Evaluation, Benchmarks, and 303(d) analysis) paired with the MEP evaluation will aid DEQ in determining the appropriateness of the steps being taken.

124. **Comment on mercury minimization assessment from Gresham Group:** It seems like evaluating the BMPs with the SWMP update to DEQ for mercury minimization and summarizing what changes are being proposed as a result and include with the SWMP submission to DEQ would also work for accomplishing this goal. If updates are suggested that require more time for planning and implementation, the permittee can submit a proposed timeframe. Otherwise, the SWMP will get submitted and theoretically get updated later(?).

Response: As described elsewhere, the SWMP Document is a living document intended to be easily updated. If the co-/permittees wish to meet permit requirements such as the mercury minimization assessment before the due date to avoid having to update the SWMP Document a separate time, as indicated

by this comment, they may do so. No changes were made in response to this comment.

Schedule D.3 Total Maximum Daily Loads (TMDLs)

125. **Comment on mercury minimization assessment from WES:** In Schedule D(3)(b)(i), titled “Willamette Basin Mercury TMDL”, the proposed permit says the following: “*Develop and submit a mercury minimization assessment with the second annual report of the renewed MS4 permit term, that documents the current actions, such as BMPs implemented, that reduce the amount of solids discharged into the permitted MS4 system*”. It is our understanding that this revised mercury TMDL is not in effect at this time (Dec. 2020) and the original mercury TMDL from 2006 is the one which is currently in effect. As a result, to ensure that we’ll have enough time to comply with this MS4 Permit requirement, please adjust this requirement to state that the mercury minimization assessment shall be due with the 3rd annual report. Also, please revise the last portion of the sentence to recognize that solids are removed by some treatment structures which are present in some sections of our MS4. We suggest that the requirement be revised to say “...*reduce the amount of solids discharged into and from the permitted MS4 system*”.

Response: Both of the requested changes have been made.

126. **Comment on WLAs and lawful compliance from NEDC et al.:** Schedule D.3.c Does not Ensure Compliance with Applicable Wasteload Allocations Upon Issuance, and Does not Specify a Lawful Schedule of Compliance. Ultimately, the Draft Permits contain no guarantees that permittees will ever achieve applicable WLAs. If in the permittee’s fourth year report it estimates that a WLA is not being achieved, it is then required only to develop a “TMDL Pollutant Reduction Benchmark,” which must reflect “pollutant load reduction proposed to achieve additional progress towards the TMDL WLA during the next permit term.” Permit Schedule D.3.d.i(B). So rather than setting an “enforceable sequence of actions” that will ultimately lead to compliance by a date certain, the Draft Permits allow permittees to continue to postpone WLA compliance indefinitely. This strategy fails to protect Oregon’s waters and is contrary to the CWA and its regulatory requirements.

Response: DEQ disagrees that any part of the permit is contrary to the CWA or its regulatory requirements, or that it fails to protect Oregon waters.

As demonstrated by the Wasteload Allocation Attainment Assessment reports submitted during the previous permit term, many practical constraints as well as cost prevent implementation of BMPs on the scale it would take to fully meet WLAs. Even under hypothetical scenarios where the hundreds of thousands to tens of millions of square feet of rain gardens could be constructed and installed to infiltrate the amount of stormwater it would take to meet a co-/permittee’s WLAs for some pollutants, which would be impossible to fund and construct within a single permit term, not every place rain gardens would be needed are capable of infiltrating the required volume because of existing land uses and soil types. Estimating a date for compliance with a wasteload allocation would necessarily be based on speculation. Though it has been done, as where the District of Columbia proposed a 125-year compliance schedule to meet TMDL allocations for district storm water, such a timeline is fraught with logistical and legal challenges. This is why MS4 co-/permittees in Oregon and in many other states address their respective wasteload allocations for stormwater through the iterative implementation of programmatic BMPs consistent with the maximum extent practicable standard. It is preferable that the TMDL implementation plans provide that each permit renewal will include a process of determining measures that can be implemented within the five-year permit to ensure that adequate further progress is made toward attaining MS4’s wasteload allocation.

Even the Clean Water Act acknowledges such constraints with the Maximum Extent Practicable framework

and the allowance in the introductory sentence of 40 C.F.R. § 122.44 [titled “Establishing limitations, standards, and other permit conditions (applicable to State NPDES programs, see § 123.25)”] that NPDES permits should include the regulatory requirements listed thereafter “when applicable,” indicating not all NPDES requirements listed therein apply to all types of NPDES permits in all circumstances. No change was made in response to this comment.

127. **Comment on WLAs and compliance with the permit, from Yakama Nation Fisheries:** Schedule D.3.a states that “compliance with the permit’s terms and conditions is presumed to be in compliance with TMDL Waste Load Allocations (WLAs) issued before the effective date of this permit, unless specified below.” This presumption requires further justification and explanation. WLAs limit the quantity of a given pollutant that can be discharged from a given source. Where in this permit is that limit set and monitored?

Response: The WLAs are set by the TMDLs, and the permit sets conditions the co-/permittees must follow to demonstrate iterative progress toward meeting WLAs. Such conditions include monitoring for progress as described in Schedule B, as well as the analyses required in Schedule D, and all the program components in Schedule A. As discussed in the comment above, DEQ has chosen an iterative approach to avoid the challenges of setting a speculative compliance timeline extending out for many permit terms, in accordance with the Clean Water Act and the MEP framework.

128. **Comment regarding Pollutant Load Reduction Evaluations and Benchmarks, from City of Milwaukie and duplicated by others:** [...] Specifically, the PER indicates that the Pollutant Load Reduction Evaluation (PLRE) will be required for DEQ evaluation prior to the development of total maximum daily load (TMDL) benchmarks, implying these deliverables are separate. Yet, the due date for both submittals is the same (as part of the permit renewal application with the 4th Year Annual Report), implying these are not separate deliverables. These inconsistencies will result in confusion and should be corrected prior to permit issuance.

Response: The language in the PER did erroneously include reference to a DEQ determination on the PLRE before noting that the Benchmarks would not be needed if WLAs were met. It was not intended that DEQ make a determination and then tell the co-/permittees whether the Benchmark exercise is necessary, as the co-/permittees are the entities conducting the exercises, and DEQ is evaluating them for compliance with the requirements. The PLRE and Benchmark reports are to be submitted together with the permit renewal application package, and the co-/permittees will need to conduct the Benchmark exercise for any parameters that the PLRE shows as not yet meeting TMDL WLAs. For clarity, the language in the PER has been modified as follows.

Finally, as part of the TMDL pollutant load reduction evaluation, the co-permittees are required to provide a narrative summarizing progress towards applicable WLAs and TMDL benchmark(s). If the co-permittees estimate that TMDL WLAs are currently achieved with existing BMP implementation, a statement supporting this conclusion must be provided as well.

DEQ will evaluate the TMDL pollutant load reduction evaluation, and ~~determine the conclusions therein on~~ whether the TMDL WLAs have been achieved based on the submitted information and implementation of existing BMPs. If the ~~Department determines that~~ TMDL WLAs are met for certain parameters, the co-permittees do not need to set pollutant load reduction benchmarks for those parameters for the next permit cycle. DEQ anticipates it will notify a co-permittee within 90 days of receiving the TMDL pollutant load reduction evaluation whether DEQ concurs with the co-permittees’ conclusion that the existing BMP implementation achieves the applicable TMDL WLAs.

If the TMDL pollutant load reduction evaluation demonstrates that TMDL WLAs are not met for certain parameters, the co-permittee must develop pollutant load reduction benchmarks for those parameters as part of the permit renewal submittal. The benchmarks should reflect structural and, where effectiveness

information is available, non-structural controls implemented as part of the co-permittees' current stormwater management program, as well as any additional reductions expected to result from BMPs proposed for the five year permit term.

129. **Comment on Benchmarks from WES:** In [Schedule D.3.d], “Establishment of TMDL Pollutant Reduction Benchmarks”, the proposed permit says “A TMDL pollutant reduction benchmark must be developed for each applicable TMDL parameter where existing BMP implementation is not achieving the WLA.” Because we’ve already developed TMDL pollutant reduction benchmarks for these pollutants, please revise this proposed permit language to say we’ll need to re-evaluate these existing benchmarks, and won’t be developing new ones.

Response: This comment appears to misunderstand the purpose of the PLRE Benchmark exercise. The TMDL benchmarks are not static numeric effluent limits but are intended to be permit-cycle (i.e., 5-year) targets used to assess progress towards meeting the WLA. DEQ anticipates the MS4 permittees will continue to iteratively manage their MS4 stormwater programs to reduce pollutants, and identify the TMDL benchmarks accordingly. Because stormwater control practices change and improve over time, and because Benchmarks set in the previous permit term are intended to be goals for pollutant reduction in the current/upcoming permit term, it is important to evaluate progress against the Benchmarks set previously. However, because the Benchmarks are targets for progress toward meeting WLAs that may not yet be met for multiple permit cycles to come, the exercise is to be repeated each permit term.

Schedule D.4 Definitions

130. **Comment on definition of Discharges, by Portland Group and City of Salem:** Verbiage in this definition related to “privately owned treatment works” is highly problematic. The term “discharge” is used in provisions throughout this permit, which are applicable to the municipal storm system, not to private treatment works. Please amend the definition as noted here:

“This definition includes additions of pollutants into waters of the state from surface runoff, which is collected or channeled by humans; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person, which do not lead to a treatment works; ~~and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.~~ This term does not include an addition of pollutants by any “indirect discharger” [40 CFR §122.2].”

Response: The definition provided is consistent with the definition provided and applied in other Oregon NPDES MS4 permits. This definition is larger than its application within this permit, as not all discharges are regulated by the permit, only discharges related to the MS4. The breadth of the definition provided does not convey added responsibilities on the co-/permittees. No change was made in response to this comment.

131. **Comment on definition of Erosion & Sediment Control Plan, from Gresham Group:** Added a sentence for plain language and clarity. The sentence that follows is contrived and difficult to understand. Proposed definition: *“Erosion and Sediment Control Plan is a site-specific plan designed to describe the control of soil, raw materials, or other substances to prevent pollutants in storm water runoff by illustrating or listing BMPs deployed by type and location as required by the permittee and/or DEQ. Site operators/general contractors are responsible for ensuring sediment-laden water leaves a site and permittees use plans to oversee sites, require changes, and enforce, as applicable. ~~For the purposes of this permit, an ESCP means a document that identifies potential sources of pollution, describes practices to reduce pollutants in stormwater discharges from the site, and identifies procedures or controls that the operator will implement to reduce impacts to water quality and comply with applicable Permit requirements.~~”*

And, from Salem: Proposed addition of “from construction sites” to the end of the first sentence.

Response: In response to these comments, the definition has been modified and now reads: “*Erosion and Sediment Control Plan is a site-specific plan, map, or document that illustrates and/or lists erosion and sediment control measures that are implemented by type and location on a construction site, that for operators and inspectors alike: (1) identifies potential sources of stormwater pollution at the construction site; (2) describes stormwater controls to prevent pollutants in stormwater discharges from the construction site; (3) tracks or records updates and corrective actions implemented as site conditions or needs change; and (4) identifies procedures the operator will implement to comply with the terms and conditions of this general permit.*”

132. **Comment on definition and use of Extended Filtration, from Gresham Group:** Suggest deleting [mention of infiltration] from definition. Rock may be needed if there will be an underdrain installed (filtration versus infiltration facility), but a rock gallery is something many in the GSI community are moving away from due to the negative impacts it can have on potential rooting depth, plant health, and just the impacts of importing more materials to a “green” facility. The need for this definition comes from when you can’t install an infiltration facility, you need to install an extended filtration facility. For that reason, I would suggest keeping this definition focused on filtration, and leaving full and partial infiltration within the bioretention definition. Also noted that infiltration is not compatible with the rest of the definition.

And, from City of Lake Oswego: The City respectfully requests that DEQ simplify this definition to read “*Extended Filtration is the technique of using flow-through (filtration) planters and flow-through (filtration) raingardens and filtration swales*” and delete the remaining verbiage.

And, from City of Salem: The definition here is inconsistent with how it is used in the permit. The permit says if LID/GI is infeasible, then use extended filtration. Yet here extended filtration is described as LID, and even potentially allowing for infiltration.

Response: DEQ modified the definition in response to these suggestions, and it now reads “*Extended Filtration is the technique of using ~~LID~~ stormwater facilities designed to promote stormwater runoff filtration through natural or engineered media. The runoff is treated through physical, biological, and chemical processes as it filters through the media of the facility. Filtration is promoted by constructing the facility with media of an appropriate infiltration rate and typically includes an underlying aggregate rock reservoir or other engineered flow-through and filtration media. Extended filtration facilities may require, with an underdrain to convey to a discharge location, or not if subsurface soil conditions allow for infiltration.*” Please see also the discussion of Extended Filtration above in the post-construction section.

133. **Comment on Green Infrastructure, from Gresham Group:** Proposed expanding the definition GI definition with language from <https://www.epa.gov/green-infrastructure/what-greeninfrastructure> interspersed with DEQ’s. GI is broader than just vegetated facilities.

And, from City of Salem: Proposed deletion of mention of flood control benefits. In the context of this permit, flood control is not applicable.

And, from Lake Oswego: The current definition is vague enough to include detention ponds but not porous pavement. The City respectfully requests that the definition be changed to state “Green Infrastructure includes, for the purposes of this permit, infiltration planters, infiltration raingardens, porous pavement, pervious pavers, and infiltration swales” and delete the remaining verbiage.

Response: DEQ expanded the definition to incorporate elements of the EPA definition as requested by Gresham Group and explicitly include pervious pavements and similar facilities, but has left the portion that

mentions flood control in place. GI is a term that is often applied in various contexts and at various scales, and though its use within this permit is not specific to flood control practices, it is a landscape benefit of the broad adoption of GI across a landscape, and worth mention in a permit aiming to increase GI across a co-/permittee's landscapes.

134. **Comment on definition of Impervious Surface from Gresham Group:** This added [struck-through] language to the Impervious Surface definition is confusing and should be deleted. As it is used in the permit, impervious surface” is currently the threshold that triggers stormwater management requirements, so this added text creates more confusion than adding clarity.

Impervious Surface is any surface resulting from development activities that prevents the infiltration of water or results in more runoff than in the undeveloped condition. Common impervious surfaces may include but are not limited to building roofs, traditional concrete or asphalt paving on walkways, driveways, parking lots, gravel lots and roads, and packed earthen materials. ~~For purposes of this permit, compacted pervious cover (i.e., managed turf or lawns with much greater hydrologic response to rainfall and an elevated nutrient load relative to nature-scaped areas or native vegetation on uncompacted soil) is not necessarily considered impervious area, though it may still require management of runoff, and thus may be used in calculations of Effective Impervious Area.~~

Response: DEQ removed the sentence suggested for deletion.

135. **Comment on definition of Integrated Pest Management from Lake Oswego and Gresham Group:** Proposed additional text to bring the definition in line with that used by OSU and EPA, to read “*Integrated Pest Management is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as monitoring, biological control, habitat manipulation, modification of cultural practices, and use of disease/pest resistant plant varieties in a manner that minimizes health, economic, and environmental risk.*”

Response: DEQ modified the definition as proposed.

136. **Comment on definition of Low Impact Development, from Lake Oswego:** The City respectfully requests that DEQ clarify the current “catchall” definition by changing it to the proposed language and deleting the remaining verbiage. Proposed definition: *Low Impact Development is the use of planning techniques such as clustering, minimizing impervious area, maximizing pervious area, and otherwise mimicking pre-development hydrology to the extent practically feasible.*

Response: The definition is based on the definition in the previous permit iteration, expanded slightly to emphasize pre-development hydrology. DEQ disagrees that the definition is too broad and made no changes in response to this comment.

137. **Comment on definition of Maximum Extent Practicable from Portland Group and Gresham Group:** We note that DEQ has changed the definition of MEP in a manner that is incompatible with the term’s meaning as established in the Clean Water Act. The term is described in Section 402(p) as the “...management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.” DEQ’s proposed definition constrains this concept by using the term “technology-based,” which typically refers to the standard that applies to industrial point source discharges. Under the CWA, these discharges (including industrial stormwater) are held to a different standard than MS4s. Industrial discharges can be required to strictly meet water quality standards regardless of practicability. For MS4s, by contrast, pollutant reduction is limited to the MEP. (*CWA § 402 (p)(3)(B)(iii) vs. § 301 (b)(1)(c)*). Please revise the definition of MEP as follows:

“[MEP] is the ~~statutory technology-based~~ discharge standard for municipal separate storm sewer systems to reduce pollutants in storm water discharges that was established by Section 402(p)(3)(B)(iii) of the Clean Water Act [33 U.S.C §1342(p)(3)(B)(iii)]. ~~MEP is the statutory standard that establishes the level of pollutant reductions that operators of regulated MS4s must achieve. This standard is considered met if the conditions of the permit are met.~~”

(The last sentence should be removed because the explanation of how the standard is met is not germane to the definition.)

Response: DEQ modified the definition to read as follows.

Maximum Extent Practicable (MEP) is the technology-based discharge standard for municipal separate storm sewer systems to reduce pollutants in storm water discharges that was established by Section 402(p)(3)(B)(iii) of the Clean Water Act [33 U.S.C §1342(p)(3)(B)(iii)]. ~~MEP is the statutory standard that establishes the level of pollutant reductions that operators of regulated MS4s must achieve. This standard is considered met if the conditions of the permit are met.~~

138. **Comment on definition of Minimize, from City of Lake Oswego:** As with analytical methods, the extent achievable is not always practicable and can lead to the use of a large amount of resources for very little gain. Request use of “practicable” in place of “achievable.”

Response: The word “achievable” in the beginning of the definition is followed by the words “using control measures (including BMPs) that are technologically available, economically practicable, and achievable in light of best industry or municipal practices. Practicability is accounted for, so the definition does not impose a standard any stricter than MEP. No change was made in response to this comment.

139. **Comment on definition of Pollutant, from City of Lake Oswego:** The City respectfully requests that DEQ adopt the proposed definition instead of using the current outdated definition: “Pollutant is an analyte in a quantity which prevents a water body from attaining its beneficial uses.”

Response: Pollutants must be counted as such whether or not they are present in quantities that would prevent a water body from attaining its beneficial uses, so that they may be controlled before they reach the water body. The definition provided matches that in 40 CFR §122.2. No change was made in response to this comment.

140. **Comment on definition of Pollutants of Concern, from City of Salem:** Just because a pollutant is present doesn’t mean it is a pollutant of concern as items 4 and 5 here suggest and as described in the last sentence of this definition.

Response: The final sentence of the definition states “For this permit, use of the term is intended to focus on pollutants known by the co-/permittee to be present in stormwater per categories 4) and 5), *and* prioritized for reduction via stormwater controls identified in this permit.” [emphasis added] The definition is intended to leave it to the co-/permittees to determine their prioritization of pollutants known to be present, based on public input within their communities/jurisdictions. No change was made in response to this comment.

141. **Comment on Structural Stormwater Controls from Lake Oswego:** This is a pretty limited definition with the addition of the 64 Federal Register definition. The City respectfully requests that the Federal Register addendum be removed.

Response: The reference to the Federal Register clearly states only that it lists examples, and thus is not intended to be perceived as limiting. No change was made in response to this comment.

142. **Comment from Yakama Nation Fisheries on UICs:** Please define the acronym UIC which is used several times in the permit evaluation report.

Response: Underground Injection Control systems, also known as UICs are injection wells that place fluids underground for storage or disposal. In Oregon, they may be permitted for use as a stormwater management tool under OAR Chapter 340, Division 44. Because this is a separate category of activity not regulated by the MS4 permit, a definition and discussion was not included. However, though the permit defined the acronym at its first occurrence, the PER did not, and this has been corrected.

Schedule F NPDES General

143. **Comment from J. Nicita on Schedule F, Section A.6, Toxic Pollutants:** Each of the proposed Phase I NPDES MS4 permit contains the following Schedule F, Section A, Standard Condition:

“A6. Toxic Pollutants – The permittee must comply with any applicable effluent standards or prohibitions established under Oregon Administrative Rules (OAR) 340-041-0033 and 307(a) of the federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.”

None of the applications demonstrate how the applicants will comply with the toxic rule at OAR 340-041-0033, including its Tables 30 and 40, and its narrative effluent standard at OAR 340-041-0033(1). Can DEQ approve these applications and issue the permits without some kind of demonstration that the permittees will comply with this toxics rule? Given the severe impacts of toxics, the question is not a light one.

I give my town of Oregon City as an example, but I am sure the same applies to all of the permittees. At p. 2-4, Oregon City’s February 28, 2017 application, in its proposed MS4 Storm Water Management Plan, states that in 2014 it had a due date of 11/1/2014 to “Implement a post-construction site runoff program that meets designated permit conditions.” It lists its “Stormwater Grading and Design Standards” as satisfying its permit conditions, presumably including compliance with the toxics rule.

That document is attached [to the originally submitted comment]. Not of the source controls contained within the document describe how or how effectively they treat or abate toxics in stormwater. As part of the response to comments, I respectfully request some kind of discussion of how the applicants are supposed to comply with the toxics rule at OAR 340-041-0033.

Response: Condition A6. Toxic Pollutants is in Schedule F of the permit. Schedule F includes standard permit conditions that are included in all NPDES permits. In addition, the preface of Schedule F states, “The general conditions in this schedule apply only to the extent they do not conflict with the requirements contained in Schedules A through F. If the permit requirements in Schedule A through D conflict with these general conditions, the permit requirements in Schedule A through D will control.”

Schedule’s A-D of the MS4 permits include the specific conditions regarding municipal stormwater and the required best management practices and minimum measures that help to control toxic pollutants. In the case of these MS4 permits, DEQ has determined that these specific conditions suitably address this requirement.

144. **Comment from Lake Oswego on Schedule F, Section C7 and Section E:** For some parameters in environmental monitoring, the geometric mean or median is more appropriate than the arithmetic mean. The bacterial average is not previously specified in this permit as the definition infers but is generally assumed to

be a geometric mean. [... Further,] Most of the definitions used in Section E do not apply to stormwater.

Response: As stated above and at the beginning of Schedule F, “The general conditions in this schedule apply only to the extent they do not conflict with the requirements contained in Schedules A through E. If the permit requirements in Schedule A through D conflict with these general conditions, the permit requirements in Schedule A through D will control.” Schedule F is required for inclusion in all NPDES permits issued by the State of Oregon, and not all conditions, definitions, or terms therein will be applicable.

145. **Comment from Portland Group on Schedule F, generally:** Please remove or modify all Schedule F requirements that have no relevance to and, in many cases, conflict with MS4 regulations. We understand much of Schedule F is boilerplate language for NPDES permits, but many of these requirements pertain exclusively to wastewater discharges and are infeasible or entirely inapplicable to MS4 discharges, which poses both legal and implementation discrepancies.

Response: As stated above and at the beginning of Schedule F, “The general conditions in this schedule apply only to the extent they do not conflict with the requirements contained in Schedules A through E. If the permit requirements in Schedule A through D conflict with these general conditions, the permit requirements in Schedule A through D will control.” Schedule F is required for inclusion in all NPDES permits issued by the State of Oregon, and not all conditions, definitions, or terms therein will be applicable.

Comments Received Specific to Individual Permits

Several individual permits were commented on either by the co-/permittees or by other stakeholders in ways or on matters that are relevant only to that permit or to specific co-/permittees, and which must be addressed separately from the general language that is common among the group of NPDES Phase I MS4 permits being renewed. These comments and co-/permittee-specific circumstances are addressed below.

City of Salem Permit

146. **Comment from Santiam Water Control District on Coates Lateral and Salem’s rights to Santiam Water Control District Facilities:** Under the Salem MS4 Permit, DEQ authorizes the City of Salem (“Salem”) to discharge municipal stormwater into receiving water bodies, including Pringle Creek. The Salem Stormwater Master Plan misidentifies an irrigation canal owned and operated by SWCD (“Coates Lateral”) as the “East Fork of Pringle Creek.” The mischaracterization implies that Coates Lateral is a natural waterbody, rather than a part of SWCD’s privately constructed water conveyance facilities and is inaccurate. SWCD purchased Coates Lateral from the Willamette Valley Water Company in 1960. Without a contractual agreement, Salem holds no right to possess, modify, or use SWCD Facilities.

Response: The comment appears to assert that this Permit allows the City of Salem to obtain some jurisdiction over the Santiam Water Control District’s conveyance facilities through the reissuance of the Permit. However, Schedule F, Section A7 of the permit makes it clear that the permit does not convey a property right or jurisdiction over facilities that belong to another entity.

147. **Comment from Santiam Water Control District on Salems discharge of stormwater into Santiam Water Control District facilities:** Salem’s discharge of municipal stormwater under the Salem MS4 Permit into SWCD Facilities creates several concerns for SWCD. First, municipal stormwater discharges increase the volume and flow of water in SWCD Facilities. [...] Second, municipal stormwater discharges directly introduce pollutants to SWCD Facilities. [C]onveyance of municipal stormwater pollutants by SWCD Facilities may result in liability exposure under state and federal environmental laws. DEQ has been writing

TMDLs to place responsibility on water conveyance districts for the quality of the water they convey. This is problematic when the districts lack control over stormwater discharges into district facilities.

Response: DEQ understands the Santiam Water Control District concerns regarding excess discharges into their facilities.

Irrigation return flows and agricultural storm water runoff are exempt from NPDES permitting requirements. Specifically, CWA Section 502(14) defines a “point source” as “any discernible confined and discrete conveyance ... from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.” See 40 C.F.R. § 122.3(f).

Storm water discharges from certain MS4s, construction sites greater than one acre, certain industries, and other designated storm water sources are point sources that require an NPDES permit. 40 C.F.R. § 122.26.

The commingling of irrigation return flow and storm water does not automatically revoke the exempt status of the irrigation return flow. See 55 Fed. Reg. 47990, 47996 (Nov. 16, 1990). NPDES regulated stormwater discharges may be authorized by a permit at the point they discharge to receiving waters or at the point they discharge into a separate conveyance. If the regulated stormwater discharge is permitted before it is commingled with the irrigation return flow, the operator of the conveyance transporting the commingled flow does not need its own NPDES permit for the commingled discharge and the irrigation return flow would retain its exemption. See also: letter from James Hanlon, Director, EPA Office of Wastewater Management, to William Schweitzer, Director, ACHD, dated July 20, 2007.

Here, The City of Salem has applied for renewal of its existing permit for its municipal storm water discharges from its MS4. Some of these storm water discharges flow into irrigation conveyances owned by Santiam Water Control District. As long as the City has a NPDES permit that covers the municipal storm water discharges into the irrigation conveyances, those permitted discharges should not affect the status of any applicable irrigation return flow or agricultural storm water runoff exemption.

148. **Comment from Santiam Water Control District on Salem’s authority to implement stormwater controls in Coates Lateral:** Third, Salem lacks legal authority to implement MS4 permit requirements in or to District Facilities. If DEQ is relying upon Salem programs and policies that involve stormwater controls within Coates Lateral, it is relying upon programs that Salem cannot implement.

Response: The MS4 Permit does not require Salem to impose stormwater controls within SWCD facilities. The Permit is clear that the scope is expressly limited to property over which Salem has legal jurisdiction or authority. See response to comment above.

149. **Comment from Santiam Water Control District on regulatory burden for water conveyance districts:** In short, DEQ has placed a regulatory burden on water conveyance districts such as SWCD without a corresponding regulatory framework for the districts to meet the required standard. SWCD is responsibly working to obtain greater control over the water quality within its facilities by acquiring data on discharge water quality and volume. SWCD is also working to obtain greater control over water quality by exercising its ownership rights in its facilities including the right to prohibit outside parties from altering the facilities or causing additional discharges into the facilities.

In order to address the concerns raised above, SWCD requests that the Salem MS4 Permit require an intergovernmental agreement between Salem and SWCD setting the terms by which Salem may discharge municipal stormwater in District Facilities during the term of the Salem MS4 Permit. DEQ should include this requirement for two reasons. First, SWCD owns Coates Lateral and therefore DEQ cannot authorize a third party to discharge into Coates Lateral without SWCD permission. Second, this requirement will afford SWCD the opportunity to work with Salem to address responsibility and planning for increased stormwater

flows and pollution concerns, and to better protect District Facilities, surrounding property, and Oregon water quality.

Response: As previously noted, the Permit explicitly does not convey this type of property right or jurisdiction. Since the Permit is clear that the Permit is not authorizing such property rights or jurisdictional authority, DEQ has declined to add the language as suggested.

150. **Comment from City of Salem on post-construction threshold values:** Lowering the threshold from 10,000 to 5,000 square feet will impose new requirements on an additional 15 to 20 percent of non-SFR projects and significantly increase staffing resource needs to support development review and oversight regarding maintenance. However, based on our detailed analysis, these additional projects will result in treatment of less than five percent of the total impervious surface created or replaced by non-SFR projects. The City requests that DEQ maintain our current thresholds of 10,000 square feet for non-SFR projects and 1,300 square feet for SFR projects.

Response: DEQ understands that the City of Salem anticipates only small benefit in terms of number (or percentage) of the overall number of projects to be newly covered by the program under the new threshold of 5,000 square feet, amounting to 15% - 20% of non-SFR projects. However, in evaluating the analysis provided and estimating conservatively from the histogram the City provided, the 15% - 20% of projects still represents annual increases of hundreds of thousands of square feet of impervious area that, with the current threshold, would produce untreated runoff. Though data was not provided by which to estimate the number of gallons of untreated runoff that this would represent, it is clearly a significant contribution of pollutant load to the Willamette River. Any untreated new or replaced impervious area adds to the overall effects of urban landscapes on receiving waters, which include changes in peak flows, channel morphology, and in-stream hydraulics, and increases in sediment transport capacity and channel erosion, as well as pollutant load. The impacts of total impervious area on biotic condition are also well documented, showing sharp declines in macroinvertebrate density and richness with a total impervious area of as little as 8-12% (see <https://www.epa.gov/caddis-vol2/caddis-volume-2-sources-stressors-responses-urbanization-stormwater-runoff> for more information).

DEQ has determined that it is appropriate to reduce the threshold from 10,000 square feet for non-SFR projects to 5,000 square feet for the City of Salem. This is important to ensure that significant contributions of pollutants and other effects on receiving waters **are addressed and to ensure that appropriate actions are taken associated with the Willamette Mercury and Bacteria TMDL Waste Load Allocations for urban stormwater**. This will ensure all municipal Phase I MS4's manage water quality impacts from runoff from new impervious surfaces in a clear, consistent and measurable way. No change was made in response to this comment.

151. **Comment from City of Salem on date of adoption of authority for inspecting private facilities:** Salem's maintenance strategy must, at a minimum include: *“Legal authority allowing the permittee to inspect and require effective operation and maintenance of privately owned and operated stormwater controls that discharge to the MS4.”* Salem does not have this blanket authority to require operations and maintenance of all stormwater controls. Salem Revised Code Section 70.117 regarding operation, maintenance, and inspection of private stormwater facilities states, *“Any person owning, operating, or occupying property on which a private stormwater facility was constructed after January 1, 2011 shall: (a) Maintain the stormwater facility so that it is in proper operation for effective pollutant removal, infiltration and/or flow control ...”*.

This date corresponds to adoption of relevant post-construction standards. We request that DEQ add this date and limitation to Schedule A.2.e.vi.(A) consistent with Schedule A.2.e.vi.(B) of the draft permit that requires inventory and mapping of facilities that have been constructed since January 1, 2011. The City requests that the draft permit language is modified as follows: *“Legal authority allowing the permittee to*

inspect and require effective operation and maintenance of privately owned and operated stormwater controls that discharge to the MS4 and were constructed after January 1, 2011."

Response: DEQ made the requested addition to Salem's permit.

Portland Group Permit

152. **Comment on Schedule B.4.d from Yakama Nation Fisheries:** Schedule B Table 2 does not include cadmium in the list of metals for monitoring, but Schedule B.4.d states that the permittee must estimate the total annual loads of cadmium and other parameters. How will they estimate this without any monitoring data? Cadmium is designated as a contaminant of interest in many areas of Portland Harbor in DEQ's 2016 Portland Harbor Source Control Strategy. Therefore, we recommend including cadmium in the list of metals for monitoring in Table 2.

Response: As described above in Comment #120, the inconsistency with monitoring parameters and elements required for the renewal application package, an inconsistency repeated through multiple permits, has been resolved.

Regarding the specifics within the Portland Harbor Superfund site, the Portland Harbor Joint Source Control Strategy (or JSCS) was issued by EPA and DEQ in 2005 and included initial screening level values on Table 3-1 for cadmium in water and soil/stormwater sediment. However, the JSCS did not indicate that cadmium (or any other contaminants) as a contaminant of interest in any areas of Portland Harbor. In 2016, DEQ issued an update to the Portland Harbor Upland Source Control Summary Report, which summarized the status of all upland sites undergoing source control for all contaminant migration pathways to Portland Harbor. The Summary Report did not indicate that cadmium (or any other contaminants) as contaminants of interest in any areas of Portland Harbor. In 2017, EPA issued the Portland Harbor Record of Decision, which included Table 17: Summary of Cleanup Levels or Targets by Media. EPA's ROD Table 17 does not include a Cleanup Level for cadmium in surface water. In 2020, DEQ issued the Portland Harbor Stormwater Strategy Update – Status of Recontamination Prevention. The report summarized DEQ's semi-quantitative evaluation of loads of five pollutants generally representing the chemical compound families of most concern in Portland Harbor sediment which are discharged in stormwater into five key areas of Portland Harbor. Cadmium was not one of the pollutants evaluated. Finally, in March 2021, DEQ reissued the NPDES 1200Z Industrial Stormwater general permit. During permit development, DEQ evaluated all the available data on impairment pollutants. The impairment monitoring results that DEQ evaluated for discharges within the Portland Harbor includes more than 1000 samples for impairment pollutants, including cadmium. All of that data results at 0-5 percent exceedance for each pollutant type. This means the majority of data shows no exceedance of the impairment concentrations out of more than 1000 sample size. The data indicates continued monitoring of any of the pollutants, including cadmium, are not warranted. Notably, DEQ's Portland Harbor Source Control program evaluates cadmium in stormwater discharges and stormwater solids and requires controls, as warranted by the data. However, the collected current data evaluations indicate that additional monitoring of cadmium through the Portland MS4 permit is not warranted.

153. **Comment on monitoring requirements for impairment pollutants from Yakama Nation Fisheries:** The permit should clearly identify the monitoring requirements for impairment pollutants. The permit mentions a need to evaluate effectiveness in reducing impairment pollutants (Schedule D.2.c.ii) but it does not clearly describe what monitoring is required to support this evaluation. This is particularly important for contaminants that are source control issues for Portland Harbor Superfund Site such as PCBs and PAHs. The monitoring described in Schedule B Table 2 does not include PCBs, PAHs, or oil and grease, which are ongoing source control problems for Portland Harbor Superfund Site.

Response: DEQ’s Portland Harbor Source Control program does not rely on MS4 monitoring when making stormwater source control decisions. Rather, source control investigation and monitoring are guided by DEQ’s Guidance for Evaluating the Stormwater Pathway at Upland Sites, which is applied at sites that may or may not be regulated under MS4 permits. Further, the Portland MS4 permit applies to all municipal stormwater discharges, not just those into the 10-mile reach of the lower Willamette River that constitutes the Portland Harbor study area. For these reasons, DEQ did not include the requested pollutants on Schedule B Table 2.

154. **Comment on monitoring detection limits by Yakama Nation Fisheries:** The permit requires DEQ approval of the monitoring plan, including quality assurance procedures for analysis. When reviewing the monitoring plan, DEQ should ensure that sufficiently low detection limits are achieved, since permittees are allowed to stop monitoring after a certain number of nondetect results, which could incentivize using less sensitive lab methods with high detection limits. USEPA Region 10 has provided guidance on detection limits in cases where effluent limits are below detection limits. Although this guidance is not directly applicable because of the lack of effluent limits in this permit, some of the requirements are relevant and appropriate. Specifically, the monitoring plan should use an EPA-approved analytical test method, and detection limits should be lower than Portland Harbor cleanup screening levels or the lowest detection limit available.

Response: Schedule B.1.d.iii states “Samples must be analyzed in accordance with EPA approved methods listed in the most recent publication of 40 CFR 136 unless otherwise approved in advance by DEQ.” For the sake of adaptive management of stormwater, it may not be necessary in all cases to require detection limits be at the lowest value possible throughout the jurisdiction area of the MS4 permit, and in fact may be counterproductive given costs and labor. If a pollutant is known to regularly occur in municipal stormwater at an order of magnitude greater than the lowest possible detection limit, requiring the lowest possible detection limit serves no purpose. DEQ will not approve inappropriate methodologies in the required monitoring plans.

155. **Comment on incorporation of Portland Harbor Source Control screening levels for monitoring, from Yakama Nation Fisheries:** The permit does not require monitoring for cadmium, nickel, chromium, PAHs, PCBs, or DDT/DDE/DDD. However, the City of Portland commented on the 2017 1200-Z industrial stormwater permit that the acute water quality criteria for PCBs and DDE were not protective of human consumption of fish, and that these contaminants should be addressed at lower concentrations to meet Portland Harbor cleanup targets, noting that ODEQ’s cleanup program is using screening levels of 0.000064 µg/L for PCBs and 0.0022 µg/L for DDE to determine where source control is required. The source control screening levels should be accounted for in the permit given that they have been determined by the cleanup program to be necessary for protection of the Superfund site.

Response: DEQ’s Portland Harbor Source Control program does not rely exclusively on NPDES 1200-Z and MS4 monitoring when making stormwater source control decisions. Rather, source control investigation and monitoring are guided by DEQ’s Guidance for Evaluating the Stormwater Pathway at Upland Sites, which is applied at sites that may or may not be registered under the 1200-Z permit or regulated under MS4 permits. In March 2021, DEQ reissued the NPDES 1200Z Industrial Stormwater general permit. During permit development, DEQ evaluated all the available data on impairment pollutants. The impairment monitoring results that DEQ evaluated for discharges within the Portland Harbor includes more than 1000 samples for impairment pollutants, including cadmium. All of that data results at 0-5 percent exceedance for each pollutant type. This means the majority of data shows no exceedance of the impairment concentrations out of more than 1000 sample size. The data indicates continued monitoring of any of the pollutants, including cadmium, nickel, chromium, PAHs, PCBs and DDT/DDE/DDD, are not warranted. Further, the Portland MS4 permit applies to all municipal stormwater discharges, not just those into the 10-mile reach of the lower Willamette River that constitutes the Portland Harbor study area. For these reasons, DEQ did not

include the requested pollutants as required monitoring.

- 156. Comment on applicability of MS4 monitoring to Portland Harbor source control, from Yakama Nation Fisheries:** The source control program for Portland Harbor has relied on the NPDES permitting program for monitoring data. For example, DEQ cited NPDES data in making source control determinations for sites in the River Mile 11 East area, and DEQ’s 2016 source control report for Portland Harbor noted that the 1200-Z permit required monitoring of “the majority of pollutants of concern for Portland Harbor sediment... copper, lead, zinc, cadmium, nickel, chromium, chlordane, cyanide, hexachlorobenzene, PCBs, iron, aldrin, DDT, DDE, dieldrin, pentachlorophenol, and PAHs” and states that the NPDES monitoring helps ensure that permit compliance protects against risk to receptors in Portland Harbor. DEQ’s permit writer has stated that Portland Harbor source control monitoring is not the purpose of the MS4 permit. However, DEQ’s source control program will then need to come up with an alternative means of obtaining these data. Please explain what coordination efforts have taken place between DEQ’s source control and NPDES programs to address this issue.

Response: DEQ’s Portland Harbor Source Control program does not rely exclusively on NPDES 1200-Z and MS4 monitoring when making stormwater source control decisions. Rather, source control investigation and monitoring are guided by DEQ’s Guidance for Evaluating the Stormwater Pathway at Upland Sites, which is applied at sites that may or may not be registered under the 1200-Z permit or regulated under MS4 permits. Further, the Portland MS4 permit applies to all municipal stormwater discharges, not just those into the 10-mile reach of the lower Willamette River that constitutes the Portland Harbor study area. Currently, DEQ has cross-program processes in place to coordinate with DEQ Stormwater program staff, Portland Harbor Stormwater Coordinator and agents with regard to suspected and known contamination on 1200-Z permitted sites. DEQ is also currently undertaking an extensive project to modernize existing environmental data management systems and anticipates that cross-program coordination will be further facilitated by the new system called “Your DEQ Online.”

Multnomah County Permit

Note: Several questions submitted in response to the Portland Group permit, addressed above, were also submitted in response to the Multnomah County permit. These comments and responses were omitted from this section.

- 157. Comment from Yakama Nation Fisheries on Multnomah County’s bridge maintenance:** This permit is distinct from other MS4 permits in that it covers bridges as well as municipal facilities and stormwater systems. These bridges are in or just upstream from a Superfund site where recontamination is a serious concern. Stormwater from the bridges has direct potential to contaminate the Willamette River via roadway runoff during normal operations as well as releases during maintenance on the bridges. For bridges with open steel grating decks like the Hawthorne bridge, roadway runoff washes directly into the river. Roadway runoff carries toxic contaminants, including those for which the Portland Harbor Superfund Site is being cleaned up, and other contaminants recently identified as highly toxic to salmon (<https://science.sciencemag.org/content/early/2020/12/02/science.abd6951>). The permit does not mention bridges except to say that they are covered by the permit, and to include them in the definition of construction activity. The permit should specify conditions for bridge operations and maintenance. For example, the State of Washington has an NPDES general permit for bridge and ferry terminal washing that requires certain methods that prevent debris and substances from entering waters of the state, and requires plugging drains during washing.

Response: The assumption that detecting low levels of contaminants in stormwater discharge equates to sediment recontamination or other harm is not appropriate. This is because the assumption does not consider

volumes of stormwater and levels of associated solids discharged compared to volumes and concentrations of receiving water and existing sediment contamination, all of which are also needed to determine pollutant loading and potential harms to sediment and the water column. The distinction in Multnomah County's permit is not that covers multiple bridges, but that it covers so little land and infrastructure that it was important to name bridges specifically as covered by the permit. The Multnomah County Road Maintenance & Operations Manual already has several pages of BMPs listed for bridge maintenance to ensure protection of natural resources, including water quality. DEQ acknowledges that the draft permit was not specific on these requirements. As such, Schedule A.3.f.iii (Pollution Prevention in Facilities and Operations), which requires that co-/permittees describe or reference in the SWMP Document pollution prevention and good housekeeping for water quality related to several listed categories of infrastructure and public works, now includes an added sub-category covering bridges and other over-water infrastructure. This will ensure not only that BMPs for protection of water quality related to bridge maintenance activities will be listed or referred to in the SWMP Document, and thus can be easily found, but that such BMPs must also be reviewed for potential improvement as part of their incorporation into the SWMP Document.

158. **Comment on Pollutant Load Reduction Evaluation from Multnomah County:** [Schedule D,] Section 3.[c]. includes language that requires pollutant load evaluations with a pollutant load reduction empirical model. As previous discussed with DEQ, the County's permit area is unique in that the majority of the roadways in the permit area in East Multnomah County are arterial roads within other cities with their respective NPDES stormwater permits. The pollutant load reduction model is designed to be used with land use categories (e.g., residential or commercial), where large polygons of watershed area delineated to estimate pollutant loads. The model is not intended to be used on single roads within a land use polygon, and such, it is difficult to interpret the results using this model. The County would like to discuss a narrative approach, or other alternative, that is better suited for our particular permit area. The current language requires an empirical modeling approach, and we would appreciate consideration to allow alternative approaches to pollutant load evaluation and reduction. We appreciate consultation with DEQ to determine an appropriate approach to our unique situation.

Response: DEQ recognizes that the specific modeling approach used by most other co-/permittees under other Phase I MS4 permits to satisfy this requirement may not be the best approach for Multnomah County's unique situation. However, many studies and modeling exercises have been conducted to evaluate stormwater pollutant loading from roads and highways without factoring in adjacent land uses. That framework may be replicated for Multnomah County's evaluation, as the permit language already states that the co-/permittees may identify additional "qualitative or quantitative evaluation" approaches suitable to their own circumstances, so long as a rationale and methodology are provided and the criteria listed below that in the permit are met. Given the importance of transportation infrastructure in the pollutant loading of urban runoff, Multnomah County's roads and highways within the urbanized area must be accounted for. It is accurate that the majority of the roadways in the permit area in East Multnomah County are arterial roads within cities which have their own MS4 permits and must also conduct their own pollutant load evaluations. For this reason, DEQ would accept Multnomah County's collaboration with adjacent entities on their pollutant load reduction evaluations as partial satisfaction of this requirement, so long as roads outside those jurisdictions are also accounted for in a separate evaluation. DEQ looks forward to further consultation with Multnomah County on ways to fully meet this requirement that are not unsuitable to the land areas being studied.

Clackamas Group Permit

159. **Comment on mercury monitoring burden for Clackamas Group Permit, from Milwaukie and WES:** Total recoverable mercury is listed under the metal analyte category in Schedule B, Table 3 and as such, co-

permittees are required to monitor for total recoverable mercury (at the same frequency as other metal analytes) in conjunction with their individual instream and stormwater monitoring requirements.

Collectively, adherence to the prescribed monitoring in Table 3 will result in a total of 220 total recoverable mercury samples being collected annually for instream and 37 collected annually for stormwater runoff (257 samples total). The number of total recoverable mercury samples collected annually under the Clackamas Phase I NPDES MS4 permit far outweighs the number of samples collected under the other Phase I permits as listed below (as per the respective Public Review Draft permits). If data are required to support an understanding of mercury concentrations in stormwater and instream, rationale has not been provided as to why such a significantly larger number of samples is needed to support this understanding in Clackamas permit water bodies when compared to other water bodies in other jurisdictions:

- Salem is required to collect 27 mercury samples per year
- Eugene is required to collect 78 mercury samples per year
- Portland is required to collect 109 mercury samples per year
- Gresham is required to collect 46 mercury samples per year.

The 2012 Clackamas NPDES MS4 permit recognized that Clackamas co-permittees typically coordinate and cost share to meet prescribed monitoring requirements and objectives. Most of the co-permittees participate in the coordinated Clackamas County Comprehensive Stormwater Monitoring Plan (CCCSMP) to address monitoring objectives collectively and efficiently. The 2012 permit language related to mercury monitoring was written in consideration of this comprehensive and coordinated effort. Mercury monitoring in the 2012 permit was required only for stormwater sampling and not instream sampling. For each co-permittee that conducts stormwater sampling, a minimum of two samples were required. One sample was to be collected during the dry weather season and one during the wet weather season, and the timing of the sampling was staggered. Annually (during the prescribed monitoring period), eight samples were collected for total and dissolved mercury and methyl mercury by the Clackamas jurisdictions.

This new draft permit includes a significant increase to the monitoring program resulting in significantly increased resource needs without any rationale as to why that is necessary and without equitability when compared to requirements of the other Oregon Phase I permits covering larger cities. Per 2012/ 2013 costs, each total recoverable mercury sample and corresponding TSS sample costs approximately \$90.00, excluding the additional cost for processing field blanks and duplicates in accordance with EPA Method 1631E. Additionally, adherence to EPA Method 1669 for sample collection requires a two-person team, to effectively implement the “clean hands/dirty hands” sampling procedure, which further impacts staffing levels and cost. The increased expenditure for collection of an additional 249 samples annually on behalf of Clackamas co-permittees is inconsistent with jurisdictions definition of MEP and monitoring requirements imposed for other Phase I permits. The additional cost associated with laboratory processing and staff time in support of this mercury monitoring provisions is estimated to be well over \$25,000 per year. DEQ has not provided rationale as to how these data will be used and why the frequency of analysis was selected or is needed.

The City requests that the Clackamas Phase I mercury monitoring requirements in Table 3 are structured based on the overall permit obligations and not individual co-permittee obligations, consistent with the 2012 NPDES MS4 permit and that the total number of samples required is commensurate with other Phase I permits. This could be achieved with an added footnote specifying a reduced frequency for mercury monitoring.

And, from Lake Oswego: Adding mercury to a monthly instream monitoring requirement creates a huge burden for small jurisdictions such as those on the Clackamas County permit especially when larger Phase I jurisdictions are only required to provide data on a quarterly basis or less. The City understands DEQ’s concern for receiving valid mercury data in order to refine the mercury TMDL but doesn’t understand the

need to have so much of the data be from the Clackamas co-permittee area since it is not known as a mercury “hotspot”. The City respectfully requests that DEQ reduce the mercury sampling frequency to twice a year which is more proportional to other Phase I permittees.

Response: DEQ separated out the mercury monitoring from individual co-permittee obligations in the permit and restructured the condition to create a monitoring requirement applicable to all co-permittees, amounting to only 44 samples per year. This reflects a mercury monitoring commitment comparable to other Phase I jurisdictions, and leaves co-permittees collectively responsible for the new, combined mercury monitoring requirement. DEQ has not added any additional specificity to the requirement but notes that there is much value in data continuity and in watershed-scale assessment. Given that, it would be beneficial if the co-permittees both A) returned to previous mercury monitoring sites for future monitoring where possible, and concurrently with that, B) made efforts to locate select instream sampling locations near the up-and down-stream ends of the watersheds within the permit’s jurisdictional boundaries, or in upper reaches available within the permit area and near the confluence of a Willamette River tributary, such as the Tualatin or Clackamas River.

160. **Comment from Oak Lodge Water Services District, City of Gladstone, Oregon City, City of Wilsonville, and City of Milwaukie on date error relative to previous permit:** Schedule A.3.e.vi.E requires permittees to continue “*maintenance of the inventory and mapping developed under the previous permit term for all public stormwater facilities, as well as private facilities which discharge to the MS4 and which have been either constructed since January 1, 2011....*”.

The 2012 Clackamas NPDES MS4 permit (Schedule A.4.h.ii) required jurisdictions to maintain the inventory of private facilities constructed after January 15, 2012. This date was set based on the issuance date of the City’s NPDES MS4 permit. It is unclear why a jurisdiction would have to go back and attempt to track facility installation earlier than previously required or implemented in conjunction with their stormwater standards per the previous permit term. The City requests that Schedule A.3.e.vi.E maintains the date of January 15, 2012, consistent with language in the 2012 Clackamas NPDES MS4 permit.

Response: DEQ adjusted the date as requested.

161. **Comment on post-construction threshold from West Linn:** This section of the draft permit specifies impervious area thresholds for application of the City’s post construction program. The threshold stipulated in our current permit is 1,000 square feet and our current standards specify 500 square feet, as we originally adopted sections of the City of Portland’s Stormwater Management Manual which include this threshold. Over the years that the 500 square feet threshold has been regulated, it has resulted in the requirement for stormwater quality controls for projects we consider as relatively diminimis, such as construction of a garden shed, or decking project. Trying to find stormwater solutions to meet standards on these small sites can be challenging, and it consumes inordinate staffing resources for sites that aren’t considered to pose water quality issues of concern. Tight soils and steep slopes, typical of the City of West Linn, are also an issue for redevelopment of areas (the typical development activity that occurs). Infiltration is typically not feasible and single-family homeowners are required to hire engineers and/or geologists to test soils to confirm feasibility and design lot-based stormwater facilities. Staff resources devoted to the post construction program would be better focused on larger sites or partitions.

The new post construction requirements in the draft permit will already require adjustments to our program and additional staffing resources. Continued regulation of this small impervious area threshold will further increase staffing needs.

The City requests that our threshold listed in the permit is changed to 5,000 ft² as is provided for eight other permittees in the Clackamas permit including: Clackamas County, Water Environment Services, Gladstone, Happy Valley, Oregon City, Wilsonville, River Grove and Johnson City.

Response: DEQ has declined to grant this request, as it would clearly constitute backsliding on an explicit, numeric permit requirement already established. The 1,000 square foot threshold was a requirement established under the previous permit following analysis and discussion with the co-permittee, and has been in effect since the previous permit's issuance on March 16, 2012. The co-permittee may relax their threshold from the 500 square feet established in their matching of Portland's Stormwater Management Manual to a 1,000 square foot requirement as set by the permit, but they are not the only co-permittee with a 1,000 square foot threshold. No changes were made in response to this comment.

162. **Comments on special condition for pesticide monitoring from WES:** The draft permit says the following: *"In addition, the permittee must initially test for all pesticides used by the co-permittee within its jurisdiction."* Please change this to make monitoring for these pesticides optional, because many separate MS4 permittees may choose to request permission from DEQ to conduct this monitoring in a coordinated study over a large geographic area, and if this proposed requirement isn't changed, everyone who participates would need to monitor for a specific pesticide in their service area if only one community has used it within its jurisdiction. This requirement that the permittee "...must initially test for..." pesticides is unique to the Clackamas County group's permit, as other jurisdiction's permits include requirements solely to "consider" either prescribed or used pesticide pollutant parameters for monitoring. The 2012 Clackamas NPDES MS4 permit required Clackamas jurisdictions to "Conduct or contribute to a pesticide stormwater characterization monitoring or instream pesticide monitoring project/ task. The pesticide pollutant parameters that must be considered for purposes of this requirement include any pesticides currently used by the City of XXX within the jurisdictional areas and the following..." Clackamas co-permittees met this requirement through a coordinated pesticide study with USGS, initiated in 2012, that included collection of water and sediment samples from stormwater outfalls and natural stream channels. Approximately 120 pesticide compounds including insecticides, herbicides, fungicides, and select degradants were evaluated. Selection of pollutant parameters was based on the individual Clackamas jurisdictions inventory of pesticide use, as well as consultation with the USGS Pesticide Fate Research Laboratory, which specializes in "current use" pesticides. The final USGS proposal and rationale for pesticide selection was attached to the 2013 Comprehensive Clackamas County Stormwater Monitoring Plan (CCCSMP) update, which was submitted to DEQ per conditions of the 2012 Clackamas NPDES MS4 permit. The final USGS report was published in 2016: <https://link.springer.com/article/10.1007/s10661-016-5215-5>. We request that the pesticide monitoring language in Table 3 consider the significance of past work conducted by the co-permittees. At a minimum, language should be consistent with the language in other Phase I MS4 permits requiring consideration of pesticide pollutant parameters for monitoring and not mandating the monitoring of specified pesticide pollutant parameters.

And, from Lake Oswego: Other Phase I permittees are not required to test for all pesticides used in their jurisdiction and the City feels this is an onerous requirement given the jurisdictional size of the Clackamas County co-permittees in relation to other Phase I permittees.

Response: DEQ greatly appreciates the work done by the co-permittees on pesticides and the value their research added to the field, and has corrected the language of the Clackamas Group permit to match the other Phase I permits.

163. **Comment on instream monitoring, from WES:** In Table 3 in Schedule B(1)(b), the WES, Clackamas County, and the Cities of Rivergrove and Happy Valley continue to be proposed to be required to monitor pollution at 9 (nine) instream monitoring sites. And to conduct Instream Biological Monitoring at 9 instream sites. In the current MS4 Permit (renewed in March 2012), the Table B-1 for the City of Rivergrove and the SWMACC includes a requirement to monitor water pollution at one instream monitoring location in the Tualatin River watershed, and to conduct Instream Biological Monitoring at one site. But there aren't any suitable instream pollution or biological monitoring locations in the Tualatin River watershed, so the number of instream and biological monitoring sites in the renewed Permit's Table 3 for WES, Clackamas

County, and the Cities of Rivergrove and Happy Valley should be reduced to 8, at a minimum. We request that the number of instream pollution monitoring locations in the renewed Permit's Table 3 for WES, Clackamas County, and the Cities of Rivergrove and Happy Valley be reduced to 4, given the size of the MS4 in WES' service area and the number of instream pollution monitoring locations maintained by other Phase I MS4 Permit holders in Oregon.

Response: DEQ made the requested modifications to the number of monitoring locations in each category.

164. **Comment on annual report due date by WES:** Schedule B(3) says annual reports will be due to DEQ no later than Nov. 1st of each year. Please change this due date to Dec. 1st. Having an extra month to compile these reports will be very helpful, since the current MS4 Permit, and the proposed renewed MS4 Permit, have extensive and detailed requirements. Generating an annual report for the current permit is very time-consuming and we expect future annual reports under the renewed permit might take even more time. This small change to the permit will yield improvements to the quality of our annual reports. If this extra month is granted to us, but not used in any given year, our annual report can still be submitted to DEQ on November 1st, or in October, or even in September for that matter. Thank you for providing this additional time for annual report writing.

Response: DEQ modified the annual report due date for the Clackamas Group permit in response to this request.

165. **Comment from Clackamas River Water Providers on Clackamas Group Permit:** The Clackamas River Water Providers (CRWP) is coalition of municipal drinking water providers that draw water from the Clackamas River and is made up of representatives from the City of Estacada, the City of Lake Oswego, Clackamas River Water, the North Clackamas County Water Commission (City of Gladstone and Oak Lodge Water District), South Fork Water Board (Oregon City and West Linn), and Sunrise Water Authority (Happy Valley and Damascus). Collectively we provide drinking water to approximately 300,000 people in Clackamas County. Four of these providers (Clackamas River Water, PWS 00187, South Fork Water Board, PWS 00591, North Clackamas County WC, PWS 00580, the City of Lake Oswego, PWS 00457) have water intakes structure in the lower river.

Many of the CRWP members are also part of the Clackamas County Group MS4 Permit. Although most permittees have service areas outside of the Clackamas River watershed, some discharge stormwater to the Clackamas River and its tributaries. For those in the Clackamas Group whose service areas are inside the watershed, we would like to make the following recommendations to enhance effort to protect our drinking water source from stormwater runoff that could degrade the quality of the Clackamas River. Because permits and best management practices are the main tools used for controlling non-point sources of pollution our interests are outlined below.

First, we would like to work collaboratively with the Clackamas County Group permittees whose service areas are inside the Clackamas River watershed as they implement their MS4 permits and Stormwater Management Plans to ensure the best protections for water quality. Second, we would like to encourage these permittees, to conduct more frequent dry weather field screening at all storm sewer outfalls in order to detect and control illicit discharges. Third, we would like to encourage them to conduct more frequent inspections of commercial, multi-family residential and industrial facilities to control illicit discharges for improved stormwater runoff quality. Fourth, we would like to encourage more frequent inspections of construction sites to ensure the effectiveness of required BMP's. Lastly, we would like to encourage more robust implementation of Low-Impact Development that captures and treats stormwater runoff before it reaches the Clackamas River and its tributaries.

This MS4 permit identifies the minimum performance standards that must be achieved by the permittees but also allows the permittees to tailor their local requirements based on local issues or water resource planning

activities. Because the Clackamas River and some of its tributaries are receiving waters we would like to encourage the permittees to develop more stringent criteria that will ensure the protection of the Clackamas River as a drinking water source. This could be accomplished by setting more stringent goals to reduce and/or cap stormwater pollution or looking at BMP effectiveness overtime.

Preventing contaminants from entering our rivers and streams minimizes problems that result from contaminants in the water supply, including increased health risks, increased drinking water monitoring requirements, additional water treatment requirements, and expensive environmental cleanup activities. The Clackamas River is the source of drinking water for almost all of the Clackamas County Group permittees so ensuring we protect the quality of this precious resource is critical.

Response: DEQ thanks CRWP for their input and agrees with the importance of encouraging collaboration among co-/permittees and drinking water providers, more effective dry-weather screening and more frequent inspections of potential pollutant sources, and more robust Low-Impact-Development. All of these elements are included in the permit and DEQ will continue to work with permittees to improve water quality.

City of Eugene Permit

166. **Comment on flexibility of construction site runoff control program structure, from City of Eugene:**

The proposed edits reflect more accurately Eugene's program which we believe meets DEQ's objectives in the draft permit and is the result of many years of implementation, learning, and adaptive management. Our program is geared toward the higher risk construction sites and does not utilize just an across-the-board threshold of 1,000 square feet of disturbed area for applicability. Eugene's erosion prevention ordinance establishes outcomes that all construction activities must meet. A sub-set of construction activities that pose the highest risk to downstream water quality is required to obtain a permit and document site-specific controls. For permitted sites, an Erosion and Sediment Control Plan is required, and regular inspections are conducted and documented. Erosion prevention outcomes are provided to building permit applicants for small, relatively low risk sites that do not trigger an erosion prevention permit. Construction sites which fall below the permit thresholds are still required to meet the codified outcomes and are subject to enforcement action if necessary, to ensure compliance.

The draft MS4 permit incorporates a threshold of 1,000 square feet of disturbed area in several places, but that does not adequately reflect Eugene's more sophisticated program. For example, for some construction sites, the threshold for needing a permit is lower than 1,000 square feet, and for some other sites, the threshold is higher. More specifically, an erosion prevention permit is required when a project disturbs 500 square feet or more and is in a sensitive area OR when a project involves 5,000 cubic feet of excavation or import OR when a project disturbs 1 acre or greater. A sensitive area is defined as having a slope greater than 10%, containing highly erodible soils, or has the potential to directly drain into a water features or its designated buffer area.

Eugene has codified mandatory outcomes (criteria that all construction sites must meet), but not prescribed "minimum required BMPs" for small or low-risk construction sites." Suggested change to language in A.3.d.iv(B), to use the word 'criteria' in place of 'minimum required BMP'.

Response: DEQ thanks Eugene for these notes on the program. Eugene developed its sophisticated, multi-tiered construction runoff control program under a permit requirement written somewhat simply as a threshold of "1,000 square feet or greater," and has achieved great success, but DEQ is aware that the simple square footage requirement of the permit may in fact prove limiting given Eugene's program structure.

Though the flexibility provided in this new permit language was intended to allow co-/permittees to develop and implement innovative solutions, and not impede any program elements already developed or similar new innovations in protecting water quality, DEQ accepted Eugene's proposed edits in this section. Small wording changes have been made in Schedule A.3.d.iv.(B) to include outcomes and criteria as well as BMPs, as options for inclusion in the SWMP Document with procedures for minimum inspection & documentation requirements, and the 1,000 square foot threshold has been replaced with reference to requirements in "ordinance or other regulatory requirement." DEQ has determined that the permit conditions are sufficient after reviewing the City of Eugene's Erosion Prevention and Construction Site Management Program practices and required outcomes for all construction sites, as well as Administrative Order 58-03-01-F and Administrative Rule 6.645 defining sensitive area designations.