Appendix B
Response to Comments on the Municipal Stormwater Permits

National pollutant discharge elimination system (NPDES) and state waste discharge general permit for discharges from large, medium, and small municipal separate storm sewer systems (The 2019 to 2024 Phase I, Western Washington Phase II, and Eastern Washington Phase II Municipal Stormwater Permits)

Washington State Department of Ecology

July 1, 2019

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1.0 INTRODUCTION

1.1 Summary of Permit Development

The Washington State Department of Ecology (Ecology) issues this Response to Comments (RTC) as an Appendix to the August 15, 2018 Fact Sheet that accompanied the August 15, 2018 formal drafts of the following National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge permits:

- *Phase I Municipal Stormwater Permit* (Phase I Permit) effective August 1, 2019,
- *Western Washington Phase II Municipal Stormwater Permit* (Western Washington, or WWA, Phase II Permit) effective August 1, 2019, and
- *Eastern Washington Phase II Municipal Stormwater Permit* (Eastern Washington, or EWA, Phase II Permit) effective August 1, 2019.

The Permits authorize discharges from municipal separate stormwater systems (MS4s) to meet requirements of the federal Clean Water Act and Chapter 90.48 RCW.

The *Phase I Municipal Stormwater Permit* applies to Clark, King, Pierce, and Snohomish counties, as well as the cities of Seattle and Tacoma. Separate Phase II Municipal Stormwater Permits for Eastern and Western Washington regulate runoff from 102 cities and portions of 15 counties across the state. In addition, the updated Phase II Permits will cover one newly permitted city and county UGA in western WA and one additional city in eastern WA. The Permits also cover stormwater discharges from public entities with MS4s, called Secondary Permittees, which include ports, school districts, and universities to name a few.

A history of the public process around these permits is available in the August 15, 2018 Fact Sheet, and online at https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Municipal-stormwater-general-permits. Ecology's public process included:

2016: Ecology received input from stakeholder advisory groups, including the Stormwater Work Groups that developed recommendations for monitoring and assessment requirements. Ecology received early input from Permittees and interested stakeholders with recommendations on permit improvements.

Spring 2017: Ecology held five listening sessions around the state to take input used to update the permits. Over 200 people attended these sessions.

Fall 2017-2018: Ecology issued preliminary draft requirements of several permit sections for the Phase I and Western Washington Phase II Permits for informal public comment, and used the input from over 50 individuals and entities to develop the formal draft permits.

August 15 – November 14, 2018: Ecology held a three month public comment period on the formal draft permits and conducted 7 public hearings and 8 workshops statewide. Ecology received a large volume of comments that were helpful in developing the final permits. We received over 3,000 comments in 1,864 comment letters (~1,790 were similar or duplicate letters). This document responds to those comments.

July 1, 2019: Ecology issued the final updated *Phase I, Western Washington Phase II,* and *Eastern Washington Phase II Municipal Stormwater Permits*.

August 1, 2019: Effective date for *Phase I*, *Western Washington Phase II*, and *Eastern Washington Phase II Municipal Stormwater Permits*.

1.2 Summary of Changes

Ecology made changes to the permits to improve clarity and readability. The following changes are some of the more significant changes made between the formal draft versions and final permits:

ALL THREE PERMITS:

Authorized Discharges

1. 'Indian Country' now references the definition found in 18 U.S.C. §1151

Compliance with Standards

2. Corrected the reference to the National Toxics Rule: 40 CFR 131.45.

Public involvement:

3. Added the overburdened communities as an audience to consider when implementing these requirements.

MS4 mapping

4. Clarified that Permittees do not need to map the following residential connections: individual driveways, sump pumps, or roof downspouts
5. Permit language was also clarified to better describe "**features** or attributes, or both" as data to collect when mapping tributary conveyance.

IDDE

6. Recordkeeping requirement was refined and clarified to direct Permittees to Appendix 14 (PH I), Appendix 12 (WWA PH II) or Appendix 7 (EWA PH II) for directions.

Secondary Permittees

7. Secondary Permittees are now required to annually inspect and maintain all stormwater facilities owned or operated by the Permittee

General Conditions

8. G10 'storm sewer system' was changed to 'MS4'

Definitions

9. A definition for 'fully stabilized' and 'surface waters' were added.
10. Editorial changes to Permit references.

Appendices

11. Edits were made to appendices in each permit in response to comments received. Major edits include:
12. Appendix 6 – Street Waste Disposal was revised to match manual language and updates to the regulations.
13. Appendix 8 – Businesses and Activities that are Potential Sources of Pollutants (PH I and WWA PH II) refined list of businesses and activities.
14. Appendix 10 – Equivalent Programs for Runoff Controls for New and Redevelopment and Construction sites (PH I and WWA PH II) were reformatted and edited to clarify what requirements need to be adopted to maintain manual equivalency.
15. Appendix 12 – Structural Stormwater Controls Project List (PH I) incorporated language that was formerly in a guidance document, describing SSC Program Points accrual and project descriptions.
16. IDDE Reporting Data and Format appendices (PH I Appendix 14, WWA PH II Appendix 12, and EWA PH II Appendix 7) were updated to simplify the fields and clarify the data reporting requirements. Ecology also delayed full implementation of this reporting requirement to the 2022 annual report.

PHASE I AND WESTERN WASHINGTON PHASE II PERMITS

Public education and outreach:

1. Language was edited to use 'campaign' and 'program' consistently.
2. Language was added to clarify general awareness campaigns shall consider delivering their messages in language(s) other than English, as appropriate to the target audience.
3. Language surrounding regional groups edited to say if Permittees choose to adopt one or more elements of a regional program, the Permittee should participate in the group, and shall implement the adopted elements of the program in their local jurisdiction.
4. Language was added to state that if a Permittee chooses option 'c' after the initial evaluation, they may forgo the final evaluation if it will not add value to the overall behavior change program.
5. In reference to advertising stewardship opportunities 'create' was changed to 'provide'.

Public involvement:

6. Added the Stormwater Management Action Plan (SMAP) to make clear this is a document that should seek public involvement.

MS4 mapping

7. For new mapping, clarified that mapping known outfall size and material can be done during normal course of business.

Stormwater Planning

8. Title of the component changed, 'Comprehensive' was dropped.

9. Reference to SMAP guidance document was moved to that section.
10. Established a date by which to convene the interdisciplinary team.
11. Clarified Coordination with long-range plans reporting requirements. Extended Phase II reporting date. Added a series of questions to the Annual Report for this section.
12. Consistent use of shall in the LID code-related section; in the Phase II Permit– clarified the LID section (ii) that applies to New Permittees only.
13. In the SMAP section: clarified regional participation, how to determine which basins to include in the process, clarified and revised the reporting and submittal for the SMAP.

Source Control for Existing Development

14. Clarified that In cases where the manual(s) lack guidance for a specific source of pollutants, the Permittee shall work with the owner/operator to implement or adapt BMPs based on the best professional judgement of the Permittee.
15. Revised text to refer to sites, instead of the interchangeable use of 'properties, and sites'.
16. Removed the reference to add mobile businesses to the inventory based on complaints received.
17. Clarified that Permittees may count inspections based on complaints, or when the property owner denies entry, to the 20% inspection rate.
18. Refined Appendix 8 – Businesses and Activities that are Potential Sources of Pollutants based on the NAICs codes for industries listed in the SWMMWW and removed four categories of industries with low potential for outdoor pollutants.

Controlling Runoff from New Development, Redevelopment, and Construction Sites.

19. The dates that outline which program must be followed were modified, including adding a 'sunset' date by which applications submitted under the 2014 Permits program must start construction, or adopt new requirements.
20. Language regarding the inspection of permanent stormwater treatment and flow control BMPs/facilities and catch basins in new residential developments was moved from the O&M section to this section.

IDDE

21. 'Must' has been replaced with 'may' in regards to the listed field screening methodologies.
22. Clarified that Permittees shall annually track the total percentage of the MS4 screened

Operations and Maintenance

23. Clarified that standards and BMP's in this section shall be consistent with, or more protective than in the SWMMWW or a PH I program approved by Ecology.
24. Language regarding the inspection of permanent stormwater treatment and flow control BMPs/facilities and catch basins in new residential developments was moved to the Controlling Runoff section.

25. S5.C.10.b.iii (PH I) and S5.C.7.b.ii (WW PH II) now references 'required inspections' instead of 'sites'.
26. Permittees must document practices, policies, and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the Permittee, and road maintenance activities under the functional control of the Permittee no later than December 31, 2022.
27. Permittees are required to update their SWPPP for heavy equipment maintenance or storage facilities by December 31, 2022

S8 Monitoring and Assessment

28. Clarified language around due dates for S8.A and S8.B payments. Added section S8.D with payment instructions.
29. Clarified that Clark County and City of Seattle, who chose effectiveness studies Option #3 in the 2013 Phase I Permit, shall pay half the amount listed in Appendix 11 for their S8.B.1 payment due on December 1, 2019.
30. Extended the date in S8.A.3.a.i from September 30, 2019 to January 31, 2020, to provide Clark County additional time to complete and submit the site verification report.
31. Added to S8.B.3 that a maximum of two requests will be made; also that the request(s) will be transmitted via the Ecology permit manager and Permittees shall have 90 days to provide the requested records.
32. Minor editorial changes to S8.C. Replaced language that gave default QAPP approval after 90 days, if Ecology did not provide comments, with language that instead allows the Permittee additional time to begin the study if Ecology's review is delayed. Similar change was made in Phase I Permit S8.B.2.c.ii.(b).

Definitions

33. Community based social marketing (Education and Outreach) and stormwater facility retrofits (Stormwater Planning), both defined in footnotes in the formal drafts, definition footnotes were moved to the glossary section.

PHASE I MUNICIPAL STORMWATER PERMIT

MS4 Mapping and Documentation

1. Clarified ongoing mapping of known MS4 discharge points.
2. Clarified ongoing mapping of connections is between Stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee, and tributary conveyances and all associated emergency overflows.
3. Clarified where the ongoing mapping of tributary conveyances to all known outfalls and discharge points with a 24-inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems applies.

4. Completion date for mapping all known connection from the MS4 to a privately owned system was extended to August 1, 2023.
5. Mapping tributary conveyances, as described in S5.C.2.a.v., for 50% of the areas outside the previously mapped urban/higher density rural sub-basins is now to be completed by December 31, 2023.
6. The sentence 'An example description is available on Ecology's website.' Has been removed.

Coordination

7. It was clarified that intra-governmental (internal) coordination agreement(s) or Executive Directive(s) to facilitate compliance with the terms of this permit need to be implemented.

Controlling runoff

8. The footnote clarifying 'started construction' was added back into the Permit.
9. Language surrounding the manual review and approval process was clarified, including increasing the time Ecology has to respond to program submittals to 120 days, and language confirming that there will be a Permit Modification to list approved programs.
10. Removed the term 'land disturbing activity' from S5.C.5.b.vi.(a), (c), and (e).
11. Updated the permit names 'Construction Stormwater General Permit' and 'Industrial Stormwater General Permit.'

Stormwater Planning

12. Added an option for county Permittees to choose an alternative basin for the SMAP.

Source Control for Existing Development

13. Revised language to include treatment BMPs as an option to apply if operational source control BMPs do not prevent illicit discharges. This language was added to match the Phase II Permit language.
14. Clarified that email is an acceptable follow-up method.

Structural Stormwater Controls

15. 'New LID BMPs' was made its own line item.
16. 'Retrofit incentive points' was changed to 'SSC Program Points'
17. Clarified the list of projects required to be submitted to Ecology only need to be for the purpose of meeting SSC Program Points.

O&M

18. Footnote updated to reflect the increased time Ecology has to respond to program submittals required in the Controlling Runoff section.
19. S5.C.10.d.i clarifies ***all*** catch basins and inlets owned or operated by the Permittee are to be inspected annually, unless a Permittee is following an alternative approach.

20. S5.C.10.d.iii clarifies that the compliance measure applies to all catch basins and inlets, or alternative approach.

Education and Outreach

21. Introductory list of program requirements edited to be consistent with WW PH II Permit.
22. 'Hazards associated with illicit discharges and improper disposal of waste' was added as a General Awareness subject area.
23. 'Opportunities to become involved in stewardship activities' was removed as a General Awareness subject area.
24. The Behavior change section was clarified to state that Permittees are required to select one audience and one BMP.
25. A requirement to use the results of evaluations to direct behavior change program implementation was added.

Western Washington Phase II Municipal Stormwater Permit

S1 Permit Coverage and Permittees

1. Expanded permit coverage to the City of Shelton, and Clallam County's unincorporated UGA for Port Angeles.
2. New Permittees February deadlines were extended to August the same year in order to better align with the effective date of the permit.
3. 'General Administration' was updated to 'Department of Enterprise Services'

S3 Responsibilities of Permittees

4. Corrected S3.A.2 – to refer to the correct section S5. This mistake was made in the formal draft and was not found in the 2013 Permit.

S5 Stormwater Management Program for Cities, Towns, and Counties

5. Footnote 1 updated to August 1, 2024

Education and Outreach

6. Public education and outreach S5.C.2.a.(b), 3rd bullet– substituted the defined term 'stormwater treatment and flow control BMPs/facilities' (rather than Permanent Stormwater facilities which is undefined).
7. LID BMPs were added as a subject area under General Awareness.
8. Clarified when New Permittees are required to begin implementing their behavior change strategy.

MS4 Mapping

9. Clarified that electronic mapping format means a Geographic Information System, CAD drawings, or other software that can map and store points, lines, polygons, and associated attributes), with fully described mapping standards.

IDDE

10. 'Permittees shall continue to evaluate, and if necessary update, existing ordinances or other regulatory mechanisms to effectively prohibit non-stormwater, illicit discharges, including spills, into the Permittee's MS4.' Has been removed.

Controlling runoff from new development, redevelopment, and construction sites

11. Clarified date by which the local program is to be adopted and made effective.
12. Added language to S5.C.6.c that clarifies that inspections may be combined with other inspections carried out by qualified personnel.
13. Retained permit language regarding retention of records.

Operations and maintenance

14. Revised date to adopt maintenance standards to align with timeframe in Controlling runoff.

Source Control for Existing Development

15. In the Phase II Permit, added "and make effective" to the language about adopting the ordinance. This is consistent with the Phase I Permit.

EASTERN WASHINGTON PHASE II MUNICIPAL STORMWATER PERMIT

S1 Permit Coverage and Permittees

1. Expanded permit coverage area to the city of College Place.

Public involvement and Participation

2. Added a footnote to S5.B.2.a. to clarify the date for the New Permittee to implement the requirement. This footnote matches the WWA Phase II Permit for New Permittees.

Education and Outreach

3. Clarified that Preventing illicit discharges means source control BMPs
4. Extended date to December 31. 2021, by which Permittees shall use resulting measurements to direct their ongoing education and outreach resources.

IDDE

5. Mapping requirement deadlines extended to August 1, 2021
6. Clarified that electronic mapping format means a Geographic Information System, CAD drawings, or other software that can map and store points, lines, polygons, and associated attributes), with fully described mapping standards.

7. In reference to source control BMPs that can be used, the statement 'or another technical manual approved by Ecology' has been removed.
8. Permittees shall track the total percentage of the MS4 assessed beginning August 1, 2019.
9. Footnote 9 for New Permittees was revised to match the WWA Phase II Permit.

Construction Site Runoff Control

10. Added a requirement that a Permittees ordinance shall include provisions to review site plans and inspect sites with high potential for sediment transport prior to clearing or grading.
11. Required adoption date for their ordinance extended to December 31, 2022.

Post-Construction Stormwater Management for New Development and Redevelopment

12. The dates that outline which program should be used were modified.
13. Permittees are required to use the Stormwater Management Manual for Eastern Washington, or another technical stormwater manual approved by Ecology to meet the requirements of Appendix 1, Core Element #5 (Runoff Treatment) and Core Element #6 (Flow Control).
14. Permittees are required to review Stormwater Site Plans prior to clearing.

Operations and Maintenance

15. Deadline to update O&M plan extended to December 31, 2022

S8 Monitoring and Assessment

16. Minor editorial changes to S8.C. Replaced language that gave default QAPP approval after 90 days, if Ecology did not provide comments, with language that instead allows the Permittee additional time to begin the study if Ecology's review is delayed.
17. Listed the ten E WA Urban Areas associated with the permit to clarify the coordination requirement and the option that one or more Urban Areas may cooperate on a study.

Definitions

18. Added a definition for 'high potential for sediment transport' and 'land disturbing activity'

2.0 ORGANIZATION OF THE RESPONSE TO COMMENTS (RTC)

2.1 Issues and Responses to Comments

Ecology has assembled summaries and excerpts from public comments into this document, and organized them by topic and/or permit condition. Ecology has provided a written response to comments on proposed permit conditions, and indicated where revisions were made to the Municipal Stormwater Permits. When multiple parties commented on the same subject matter, Ecology grouped the summarized and/or excerpted comments into the "Summarized Comments, or Summary of the Range of Comments." This allowed Ecology to respond to the range of comments collectively. The number of

comments and responses do not always match up, where we can be succinct in a response to respond to more than one comment, we did so. Reviewers should read all of the responses listed for a topic.

Numerous commenters provided introductory statements and general comments along with more detailed questions and comments on specific permit conditions. These statements and comments provided important perspective and context that ultimately helped Ecology finalize the permits. Due to the volume of background statements and general comments, Ecology limited written responses to specific comments on the draft permit, and did not provide written responses to background statements and general comments.

For comments made to one permit that resulted in a change to permit language that applied to the same topic in another permit, Ecology determined whether it was appropriate to make the same change in the other permit. Ecology did this to maintain consistency between permits and similar requirements.

Copies of all public comment letters are posted on Ecology's Municipal Stormwater General Permits website: https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Municipal-stormwater-general-permits

2.2 Index of Commenters

This section is an index that lists the name of each city, county, agency, organization, and individual commenter and the topics associated with their comments. We received numerous comments from individuals, those comments are noted as Individual Commenters.

Affiliation	Topics where comments were assigned
Agency	
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Black Diamond	Compliance with Standards
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City of Bellevue	Compliance with Standards
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City of Bothell	Comprehensive Stormwater Planning

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City of Issaquah	Comprehensive Stormwater Planning

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City of Kelso	Comprehensive Stormwater Planning
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City of Kent	Illicit Discharge Detection and Elimination (IDDE)
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City of Lynnwood	Comprehensive Stormwater Planning
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The following individual commenters sent in similar letters, responses are found in the following topics:

1. General comments and Process
2. Public Education and Outreach
3. Public Involvement
4. Stormwater Planning
5. Structural Stormwater Controls
6. SWMMWW

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Mach, Alex
Macy, Mustang
Madigan, Sally
Madsen, Ellen
Magallon, Andrew
Magliola, Lawrence
Mahlis, Larry
Maki, Linda
Mallory, Jesse
Mammen, Harris
Manderville, Bartholda
Manetti, Christina
Mann, Danelle
Marble, Linda
Margolis, Margo
Marino, Nate
Markley, Shannon
Marks, Diane
Marone, Susan
Marquart, Frances
Marshall, Carolyn
Martens, Linda
Martin, Jeanne
Martin, Liza
Martin, Melodie
Martin, Michael
Martinez, John
Martinez, Priscilla
Marx, Bernie
Marx, Nancy
Massey, Carolyn
Massey, Linda
Mastri, Frank
Mathisen, Sarah
Matsui, Vicky
Mazzola, Lisa
Mccabe, Catherine
Mccall, Jordan
Mccann, Ellen
Mccarter, Earl
Mcclain, R
Mcclintock, Gloria
Mcclurg, Daviann
Mcconaughy, Jeffery
Mccormick, Brian
Mccoy, Evan
Mccuen, Annie
Mccuen, Gary
Mcdaniel, Kevin
Mcdonagh, Jan
Mcdonald, Annette
Mcdonald, Maureen
Mcdonough, Rebecca
Mceachrontaylor, Lindalee
Mcgahey, Doria
Mcgill, Ann
Mcgowan-Smith, Lorna
Mcgunagle, William
Mcgurn, Ed
Mckee, Dave
Mclaughlin, Julia
Mclaughlin, Robin
Mcmahon, Annie
Mcneil, Mona
Mcrae, Stacey
Mcrae, Susan
Mcshea, Morgan
Meade, Audrey
Medeiros, Clayton
Medina, Rosario-Maria
Meehan, Camille
Melton, Jim
Mesavage, R
Meuer, Rita
Meyer, Colonel
Meyer, Eric
Meyer, Greg
Meyer, Marilee
Meyer, Robert
Michaels, Megan
Michaels, Melissa
Michaels, Peter
Mick, Debbie
Middleton, David
Miles, Walter
Milhaupt, Shannon
Milkie, Renee
Millard, Jane
Miller, Claudia
Miller, Genevieve
Miller, Sharon
Miller, Travis
Miller, Vicky
Mills, Damon
Mincin, Ken
Miner, Ralph
Mitchell, Jessica
Mitchell, Karen
Mitchell, Kimberley
Mixon, John
Mohseni, Leila
Moldestad, Norman
Molloy, Mark
Monasevitch, Nina
Moore, Ben
Moran, Judy
Morander, Kellyann
Morberg, Jan
Moreland, Tom
Morency, Claire
Morgan, Lesley
Morin, Carla
Mork, Stuart

Moser, Rich
Mosley, Marilyn
Mott-Smith, Margot
Mouton, Alexander
Mower, Amy
Moye, Ed
Mujica, Bernardo
Mukai, Juro
Mulcahey, Patrick
Mulcare, James
Mulvey, Lori
Munar, Dwayne
Murawski, Heather
Murphy, James
Murphy, Joanie
Murphy, Maryann
Murray, Madelon
Musgrove, Donna
Muzzey, Karry
Myers, Keli
Myers, Mark
N, Mary
Nam, S.
Nancy, Jim
Nardell, Jason
Nattrass, Suzanne
Neevel, David
Nelson, Jennifer
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Nelson, Michelle
Nelson, Milton
Nelson, Thora
Newland, Fletch
Newman, Roberta
Newton, Laura
Newton, Shirley
Nicholson, Allan
Niesen, Andreas
Nightingale, Terry
Nihipali, Michele
Nolasco, Chris
Noll, Richard
Nordby, Pat
Norman, Jeffrey
Northrup, Lori
Noyes, Marianne
Nunez, P
Nussbaum, Berl
O, Nancy
O'Brian, Bonnie
O'Brien, Bill
O'Brien, Suzanne
O'Dell, Sean
O'Grady, Shawn
O'Halloran, Dr.
O'Neal, Maureen
Obert, Leonard
Ogle, Peg
Ohman, Lynda
Oliveri, Tom
Olivier, Nina
Olney, Twyla
Olsen, Carol
Olson, Erik
Olson, Virginia
Olsson, Phil
Onufer, Jerome
Osborne, Mark
Oshikawa, Phyllis
Ostrer, Allison
Ostrow, Hillary
Ouellette, Tracy
Overstreet, Amanda
Overton, Kristy
Owen, Alice
Padelford, Grace
Page, Bob
Palmer, Annie
Palmer, Judy
Palmer, Lorraine
Palmer, Martin
Pantier, Gina
Parker, Deborah
Parker, Stan
Parman, Teree
Paro, Sue
Parriott, Maureen
Parsley, Adina
Parson, Frances
Pasqua, John
Patterson, Eugenia
Paulsen, Julia
Pavcovich, Michelle
Paxson, Michele
Payton, Fay
Pearson, David
Pearson, Rick
Pearson, Tia
Peck, Elizabeth
Pecurto, Eusebio
Pederslie, Sharon
Pellerin, Tyra
Pellicani, Andrea
Pena, Deanna
Penchoen, Gregory
Pennington, Sharyn
Percival, Scott
Perkins, Cheryl
Perkins, Guy
Perkins, Lela
Perlaki, Jen
Perron, P
Persky, William
Peter, Rimbos
Peters, Matt

Peters, Thom
Peterson, Erik
Pfeifer, Nezka
Pflaumer, Katrina
Phelps, Janet
Phelps, Renee
Pierot, Dave
Pierot, Paul
Pierson, James
Pierson, Neilia
Pinto, Juliann
Poirier, Jeanne
Poissot, Kathy
Polda, Sarah
Polley, Daniel
Poncia, Beverly
Porter, Alexander
Porter, Susan
Post, Sheryl
Potter, Lisa
Potts, Paul
Poulson, Terry
Power-Drutis, Tamara
Prezyna, Ann
Price, Mara
Proctor, Steve
Provost, Lin
Psaras, Brenda
Pullman, Aubrey
R, A
R, F
R, J
R., Andrew
Radford, Kathy
Rafnson, Denise
Rall, Ben
Ramirez, Veronica
Ramon, Laura
Ramos, Debbie
Ramos, Miguel
Randles, Melinda Brown
Rarich, Kirsten
Ray, Laura
Read, Helen
Reading, Toni
Redish, Maryellen
Reed, Ronald
Rees, Melissa
Reese, Sarah
Reeves, Lenore
Reeves, Valerie
Register, Elizabeth
Rehn, Debra
Reich, Bianca
Reichert, Robyn
Reifschneider, Jill
Reineke, Toni
Reinfried, Kay
Renner, Jeff
Resh, Brian
Reynolds, Michele
Reynolds, Miriah
Rice, Robert
Richman, Dore
Ridder, Lynette
Riley, Mary
Rinaldi, Margaret
Riner, Lee
Ring, Susan
Ringle, David
Riordan, Janet
Rivera, Ed
Rivera, Javier
Rivers, Jerry
Rivkin, Mary
Ro, Katz
Roberts, Melissa
Robinson, Janet
Robison, David
Rochkind, Iris
Rocks, Brent
Roda, Anne
Rodgers, Camie
Rodgers, Patricia
Rodgers, Sandra
Rofkar, Barbara
Rogers, Pamela
Rohrer, Chuck
Rolf, Carol
Rolland, Seth
Roller, Mark
Rollison, Sheri
Roman, Nora
Rome, Krista
Romero, Tony
Rosales, Charis
Rose, Rebecca
Rosenfeld, Daniel
Rosenkotter, Barbara
Rosenthal, Elizabeth
Ross, Anne
Ross, Catherine
Rossen, Christine
Roth, Stefanie
Rothman, Emily
Rowland, Danielle
Rubinstein, Harvey
Rudman, Linda
Rudolph, Joyce
Ruhl, Kathy
Russell, Mark
Rutherford, Francie
Ryba, Beau
Rybicki, John
Ryland, Anne
S, Barb
S, Denise

S, John
S., Kay
Saalwaechter, Susie
Sachs, Stephen
Sage, Kaitlin
Sagovac, Emily
Sakura, Peter
Salcedo, Corinne
Sampson, Paul
Sanchez, Sierra
Sandvig, Daniel
Santerre, Gay
Saran, Harvinderjit
Sarvasy, Paul
Saupp, Janet
Sautter, Tamar
Savard, Judy
Saxon, Diana
Sayre, Rebecca
Scarborough, Jim
Schaechter, John
Schaef, Dennis
Scheel, Doug
Schiesl, David
Schmidt, P.Jacquelyn
Schmied, John
Schneider, Dan
Schomberg, Sandra
Schuch, Janice
Schuessler, Bob
Schuman, Laura
Schwartz, Marge
Schwartz, Phebe
Schwartz, Ronlyn
Schwarzkopf, Kim
Schwinger, Francis
Scott, Cliff
Scott, George
Scott, Mark
Scott, Nolen
Scott, Star
Scribner, Denee
Seals, Donny
Sears, Janice
Seater, Kimberly
Sebring, Mary
Secunda, Kim
Sedon, Douglas
Segretti, Fiona
Selby, John
Sellers, Jennifer
Seniuk, Susan
Sennesael, Menno
Sennett, Michael
Sevilla, Caroline
Seward, Maryann
Sextro, Ann
Seymour, Sonja
Shaffer, Anne
Shafransky, Paula
Shandler, Jalien
Shankel, Ms
Shapiro, Michael
Sheehy, Steve
Shelangoski, Dena
Shelby, Bc
Sheldon, Diann
Shields, Juli
Shields, Maggie
Shilling, Bruce
Shippee, Robert
Shoemaker, Lynn
Shubert, Stephen
Shuh, Matt
Shurgot, Michael
Shwed, Robert
Siddique, Omar
Siegel, Sheila
Sifuentes, D.G.
Siggs, Pat
Sigler, Dean
Sigman, Rhonda
Sim, Barbara
Simanton, John
Simcox, Shelley
Simmons, Davin
Sippel, Katrin
Siptroth, Michael
Skelton, Mary
Skerry, Priscilla
Skibinski, Lynn
Skill, Jacqui
Skinner, Will
Skolnick, Kate
Skouge, Gloria
Slaton, Chris
Sloan, Holiday
Slone, Tyler
Slosky, Ron
Small, Justin
Smith, Baker
Smith, Chris
Smith, Dennis
Smith, Donna
Smith, Leslie
Smith, Lloyd
Smith, Marilyn
Smith, Sandra
Smith, Stacey
Smoose, Jennifer
Snapp, Seth
Snider, Sandra
Snyder, Dan
Soares, James
Sohl, Erica
Sola-Llonch, Nancy
Solomon, Samantha

Solum, Mary
Sonnenfeld, Nancy
Sorensen, James
Sosin-Rocha, Madeleine
Spangenberg, Mia
Sparks, Kathy
Sparling, Sheryl
Spear, Debbie
Species, Scott
Spoor, Constance
Springer, John
Sprute, Mary
Stamey, Sara
Stanberry, Beth
Standridge, Lavaughn
Stanley, Carol
Stansfield, Jack
Starseed, Lozz
Stay, Chris
Stein, Cindy
Steiner, A.L.
Steinmann, Brigitte
Stephen, Curry
Stepich, Mark
Stepp, Michelle
Sterling, Laurie
Stevens, Bradley
Stevenson, Barbara
Stewart, Jackie
Stewart, Kristin
Stiffler, Tonya
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Stoeckel, Sue
Stohlman, Julie
Stone, Judith
Stone, Miriam
Storck, Ivan
Storm, Laurie
Story, Linda
Straight, Courtney
Strawman, Tom
Strickwerda, Chris
Struck, Fred
Stuart, Fiona
Stucki, Elizabeth
Studley, Linda
Stuehler, Helen
Stutheit, Don
Subala, Marilyn
Sullivan, Carol
Sullivan, Diane
Sullivan, Gail
Summers, George
Sutherland, Dolly
Sutkus, Laura
Sutor, Molly
Svensson, Shannon
Swaim, Laura
Swank, Ryan
Swayne, Peggy
Swoffer, Thomas
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T, F
Takush, Kathie
Tallman, Scott
Tanksley, Michael
Tautvydas, Kestutis
Taylor, Aileen
Taylor, Deborah
Taylor, Karla
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Taylor, Matthew
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Taylor, Polly
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Teraberry, Kimberly
Terrenzio, Joe
Terry, James
Teske, John
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Thoman, James
Thomas, Karen
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Thompson, Lauren
Thomsen, Don
Tideman, Serena
Tiefer, Hillary
Tierney, Gavin
Tobias, Alice
Tomlinson, Rich
Tompkins, Chris
Towner, Erline
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Trail, Teresa
Trainor, Rebecca
Trasoff, Stephanie
Treadway, Roy
Trees, Barbara
Trescone, Thomas
Trimble, Jr
Tromly, Benjamin
Trosper, Cheryl
Tucker, Drayton
Tufts, Janet
Turnell, Amelia
Turner, Bernadine
Tuttle, Barbara
Tylczak, Katherine
Tyson, Carole
Uding, Nancy
Uriarte, Ray
Urias, Victoria

Uy, Daisy
Uyenishi, Steve
Uzuner, Selim
Vadas, Dr.
Vail, Cameron
Valentine, J
Valentine, Jennifer
Van Alyne, Emily
Van Leekwijck, Natalie
Van Vorous, Heather
Vandegrift, Debra
Vandermaten, Judy
Vatne, Sharon
Vaughan, Carolyn
Vavrek, Jean
Vayda, Karen
Veloz, Amy
Venos, Mary
Veralli, Robert
Vermeeren, Dirk
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Vexler, Eleven
Vidas, Jennylynn
Vienneau, Wendy
Vigars, Barbara
Vijarro, Carmen
Vilgalys, Justas
Villeneuve, Michele
Vinson, Kathryn
Vital, Sybille
Vogel, Holly
Voli, Carlo
Volmut, Mark
Volz, Candace
Von Christierson, Peter
Vonfeld, Beverly
Vonmoos, David
W, A
Wade, Bruce
Wagoner, Robyn
Wahr, Bernhard
Wainscott, Melody
Wale, Liisa
Walker, Carol
Walker, John
Wallace, Robert
Walter, Mary
Walton, Bruce
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Warner, Valentina
Washington, Chris
Watson, Harold
Watts, Martin
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Wear, Tiffaney
Weaver, Julene
Webb, Dean
Weber, Carol
Wechsler, Roger
Wehner, Michaela
Weinstein, Diane
Weinstock, Jason
Weir, Kristi
Weis, Marie
Weisel, Jan
Weiss, R.
Weiss, Sarah
Wells, Tonia
Wendler, Dorothy
Wesley, James
Wessels, Riley
West, Rusty
Westra, Jennifer
Weyer, Dora
Wheeler, Chloe
Wheeler, Kassie
Wheeler, Kathleen
Wheetman, Dan
White, David
White, Lois
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Whitehurst, Carol
Whitener, Shari
Whitesell, Edward
Widge, Cochran
Wiederhold, Joe
Wienert, John
Wiens, Dolores
Wilburn, Danielle
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Wilfing, Janice
Wilkerson, Joyce
Wilks, Andrew
Willey, Irene
Williams, Betty
Williams, Janet
Williams, Kathleen
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Williams, Sandy
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Wilmarth, Michael
Wilson, Barbara
Wilson, Bea
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Wingard, Greg
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Winkel, David
Winn, Randall
Wirth, Mark

Witmer, Tiffany
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Wollborg, Suzanne
Wollett, Susan
Woo, Elaine
Woo, Vickie
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Wood, Antonia
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Woodruff, James
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Wright, Joan
Wright, Judy
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Wynne, Janet
Yake, Bill
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Yoge, Yonit
Young, Connie
Young, Kc
Young, William
Zaccagnino, David
Zack, Mary
Zapf, Fred
Zarrell, Vicki
Zarter, Ellen
Zech, Gisela
Zeman, James
Zens, Mike
Zentura, Ms
Zerr, Laura
Zinn, Andrea
Zinter, Yvonne
Zizz, Joy
Zubek, Sandra
Zucker, Marguery

3.0 GENERAL COMMENTS AND PROCESS

3.1 General Comments

Commenters: City of Edmonds, Clark County, City of Bellevue, King County, Snohomish County, City of Olympia, City of Tacoma, City of Shoreline, City of Port Angeles,

Summarized comments

1. Align the permit term to match the calendar year. Cities do not operate on an August to August schedule.
2. Allow more time for comments. Ecology is not allowing sufficient time for review and comment.
3. Exempt Port Angeles from the proposed revisions to this permit. This revisions of the permit represents an aggressive increase in the regulation of stormwater and in the burdens placed on the government entity.
4. Throughout the Permit cycle, ensure the Primary Contact person listed in item D. of the "Duty to Reapply-Notice of Intent for Coverage" submitted by each Permittee receives written notification of any new Permit requirements, guidance documents or other pertinent information.
5. State that meeting the permit's performance measures should be recognized as MEP and AKART.
6. Not including a provision allowing "backsliding" from the SWMP plan level will create a disincentive for Permittees to do more than is required by the permit.
7. Coordinate with DOT to treat road and highway discharges. Take action on Urban Mortality Runoff Syndrome (UMRS) killing Coho with stormwater toxics. Protect degraded waters (ex. Deschutes) by preventing Permittees from further polluting waters exceeding TMDLs. Need to apply more county resources to address non-point pollution entering stormwater runoff (including agriculture runoff).
8. Ecology should combine the Phase I and Phase II Permits, requiring Phase IIs to meet Phase I requirements.

Response to range of comments

1. Ecology will issue the final Permits on July 1, 2019 as scheduled. Ecology disagrees that not enough time was given for review and commenting. Ecology provided three months of public comment and held eight workshops and seven public hearings state wide. WAC 173-226-130(d) requires at least a 30-day public comment period and one public hearing, and Ecology far exceeded that requirement. The draft *Stormwater Management Manual for Western Washington* was available for four months for public comment. Ecology also conducted an extensive public input process for the updated permits over the past three to four years. That process included listening sessions, and an informal public review and comment period on preliminary draft permit sections.
2. Ecology acknowledges that smaller jurisdictions' stormwater programs have less capacity than do larger jurisdictions, and made a number of final permit decisions in consideration of the smaller jurisdictions. The final permit requirements increased the flexibility for requirements such as

source control for existing development, IDDE reporting, O&M documentation, see those sections for additional discussion. In addition, Ecology uses enforcement discretion and provides technical assistance in consideration of jurisdiction size and capacity. Ecology believes the permits achieve a good balance of prescriptive requirements and the flexibility for Permittees to tailor requirements to local conditions.

3. Ecology does include the “primary contact” when providing information to Permittees.
4. Ecology did not change the requirement that the SWMP shall be designed to meet MEP and state AKART requirements. Although Ecology considers the requirements of this permit to be MEP and AKART, each program component includes areas of flexibility for Permittees to design and implement individual activities tailored to local conditions to meet the requirements. Permittees are required to design their SWMPs to MEP and AKART standards to protect water quality. Ecology does not agree that the permit should state that Permittees who implement the SWMP are meeting MEP and AKART.
5. The term “anti-backsliding” refers to a statutory provision that prohibits the renewal, reissuance, or modification of an existing NPDES permit that contains effluents limits, permit conditions, or standards that are less stringent than those established in the previous permit. They do not apply to a Permittee’s individual SWMP plans.
6. WSDOT is a PH I Permittee who has their own required actions under their own permit.
7. Ecology made significant attempts to further align the WW PH I and PH II Permits. However, Ecology does not feel it is appropriate to combine the permits at this time.

3.2 General Editorial Comments

Summarized comments

1. The City noted inconsistent capitalization for the word "Permittees"
2. The City noted inconsistent comma usage.
3. Ground Water should be one word similar to WAC 173-200.
4. Throughout the document, ensure that "new development" states "new development" and not just "new or redevelopment projects" because there is no definition for new projects. The correct terminology should be "new development or redevelopment projects."
5. Please review all internal references to ensure that the correct sections are being referenced. Due to the changes in section numbers, internal references are directing the reader to the wrong sections
6. Do not add S5.C components in a way that changes the existing component numbering system. Permittees have built their programs around the components of the 2007 permit.

Response to range of comments

Ecology reviewed the Permits and made editorial changes, where applicable. Ecology retained the order of S5 components as listed in the formal draft.

3.3 Permits exceed federal requirements - Comments from Eastern Washington

Commenters: Chelan County, City of Spokane

Summarized comments

1. Implementation of the Municipal Stormwater Permit administered by the Department of Ecology poses a significant cost to Phase II communities. Each five-year permit cycle, the Department of Ecology proposes minimum performance measures that exceed the Environmental Protection Agency regulations within the Code of Federal Regulations water pollution control for stormwater discharges. The county strongly encourages the Department of Ecology to not impose performance measures that go beyond federal requirements.
2. There is an approximate seven month delay between the due date for draft permit comments on November 14, 2018 and the permit reissuance date of July 1, 2019, with no scheduled public communications from Ecology. We believe this is a good opportunity for Ecology to communicate to the Permittees the status of the comments that have been provided to Ecology, and to allow follow-up interaction between the Permittees and Ecology in order to ensure complete understanding of the new permit conditions, and foster continuous compliance during the transition between permit cycles.

Response to comments

1. Ecology's municipal stormwater permits meet the MEP standard of the Clean Water Act and also meet the AKART standard of state law (RCW 90.48). See the discussion in the Fact Sheet. The EPA federal rule does not include fully detailed specifics on the program elements required, and clarifies that these are minimum requirements. Ecology permits provide program benchmarks and more detailed requirements that establish clear thresholds for compliance to protect water quality to the MEP and to meet the AKART standard.
2. Thank you for the comment. Ecology will communicate with Permittees and other interested parties when the final permit language is ready to be released. We will also plan or will attend meetings with Permittees to ensure they are knowledgeable about the next version of the permit.

3.4 Support permit requirements or request stronger requirements

Commenters: Puget Soundkeepers, Washington Environmental Council, Individual Commenters.

Summary of the range of comments

1. The permits are critically important to protect and restore Puget Sound and to aid in recovery of ESA-listed salmon species and killer whales.
2. The draft permits fail to capitalize on this important opportunity to protect and restore the Sound.
3. Protect Puget Sound from polluted runoff. We need to strengthen the permits to protect Puget Sound.

Response to the range of comments

1. Ecology worked with a broad range of stakeholders and considered substantial scientific and technical information in establishing the requirements and compliance thresholds for these permits. Ecology believes the final permits achieve a reasonable balance of requirements and timing for effective implementation.
2. The final Phase I and Western Washington Phase II Permits include requirements for watershed-based stormwater planning in the four most populated counties of western Washington. This analysis includes biological thresholds.
3. The final permits (see the Coordination section of this RTC) encourage Permittees within watersheds to coordinate stormwater management programs. Ecology also encourages Permittees to work within existing watershed and salmon recovery planning groups to conduct stormwater planning to address existing and future development.

3.5 Fact Sheet

For comments on specific permit requirements that refer to the Fact Sheet, see the specific permit sections of this RTC.

Commenters: King County, City of Seattle

Summarized comments

1. Concerned that meaning has been lost for the Phase I Permit by combining the two fact sheets into one. At a minimum, when a FS section relates only to Phase II, please revise the Fact Sheet to state that in the Permit section title and include the Phase-II only Section number. The comments have not indicated each instance, but for example: 6.1.3, 6.1.4, 6.1.5, and 6.1.6 all appear to relate to Phase II only and all refer to S1 Permit sections that do not match the text in the Phase I Permit."
2. Please consider restoring most of the Phase I Permit 2011 FS text about coverage and Permittees, which is accurate and complete and contains important information. If not, then it is necessary to add "may" to read: "The areas covered by the permit [ADD may] include the entire incorporated area of a city...." Reason: Inaccurate. Permit coverage is only for "discharges from" the MS4, not direct discharges or combined sewer areas.
3. Delete "Phase I and" in second full paragraph, to read, "For [DELETE Phase I and] Phase II counties, the Permits cover the urbanized area, or census-defined urban area, that extends...." Reason: Inaccurate. The maximum MS4 area for Phase I counties is based on jurisdictional boundaries, not census-defined urban status like Phase IIs."
4. Comment RE: Fact Sheet Pg 14, Degraded Water Bodies, 2nd bullet under heading: Re: text "Other recent studies".

   Suggested Language: "Studies have suggested that road density and traffic volumes are main stressors to benthos community health in urban streams indicating traffic associated pollutants in stormwater degraded receiving water bodies."

5. Fact Sheet Fact Sheet 14 "Comment RE: Fact Sheet Pg 14, Degraded Water Bodies, 3rd bullet under heading: Re: text ""Studies in the 1990s"". The numbered end-note (4) only lists one study dated 1991. Recommendation: Please provide references to additional studies."
6. Fact Sheet Fact Sheet 14 "Comment RE: Fact Sheet Pg 14, Degraded Water Bodies, 5th bullet under heading: Re: text ""Recent modeling exercises"". ""Recent modeling"" seems to be referencing the Watershed Modeling efforts done by Phase I Counties. (see section 3.2.1 below on "Phase I Counties' Watershed Modeling and Planning")
7. Roof Runoff: Issue – Based on Ecology's recent roof runoff study, certain types of roofing materials have been identified as being a significant source of pollutants. Comment: What does Ecology plans to do with the results of their study? King County recommends that Ecology include these types of roofing materials as PGIS "
8. Pg 51, "We encourage Ecology to point to the MS4 database framework, the "data dictionary" developed by a GROSS grant and currently housed at the Washington Stormwater Center website in addition to the guidance that they currently provide.
   http://www.wastormwatercenter.org/standardized-mapping-framework/"
9. Pg 57, Ecology plans on doing a permit modification process to include the list of "approved" documents and codes in Appendix 10. Recommend that this should be clearly stated in Appendix 10, Part 3 and in S5.C.5 of the permit
10. Fact Sheet Fact Sheet, pg 57: "One important strategy that only one of the four counties highlighted in their scenarios was changing the land use designation or zoning established as part of the growth management process. King County demonstrated that such changes will help protect water quality while substantially lowering the high capital project costs identified by the models.
    Please remove this statement as it is incomplete in its explanation and use.

    This statement is based on a modeling run in which 25% of the effective impervious area was removed from the analysis. The cost estimates were based on what mitigation was needed to meet the objective with reduced EIA. The cost of the removal of the impervious surfaces, the houses, roads, sidewalks, etc. and the cost of the property purchases were not included in the analysis making this statement inaccurate."

Response to range of comments

1. The Fact Sheet is not a document that is revised after it is issued as a practice. The Fact Sheet is required under WAC 173-226-210 and is part of the official record. Ecology is appending this RTC to the August 2018 Fact Sheet and posting it online as a component of the final permits. Permittees should rely on information in the Fact Sheet and RTC to understand, for example, the rationale for a permit change.
2. This Response to Comments is an appendix to the Fact Sheet. The combined Fact Sheet states at 6.1.3: This remaining section on S1 applies to Phase II Only – which covers the sections 6.1.3-6.1.6. The introductory paragraph to section 6.0 also explains how the sections were formatted.
3. Although direct stormwater discharges to a receiving water are not authorized by the Permits, the statement in the Fact Sheet is accurate as it refers to the permit section.

4. Phase I County coverage is per section S.1 and is based on MS4 discharges within and from the jurisdictional boundaries.
5. Regarding the study cited in the footnote, thank you for your comment. The referenced paper was the first of many studies on the topic.
6. Roof runoff results can be considered by Permittees as they implement their own programs. Ecology has not made any specific changes at this time.
7. Ecology appreciates the commenter's directing our attention to other MS4 mapping resources (i.e., the MS4 database framework and "data dictionary") that Permittees may want to reference in addition to Ecology's MS4 mapping guidance.
8. See responses to comments on Appendix 10.
9. Ecology does not revise Fact Sheet language after it is issued. The commenter makes a qualification to a general statement in the Fact Sheet. This will be flagged to update for future permit cycles.

4.0 PERMIT COVERAGE AREA AND PERMITTEES

Permit section: S1 (All permits)

Commenters: Kay Kassinger, Clallam County, King County, City of Tacoma, City of Port Angeles, City of Everett, North Peninsula Building Association, City of Olympia, Puget Soundkeeper Alliance, Board of Clallam County Commissioners, Clallam County Department of Community Development, Clallam County Public Works, City of Port Angeles, North Peninsula Building Association, Kay Kassinger (Director, Peninsula Housing Authority), Jane Hielman (Clallam County Planning Commission).

4.1 Phase II Permit coverage of the unincorporated Port Angeles UGA (PAUGA)

Summarized comments

1. Supports including the Clallam County urban growth area surrounding Port Angeles. This will provide consistent requirements for development opportunities. The City of Port Angeles appreciates that the UGA will be held to similar requirements as the City to help 'even the playing field' for development opportunities.
2. Disagree with Ecology's determination that the unincorporated PAUGA meets criteria for Phase II Permit coverage. Ecology evaluated the PAUGA in 2011-2012 and determined at that time that the PAUGA did not meet criteria for permit coverage. The County says, in the years since Ecology's 2012 evaluation: their MS4 in the PAUGA has not changed, impervious cover has decreased, water quality impairments have not changed, and that stormwater regulation in Clallam County is more robust now than it was in 2012. Ecology should re-evaluate its determination to cover the PAUGA.

Response to range of comments

1. Ecology agrees that stormwater requirements are important factors in ensuring appropriate environmental protections for all new development and redevelopment.
2. Ecology evaluated the unincorporated PAUGA for Phase II Permit coverage consistent with federal regulations (40 CFR 123.35) and agency guidance for these evaluations. Ecology has determined that the PAUGA meets criteria for permit coverage. Ecology used the 2007 Petition Criteria document for this evaluation. Ecology weighed information on: impaired water bodies, interconnection to an existing area of coverage, population growth, the current status of stormwater management in the County UGA around Port Angeles, and the potential for discharges from the MS4 to contribute pollutants to surface waters of Washington State, in our evaluation of the unincorporated PAUGA for permit coverage. The MS4 in the PAUGA is contiguous with (and interconnects to) another already regulated MS4 – i.e., the MS4 owned and operated and regulated by the City of Port Angeles. The MS4 in the PAUGA also discharges stormwater to impaired or sensitive waters – Lees and Ennis Creeks in particular. Lastly, the County has not demonstrated that the County's existing stormwater management program adequately addresses discharges of pollutants from County MS4 to surface waters and ground waters in the PAUGA.
3. In April 2012, Ecology provided County Commissioners with several recommendations that, if followed, would have demonstrated the County's commitment to implement effective stormwater management. Unfortunately these 2012 recommendations were not advanced. Ecology appreciates that the County has recently demonstrated renewed enthusiasm for making stormwater management a priority. However, as of November 15, 2018 (close of the permit's comment period) no substantive advances have been made to manage stormwater in the County. The PAUGA meets several of the six Petition Criteria Factors, as is elaborated in this Response to Comments.

4.2 PAUGA Discharges to impaired or sensitive waters

Summarized comments

1. There is no unincorporated PAUGA up gradient of Dry, Tumwater, and Peabody Creeks; these creeks are all within the City of Port Angeles (City) and not in the unincorporated PAUGA. The same applies to most of Valley Creek and White Creek since there is only a small portion of unincorporated PAUGA up gradient of these creeks in the City.
2. The County says that conditions of the creeks that run through the UGA and the City of Port Angeles have not changed since Ecology's 2012 decision to not cover the PAUGA under the Phase II Permit. According to the EPA, data for 303(d) listing includes data only through May 1, 2011, which was data available at the time of the 2012 evaluation." CWA 303(d) listed (Category 5) streams that run through the PAUGA and the City of Port Angeles have better water quality within the UGA than the downstream city portions of these streams.
3. The County says, "…where pollutants are found in the downstream City portions, the entire segment is labeled as a Category 5 regardless of the better water quality up gradient, because of

the segmentation system Ecology used during the last listing period, which is now being changed in the current 305(b) round."

4. The County says that streams B-IBI data shows mostly excellent B-IBI (green symbol) and good (yellow symbol) results for Dry, Tumwater, Valley, Peabody, White, and Ennis Creeks before entering the City of Port Angeles. Morse Creek is not in the unincorporated PAUGA, and Lees Creek shows some issues; however, the B-IBI data closest to the Strait, at Lees 0.1 shows good benthic conditions.
5. The County says the PAUGA is "not a TMDL, Sensitive Area, Shellfish Protection District, [or] National Marine Sanctuary" and it does not have "State Designated Outstanding Resource Waters, drinking water intakes or designated protection areas, or designated public swimming areas."

Response to range of comments

1. Ecology disagrees that there is no unincorporated PAUGA up gradient of Dry and Peabody Creeks. Ecology reviewed high resolution NHDPlus data and found that Chickamin Creek, which flows through the western PAUGA north of Route 101 discharges to Dry Creek. NHDPlus data also indicates an unnamed headwater stream in the PAUGA (west of Ramona Rd. and S. Mt. Angeles Rd.) discharges to an unnamed perennial stream, which flows to Peabody Creek (USGS NHDPlus HR, https://nhd.usgs.gov). There is no PAUGA up gradient of Tumwater Creek. In 2011, Ecology did not identify County MS4 in the PAUGA area that drains to Valley Creek.
2. The County has not presented water quality data to substantiate their claim that "conditions for these creeks has not changed since the 2012 Ecology letter…" Because the most current water quality assessment data used to list impaired waters includes data only through May 1, 2011, Ecology cannot say whether current water quality conditions in these creeks has improved, worsened or remains unchanged in more recent years. EPA approved the current 303(d) list as of July 2016.
3. Several streams that drain watershed areas of the PAUGA and the City of Port Angeles are impaired for water quality parameters including bacteria, dissolved oxygen (DO), turbidity, temperature and B-IBI/bioassessment. Several streams that flow through the City of Port Angeles and/or the UGA, are designated for salmonid habitat and/or spawning, rearing and migration beneficial designated uses. Salmonids are sensitive to low DO, increased stream temperature, high bed load movement with increased stream velocity, and stormwater pollution.
4. Ecology reviewed current water quality assessment CWA 305(b)/303(d) data for Lees, Ennis, Peabody and Dry Creeks; each of these creeks is on the current (2014) CWA 303(d) list of impaired waters for one or more parameters; and each creek has designated use protections for salmonid habitat and/or salmonid spawning, as well as primary contact recreation and water supply uses. Lees Creek is a perennial stream that flows through the eastern PAUGA prior to discharging to the Strait, and does not flow through the City of Port Angeles. Lees Creek from the Lees East Fork confluence to the Strait is impaired for DO, turbidity and bacteria (Listing IDs 42869, 79019, 21453). All water quality data used to list this assessment unit as impaired was sampled from Lees Creek within the PAUGA. Ennis Creek flows along the western boundary of the eastern PAUGA where it enters the City of Port Angeles prior to discharging to the Strait.

Sample data from three of the four locations used to list Ennis Creek as impaired for bacteria are on or near the city-UGA boundary (Listing ID 42906; Location IDs CCWR_00024, CCWR_00025, CCWR_00588). Catchment areas in the City and the UGA drain to Ennis Creek. In 2011, the City discovered two stormwater outfalls to Ennis Creek in the County PAUGA reaches of this stream. Flows from both outfalls tested above state water quality standards for fecal coliform. Water quality data used to list Peabody and Dry Creeks as impaired was collected from stations in the City, since neither creek flows through the UGA. The PAUGA MS4 discharges to impaired waters, Ennis and Lees Creeks, in particular.

5. Ecology's water quality assessment approach changed under the current (2014) CWA 305(b)/303(d) list. The comment that the "segmentation system" is "now being changed in the current 305(b) round" is not accurate. Ecology's stream assessment method change from the Public Land Survey (PLS) section to National Hydrography Dataset (NHD) reach is already reflected in the current CWA 305(b)/303(d) assessment data. The new NHD reach segmentation system is based on the confluence to confluence reach defined by NHD. Segments are based on hydrologic principles instead of political boundaries under the PLS system.
6. The map of B-IBI data that the County included with their comments shows both "good" and "fair" B-IBI ratings along Ennis and Lees Creeks, though no numeric BIBI scores or sample dates by location were provided. These B-IBI ratings do not negate the fact that Lees and Ennis are currently assessed as impaired for multiple water quality parameters.
7. Ecology evaluated "sensitive waters"—not sensitive areas—as this term is defined in Ecology's Petition Criteria. There are "sensitive waters" in the PAUGA. Sensitive waters include critical aquifer recharge areas (CARAs), which the Growth Management Act defines as "areas with a critical recharging effect on aquifers used for potable water" (RCW 36.70A.030). There are CARAs in the PAUGA. Sensitive waters are also surface waters that provide critical habitat for threatened or endangered species. Naturally spawned anadromous steelhead and Chinook salmon originating from rivers flowing into Puget Sound from the Elwha River eastward are threatened species (50 CFR 223.102). Critical habitat for Puget Sound steelhead is designated for the Port Angeles Harbor watershed, which includes Dry, Ennis, Lees, Valley, and other creeks (50 CFR 226). Critical habitat for Puget Sound chinook salmon is designated for nearshore marine areas along the Strait, including areas adjacent to the City of Port Angeles and the eastern PAUGA (50 CFR 226).

4.3 PAUGA Areas served by the MS4

Summarized comments

1. The PAUGA MS4 does not meet Ecology's 1,000 population served by the MS4 threshold. The PAUGA 10 year growth rate from 2008 to 2018 is 0.44%, which is far below the 15% over a ten-year period, high growth rate threshold in Ecology's evaluation criteria.
2. The County estimates the current PAUGA population served at 853. This estimate is in part based on a household occupancy rate of 0.917180.
3. The County says the PAUGA is not contiguous with an already regulated MS4, and that it did not meet this criteria in 2012.

Response to range of comments

1. Ecology weighed several factors, as described above when determining if permit coverage is warranted. Ecology disagrees with the County estimate of 853 population served by the MS4. The County says it multiplied 930 by a household occupancy rate of 0.917180. August 2018 OFM SAEP data for unincorporated UGAs includes the following 2018 estimates for the unincorporated PAUGA: household population (2,717), occupied housing units (1,216). The 2018 estimated average household occupancy rate for households in the unincorporated UGA is 2.23 based on this OFM SAEP data; Ecology applied a 2.22 average household occupancy rate in 2011 to estimate 932 people served by the MS4. It is unclear how the County estimates a household occupancy rate of 0.917180 for the UGA. This household occupancy rate is inconsistent with current OFM SAEP data for the unincorporated PAUGA.
2. The PAUGA MS4 is contiguous with an already regulated MS4, i.e., the City of Port Angele's MS4. The City of Port Angeles became a NPDES Phase II Permittee in 2007. Each discreet area of the unincorporated UGA is contiguous with some portion of the City of Port Angeles. Ennis Creek forms the primary border between the largest and most populated portion of the UGA and the City of Port Angeles. Several smaller sections of UGA border Port Angeles directly.

4.4 Current Clallam County stormwater policies and regulations

Summarized comments

1. After Ecology's 2012 evaluation of the PAUGA, adoption of draft plans and ordinances for stormwater management stagnated as result of a change in the elected DCD Director and pushback from the community. There is now more political will for updated stormwater management in the County, and the county listed several steps taken since 2017.
2. The County says its Critical Areas code (Chapter 27.12 CCC) has provisions related to stormwater management in addition to other protection standards such as buffers from wetlands, streams, and landslide hazard area; and that the Comprehensive Plan (Chapter 31.04 CCC) includes many policies on stormwater management, pollution prevention, and public involvement and education.
3. The County says new large-scale development in PAUGA has been conditioned through SEPA to comply with the 2005 or later Ecology stormwater manual. (Chapter 27.01, Clallam County Environmental Policy).
4. Clallam County Public Works (CCC 5.100.240) requires approval of a stormwater drainage plan prior to obtaining a building permit, road access permit, and for actions that may impact stormwater runoff.
5. The Clallam County Public Works is a member of the Regional Road Maintenance Program and uses the WSDOT 2014 Highway Runoff Manual and the February 2016 Supplement. The County says Ecology's website says, "Ecology approved the WSDOT *Highway Runoff Manual* as functionally equivalent to the *Stormwater Management Manual for Western* and *Eastern Washington*."
6. The County says Clallam County projects one acre or greater are required to obtain an NPDES General Construction Stormwater Permit, which requires preparation of a Stormwater Pollution

Prevention Plan (SWPPP) to control the effects of runoff during construction. The County says sites are inspected and monitored until final stabilization, and that this is in addition to the requirements of the 2014 *Highway Runoff Manual* and 2016 Supplement.

7. Clallam County recently updated stormwater regulations and policies in its updated County Shoreline Master Plan (SMP) and County-wide Planning Policies (CWPP) in October 2018. The CWPP now includes stormwater policies, including an illicit discharge prohibition. The County says its updated SMP contains policies and regulations on clearing, grading and filling; temporary erosion and sediment control; stormwater management and illicit discharge regulation, including stormwater development standards referencing the most current edition of the Ecology SWMMWW.

Response to comments

1. Ecology reviewed supporting documentation from Clallam County on its existing stormwater program including stormwater policies and regulations. This documentation has not changed Ecology's determination. The current *Stormwater Management Manual for Western WA* is not adopted in code and the County lacks adequate illicit discharge (e.g. nonstormwater discharge) prohibitions, for example.
2. The *1992 Stormwater Management Manual for the Puget Sound Basin* is the manual and stormwater design standards adopted in Clallam County Code (Chapter 27.12 Critical Areas). Ecology has updated the manual three times since the 1992 manual: the *2001 SWMMWW, 2005 SWMMWW,* and *2012 SWMMWW* (amended in 2014). Stormwater design, facility/BMP maintenance and other technical standards found in the 1992 manual are far less stringent and less environmentally protective, as compared to design and maintenance standards established in the *2014 SWMMWW*. Clallam County Code does not require that new or redevelopment in the PAUGA comply with the 2005 or later SWMMWW.
3. The statement: "Ecology approved the WSDOT Highway Runoff Manual as functionally equivalent to the Stormwater Management Manual for Western and Eastern Washington" is only partly correct. As of at least March 2019, Ecology's website clarifies that the *2014 WSDOT Highway Runoff Manual* (2014 HRM) "meets the BMP selection, design, infeasibility criteria, and limitations for public road projects equivalent to Ecology's *2014 SWMMWW* and *2004 Stormwater Management Manual for Eastern Washington*. These are primarily located in Chapter 5 and Chapter 6 of the 2014 HRM. Other sections of the 2014 HRM contain WSDOT-specific guidance that may not be deemed part of an equivalent program for a municipality." The 2014 HRM is intended for designing stormwater controls for linear road projects; it is not intended for designing stormwater controls for residential and commercial development projects. Although Clallam County uses the 2014 HRM and 2016 *Supplement for Linear Roads Projects*, neither the 2014 HRM nor the 2016 Supplement is required for County roads projects by Clallam County Code.
4. The Clallam County Board of Commissioners approved the updated SMP in October 2018. However, Ecology must approve the County's updated SMP before it takes effect. The County's updated SMP applies within shoreline jurisdiction. Because there is minimal shoreline jurisdiction in the PAUGA, the County's updated SMP has limited application within the unincorporated PAUGA.

5. The CWPP are policies, not enforceable code. These policies do not offer the specificity sufficient to resemble a stormwater management program.

4.5 Phase II Permit requirements and cost

Summarized comments

1. Residents in the unincorporated PAUGA are moderate to low-income households and the cost of permit implementation are not reasonable.
2. The County requests additional time to work toward Phase II compliance. The County needs affordable housing and the new and redevelopment requirements under the Phase II Permit are a barrier to affordable housing projects.
3. The PAUGA represents a small area of the County. The County believes it is counterproductive for them to spend limited resources on the PAUGA MS4 when they can use those funds for the entire unincorporated County.

Response to range of comments

1. Clallam County qualifies for a reduced permit fee under the Phase II Permit because the County's median household income is less than the state average. Ecology recognizes that Phase II Permit coverage brings challenges for the community covered. Permit requirements for new Permittees phase-in over the five year permit term. This allows new Permittees time to build up their stormwater programs. Ecology is exploring ways in which grant monies can best serve the needs of hardship communities, like the unincorporated Port Angeles UGA.
2. Ecology's decision to cover the PAUGA under the Phase II Permit does not preclude the County from applying its stormwater management program to other areas within the County.

4.6 All other S1 Comments

Summarized comments

1. S1.F 7 "All MS4s owned or operated by Permittees named in S1.B and located in another city or county area requiring coverage under this permit or either the *Western Washington Phase II Municipal Stormwater Permit* or the *Eastern Washington Phase II Municipal Stormwater Permit* are also covered under this permit.

    19. Clarify what parts of the permit apply to property outside its jurisdiction. We recommend that this be viewed through the permit requirements legal ability to dictate action. For example – King County should not be taking enforcement actions on property owned by King County but located in another jurisdiction and King County should use the development requirements of the jurisdiction where that construction is occurring. S1.B....under this permit, applicable to the following sections of the Phase I SWMP: S5 C2, C3, C6, C8, C9, and C10, and any applicable actions required to meet Appendix 2."

2. S1.D - The concept of Co-Permittee is confusing. Is this a necessary Permittee type - considering Secondary Permittees and Phase II Permittees? What is an example?

3. We note that several school districts listed. Why don't our local school districts (Everett and Mukilteo) have to get Municipal SW permits? Similarly are Drainage and Flood Control District supposed to have their own coverage?
4. S1.D.2.a.iii Suggest reviewing this section and updating the list of secondary Permittees names. Washington State General Administration is now Department of Enterprise Services (DES).
5. Ecology should expand Permit coverage to include all Western Washington watersheds not currently protected. Leaving large swaths of built-out areas unprotected because of a land planning designation is arbitrary and does nothing to address the problems of polluted stormwater runoff. Rural and suburban areas also produce polluted stormwater runoff harmful to nearby waterbodies. Ecology should take steps to prevent this now by expanding permit coverage to all areas that drain to Puget Sound, and all areas in Western Washington that are on or near waterbodies or in a watershed that could be impacted by stormwater runoff - including those outside of urbanized areas - in the 2019 Permit cycle.

Response to the range of comments

1. Ecology does not agree that the proposed change is needed and did not revise Special Condition S1.F (S1.A.4 in the *Western Washington Phase II Municipal Stormwater Permit*) which refers to facilities owned or operated by the Permittee located in other permitted jurisdictions. For example, if a Phase I County owns a facility in a Phase I City, the Phase I County must implement the permit requirement as the facility operator. The Phase I city inspects the facility under the source control program as the regulator. The permitted jurisdiction must meet the requirements of local codes and ordinances.
2. Co-Permittee is a permissible Permittee type used in the federal regulations. This term is defined in the Permit. Permittees, like the City of Tacoma and Pierce County, could elect to join as co-Permittees and coordinate implementation of requirements.
3. School districts and diking and drainage districts located in a permit coverage area are subject to permit coverage as Secondary Permittees. For more information, see Ecology's webpage for Secondary Permittees at:

   https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Stormwater-permittee-guidance-resources/Municipal-stormwater-permit-guidance.
4. Ecology updated the Secondary Permittee name for Department of Enterprise, thank you.
5. Ecology considered the comment and will not be expanding permit coverage beyond urban areas for the 2019 permit cycle. Ecology believes that regulating rural areas of Phase II Counties is not appropriate under the Phase II Permits at this time, as most of these areas would not meet the criteria for coverage. In addition to the questionable cost/benefits of implementing an urban stormwater program in a rural setting, such an expansion would include lands regulated under authorities such as the Forest Practices Act, and large areas of agricultural land that are specifically exempted from the permits in the federal rule. Ecology evaluated cities of over 10,000 outside of urbanized areas, as required by the federal rule, and used its designation authority to evaluate the unincorporated UGAs around cities of over 10,000 covered by the permits.

5.0 AUTHORIZED DISCHARGES

Commenters: King County, City of Tacoma, Washington State Department of Transportation

Permit section: S2 (All permits)

Summarized comments

1. For those non-authorized discharges (such as UIC) state the permit under which they are authorized in Washington.
2. Include language clarifying that authorized, allowable and conditionally allowable discharges may still need to be reported as a G3, this should be explicitly laid out in S2.B.1.
3. Allowable and conditionally allowable discharges are a regulatory standard and are not an action that can be taken by the Permittee through the SWMP. This should be moved from S5.C.9 to S2. This would eliminate the need to repeat the list in S6.D and S.6.E
4. S2.E doesn't appear to have the updated language consistent with EPA for describing "Indian Country." Suggest updating this language.

Response to range of comments

1. Information on permits that are required for non-authorized discharges under the Municipal Stormwater Permits are available on Ecology's website to find the most current information is available. The PARIS database provide permit information. UIC rules, based on the Safe Drinking Water Act, not the Clean Water Act, are available on Ecology's website: https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Underground-injection-control-program.
2. Ecology agrees that authorized, allowable and conditionally allowable discharges may still need to be reported as a G3. Ecology has provided guidance documents that provide further clarification on when G3 reporting is necessary, the Municipal Stormwater Permit guidance pages, including the FAQ page that currently provides reporting guidance.
3. Ecology agrees that allowable and conditionally allowable discharges are a regulatory standard. Ecology believes it is appropriate to list them in the IDDE section of the permit to clarify the ordinance requirements of that section.
4. Ecology modified the language to add Indian Country as defined in '18 U.S.C. §1151'.

6.0 RESPONSIBILITIES OF PERMITTEES

Permit section: S3 (PH I and WWA PH II)

Commenters: King County, City of Olympia, City of Federal Way, City of Everett

Summarized comments

1. Are maintenance responsibilities for sites with Industrial SW permits similar or identical to those in this permit, so that in practical terms the entity would be fulfilling the Permittee's responsibilities? Does this negate the need to include Industrial Permitted sites within the MS4 program?
2. S3.A.2. It appears the reference to S6 Stormwater Management Program for Cities, Towns, and Counties is incorrectly referenced in this section and should actually be S5.
3. Notice of Intent "Facilities" are not defined by permit. This uses a permit-defined term that creates specificity. Proposed Language: Public Notice applies to stormwater treatment and flow control BMPs/facilities that begin operations on or after August 1st, 2019."
4. S3.B.1 and 2 - Notice of Intent 9 "B. Permittees may rely on another entity to satisfy one or more of the requirements of this permit. Permittees that are relying on another entity to satisfy one or more or their permit obligations remain responsible for permit compliance if the other entity fails to implement the permit conditions. As described in S3.B (subsections 1 & 2), this requirement in the NOI is for secondary Permittees only but that is not stated in the NOI. Clarify that this requirement is exclusive to secondary Permittees. Proposed Language: If you are a secondary Permittee, are you relying ... The statement must be signed by all participating Permittees.

Response to comments

1. Facilities covered by an Industrial Stormwater Permit are subject to local government regulations adopted under the requirements of this permit. Maintenance requirements for individual facilities are specific to the BMPs used and typically follow SWMMWW/SWMMEW, but this does not negate the need to follow permit requirements as they pertain to the permit or the local MS4.
2. Ecology corrected this typo, thank you.
3. The reference to “facility” in the NOI is referring to the city or county (or secondary Permittee) that is applying for permit coverage. The NOI is not used for a particular stormwater treatment/flow control BMP/facility.
4. S3.B applies to all Permittees, not just Secondary Permittees. If a city, county, or Secondary Permittee is relying on a consultant or a contractor, or another Permittee to meet permit requirements, then this agreement is submitted to Ecology either with the NOI, or during the permit term if that is when the agreement is developed.

7.0 COMPLIANCE WITH STANDARDS

Phase I/II Permits: S4

Commenters: City of Auburn, Clark County, City of SeaTac, Barbara Craven, City of Bellevue, City of Brier, City of Sammamish, Skagit County, Larry & Cheryl Morgan, Black Diamond, City of Tacoma, City of Snoqualmie, City of Mount Vernon, Puget Soundkeeper Alliance, City of Federal Way, City of Everett, Larry and Cheryl Morgan

Summarized comments

1. S4.C pg. 12 "shall reduce the discharge of pollutants to the maximum extent practicable" (MEP). This is subjective. Could a measurable amount be specified; for example, add "and at a minimum, reduction of pollutants must meet TMDLs."

   S4.A "water quality standards" seems too non-specific. Do subsequent references to "water quality standards" mean the WAC in S4B? pg. 12 such S4F1 and 2, pg. 12. Also S43ai and ii, pg. 13 S4.F.3.D, "annual report." For how many years?

2. S4.A - RCW 90.48.520 does not appear to be the appropriate reference. Verify and revise as necessary.

3. Ensure consistency amongst all Permit sections with the use of "Waters of the State". Consider always using "Waters of the State" which has a definition. Section S4.E uses waters of the State of Washington.

4. S4.F.1 - The proposed language indicates that the Permittee must notify Ecology if the Permittee "is causing or contributing to a known or likely violation of Water Quality Standards in the receiving water."

5. The words "or likely" be removed from the above language, because it requires the Permittee to speculate or guess to whether a violation may have occurred and as such is inappropriate for a regulatory document.

6. The language is in present tense (is causing or contributing to). Please revise the language to include "has caused, or is causing or contributing to a known or likely violation..."

7. Consider changing S4.F.1 to state "...is potentially causing or contributing..." The inclusion of potentially is necessary because according to S4.F.2, Ecology makes the determination if the discharge is causing or contributing not the Permittee.

8. Ecology must perform an anti-degradation analysis for all new and expanded sources seeking permits to discharge pollutants to state waters, consistent with 40 C.F.R. § 131.12, RCW § 90.48, and WAC 173-200-030. Permittees should be required to demonstrate that Permit issuance is in the overwhelming public interest, or the Permit should be denied. Further, Permittees should be required to demonstrate that they meet the new water quality standards.

   To ensure consistency with the Clean Water Act and Washington's antidegradation policy, Stormwater Management Plans (SWMPs, under Section S.5 of the Permits) should require that discharges must not cause or contribute to violations of State water quality standards.

Response to the range of comments

1. Maximum Extent Practicable (MEP), comes from the EPA rule, and All Known, Available and Reasonable methods of prevention, control and Treatment (AKART), comes from Washington State Pollution Control Act – both standards apply to Washington's Municipal Stormwater Permits. See the background and regulatory sections of the Fact Sheet for additional discussion. Water quality standards (WAC 173-201A) are those referenced in S4.B. The number of annual reports that require reporting on S4.F will be determined in the adaptive management plan.

2. The correct references are cited. The Pollution Control Hearings Board issued an Order regarding S4.F (PCHB 07-021-023, -026-030, and -037 Condition S4) and required Ecology to use the specific language in this provision. See Fact Sheet discussion on Compliance with Standards and Anti-degradation. Ecology has prepared guidance on S4.F, the questions raised have been answered in this guidance document Municipal Stormwater Permits and Compliance with Standards (Publication #: 09-10-068). S4.F is triggered when:
    a. You have credible site-specific information of a known or likely violation of water quality standards in a receiving water; and
    b. You have credible site-specific information that a discharge from your MS4 is causing or contributing to the known or likely violation of water quality standards.
    c. The information you submit about the receiving water and about your MS4 discharge must be credible. For purposes of S4.F.1 notification, examples of credible information include:
        - Data from a laboratory obtained through documented methods.
        - Data for a field-measured parameter with a documented collection method.
        - Documented odors, visual observations, or photographs obtained by qualified personnel (depending upon the pollutant of concern or the impact on designated uses of the water body).
3. Although this section, where the language is from a PCHB decision, refers to waters of WA state and the glossary contains waters of the state – this reference used is still clear, and we retained the language to remain consistent with the decision.
4. A known water quality standards violation in the receiving water occurs when chemical or physical data confirms the violation at a specific location. The applicable water quality standards regulation provides information about determining a water quality violation for the pollutant of concern. Known water quality standards violations may be listed on the State Water Quality Assessment (in either Category 4 or 5). A likely violation of water quality standards in the receiving water may be recognized using best professional judgment when data is not available or it is not necessary or not safe to collect data.
5. See fact sheet discussion on antidegradation.

7.1 Compliance with Standards (Eastern Washington)

EWA Phase II Permit: S4

Commenter: Larry and Cheryl Morgan

Summarized comment

1. The [City-approved] detention ponds are inadequate for the protection of [added flows] and [water quality] to Hatley Creek and to the SFPR and to our private property, thus they are in direct violation of RCW 90.48.010. Hatley Creek was historically a [small intermittent stream] fed by natural runoff and natural springs. The conveyance of unregulated urban stormwater flows located within the upper reaches of the Hatley Creek Basin have changed the historical: volume,

velocity and quality of Hatley Creek significantly, thus DOE an EPA have designated the Creek to be an open channeled [municipal stormwater sewer system]. There are significant flaws within this proposed Stormwater Draft that will not protect our current and future environmental and private property rights. FYI - Hatley Cr. is a small drainage off the South Fork Palouse River (SFPR) near Dayton.

Response to comment

1. Ecology has provided guidance on the compliance with standards section of the permit (see publication # 09-10-068). The specific issues raised in the comment are addressed at the local government level. The Municipal Stormwater Permit requires cities and counties to implement programs that regulate stormwater from new and redevelopment.

8.0 COORDINATION

Permit Reference: Phase I Permit - S5.C.3.
Western Washington Phase II Permit - S5.A.5
Eastern Washington Phase II Permit – S5.A.5

Commenters: City of Newcastle, Chelan County Public Works, City of East Wenatchee, Douglas County, King County, Snohomish County, City of Tacoma

8.1 General Comments

Summarized comments

1. S5.C.3.b the 2013 permit contained the statement at the end of this section, which stated, "Failure to effectively coordinate is not a permit violation provided other entities, whose actions the Permittee has no or limited control over, refuse to cooperate." Reinstate this provision.
2. Please define "watershed."
3. How does Ecology define an "adjoining or shared area"
4. How will a Permittee know when the "when needed" standard is triggered?

Response to range of comments

1. "Failure to effectively coordinate is not a permit violation provided other entities, whose actions the Permittee has no or limited control over, refuse to cooperate" is retained in the Fact Sheet for the record.
2. Permittees may define watershed on the scale that works best for implementation of permit requirements. For the Stormwater Planning requirements, Ecology created guidance that references a useful watershed scale.
3. Coordination between local jurisdictions is needed for successful implementation of stormwater management programs in areas where conveyance systems are interconnected or discharges go to the same water. Coordination may occur at a variety of scales as appropriate to the activities

being coordinated. Ecology did not define the terms 'watershed' or 'adjoining or shared area' as requested in the permits. Examples of coordination mechanisms are measures such as an organizational chart, interdepartmental meetings, an e-mail distribution list, a formal spreadsheet of program assignments, a reporting task, or other measures. Examples of when coordination can be proven as needed is when permit compliance is compromised, barriers to compliance could be poor communication methods, unclear assignments for tasks or reporting, inadequate training, lack of proper equipment, actions of one department that conflict with a stormwater requirement, or other problems that limit permit compliance.

8.2 Eastern WA comment on coordination

Commenters: Chelan County, City of East Wenatchee, Douglas County, Clayton Verellen.

Summarized comment

1. Coordination among Permittees, permit section a. states that coordination among entities covered under this permit is encouraged. The current permit language states, "The SWMP should include coordination mechanisms..." Proposed language changes the "should" to "SHALL". Shall does not encourage coordination, it requires coordination. Retain the word should, to encourage rather than require coordination. Each Permittee / entity is unique and governed by a separate elected body. Coordination occurs to the extent practicable to address permit requirements in a timely and cost effective manner. Requiring coordination unfortunately can often result in inefficiencies and delays, ultimately resulting in the opposite of the desired outcome.

Response to comment

1. Ecology retained the use of shall in this permit section statewide. Coordination on various permit requirements such as IDDE response, effectiveness studies, or education and outreach will lead to improved knowledge about interconnected or adjacent or regional MS4 systems, better information can lead to better practices and implementation of requirements.

9.0 COMPREHENSIVE STORMWATER PLANNING

This section applies to the Phase I and Western Washington Phase II Permits.

Permit reference: Phase I – S5.C.6

WWA Phase II – S5.C.1

Commenters: WRIA 9 Watershed Ecosystem Forum, City of Auburn, City of Marysville, City of Oak Harbor, City of Edmonds, Michael Martinez, Clark County, City of SeaTac, City of Newcastle, Futurewise, Kitsap County, City of Redmond, Thurston County, City of Bothell, City of Bellevue, Pierce County, City of Sumner, City of Brier, WEC, WEC, PSK, Futurewise, King County, City of Renton, City of Seattle, City of Sammamish, City of Lake Forest Park, City of Mukilteo, City of Kelso, Skagit County, Black Diamond, City of Lake Stevens, Snohomish County, City of Olympia, City of Kirkland, Phyllis Farrell, City of Lynnwood, City of Vancouver, City of Tacoma, City of Snoqualmie, City of Shoreline, City of Port Angeles, City of Mount Vernon, Puget Soundkeeper Alliance, City of Poulsbo, City of Issaquah, City of Everett, The Nature Conservancy, Individual Commenters.

9.1 Environmental Justice

Summarized comments

1. The 2019 municipal stormwater permits have not done enough to advance Ecology's own goals to achieve environmental protections for all Washingtonians. Ecology should review its stormwater program through an environmental justice lens, eliminating incentives that continue the flow of resources and progress into wealthier, whiter neighborhoods while ignoring those communities most affected by stormwater pollution and most in need of investments in infrastructure and green solutions.
2. Proposed SMAP guidance encourages municipalities to "Give higher priority to basins with receiving waters that show low to moderate levels of impairment..." because these waters are "... expected to benefit more quickly as a result of stormwater improvements." This could lead to a bias of basins being selected in wealthier communities. We urge Ecology to do an environmental justice analysis for this Permit cycle to analyze whether this bias is happening and how it could be corrected to give equally high priority for basins where water quality has health impacts on communities of color and low-income communities. We also recommend that EPA's EJSCREEN mapping tool be integrated into the SMAP process explicitly.
3. Ecology must provide guidance beyond simply the environmental justice guidance found in the Building Cities in the Rain reference document that encourages Permittees to prioritize EJ communities for stormwater investments. We recommend that the EPA's EJSCREEN mapping tool be integrated into the SMAP process explicitly.
4. Improve Public Process. Communities often have valuable information on local conditions and priorities that could benefit the SMAP process. We recommend providing enhanced guidance that facilitates the implementation of an inclusive, transparent public process throughout watershed planning so that the public can provide input and thus help maximize the effectiveness of each SMAP.

5. The proposed Structural Stormwater Control (SSC; Phase I Permit S5.C.7) points system must require Permittees to work hand-in-hand with impacted communities and incentivize retrofits in low-income communities, communities of color, communities most impacted by climate change, and prioritize future project work where stormwater discharge indicators place a burden of risk on already disproportionately polluted communities.

Response to the range of comments

1. Ecology appreciates the comments on Environmental Justice (EJ). Although addressing environmental justice issues is not a clear component of the Clean Water Act or the WA State Pollution Control Act, the permit language in several sections does apply EJ considerations. Permittees are encouraged to include human health and other EJ factors in their SWMPs, as well as improving overall information flow to overburdened communities about stormwater impacts and opportunities to address them. The permit requirements neither require nor prohibit Permittees to be doing more to improve conditions specifically for overburdened communities. These decisions must be made at the local scale, and, in fact, this work is more effective at the local scale. Ecology uses the EPA definition for 'overburdened communities' to help Permittees define the communities that may be most impacted by stormwater impacts. We use this term in several requirements in order to improve Permittee awareness that they should be inclusive while implementing the SWMP with the intent of improving quality of life for those most sensitive to water quality impairments:

    a. **Public Education and Outreach** – lists overburdened communities as a particular target audience that should receive information about stormwater impacts. Since they have been identified as a target audience in Public Education and Outreach, this includes ensuring that these communities are also aware of opportunities to provide input on various stormwater programs. Sources of information to identify overburdened communities include, but are not limited to USEPA's EJ Screen, or WA State Department of Health's *Washington Tracking Network "Environmental Health Disparities" map*.

    b. **Public Involvement** – lists overburdened communities as an audience that should be made aware of opportunities to provide input on both SWMP and SMAP development. Ecology did not define any performance measures specific to public involvement in overburdened communities. Permittees should assess their means to involve the public, including overburdened communities, and make any needed changes to their outreach to help to ensure inclusivity. This may include, but is not limited to, making documents accessible and addressing linguistic or literacy challenges when providing information.

    c. **Source control for existing development** – provides a proactive emphasis on controlling pollutants from entering the public stormwater system and will likely be implemented in or close to overburdened communities. Most of the targeted activities are in dense urban, commercial, and industrial land uses.

    d. **Stormwater Planning** – Permittees are not required to select their SMAP basin based on EJ considerations, but the guidance document created for this requirement includes collecting information on overburdened communities for use in assessing the basins in their permit coverage area. Permittees then use this information as part of the process of assigning priorities to their basins.

e. **Phase I Structural Stormwater Controls** – Phase I Permittees are required to implement stormwater retrofit projects and additional maintenance activities. These are quantified using a 'point' system that generally assigns points by the relative hydrologic and water quality benefits of the project. Permittees are required to achieve 300 points this permit cycle. Ecology added an EJ incentive multiplication factor for a project or activity located in an overburdened community. The multiplier increases the retrofit incentive points, which are applied after the hydrologic and water quality benefits of the project have been determined.

9.2 Overall comments and interdisciplinary teams

Summarized comments

1. Consider changing 'Comprehensive Stormwater Planning' to Integrated Stormwater Planning or something similar. The word 'Comprehensive' conflicts with existing City Comprehensive Plans and may cause confusion between the two.
2. All sub-sections: We request clarification on Ecology's goal or anticipated final outcome of this section. There does not appear to be any quantifiable performance measures in this section other than the generation of some reports to be submitted to Ecology. Guidance for preparing the stormwater comprehensive plan is included in SMAP but this document is only guidance and speaks to expectations, not requirements. There is a lack of any formal actions or obligations to follow the comprehensive plan or to actually make any stormwater code updates as currently written.
3. Define "receiving waters." Define "basin" or remove the word.
4. (Phase I S5.C.6.) The first sentence is unclear, there is a grammatical error and the words used in the introduction paragraph are not the same as those in a.i, which is confusing and unclear. Revise for consistency.
5. Small to medium-sized jurisdictions do not typically have scientific experts on staff. Requiring such individuals to be part of the interdisciplinary team means an added cost burden to the City.
6. Provide a deadline for when the interdisciplinary team must be convened. We suggest August 2020.
7. Ecology is adding a land use planning component to a permit regulating discharges to receiving waters from the MS4. State law regulating land use is separate from the requirements to regulate pollutant discharges to waters of the state. If the state wishes to include stormwater in comprehensive plans for counties, the state Growth Management Act should be revised.
8. The SMAP Guidance (Pg. 1 bottom) states that the purpose of the SMAP is to answer two questions, one of which is "How can we meet our future population and density targets while also accomplishing our water quality goals?" However the draft permit only talks about addressing "existing development" (S5.C.1.c.ii last sentence). The Permit already has requirements for addressing new development. The state Growth Management Act regulates how municipalities plan for future growth. The Guidance seems to extend past the purview of this permit by requiring planning for future growth.

9. Avoid adding a new program component, add the sections to existing program elements in the SWMP.

Response to range of comments

1. We revised the title of this program to 'Stormwater Planning' in order to avoid confusion by using the term 'comprehensive'.
2. Reports are used throughout this program to document compliance with the permit requirements. The most efficient means for Ecology to learn about Permittees' efforts is through the annual reports. For this section, we require the Permittee to document internal planning actions. We have modified the annual report questions in order to be clearer as to both the format and the information that Permittees should supply in these submittals. The outcomes are as follows:
    a. Coordination of long-range plans: the outcome of this requirement is each Permittee describing or identifying how stormwater needs and/or information, etc. are integrated into various long-range planning efforts, and used to develop policies, codes, and projects. Ecology seeks information about the process that Permittees followed during the previous and the current permit cycles. Ecology added a series of Annual Report questions to clarify, based on Department of Commerce's GMA periodic update checklists. For additional information, see the responses below on coordination of long range planning.
    b. LID-code related requirements: the outcome of these requirements is continued implementation of a program and policies designed to make LID the preferred and commonly used approach to stormwater management in all elements of development related standards, policies, codes or other enforceable mechanisms. When applicable, Permittees will report the identification of newly found barriers to LID implementation. Now that LID is being used in projects, new barriers may arise that need to be addressed to ensure LID is being implemented successfully. Further, this requirement is used to ensure that, as these and other codes are being developed or revised, that LID continues to become the preferred and commonly used approach.
    c. SMAP: the outcome of this requirement is a completed municipal stormwater action plan for a high priority catchment area. The plan should be developed based on the best available information that the municipality has in its possession that is applied through a prioritization methodology that makes sense for the jurisdiction. This effort is intended to be a relatively rapid review and assessment of existing information, followed by the prioritization and identification of a priority area where focused implementation of municipal stormwater management strategies is anticipated to improve receiving waters. The final plan should exhibit in a thoughtful approach to addressing where, what, and when municipal stormwater actions are prioritized. This includes identifying areas where: conservation or protection of areas can be achieved, zoning can be used as a water quality management tool, and/or retrofits should be located to address legacy development impacts.

        In the WWA Phase II Permits, Ecology does not require implementation of the stormwater projects in the plan. Ecology has not determined when or how Permittees would be

required to implement such a plan. We want to learn from what Permittees produce and submit during the 2019 permit cycle to help determine next steps. Ecology will soon convene an external stakeholder process to review the Structural Stormwater Control Program in the Phase I Permit. This process will help inform our decision as to what may be appropriate for the 2024 WWA Phase II Permit.

3. Receiving waters is (and has been) a defined term in the glossary. Basin scale is discussed in the SMAP guidance document. The term "receiving water basin" is no longer used.
4. Correction made to the typo.
5. Permittees determine the composition of their interdisciplinary teams and may rely on already established teams. Specific professions are not required to be on the teams. Ecology intends for Permittees to meet this requirement by utilizing staff employed by the municipality that have job duties and influence over asset planning and policy, as well as other relevant backgrounds. If a particular discipline is not available for a Permittee's team, that is not a permit violation. The Permittee may use judgment to determine which disciplines or backgrounds are relevant and needed for the team's work, and whether their team should be augmented by consultants or other contracted individuals with helpful expertise.
6. Ecology agreed and moved the requirement to convene an interdisciplinary team to the performance measures section of this program, and added a deadline to the provision that requires the formation of a team.
7. The NPDES permit requires the use of a suite of practicable methods to prevent and reduce pollution to the state's waters from Permittees' MS4s. Those methods include development standards that reduce urban stormwater amounts, flow rates, and pollutants. Current development practices change water quality and natural hydrology to the extent that the beneficial uses are severely compromised, if not lost. Restricting stormwater management strategies to end-of-pipe methods has not and will not be successful in the long term.
    - The Pollution Control Hearings Board has stated in its opinions that it finds the goals of the Clean Water Act and State Water Pollution Control Act to be complementary with the goals of the Growth Management Act.
    - Ecology does not agree that there is an inherent conflict or explicit separation of the named statutes and the permit. Development code changes implemented to meet the permit requirement should be compatible with the SMA and GMA and code changes will also have to be adopted in accordance with GMA procedures.
    - Ecology is not mandating any particular type of land use planning nor decisions. It is requiring the Permittee to better understand the impacts of its land use plans on the viability of the beneficial uses of the State's waters. Permittees should proactively be investigating where degradation of beneficial uses and violations of State water quality standards are projected to occur, and propose actions to avoid those impacts. Those actions should influence and can be incorporated into the Permittee's GMA plans and related implementation documents.
    - Implementation of identified actions is not a requirement of the 2019 W WA permit.

8. The planning requirements could be added to existing SWMP elements, but Ecology decided to retain planning as its own focus element for clarity and ease of the user. Section S5 of the permit describes all of the "programs" the Permittees are required to implement, which is why that term is used in the introduction to Stormwater Planning.

9.3 Regional collaboration

Summarized comments

1. While regional stormwater planning efforts are identified as an option in this section, this section does not provide enough allowances to complete regional stormwater planning efforts. The following items need to be addressed to allow for regional planning efforts:
    a. Increase the amount of time available to complete regional planning efforts (i.e. 7/31/23); and
    b. Allow Permittees to identify and fund priority areas and projects outside of their jurisdictional boundaries, but within a basin to which they are contributing flows.
2. A regional effort will require a substantial increase in time and resources for coordination (MOU/Interlocal Agreement and charter creation) and lining up values.
3. Funding outside of jurisdictional boundaries will be more burdensome, adding to potential barriers.

Response to range comments

1. Ecology agrees that collaborative watershed scale planning efforts can be beneficial to receiving waters, but we decided not to create a different regulatory pathway for regional collaboration for the stormwater planning requirement in the 2019 permit cycle. Permittees may choose to collaborate to meet the permit requirement if they choose; permit language was added to specify that a Permittee may rely on another Phase I or Phase II jurisdiction to meet all or part of SMAP requirements at a watershed scale, provided at least one priority catchment is located within the local jurisdiction. This eliminates concern about spending jurisdictional funds elsewhere. To be successful, however, Ecology believes that ***existing*** partnerships must be leveraged; a regional group is not likely to be successful in this effort if the collaboration is initiated solely in response to the permit requirement. The review of information and identification of projects and areas may help to encourage regional collaboration in future years.

9.4 Overall comments on Coordination with long-range plans

Phase I: S5.C.6.b | **WWA Phase II:** S5.C.1.b

Summarized comments

1. Ecology should coordinate with state agencies directly to improve state-mandated requirements for planning.
2. The requirement to report on actions that occurred during the past permit is not appropriate.
3. This establishes a significant burden to conduct long range planning efforts outside of the GMA mandated comprehensive plan periodic updates.

4. We have a tremendous concern that adopting, implementing and enforcing ever more stringent stormwater standards is in conflict with our ability to provide affordable housing for our community. Whether this conflict is real or perceived, it is essential that Ecology acknowledge it and provide local jurisdictions with tools to address it.
5. Clarify which other long-range land use plans are to be reviewed/considered for this report.
6. The level of reporting detail is not clear in this section. An example of a report format and detail is needed, preferably as an appendix to the permit.
7. We continue to have concerns about the permit requirements being in conflict with the Growth Management Act requirement for density. Rather than putting Permittees in an untenable situation, we recommend that Ecology provide grant funding for pilot programs to develop a sustainable basin within an urban growth area.

Response to range of comments

1. Ecology does and has coordinated directly with other state agencies to improve planning requirements. Through this requirement, Ecology and other state agencies will learn more about how Permittees are planning for development and addressing the impact of stormwater runoff from their municipalities on aquatic resources/receiving waters. We are interested in Permittees' practical experiences in using stormwater information to update long-range planning documents that guide future development and infrastructure investments. This information will help to inform future permit planning requirements.
2. Permittees will produce an informational report describing the policies, plans, or strategies taken during the last planning update cycle. The report is based on a series of Annual report questions developed to provide more guidance on the type of information that will be useful to review. The questions are based on the questions asked on the checklist for a GMA periodic update. Ecology believes it is appropriate to request information from Permittees to help guide future permit requirements.
3. These requirements are intended to fit in with the Permittees' existing planning frameworks, which Permittees will describe to Ecology in their reports. Permittees are not being asked to create a new or separate long-range planning process. The reports for this section will describe how the existing planning process includes and addresses, or perhaps does not include or address, stormwater management needs and information when developing updates to policies, codes, or plans. LID code-related requirements relate to the updating or the creation of new codes, ordinances, or other enforceable mechanisms related to development standards – which only needs to be considered when the Permittee decides to revise, update, or write new codes, policies, or standards. SMAP requirements can be integral to supporting and informing the Permittees' long-range planning processes.
4. With this new planning requirement, Ecology is not requiring the adoption of more stringent site or subdivision requirements or more stringent stormwater codes. Ecology is not mandating any particular type of land use planning nor decisions. We are requiring each Permittee to report on their overall stormwater planning process and to then identify priorities and specific actions tailored to a specific watershed area. Permittees are encouraged to reach out to their regional permit manager at Ecology for tools and technical assistance to support permit implementation

and realize appropriate cost saving efficiencies wherever possible. Ecology also provides grant funding to develop permit implementation tools that benefit multiple Permittees in the region or statewide.

5. The "Coordination of long-range plans" permit requirement is not intended to create any plans that do not already exist; it is solely a reporting requirement. Permittees should rely on the interdisciplinary team to identify the appropriate long-range planning documents for the jurisdiction. To help identify appropriate plans, the permit uses the description of "locally initiated or state-mandated long-range land use plans that are used to accommodate growth, or transportation." Some jurisdictions call similar plans by different names, or develop more plans or different types of plans than others. Typical plans that can be included are Comprehensive Plans, including the land use elements, capital facilities element and capital facilities plans, stormwater utility plans, subarea plans, conservation/open use plans etc.
6. Ecology provided more specific Annual Report questions based on Department of Commerce's GMA periodic update checklists. These new questions help clarify what Permittees should report.
7. Ecology does not agree that there is a conflict between the permits and GMA requirements or that another pilot planning exercise is needed. The planning requirements in this permit represent a reasonable next step following and based on the results of the Phase I watershed-scale planning requirements and Ecology's consultation with other state agencies involved in GMA and regional transportation planning.

9.5 Coordination of long range plans – reporting

Phase I: S5.C.6.b.i.(a) & (b) |**WWA Phase II:** Sec. S5.C.1.b.i.(a) & (b)

Summarized comments

1. Remove this permit language for the following reasons:
    a. Water quality and watershed protection updates for the Comprehensive (Growth Management Act) Plan were not required under the last NPDES Permit. Therefore, this requirement is outside of the purview of this permit or the 2013 permit;
    b. Asking a Permittee to report on items outside of the regulatory time window of the proposed permit is also outside of the purview of this permit.
    c. Alternatively, provide reasoning on how work that was not required under the previous permit, can be covered retroactively, and/or confirm that if a jurisdiction reports that they did not address any water quality and watershed protection, it would not be a violation of the Permit.
2. Change "March 31, 2020" to "March 31, 2021." With limited staff and resources, more time is needed to develop the Stormwater Planning program.
3. There is a complete disregard to the GMA requirements and the mandated dates that municipalities are required to update their Comprehensive Plans. This creates confusion, duplication of work and inefficiencies due to the complexity of reporting.

4. S5.C.6.a.i states, describe certain items in the Annual Report. In S5.C.6.a.i(a) and a.i(b) deadlines are provided for different but similar items. It is unclear if Ecology is requesting two separate reports that are separate from the SWMP Plan and Annual Report. If this is the case, call the reports by a separate and distinct name so the Permittee knows which documents they are required to create. Update the Permit language to clarify the relationship between the two reporting requirements and deadlines.
5. The GMA requires the City to apply its comprehensive plan and development regulations, developed in accordance with the GMA, to specific permitting decisions and land uses. To the extent the City's NPDES permit was to impose land use and zoning requirements inconsistent with the City's comprehensive plan and development regulations, the result could be a regulatory debacle. Attempting to regulate land use and zoning through stormwater permits could expose municipalities to conflicting standards and considerations when planning and may expose municipalities to legal challenges when such NPDES permit obligations cannot be met due to conflicting laws and regulations.
6. REVISE as follows:

a. Coordination with long-range plan updates

7. On or before March 31, 2020, the Permittee shall describe how water quality and watershed protection related to MS4 discharges were addressed, if at all, during the 2013-2018 permit cycle in updates to the Comprehensive Plan (or equivalent) and in other locally initiated or state-mandated long range land use plans that are used to accommodate growth, or transportation. The purpose of this requirement is to educate Ecology regarding local planning, and does not require any particular substantive legislative, policy, or reporting outcome.
8. On or before March 31, 2022, the Permittee shall describe how water quality and watershed protection related to MS4 discharges are being addressed during this permit cycle, if at all, in updates to the Comprehensive Plan (or equivalent) and in other locally initiated or state mandated long-range land use plans that are used to accommodate growth, or transportation. The purpose of this requirement is to educate Ecology regarding local planning, and does not require any particular substantive legislative, policy, or reporting outcome.
9. This requires Permittees to update [GMA] Comp Plans with water quality and watershed protection elements by 3/31/22. We request that this language be removed from the permit for the following reasons:
10. A Stormwater Element is not a required component of the GMA Comp Plan. If Ecology wishes to modify the requirements of the Comp Plan, it should be done through an amendment of the state Growth Management Act, not through a federal stormwater permit requirement.
11. Watershed and water quality protection components should be addressed in a Comprehensive Stormwater/Surface Water Plan, not a GMA document.

12. The county/city's Comprehensive Plan update will be completed by June 30, 2023 [or other dates provided]. A reporting deadline of March 2022 will not capture this major effort. Please delay this reporting deadline for applicable Permittees.

Response to range of comments

1. The commenters are correct that there was no requirement in the 2013 permits that required water quality and watershed protection updates to the Comprehensive Plans/long-range plans excepting perhaps any changes that may have resulted from adopting Appendix 1 or LID-code related changes. 'Coordination of long-range plans' of the Stormwater Planning Program is a reporting requirement to provide summarized information to help Ecology understand how stormwater management needs are being incorporated into the jurisdiction's long range planning process. The 2019 permit requires no action beyond this reporting.

13. The Annual Report questionnaire now provides a series of questions that help shape the report. Rather than a summary report as an attachment (as proposed in the formal draft), specific Annual Report questions are provided to help clarify what should be reported. These Annual Report questions are based on Department of Commerce's GMA periodic update checklists. Permittees may have completed a similar checklist during planning updates and therefore may be able to rely on those responses.

14. For others that do not follow the GMA planning process, consider the questions in the context of your jurisdiction's long-range planning process. The questions direct Permittees to describe how the municipality takes stormwater impacts and management needs into consideration when developing long-range plans related to accommodating development, population growth, conservation, transportation, and utility planning. If the Permittee does not have methods or procedures or process for taking stormwater into account in these planning processes, then a statement to that effect would be a compliant response to the questions.

2. Ecology agreed to provide more time to report on actions taken during the 2013 permit term.

3. The requirements are not intended to create a separate long-range planning process, but rather to fit in with the Permittee's existing planning framework. Ecology did consider the GMA periodic update deadline dates, however various communities have different dates due to various circumstances. We tried to select a reporting deadline that was far along enough in the GMA process that the Permittees following the GMA requirements would be able to describe how the process works with accuracy for the time it is submitted. The permit deadline also needs to be before the end of the permit cycle so that Ecology can review and consider the information Permittees provide before writing and reissuing the 2024 permit.

4. In the Phase I Permit, both reports will be due with the Annual Reports. In the WWA Phase II Permit, the first report will be due with the Annual Report, the second report will be due as a separate submittal. This compromise is intended to accommodate the comments requesting additional time to be nearer the end of the GMA process, but still allow Ecology time to review the reports before reissuing the permits. Clarifying language was added to the permit section on how the reports should be submitted.

5. Ecology is not mandating any particular type of land use planning nor decisions. Stormwater planning and GMA required planning are not in conflict and should work together to create policies and codes that accommodate the projected growth and provide stormwater management services while protecting receiving waters.
6. Ecology appreciates the suggested revision to permit language and made clarifying edits to the permit section.
7. Ecology disagrees and retained this requirement. Under RCW 36.70A, stormwater is to be considered in the land use element. Ecology is not attempting to create a new stormwater element or to modify the requirements of GMA. See other responses above on what should be reported. This is an informational reporting requirement – no other action is required.
8. See responses above related to the reporting requirements for this section. In the Phase II Permit, the deadline was extended to January 2023, which means this report will need to be submitted to the regional office or through WQwebPortal as a separate submittal, rather than with the Annual Report.

9.6 LID code-related requirements

Phase I: S5.C.6.c | **WWA Phase II:** S5.C.1.c

Summarized comments

1. Low Impact Development Code Related Requirements. Please remove this language from the Comprehensive Stormwater Planning Section as it has nothing to do with the stormwater planning. Please relocate this language to Section S5.C.6., where the LID requirements were located in the 2013 permit (Controlling Runoff from...)
2. We appreciate the changes made to this permit section to clarify that Permittees are expected to build on their past work in implementing low impact development (LID) code reviews and changes, rather than stopping at completion of the previous permit requirements. As Permittees continue to identify and evaluate barriers to LID implementation in their code, we further appreciate that Ecology has begun the process of tracking common barriers to support solutions at a regional scale.
    i. To better facilitate this process and ensure that barriers can be easily overcome, we recommend clarifying and standardizing the annual reporting requirements for Permittees by providing a tool or template Permittees can use (for example, Permittees should identify specific sections of their development or other codes that were found to be problematic for LID implementation, and should include specific language they used to change these sections). We also recommend that Ecology share information and best practices learned from this process across jurisdictions in a clear and consistent way, such as a webinar, presentation, or newsletter.
3. For new Permittees, the compliance date for this permit condition should be changed to December 31, 2024. If the GMA mandated comprehensive plan update must be completed by June 30, 2023 the process to update the implementing development regulations will not be complete during the subsequent 6 months. As a result, the March 31, 2024 deadline should then be changed to March 31, 2025.

4. Low Impact Development Code-Related Requirements - Jurisdictions have already been required to make LID the "preferred and commonly used approach" to stormwater management as part of the previous permit. As part of this process, Ecology required a gap analysis to identify barriers to LID implementation. This section seems to imply that jurisdictions continue an on-going gap analysis process each year. Please clarify if Ecology is requiring a yearly gap analysis. If so, this is redundant as most jurisdictions have already adopted the 2014 SWMMWW.
5. Permittees are required to assess and report on newly identified administrative or regulatory barriers to implementation of LID principles and BMPs. Should we be reporting on maintenance barriers as well?
6. There needs to be a statement that not updating or revising development-related codes, rules, standards, or other enforceable documents in any given year is not a Permit violation. Ecology has stated as much in meetings and needs to make this clear in the Permit language itself. ADD the following: "Not updating or revising development-related codes, rules, standards, or other enforceable documents is not a Permit violation."
7. REVISE as follows: "Permittees shall, as part of the update of development-related codes, rules, standards, or other enforceable documents that occur in the ordinary course of business, review and, if determined by the Permittee to be appropriate, revise those portions of the development-related codes, rules, standards or other enforceable documents that the Permittee is proposing to amend to incorporate LID principles and LID BMPs. Permittees should consider ways to minimize impervious surfaces, native vegetation loss, and stormwater runoff. Not updating or revising development-related codes, rules, standards, or other enforceable documents is not a Permit violation."
8. REVISE as follows: "Annually, as part of its annual reporting to Ecology, each Permittee must report any newly identified administrative or regulatory barriers to implementation of LID Principles or LID BMPs that were addressed during that calendar year. A Permittee's reporting that it did not identify and/or address any such barriers is not a Permit violation."
9. The requirement for the LID report to include "mechanisms adopted to encourage or require implementation of LID Principles or LID BMPs" appears to be an additional behavior change program requirement that may or may not be the one program selected by the Permittee to pursue under Section S5.C.11. This appears to be a "hidden" additional behavior change requirement and should be revised to avoid conflict with Section S5.C.11. Suggest adding "if applicable" to the end of the last sentence."

Responses to the range of comments

1. Ecology appreciates the comments, but did not accept the recommendation. By including the LID code requirements in the Planning section, Ecology makes a distinction between jurisdiction-wide LID code-related requirements and LID in the Controlling Runoff section aimed at the site and subdivision scale. The Controlling Runoff permit section references Appendix 1 and the LID BMPs in MR#5. The LID code-related requirements pertain to all the other municipal codes, requirements, standards, etc. related to development (landscaping, parking, road/street codes, etc.) that could or might prevent LID from being the preferred and commonly used approach. This was a point of confusion for many Permittees who thought that simply adopting

requirements associated with Appendix 1 also met the LID code-related requirement. The LID code-related requirements help to translate LID Principles in addition to LID BMPs into the fabric of the development standards for the municipality, not just the drainage or stormwater code. This section was retained in the Stormwater Planning program because it relies on an interdisciplinary team that should be knowledgeable and influential as to when codes, standards, or enforceable documents (related to their work or departments) are being revised or developed and will be able to inform the reporting on this requirement.

2. Ecology appreciates the comments regarding reporting on this section and will consider methods to convey information learned during the 2019 permit cycle.
3. The commenter's recommended schedule for new Permittee reporting would be outside of the 2019 permit cycle. The schedule in the permit for **new** Permittees follows the same time allowance that was provided to Permittees in the 2013 permit cycle with similar GMA timeframes. This section of the permit does not apply to Permittees that were covered by the 2013 permit.
4. Please see the Permit Fact Sheet. This is not a requirement for Permittees that have already conducted the LID code review to complete that review again. The permit language states that it applies when "updating, revising, and developing new local development-related codes, rules, standards, or other enforceable documents." This requirement is a continuation of the 2013 requirement to ensure that Permittees are continuing to focus on making LID the preferred and commonly used approach. Permittees tracking changes to their policies and rules may find that newly created or unintentional barriers are preventing LID codes or practices from being implemented. These barriers need to be addressed. On the other hand, a new code might be developed that can help to make LID be used more often, or communities may find more new ways to incorporate LID into their codes or standards. If no actions were taken or no barriers were found over the course of the year, then there is nothing to report. The Annual Report will have an option to accommodate this type of response. Clarifications were made to the permit language where deemed necessary.
5. Permittees should report any barriers they find to implementing LID BMPs that are created by their own application, procedures, policies, standards, or codes.
6. Ecology does not agree that proposed permit language suggestions regarding reporting are warranted. As noted above, the Annual report will include an option to accommodate not making any changes to local codes.
7. The requirement to describe mechanisms developed to encourage or require implementation of LID principles or LID BMPs is not a hidden behavioral education requirement. See above responses to comments for additional context. This permit section requires Permittees to report what they already do or what provisions they put in place to make LID easily, readily, and practicably implementable in their jurisdictions. It is not requiring Permittees to create anything new. Clarification was made to permit language.

9.7 Overall Comments related Stormwater Management Action Planning

Phase I: S5.C.6.d | **WWA Phase II:** S5.C.1.d

Summarized comments

1. We must have strong stormwater permits because polluted stormwater runoff is such a large source of toxic pollution into Puget Sound, and these permits are the most direct way to reduce this threat throughout our region, stop the decline of our orcas and salmon, and continue working toward a healthy estuary for generations to come.
    - Similarly, Ecology must make sure that cities and counties are required to undertake meaningful, inclusive public engagement as they draft watershed plans and make decisions that will directly impact our communities.
2. It is unclear how these two assessments differ. Both seem to consider the receiving water condition and the extent to which stormwater influences it. We recommend that the first assessment only look at WQ data and only bring in stormwater considerations during the second step. To do this, please delete "to identify receiving waters that will benefit from stormwater management planning."Associated edits may be helpful in the guidance.
3. Small jurisdictions, or jurisdictions without adjacent Permittees should be exempt from the requirement.
4. The *Status & Trends 2015 Fact Sheet* (SAM_FS #009, Aug 2018) indicates that low watershed and riparian canopy cover is a significant stressor to BIBI. This was also identified in the various Phase I basin plans. Please add [increasing watershed canopy] as an allowable SMAP strategy.

Response to the range of comments

1. Thank you for your comments, Ecology appreciates hearing from so many of the public on the Municipal Stormwater Permits. Ecology agrees that local governments should aim to engage in meaningful, inclusive engagement. We added permit language qualifications to the public involvement requirements; the SMAP (in addition to the SWMP) must be made available to the public in order to provide input. We believe this would have been part of the Permittee's processes anyway, but made the clarification to be clear. The SMAP guidance further describes the need for local governments to include public engagement in the process of developing the SMAP. Washington State has strong requirements for public participation in local government decision-making processes, a number of the activities required by the permit already require public involvement under other state and local laws.
2. We clarified the steps and teased out assessing stormwater influence as a separate SMAP step with additional context on what to consider when conducting this assessment. This step is intended to help narrow the list of receiving waters prior to the prioritization process. Permittees should consider where it is most likely that enhanced stormwater management, retrofits, and/or land use planning in a basin will protect or improve downstream water quality and habitat. Guidance for determining low expected hydrologic impacts or low expected pollutant loadings is based on information in the SWMMWW.
3. Ecology does not agree that a Permittee must be adjacent to another Permittee to be subject to this requirement. Some small jurisdictions may find they have little expected stormwater management influence from SMAP on their receiving waters and they will not need to complete the remaining required SMAP steps. However, all jurisdictions must produce the watershed

inventory and stormwater management influence assessment. Some small jurisdictions may have important receiving waters that will benefit from SMAP.

4. Yes, increasing canopy cover can be considered and was added in the SMAP guidance as a potential land management strategy for built out areas.

9.8 Comments related to receiving water basin assessment

Phase I: S5.C.6.d.i | **WWA Phase II:** S5.C.1.d.i

Summarized comments

1. Ecology has indicated that IDDE reports, field information, maintenance, and stormwater infrastructure, may be used as "existing information" and that instream water quality data is not necessarily required for this exercise. If this is Ecology's intent, please modify Permit language to reflect that intent. Identify the minimum required data, or types of information that would qualify. Otherwise indicate how Permittees will know "where significant gaps in the state of knowledge exist." How does Ecology propose a Permittee evaluate what the gaps are, if there is no metric by which to evaluate the gaps?
2. The City requests that the following language: "Where significant gaps in the state of knowledge exist, a plan and protocol should be developed to improve the assessment." be removed or modified as follows: The reasons for this request are as follows: 1) The language appears to allude to future monitoring requirements that Ecology staff have stated in a public meeting will not be the case; 2) Many Permittees do not have staff qualified to develop a plan or protocol to fill these data gaps; 3) Most jurisdictions opt to contribute to a regional monitoring effort to avoid the costs of developing and implementing monitoring plans, and this requirement appears to be contrary to that option by requiring Permittees to develop a monitoring plan.
3. This text needs to be clarified - is this requiring a study to assess the influence of stormwater on a particular watershed or basin? If so, how would this need to be done?

Response to range comments

1. Ecology removed the phrase “where significant gaps in the state of knowledge exist…” from the permit language and clarified the receiving water delineation and assessment requirements. SMAP is intended to rely on existing information. Monitoring is neither required nor expected to meet the permit requirements for SMAP. The SMAP guidance lists relevant types and sources of information to consider including in this process; but Ecology is not prescribing which data sources the Permittee must use in developing the SMAP. Permittees must use their own judgment to determine whether and how significant knowledge gaps should be addressed to support future actions. Addressing those gaps may be a proposed action in the SMAP, but it is not required. Ecology provided additional guidance on assessing stormwater management influence as a new step; a study is not required. See also the responses to overall SMAP comments, above.

9.9 Comments related to receiving water basin prioritization

Phase I: S5.C.6.d.ii | **WWA Phase II:** S5.C.1.d.ii

Summarized comments

1. In a more flexible prioritization scenario, Permittees can still produce a qualitative assessment and achieve the deliverable desired: a watershed inventory with key characteristics of each basin. Each Phase II could determine the extent of retrofit opportunities and submit this plan and prioritization for Ecology review. Retrofit projects developed within this planning framework could also be given preference in the competitive Stormwater Financial Assistance Program.
2. The University of Washington is currently spearheading a reporting platform so that people living in the Puget Sound region can report salmon exhibiting URMS. Ecology should encourage Permittees to accept and investigate reports of URMS, either utilizing this platform or modifications to Ecology's pollution reporting hotline. URMS data for coho salmon could also be used for prioritizing basins for planning and implementation of SMAPS.

Response to the range of comments:

1. The permit does not prescribe a prioritization process. Permittees are provided the flexibility to determine the prioritization method that fits best with their jurisdiction and still meets the goals and intent of the requirements. Ecology will not review Permittees' SMAP in advance of the required submittal date. Ecology will consider your suggestion for future SFAP scoring.
2. Thank you for the comment. This is another source of information that Permittees may use when determining priority basins.

9.10 Comments related to the Stormwater Management Action Plan

Phase I: S5.C.6.d.iii | **WWA Phase II:** S5.C.1.d.iii

Summarized comments

1. It is difficult to quantify the impact of "targeted or customized implementation of stormwater actions." Although it is certain that these items make a difference in water quality, predicting the magnitude of that difference is next to impossible without extensive and expensive water quality monitoring. In addition, these actions are already required in other areas of the permit, so it is unclear how much additional implementation would be needed or beneficial. Inclusion of stormwater actions blurs the focus on structural retrofits.
2. The date by which to have watershed plan done is only 6 months from the initial evaluation. Please allow 1 year.
3. Do basin flow control retrofits apply if there are no receiving waters other than salt water? (If most or all of the MS4's basins drain to a flow control exempt water body though a stable, non-erodible man made conveyance, are basin retrofits expected or required?)
4. This section does not allow for or address an important pathway for water quality retrofits commonly referred to as opportunity based retrofits. Many Permittees look for opportunities to add on or partner with local non-stormwater CIP projects to include a water quality retrofits into the project in an effort to improve water quality in the area and reduce the costs of implementing a stand alone water quality retrofit. The process included in this section does not allow for water quality retrofits outside of the priority watershed or priority target area to count towards permit compliance. The City requests that a section be added to allow for these types of

retrofits, as they are a more cost effective way of improving water quality in our region. Further, we fear that without this new language, these cost effective and beneficial retrofits will not occur, unless they fall within a priority basin or area.

5. Time scales beyond a permit term are inappropriate. The county has a six year capital plan that is updated yearly, which is a realistic planning window. The plan can be updated in subsequent permit terms as technology and management goals evolve.
6. Pierce County's Watershed Plan demonstrated that water quality was too heavily influenced by ground water to be improved with stormwater facilities or low impact development projects. We are requesting that Ecology change this language to allow implementation of water quality improvement projects in a basin of the Permittee's choosing.
7. Ecology should mandate that Permittees prohibit the addition of any new hard surfaces, and further take steps to dis-incentivize use of motor vehicles, in basins with 303(d) listed waterbodies and/or Total Maximum Daily Loads (TMDLs) in place, and in basins with verified documented instances of URMS. These steps could include: adding bike lanes, increasing bus routes, incentivizing car-pooling, and redirecting traffic flow. Furthermore, Permittees should implement plans to reduce the effective impervious surface area in these basins. These three measures could be accomplished through the SMAP and/or the Structural Stormwater Controls sections of the Permits, and with a revision to section S.7 and Appendix 2 of the Permits.
8. Ecology should provide more clarity on which processes to reference and incorporate into the SMAP process. Growth Management planning, Shoreline Master Programs, local public transportation expansions, and other similar efforts should be specifically incorporated where relevant. Furthermore, the current lack of standardized reporting mechanisms for this first component of watershed planning will likely lead to inconsistencies between Permittees in implementation and reporting, making it difficult to track and compare progress.
9. Require Implementation of Stormwater Management Actions Plans: Cities and counties should be fixing areas with no stormwater treatment, but Ecology has excluded nearly all Puget Sound municipalities from requirements to take action during this permit cycle. Ecology should require all Permittees to make retrofits now and implement a meaningful number of projects to achieve real water quality improvements. We strongly urge Ecology to require that jurisdictions go beyond preparing a SMAP in the 2019 Permit cycle and implement these plans. Permittees should also report on projects that will be implemented within the 2019 Permit cycle. This means that Phase II jurisdictions should include a list of projects to be implemented in this Permit cycle with their list of Annual Report Questions (Appendix 3).
10. Additionally, we suggest including clear expectations on the outcomes of these actions that set Permittees up for success, such as measurably improved outflow water quality. There is no value in planning and taking inventory if these measures are not acted upon.

Response to the range of comments

1. Ecology appreciates the comments on this section. Although some strategies may be difficult to quantify, a wide variety of stormwater management actions are appropriate to include in a plan to protect and recover receiving water quality and habitat. Retrofits and land management strategies as a water quality management tool are actions that each jurisdiction needs to

specifically consider including in their SMAP. Ecology modified this provision by stating that programs only need to be tailored if the Permittee has information or uses judgment to determine a tailored program would be beneficial, so that more focus could be placed on other approaches.

2. Ecology revised the date to March 31, 2023, to submit the plan to provide additional time for Phase II Permittees as well as retaining time to review plans before we begin to reissue the permits.
3. Basins or sub-watersheds that drain to flow-control exempt waters do not need to consider flow control projects. They may still wish to consider water quality projects.
4. For this initial plan, opportunistic projects located in the high priority area(s) should be included in the SMAP but the jurisdiction must also assess whether these projects alone will be sufficient to meet the goals for the receiving water. Note that other planned capital improvements should be reported in the 'coordination of long-range plans' section relating how stormwater needs are being incorporated into GMA required plans/elements, or through locally initiated plans. If useful, Permittees may develop a second SMAP that is planning for opportunistic projects in areas across other sub-basins.
5. Ecology disagrees that timeframes beyond the permit cycle are inappropriate for planning. The permits will continue to be reissued as long as there are municipal stormwater discharges to surfaces waters. Including longer-term projects and activities will support adaptive management and updates of your SMAP over time.
6. The requirement for the Phase I counties to develop an SMAP for basin within the watershed they modeled and planned for during the 2013 permit was intended to build on the detailed understanding gained from those efforts. Ecology understands the request to select a different basin than the one modeled for the watershed-scale stormwater plans. In order to ensure that the selected alternative basin is appropriate, and that sufficient information is available to inform SMAP for that receiving water, Ecology revised the language in the Phase I Permit to allow a Phase I county to follow the basin assessment and prioritization process outlined in the Phase II Permit.
7. While such solutions could be considered, the feasibility and determination of whether a specific type of project can be implemented in a particular area is more appropriate at the local level, particularly within the context of making Low Impact Development the common and preferred approach. Ecology includes actions related to the TMDLs in Appendix 2, determined by the language in the EPA-approved TMDL.
8. Ecology agrees that the suggested plans are appropriate, as are many other planning processes that are listed in the guidance. Permittees develop and name long-range or development-related plans by various names, and not all Permittees are required to plan under GMA or SMA. We retained the permit language, which is general enough to apply to all Permittees and allows Permittees to use their best judgment to identify the appropriate plans developed within their municipality.
9. Ecology does not agree that the permit should require Phase IIs to implement SMAP actions within the 2019 permit cycle. Ecology views the permit requirements and schedule for

implementation based on the whole of the permit requirements and not just one element or program. Ecology structured the SMAP requirement to provide ample time to successfully complete all of the required planning steps while following a meaningful public engagement process, which should include preparing and holding hearings with various local entities such as planning commissions and elected officials. Ecology believes that the required schedule is reasonable, while acknowledging that it will still be challenging for some Permittees. The 2019 Phase II Permit introduces a new program, Source Control for existing development, and other modifications to Stormwater Management Programs. Ecology will learn from the SMAP reports and a stakeholder process during the 2019 permit cycle in order to better determine what might be the appropriate timing and level of effort for Phase II Permittees' implementation of SMAP retrofits and other actions. Meanwhile, the permit requires many actions that directly improve receiving waters, including the Puget Sound.

10. Ecology revised the Annual Report questions for this section to receive more consistent and comparable information.

9.11 Comments on the SMAP Guidance document

Summarized comments

1. Ecology should support a collaborative effort to provide a guidance document that includes a template for reporting requested information. The template would provide some consistency across jurisdictions as to what the planning exercise will provide. For example, overlay transportation planning maps with stormwater planning maps to see the areas where priorities overlap.
2. As part of Comprehensive Stormwater Planning, stormwater transfer control programs are encouraged. One allowable option is reforestation. The conditions of reforestation appear to be limited to restoration of evergreen forest. Other language states that the new facilities should be designed to meet the historic land cover condition. If the historic land cover condition was something other than evergreen forest, such as Garry oak savannah or prairie, can full transfer credit be granted for restoration of land to Garry oak savannah, prairie, or similar land covers? Also, can transfer credits be granted for conversion to economically productive land use such as orchards, vineyards, and other low soil disturbance agricultural land uses?
3. The prescriptive basin scale set in the proposed requirement is unnecessarily rigid for basins not already characterized in the Puget Sound Watershed Characterization. A flexible and scalable planning requirement with an emphasis on data Permittees already have or institutional knowledge that can be dovetailed into the planning and prioritization process is more appropriate.
4. It is inappropriate to require Permittees to perform activities outside the area draining to the MS4.
5. Permittees could use more specific guidance on incorporating landscape scale data from long range plans (such as Critical Area Ordinances and Shoreline Master Programs) to inform the assessment of water conditions during the SMAP process. Planning documents can also inform the assessment of development pressure in the chosen basin – how much growth is likely to

occur and whether sensitive parts of the basin are likely to be protected. The long-term actions and adaptive management sections of Permittees' SMAP should address how stormwater planning will be incorporated into CAOs and SMPs. This should also be included in the Annual Report (Question 28).

6. SMAP Guidance (p. 10), we suggest the following wording to encourage municipalities to expand their options for potential funding sources and delivery mechanisms for stormwater management. Permittees are encouraged to look for a variety of methods to fund and deliver storm water management programs and to create multi-benefit projects that might not be funded from traditional stormwater sources. Multi-benefit projects such as green stormwater infrastructure (rain gardens, bioswales, trees) that can meet water quality goals, as well as habitat, recreation, jobs and other community goals, can increase public support of stormwater pollution prevention, which will ultimately improve water quality. Permittees are encouraged to investigate various incentives for increasing the scale of stormwater projects (rebates, regulatory relief), development of public/private partnerships, and leveraging state funds to get better interest rates on public funds.

Response to the range of comments

1. Ecology does support collaborative efforts and modified the permit language to clarify. Ecology has modified the Annual Report questions to collect consistent and comparable information while still allowing individual Permittees flexibility to produce plans in a format that meets their needs. Ecology did not provide a template due to the variability in acceptable approaches for jurisdictions to successfully meet this permit requirement.
2. Ecology does not “encourage” Stormwater Control Transfer Programs through the SMAP process, however, we do cite the guidance document because it provides additional context on data to consider, and principles for prioritization. Developing a plan for stormwater control transfer program is a more in-depth process and requires Ecology consultation, review, and approval before such a plan may be implemented. That said, a SCTP project may be included in your SMAP. The other specific questions raised in the comment would be addressed through that process. See the SWMMWW for guidance when an evergreen forest is not the historic land cover.
3. Ecology has not prescribed a basin scale; the guidance suggests a target size range. Permittees may use a scale that fits best for their landscape and municipality. The watershed size range in the guidance document has been determined over time to be useful for understanding the impacts of stormwater on receiving waters; and the catchment area size range was suggested by Phase I Permittees following completion of their required watershed-scale stormwater planning in the 2013 permit.
4. Ecology is not requiring Permittees to take action outside of their permit coverage areas. The permit requirements only apply to the permit coverage areas. Phase II Counties may prioritize a basin outside of the permit coverage area if the proposed actions will protect or improve their receiving water conditions.
5. Ecology added permit language to ensure the connection between the SMAP and other plans can be made, but we do not prescribe how Permittees will do this.

6. Ecology agrees that Permittees should consider those and other creative funding approaches, but we did not incorporate this suggestion in the guidance document.

9.12 Funding need

Summarized comments

1. What is the trajectory of this program, and will PH II Permittees be required to implement in upcoming permit cycles?
2. There is a lack of local funding to develop this program and to implement retrofits. Ecology should provide these funds.
3. For the sake of discussion, if a typical cost of $55,000 per acre is assumed (geometric mean of 10,000 and 300,000), this would require 16.5 million dollars to implement an action plan for a single 300-acre catchment- and this total is by no means at the upper end of the cost range. Does it make sense to spend this much money in such a small area? Will it draw down stormwater management investments in other areas and lead to further degradation elsewhere within a jurisdiction? Will it not be in the best interest of a jurisdiction's stormwater managers to develop a rationale for selecting an area with minimal existing impact (retrofit need) in order to reduce action plan costs? The City requests that Ecology provide more transparency with respect to the long term trajectory of basin plan requirements over several permit cycles so that jurisdictions can plan accordingly (i.e. will phase-II communities be required to implement retrofits on the next permit cycle?).
4. The City would like to see grant funds made available to perform community-specific watershed analysis and planning.

Response to range of comments

1. Ecology will learn from the SMAP reports and a stakeholder process during the 2019 permit cycle in order to better determine what might be the appropriate timing and level of effort for Phase II Permittees' implementation of SMAP retrofits and other actions. Ecology has provided grants to Permittees to assist them in implementing the permits, as well as for capital stormwater projects in permitted communities. Ecology will continue to seek and provide state funding for Permittees' technical assistance, guidance, training, planning, and capital projects.

10.0 Public Education and Outreach

Permit reference: Phase I Permit – S5.C.11

Western Washington Phase II – S5.C.2

Eastern Washington Phase II – S5.B.1

Commenters: E.WA Stormwater Group, City of Marysville, City of Oak Harbor, Michael Martinez, Clark County, City of SeaTac, City of Newcastle, Chelan County Public Works, City of East Wenatchee, Kitsap County, Spokane County Stormwater Utility, Douglas County, Barbara Craven, City of Redmond, City of Bellingham, Thurston County, City of Bothell, City of Bellevue, Pierce County, City of Sumner, STORM, City of Brier, King County, City of Renton, City of Seattle, City of Sammamish, City of Lake Forest Park,

City of Mukilteo, City of Kelso, Skagit County, Black Diamond, City of Lake Stevens, Snohomish County, City of Olympia, City of Kirkland, City of Lynnwood, City of Vancouver, City of Tacoma, City of Snoqualmie, City of Shoreline, City of Port Angeles, City of Mount Vernon, City of Federal Way, City of Poulsbo, City of Longview, City of Issaquah, City of Everett.

10.1 Overall comments

Summarized comments

1. Does Ecology intend for each municipality to find demographics on each target audience? This would take years to implement. Consider rewriting this section to ensure this requirement can be met within the Permit term.
2. We are in agreement that translation of materials should be required where necessary, but request that a regional or ecology provided translation service be available to assist smaller jurisdictions.
3. Clarify 'high priority audience'
4. How do we need to show the connection between local water quality issues and target audiences?
5. Permittees should not be responsible for training engineers who are licensed professionals. The same goes for contractors who have trade associations that can provide training. Ecology should continue to provide training.
6. There is no mention of planning for climate change and stormwater impacts in this section of the permit. Coordination of climate change projections and public information should be included in the consideration of the BMPs and low impact development strategies.
7. Another ubiquitous issue are TMDLs, and despite the focus on fecal coliform, there is no mention of septic information or best practices, and only BMP focus on pet waste. Septic system impact should be included in BMPs along with pet waste, as an awareness and behavior change issue.
8. S5.C11.a 44 "Recommended language changes
   Each Permittee shall implement an education and outreach program for the area served by the MS4. The program design shall be based on local water quality information **data as available** and target audience characteristics **and demographics** to identify high priority target audiences, subject areas, and/or BMPs. "
9. Clarify between 'campaign' and 'program'
10. Define 'Area served by the MS4'

Response to range of comments

1. Ecology is only referencing more specific demographics when considering the need to provide materials in languages other than English. EPA and the State of Washington both have tools to help municipalities identify communities that would benefit from education and outreach materials in languages other than English. See discussion on environmental justice in the Comprehensive Stormwater Planning section for more information.

2. Permittees may determine the highest priority audiences and subject areas based on local and/or regional pollution problems.
3. There is no specific metric for relating water quality issues to target audiences. Ecology expects the Permittee to appropriately match target audiences to subject areas/BMP's
4. Ecology believes Permittees should provide education and awareness of Permit requirements to professionals who implement Permittees' ordinances and manuals. Ecology supports education programs and training through grant funding and various other sources.
5. Ecology realizes the importance of some subject areas, such as 'climate change projections' and encourages Permittees whom have the resources to do so, add additional subject areas important to their jurisdictions to their programs.
6. The permit does not restrict jurisdictions from applying a septic system focus as a behavior change assessment, if this is an issue within the MS4.
7. Ecology has changed some instances of 'campaign' and 'program' to reflect that 'program' refers to the ongoing overall education and outreach program requirements, and 'campaign' refers to individual behavior change projects.
8. Permit requirements only apply to areas served by the MS4, this is further defined in section S.1.A of the Permit.

10.2 Regional Efforts

Summarized comments

1. Clarification is needed on what is meant by "If a Permittee chooses to adopt one or more elements of a regional program, the Permittee shall participate in the regional group and implement the regional program in the local jurisdiction
    - Is each Permittee require to develop regional programs at the local jurisdiction?
    - Couldn't jurisdictions adopt elements of a regional program and implement them locally without being part of the regional group - and still be meeting permit requirements?
    - Does this mean attending meetings for this group and providing input or does it go as far as contributing monetarily to the program?
    - Does this require holding an event for the program in your city or would advertising for the program and its' events fulfill the intent of this statement?
    - This requirement could be interpreted to state that if a Permittee chose to act individually, they could not have a program element(s) that the regional group has because they are not participating in the regional group.
    - The use of the term "elements" is confusing. Please use the same words consistently.
2. Define "regional".
3. "Permittees may choose to meet these requirements individually or as a member of a regional group. [DELETE: Regional collaboration on g] General awareness or behavior change programs, or

both, includes Permittees developing a consistent message, determining best methods for communicating the message, and when appropriate, creating strategies to effect behavior change."

4. Phase I Permit S5.C.11, first sentence and 3 bullets p.44 (redline)
   What is the purpose of these statements, which appear to be incomplete and vague summaries of the requirements in S5.C.11?

Response to range of comments

1. "Regional" is not a prescriptive term with geographic borders. Permittees may view a regional effort to be a collaboration of Permittees in a nearby area. Ultimately, whatever the regional effort you participate in, it needs to make sense for your own jurisdiction to be taking part in that effort, and you must still apply the regional campaign, or elements of that campaign, locally in your own jurisdiction. In this context, "elements" of a campaign refers to situations where a full-scale implementation of a complete campaign in a Permittee's jurisdiction may not be applicable to local needs. If some, but not all, parts of a larger campaign are applicable locally, Ecology does not mandate jurisdictions implement the other parts of the campaign that do not apply to their community.
2. The requirement for regional participation, if adopting a regional program, has been removed from both the PH I and PH II permits. Ecology understands that it may not be feasible for all Permittees to actively engage in regional groups. However, Ecology strongly encourages meaningful participation, as active participation and collaboration will strengthen the resources these regional groups can provide.
3. If advertising for a regional stewardship event, the event doesn't necessarily have to be in your jurisdiction, but there should be a reasonable expectation that your targeted community can attend the event.
4. Ecology does not agree with the suggested edits to permit language. This language was added to provide clarity for regional participation.
5. The first three bullets in the introduction to Education and Outreach section were added to provide intent, context, and clarity for the permit requirements. Ecology revised the Phase I Permit to match the language used in the Phase II Permit.

10.3 Timelines

Summarized comments

1. Revise due dates for behavior change program to come after the SMAP so jurisdictions can use the water quality data collected.
2. Delay the initial evaluation by one year, so it would be completed by July 1, 2021
3. Is the initial evaluation to be completed by July 1, 2020, or is the evaluation to begin on or before July 1, 2020 and should be completed by February 1, 2021?
4. Provide at least three months between development and implementation of the behavior change program.

5. Many municipalities use biennium budgets with annual appropriations. The proposed 9 months may make financial support for the revised requirement difficult. One year is more appropriate for the new evaluation. The proposed 18 month period from effective date to use community based social marketing methods should be changed to two years for the same reason.
6. The proposed timelines should accommodate Permittees focusing on a seasonal behavior.
7. Please clarify if the program development shall commence no later than February 1, 2021, or if it needs to be completed by that date.
8. S.5.C.2(a)(ii)(c): Change "February 1, 2021" to "February 1, 2022."

Response to range of comments

1. Ecology appreciates the suggested timelines for implementation. Whenever possible, we strive to coordinate timelines within the permit to achieve the greatest efficiency of work for Permittees. Ecology does not agree with the timeline modifications suggested by multiple commenters. The SMAP requirements are new, and the behavior change program is an ongoing program that must continue to make progress during the permit cycle. Permittees may determine their own internal schedule in order to help inform different tasks and programs, but must meet the deadlines set in the permit. The receiving water assessment required by the Stormwater Planning component could be phased so that information related to behavior change programs is available early.
2. The first evaluation of the 2019 permit cycle is to be of an on-going program. Depending on the length of implementation of the ongoing program, Ecology understands that various levels of findings will result. The timeline outlines that by July 1, 2020, the Permittee must be prepared to evaluate its existing program. If more than seven months is needed to evaluate, the Permittee can begin earlier than the timeline outlined in the permit. Ecology disagrees with delaying the initial evaluation, and subsequent actions based on that evaluation, as it would delay implementation of a Permittee's program. Ecology did add an option to forgo the initial evaluation if Permittees choose to begin a new campaign and not continue or adjust an existing campaign.

10.4 General awareness

Summarized comments

1. Are PH II jurisdictions expected to develop a new awareness program every year?
2. The requirement to select a target audience and subject is confusing as the point of general awareness is to provide a broad awareness of the nature and impacts of stormwater pollution to the community at large, which includes the general public and commercial/industrial /institutional entities.
3. This section should be specific in allowing for a narrower entity focus statement than "all businesses" or "all of the general public".
4. The Fact Sheet, p. 47, states Ecology added language in the General Awareness section "to help clarify how many audiences and BMPs must be targeted..."

Where is this language? The County finds no clarifying language on this point in the Draft Phase I Permit. Since the Fact Sheet indicates Ecology's intention to align the Phase I and Phase II Permit requirements on this topic, Ecology should utilize consistent and clear language in each permit.

5. Ideally, the general awareness topics should lay the groundwork for and support desired behavior changes. Replace the second and third subject areas with: Water Pollution Hotline Reporting, and the 3rd message to be chosen by the Permittee based on the criteria outlined under Minimum Performance Measures S5.C.11.a.
6. Some of the subject areas are not relevant to some of the target audiences. In addition, trying to address all of the subject areas for all of the target audiences may result in muddled messaging and/or oversaturation. We recommend refining this section and allowing for more targeted outreach based on jurisdiction needs.
7. Leave home-based and mobile businesses out of the general awareness section for local jurisdictions.
8. Outreach to the development community should be its own section, or under S.5.C.6
9. Parking lot owners should be added as a target audience.
10. Add 'climate change projections' to the subject areas for a.i.(b).
11. The Permit language in section S5.C.2.a.i.(c), 'Permittees shall provide subject area information to the target audience on an ongoing or strategic schedule.' Should be clarified, and in a guidance document or FAQ sheet, not the permit.
12. Pierce County staff are recommending the following language refinement to the Education and Outreach section of the permit. Reword "Build general awareness about impacts from, and methods to address and reduce stormwater runoff" to "Build general awareness about how stormwater is managed, including how to reduce stormwater flows and impacts to water quality."
13. Does Ecology intend Permittees to identify and prioritize overburdened communities (plural) within their jurisdiction? And, if so, how is one overburdened community to be prioritized over another or is each overburdened community to be identified and targeted within the general public population?
14. As written, this permit section appears to require Permittees ""single out"" overburdened communities for extra emphasis. The definition of the term "overburdened communities" indicates that these communities are already over their ability to cope and are burdened with issues more than the general public. Why should overburdened communities be further singled out to do stormwater activities? We should instead make sure that all non-burdened populations are doing everything right first before we make a push at those that are already clearly working harder to just meet their basic needs. Additionally, "overburdened communities" may already be doing more than the general public for water quality if, for example, they cannot afford a car and so utilize public transportation. The City of Tacoma supports translation of materials into languages outside of English, we also support programs which would help increase water quality while providing specific services to overburdened populations, however, the permit language only seems to focus on targeting overburdened communities not increasing access or dual

benefit programs for both stormwater benefit and decreasing the load on overburdened communities. Remove this specific audience from the permit.

Response to range of comments

1. Phase II Permittees are not required to choose a new target audience and subject area every year, however, they may do so if they want, or they may continue to select the same audience and subject annually if that is effective.
2. Ecology did not align the language in the Phase I and II permits regarding the number of target audiences to be reached. For General Awareness, Phase I Permittees are required to implement a program that reaches the entire list of target audiences and subject areas, while the Phase II Permittees are required to select one audiences and subject area at a minimum. For Behavior change, both Phase I and the Phase II Permit only require the selection of one audience and BMP. Ecology intends for subject areas/BMPs to be applied to specific audiences as appropriate, and for Permittees to select the audiences and subject areas based on local and/or regional pollution problems.
3. Ecology did not make any changes to target audiences and subject areas for the General Awareness section. However, Ecology realizes the importance of some subject areas which are not explicitly included in the permit, such as 'climate change projections' and strongly encourages Permittees whom have the resources to do so, add additional subject areas important to their jurisdictions to their stormwater programs.
4. "Ongoing or strategic schedule" clarifies that Permittees have the flexibility to target their ongoing general awareness program during times that It's most efficient for the recipient (i.e. school children during the school year, etc.)
5. Ecology disagrees with removing 'overburdened communities' as a target audience for general awareness. EPA and the State of Washington both have tools to help municipalities identify overburdened communities. Ecology is not adding 'overburdened communities' as a target audience in the 'behavior change' section of this requirement, therefore the overburdened communities are not being singled out to do additional stormwater activities, nor is one overburdened community being prioritized over another. Ecology included permit language that applies to environmental justice issues where we found the connection to be applicable to human health and environmental factors, as well as improving information flow to increase the awareness of overburden communities about stormwater impacts. See discussion in section 8.1 on environmental justice for more information.

10.5 Behavior change program

Summarized comments

1) Include Fact Sheet language "...begin to implement the strategy developed in S5.C.1.b, which may include the start of audience research or other early tasks that inform the behavior change program, but does not necessarily mean the program must roll out to the target audience."
2) If a program is started and then determined to not be working, is the jurisdiction required to tweak the program to address the problem or will they be able to develop or find a more suitable program?

3) Please clarify whether Ecology expects Permittees to select a new audience and behavior annually, or can they select 1 from each for the duration of the permit period.

4) Clarify that (Audience specific) means that the Permittee may choose an appropriate audience which is not previously listed to target for these BMPs. "(Audience specific)" target audiences should be a separate subsection called S5.C.2.a.ii.(b), shifting the remaining requirements to S5.C.2.a.ii.(c) through S5.C.2.a.ii.(g). Define "audience specific" and list the two subject areas.

5) S5.C.2: How do we measure the 'Effect', and what is an acceptable level of changed behavior?

6) "Effect" behavior change is an impractical requirement, influence might be the better wording.

7) Based on the Ecology staff clarifications provided at the October 3, 2018 STORM conference, please add 'at least one' to the following language: 'Behavior change: To effect behavior change, Permittees shall target at least one of the following audiences and BMPs:'

8) The targeting of the use of audience-specific source control BMPs is part of the implementation of S5.C.8. in the phase I permit and is not needed in this component.

9) Remove "Prevention of illicit discharges" from the list of BMPs, given that more detailed types of illicit discharges are already listed for behavior changes including household chemicals, carpet cleaning washwater, vehicle maintenance drips, pet waste, dumpster and trash compactor juice, etc.

10) Section S5.C.1.a.ii(a) should also include a corresponding spill control retrofit BMP for the behavioral change category.

11) Consider moving litter and debris prevention to general awareness section instead of or in addition to behavior change.

12) Add the following Target audiences: parking lot owner's or manager's.

13) Ecology should develop example programs that the Permittees can choose to implement or provide grants or other funding for STORM to develop the program, or develop a free training program to assist Permittees in program development and implementation. Ecology should have at least one program for each combination of target audience and BMP available.

Response to range of comments

1) The Fact Sheet language suggested to become permit language contains guidance, and is therefore not suitable for permit language. However, the content of the comment is correct, if a new program or campaign is selected then Permittees must begin to implement developing that program by the date specified in the permit – which may include starting with research to inform the development of this new program or campaign.

2) When Permittees complete their initial evaluation, they have three options for moving forward:

    a. Option 1. Develop a strategy and schedule to more effectively implement the existing campaign.

    b. Option 1 is to refine the existing, ongoing, behavior change campaign with the *inclusion* of community based social marketing methods. This includes, if not part of the program already, a plan to evaluate the effectiveness of the program going forward.

c. Option 2. Develop a strategy and schedule to expand the existing campaign to a new target audience or BMPs.

d. Option 2 is to expand the existing, ongoing behavior change program to a new audience with the same BMP, or same audience but a new BMP may be a better fit or more effective at achieving the desired behavior change.

e. Option 3. Develop a strategy and schedule for a new target audience and BMP behavior change campaign.

f. Option 3 is to develop a new approach for the behavior change program, focusing on a new audience and BMP than the existing program. Permittees may decide whether they want to continue to adjust a behavior change program to make it more effective or to start a new program.

3) Permittees must implement the program every year during the permit cycle, but do not need to select a new audience or BMP every year.

4) 'Audience specific' was added to the last two bullets to give Permittees more flexibility in the target audiences, giving Permittees a better ability to customize those BMP's as needed.

5) Ecology has not set a defined amount of behavior change, but a process and program requirements. The level of effort comes from following practices similar to Community Based Social Marketing. Following a methodology like CBSM sets up a process where indicators of success are established and tracked in order to assess how well a message/campaign is working at reaching its intended audience. Permittees use the required evaluations to continue to improve the behavior change program overall and/or campaign.

6) The PH I permit was corrected to clarify that only one target audience and BMP are required to be implemented in the behavior change section.

7) Ecology did not make any changes to target audiences or BMP's in this section.

8) Ecology disagrees with the suggestions to remove 'source control' or 'prevention of illicit discharges' as BMP's to consider. Having them in this section gives Permittees additional opportunities to address these issues that may not be covered in other areas of the permit more in depth.

9) A spill control retrofit bmp could be categorized under the illicit discharge prevention bmp, or the source control bmp.

10) Ecology encourages Permittees to cooperate in regional public education efforts. In past Permit terms, Ecology has funded efforts such as the Puget Sound Stormwater Outreach for Regional Municipalities (STORM) program and awarded other grants to groups of Permittees for regional or statewide public education activities. Ecology will continue to seek out resources to help develop education and outreach programs.

10.6 Community-Based Social Marketing

Summarized comments

1. The language should, at minimum, be modified to indicate that this can be met through a more generic social marketing approach. (i.e. require 'social marketing' not 'CBSM').
2. Training or consulting services from this methodology of social marketing is expensive; DOE should not require it, unless they plan to pay for all education and outreach staff to receive training or to provide funding for consulting services.
3. What does Ecology mean by the phrase "tailored to the community"? Do you mean "tailored to local circumstances and priorities? Or does Ecology mean "tailored to a target audience"?

Response to range of comments

1. The Permit language allows for flexibility in which social marketing practices may be chosen by communities - by only requiring practices 'similar to Community-Based Social Marketing'. There are many online resources related to practices similar to Community-Based Social Marketing. Ecology would also encourage the use of regional efforts to implement this requirement.
2. Ecology is using 'community' to refer to both local conditions and priorities, and the target audience when describing how a campaign should be developed.
3. Ecology means both by the phrase tailored to the community – the initiative or behavior change campaign is to address a local water quality concern that is relevant to the municipality, and the messages are to be tailored so that they are appropriate and developed to direct a specific audience within the community to change behavior in order to address the water quality concern.

10.7 Initial Evaluation

Summarized comments

1. Include language that makes it clear Permittees may evaluate a new behavior change program, or the program evaluated in the previous permit cycle.
2. Remove this section, as the 2013 permit did not require an 'ongoing' behavior change program.
3. Can an evaluation of a regional program we participate in work for this? It would be most effective and efficient for Permittees to coordinate, track and share evaluations to build data for regional impact of BMPs and behavior change.
4. Does this mean we conduct a new evaluation on the same program we evaluated in the 2013-18 permit?
5. Request to extend deadlines, with some requesting them to coordinate with biennium budgets.
6. Please clarify if the July 1, 2020 deadline means the evaluation must be started by that date or if the evaluation needs to be completed by the July 1, 2020 deadline.
7. What is the expectation for what qualifies as an evaluation?
8. Clarification on what is meant by 'evaluation', and a list of methods.

9. The current permit language is acceptable, as it allows jurisdictions flexibility in how they evaluate their behavior change programs.

Response to range of comments

1. A behavior change program, or a behavior change campaign, can be implemented individually, or as part of a regional effort. To maintain effectiveness, the behavior change program is based on evaluation of ongoing efforts and how successful the campaigns may be at reaching the target audience. The 2013 Permits required an evaluation of one audience's understanding of the program/campaign being implemented. The results of that evaluation were required to be used to direct future efforts of the ***ongoing*** behavior change program (see 2013 permit language and the 2012 Response to Comments). Beginning July 1, 2020, a new evaluation of the behavior change campaign is required. Permittees shall document lessons learned and recommendations for next steps with the program. Recent evaluations of the existing, ongoing behavior change program may count to meet this requirements. To be clear, the original evaluation required under the 2013 Permit would not count toward this proposed requirement. If a new behavior change campaign was started at the end of the last permit cycle as a response to evaluation, Permittees may continue to implement their efforts to establish the campaign following the new permit requirements. Furthermore, Ecology included language that provides an option for Permittees to forgo this initial evaluation if the Permittee has decided to develop a new campaign, and the evaluation of an existing campaign will not add value to the overall behavior change program.
2. Ecology has retained the language '…each Permittee shall conduct a new evaluation of the effectiveness of the ongoing behavior change program…' However, we have reviewed our use of 'campaign' vs. 'program' throughout the Education and Outreach section, using 'program' when we are referring to the overall behavior change program, in all its iterations over the years, and 'campaign' to refer to specific target audience and BMP pairings.
3. Ecology retained the deadlines proposed.
4. The deadline of "no later than July 1, 2020, each Permittee shall conduct…" means that the Permittee must start the evaluation on July 1 – but Permittees should keep in mind the deadlines that follow to determine the best timing to complete the required tasks.
5. Evaluation means establishing metrics or indicators related to the behavior change campaign in order to assess whether the intended goals, or measures of campaign success, are being met. The methods to evaluate the campaign should be determined as the campaign is being planned. Depending on the campaign you will set up metrics to measure how the message of the campaign is being received by the target audience – this could be through direct communication with the target audience through focus groups, surveys, or indirect observations of a related parameter. Ecology will work to provide examples and resources on its guidance webpages.

10.8 Final Evaluation

Summarized comments

15. S5.C.2.a.ii.(f) - Does this mean we need to continue the same BMP behavior change program/element/campaign, or just that we need to continue a behavior change component?
16. The Permittee may have found that the campaign worked well and proposes to continue as is, with a simple expansion of the program to reach a wider, but not different, audience. There may be no need for a re-evaluation.
17. Permittees should have the freedom to design their behavior change campaign to be most effective, which may mean NOT attempting to change understanding. Please remove the requirement to evaluate changes in understanding.

Response to range of comments

1. Permittees must continue to implement an ongoing behavior change campaign. Permittees may continue to implement an ongoing behavior change campaign, or develop a new campaign to implement. Section S.5.C.2.a.ii.(f) 'Permittees shall use results of the evaluation to continue to direct effective methods for implementation of the ongoing behavior change program' from the PH II Permit has been added to the PH I permit for consistency.
2. Even if minimal changes are made to your behavior change campaign as a result of the initial evaluation, the final evaluation is still required to confirm the campaign's continuing effectiveness and to ensure you are reaching the broader audience.
3. The permit language refers to understanding of the targeted behaviors. This is a requirement to evaluate the messages that the Permittees are providing to their target audience, Permittees are given the flexibility to design their program to be most effective, and that is the point of the evaluation.

10.9 Stewardship opportunities

Summarized comment

1. Request to change the word 'create' to 'provide' when advertising stewardship opportunities.
2. This section of the proposed revisions should be deleted or Port Angeles shall be exempt.
3. Stewardship is also located within S.5.C.11.a.iii and the requirements are inconsistent. Locate all stewardship requirements in one section and clarify the requirements.

Response to range of comments

1. Ecology agrees that 'provide' is a more appropriate term in this section, language has been changed to reflect so.
2. Ecology does not agree with exempting specific Permittees from this requirement.

3. Ecology agrees that 'opportunities to become involved in stewardship activities' underneath the General Awareness section of the PH I Permit is redundant. It has been removed, and S.5.c.11.a.iii has been revised to clarify that stewardship opportunities should be provided and advertised to residents and other interested parties.

10.10 Guidance

Summarized comment

1. Recommendation that Ecology develop education and outreach materials for the State as a whole, or for Eastern and Western Washington individually.

Response to range of comments

1. Ecology encourages Permittees to use resources provided through the Washington Stormwater Center, and regional groups such as STORM (Stormwater Outreach for Regional Municipalities).

10.11 Editorial Comments

Summarized comments

1. "No later than March 31, 2024, evaluate and report on the changes in understanding and adoption of targeted behaviors resulting from the implementation of the strategy and any changes to the program in order to be more effective; describe the strategies and process to achieve the results." This sentence is grammatically and substantively unclear.
2. Various references are incorrect, please revise.
3. Various typos, please correct.
4. Request to reorganize this section of the permit. There are too many levels of organization, and it makes referencing difficult.
5. S.5.C.11.a.i and ii. Consider revising these sections to a table format to clarify which audiences are applicable to which messages.

Response to range of comments

1. Ecology has corrected language as needed. Ecology did not clarify which audience are applicable for each message in order to provide Permittees the flexibility to design programs that reflect local issues.

10.12 Eastern Washington comments on Education and Outreach

EWA Phase II: S5.B.1

Commenters: City of East Wenatchee, Douglas County, E.WA Stormwater Group, Spokane County, Chelan County, Clayton Verellen.

Summarized comments

1. Ecology added the requirement to measure the understanding and adoption of the targeted behaviors for at least one target audience in one subject area no later than August 2021. We take no exception with the permit language as written.
2. Ecology proposes that each Permittee shall measure the understanding and adoption of targeted behaviors for at least one target audience group no later than August 1, 2021 to direct education and outreach more effectively. We propose that this requirement language be removed from this section and moved to the S8. Effectiveness Studies section.
3. Recommend Ecology develop education and outreach materials for the State as a whole, or for Eastern and Western Washington individually. This would ensure consistency in the messages and be a more economically viable mechanism for addressing public education and outreach. As the requirements within the permit become more and more specific, a broad based approach is warranted.
4. EWA Section S5.B.1.b. - Change August 1, 2021, to August 1, 2023. Section S5.B.1.b, Footnote 4 - Change August 1, 2023, to August 1, 2024.

Response to comments

1. Comment noted. Thank you.
2. Ecology retained the provision to evaluate the education and outreach program in that program component rather than moving it to the effectiveness study section. The effectiveness study is a more robust process requiring the development of a QAPP. Ecology does not think taking that approach is warranted for the level of evaluation described in the education and outreach section. The intent is for Permittees to measure/evaluate the results of an education effort to learn whether it helps achieve a better understanding and adoption of desired behaviors in the target audience, and then apply the evaluation results to update and refine ongoing education and outreach programs. Ecology does not intend the requirement to measure and use results to apply to all the target audiences.
3. There are a number of general awareness resources that are available on Ecology's and EPA's websites that can be modified for use on the local level. Ecology understands that education that is tailored to the local audience often has a better chance to reach, and speak to the intended audience, and that local Permittees are in a better position to understand their residents. Ecology has provided resources for education and outreach programs through grant programs, and the Washington Stormwater Center is building its online resources and services to Permittees.
4. Ecology revised the date to Dec. 31, 2021, but did not change the date for new Permittees.

11.0 Public Involvement

Permit reference: Phase I Permit – S5.C.4.
Western Washington Phase II – S5.C.3.
Eastern Washington Phase II – S5.B.2

Commenters: City of Tacoma, Kitsap County.

Summarized comments

1. S5.C.4.a - Provide additional guidance to describe opportunities where public input could direct SWMP implementation. SWMP elements are highly prescriptive and so it would be helpful for Ecology to provide ideas of where they anticipate public input might be incorporated in a meaningful way.
2. S5.C.3. Public Involvement and Participation. "each Permittee shall post on their website their SWMP" next sentence states, "all other submittals must be available to the public upon request." Recommend the use of consistent language, either use the term shall or must for both statements

Response to range of comments

1. Public involvement opportunities occur in the decision-making processes for the SWMP. The intent is to create an environment where the public can have an active role in shaping the local stormwater program. Washington State has strong requirements for public participation in local government decision-making processes, a number of SWMP activities such as code revisions already require public involvement under other state and local laws. The SWMP provides the Permittee's plans on how they will implement permit requirements, there are several areas that allow flexibility on how the requirements are implemented and the public may have input on the specific activities, areas of focus, or plans that the Permittees present in the SWMP. Ecology believes that public involvement and participation through a range of opportunities and venues helps advance successful permit implementation. Ecology understands, however, that not every aspect of a Permittee's SWMP is flexible and that public input on every component without clear boundaries of what can be changed and what is required may not be useful. Ecology does not expect Permittees to pursue all of the opportunities or topics noted. Each Permittee is capable of determining where public involvement and input is most meaningful.
2. Ecology corrected the language to be consistent with 'shall'.

12.0 MS4 Mapping and Documentation

Permit Reference: Phase I Permit - S5.C.5.2
Western Washington Phase II Permit - S5.C.4
Eastern Washington Phase II Permit – S5.B.3

Commenters: City of Auburn, Clark County, Thurston County, City of Kent, City of Bellevue, Pierce County, King County, City of Sammamish, Yakima County, Skagit County, Snohomish County, City of Olympia, City of Kirkland, City of Tacoma, City of Shoreline, Greg Vigoren, City of Port Angeles.

12.1 Comments on Ongoing mapping requirements

Summarized comments

1. Suggested addition: (Phase II S5.C.4.a) "Ongoing Mapping: Each Permittee shall continually update and maintain mapping data for the features listed below..."

2. (Phase II S.5.C.4.) Consider revising the Ongoing and New Mapping to be one section with specific dates called out for items that have a specific start date.
3. (Phase I S5.C.2.a): Consider changing the language to: "maintain and update as needed an asset management program that can display on a map the following features listed below."
4. What is the basis for mapping geographic areas of MS4 not draining to surface water? Mapping areas that drain to groundwater through UIC wells is unrelated to managing the MS4 under the NPDES municipal permit.
5. (PH I S5.C.2.a) What is supposed to be mapped: 24-inch conveyances or conveyances to 24-inch outfalls? The 24 inch ditch width threshold would require measuring ditches to assess whether they are actually 24 inches or more in width. Measuring ditch width is an unproductive use of limited resources, where there is little need for stormwater management.
6. MS4 connection mapping: The term "public entity" is vague. Perhaps this requirement should be limited to municipal storm sewers regulated by the Clean Water Act or having a municipal stormwater permit.
7. (Phase I S5.C.2.a.v) The permit requires the Phase I counties to map 50% of their rural subbasins during this permit cycle.

   Proposed Language: “Tributary conveyances to all known outfalls and discharge points with a 24-inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems. For Counties this requirement applies to urban/higher density rural subbasins and 50% of the rural subbasins as described in S.5.C.2.b.iii "
8. (Phase I S.5.C.2.a.v) The Ongoing Mapping section appears to require new mapping. Restore the following verbiage: "For counties, this requirement applies to the area of the county within urban/higher density rural sub-basins mapped under the previous permit. For cities, this requirement applies throughout the city.”
9. (WWA PH II S5.C.4.a.iii.) - Suggest rewording to recognize that some stormwater treatment and flow control BMPs/facilities can perform both functions.
10. (WWA PH II S5.C.4.a.v.) - To avoid redundancy, allow the "discharge point" as mapped as an asset (i.e., infiltration ponds and other infiltration BMPs) to suffice for mapping discharge points.
11. (WWA PH II S5.C.4.a. vii.) - Clarify: "all connections" as we suggest excluding small connections such as roof drains and sump pumps. To clarify, possibly state: "All connections greater than 6 inch diameter."
12. Clarification needed. Are we meant to map downspout control, etc.?

Response to the range of comments

1. To maintain a map of the required features, a Permittee must update this map in order to keep it accurate and with up to date information. Ecology considered the suggested addition to S.5.C.4.a, but decided not to implement it. The expectation to “continually update” the mapping data is implied by “maintain mapping data…”

2. Ecology considered suggestions to revise or reformat S.5.C.4 of the Phase II Permit, but decided not to implement the suggested revisions or reformatting. Ecology retained separate sections for ongoing and new mapping to follow the Phase I Permit structure.
3. Ecology did not take the suggested revision to require an asset management program. An MS4 infrastructure asset management program may include all of the following: mapping of MS4 infrastructure; maintenance, repair and replacement of these infrastructure assets; and an information system to manage these MS4 infrastructure assets (e.g., a Geographic Information Systems or GIS). Ecology does not specify the information system that a Permittee uses to map their MS4 infrastructure. Permittees may select the electronic mapping format that best meets their needs, so long as the required ongoing and new mapping permit requirements are met.
4. Ecology requires that Permittees map geographic areas that do not drain to surface water because the Phase I and II permits also regulate discharges to ground waters of the state from MS4s owned or operated by Permittees. Discharges to ground waters of the state through facilities regulated under the Underground Injection Control (UIC) program, chapter 173-218 WAC, are not authorized under the Phase I or II permits. The Municipal Stormwater Permits do not require Permittees to map areas served by UIC facilities, and Permittees may decide to separate out areas served by UIC facilities when meeting this requirement. See UIC guidance for additional information.
5. In Western Washington, map the tributary conveyances to known 24-inch outfalls and discharge points. The requirement is to map the tributary conveyances that lead to a 24-inch nominal diameter or larger outfall (or an equivalent cross-sectional area for non-pipe systems). Permittees must map the MS4 conveyances that lead to a 24-inch nominal diameter or larger outfall (or an equivalent cross-sectional area for non-pipe systems).
6. "Entity" is a defined term in the Phase I and II permits. It is defined as a government body, or a public or private organization. A public entity is a government body or a public organization.
7. Ecology restored the following sentences to the ongoing mapping section in the Phase I Permit, as this is ongoing mapping work: "For counties, this requirement applies to the urban/higher density rural sub-basins. For Cities, this requirement applies throughout the City." Ecology retained the provision to map half (50%) of the tributary conveyances in areas outside of the urban/higher density rural sub-basins in the new mapping section.
8. Ecology uses the term "stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee" to capture devices/BMPs/facilities that can perform both flow control and treatment functions.
9. Permittees must use their discretion in establishing field data acquisition and in-office MS4 asset inventory and mapping procedures. Permittees can decide how their MS4 mapping data is managed and stored (e.g., in a geographic information system, GIS, or other electronic/digital format), as long as they can produce a map that illustrates where the required mapping features are located.
10. Connections mean all discrete piped, ditched or channelized connections into (or from) the MS4, except for individual residential driveway, roof drain or sump pump connections.

12.2 New mapping

Summarized comments

1. Regarding the requirement to map size and material of outfalls, what does "beginning on January 1, 2020" mean? Does that mean Permittees need to start collecting size and material for "known" outfalls? If so, is there a timeline for completion? What does "where known" mean? Clarify if size is meant to be nominal pipe diameter.
2. (PH I S4.C.2.b.i) "No later than January 1, 2020, begin mapping size and material for all known MS4 outfalls. The understanding from conversations is the intent of this requirement is to not require a specific mapping effort to meet this requirement but to collect size and material metrics during normal maintenance and inspection activities. Please provide clarifying guidance.

   Proposed Language No later than January 1, 2020, begin mapping size and material for all known MS4 outfalls as normal maintenance and other like activities re-visit the known outfalls."
3. The deadline in S5.C.4.b.i of January 1, 2020 does not provide Permittees with adequate time to implement this requirement and should be extended to 2021.

Response to range of comments

1. We revised the language to a “no later than” for consistency with the phrasing of other deadlines in that section. On the date specified in the permit, Permittees must start (or have started) collecting – as part of their normal course of business – through regular inspections, maintenance, or installation, etc. – the outfall information:
   a. Size, or the nominal pipe diameter or equivalent cross-section for non-pipe systems, and
   b. Material make up (e.g. concrete, ditch outfall, corrugated metal)
2. Ecology also revised the new mapping section in all three permits for consistency, adding an end date of August 1, 2023 by which all new mapping must be completed.
3. Ecology does not see a need for a year extension of this requirement. The Permittee must only begin collecting size and material for all known MS4 outfalls by January 1, 2020 during normal course of business to meet this requirement.

12.3 Associated drainage areas

Summarized comment

1. S5.C.4.a.v(b) Add language that the associated drainage area to be mapped is only within the Permittee’s jurisdictional limits.

Response to comment

18. The applicability of the entire permit to the Permittee’s MS4 is stated in Special Condition S1.A, Geographic Area of Permit Coverage. Ecology disagreed that this should be restated repeatedly throughout the permit.

12.4 Private Connections

Summarized comments

1. The requirement to complete mapping of all known connections from MS4 to a privately owned stormwater system would require additional staff time to research and investigate the stormwater system.
2. S5.C.2.b.ii MS4 Mapping and Documentation, no later than August 1, 2021, complete mapping of all known connections from the MS4 to a privately-owned stormwater system.

   Add clarity to identify the start and end dates of this requirement. There should be language describing the intent, and this should be outcome/deliverable based.

   Proposed Language: ii. “No later than August 1, 2023, complete mapping of all known connections from the MS4 to a privately-owned stormwater system. For Counties this requirement applies to urban/higher density rural subbasins and 50% of the rural subbasins as described in S.5.C.2.b.iii"
3. As an alternative to mapping connection points as a discrete feature, we recommend providing Permittees the option to identify connections via queries of stormwater asset databases. With Thurston County's extensive mapping effort to capture both public and private stormwater system features, adding discrete points to existing assets to indicate connections would cause maps to become illegible due to the large number of MS4 connections. This could lead to confusion for field inspection staff and other users of our MS4 mapping data.
4. Please define what needs to be mapped when mapping "all known connections from the MS4 to a privately owned stormwater system."

Response to range of comments

1. Ecology extended the deadline to August 1, 2023 to complete mapping to a privately-owned stormwater system. Permittees can decide how their MS4 mapping data is managed and stored (e.g., in a geographic information system, GIS, or other electronic/digital format), as long as they can produce a map that illustrates where the required MS4 assets and other permit required features are located. Ecology does not require Permittees to map connections (see ongoing mapping and new mapping requirements) as point features in a GIS. If the Permittee can produce a map of the permit-required connections (e.g., through a query or spatial analysis), this satisfies this requirement.
2. The intent of this provision is to map locations, where the MS4 connects to, or discharges to a privately-owned stormwater system (e.g. conveyance, or BMP), the Permittee will map this known location as a “connection.” Permittees may map these and any other required feature using methods and naming conventions that work for them. Ecology does not mean that these locations must be a mapped electronically as a point feature. As long as the Permittee can produce a map of “all known connections from the MS4 to a privately owned stormwater system” (e.g., through a query or spatial analysis), this satisfies the permit requirement.

12.5 Deadlines/Tributary conveyance

Summarized comments

1. S5.C.2.b.iii The requirement to map tributary conveyances in areas not previously mapped is poorly worded and needs a rewrite. Need additional time to complete this task.
2. Phase I Permit S5.C.2.b, "New Mapping: Each Permittee shall complete the following mapping. i. No later than January 1, 2020, begin mapping size and material for all known MS4 outfalls." ii. No later than August 1, 2021, complete mapping of all known connections from the MS4 to a privately-owned stormwater system. iii. No later than December 31, 2019, Counties shall start mapping tributary conveyances, as described in S5.C.2.a.v for 50% of areas outside the urban/higher density rural sub-basins"
3. It appears Ecology is implying a deadline ("shall complete") without actually stating a completion deadline, which is confusing. Two of the three mapping tasks to "complete" actually state begin by deadlines, not completion dates. Is Ecology requiring that a Permittee "shall complete" the starting of two of the three mapping tasks?
    19. Revise as follows: New Mapping: Each Permittee shall (delete: “complete the following mapping.”) Then state a “begin by” deadline for each of the three listed tasks for consistency. If a completion deadline is used instead of a “begin by” deadline, make that completion date July 31, 2024.
    20. Ecology does not need to specify both a start date and a completion date as that is overly prescriptive of the County’s work processes.

Response to range of comments

1. Ecology revised this section to clarify the deadlines. The new mapping requirement for counties to map tributary conveyances was revised to a completion date, rather than a start date. Permit language was also clarified to describe **features** and/or attributes as data to collect when mapping tributary conveyances.

12.6 Records requests

Summarized comments

1. S.5.C.4.d: How are requests made and how is the data to be delivered? Is it sufficient to have public facing stormwater GIS data?

Response to range comments

1. For record requests from the public, the Permittee may choose how to provide this information, either directly or through their public facing GIS data. Ecology may make specific requests, on a case-by-case basis, in order to assess compliance if questions arise.

12.7 Mapping format

Summarized comments

1. Clarify or define electronic format and what fully described mapping standards means.

2. Include the example electronic standards as an appendix or describe the exact location on the Ecology's website where the electronic standards are found.
3. This requirement should be reworded to simply require mapping in an electronic format. Remove the sentence that says, “An example description is available on Ecology’s website” because Phase I Permittees already have systems in place.

Response to range of comments

1. Ecology intends for all Permittees to have their MS4 systems mapped as required as an electronic map, in which the data associated with the map is stored in a searchable, and maintained database. We added Phase II Permit language to provide examples of electronic formats. A scanned image does not meet this permit requirement – unless it can be edited and maintained as intended. As stated above, Ecology does not intend to require a specific information system, methodologies, or naming conventions associated with the mapping requirements at this time. Permittees must be able to produce a map, if so requested, that illustrates the locations of the required features to be mapped. Ecology developed this webpage that describes GIS standards that grant recipients are encouraged to implement,
2. https://ecology.wa.gov/Research-Data/Data-resources/Geographic-Information-Systems-GIS/Standards
3. This guidance is not required to be followed, but is offered in case it may be helpful to Permittees. Because this guidance is not required, Ecology removed this webpage reference from permit language.

12.8 General/Editorial Comments

Summarized comments

1. Foot Note 13 indicates both years 2013 and 2019. Erroneous error.
2. Consider revising the Title to say MS4 Asset Management.

Response to range of comments

1. Ecology corrected the typo but did not change the title of the mapping program as suggested. We agree that MS4 mapping and documentation can be (part of) an asset management program.

12.9 Comments on Mapping Guidance

Summarized comment

1. It appears to be Ecology's intent to publish the ""Draft Mapping Guidance for Phase I and Western Washington Phase II NPDES Municipal Stormwater Permittees"" without a formal public comment period. The City would like to reiterate comments made as follows related to the Guidance: a. Under additional guidance for tributary conveyances note that catch basin leads are not required to be mapped. b. Under Figure 5 update the language about the stormwater treatment and flow control BMPs because previous language states that all permeable pavement would be mapped even if it was used to meet MR#6 or MR#7. In this figure, would the area contributing to the bioretention facility and the area contributing to the permeable pavement be

mapped as geographic areas not discharging to surface water or would just the bioretention area be mapped because the permeable pavement (from the picture) does not infiltrate 100% of the stormwater? c. Under Figure 7, it appears that the private outfall is required to be mapped as an outfall, is that correct? d. In Figure 11 is the Permittee required to map the geographic area because this is considered to be a UIC and would not be covered under the Permit?"

Response to comment

1. We will take these comments into consideration as the guidance is updated, which is expected to follow permit reissuance. Permit language is what is required to be followed., This mapping guidance is provided to add additional context or provide a useful resource.

12.10 Eastern Washington Comments on Mapping

Summarized comment

E.WA Phase II: S5.B.3

Commenter: Yakima County

1. Ecology has proposed new mapping requirements in this section that will require Permittees to update the maps of their MS4s. These updates include an electronic mapping format and additional features and attributes such as known connections, discharge points and stormwater facilities. Yakima County understands the importance of having a complete and correct map of the MS4 however, we do not feel that Ecology appreciates the required effort and expense it would take to for Permittees to fulfill this requirement in one permit cycle. For jurisdictions that need to make the change to digital mapping and include the additional features and attributes, this will be a heavy lift that will require hiring the expertise to create this product, not to mention the ongoing maintenance requirement for these maps. This obligation will create a financial burden for many jurisdictions and their ratepayers.

Response to comment

1. Ecology appreciates the effort, the permit allows two years to move to an electronic map and three years to update maps to meet the new requirements. Ecology intends for all Permittees to have their MS4 systems mapped as required as an electronic map, with the data associated with the map stored in a searchable, and maintained database. We added permit language to provide examples of electronic formats.
2. Ecology does not intend to require a specific information system, methodologies, or naming conventions associated with the mapping requirements at this time. Permittees must be able to produce a map, if so requested, that illustrates the locations of the required features to be mapped. Ecology found that the majority of Permittees have some form of GIS or electronic mapping already in place on jurisdiction's websites. Ecology anticipates that many of the new features required to be mapped may have already been captured on MS4 maps in order to perform maintenance or to better respond to spills or illicit discharges.

13.0 Illicit Discharge Detection and Elimination (IDDE)

Permit reference: Phase I Permit – S5.C.9.
Western Washington Phase II – S5.C.5.
Eastern Washington Phase II – S5.B.3

Commenters: City of Auburn, City of Bellevue, City of Bellingham, City of Bothell, City of East Wenatchee, City of Everett, City of Issaquah, City of Kent, City of Kirkland, City of Lake Forest Park, City of Marysville, City of Mount Vernon, City of Mukilteo, City of Newcastle, City of Olympia, City of Port Angeles, City of Redmond, City of Renton, City of SeaTac, City of Seattle, City of Shoreline, City of Spokane, City of Sumner, City of Tacoma, Chelan County Public Works, Clark County, Douglas County,

E.WA Stormwater Group, King County, Kitsap County, Pierce County, Skagit County, Snohomish County, Thurston County, Yakima County, Barbara Craven, City of Bothell, City of Kent, Clayton Verellen.

13.1 Ordinance development

Summarized comment

1. Phase I Permit S5.C.9.b, p.34 (redline) "Permittees shall continue to evaluate, and if necessary update, existing ordinances or other regulatory mechanisms to effectively prohibit non-stormwater, illicit discharges, including spills, into the Permittee's MS4."
   Is this a requirement that a Permittee must be in a constant state of review and evaluation? That is not reasonable. 2013 Permit language required an update effort, if necessary to accomplish a stated goal, by a particular date. How to achieve compliance was clear. Here, a Permittee will have no way of knowing whether it is doing enough to meet this vague requirement. How does a Permittee demonstrate it is continuing to evaluate something? RECOMMENDATION: Revert to 2013 Permit language with a new due date or delete this entirely.

Response to comment:

1. The Phase I and WWA Phase II Permits were revised to remove the evaluation and update of the ordinances, the Permits require the continued implementation of the ordinance to prohibit non-stormwater discharges and no changes were made to the contents of what is prohibited or conditionally allowed. Permittees are still required to address significant sources of pollutants to the state if discharges are identified.

13.2 Comments on the list of allowed discharges

Summarized comments

21. Agricultural irrigation should not be included. It contains fertilizers and other contaminants. Do not allow agricultural irrigation to be comingled with urban stormwater.
22. S5.C.5.c.ii (third bullet) Can we add language to prohibit discharges of salt water pools to MS4?
23. S5.C.5.c.ii Discharges from fire sprinkler systems should not be included in list of conditionally allowed discharges as they may contain high levels of turbidity or iron, corrosion inhibitors, etc. Please note that these discharges are not allowed (e.g., under first bullet).
24. Add another "conditionally allowed" bullet that is specific to pressure washwater. Pressure washwater may come from sidewalks, roads, driveways, parking lots, buildings. Perhaps it should be conditionally allowed if no soaps or other chemicals are used, no hot water, and sediment is physically prevented from reaching storm drain
25. S5.C.9.b.i 35 "Allowable Discharges: The ordinance or other regulatory mechanism does not need to prohibit the following categories of non-stormwater discharges: Recommended language
    - (f) residential air conditioning condensate

• (g) Irrigation water from agricultural sources that is commingled mixed with urban stormwater."

Response to the comments

26. Permittees may prohibit or further condition the list of discharges in the permit.
27. The language pertains to allowable or conditionally allowable non-stormwater discharges, salt water pool discharges are already prohibited, since it would be a non-stormwater discharge – only pool water that can meet the conditions in the permit may be an allowable discharge.
28. Permittees may develop more stringent regulations based on local knowledge of sources at their discretion in order to prevent illicit discharges from entering the MS4. Street and sidewalk wash water is already addressed in the list of conditionally allowed discharges. We hope the use of consistent reporting through WQWebIDDE may be able to better inform this permit section in future permit cycles.

13.3 Must/may/shall in IDDE Performance measure

Summarized comments

1. Revise the second paragraph of section a.: Illicit connections and illicit discharges ~~must~~ may be identified through field screening…, ID or IC may be identified through other means listed. This statement is more guidance than requirement. There are concerns about requiring the use of a specific guidance manual that was written with the intention of assisting other jurisdictions in defining their methodology. Guidance documents are not intended to be regulatory. Making a guidance document required in permit language automatically creates resistance and discourages jurisdictions from undertaking the task of creating future guidance documents.
2. Revise the language in the second paragraph of section a.: "Illicit connections and illicit discharges must be identified through field screening, inspections, complaints/reports, construction inspections, maintenance inspections, source control inspections, and/or monitoring information, as appropriate".
29. What happens if they are identified in some other manner? This sentence doesn't add anything to the Permit and should be eliminated, or be restated to provide direction as a minimum performance measure.
30. Consider changing the word 'must' to 'may' in the second paragraph of minimum, performance measures.

Response to comments

1. Ecology agreed to retain the use of 'may' when discussing the more recent guidance to follow for IDDE field screening as to not limit effective methodology. The cited guidance is under review and may be updated.
2. Ecology clarified the permit language to add that the methodology listed is not limited to the examples provided.

13.4 IDDE education and outreach

Summarized comments

1. PH II: S5.C.5.b. - We suggest moving this as a separated requirement to Public Education and Outreach. The requirement can then be amended to read: "In support of S5.C.5., Permittees shall inform public employees, businesses, and the general public. . . . "
2. Phase II: S5.C.5.b. - Similar to the language included in S5.C.2 on page 19 which outlines how Permittees can meet requirements either individually or through a regional group effort, we recommend similar allowance for Permittees to meet the IDDE outreach through a regional effort.
3. S5.C.5.d.ii. - We suggest moving this as a separated requirement to S5C.2. The requirement can then be amended to read: "In support of S5.C.5., a publicly listed and . . . ."

Responses to comments

1. Ecology retained this provision to inform public employees, businesses, and the general public of hazards associated with illicit discharges in the IDDE section. See Fact Sheet for reasoning.
2. Permittees may partner with other entities to meet the IDDE requirements, see section S3. Responsibilities of Permittees, relying on another entity.
3. Ecology retained this requirement within the IDDE section.

13.5 Program designed to detect and identify non-stormwater discharges into MS4 & Screening

Summarized comments

1. Do we have to re- screen areas that were just screened in the previous year? Are we expected to screen 100% of our area in the permit cycle, or using the "average" of 12%/year for less than 100% over the permit cycle?
2. Consider reducing the percentage screened if jurisdictions increase their geographic area by more than 5% or waive the screening requirement for annexed areas and require prioritization of the newly annexed area in the next permit cycle.
3. (WWA PH II S5.C.5. d.i.) Suggest moving this last sentence "These procedures may also include source control inspections" to the new source control section of the draft permit. Source control inspections include more than field screening and source identification.
4. "S5.C.9.c.i.(a) - It has been stated by Ecology staff that for purposes of this section the known conveyance system does not include catch basin leads or ditches. State this in the Permit. Consider limiting the conveyance system to a certain pipe size or some other metric that can reliably be inspected. In one sentence of this section it uses the term "conveyance system" and in the next sentence it uses the term "MS4." Please use consistent terms and clarify if this requirement is applicable to the entire conveyance system or if it is limited as has been the policy of Ecology Staff.

5. Clarify what ""on average, 12% of the Permittee's known conveyance system each year means"" does this mean a Permittee could do 8 percent one year and 16% the next?"
6. Phase I Permit S5.C.9.c.i.(a), p. 36 (redline) "Permittees shall track the total percentage of the MS4 screened beginning August 1, 2019 through December 31, 2023." What this statement requires is unclear. Is it a requirement to make a single report in the 2023 Annual Report of the total percentage of MS4 screened? Appendix 5, Q41 suggests this may be a yearly reporting requirement, which is not evident from this Permit language. Clarification is necessary.

Response to range of comments

1. The permit does not specify the areas that need to be screened, that is based on local discretion and may be based on areas of heavy use, location to receiving waters, or discharges to impaired waters, or by land use.

   The percent of the MS4 that must be screened can be determined by whatever works best for the Permittee.

   The percentage may be based on:

   - Linear feet of the MS4.
   - Geographic area served by the MS4 (aerial extent based on delineation of MS4 basins).
   - Percent of outfalls.*

   *Note that using the percent of outfalls method implies that each outfall is representative of the same MS4 service area, which is not actually true, but it may be the best fit given the state of MS4 maps.
2. Stormwater management needs should be considered and planned for with annexations.
3. The reference to the source control program is a reminder how the two programs can be leveraged to improve efficiencies, and was retained in case helpful for Permittees to think about as they are developing the new Phase II Source Control program.
4. Conveyance does include ditches, the catch basin is the collection system. The permit uses “MS4” as there are a variety of ways to field screen your system
5. Yes, the portion of the MS4 screened can be averaged over time as described in the comment #5 above.
6. The program should be tracking the area of the MS4 that has been screened. In order to assess compliance over the permit term the amount screened each year is now asked to be reported in the Annual Report.

13.6 Addressing illicit discharges, including spills and illicit connections into MS4

Summarized comments

1. PH I: S5.C.9.d./PH II: S5.C.5.e. - Throughout this section include spill and illicit connections as appropriate where illicit discharge is used (S5.C.9.d.iv appears to make a very specific distinction). Alternatively, remove "including spills and illicit connections" and place that language in the

definitions section. As written the program appears to apply to illicit discharges, spills, and illicit connections but the compliance metric is unclear as to intent. Please clarify and add additional language as necessary.

2. PH I: S5.C.9.d.iii/ PH II: S5.C.5.e.iii. - "Truncate the end of the paragraph. Legal actions can occur even when the discharge is eliminated. The original language is too narrow.

   Procedures for eliminating the discharge; including notification of appropriate owners or operators of interconnected MS4s; notification of the property owner; technical assistance; follow-up inspections; and use of the compliance strategy developed pursuant to S5.C.9.d.iv, including escalating enforcement and legal actions ~~if the discharge is not eliminated~~."

3. Define 'potential illicit discharge'

Responses to range of comments

1. Ecology did not make any changes, the opening sentences to this section provide clarification that illicit discharges include spills and illicit connections. We do not agree that this needs to be repeated throughout the section. Regarding the illicit connection timeline, the illicit discharge is a discharge; if the investigation of the discharge within 7 days leads to the discovery of an illicit connection, then permit requires that Permittees have 21 days to begin the investigation of the source of the connection (21 days from when they discover it). All illicit discharges are prohibited and must be eliminated/contained immediately.
2. Ecology did not make any permit changes, Permittees may need to make additional procedures to deal with situations, such as legal issues after a discharge has been eliminated.
3. Ecology has not further defined 'potential illicit discharge.' Illicit discharge is defined in the glossary, see standard dictionary definition for 'potential.' Permittees are required to investigate any complaint, report or monitoring information that indicates that an illicit discharge may be present.

13.7 Staff training

Summarized comments

1. Create a municipal staff training permit section that includes all the ongoing and follow-up training program requirements for municipal staff, who, as part of their normal job have permit implementation related responsibilities.
2. Training IDDE awareness training for all field staff - This should be limited to employees whose primary job involves working on or near the MS4 and performing site inspections such as health inspectors visiting restaurants. Training beyond this group will provide little or no results because of the low likelihood of encountering an illicit discharge.

Response to range of comments

1. Ecology considered consolidating training requirements into one section, but did not make that change this permit cycle in order to simplify the proposed changes. We will develop training tables that will help to connect required training with permit timelines in one table or similar format.

2. The permit requires the Permittee to train field staff, who may come into contact or observe illicit discharges, on the identification and proper procedures for reporting illicit discharges. Field staff to be trained may include, but are not limited to, municipal maintenance staff, inspectors, and other staff whose job responsibilities regularly take them out of the office and into areas within the MS4 area. Permittee field staff are out in the community every day and are in the best position to locate and report spills, illicit discharges, and potentially polluting activities. With proper training and information on reporting illicit discharges easily accessible, these field staff can greatly expand the reach of the IDDE program.

13.8 Typos

Summarized comments

1. PH II: S5.C.5.c.v - 2nd comma in first line should be moved, should read, "Permittees shall continue to evaluate, and if necessary, update existing ordinances..."
2. PH II: "S5.C.5.d.i - Each paragraph within should be its own section, especially since each has a report question associated with it, i.e.:

    i. Procedures for conducting investigations...
    ii. The Permittee shall implement a field screening.....
    iii. All Permittees shall complete field screening...

    And the subsequent sections should be renumbered (current S5.C.5.d.ii becomes S5.C.5.d.iv and current S5.C.5.d.iiI becomes S5.C.5.d.v). Additionally, in the second paragraph that begins with ""The Permittee shall implement a field screening...."", there's a comma that should be a period after Inc. in Herrera Environmental Consultants, Inc."
3. Phase II: S5.C.5.e.iv The revision to the third bullet seems erroneous.

Response to range of comments

1. See discussion under ordinance development. This provision was removed as the requirements for the ordinance did not change this permit cycle. Permittees must address any discharge that is a significant source of pollutants.
2. Corrections made. Ecology disagreed with the some of the formatting recommendation, but did make a minor modification to the formatting that we deemed appropriate and corrected the typos.

13.9 Comments on IDDE incident tracking and reporting

Phase I: S5.C.9.g | WWA Phase II: S5.C.5.g | EWA Phase II: S5.B.3.f

Summarized comments

1. See also comments under Appendix 14 (Phase I), Appendix 12 (WWA Phase II), and Appendix 7 (EWA Phase II).
2. We agree with the submittal requirements.

3. We recognize the value of reporting data that are within the scope of the permit and relevant to the IDDE program.
4. Allow local jurisdictions to query the WQWebIDDE database.
5. Move this requirement from S5.C.9.g to S5.C.9.d.v in the Phase I Permit. The information most correctly pertains to the program to address ICs and IDs, not the program to detect them.
6. Provide clarity about cases in which the response to an incident spans two calendar years.
7. Provide clarity about cases in which a record needs to be amended for any reason (i.e., a source previously "unknown" was later identified). Do not require Permittees to resubmit data in these cases. Add to permit language, "The information entered is the best available to the inspector at a point in time."
8. Provide an example IDDE scenario and an example .xml file that uses the example IDDE scenario.
9. For the March 2020 Annual Report we can provide an excel spreadsheet of the information that is being input into our current database. If no ramp-up period is provided, we will have to issue a G20 for our first annual report.
10. Allow a ramp-up period for complying with the data schema; delay it to the 2021 annual report.
    a. Provide time to assess and modify existing systems and to make and test the technical changes necessary to make current databases export data in the correct format.
    b. The earliest reasonable time for an IT project to be initiated would be August 2019 after the reissued permit is in effect.
    c. Our current database can export data but it would not follow the schema nor use the specific terms so any submission prior to project completion would have limited utility; approximately 20% to 40% applicability.
    d. Giving Permittees additional time to automate the process will avoid unnecessary duplicate, manual entry of their records in order to fully comply.
    e. Staff conducting investigations in the field need training to do a thorough and consistent job of reporting.
11. Allow Permittees to use their own systems to report the required data.
12. Changes were made to Appendix 14 during the comment period. The comment period should have been extended to reflect these changes.
13. It is not clear how Ecology will fund the development of and continued maintenance of the database and analyses of the data. Funds provided by Permittees under Section S8.B.2 are not guaranteed to fund the WQWebIDDE form and analysis of the data.
14. Consider making the data scheme part of a guidance document so that a permit modification is not required to make minor changes if upgrades or problems are found with gathering and reporting data without a permit modification. This option could also facilitate adding fields to address management questions identified by stakeholders. Otherwise any future changes to the required data reporting format beyond those defined as "minor modifications" will need to be made through a permit modification.

15. The schema provided in the Appendix will not work well operationally. It does not seem possible to comply with this requirement.
16. Make the form simpler and use clear language that is not prone to multiple interpretations.
17. Overall it is unclear exactly what information is required to be submitted.
18. What are the ramifications if the data entered is not accurate? Many answers are based upon assumptions because field staff do not conduct lab analysis of each spill.
19. Erroneous conclusions can be drawn by analyzing data from fields such as start and end dates.
20. The requirement to submit data with the Annual Report for Permittees should be satisfied by either WQWebIDDE reporting, or submittal of information via the annual report, but not both.
21. In lieu of data entry through the portal, provide Permittees with an Access database, Excel spreadsheet, or a similar commonly used application, that encompasses the desired reporting elements captured in the DRAFT Appendix schema, and could be exported as an .xml file upload into WQWebIDDE.
22. Provide training, focus sheets, and support to Permittees on the WQWebIDDE portal with the reissuance of the Permit and prior to the Annual Report.
23. Eliminate the required format. This will require substantial resources to implement. Ecology should reformat the data submitted by Permittees.
24. The proposed required changes to our database would make it more difficult to utilize the historic and newly collected data in combination to evaluated program effectiveness as well as identify reoccurring problem areas, trends, and areas to focus preventive measures.
25. Reduce the number of fields. Limit the reporting to actions specifically required by the permit or the minimum needed to achieve the objective of assessing Permittee compliance. Ecology can always request additional information from a Permittee.
26. Maintain the 2013 permit annual report requirement to report only actual IDDEs: discharges to MS4 that require G3 notification.
27. Limit the reporting requirement to legitimate reports of incidents that are investigated by Permittee. Do not require Permittees to submit data for every phone call alleging a spill; these could be appropriately deemed to not warrant investigation or be located outside the Permittee's jurisdiction. Instead, focus the reporting on incident response by the trained staff responsible for identification, investigation, and elimination of illicit discharges to the MS4.
28. Do not require reporting on "Allowable discharges" and "Conditionally allowed discharges" which are investigated but are not be recorded in our ID/IC management database.
29. Eliminate duplicative reporting requirements throughout the permit. Look at this requirement in relation to the recordkeeping and reporting requirements for G3, S4.F.1, and S5.A.3.
30. Provide financial incentives for Permittees to meet this requirement.
31. Delay this requirement to the next permit.

a. Work with Permittee staff involved directly in IDDE investigations and tracking to build a streamlined reporting database over the next permit cycle.

b. Use the SWG process to define management questions that could be answered by Permittee-submitted data to answer questions that result in improvements to the stormwater permit and improved environmental outcomes for Permittees. A stakeholder involvement process would lead to better acceptance of the effort required to collect and submit data that is not needed by Permittees. In the meantime, limit the number of fields as much as possible.

32. Eliminate this reporting requirement.

    a. The proposed requirement will decrease our staff efficiency. It is an unnecessary time burden and waste of Permittees' resources to report these data in the annual report. Staff time should be used to address MS4 issues instead.

    b. Rather than require the database, clarify what was requested in the 2013 permit Annual Report Questions and more clearly define terms in the Permit to ensure consistency amongst Permittee's interpretation of Permit requirements.

    c. Because much of the same information is reported in ERTS, it is unclear why this information is requested in this format as well.

    d. Exempt Permittees with their own existing databases for recording their IDDE investigations and responses.

        i. The costs to meet this new requirement will be considerable.

        ii. Instead, allow these Permittees to do their own local analyses and describe how they are using these data to identify needed changes to their Education and Outreach programs.

    e. It is not clear how Ecology will use the data to improve future permits or Permittees' IDDE programs, or even reduce a potential pollution problem in Puget Sound. The 2017 report on evaluation of the 2014 data did not find that a database is needed, only that consistent reporting would make it easier. The data will not really help to steer the future of source control in the Puget Sound Region.

Response to range of comments

1. Also see response to comments in section 15.10 on Appendix 14 (Phase I), (WWA Phase II) Appendix 12), and Appendix 7 (EWA Phase II).

2. **Changes made:** Ecology changed the permit language to clarify that reporting is required for all incidents investigated by the Permittee, whether or not the investigation confirmed an illicit discharge. Ecology also made changes to the Web Portal application and the proposed data schema in response to specific comments on the report fields.

   Ecology delayed full implementation of this reporting requirement to the 2022 annual report. Permittees are still required to submit information for the 2019 and 2020 calendar years in a format that is as close to the WQwebIDDE format as is possible. Permittees not planning to export data from their own tracking systems must use WQwebIDDE to report their data for the

2020 calendar year. Ecology also decided to allow Permittees an additional year to develop systems to transmit data from their current data bases to the WQwebIDDE portal. All Permittees will report their data for calendar year 2021 and beyond using the WQwebIDDE portal or according to the required WQwebIDDE format.

Reasoning for the change: This is not a new recordkeeping and reporting requirement. The Web Portal application and proposed specific data schema/format are new but they are based on guidance that Ecology issued in 2013 to clarify what was requested for WWA Permittees' responses to the Annual Report questions in the 2013 permits. Ecology developed this guidance with input from a group of IDDE practitioners and revised it with further input from that group in 2015-2016. Some Permittees developed their own record keeping systems with this guidance in mind.

It is reasonable to provide a ramp-up period to meet the specificity of the new format and content requirements. For the first reporting year, the permits' required data reporting differs for the first and second halves of the 2019 calendar year. Permittees with existing databases may need some additional time to develop, test, and implement adjustments to their systems to export data in compliance with the specified formatting requirements.

Previous permits required Permittees to report the total number of hotline calls received during the previous calendar year. Ecology has presumed that these numbers included calls that required follow-up investigation for non-IDDE incidents. The current permit no longer requires Permittees to keep track of the number of hotline calls, but rather to include a minimal amount of information about non-IDDE incidents that required a field investigation by a Permittee's staff.

The permit does not require any entry of this information into ERTS. G3 only requires that the Permittee notify Ecology that an incident occurred. ERTS is primarily used to refer incidents to the appropriate party for incident response – not to record the responses.

The changes made to the formal draft IDDE reporting Appendix were minor and were posted 37 days into the 90-day comment period. Ecology did not extend the comment period. We appreciate Permittees' detailed and constructive comments for improving the ease and utility of the form and the quality of the resulting data.

13.10 Appendix 14 (Phase I), Appendix 12 (WWA Phase II), Appendix 7 (EWA Phase II)

Commenters: City of Auburn, City of Kirkland, City of Redmond, City of Renton, City of Seattle, City of Tacoma, Clark County, Snohomish County, Thurston County

Summarized comments

1. See also comments on S5.C.9.g (Phase I), S5.C.5.g (WWA), S5.B.3.f (EWA)
2. Suggested alternate language: "This is the complete list of information that Permittees are required to use diligent efforts to report for each suspected illicit discharge, including spills and illicit connections that were found by reported to, or investigated by the Permittee. Each

Permittee may either use their own system or the WQWebIDDE form for recording this data. If using your own tracking system, this information must be provided in an electronic format that follows the data schema provided at the end of this document and is easily transferred to a database. Ecology prefers a zipped .xml. An excel spreadsheet or tab-delimited file that follows the data schema is acceptable. Each permittee is to use diligent efforts to include a separate entry (even if left blank) for every line below and to use the precise verbiage and spelling below. For all incidents where the answer to #7 is no, #8 is required but #9-15 are not required. Each field that ends in a colon (":") is followed by a text answer. All dates are in MM/DD/YYYY format."

3. Allow Permittees to report this information in an easier, more industry-standard format such as a CSV file or some other readily exportable file format
4. Provide clear information to all Permittees.
    a. Provide an example .xml download file for review.
    b. Provide the .XSD explanation document.
    c. The .xsd document provided does not include enough information to be usable. There is inconsistent information given between IDDE XML Schema Document (IDDE.xsd), the printed version of the webapp and the online test version of the webapp.
5. Simplify and streamline the reporting form. The simpler the reporting form and fields are, the better the data will be. There is a significant drop in data quality and consistency when field choices extend beyond 7-10 options.
    a. Ecology's proposal would greatly increase the complexity of recording and reporting. There would be many blanks in the proposed form and the data would be entered in inconsistent ways.
    b. Ensure the inclusion of the required information for each field will be useful.
        i. Identify specific management questions to be answered by the required data. Use only questions that will help with regional prioritization.
    c. A data dictionary is needed for every term.
    d. Only require information that is required by the permit. We should not be required to submit data for complaints that are not IDDEs.
    e. Unknown and Other are distinct answers, but both are generally the default for when no IDDE incident is confirmed and are better captured by “No problem or issue found.” Only a small portion of "unknown/other" are sites were the material was unable to be determined or the issue was unclear.
    f. Overall suggestions to improve data reporting:
        i. To the extent possible, use a single term for a field
        ii. Distinguish between pollutant types (e.g. soap) and pollutant sources (e.g. vehicle/equipment washing)
    g. Allow comment fields rather than the long pick lists which create usability issues, particularly in the field with mobile applications.

h. It is unclear if a user should check one or multiple entries for a specific incident.

6. Do not require perpetual update of entries or update beyond one month of intake time.
7. Provide all Permittees access to a data gathering system such as an Arc GIS online field application for iPads based on the permit language. Clark County developed, field tested, and refined such a system in 2017 and is willing to work with Ecology to make this system available.
8. Field #1: Jurisdiction name and permit number
    a. No proposed changes
    b. Remove permit number; not needed for analysis
9. Field #2: Incident ID assigned by jurisdiction
    a. No proposed changes
    b. Remove field; not needed for analysis
10. Field #3: Date of incident
    a. No proposed changes
    b. Remove field; not always known
11. Field #4: Date incident was reported to you
    a. No proposed changes
12. Field #5: Date of beginning your response
    a. No proposed changes
13. Field #6: Date to end your response
    a. This field should be only a date field as there is already a field to capture the outcome (final resolution, transferred to another party), #14. This would simplify the work flow for field entry using mobile devices and be easier for data entry and analysis.
    b. "Transferred to another party" here and "Referred to other agency or department" in Field #14 are similar. Please provide clarification for applicable uses of these two fields.
    c. Clarify when is "End of your response": Is it when IDDE was eliminated, pollutant removed from MS4, transferred to other agency, or when whole case is closed?
    d. The "Transferred to another party?" choice should allow for more than one party since it is possible to transfer an investigation to two or more agencies.
    e. Remove “Final resolution?” question. It is unclear when “no” would be an appropriate response. Use permit language.
14. Field #7: Discharge to MS4
    a. Modify to a Yes / No response
    b. “No problem found” should be one of the first choices, it is the most common answer – similar to “unknown”.

c. Retain the pick list for a Yes response but not for a No response.

d. Define all of the possible answers in this pick list.

e. Clarify intent regarding discharges to the street surface which is part of the MS4. The current question would be answered Yes and No if there was a spill to the street surface (i.e. the MS4) and the spill was cleaned up.

f. For "Estimated Volume"

   i. Break up the choices into groupings such as 50-500, >500-2,000, and >2,000 (or some other sensible number of choices).

   ii. Is “sheen” a yes/no question?

   iii. Seems to ask for a quantity two times.

   iv. Eliminate “Estimated quantity.” It is too subjective.

g. What is requested under “Receiving water”? A name? Yes/no?

15. Field #8: How was the incident discovered or reported to you

    a. What is intended to be recorded in the category of "Other MS4"? Please provide clarification for applicable uses of this field.

    b. Eliminate the referral list

    c. Modify to the following list

       i. Pollution Hotline (Includes Phone and/or Web and/or Mobile App)

       ii. Direct Report To Staff

       iii. Staff Referral

       iv. Other Agency Referral

       v. ERTS

       vi. Inspection: a. business b. construction c. MS4

       vii. Other: (explain)

    d. Revise to "Business/FIRE inspection"

    e. Revise "MS4 inspection/SCREENING”

16. Field #9: G3 notification

    a. No proposed changes

    b. Eliminate this field

17. Field #10: Incident Location

    a. Adjust the "Street" field to receive a variety of location descriptions, i.e., street addresses or intersection type addresses.

b. Street address should not be included. Avoid creating a stigma of the incident location site or adjacent site(s). Often spills/accidents are in the right-of-way and the private property owner associated with that address may be unfairly associated with a discharge that had nothing to do with their activities.

18. Field #11: Pollutants Identified

    a. Streamline or minimize this pick list library. Pick the top 10 and cover the rest under Other.

    b. It is unclear how many items need to be checked within this field.

    c. Clarify that “explain” is needed only for “other” responses.

    d. How is "Unconfirmed" different from "None found"? Eliminate these choices as they are redundant to #7 "No problem found."

    e. Remove one of the pull downs for oil. “Vehicle oil” is listed twice, under both "liquid waste" and "oil" categories. Clarify which listing to use.

    f. Simplify “Oil” to just Vehicle/Food/Other; food includes “FOG: Fats, oil, grease”

    g. Include "turbid runoff" as a separate category (vs. sediment).

    h. Do you also check Solid or Liquid or Foam if you check chemical?

    i. Group by type of response required (solid waste, liquid waste)

    j. Eliminate the dropdowns below Chemical, Foam, and Other

    k. Remove "Solid waste", "Liquid waste", "Oil" and "Chemical" as group categories.

    l. Either eliminate the primary pollutant families (i.e. solid waste, liquid waste, etc.) and use a refined, remaining list for Pollutants Identified, or remove the subfamily pollutants altogether from the pick field library and use the primary pollutant families. For example, use either of the following but not both:

        i. Pollutant Types Identified: None Found, Unconfirmed, unspecified, or not identified, Solid Waste/Trash, Liquid waste, Sewage/septage, Oil, Chemical Foam, Other (explain)

        ii. List of Pollutants Identified: None found, Trash, Sediment/soil, Cement, concrete, lime, or plaster, Yard waste or other plant or wood waste, Food waste, Pet waste/livestock manure, Sewage/septage, Roofing materials, Road tar, Petroleum Hydrocarbon Products, Antifreeze or other coolant, Paint, Food preparation oil, Household or industrial chemical (explain), Pesticide or herbicide, Fertilizer, Soap/detergent/surfactant, PCBs, Refrigerant, Chlorinated water, Other not listed (explain)

19. Field # 12. Source or Cause

    a. Clarify that “explain” is needed only for “other” responses.

    b. Sources or causes may need to be separate items to identify the source (a type of property from which the pollutant is discharged) and cause (why the discharge occurred).

c. When is “not applicable” the appropriate response?

d. Streamline or minimize this pick list library. Pick the top 10 and cover the rest under Other.

e. Spill is very broad: covers vehicle accidents, construction, and improper business operations.

f. Eliminate “Vehicle related source or cause” as these conditions fit under Spill reporting data format.

g. No need to have “Construction BMP failure” drop down; this is always the cause.

h. Under “Improper business operation or activity” there is a list of activities (i.e. Equipment cleaning, Pressure washing, Leaking dumpster, etc.) and business types (i.e. Drive-thru, Mobile business, Restaurant). Remove the business types since they are not improper operations or activities. Replace the business types with activities that occur at these businesses that may be done improperly, such as: Waste/wash water disposal, Vent/filter cleaning, Uncovered outdoor storage, or be specific about the operation or activity that leads to illicit discharge (i.e. operational BMPs for commercial businesses).

i. “Improper business operation or activity” should either:

   i. Include consistent language and all BMPs listed in the SWMMWW, Vol. IV-Source Control BMPs, or

   ii. Eliminate the current subset of improper business operation or activity. The Snohomish County Source Control Inspection program will cite specific deficiencies from Vol. IV when making referrals for ID/IC investigation purposes.

j. Drive-thru is redundant to restaurant

k. Eliminate “retail operations,” as they apply to the whole list.

l. Add in sprinkler water to correct category (prohibited? Conditionally allowable?)

m. Eliminate “Allowable discharge” and “Conditionally allowed discharge”

n. Move “Allowable discharge” and “Conditionally allowed discharge” and first three “Surface Runoff” options to the non-IDDE report field.

o. "Broken or clogged water or sewer line" should be two choices since water line issues are different than sewer ones.

p. Eliminate “Surface runoff.” Flow from uncontaminated ground water or spring water is not ID/IC incident.

q. Add UBI as a queryable code under "mobile business"

20. Field # 13: Source tracing approach used

a. Clarify that “explain” is needed only for “other” responses.

b. Do you always have to check “not applicable” if source tracing wasn’t used?

c. Delete “further inspection or reconnaissance” because implies it’s already happening.

d. The proposed IDDE reporting should not manage field and analytical laboratory data. This testing can include an extensive list of target analytes, and would contribute to lengthy field of selections in a pick list. Also, numerous samples may be collected over time, and at differing locations.

e. This pick list should reflect the primary field screening indicator observations, and follow-up indicator(s) listed in the *Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual*.

f. Use the following simplified list of field and laboratory screening indicators:

   i. 1. Field indicators:
      - Visual indicators
      - Physical indicators (e.g., turbidity, pH, specific conductivity)

   ii. 2. Analytical laboratory Indicators:
      - Organic
      - Inorganic
      - Microorganisms

g. Revisions recommended. Indicator testing should be separated from source tracing methods. Indicator testing includes flow/discharge, visual (floatables, foam sheen), ammonia, color, odor, pH, temperature, turbidity, hardness, nitrates, potassium, specific conductivity, bacteria, chloride/chlorine, fluoride, and hydrogen sulfide. Source tracing methods include vehicle/foot reconnaissance, dye testing, smoke testing, video inspection, optical brightener, and sand bagging.

h. Remove the pick list for Indicator Testing. Just have Indicator Testing as the check box and fill in the test that was used (leave blank to fill in details). There are very few Phase II jurisdictions that have a program big enough to have a IDDE program based on several indicator tests.

i. Color and odor should be removed from “Indicator testing” – leave with “Visual observation”

21. Field #14: Correction/elimination methods used

   a. Clarify that “explain” is needed only for “other” responses.

   b. What does clean up mean? By the Permittee? Isn’t this always the case?

   c. Eliminate the pick list under Enforcement and replace it with Yes / No.

      i. Correction Notice, Legal Notice, and Written Warning will not be universally applied by all Permittees.

      ii. The process of progressive enforcement may include all of the steps detailed in this section and other approaches that are not listed.

      iii. These progressive enforcements steps can occur over a considerable length of time if the ID/IC incident includes other land use code violations.

      iv. This would help to minimize required pull-downs.

d. Add a new choice "Ongoing" for extended enforcement periods and do not require the field to be updated.

e. If “referred to another agency” is kept in #6, eliminate it here.

f. Eliminate “Further observation” choice from this field.

g. Eliminate this field.

22. Field #15 - Please provide additional clarification regarding how this field is intended to be used, particularly regarding unresolved/ongoing inspections.

Response to range of comments

Also see response to comments on **S5.C.9.g (Phase I), S5.C.5.g (WWA), S5.B.3.f (EWA).**

Ecology changed the WQWebIDDE form to simplify the fields and clarify the data reporting requirements. Permittees made constructive comments to ensure the data are useful and the data collected will be of high quality and consistency. Ecology believes this final form and content will be more easily adapted by all of the Permittees. Ecology encourages Permittees to work with others who have already developed compatible systems.

Terms and field code notes are included in the instructions. Specifically, the following changes were made:

Field 1: No changes. The permit number is auto-generated for Permittees using the WQWebIDDE form.

Fields 2 and 3 were removed.

No changes were made to Fields 4 and 5 except that a calendar pick date is now available (using a browsers other than Internet Explorer) to launch the WQwebIDDE portal application; these are now Fields 2 and 3 “Date incident discovered or reported to you” and “Date of beginning your response.”

Field 6: Changed to be just the “Date of end of your response” which is now Field 4. Also see changes to Field 14.

Field 7: This is now Field 6 “Discharge to MS4?” and, if the answer to this question is either no, yes but allowable, or unknown, it is the final question that needs to be reported for the incident. The Yes/No/Unknown lists in the formal draft version were removed and replaced with the following single list of possible answers:

- Yes – notified Ecology
- Yes – notified DOH and Ecology
- Yes – did not notify
- Yes – allowable or conditionally allowable
- No – none found
- No – cleaned up before reached MS4
- No – discharge to Underground Injection Control (UIC) well
- Unknown

- Other (explain)

Field 8: This is now Field 5 and the list of possible answers was changed to the following:

- Pollution hotline (phone, web, app)
- Direct report to your staff
- Staff referral
- Other agency referral
- ERTS referral
- Business inspection
- Construction inspection
- MS4 inspection or screening
- Other (explain)

Field 9: Question was moved to Field 7 (now Field 6) under a "Yes" answer, and changed as shown. The field for the ERTS number was removed.

Field 10: "Incident Location" is now Field 7, and was changed from "provide at least one of the following" to "provide one of the following." The "State" field was removed and the "Zip" [code] field is optional.

- Street address or Nearest intersection
- Latitude/longitude

Field 11: This is now Field 8 "Pollutants Identified". The list was shortened to the following categories of pollutants identified:

- Unconfirmed, unspecified, or not identified
- Fuel and/or vehicle-related fluids
- Food-related oil/grease
- Sediment/soil
- Solid waste/trash
- Sewage/septage/pet waste/human waste
- Other wastewater
- Paint
- Firefighting foam
- Soap and/or cleaning chemicals
- Other (explain)

Field 12: This is now Field 9 "Source or Cause." The list was shortened to the following types of sources:

- Unconfirmed, unspecified, or not identified
- Vehicle-related business
- Food-related business
- Landscape-related business
- Mobile business
- Construction activity
- Other commercial/industrial activity
- Vehicle collision
- Other accident/spill
- Intentional dumping
- Illicit connection
- Other (explain)

Field 13: This is now Field 10 "Source tracing approach(es) used" and the list was changed to the following:

- Not applicable
- Observation (color, sheen, turbidity, floatables, odor)
- Map analysis
- Dye, smoke, or pressure testing
- Field indicator measurements
- Analytical laboratory indicators
- Other (explain)

Field 14: This is now Field 11 "Correction/elimination methods used" and the list was changed to the following:

- Clean-up
- Education/technical assistance
- Add or modify operational source control BMP
- Add or modify structural source control BMP
- Add or modify treatment BMP
- Enforcement
- Referred to other agency or department
- Other: (explain)

Field 15 is now Field 12, and was unchanged, but the instructions make it clear this field is focused on providing additional, optional information about the source or cause, or providing explanation for any issues in meeting permit-required timelines.

13.11 Eastern Washington comments on IDDE

EWA Phase II: S5.B.3

Commenters: Chelan County, City of East Wenatchee, Douglas County, Yakima County, City of Spokane, Eastern WA Stormwater Group, Clayton Verellen.

1. S5.B.3. b. vi. Permit language has been modified from "may need to" to "shall". The county recommends leaving permit language as is (may need to), allowing the Permittee to implement regulatory mechanisms as needed for our specific community rather than as required by the permit.

Response to comments

1. Ecology retained the requirement to update ordinances or other regulatory mechanisms so that the Permittee has the authority to require operational or structural source control BMPs where necessary to prevent illicit discharges. This adds another tool in the IDDE toolbox to permanently eliminating pollutant sources to the MS4. Permittees still have the discretion to apply corrective actions that are deemed appropriate and responsive.

Comments related to IDDE reporting S5.B.3.f

Commenters: Chelan County, City of East Wenatchee, Douglas County, Yakima County, City of Spokane, Eastern WA Stormwater Group.

1. Recordkeeping: If IDDE information is submitted to Ecology via WQWebIDDE, then requiring the Permittee to compile and submit the same information within the Annual Report is duplicative and unnecessary. The requirements for IDDE reporting should be satisfied by either WQWebIDDE reporting, or submittal of information via the annual report, not both. It is the county's preference to eliminate the WQWebIDDE requirement and utilize the annual report to submit IDDE information. Ecology can utilize this information and place it in any format deemed necessary.
2. This reporting proposal is onerous and a burden on jurisdictions that would require them to spend limited resources to change the existing database tracking and reporting systems that are currently in place. It is also a duplication of effort on the Permittees' part since IDDEs are also reported to Ecology in the annual report. At a minimum, we would request that the jurisdictions be allowed to report this information in an easier, more industry standard format such as a CSV file or some other readily exportable file format. Requiring Permittees to report information in this fashion is an unnecessary financial burden on the ratepayers of the jurisdiction.
3. All Permittees are already required to track and report illicit discharge incidents. Jurisdictions have invested in their own database logging, tracking and reporting systems. The requirement to make changes to their computerized systems so the information can be entered and stored in an Ecology database would be a substantial financial burden to the Permittee and their ratepayers.

Also, staff time entering the same information in a duplicate Ecology database is a waste of the Permittees' resources.

4. in order to meet the intent of the proposed change and maintain consistency among Permittees, we feel that Ecology should develop an Access database, Excel spreadsheet, or a similar commonly used application, to provide to Permittees that encompasses the desired reporting elements captured in the DRAFT Appendix schema, which could be exported as an .xml file, that Permittees would provide to Ecology for upload into WQWebIDDE.

Response to comments

See Ecology IDDE reporting responses in section 13.10, above.

14.0 Controlling runoff from new development, redevelopment and construction sites

Permit reference: Phase I Permit – S5.C.5, Appendix 10
Western Washington Phase II – S5.C.6, Appendix 10
Eastern Washington Phase II – S5.B.4, S5.B.5

Commenters: City of Oak Harbor, City of Edmonds, Michael Martinez, Clark County, City of SeaTac, Company - LDC, Inc, Building Industry Association of Washington, Thurston County, City of Bothell, City of Kent, Pierce County, City of Sumner, City of Brier, Phillips Burgess PLLC, King County, City of Renton, City of Seattle, Master Builders Association of King and Snohomish Counties, City of Sammamish, City of Mukilteo, Black Diamond, Snohomish County, City of Olympia, City of Kirkland, Phyllis Farrell, City of Tacoma, City of Snoqualmie, Washington State Department of Transportation, City of Mount Vernon, City of Poulsbo, City of Redmond, Pierce County, City of Seattle, Snohomish County, City of Tacoma

14.1 Date of Adoption of standards

Summarized comments

1. The proposed language has a hole in what appears to be vesting language regarding the adoption of stormwater standards. It indicates that new standards that go into effect apply to "all (development) applications submitted: i) On or after December 31, 2021. (and) ii) Prior to January 1, 2017 that have not started construction by January 1, 2022." As written this language includes a hole in the (vesting) timeline which indicates that applications submitted on or after January 1, 2017 and prior to December 31, 2021 have no vesting and have to start their application review process over again once the new standards go into effect.
2. There have been number comments to us about applications submitted during different time periods than expressed in a.i and a.ii. Perhaps a new a.iii which would state that all other applications submitted will be reviewed with the stormwater regulations in effect at the time of complete application, as per RCW 58.17.170.

3. The "prior to" date could be problematic. What if a jurisdiction adopted a manual equivalent to the 2014 SWMMWW prior to January 1, 2017?
4. The statements under S5.C.5.a seem to contradict S5.C.5.a.i through vi.
5. S.5.C.5.a.iii-The date for King County should be February 3, 2021, instead of March 15, 2021.
6. S5.C.5.a.iii: For King County, applications submitted prior to March 15, 2016, which have not started construction by March 15, 2021. Comment: KC adopted a public rule revising the King County Surface Water Design Manual (SWDM). This public rule was adopted on March 25th, 2016. The 2016 SWDM is effective as of April 24th, 2016.
7. Request that the language in this section be revised to allow Phase II Permittees to extend their implementation deadline based on the delays of the Phase I standard adoption
8. Give the Permittees more time to complete the manual update
9. (PH II) Please make the application date be on or after January 1, 2022 for ease of administration and tracking to calendar years.

Response to range of comments

1. With the addition of new required changes PH I Permittees will be required to make in order for their adopted manuals to be deemed equivalent (see sections on Appendix 1, and 10 in the RTC), Ecology has decided that the changes are significant enough to warrant adding a provision that applies to applications submitted under the current (2013 Permit) program that haven't started construction by a specific date, will be required to be reviewed under the requirements of the new (2019 Permit) program. This change was made in both the PH I and PH II Permits.

    1. Permittees should rely on the dates that they adopt standards. Permit language provides flexibility to Permittees.
    2. Ecology disagrees that S.5.C.5.a contradicts S.5.C.5.a.i-iv. S.5.C.5.a outlines the requirement to continue existing programs, and S.5.C.5.a.i-iv outlines when those requirements apply.
    3. January 1, 2017 was the deadline to implement the 2014 SWMMWW. If a municipality adopted the 2014 SWMMWW before January 1, 2017, that date is when all applications moving forward would need to be using the 2014 SWMMWW.
    4. Ecology corrected the dates in S5.C.5.a.iii for which a Permittee's existing equivalent program applies to new and redevelopment applications for King and Snohomish counties to align with the effective dates of their manual adopted under the 2013 permit.

10. Ecology revised the required adoption date for PH II Permittees to July 1, 2022 in order to provide additional time for Phase II Permittees to review Phase I manuals after the Phase I adoption of standards. Ecology changed the date from the last day of the month, to the first day.

14.2 Site and Subdivision Scale Requirements

Summarized comments

1. S5.C.5.b.vi - Consider revising language to make the intent more clear: The program shall include a mechanism to ensure all new development, redevelopment and construction projects that meet the thresholds in Appendix 1 have a review, inspection, and enforcement process that ensures compliance with the Minimum Requirements in Appendix 1. At a minimum, the program shall be administered by qualified personnel and include the following standards for compliance:..."
2. S5.C.5.b.vi(b) - Consider revising this section to just be TESC BMP installation. vi.(c) could then be maintenance inspections and (d) would be final inspection.
3. S5.C.5.b.vi(a & e). It is possible to meet the threshold for new development and redevelopment without being a land disturbing activity. Is the intent to only require inspection of those projects that alter the soil cover conditions?
4. S5.C.5.b.ii(f) - Remove BMP limitations as these are inherently part of the BMP design criteria.
5. The NOI forms are available at the Ecology website. Does this need to be in the permit?
6. Increase monitoring and oversight of new construction permits.
7. Increase LID requirements for new development and redevelopment projects---reduce exemptions

Response to range of comments

20. Ecology did not make the edits suggested in comments #1&2 above, and finds the current language to be clear.
21. Ecology agrees that it is possible to meet new and redevelopment thresholds without the project being a 'land disturbing activity'. Ecology revised S.5.C.5.b.vi(a), (c), and (e) by removing the term 'land disturbing activity' and referring to the permit thresholds.
22. Ecology disagrees with removing BMP limitations. Under the BMP guidance in the SWMMWW, limitations has its own sub-heading.
23. Ecology has retained the language requiring the Permittee to make available NOIs for construction and industrial activity. Permittees may refer to Ecology's website to access the NOI forms.
24. Ecology updated the WWA Phase II Permit language to match Phase I Permit language to clarify that construction inspections may be combined with other inspections provided they are performed using qualified personnel, as well as adding back into this section recordkeeping requirements – both of which will improve the monitoring and oversight of new construction permits, or the LID requirements for new and redevelopment projects. Permittees are allowed to have more stringent requirements for new and redevelopment.

14.3 Phase I Manual Equivalency

Summarized comments

1. Please alter the Permit to state that Phase I Permittees remain in compliance with the 2019 Permit when the Permittee maintains its approved equivalent program and makes only the changes listed in App. 10, and Phase I Permittees also have the option to make additional changes beyond those listed in App. 10.
2. Remove 'Incomplete submittals will not be approved'.
3. S5.C.5.b.iii - Revise language to state that this section is only necessary if the Permittee intends to utilize an equivalent manual.
4. The second paragraph of S5.C.5.b.iv, appears to be redundant with or possibly in conflict with S5.C.5.b.iii.
5. In the Permit whenever it states to provide anything written describe if these items require submission to Ecology and G19 certification.
6. It does not appear that applicants are required to revise their SWMM to comply with the new wetlands protection guidance though it is specifically referenced in the Permit and SWMMWW. Is this the intent?
7. A simple explanation of the reason for the change should be adequate in some cases, instead of a technical memo.
8. Permittees will likely use the manual update window to make updates to manuals for clarity and improved performance. These should not require a technical memo but should include a description of why the change was made and equivalence is retained
9. The permit should not require justification for adding emerging technology BMPs that are granted a General Use Level Designation by Ecology.
10. The language is ambiguous as to the date by which Ecology must respond to avoid a deadline extension for the final regulations.
11. Ecology's current manual equivalency process does not mean manuals contain equivalent requirements. Instead, that the minimum requirements in Ecology's manual have been met. This makes it difficult for an agency like WSDOT, who must interact with many Phase I and Phase II jurisdictions due to the nature of our infrastructure. It is difficult for us to know if the local jurisdiction requirements are based on just meeting, or exceeding, Ecology's minimum requirements (i.e., more stringent requirements). The current proposed language will not address these issues of inequity between our HRM, Ecology's SWMMWW/EW, and local jurisdiction manuals. WSDOT suggests clearly identifying requirements versus guidance in the Phase I and Phase II Permits, defining the process for manual equivalency, and including a description of what manual equivalency means.

Response to range of comments

1. In accordance with S5.B, Permittees must continue implementing their existing Stormwater Management Program, and therefore continue using the enforceable documents listed in Appendix 10, Part 1, until they make effective a local program per S5.C.5.b.iv.
2. Ecology did not make the suggested edit. Ecology intends to follow a more streamlined review process and must receive complete information in order to complete a timely review.
3. Ecology disagrees that the submittal described in S.5.C.5.b.iii is only necessary if a Permittee is adopting an equivalent manual. All PH I Permittees currently use their own manuals, all of which will need to be updated to maintain equivalency. Even if a Permittee were to decide to use the SWMMWW, their codes, ordinances and other enforceable documents will all need to be updated to reflect that change.
4. Ecology has revised S.5.c.5.b.iv, and combined some parts with S.5.C.5.b.iii to provide clarity.
5. The format for submitting additional changes not outlined in Appendix 10, is outlined in Appendix 10 part 2, table 10.2 (updated from table 10.3 in the formal draft). Ecology agrees that a technical memo may not always be needed for every change, and has modified permit language to allow more flexibility. The updated language only requires a rationale for the change. For some changes, the rationale may be as simple as stating 'to align with the SWMMWW', or 'has a General Use Level Designation by Ecology'. Though other proposals may require a more detailed description, or technical memo. Permittees should note, however, that the burden of proof is on the Permittee, and if Ecology determines that not enough information is given in the rationale, the request may be considered incomplete, and may not be approved.
6. Ecology disagrees that the date by which Ecology must respond to avoid a deadline extension for the final regulations is unclear. S.5.C.5.b.iii clearly states how long Ecology has to respond, and the required deadline for adoption will be automatically extended by the number of calendar days that Ecology exceeds that period. Ecology increased the review time available to 120 days.
7. Ecology has combined the second paragraph in S.5.c.5.b.iv with S.5.C.5.b.iii to avoid confusion.
8. Section G19 of the permit describes when a submittal requires certification.
9. Ecology's review of local manuals is based on the equivalency criteria for local manuals written in S.5.C.5.b.i and ii, and the minimum requirements, definitions and thresholds in Appendix 1 of the permit. Permittees programs must be equivalent to meet the requirements, limitations and criteria listen in the SWMMWW, however they have the authority to be more stringent. Ecology is working to refine this process, as seen in Appendix 10 of the Phase I Permit, and may continue to clarify this process in future permit cycles.

14.4 Training

Summarized comments

1. Remove S.5.C.5.b.viii as Section S5.C.5.b.vi states that qualified personnel must conduct the activities.

2. Consider creating a new municipal training permit section that includes all ongoing and follow-up training requirements.
3. Allow Permittees to meet training requirements through regional efforts.

Response to range of comments

1. Ecology retained the section S5.C.5.b.viii, as this section also outlines the follow-up training required for staff, which S5.C.5.b.vi does not.
2. Ecology is working on creating a guidance document to help Permittees identify ongoing training requirements.
3. The permit does allow for training requirements to be met through regional efforts.

14.5 Guidance/Definitions

Summarized comments

1. (PH I) Include definition of "started construction" from 2013 Permit. It appears to inadvertently have been removed.
2. We have had several issues related to interpretations of how the drainage review requirements apply to subdivisions developed under a previous stormwater manual. The guidance on drainage review requirements in the current permit's fact sheet conflicts with the permit's definition of redevelopment and the description of the permit's application for redevelopment. Could you please incorporate the FAQ language into the permit itself for clarification and consistency among the Permittees?

Response to range of comments

1. The footnote that included the definition for 'started construction' has been added back to the PH I permit.
2. Ecology was unable to locate the reference in the comment. The Permit language has been revised to provide clarity for projects approved under previous development codes, which have not started construction by certain dates specified in the Permits.

14.6 General/Editorial

Summarized comments

1. The title of this section should be bold
2. Reorganize S5.C.5.b.i into a bulleted list that says each thing that must be included in ordinances as separate line items
3. S5.C.5.b.iii(a).typo SWMWW should be SWMMWW

Response to range of comments

1. Ecology appreciates the editorial suggestions above. The title of this section was bolded, and the typo was corrected.

14.7 Comments on Appendix 10

Summarized comments

1. For replacement language in the 2014 SWMMWW Volume III, Appendix III-C, Part 2, Section C.11.3 is titled "Instructions for Roads on a Slope with Internal Dams within the Base Materials that are Below Grade", but the sentence to be replaced refers to "grades greater than 2%" which is addressed in Section C.11.2 Instructions for Roads on Grades above 2%. Recommend keeping both Sections C.11.2 and C.11.3 to address both types of road conditions. Also, keep Section C.11.1. since it is referenced in Section C.11.2.
2. Replace the sentence: "For grades greater than 2%, see additional guidance under the WWHM3 section." With: 2014 SWMMWW Volume III-C, Section C.11.3
3. Ecology needs to be explicit about what it is requiring. It seems unusual for a regulator to go through the effort of modifying a document like the SWMMWW and yet not require the regulated Permittees to comply with or enact those changes. There is likely to be significant misunderstandings as to what is or is not required of Permittees and absolute clarity from Ecology on this point is critical to all stakeholders.
4. Permittees have questions because the 2018 draft, SS.C.5.b.iii (with App. 10), requires Phase I Permittees to make some, not all, of the changes Ecology has included in the draft SWMMWW. For example, App. 10 does not list, so 55.C.5.b.ii does not require, new source control BMPs that are in the draft SWMMWW. This differs from the current (2007, 2013) permit structure; Ecology in the past has reviewed the complete set of Phase I program changes (local codes, rules) and approved when equivalent.
5. Examples in Appendix 10 part 2, table 10.1 do not match the language in Appendix 1. Edit for clarity.
6. (PH I) Under Part 2, the language references the Phase II Permit. Revise language.
7. What is considered to be a new section not found in the SWMMWW
8. Under the 2013-2018 and 2012 Permit, it appears that Element 9f should state Element 9g, Element 9h should state 9j, and 9i should state 9j. Verify and revise
9. The language suggested to replace Section 4.7, Second Paragraph is not the same language as shown in the Permit Section. Revise.
10. Part 3 is confusing, I think it intends to summarize the language found in S5.C.5.b.iii. Part 3 should be rewritten to clarify the process and refer back to S5.C.5.b.iii. (Usually the appendix contains more detail than the permit language – in the case, the reverse is true.)"
11. The use of Parts 1,2 and 3 in Appendix 10 are unclear to the reader and the intent should be clearly laid out in the introduction section of this Appendix
12. Make sure permit references are correct
13. REVISE the title of Appendix 10 as follows: "APPENDIX 10 – Equivalent Programs for Appendix 1 and the Required Portions of Ecology's *Stormwater Management Manual for Western Washington*"

14. Part 1 of Appendix 10 identifies those equivalent programs and manuals but does not clearly indicate their relevance to meeting the S5.C.5.a, S5.C.8.b.i and S5.C.10.a requirements in the 2019 Permit. The importance of Appendix 10, Part 1 in the 2019 Permit is not to identify whether a Permittee complied with requirements in the 2013 Permit, but to make clear that existing approved equivalent programs and manuals meet the 2019 Permit requirements until changes consistent with S5.C.5.b.iii and Appendix 10, Part 2 are required. Ecology should make that clear in the Appendix 10 language itself.
15. "These Programs must be adopted [sic] made effective no later than July 1, 2021." This statement is unnecessary.
16. The review period and possible extension of deadline is addressed in Special Condition S5.C.5.b. It is unnecessary to repeat it here.
17. Appendix 10 In the second column of the first row the word "second" should be added as follows: Replace "second" bullet with: "Demonstrate compliance with the LID Performance Standard
18. In the second column of the last row there appears to be a typo in the citation. It appears this citation should be criterion "2014 SWMMWW Volume III, Appendix III-C, Part1, Section C.11.3".

Response to the range of comments:

1. Ecology has deleted Appendix 10 part 2, table 10.1 in response to multiple commenters confusion on how the required changes were to be made. To replace that table, Ecology has created a list of the concepts and BMP's that need to be adopted to obtain equivalency with the SWMMWW. The new list has taken into account, and clarified much of the confusion outlined in the comments received.
2. Based on comments, Ecology has also reconsidered the parts of the SWMMWW that should be required updates. With this reconsideration, several new concepts and BMP's have been added to the list of required changes to obtain equivalency with the SWMMWW, including the review of Source Control BMPs.
3. Ecology disagrees that part 1, part 2, and part 3 are unclear. The introductory paragraph of each section outlines the purpose and applicability of each section.
4. Ecology is choosing to maintain consistent titles from the previous permit cycles for clarity. Also, the prior permit included a similar diversity of material and was well implemented with the existing title.
5. Ecology agrees that the purpose of Appendix 10, Part 1 in the 2019 Permit is to make clear that existing approved equivalent programs and manuals meet the 2019 Permit requirements until changes consistent with S5.C.5.b.iii and Appendix 10, Part 2 are required. Ecology disagrees that this is not clear. The same language was used in the 2013 permit, and is being retained for the 2019 Permit.

14.8 Eastern Washington comments on controlling construction site runoff

EWA Phase II: S5.B.4

Summarized comments

Commenters: Chelan County, City of East Wenatchee, Douglas County, City of Spokane, Clayton Verellen

1. 4. b. i. Existing language requires review of Construction SWPPPs prior to construction. Proposed language requires review prior to clearing and construction. Clearing is not currently an activity that is regulated by every Permittee. It is not feasible or reasonable to require a submittal for an activity that is not regulated. There will be minimal effectiveness associated with the addition of this language as implementation will be limited. Recommend evaluation of potential conflicts with vegetation maintenance (clearing) activities associated with addressing potential fire hazards.
2. In proposed Section S5.B.4.c.i, Ecology requests additional site assessments and inspection requirements for all new construction sites that disturb one acre or more, or are part of a larger common plan of development or sale, where the sites shall be inspected by qualified personnel 1) prior to clearing and grading for construction if a high potential for sediment transport is determined, and 2) during construction to verify proper installation and maintenance of required erosion and sediment controls.
3. The proposed additional inspection requirements are redundant with Ecology's National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for Stormwater Discharges Associated with Construction Activity (Construction Stormwater General Permit [CSWGP]).The CSWGP conditions set forth in Section S4.A already meets the proposed intent to verify proper installation and maintenance of required erosion and sediment controls during construction. We feel that creating overlap between Construction and Municipal stormwater permits, by including duplicate requirements, has the potential to create confusion with respect to the roles and responsibilities amongst Permittees, and would create an unnecessary and substantial financial burden to the Permittee and their ratepayers in order to perform redundant inspections that are already required under Ecology's CSWGP.

Response to range of comments

1. Ecology revised the language to provide until December 31, 2022, if needed, to adopt or update ordinances or another enforceable mechanism in order to have the legal authority to review site plans prior to clearing, and inspect sites with high potential for sediment transport prior to clearing and grading. A definition for “high sediment transport” was also added to the permit – which means any project that does not qualify for an erosivity waiver, as described in Appendix 1. Ecology added the ‘land disturbing activity’ definition from the SWMMEW to clarify that vegetation maintenance is not considered land disturbing.

   This provision was added to bring statewide consistency to the permits for procedures of site plan review and inspection in order to proactively protect the MS4 from receiving pollutant discharges from construction sites. Local inspectors apply local codes, and can provide closer oversight to protect its own MS4. Ecology construction inspectors will continue to enforce the Construction Stormwater General Permit requirements.

14.9 Eastern Washington - Post-Construction Runoff

Commenter: Futurewise

Summarized comment

25. Section SS.B.5.c.iii from the 2014 Eastern WA Permit: Inadequate maintenance of private residential stormwater facilities is of concern in some areas of Eastern Washington. (This has also been reported by engineers in suburban and rural areas in Western Washington.) In the previous Phase II Eastern Washington Stormwater Permit, the following language removed accountability for municipalities to ensure inspections of BM P's, since it required proof of a water quality violation: If a BMP is not inspected, the Permittee is not in violation of this provision unless a violation of water quality standards occurs due to a lack of operation and maintenance of the facility. Thus, we support the removal of this language from the Eastern WA Permit.

Response to comment:

1. Thank you for the comment.

26.

15.0 Operations and Maintenance (O&M)

Permit reference: Phase I Permit – S5.C.10
Western Washington Phase II – S5.C.7
Eastern Washington Phase II – S5.B.6

Commenters: E.WA Stormwater Group, Clark County, City of SeaTac, City of Newcastle, Barbara Craven, City of Redmond, Thurston County, City of Bothell, City of Bellevue, City of Sumner, City of Brier, King County, City of Renton, City of Seattle, City of Sammamish, City of Mukilteo, Yakima County, Black Diamond, Snohomish County, City of Olympia, City of Lynnwood, City of Tacoma, City of Snoqualmie, City of Shoreline, City of Port Angeles, City of Mount Vernon, City of Federal Way, City of Poulsbo, City of Longview, City of Issaquah, City of Everett.

15.1 Maintenance standards (section a)

Summarized comments

1. Circumstances beyond Permittee's control needs to also include weather and for private facilities budget planning. Some maintenance is exorbitantly costly and small private entities may need time to budget for the costs the next year.
    a. Will Permittees be required to submit a G20 letter in addition to the documentation required in this section?
2. S5.C.7.a.ii – Edit first sentence to read "Unless there are circumstances..., when an inspection identifies an exceedance of the maintenance standard, maintenance RELATED TO FACILITY FUNCTION shall be performed..." This edit allows Permittees to prioritize critical maintenance within the 6 to12 month time period.

3. Appendix 10 does not refer to any content in Volume V as needing to be incorporated to be functionally equivalent, please clarify that the maintenance standards will not change from those contained in the 2014 SWMMWW.
4. "S5.C.10.a. See comment about S5.C.5.b.i-iv. Change to read as follows: "No later than July 1, 2021 each Permittee shall update their maintenance standards as necessary to meet the requirements in this section [[ADD]] and for any manual approved by Ecology and listed in Appendix 10, Part 1, is not required to make additional changes to achieve equivalency."
5. REVISE as follows: "Maintenance Standards. Each Permittee shall implement maintenance standards that are as protective, or more protective, of facility function than those specified in the *Stormwater Management Manual for Western Washington* (SWMMWW). For facilities, which do not have maintenance standards, the Permittee shall develop a maintenance standard. The requirements of this section are met by using maintenance standards contained in a functionally equivalent manual approved by Ecology in Appendix 10."

Response to range of comments

1. Ecology did not make the suggested changes to the section describing circumstances beyond the Permittee's control. If weather results in delay of meeting the required schedule, it should be based on the need to reallocate for emergency work. Permittees are required to identify the party responsible for private maintenance, MR#9 requires an O&M plan. Permittees follow their procedures for compliance to ensure timely maintenance in order to protect water quality. Permittees must document the circumstances, and how they were beyond their control - as long as the requirements are followed, a G20 is not necessary.
2. Section a. begins by describing that Permittees "shall implement maintenance standards that are as protective, or more protective, **of facility function** [emphasis added] than those specified in the *Stormwater Management Manual for Western Washington* (SWMMWW)." This standard applies to the subsections below. Ecology did not make the suggested revision to repeat this phrasing. Permittees determine the importance of each maintenance activity and its priority within the stormwater program. Permittees must maintain facility function, which means Permittees must complete maintenance necessary to ensure BMPs continue to operate as designed to protect waters of the State. Permittees may identify certain maintenance activities that do not impact facility function and follow up on those actions on a different schedule than the permit requires.
3. The maintenance standards in the 2019 version of the SWMMWW are equivalent to the 2014 SWMMWW version and the approved Phase I manuals cited in Phase I Appendix 10. We revised permit language to include the PH I approved programs.

15.2 O&M regulations for private facilities

Summarized comments

1. We support the addition of a stand-alone Operations & Maintenance section. However, the stated goal is "preventing or reducing pollutant runoff from municipal operations" which fails to cover the scope of this permit section. We recommended including the goal of maintaining MS4 infrastructure components and both public and private stormwater facilities to ensure continued

water quality and flow control performance as designed, which is the primary focus of minimum performance measures (a), (b), (c) and (d).

2. Disagree with moving the private inspection program into the public Operations and Maintenance section of the permit. This is for multiple reasons: budgeting of resources, location of inspectors for private inspection programs (not part of crews), differing protocols for private facilities and land ownership, enforcement policies that require ordinances, regulatory framework, and code/Police involvement; and the repercussions of failure to maintain are different. Please move section b and copies of applicable portions of section a into a new standalone section (similar to what was done for Mapping) that is titled "Private Stormwater Facilities Inspections". This section should reside after the Runoff Controls Section for New Development and Redevelopment but prior to the Operations and Maintenance section of the permit.
3. In Phase II jurisdictions, do facilities built prior to 2007 have to be inspected?
4. Please clarify a start date for the new maintenance requirements in S5.C.7.b.i.a.
5. S5.C.7.b.i - Does this apply to all stormwater treatment and flow control BMPs/facilities permitted, even if they don't discharge to the MS4? Or just ones that discharge to the MS4?
6. b.i(b) Private catch basins aren't required to be inspected, but it seems required for public. Why is catch basin inspection required during construction (every six months) and not after?
7. S5.C.7.b.i(c) - This should be moved to S5.C.6.c since this is an inspection requirement during the construction phase, not post-construction.
    - Consider removing this requirement because it is already covered under Controlling Runoff component which requires maintenance of TESC facilities. If this section will remain, require yearly inspection to coincide with the annual inspection requirements for stormwater treatment and flow control facilities/BMPS.
8. S5.C.7.b.i(c). - Please include a definition of "fully stabilized" in the Permit's definitions section.
9. S5.C.7.b.ii - What does "...achieving at least 80% of all sites" mean? Language should be clearer, i.e. "Compliance during this permit term shall be determined by the presence of an established inspection program designed to inspect all sites and achieving at least 80% of inspections." Is this requirement for the permit term (5 years) or annually?
    - The compliance metric of "sites" does not clearly correspond to the inspection requirements described in this section.
10. Secondary Permittee - S6.D6.i What does "regularly inspect and maintain" mean? Annual inspections? Quarterly?

Response to the range of comments

1. Ecology revised the O&M introduction in the Phase II Permit to match the language from the Phase I Permit. The Phase II section was modeled after the Phase I format and so language that applies to both private and public O&M responsibilities is appropriate.

2. Ecology did not take the suggestion to create a stand-alone section for private stormwater inspections and retained the O&M section for public and private facilities.
3. Permittees are required to inspect and maintain all municipally owned or operated stormwater treatment and flow control BMPs/facilities and catch basins. Phase I Permittees are required to inspect and require maintenance on all stormwater treatment and flow control BMPs/facilities regulated by the Permittee (i.e., private facilities), regardless of when they were built; and catch basins in new residential developments. Phase II Permittees are required to inspect and require maintenance on private facilities built to meet permit requirements (first enacted by the Feb. 16, 2010 ordinance, or earlier if a jurisdiction was an early adopter of the regulations). The Phase II Permit does not require inspection of private facilities constructed before permit requirements (or local codes) were effective.
4. This is a continuing program. Phase I Permittees must update their O&M programs by July 1, 2021, existing Phase II Permittees have until 12/31/2021; new Permittees must implement requirements no later than 12/31/2022.
5. The Permit requires inspections of private catch basins in new residential developments every six months until 90% of lots are constructed (or when the site is fully stabilized). In contrast to commercial construction, residential construction can occur over a long time frame as individual lots are built out. This is also a time when the potential for polluted runoff is high if temporary erosion and sediment control BMPs are not properly implemented and maintained. Ecology moved this provision to the controlling runoff section, since this requirement applies during active construction.
6. Maintenance of stormwater facilities regulated by the Permittee applies to projects regulated by S5.C.6 (Phase I) or S5.C.7 (Phase II).
7. "Fully stabilized" means the establishment of a permanent vegetative cover, or equivalent permanent stabilization measures (such as riprap, gabions or geotextiles) which prevents erosion. This definition was added to the Permits.
8. Ecology revised the language to be clear that the compliance measure is achieving 80% of required inspections. This rate refers to the schedule of facility inspections referred to in the subsection, i.e. annual inspections of stormwater treatment and flow control BMPs/facilities.
9. For Secondary Permittees, the Permits have been revised to require annual inspections of all stormwater facilities owned or operated by the Permittee.

15.3 Comments related to inspections, compliance rate

Summarized comments

1. The minimum performance measure for inspecting the operation and maintenance of projects regulated by the Permittee is too low at 80%. Inspection rates should be 100%.
2. Permittees have repeatedly requested that all references to a 100% compliance threshold be reduced. In O&M, the 100% requirement is on maintenance timelines for cleaning facilities that have been identified to have an exceedance of maintenance standard (particularly catch basins). This means missing one catch basin out of thousands triggers a G20 notification. Reducing the

requirement to 95% or 98% would be helpful in reducing the need to submit G20's for a small oversight.

3. S5.C.7: Suggest adding a compliance clause similar to inspections with compliance achieved at 95% of those identified for maintenance as being completed. Suggested language under S5.C.7.a.ii: Add new sentence to end of section "Maintenance shall be performed for at least 95% of the facilities and catch basins identified for maintenance."
4. The permit should include performance measures that allow for less than 100 percent of the facilities be defect free. The number could be equal to or higher than the inspection rate, for example, "85 percent of regulated facilities and 97 percent of Permittee operated facilities."
5. b.i(b) Private catch basins aren't required to be inspected, but it seems required for public. Why is catch basin inspection required during construction (every six months) and not after?
6. b.i(b) Do facilities built prior to 2007 have to be inspected?
7. S6.D6.i - What is the definition of "regularly inspect and maintain" mean? Annual inspections? Quarterly?
8. Please clarify a start date for the new maintenance requirements in S5.C.7.b.i.a.
9. S5.C.10.a.ii "Unless there are circumstances beyond the Permittee's control, when an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed:

   (a) Within 1 year for typical maintenance of facilities, except catch basins.
   (b) Within 6 months for catch basins.
   (c) Within 2 years for maintenance that requires capital construction of less than $25,000.

   This requirement should be outcome based

   King County is advocating for flexibility for exceedances in the time frame for maintenance actions required for flow control and water quality facilities and catch basins. The proposal would allow for minor exceedances of required maintenance timelines to reduce the number of G20s for minor issues. The proposal is advocating for jurisdictions to accomplish 95% maintenance required (instead of 100%) for compliance, with the Permittee meeting the remaining 5% permit-required maintenance actions within an additional six months. Language to be applicable to 10.b, c, and d"
10. S5.C.7.d - It appears the reference to S.5.C.7.c., c, and d should be S.5.C.7.a. , b, and c

Response to range of comments

1. Ecology disagrees that a performance measure of 80% of required inspections is too low.
2. Ecology decided to retain the 100% compliance measure to perform maintenance within six months for catch basins exceeding maintenance standards. The schedule ensures a maintenance response that is protective of water quality. The permit allows a percentage of required facilities or sites to not be inspected and still meet the performance standard (i.e., 95% of required inspection completed). Therefore, if maintenance needs are found during inspections, it is not appropriate to leave a BMP in an unmaintained state longer than the maintenance schedule. Permittees that continue to struggle with meeting the required schedule may need to consider

alternative procedures in order to comply with requirements. See responses to 15.1 Maintenance Standards above.

3. Thank you for the comment. Ecology corrected the Phase II citation to reference the required annual inspections of stormwater flow control BMPs/facilities, spot checks after major storm events, and catch basins.

15.4 O&M facilities owned or operated by the Permittee

Summarized comments

1. The first part of sections S5.C.7.c.ii. and S5.C.7.c.iii. are sentence fragments. Revise to complete the sentences.
2. S5.C.7.c - Add a definition in the "Definitions and Acronyms" section for stormwater facility or reference the definition in the SWMMWW.

Response to range of comments

1. Ecology revised for complete sentences.
2. 'Stormwater facilities' is used as a more general term in this context and refers to the stormwater facilities called out in the permit section, i.e. stormwater treatment and flow control BMPs/facilities and catch basins. We did not add a new definition to the permit or SWMMWW.

15.5 Catch Basin maintenance

Summarized comments

1. (Phase I S5.C.10.d) Remove all references to inlets from this section. The title of this section is specific to catch basins. In addition, the compliance metric is specific to catch basins and there is no Ecology maintenance standard for inlets and no required timeline for maintenance of inlets. Define catch basins applicable to this section.
2. (Phase I S5.C.10.d.i) - Revise to state; "Each Permittee shall annually inspect all catch basins owned or operated." It appears that the "all" was inadvertently left out since alternatives that describe less than all are included within the section.
3. "S5.C.10.d.i.(b) - Clarify the language to state that the inspection of catch basins immediately upstream of any MS4 outfall, discharge point, or connection to public or private storm system is only intended to take place within circuits that are included in the circuit approach.
    a. Additionally, clarify the "if applicable". This paragraph also seems to imply that catch basins are installed in-line with the conveyance system and that sediment would travel through the conveyance system and the catch basins and transfer and fill the downstream catch basins. This is not typically how systems are designed. "Extra" inspection of the catch basin upstream of an outfall or other discharge location is not particularly valuable based upon how systems are designed.
    b. Additionally, clarify if by ""connections to public or private storm systems, it is intended to mean where the MS4 would flow into another public or private system, not just any

time a private system connects into the Permittees MS4. Revise to state, ""...connections from the MS4 to a public or private system"".

c. Additionally, the requirement to map connections from the MS4 to privately owned stormwater systems (S5.C.2.b.ii) has a completion date of August 1, 2021; it is unclear how the timing of that mapping requirement relates to the inspection requirements of this section."

4. S5.C.10.d.iii - The compliance metric only makes sense if the Permittee is using the standard requirement. A compliance metric must be defined for each alternative. Include compliance standards for each of the alternative programs (a), (b) and (c).

5. Recommend adding an additional alternate compliance option. The option would be to inspect and clean all catch basins in a Permittee's system, twice within a permit term. Inspection and cleaning would be required once between the start of the permit term and December 31, 2021 and once between Jan 2022 and end of permit term. Compliance would be achieved by inspecting and cleaning 95% of the required catch basins within each cleaning cycle.

Response to range of comments

1. Ecology retained the reference to inlets in the permit section pertaining to catch basin maintenance. The maintenance standards for catch basin maintenance include activities for clearing inlets. The compliance measure is based on the maintenance standard for catch basins (SMWWMM Table V-A.5 Maintenance Standards – Catch Basins).

2. The Phase I Permit was revised to clarify the intent of the compliance measure to include all catch basins and inlets, or implemented alternative catch basin inspection program.

3. Following the circuit approach means defining the circuits (see permit definition), the permit language is referring to the upstream catch basins within the circuits. “If applicable” applies to the outfalls (or discharge points, etc.) upstream that should receive maintenance within the circuit. Permittees may select the catch basins to inspect based on local knowledge such as the size and configuration of the catch basins within the circuit, traffic volumes, and land use. The catch basin immediately upstream of a system outfall is only required to be inspected if applicable. See *Catch Basin Inspection Alternatives for Phase I and II Municipal Stormwater guidance* (April 2013; Publication #13-10-019; https://fortress.wa.gov/ecy/publications/SummaryPages/1310019.html) on how a circuit should be established.

   Some Permittees have found that sediment accumulation and the need for maintenance varies within the MS4 based on traffic volumes, land use, topography, street maintenance practices, or the configuration of the MS4. For example, catch basins in an established residential area with low traffic volumes and gentle slopes may accumulate sediment more slowly than catch basins in a high traffic volume commercial or industrial area. Similarly, catch basins along primary arterials and maintained snow routes are likely to experience increased rates of sediment accumulation. For certain areas, especially those with lower sediment accumulation rates, the ‘circuit inspection approach’ may be a useful alternative to the standard approach. The ‘circuit inspection approach allows Permittees to target inspection of certain catch basins within areas that either drain to a single point or that have similar rates of accumulation and similar

maintenance needs. The potential connection between the mapping requirement and O&M is that as O&M work is conducted, these locations can be documented to help the mapping effort, or after these locations are mapped, they would be added to the circuit approach.

4. The performance measure refers to required inspections and does apply to the various options that use inspections.
5. The alternate compliance option at S5.C.10.d.i(a) (Phase I Permit) already allows the Permittee to specify a less frequent catch basin inspection schedule (i.e., less than annual), if the Permittee can justify that maintenance standards for catch basins will continue to be met under a less frequent inspection regime.

15.6 Policies and procedures for O&M

Summarized comments

1. Time is needed to document policies, practices, and procedures for O&M activities listed. Provide a deadline to complete the documentation.
2. Please revised this section to remove this documentation requirement, as it is unnecessary and limits a Permittee's operational flexibility to modify these practices, policies and procedures without formal documentation. If Ecology insists on keeping this documentation requirement, please revise it to allow one year for Permittees to complete this documentation process. Further, how detailed are Permittees expected to be? For street cleaning, we hire a street sweeper. Do we say as much on a document to meet this requirement?
3. Define what is meant by documenting policies and practices.
4. "S5.C.7.b.ii This sentence is missing something ""Compliance during this permit term shall be determined by achieving at least 80% of all sites."" Should it be ""by achieving inspections of a least 80%""?"

Response to range of comments

1. Ecology added a requirement to document the policies, practices, and procedures for O&M activities to ensure that each topic is addressed, to provide consistent training and implementation by the jurisdiction, and allow for oversight of O&M activities. Ecology revised the permit to provide time to document the policies, practices, and procedures for O&M activities. Permittees must continue to implement their O&M programs. Documentation is written, or recorded in a manner that shows how these O&M activities are addressed and to help provide consistent implementation by staff. Permittees may determine the level of documentation that is necessary. Some activities may need detailed Standard Operating Procedures, where other activities may need less.
2. Ecology revised the permit language to be clear that the compliance measure for inspections of private stormwater BMPs is the presence of an established inspection program designed to inspect all sites and achieving at least 80% of required inspections.

15.7 Training

Summarized comments

1. In section S5.C.7.f, define "relevant SWPPs". Should this be SWPPPs (Stormwater Pollution Prevention Plans) instead? Please clarify.
2. S5.C.7.f - Please consider creating a new municipal staff training permit section that includes all the ongoing and follow-up training program requirements for municipal staff, who, as part of their normal job have permit implementation related responsibilities. In addition, similar to the language included in S5.C.2 on page 19, which outlines how Permittees can meet requirements either individually or through a regional group effort, we recommend similar allowance for Permittees to meet this training requirement through a regional effort.
3. S5.C.10.f - After functions in the first sentence of this paragraph, add the word "that".
4. "The staff training records to be kept include dates, activities or course descriptions, and names and positions of staff in attendance."

   Including the position of staff trained could require extra time. What is really important is that all staff who are in the field and may encounter stormwater issues are trained, not what their position is called. Different jurisdictions may have different titles for people who conduct the same work, making this information not particularly useful to Ecology. Recommend deleting "positions" REVISE as follows: "The staff training records to be kept include dates, activities or course descriptions, and names of staff in attendance."

Response to range of comments

1. Thank you for the comment. Ecology corrected the typo as this was meant to be “SWPPP” or Stormwater Pollution Prevention Plans. “Relevant SWPPPs” means those SWPPPs that would be relevant to the staff that may rely on them. All staff should be trained on the SWPPPs (or know where they are located and how to use them) for the locations that they work.
2. Ecology considered the suggestion to create a training section in the permit and ultimately did not develop it this permit cycle. We are working on developing a table that lists the training as a tool for Permittees.
3. Thank you. We corrected the sentence.
4. Ecology disagrees that including the position of staff in attendance for trainings would require a significant amount of extra time. Ecology understands that Permittees use different terms for various positions that receive training, but having position information recorded will help enable permit oversight. Ecology retained this requirement.

15.8 SWPPPs for heavy equipment maintenance or storage yards

Summarized comments

1. "A detailed description of the operational and structural BMPs in use at the facility and a schedule for implementation of additional BMPs." This section sounds as though additional BMP's will be required to be added to the facilities, is that the intent? If not please include

"Additional BMPs as determined during annual inspections". With no implementation time this requirement would put the Permittees out of compliance immediately.

2. S5.C.10.g - Include a date for when SWPPPs must be updated. The date must be on or after the date of SWMM implementation because the SWPPPs are required to be updated to comply with the new BMPs of Volume IV of the SWMMWW.
3. S5.C.10.g.i This section references the SWMMWW. This section does not appear to allow the use of equivalent manuals so the Permittee would be required to utilize all BMPS from the 2019 SWMMWW and not their own SWMM. Is this the intent?
4. What data or analysis does Ecology rely on to require SWPPPs for these types of areas, which do not otherwise require other NPDES permit coverage and thus appear to be required to have SWPPPs simply by virtue of ownership/operation by a Phase I Permittee?

Response to comments:

1. Ecology clarified this statement. Its intent is to identify when additional BMPs may be needed, and as the commenter notes this may occur during inspections. New BMPs may not need to be identified, and existing SWPPPs may be adequate. This permit language is not intended to add additional BMPs when they are not needed at a site but, when they are needed, the SWPPP must include a BMP implementation schedule.
2. Ecology provided a date by which SWPPPs must be updated, if needed, to include the required information. This date is aligned with the date to document the policies, practices, and procedures for municipal operations. Generic SWPPPs are typically found to be inadequate based on the need for site specific information, such as where BMPs are located, specific storage or uses on site. Generic SWPPPs that have been updated over the years to include site specific information may still be useful and need only minimal updates to include the required information listed in the permit.
3. This permit provision includes the statement that “a program approved by Ecology” may also be used and this is referring to the Phase I Ecology approved stormwater manuals and codes (program for controlling runoff from new and redevelopment).
4. Publically-owned heavy equipment maintenance or storage yards were not categorically required by EPA as needing coverage under Industrial Stormwater General Permits or any other site-specific general permit. However, Ecology and local governments have noted that the day-to-day activities and materials at these facilities were very similar to commercial truck and equipment repair facilities, sand and gravel facilities, and other similar pollution-generating “industrial” operations. If not properly managed, municipal maintenance and storage yards can generate stormwater discharges with elevated concentration of sediment, turbidity, nutrients, metals, petroleum hydrocarbons, and dissolved solids. As such, both the Phase I and Phase II Municipal stormwater permits require the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) to ensure that the facility staff utilize appropriate operational and structural Best Management Practices (BMPs) to control pollutants to the maximum extent practicable.

   Additional specificity was added to the 2019 Permits to ensure that municipal maintenance facility SWPPPS provide on-site staff with sufficient direction on 1) source control BMPs, 2)

facility inspections and record-keeping, 3) inventory of pollution-generating materials and equipment, 4) site mapping, 5) spill prevention and response, and 6)staff training.

Ecology believes that these additions provide more clarity and certainty to Permittees, and will help guide staff at municipal operations to successfully prevent stormwater pollution.

15.9 Recordkeeping

Comment:

1. S5.C.10.h. Record keeping "Maintain records of inspections and maintenance or repair activities by the Permittees."

    27. This section should be worded to apply only to stormwater treatment and flow control facility and catch basin inspection and maintenance to meet requirements of S5.C.10.a-d. For example, repair of conveyance system components is not required by the permit and such repair records should not be required to be retained under the permit.

Response to comment:

1. Ecology disagrees that recordkeeping only applies to O&M sections a-d, the requirement to retain records pertains to all required actions within the O&M component. The permit language was clarified to refer to the permit section.

15.10 Eastern Washington comments on O&M

Permit reference: **S5.B.6**

Commenters: Yakima County, E.WA Stormwater Group

Summarized comments

1. Ecology has removed language from this section that allows Generic Stormwater Pollution Prevention Plans (SWPPPs) that could be applied to multiple locations. Recommend this language be placed back in the new permit for this section. Generic SWPPPs are cost effective, time savings tools that that are especially useful for large jurisdictions that have numerous material storage areas, maintenance areas and heavy equipment storage areas to create pollution prevention plans for. We have also invested staff resources in revising these plans over the years and training local personnel on how to follow them. This change will now require Permittees to write many more SWPPPs which will use up even more staff resources in the future and will lead to confusion due to unneeded multiple SWPPPs.
2. Section S5.B.6.a Permittees shall implement a schedule of municipal Operation and Maintenance activities (an O&M Plan). Permittees shall review and, if needed, update the O&M Plan no later than December 31, 2021. We propose to change that date to August 1, 2024 to allow for more time to review and update the O&M Plans and SWPPPs.

Response to comments

1. Ecology removed the language allowing generic SWPPPs in all three of the Municipal Stormwater Permits. SWPPPs are inherently site specific, and unique to the facility and the activities that take place there. The elements now included in permit will help to prepare more informed SWPPPs

and lead to better facility maintenance and response to spills. If the existing SWPPPs – which have been revised over time (which does not sound like a generic SWPPP) include the information listed, no additional work is needed.

2. Ecology revised the deadline to December 31, 2022 to provide an additional year to update the O&M plans.

   28.

16.0 Comments on Source Control for Existing Development

This section applies to Phase I and Western Washington Phase II only.

Permit reference: Phase I Permit – S5.C.8

Western Washington Phase II – S5.C.8

Commenters: City of Auburn, City of Marysville, City of Oak Harbor, City of Edmonds, Clark County, City of SeaTac, Building Industry Association of Washington, City of Redmond, City of Bellingham, Thurston County, City of Bothell, City of Kent, City of Bellevue, City of Sumner, City of Brier, King County, City of Renton, City of Seattle, City of Sammamish, City of Lake Forest Park, City of Mukilteo, Skagit County, Black Diamond, Snohomish County, City of Olympia, City of Kirkland, City of Lynnwood, City of Vancouver, City of Tacoma, City of Snoqualmie, City of Shoreline, City of Port Angeles, City of Mount Vernon, City of Federal Way, City of Longview, City of Issaquah, City of Everett,

16.1 Comments related to legal authority and stormwater retrofits

Summarized comments

1. Remove this program from the Phase II Permit.
2. Provide the legal basis for requiring BMPs at existing businesses and properties where only a potential discharge may occur.
3. Is this a technical assistance type application or are we actually requiring installation of structural BMPs when we identify a site that has pollution generating sources?
4. The requirement for structural stormwater controls should be removed from the language from these sections (WWA Phase II S5.C.8.a.i.& b.i.) and be replaced with educational program that incentivizes structural retrofits on these existing non-conforming sites. If Ecology insists on keeping this structural retrofitting language, please provide the legal basis Permittees can use to justify implementation of this retrofitting requirement.
5. Local jurisdictions should not be required to implement this program, the state (Ecology or other agency) should be the responsible entity.
6. We suggest that a more appropriate way of mandating businesses to perform upgrades or retrofits would be through the state business license program. Requiring upgrades prior to reissuance of a business license would appear a more appropriate mechanism for forcing businesses to current codes and suggest Ecology pursue this avenue. Furthermore, health departments and other County agencies already maintain business lists with contact information

and already access many of the sites during other inspections; we suggest that cross training those staff and implementing requirements within those agencies would be more effective at achieving measurable outcomes.

7. Some of these options may be quite costly for retrofit. Outline an option for the required code to allow an Exception which specifies criteria, including but not limited to, prohibitive capital costs associated with such retrofits.

8. Ecology should provide funding to businesses/properties required to implement structural BMPs.

Response to range of comments

1. See the Fact Sheet for rationale for adding this program to the Western Washington Phase II Permit. The Phase II Source Control program is based on the Phase I program, required by 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv). Phase I (see 40 CFR 122.26 (d)(1)(v)(B) and (d)(1)(iv)(B)) and Phase II stormwater management programs (see 40 CFR 122.26(d)(2)(iv)(B)) are required to address illicit discharges into the MS4 system. According to EPA guidance, an effective IDDE program is more than just a program to respond to complaints about illicit discharges or spills. Permittees must proactively seek out illicit discharges, or activities that could result in discharges, and the Phase I Source Control program has been an effective program. Ecology has also seen success with the related (but different) voluntary Hazardous Waste Pollution Prevention Program (formerly Local Source Control) of which several Phase II Permittees participate. Permittees that participate in the Pollution Prevention Program may continue to do so, but may need to use alternative funding source in order to take necessary follow up actions. Ecology is expanding a known permit program that can achieve results by adding this program to the Western WA Phase II Permit.

2. Operational source control BMPs are required when the inspection finds that there are not adequate operational source control BMPs in place to prevent polluted discharges. Structural source control BMPs, or treatment BMPs/facilities are required when the operational source control BMPs are not adequate to prevent illicit discharges. Structural source control BMPs should be applied after finding operational source control BMPs to be inadequate. However, in some cases, treatment BMPs/facilities are more affordable or easier to implement than structural source control BMPs and achieve the same result, the permit language reflects the flexibility to select the more appropriate BMPs to achieve the same water quality result. This program is not intended to retrofit existing sites to meet new or redevelopment treatment standards – this program is focused on source control - first through applicable operational source control BMPs, then through structural source control, or treatment BMPs/facilities when needed to prevent illicit discharges. To further clarify applicable BMPs and to be consistent in language, Ecology revised Phase I and Phase II Permit language.

3. The NPDES regulations require Permittees to have adequate legal authority to implement the requirements of the permit. Some Permittees may need to revise and update local codes to have the authority to inspect, require source control BMPs at existing sites, and enforce, while others already have this authority through the IDDE program. The permit provides three years to develop and adopt appropriate legal authority. This program is a proactive measure to keep pollutants out of the MS4, further reducing pollutant loads to receiving waters.

4. Local governments are closely informed to the activities taking place within their jurisdictions. Permittees may find efficiencies in partnering with various entities or leveraging existing programs to develop the inventory, for inspections, or training (e.g. Health Districts, ISGP, IDDE, or restaurant inspectors).
5. Permittees are allowed discretion in determining the appropriate BMPs to require and the schedule by which to require compliance at existing sites. Permittees must prevent illicit discharges, which is when structural source control BMPs or treatment BMP/facility (or both) would be required – if operational source control BMPs are found to be ineffective. This program does not require retrofitting existing sites to meet new or redevelopment standards.
6. Ecology has limited state funding program eligibility to public entities, not private businesses, to remain in compliance with Article 8, sections 5 and 7 of the Washington Constitution, which prohibit gifts of public funds.

16.2 Ordinance development and politics

Summarized comments

1. Staff do not have sufficient control to pass an ordinance if politicians and the business community disagree.
2. Ordinance development takes considerable amount of time and process.

Response to range of comments

1. Municipal Stormwater Permits in the State of Washington have required municipalities to pass ordinances or other enforceable documents in many capacities, therefore Ecology disagrees that municipalities do not have sufficient control to pass an ordinance or other enforceable document for this requirement. During the preliminary draft permit process, we received comments that the original timeline of two years to adopt the ordinance was not adequate time to conduct outreach to the business communities and elected officials. Ecology is providing Permittees three years under the permit cycle to prepare for this program, with three and a half years until the inspection program must be implemented.

16.3 Local Source Control/ Cost of program/emphasize outreach instead

Summarized comments

1. The proposed regulatory source control program conflicts with participation with Ecology's Hazardous Waste Program's Local Source Control (now called Pollution Prevention Assistance).
2. There is a lack of resources to implement this program without additional funding.
3. The proposed permit requirement is not comparable to Ecology's Local Source Control Partnership, and should emphasize outreach instead of enforcement and requirements of structural BMPs.

Response to range of comments

1. Ecology disagrees that the permit requirements conflict with partnering with the Pollution Prevention Assistance program. Per S5.C.8.b.i, "*Implementation of source control requirements*

may be done through education and technical assistance programs, provided that formal enforcement authority is available to the Permittee and is used as determined necessary by the Permittee…" Permittees may continue to apply to enter into contracts with the Hazardous Waste Local Source Control Partnership (now called Pollution Prevention Assistance). Currently, there are three Phase I Permittees (Clark and King County, and City of Seattle) who are partners with the program while having had this Source Control requirement in effect for the Phase I Permit.

Funding provided through this program may be used for conducting Source Control business inspections as required in this permit until voluntary compliance by the business owner ends and the inspector must pursue progressive compliance strategy. Permittees who currently have a contract with the Hazardous Waste Local Source Control Program will not lose access to the funding provided by the contract due to implementation of this Source Control requirement as long as the funding is not used to support enforcement actions or other activities ineligible for reimbursement under this program. Those that receive funding through the PPA program, must also focus on the hazardous waste aspect of the program and conduct technical assistance that addresses all items on their checklist including hazardous waste management inside the businesses.

2. During the preliminary draft permit process, we received comments that the original timeline of two years to adopt the ordinance was burdensome. Ecology is providing Permittees three years under the permit cycle to prepare for this program, with three and a half years until the inspection program must be implemented. This timeline is set to provide sufficient time for Permittees to identify how to fund and implement the program in a manner which will meet the minimum requirements of the Permit.
3. Ecology acknowledges that this permit requirement extends beyond the voluntary compliance established in the Local Source Control Program (now called Pollution Prevention Assistance), but disagrees that the permit does not emphasize outreach and education. S5.C.8.b.i states that, "Implementation of source control requirements may be done through education and technical assistance programs, provided that formal enforcement authority is available to the Permittee and is used as determined necessary by the Permittee…" Furthermore, the requirement S5.C.8.b.iii.(a) makes education and outreach to all businesses identified as pollution generating by the Permittee the first step in implementation of this Source Control Program.

16.4 Delete "or violations of surface water, groundwater, or sediment management standards because of inadequate stormwater controls" and reference to treatment BMPs

Summarized comments

1. (S5.C.8.b.i) Delete "or violations of surface water, groundwater, or sediment management standards because of inadequate stormwater controls."
2. Delete requirement for "treatment BMPs/facilities, or both."

Response to range of comments

1. Ecology disagrees with the request to delete 'or violations of surface water, ground water, or sediment management standards because of inadequate stormwater controls'. This provision is intended to be consistent with S4. If a business is causing a known violation of the standards stated above, the municipality must require Structural source control BMPs, or treatment BMPs/facilities, or both, to prevent further pollution if operational source control BMPs do not prevent the violations.
2. Ecology disagrees with the request to delete 'treatment BMPs/facilities, or both' from the PH II permit. Treatment BMPs/facilities has been added to the PH I permit to be consistent with the PH II permit. Treatment BMPs/facilities are intentionally included to allow for flexibility where a treatment BMP may be more cost-effective than a structural source control BMP and achieves the same results.

16.5 Opposed to inspections at ISGP sites

Summarized comments

1. Permittees should not be responsible for inspecting sites that hold an Ecology issued NPDES permit. Remove the requirement for local governments to inspect and enforce at these locations.
2. If a facility violates the water quality standards listed in their permit, is that putting the city out of compliance with the other terms in this permit section?"
3. Ecology provide each jurisdiction with a summary of permit conditions for each non-municipal permit issued within the Municipal Permittees area of coverage.
4. Need guidance document on how to manage enforcement process for when this occurs. How are disagreements settled and which permits take jurisdictional lead?

Response to range of comments

1. Ecology disagrees with the suggestion to exclude sites covered by the Industrial Stormwater General Permit (ISGP) or other Ecology-issued NPDES permit. Permittees should play a direct role in controlling the discharge of pollutants to and from the Permittee's MS4, including those pollutants discharged by facilities with NPDES permits. Permittees may prioritize inspection sites as they see fit.
2. No, per S5.C.8.a.iii, municipal Permittees in compliance with the terms of the permit are not responsible for water quality standards violations or other receiving water impacts caused by discharges from facilities covered by the ISGP or other Ecology-issued NPDES permits.
3. For the suggestion that Ecology provide each jurisdiction with a copy of permit conditions for non-municipal Permittees within the jurisdiction; most of these facilities are covered under the Industrial Stormwater General Permit (all facilities have same permit conditions), the ISGP Permit is available online, specific facility details are found in Ecology's PARIS database. Any other Ecology issued permits are also available for review and download through the PARIS database.
4. Ecology has the lead role in implementing the ISGP and the local jurisdiction has the lead role in implementing their ordinances. If local ordinances require something more stringent than the

ISGP, the jurisdiction takes the lead. If the ISGP is more stringent than local ordinances, the jurisdiction is not responsible for enforcing the requirements of that permit. Ecology encourages coordination between ISGP inspection staff and the local jurisdiction on inspections.

16.6 Clarification on pesticide/IPM

Summarized comments

1. Clarify where the Permittee must apply practices to reduce polluted runoff from the application of pesticides, herbicides, and fertilizers discharging into MS4s owned or operated by the Permittee – does this include existing subdivisions, or just Appendix 8 listings?
    a. Suggest you edit 8.a.i to include a statement such as ... associated with existing land uses and activities
    b. Recommend changing the language to read: Practices to reduce polluted runoff from the application of pesticides, herbicides, and fertilizer discharging into MS4s from land owned or operated by the Permittee.
2. S5.C.8.a.iv – How is this permit requirement to be implemented? Does it apply to the same businesses and/or properties, above, or to other sources/parts of the City? How is this different from behavior change outreach described in S5.C.2.a.ii?

Response to range of comments

1. Permittees are responsible for controlling discharges coming into their MS4. Permittees may go beyond relying on licensing requirements to consider application practices in their source control inspection program.
    a. This language is already in S5.C.8.a.i.
    b. Ecology clarified S5.C.8.a.iv to mean that Permittees need to apply practices to reduce polluted runoff from sites identified in their inventory. Part of the Source Control Business Inspection program should include a component that notes areas where pesticide, herbicide, or fertilizer application occur on these properties which may impact stormwater runoff that enters the Permittees MS4. Permittees should already be using the same protective application methods on their publically owned and maintained lands, per the Applicable Operational BMPs established in the 2014 SWMMWW, IV-2.2.S411 BMPs for Landscaping and Lawn/Vegetation Management.
2. The behavior change program may be used to help meet the source control requirements, but the provision in S5.C.8 intends that source control BMPs be considered at sites associated with commercial and industrial sites in the inventory that apply herbicides, pesticides, and fertilizers in areas that discharge to the MS4.

16.7 How often to update business inventory list

Summarized comment

1. How often does the inventory of businesses and properties to inspect need to be updated?

Response to comment

1. For Phase II Permittees, the inventory is required to be compiled no later than August 1, 2022. The inventory is not expected to be updated during the permit term, except when the Permittee deems necessary. For Phase I Permittees, the inventory should be updated once every five years.

16.8 What should be included on the inventory list

Summarized comments

1. The comprehensive list of businesses and activities that are potential sources of pollutants in Appendix 8 will capture many categories and individual businesses and properties (e.g. real estate office, bookstore, early-learning center) that do not have outdoor pollutant-generating sources and are not a risk to water quality impairment. This may result in a very large source control inventory of which the Permittee is required to inspect 20% per year. Reduce the inventory to the types of businesses that will have outdoor activities deserving of the level of effort this program will require.
2. Exclude businesses that only conduct work indoors.

Response to range of comments

1. Ecology refined the number of NAICS classifications to those with the greatest outdoor pollution potential to waters of the state based on NAICS codes listed in the SWMMWW Vol 4 Appendix IV-A, information from Hazardous Waste's Pollution Prevention (formerly Local Source Control program) inspection database, a recent Stormwater Action Monitoring effectiveness study on source control, and EPA's MS4 Permit Improvement Guide. This listing excludes businesses that only conduct work indoors or where there is limited potential for significant outdoor pollution generating sources. If a business is inspected and the Permittee determines that the business does not have the potential to pollute, it may be removed from the inventory. Permittees may add businesses or sites to their inventory if a particular site has activities that are outdoor pollution generating, as applicable in their jurisdiction.

16.9 Inventory - Add to Appendix 8

Summarized comments

1. Suggest adding parks, urban agriculture, demolition of any structure, and any landfill or excavation.
2. It would be helpful if the appendix included links to the codes and numbers listed in the table so they can be easily looked up for further details; and the titles in the table header should match the names in the first paragraph.

Response to range of comments

1. Permittees may add outdoor pollution generating businesses or sites to their inventory as applicable in their jurisdiction.

2. Ecology cannot link to outside websites in the Permits, as we do not have any control as to whether that website will remain in existence. The NAICS codes are readily available on the internet.

16.10 Inventory– Mobile and home-based businesses

Summarized comment

1. S5.C.8.b.ii – Clarify that a Permittee has the flexibility to decide if all businesses (home-based and other) identified in Appendix 8 may not need to be included in business inventory due to not having outdoor pollutant-generating sources.
2. We do not include mobile-based businesses not located within unincorporated County in the inventory. Remove this reference from the inventory section.

Response to comment

1. Home-based businesses are not required to be included in the inventory unless a complaint is received and an inspection reveals that the business has outdoor pollution potential. If a business does not have outdoor pollution generating sources, it does not have to be included in the inventory. Complaint based inspections are mandatory and may be counted toward the 20% inspection requirement.
2. Ecology removed the reference to mobile businesses in the permit language as these will still be responded to if a complaint is received, or through the IDDE program. Areas where multiple food trucks, or more stationary mobile businesses, operate should be considered for the inventory.

16.11 Complaint-based inspection and IDDE crossover

Summarized comments

1. How are complaints related to the source control program different from complaints received for the IDDE program? How should complaints be tracked and by which program?
2. Provide a definition of what a "legitimate complaint" is because it is too vague as written.
3. Can we get credit for IDDE inspections (S5.C.5.d.i) with our source control inspections?
4. We request that revisions proposed in this section be migrated to the IDDE section of the permit, and all 'source control' sections be removed in their entirety.

Response to range of comments

1. A single complaint may apply to more than one program. Not all IDDE complaints lead inspectors to a business location, so there is not a subsequently required business inspection. If a complaint of an illicit discharge is traced/verified to be coming from a business site where outdoor pollution generating activities are occurring, you would proceed to conduct a source control business inspection. You would report your IDDE investigation/response to meet your IDDE tracking requirements, and count the business inspection toward your Source Control 20% inspection requirement. It does not matter if the business is on your inventory list already or not.

2. Ecology removed the word "legitimate" as it is not consistent with language elsewhere in the permit, such as the IDDE requirements. The intent is that credible complaints, those that are deemed that a response is required, need be acted on and reported. Complaints may be received by Permittees either directly from citizens, or through external referrals, such as ERTS.
3. If a Permittee implements IDDE procedures and traces an illicit discharge to a site where they then conduct a Source Control Business Inspection, then yes, both the IDDE program and the Source Control Business Inspection Program would be credited.
4. Ecology disagrees with this request to migrate source control requirements to the IDDE section. The two programs may intertwine, but for clarity sake, the permit describes IDDE and Source Control as separate programs with discrete purposes. Permittees may operate the programs as one if that is best suited for the jurisdiction.

16.12 Who has inspection authority?

Summarized comments

1. Please define who has source control inspection responsibility, and possibly authority to require BMP implementation when a Phase I (or Phase II) owns a property within the jurisdiction of another Permittee's.
2. Who has the authority when the property is within one permitted jurisdiction, but the property discharges to another Permittee's MS4?

Response to comments

1. When an entity covered under an MS4 Permit owns a facility that is located within another Permittees geographic area of permit coverage, the S5.C.8, source control inspection responsibility, falls to the Permittee where the facility is physically located. For example, if a County-owned facility is located within a City's geographic area of coverage, the City is responsible for source control inspections, and has the authority to require BMPs for pollutant generating sources that could discharge to its MS4.
2. Ecology agrees that Permittees only have regulatory authority to address sources located within their respective jurisdictional boundaries, except when an illicit discharge is occurring and the two jurisdiction may need to coordinate to eliminate. S5.C.8.a applies to areas that discharge to MS4s.

16.13 Denied entry for an inspection counts towards the inspection performance goal

Summarized comment

1. Please add language stating that Permittees may count denial of access to properties towards the 20% annual inspection performance standard.

Response to comment

1. Ecology added permit language to clarify. If a Permittee attempts an inspection and is denied entry, that does count towards meeting the inspection rate. Further, inspections based on

complaints also count towards meeting the inspection rate. S5.C.8.b.iv.(c): Permittees must retain records of sites that are not inspected because the owner denies entry.

16.14 Inspections and TMDL cross-over

Summarized comment

1. Some Permittees are required to conduct inspections based on requirements in Appendix 2. Recommend: The Permittee may select which sites to inspect each year, **except to the extent specific business inspections are required as set forth in Appendix 2**, and is not required to inspect 100% of sites over a 5-year period.

Response to comment

1. Requirements in this section of the permit do not nullify additional requirements set forth in Appendix 2. If a Permittee is required to do business inspections for a TMDL requirement outlined in Appendix 2, that information could be used in their prioritization process, and they may use that inspection to go towards their 20% inspection rate. Ecology does not agree that a change in language is needed.

16.15 Guidance needs/outreach info specificity

Summarized comments

1. Provide guidance regarding how tailored the outreach information provided to specific SIC codes need to be (or is that up to the jurisdictions)? Who should be informed? Please clarify in FAQ.
2. Drop this requirement and let Education and outreach take care of outreach to businesses and let the source control component focus on site visits. It is difficult to provide meaningful information to businesses outside of the routine site visits. Consider whether the current approach is appropriate given the move toward CBSM in Education and Outreach.

Response to range of comments

1. Outreach is an important part of the Source Control program, and Ecology feels it is important to specify, in this section, that potentially pollution-generating businesses have the education needed to prevent pollution from coming into contact with stormwater. Jurisdictions can determine how tailored the information needs to be for the program to be effective.

16.16 Clarify terms or permit conditions.

Summarized range of comments

1. Language in several subsections refers to either "businesses and/or properties" OR "sites." If these terms are equivalent, only pick one. It is unclear if "site" is different from "business and/or property."
2. S5.C.8(b)(iii)(b): In the first sentence the word "assure" is vague and does not provide an objective benchmark for success. We suggest replacing "assure" with "assess."
3. Are areas that discharge directly to a waterbody or through a UIC excluded from the inventory of businesses? Often, a UIC will have an emergency overflow that could flow into our MS4.

4. S5.C.8.a. – Is the term "discharge" being used consistent with the definition of the 2014 SWMMWW (or proposed definition in the 2019 SWMMWW)? Please provide definition of "discharge" in permit's Definitions and Glossary.
5. Define "commercial and industrial properties which have the potential to generate pollutants to the Permittee's MS4". It is unclear if this definition is meant to be defined by (a) and (b).
6. Define "other pollutant generating sources", "mobile business", "home-based businesses", and "multifamily properties". Consider removing examples and such as.

Response to range of comments

1. Ecology found that the terms used to describe properties, facilities, and sites were synonymous. Based on the calls for simplification, the section was revised to use site when referring to commercial or industrial properties. 'Facility' was also a term being used to describe a site or property, therefore this term was revised to site as well.
2. Ecology agrees to clarify the word 'assure' with 'assess' – BMP effectiveness.
3. Permittees only need to include businesses that discharge to your MS4. Emergency overflows that would discharge to the MS4 should be included on the inventory, however, these sites may have a lower priority for inspections.
4. Discharge is used throughout the permit and generally means runoff leaving new development, redevelopment, or an existing site via overland flow, built conveyance systems, or infiltration facilities.
5. S.5.C.8.b.ii is defined by (a) and (b).
6. Ecology has not further defined the terms requested. Examples provide a Permittee with Ecology's intent, without removing flexibility.

16.17 Source control BMPs and resources

Summarized comments

1. We request the second paragraph of S5.C.8.(b)(i) to also include direction for using other sources for source control BMPs where the SWMMWW or equivalent manuals are lacking guidance.
2. What is meant by treatment BMPs, and what if the local adopted manual does not include any in its source control section? Do treatment BMP's mean those that are used for minimum requirement 6: Water Quality, or those that are mentioned in the Stormwater Pollution Prevention Manual?
3. The proposed approach is problematic because there is no Ecology guidance on structural source control retrofits for existing buildings/sites. Per the draft permit language, structural source control BMP's "must be required" if operational source control BMPs do not prevent discharges or violations. This would trigger a site retrofit and there is no Ecology design guidance for retrofits, only guidance for new construction. Removing this language from the draft and emphasizing the existing illicit discharge enforcement requirements as a best fit for any identified issues found in the course of the outreach program would be a better fit; although additional guidance on retrofits and source controls in the Stormwater Manual is also needed.

4. Please restore clear direction for MS4 Permittees about which commercial and industrial "pollutant generating sources" and which BMPs Ecology intends that Phase I Permit requires to be part of local regulation under S5.C.8.b.1.
    - Change to read as follows: "The requirements of this subsection are met by using the source control BMPs in Volume IV of the *Stormwater Management Manual for Western Washington*, or a functionally equivalent manual approved by Ecology [[ADD]] and listed in Appendix 10, Part 1, with no additional changes required for equivalency.
5. Appendix 8 includes the group description of "Automotive Dealers and Gasoline Service Stations". When "S409 BMPs for Fueling at Dedicated Stations" is referenced in the draft 2019 SMMWW, it is discovered that the text "For New or Substantially Remodeled Fueling Stations" is immediately above the list of Applicable Operational BMPs. This language is likely to cause disagreement between the MS4 Permittee and fuelers that would fall under inspection and enforcement.
6. S5.C.8.b.i – It is stated that the source control requirements are those contained within Volume IV of the SWMMWW (which is the 2019 SWMM). Is an existing business meant to be held to the standards of each new SWMMWW and its new requirements for Source Control if it is already meeting the current standards?

Response to range of comments

1. Ecology agrees with the suggestion to add language providing guidance for instances where the SWMMWW lacks BMPs to address certain activities/sources. As such, S5.C.8(b)(i) has been revised to include language allowing this use of alternative/additional Source Control and/or Treatment BMPs other than those specified in the SWMM or equivalent, as necessary to address pollutant generating sources.
2. Treatment BMPs is defined in the SWMMWW as "A BMP that is intended to remove pollutants from stormwater. A few examples of treatment BMPs are Wetponds, oil/water separators, biofiltration swales, and constructed wetlands." While new development and redevelopment scenarios may trigger treatment, and therefore the use of specific Treatment BMPs from Volume V of the SWMMWW, ***retrofitting*** stormwater treatment at existing properties may involve the use of non-SWMM or non-TAPE approved BMP approaches.

    29. The following excerpt from Volume V of the SWMMWW captures Ecology's position on the use of manufactured treatment devices in retrofit scenarios at existing properties: "*To achieve the goals of the Clean Water Act and the Endangered Species Act, local governments may find it necessary to retrofit stormwater pollutant control systems for many existing stormwater discharges. In retrofit situations, the use of any BMP that makes substantial progress toward these goals is a step forward and is encouraged by Ecology. To the extent practical, the performance of BMPs used in retrofit situations should be evaluated using the TAPE or CTAPE protocols.*"

    Permittees may find a treatment BMP to be more effective than a structural source control BMP and achieve the same or better result, Permittees may determine which BMPs should be applied when operational source control BMPs do not prevent illicit discharges. When treatment BMPs are required, the Permittee may apply best professional judgement to ensure that any

necessary treatment is reasonably expected to meet the pollutant reduction targets in order to prevent illicit discharges, or violations of water quality standards.

3. Permittees will determine during inspection, which BMPs are most appropriate to apply, starting with operational source control BMPs. The manual allows BMPs to be adapted in retrofit cases.
4. Ecology disagrees that this permit language change is needed. Ecology will review the Source Control section of Phase I manuals for equivalency with the 2019 SWMMWW.
5. Ecology agrees that clarification is needed in respect to the source control requirements for dedicated fueling stations. As such, Ecology has revised SWMMWW Vol IV S409, to move the heading [*For New or Substantially Remodeled Fueling Stations*] directly above the "Structural Source Control BMPs" section. As such, the Operational Source Control BMPs are required for all fueling stations, while the Structural Source Control BMPs are only required for New or Substantially Remodeled Fueling Stations.
6. Regarding the suggestion to specifically reference Volume IV of the SWMMWW, Ecology believes that there may be manuals in use by local governments that do not follow the same formatting convention (e.g., use Chapter 4, rather than Volume IV; etc.), so Ecology has decided to retain the existing language: "The requirements of this subsection are met by using the source control BMPs in the SWMMWW,…"
7. Regarding the question about S5.C.8.b.i – "Is an existing business meant to be held to the standards of each new SWMMWW and its new requirements for Source Control if it is already meeting the current standards?" The applicable operational source control BMPs must be implemented according to each new SWMMWW, in accordance with each reissued permit. However, the existing business would only need to implement the structural source control and/or treatment BMPs if the operational source control BMPs were allowing illicit discharges and/or WQ standards violations.

16.18 Enforcement

Summarized comments

1. The section makes it sound as though a single follow-up inspection requires the Permittees to take enforcement action. Some issues take multiple site visits to achieve compliance. Request the red text be changed to "after a reasonable attempt at voluntary compliance"

Response to comments

1. Ecology has addressed the issue of allowing compliance within a "reasonable time period" in S5.C.8.b.iv, however, Ecology agrees that language in S5.C.8.b.iv(b) may suggest non-compliance after a single follow-up inspection requires mandatory enforcement. The permit language was clarified to reflect the potential for multiple follow up inspections.

16.19 How to refer a case to Ecology?

Summarized comments

1. What is the procedure for referring a non-emergency violation of local ordinances to Ecology? (S5.C.8.b.iv(d))
2. Permittees should be allowed to refer violations at NPDES permitted or UIC regulated sites to Ecology under any circumstance. In particular if there is an emergency that requires environmental clean-up.

Response to comments

1. Permittees should contact their regional Stormwater Permit Implementation Planner, listed on the public Ecology website. Permittees will need to submit a written request for assistance, the notification shall include all information required per S5.C.8.b.iv(d).
2. There is no language in the permit restricting Permittees from referring sites to Ecology that are also covered by another NPDES permit or UIC regulations. Emergency response needs are covered by G3 requirements.

16.20 New program requires more time, extend implementation timeframe to next permit cycle.

Comment

Source control inspection and enforcement will be a significant increase in time, staffing and cost to Phase II Permittees. We agree that this is an important practice to help prevent pollution of stormwater from existing businesses but feel that the time commitment required to implement a successful program will mean that other new Permit requirements (such as the Stormwater Management Action Planning [SMAP], and Public Education and Outreach using social marketing practices) will not receive the attention that they require to be successful. To ensure that all of these new Permit requirements are successful, we suggest that implementation of source control inspection and enforcement be extended into the next Permit cycle.

Response to comment

Ecology agrees that source control is an important practice to help prevent pollution of stormwater. Because of this, Ecology disagrees that this requirement should be delayed until the next permit term. Ecology considers the overall level of effort each Permit presents to municipalities and allows three years to adopt the ordinance, and an additional four months to begin inspections. Ecology also provides guidance and grant funding to assist with implementing the permit requirements, and technical assistance from the regional office is available.

16.21 Typos

Comments

1. S5.C.8(a)(ii): Typo--publicly is spelled incorrectly. Add "institutional" to commercial and industrial properties.

2. At Phase I Permit S5.C.8.a.ii and -b.ii, please correct typo: Substitute "publicly" for "publically."
3. S5.C.8.b.iv(a) - Add a comma after "action(s)". Include email as a follow-up action option.
4. S5.C.8.b.iv(b) - It should say "....municipal code or ordinances "instead of "municipal code and ordinances"?
5. Phase I Permit App. 8 p.1 Typo The reference to "S5.C.7.b.ii" is now inaccurate with Ecology's reorganization. The reference should be to "S5.C.8.b.ii.

Response to comments

1. Ecology agreed with the recommendations and made edits to the permit language.

16.22 Request for FAQs on source control program

Summarized comments

1. We would also like to request an FAQ from Ecology for questions surrounding the Source Control Program for Existing Development.
2. Most businesses operate in buildings they lease rather than own. As such, a requirement for structural BMPs will possibly trigger lawsuits between building owners and lessees as to who should pay for the BMP. Businesses won't want to pay for capital upgrades to a facility they don't own; property owners will not want to pay for upgrades that weren't required at the time their facility was built, and are only required because of a particular tenant. Can Ecology address these issues in the FAQ guidance document?

Response to comments

1. Ecology intends to provide an FAQ on the Source Control Program for Existing Development. This will be developed after reissuance.

17.0 Comments on Structural Stormwater Controls

This section applies to the Phase I Permit.

Phase I Permit: S5.C.7

Commenters: Michael Martinez, Clark County, Futurewise, City of Redmond, Pierce County, WEC, WEC, PSK, Futurewise, King County, City of Seattle, Snohomish County, City of Tacoma, Washington State Department of Transportation, Puget Soundkeeper Alliance, The Nature Conservancy

17.1 General

Summarized comments

1. The following language changes were suggested:
    a. Retrofit incentive points title should be changed to SSC Program Points
    b. Any occurrences of incentive points should be changed to retrofit incentive points

c. "Qualifying projects reduce or prevent negative water quality impacts from MS4s." Consider revising to state" "Qualifying projects should aim to reduce or prevent negative water quality impacts to receiving waterbodies from MS4s."

d. S5.C.7 30: "The program shall address impacts that are not adequately controlled by the other required actions of the SWMP.
Proposed Language: The program shall address impacts that are not adequately controlled by the other required actions of the SWMP (S5.C.5)

e. We recommend moving the project description language from S5.C.7.a to Appendix 12 and in section S5.C.7.a refer the reader to the project descriptions found in Appendix 12.

f. S5.C.7.c: "With each annual report, each Permittee shall provide a list of planned, individual projects scheduled for implementation during this permit term. This list must include at a minimum the information and formatting specified in Appendix 12 .
Recommended language: With each annual report, each Permittee shall provide a list of planned, individual projects scheduled for implementation during this permit term for the purpose of meeting S5.C.7.d. This list shall include at a minimum the information and formatting specified in Appendix 12.

2. The Permit only contains 10 Qualifying Project Types as LID projects were combined with treatment and flow control. This guidance contains 11 types. Ensure consistency amongst documents

3. Governor's Orca Recovery Task Force Draft contaminants recommendation number 31, to reduce stormwater threats and accelerate clean-up of toxics that are harmful to orcas, by actions including: "identify toxic hotspots in the stormwater entering Puget Sound. Prioritize these for retrofits and/or redevelopment to meet current standards." Will Ecology implement the Task Force's recommendations in this round of Permits?

Response to range of comments

1. Ecology appreciates the editorial and clarifying language suggestions. Suggestions 1.a, and 1.f were adopted.

2. Ecology agrees that there should be consistency in language between the Permit and Appendix 12. Project types listed in the Permit are now listed in the same format as Appendix 12.

3. The SSC program has an element requiring Permittees to prioritize projects. Ecology would expect that identifying hotspots for stormwater pollution in urban areas would be a part of this prioritization process. Ecology would also point to the new Stormwater Planning requirements. More discussion can be found under the Stormwater Planning section.

17.2 Defined Level of Effort

Summarized comments

1. Ecology should require a more ambitious "level of effort" for structural stormwater controls from its Phase I Permittees. While Ecology's proposed introduction of a retrofit incentive point system appears a promising step, it seems that asking Permittees to meet only the level of effort

managed by the "average" achieved during the last permit cycle may aim too low. Permittees in the coming cycle should match the level of effort of their better-performing peers.

2. We recommend that Ecology not include a defined level of effort in the 2019-2024 Permit. Stormwater managers may be put in the position where they need to prioritize getting "points" over directing investments for the highest priority environmental outcomes. That being said, Ecology's proposed "ramp-up" approach to the required points during the 2019 permit cycle reduces the risk that the point system will significantly drive Phase I priorities during the 2019 permit cycle. However, in future permit cycles (once the ramp-up period is over), the risk is likely to increase significantly."
3. What is the point in time at which a Permittee "achieves" its points? Must Ecology affirmatively approve "achievement" of points? How does a Permittee document "achievement"? Does Ecology expect Permittees to submit requests for Ecology's approval of points? What if a Permittee disagrees with Ecology's determination? What process is available to a Permittee to address this?
4. If Ecology intends to include a defined level of effort in the 2019 Permit, a 4.5-year Performance period is recommended, rather than the proposed 3.5-year Performance Period. A 4.5-year Performance Period is more reflective of performance during the 5-year permit period.
5. Both Phase I and Phase II Permittees should have a defined retrofit requirement. We suggest a tiered approach to retrofits for Phase I and II Permittees based on population, with a 1,300 point requirement for all Phase I Permittees and any Phase II Permittees that now meet the original Phase I population threshold of 100,000 or more. Medium-sized Phase II Permittees should have a points requirement of 800 and small Phase II Permittees should have the lower points requirement of 500.
6. Ecology has lowered the points requirement from the 1,300 points proposed in the Preliminary Drafts, to 300 points. Phase I Permittees proved themselves capable of performing retrofits valued at more than 300 points in their comments letter dated May 16, 2018. Under the current scheme of 300 retrofits points, some Permittees will do less retrofits in the 2019 Permit cycle than they did in the 2012 Permit cycle. This does not comport with the anti-backsliding provisions of 33 U.S. Code § 1342(o) or the Clean Water Act.
7. Grant funding will be crucial to a Permittee's ability to achieve the target of 300 incentive points, but environmental benefit, not availability of grant funding, should drive project prioritization.
8. For the remainder of the Permit term a Permittee apparently gets no credit for any SSC activities, which seems like a disincentive for a Permittee to devote any resources to those activities. The County assumes Ecology did not intend to incentivize inaction, which makes Ecology's insistence on such an early deadline confusing.
9. Ecology has proposed untested and, in a number of cases, unclear metrics for determining points per project or activity.
10. Commenters suggested multiple incentive point modifications.

Response to range of comments

1. Ecology's decision to require a minimum level of effort stems from past PCHB rulings (PCHB No. 07-021) and sets a standard for evaluation of a Permittee's compliance with MEP and AKART standards.
2. The Federal Rules (40 CFR 122) do not require a retrofit program for small MS4s (Phase II Permittees and Secondary Permittees). Ecology is implementing the defined level of effort for Phase I Permittees during this permit term in order to make informed decisions regarding possible future retrofit requirements for all municipal stormwater Permittees.
3. The 300 minimum point level of effort is based off Ecology's analysis of data from the 2013-2018 permit; Permittees provided point estimations of the projects completed during the 2013-2018 permit and best professional judgement. The points accrued shall be documented and submitted as described in Appendix 12. Ecology has not extended the deadline for point accrual. The reporting timeline was considered in setting the current level of effort.
4. Ecology disagrees that lowering the minimum point level to 300 violates anti-backsliding provisions, as there was no level of effort set in the previous permit.
5. Ecology agrees that projects under this section should be eligible for grant funding. Projects completed to meet SSC requirements are eligible for grant funding.
6. Ecology made minor changes to SSC Program Points, and clarifications of projects. See the discussion under Appendix 12 for more detail. Ecology expects future permit requirements will be informed by the recommendations from the stakeholder process held during the upcoming permit term.

17.3 Stakeholder Process

1. A large and more formal stakeholder process during the 2019-2023 Permit is needed to improve S5.C.7 requirements through scientific and stakeholder input. This is necessary to ensure that the projects types, their descriptions and requirements and the incentive point factors reflect best available science and stormwater management priorities for the state's stormwater structural retrofit programs and associated receiving waters as S5.C.7 and App 12 will drive Permittee's S5.C.7 priorities and investments. It is suggested to use a similar approach to that used by Ecology for the development of the 2013 Permit LID requirements and establish a committee or comparable process to update the S5.C.7 documentation and lead to a permit modification or change in the next permit term.
2. Pierce County recommends a more cost-to-benefit type of system be developed. We recommend using a structural BMP performance-based metric that considers dollars spent relate to stormwater flow and/or pollutants reduced. The use of concepts and terms everyone understands (e.g. dollars spent, gallons of stormwater reduced or treated and tons of sediment reduced) allows investments to be clear and meaningful to the broadest audience. What did we spend, what did we get for it, and how was that SSC investment linked to attaining water quality standards in the Permittee's receiving waters (i.e. why did it matter)?

Response to range of comments

1. Ecology agrees with, and is committed to implementing, a more formal stakeholder process to inform future iterations of this requirement. See additional discussion in the Appendix 12 section.

17.4 Guidance

Summarized comments

1. We recommend that elements of the guidance be clarified and included as permit language and as fact sheet language or added to Appendix 12.
2. Throughout the document ensure consistency amongst the use of terminology, specifically BMP, facility, and project.
3. For all calculations there should be rounding guidance. For example, at which stage of the calculation should rounding occur; how many significant digits; how many decimal points, etc.
4. The Guidance should specify that restoration of forest cover includes the urban forest (street trees) and not just bare land or natural areas. Additionally, the Guidance should specify that native evergreens capture more water than deciduous species, so restoration efforts that favor evergreen species should be encouraged.
5. It is stated, "Ecology does not intend SSC projects to mitigate or compensate for previous impacts from MS4s." This statement is confusing as some of the qualifying project types such as maintenance, restoration, and floodplain connection directly compensate for previous impacts from the MS4." Remove statement or provide additional language as to the intent of this statement.

Response to range of comments

1. Sections of the guidance document were revised and moved in to Appendix 12 to provide more clarity on the requirements of this section.
2. Ecology ensured the consistent use of terminology for clarity. See discussion under the Appendix 12 section for more details.
3. Rounding should occur at the end of the calculation, and to the nearest tenth decimal.
4. Ecology is currently not including street trees in the calculation of forest cover. However, the area of the planter box can be calculated as ‘removal of impervious surface’.
5. Ecology removed the statement, "Ecology does not intend SSC projects to mitigate or compensate for previous impacts from MS4s." for clarity.

17.5 Planning/ Prioritization Process

Summarized comments

1. S5.C.7.a - It is unclear from the Permit language if the applicant has to choose to utilize projects types from S5.C.7.a.i before choosing from S5.C.7.a.ii. It is recommended to remove the two

sections and allow Permittees to freely choose from any section as it has been proven that all options will provide some benefit to receiving waters.

2. Remove public involvement and budget from the planning process requirements.

Response to range of comments

1. The Permit is divided into two sections to clarify that those projects listed under S.5.C.7.a.i are all required to be considered when planning projects. Projects listed under S.5.C.7.a.ii are allowed, and encouraged to be considered, but are not required.
2. Ecology does not agree that the public involvement and budget line items should be removed from the planning process.

17.6 Partnerships

Summarized comments

1. The permit should explicitly allow/encourage Permittees to form innovative partnerships with departments of transportation, private organizations, nonprofit entities, etc. to leverage funds, e.g., for GSI retrofits, build capacity and meet water quality goals more efficiently.
2. Can jurisdictions use partnerships to meet the S5.C.7 requirements? For example, can the City of Tacoma contribute funds to a City of Seattle project to obtain credits?

Response to range of comments

1. Ecology is not opposed to innovative partnerships to meet permit requirements. However, only projects completed within a Permittee's jurisdiction can be tallied for SSC Program Points.

17.7 Appendix 12

Summarized comments

1. The following suggestions were made for Table 1:
    a. Remove the 'cost estimate' column.
    b. Remove 'lat/long' column
    c. Specify which geodetic system 'lat/long' should be based on.
    d. Include columns for each item needed for the equivalent area calculation.
    e. Include a column defining a projects start and end year.
2. Request to remove footnote '2' because it is unknown if activities conducted under the watershed plans provide additional benefits.
3. Concerns about the removal of "capital projects related to the MS4 which implement an Ecology approved basin or watershed plan" as an eligible category of actions/improvements.
4. Recommend counting complete and maintenance stage projects only.
5. "Floodplain reconnection projects on water bodies that are not flow control exempt per Appendix 1 (S5.C.6.a.ii(3)) – Qualifying floodplain reconnection projects will have an MS4..." Why

include the language of not flow control exempt? Floodplain reconnection projects in areas such as the Puyallup River (which is considered to be flow control exempt) can have significant benefits.

6. It is unclear if Category 11 only includes street sweeping and line cleaning. Under this category can Permittees develop their own incentive factors associated with other project types?
7. Ecology appears to require two rounds of sweeping per year over a particular route to count toward SSC incentive points. Must both rounds be with a high-efficiency sweeper or is it sufficient that the second round only utilizes a high-efficiency sweeper?
8. Both industrial roadway, and rural roadway projects receive the same points, however the industrial roadway project most likely has a greater environmental benefit, and is also likely to cost significantly more. This incentivizes cleaning the cheaper, more rural and less polluted roadways.
9. Consider increasing the value of street sweeping and line cleaning as the benefits are similar to other stormwater technologies designed to remove pollutants.
10. For line cleaning, units should be specified as feet, as per Appendix 12 Table 2. The guidance of "miles" (SSC Guidance, p. 5, paragraph on Line Cleaning Programs) should be changed to "feet."
11. Unit for impervious surface removal should be specified for project type 10. Recommend three (3) retrofit incentive points per 1,000 square feet.
12. Ecology should clarify that incentive points for Project Type 10 (permanent removal of impervious surfaces) are allowed together with incentive points for Project Type 5 (property acquisition) for the same project.
13. Please explain why maintenance level points are only available to projects that remove impervious surfaces (Project Type 10).
14. It is unclear what land use types and percentages of cover assumptions (ex. 65%, impervious) to use in the equivalent area calculations. It is recommended to provide a standard percent impervious area coverage based upon land use area (residential, commercial, etc.) so that calculations amongst jurisdictions are similar.
15. Could other types of habitat restoration fit, such as native prairie restoration that do not have complete forest cover but would be restored to their native condition? Clarify the requirements for qualification under these types.
16. Consider making the retrofit incentive for property acquisition higher because it has a potentially very large benefit.
17. We strongly recommend that Permittees receive points based on an increase in tree canopy cover, rather than acres planted. Ecology should award 0.25 points per acre where future canopy cover has been restored to at least 40% above current conditions.
18. In-channel projects should be allowed if they address bank erosion problems caused directly by proximity to stormwater outfalls.

19. It is unclear if, to be considered LID, the BMP must provide infiltration. Provide additional guidance or language if that is the intent. This comment applies in reverse as well when considered flow control facilities -does only the volume count toward the flow control portion.
20. For runoff treatment, can non-pollution generating areas that drain the facility be included in the equivalent area calculations?
21. Under the Runoff Treatment Section, oil control is specifically not included as an example for projects that could result in runoff treatment benefits. Is this intentional?
22. A Runoff Treatment Project that provides basic treatment receives a 1.5 Incentive Factor while a project that provides enhanced treatment receives a 1.75 Incentive Factor. That enhanced treatment should receive more points may be valid, why 0.25 more? Why not 0.5 more? Or 0.1 more?
23. We propose that in the Structural Stormwater Control Projects, Permittees are awarded some incentive points (1.0, equivalent to removal of impervious surfaces) for reducing the pollution from cars on their roadways.
24. Ecology should provide an alternative to the SWMMWW flow control standard for urban creeks that have had at least 40% total impervious area (TIA) since 1985 by allowing the use of an equivalent Ecology approved manual.
25. Allowing more points for larger facilities that are designed for a hypothetical larger storm may create facilities that are not properly sized for the contributing area and therefore may affect the facility function which may not be a benefit so additional points may not be appropriate for oversized facilities.
26. Would basic treatment waters get more points if the facility treats something that isn't required like phosphorus, oil or metals (enhanced treatment)?
27. Structural stormwater controls installed as retrofits test the performance assumptions associated with the Basic Treatment Menu (BTM) design standard. These retrofits are rarely able to meet the full BTM flow-based or volume-based design requirements (i.e. 91 percent of the local hydrograph). Consequently, the commensurate performance assumption of 80 percent Total Suspended Solids (TSS) removal is not clearly supported because there is no mention in the Stormwater Management Manual of Western WA (SWMMWW) as to whether the 80 percent TSS removal can be achieved by structural stormwater controls (BMPs) that are designed consistent with, but can't fully meet the BTM volumetric or flow-based design standard due to site constraints.
28. The following projects and project characteristics DO NOT qualify: Projects that do not have a "nexus" with the current MS4 or do not prevent future MS4 Impacts, including:

30. 1. In-channel habitat and stream restoration
    2. Fish barrier removal
    3. Stabilization of down cutting
    4. In-stream culvert replacement

    Ecology has failed to provide a clear distinction between a "Stabilization of down cutting" or "In channel habitat and stream restoration" project (defined by Ecology as non-qualifying actions)

and a "Floodplain Reconnection" or "Restoration of Riparian Buffer" project (defined by Ecology as qualifying projects). All these activities take place within the confines of the ordinary high-water mark and on properties located adjacent to the creek, draining directly to the receiving waters without a connection to a Permittee's MS4. Properties and settings, that in a TMDL, would be appropriately assigned to the non-point load allocation requirements. In practical terms, any professional with river project design and construction oversight experience would point out that most projects in riverine settings are a blend of all four actions.

Response to range of comments

1. For the final Permit, Ecology combined Appendix 12 with the 'SSC Guidance' document that was released for comment at the same time as the Permits.
2. The following clarifications were made in Appendix 12
    a. 'Lat / Long' category –Report Lat-Long in decimal degrees and include the datum (e.g., WGS84). Permittees are also to use 6 decimal places to make the location most accurate.
    b. Any sweeping to count for SSC must be completed with a high efficiency sweeper, and reach the curb.
    c. Line cleaning has been specified as feet, and the incentive point factor revised to '.025 times the liner feet of lines cleaned'.
    d. Impervious surface removal has been specified as square feet.
    e. LID projects require infiltration
    f. Project type 11 only includes high efficiency street sweeping and line cleaning that is not otherwise used to comply with S5.C.10
    g. Projects completed prior to July 1, 2019 (Permit issuance date) may not be included.
    h. Rounding of point estimations should occur at the end of the calculation, and be to the nearest tenth decimal.
    i. References to 'incentive points' or 'retrofit incentive points' have been changed to 'SSC Program Points'
3. Ecology appreciates the numerous suggestions relating to additional projects that should be included, and revisions to the current amount of points assigned to those projects. Ecology's proposed calculation of a project's retrofit incentive is intended to reflect MS4 retrofit priorities as well as receiving water conditions and project effectiveness. The scaling basis of point assignments is relative and is used solely for calculating compliance with the SSC Program Points. Many point assignments are based on an "equivalent area" calculation. Ecology bases the equivalent area calculation on a scale that compares the amount of runoff treatment or hydrologic control achieved through the proposed project to the amount achieved if you designed the project to meet the new and redevelopment criteria for the area draining to the new BMP(s).

4. Equivalent area is then used for LID (MR #5), runoff treatment (MR #6), or flow control (MR #7) benefit standardization, reflected as a ratio. Because hydrologic and treatment benefits from stormwater facilities vary, Ecology has divided each into different levels of project achievement. Each level is given a retrofit incentive point multiplier that reflects a point system that is used to define the required SSC Program level of effort. During the 2019 permit cycle, Ecology is committed to leading a stakeholder process to inform future iterations of this requirement. These comments will be used to inform the agenda and goals of that process.
5. Ecology recognizes that retrofit designs are typically limited in size because the necessary area is not available to build a BMP that can treat the full drainage basin. Incentive points are given for the area that corresponds to the size of the facility. For example, if the full basin requires a design flow rate of 2 cfs and they construct a BMP that has adequate size to treat 1 cfs, they get credit for only ½ of the basin when they calculate the retrofit incentive points. Detailed instructions on how to do this calculation are provided in Appendix 12.
6. This Permit cycle's minimum point requirement is intended to allow for a "ramp up" adjustment to reflect program planning, and therefore includes a level of effort for design-stage incentive points as well as complete/maintenance-stage incentive points. Complete/maintenance-stage incentive points may substitute for design-stage incentive points, however a minimum of complete/maintenance-stage incentive points must be achieved by the date proposed.
7. The incentive point multipliers in note 2 is meant to incentivize particular areas of concern within a Permittee's jurisdiction. Different water bodies have TMDLs, are listed as an impaired water by Ecology, and are identified in basin plans as needing treatment for specific pollutants. We intend to use this information to identify targeted pollutants. Additional points are available for providing more than basic treatment, even if it is not required.
8. Ecology is looking for "Stormwater" water quality benefits. Floodplain reconnection projects provide the most stormwater benefit from the flow control to surface waters. Performing floodplain reconnections in flow control exempt water bodies does not provide enough stormwater benefit to be calculated for SSC Program Points.
9. Municipal Stormwater Permits regulate the MS4, not the receiving water itself. Therefore, in-stream projects cannot be calculated for this requirement. Ecology clarified that SSC Program Points can only be calculated for project areas above the Ordinary High Water Mark (OHWM) as specified in Ecology's 'Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State', publication no. 16-06-029. If a project, such as a floodplain reconnection project, or restoration of riparian buffer project, extends below the OHWM, the project may still be used to achieve SSC Program Points, however only the areas above the OHWM may be used in calculating points.

18.0 S7 – Total Maximum Daily Load (TMDL) and Appendix 2 Requirements

Permit reference: Phase I – S7 and Appendix 2
Western Washington Phase II – S7 and Appendix 2
Eastern Washington Phase II – S7 and Appendix 2

18.1 Comments on S7. Compliance with Total Maximum Daily Loads

Commenters: Snohomish County, Puget Soundkeeper Alliance

Summarized comments

1. Permits do not require Permittees to comply with TMDLs that are issued after the issuance date of the permit, nor do they require special considerations for development, construction or redevelopment projects in TMDL and/or 303(d)-listed watersheds. This is a significant gap, as TMDLs can potentially constitute the clearest roadmap towards resolving site-specific water quality problems associated with stormwater.
2. It would be helpful to have cross-referencing between relevant elements of the SWMP and TMDL sections that tie to those SWMP elements.

Response to comments:

1. Ecology has other legal mechanisms to ensure EPA approved TMDLs are implemented for those approved during a permit cycle. New TMDLs, as appropriate, are added to the permit when the permit is reissued.
2. Comment noted. Permittees may work with their regional permit manager at Ecology for this specific technical assistance.

18.2 Comments on Appendix 2

Summarized commenters: City Of Pullman, Thurston County, King County, Snohomish County, City of Puyallup, City of Everett, City of Bellingham, Pierce County, Barbara Craven

18.3 Comments related to fecal coliform and E. coli.

1. The draft Permit requires various actions to implement a fecal coliform TMDLs listed in Appendix 2. Ecology is amending the state water quality criteria to use E. coli instead of fecal coliform because EPA (2012) determined that E. coli is a substantially better indicator of potential human health risk associated with fecal contamination in recreational waters. Recommend that Ecology revise the TMDLs to align with the new E. coli criteria and adjust the permit requirements as appropriate.

Response to the comments

1. Ecology does not intend to rewrite TMDLs to reflect the new E. coli standard. Permittees may use the QAPP process to work with Ecology's regional staff to include sampling for E.coli.

18.4 Comments related to specific TMDLS:

1. King County - Bear-Evans – "Recommended language: Complete IDDE field screening for bacteria sources in these areas, including rural sub-basins, by January 1, 2022. Request that the deadline be extended by a year to align with county resources. The change in the geographic coverage in the Boise Creek TMDL has added a significant geographic area to the TMDL program for King County. This deadline requires the county to complete the screening of the other 50% of Bear Creek basin which would require the county to complete the bacteria screening of a 51 square mile basin in 18 months. This schedule would require increasing resources to this basin for a program that has been and will be in place for years due to the nature of the pollutant. "
2. King County, Issaquah Creek - Recommended language:
   Complete IDDE field screening for bacteria sources in these areas, including rural sub-basins, by January 1, 2024. Request that the deadline be extended by a year to align with county resources. The change in the geographic coverage in the Boise Creek TMDL has added a significant geographic area to the TMDL program for King County. This deadline requires the county to complete the screening of the other 50% of Issaquah basin which would require the county to complete the bacteria screening of a 61 square mile basin in 2.5 years from issuance of the permit, simultaneously conducting the same program in Bear Creek and Boise Creek. This schedule would require increasing resources to this basin for a program that has been and will be in place for years due to the nature of the pollutant."
3. Swamp Creek - The draft Permit requires monitoring to implement a fecal coliform TMDL. It is unclear how this is to be handled when the TMDL is located in a headwaters that run dry during the summer months and makes the 12 minimum samples difficult to achieve unless the agency samples twice a month. Sampling should not be attempted if there isn't flowing water in which to collect the sample. Please add language that samples will be collected to the extent feasible so that an agency isn't penalized if there isn't enough flow to collect 12 valid samples in a year. Or even more preferable please remove TMDL sampling requirements from locations in the headwaters that to do not meet certain flow criteria.
4. Stillaguamish River p.1 Table of contents WRIA 5 – Stillaguamish River TMDL starts on page 8 of Appendix 2, not page 5. Revise accordingly.
5. Stillaguamish River TMDL, p.9 Swamp Creek TMDL, p.15 Typos There are three typographical errors on page 9: 1. Duplicates in the O&M section a sentence from the Business Inspection section. Delete. 2. Duplicates the Public Education and Outreach section. Delete. 3. Duplicates the O&M section. Delete. The typo on page 15 duplicates a sentence from the Business Inspection section (regarding reinspection) in the IDDE section. Delete.
6. p.8 Snohomish River Tribs TMDL, p. 10 North Creek TMDL, p.12 Swamp Creek TMDL, p.14 Little Bear Creek TMDL, p.19 Deletion of: "All qualifying facilities shall be inspected by August 1, 2016." Ecology proposes to remove a deadline/timeline for inspection of commercial animal handling and composting facilities. What, then, is Ecology's expectation for inspection? Inspect all qualifying facilities? By when? All during this Permit term? The implication of the every three year reinspection requirement is that Ecology does not expect, for example, yearly inspections or even every three year inspections for qualifying facilities without bacteria source control

problems. Permittees would rather not have to guess how to comply. Just state the inspection requirement.

7. Stillaguamish River TMDL Swamp TMDL Little Bear Creek TMDL Public Education and Outreach Delete the word "pet" from the requirement. There are other sources of bacterial pollution besides pet waste. These include: municipal sewer systems, onsite septic systems, farm animals. REVISE as follows: "Public Education and Outreach: Each Permittee shall conduct public education and outreach activities to increase awareness of bacterial pollution problems and promote proper waste management behavior."

8. Requirements Snohomish River Tribs TMDL, p. 11 North Creek TMDL, p.12 Swamp Creek TMDL, p.15, Ecology's limited time to perform this requirement reduces Permittee flexibility. Permittees should be able to manage implementation timing given local factors and information, including budgetary constraints. For example, it may be best for a Permittee like Snohomish County, with multiple TMDLs containing this TSIE requirement, to stagger the work between TMDL areas such that field work is not required to begin in all areas at the same time.

   The intended meaning of the "new" high priority area is unclear and appears unduly restrictive. Something may have changed in a previously selected high priority area that would make that same area a higher priority than a "new" area. This limitation should be removed.

   Finally, the phrase "...and any other relevant and available bacteria data" is ambiguous and should be removed. How is a Permittee supposed to know what Ecology or another stakeholder considers "relevant" or "available"? This standard leaves a Permittee guessing at how to achieve compliance, which is inappropriate. The phrase also does not acknowledge the limitations on data use set forth in General Condition G9 of the Permit, the Washington State Credible Data Act, RCW 90.48.570-590, and associated Water Quality Policy 1-11.

   REVISE as follows: "Each Permittee shall review the fecal coliform data collected per approved QAPPs under the 2013 Permit and other fecal coliform data collected by the Permittee. The purpose of this review is to identify a minimum of one high priority area that will be the focus of source control identification and elimination efforts during this Permit term. Each Permittee shall prepare written documentation of this review and the identified high priority area; documentation shall be submitted with the applicable Annual Report year in which the review and identification effort occurred. Permittees shall complete their source identification and elimination efforts by July 31, 2024, unless ongoing source identification and elimination efforts are deemed necessary by the Permittee beyond July 31, 2024."

9. Requirement for Snohomish, North, and Swamp pp. 11, 12, 15
   "Stormwater quality sampling for bacteria sources is required as part of this focused source identification and elimination effort." The term "stormwater quality sampling" is not adequately defined. It could be read to imply that Permittees are expected to deploy automated stormwater monitoring equipment in the MS4 and/or receiving waters to time the gathering of samples during storm events of a known flow rate or volume. This is not consistent with Ecology's stated intent, which is that Permittees would sample during or closely following storms. Further, stormwater quality sampling for fecal coliform bacteria using automated equipment may produce samples which violate General Condition G9.D because samples could exceed regulatory

hold times and temperatures. ADD the following: "For the purposes of targeted source identification and elimination efforts, stormwater quality sampling is defined as obtaining grab samples of either stormwater discharging to or from the MS4 or receiving waters during a storm event."

10. pp. 9, 11, 13, 15 Surface Water Monitoring Requirement for Stillaguamish, Snohomish, North, and Swamp - Does Ecology expect a Permittee to collect 12 samples in at least one location from August 1, 2019 – December 31, 2019? The County does not believe that is the intent but this Permit language is unclear. In addition, unforeseen circumstances can prevent the collection of 12 samples per calendar year. For example, collection may be dependent on Ecology's approval of a revised QAPP, for which there is no submittal deadline, and streams can dry up, making collection of 12 samples in a calendar year infeasible.
11. Thurston County - "a." is appropriate given the approach to selecting target audiences, subject areas, and BMPs in S5.C.2. However, "b." seems unnecessarily redundant given this is already a requirement of S5.C.7.
12. RE: Nisqually River report in Appendix 2. The report was written in 2005, based on 2003-2004 data. This is out of date. The NPDES should not rely on old data. On May 14, 2017 I saw soap suds at the edge of the river. If the NPDES team cannot collect data and write a current report, it should contact the appropriate persons in Ecology. RE: Nonpoint source pollution. There are no requirements for this type of pollution, and there should be.
13. Lake Whatcom - City of Bellingham provided comments on a preliminary version of the WWA draft permit of Appendix 2-Lake Whatcom TMDL.
14. Puyallup River (Fecal Coliform) - Under the 'City of Puyallup' Section the first and third bullet points are almost the same (except for one word) and one of the bullets should be removed.
15. Clarks Creek (DO and Sediment) – Since the numbers provided are estimates and approximations, the City of Puyallup believes this should be reflected in the language. For example, the City suggests 'City of Puyallup, bullet 1' read: "The Permittee shall construct and implement water quality improvement projects (WQIPs) that <u>are estimated to</u> achieve a combined average annual sediment reduction of 155 tons per year by the end of 2021. This represents approximately 94% of the 20 year TMDL implementation target." The City's edit adds the three underlined words.
16. Clarks Creek (DO and Sediment) – Pierce County recommends that Ecology acknowledge that sediment reduction and volume treated credit achieved by the projects are estimates. The County offered this permit language: "The combined average annual sediment reduction credits achieved by the projects listed is estimated to be 54.4 tons per year."
17. Clarks Creek (DO and Sediment) - The City of Puyallup suggests bullet 2 should read: "The Permittee shall construct and implement WQIPs that <u>remove or</u> treat 21.5 MG...." The City's suggested edit adds the two underlined words.
18. Clarks Creek (DO and Sediment) - Regarding Bullet 6. The City of Puyallup believes that for any facility that has been monitored to determine actual removal or treatment rates, the City should be able to use that study/monitoring data as a basis for the function and credit for that structure.

There are many instances where the WWHM's prescriptive treatment flow rates for the mechanical facilities may not agree with removal rates based on field conditions/water quality inputs. We do believe that if the facilities are not working as planned/designed they should be upgraded to ensure the intended removal rates. However, the facility removal rate should be able to be counted as indicated by monitoring while the additional treatment retrofits/upgrades are being designed and implemented, as long as there is adequate monitoring data to back up the partial removal efficiency. There are cases where sound engineering could dictate using partial treatment from one device that may be underperforming and install a second device to bridge the gap to the required basic or enhanced treatment levels. If on the ground data for the facility is not available, it makes sense to us to use the designated treatment flow rates. However, if actual data for the facility has been obtained in the installed location, that should always be utilized.

19. Clarks Creek (DO and Sediment) - Pierce County offered revised permit language that includes a preamble.
20. Clarks Creek (DO and Sediment) - Pierce County offered revised permit language for Ecology's actions required for Pierce County in Appendix 2 of the draft 2019 Permits.

Response to comments:

1. Bear-Evans - Ecology approves the request to extend the field screening deadline by 1 year.
2. Issaquah Creek - Ecology approves the request to extend the deadline, however the timeline requested is inconsistent. It asks for the deadline to be extended by "a year", but then names 2024 as the deadline set in their recommended language. The deadline in the draft permit is January 1, 2022, so we will extend until January 1, 2023 to provide one additional year of time.
3. Swamp Creek - The permit language already provides Permittees flexibility to change sampling locations if they choose. Therefore, if a Permittee has sampling data to justify modifying sampling sites in their selected area, they may submit a draft QAPP to Ecology stating the new surface water monitoring locations more representative of streams within the City jurisdiction that they plan to sample moving forward. Ecology will work with the City to determine appropriate sampling locations that meet the intent of the TMDL.
4. Thank you – page numbers were corrected.
5. Typos on page 8-9: This is correct. Delete the entirety of the first O&M section. Delete the entirety of the first Public Ed & O section. Typos on page 15: This is correct. Delete the last sentence of the IDDE section, which is a duplicate of the last sentence in the Business Inspection paragraph on page 14.
6. Stillaguamish River TMDL, Snohomish River Tribs TMDL, North Creek TMDL, Swamp Creek TMDL, Little Bear Creek TMDL - The previous permit provided a deadline to complete all initial inspections of qualifying facilities by Aug 1, 2016, and after that they were required to implement an ongoing re-inspection program for facilities with bacterial source control problems on a 3 year cycle. This permit cycle is simply stating they must continue that program. Recommended language change: Permittees shall continue to implement an ongoing inspection program to re-inspect facilities with bacteria source control problems a minimum of every three years.

7. Stillaguamish River TMDL Swamp TMDL Little Bear Creek TMDL - Ecology rejects this recommended language. All of the pollution sources named in this comment are encapsulated by the use of the language "bacterial pollution problems".

8. Snohomish River Tribs TMDL, North Creek TMDL, Swamp Creek TMDL - Ecology acknowledges that several Permittees may have multiple TMDLs that include this targeted Source Identification & Elimination requirement. As such, we recommend the following language:

   "For Permittees with more than one TMDL containing this Targeted Source Identification & Elimination requirement, those Permittees shall begin to implement source identification and elimination efforts in at least one of the subbasins discharging to the identified high priority area no later than May 1, 2021. Permittees have the flexibility to stagger the implementation of the remaining subbasin IDDE efforts, provided all have been completed by end of the calendar year in 2023.

   Ecology will allow Permittees to continue working in a previously established high priority area, provided the Permittee submit a report outlining why this area is still the highest priority for targeted source identification and elimination.

   Language around using "any other relevant and available bacteria data" is intended to not limit Permittees to only using data collected by their internal team. Recommended language change:

   By January 1, 2021, each Permittee shall review the fecal coliform data collected per approved QAPPs under the 2013 Permit, and may include any other relevant and available bacteria data.

   Permittees must use their best professional judgment what data is relevant.

9. Snohomish, North, and Swamp - Ecology approves this proposed addition and Inserted it after 2nd sentence in the 2nd TSIE paragraph.

10. Snohomish, North, and Swamp - Ecology does not intend Permittees to take 12 samples from a single location between Aug 1, 2019 - Dec 31, 2019. The permit requirement is to collect 12 samples in at least one location per calendar year. Revise language of first bullet to:

    Collect 12 samples taken in at least one location per calendar year. For the reporting year of 2019, samples taken any time between January 1 - Dec 31, 2019 may be included.

    As this is a continuing permit requirement and not a new requirement, this will not be a timing problem. For a single site, 12 samples must be collected during the calendar year but timing can be adjusted based on local knowledge of when streams may be flowing too low to sample.

    The permit language already provides Permittees flexibility to change sampling locations if they choose. Therefore, if a Permittee has sampling data to reflect water quality standards have been met in their selected area, they may submit a draft QAPP to Ecology stating the new surface water monitoring locations they plan to use moving forward.

    Ecology does not approve ceasing business inspections, public education and outreach, and operations and maintenance activities on a water segment that has improved enough to meet

water quality standards. These efforts are not water segment specific and their benefits extend beyond a single monitoring location.

11. Thurston County - Ecology intends to keep the language as drafted to reinforce requirements of other permit sections.

12. Nisqually – The Municipal Stormwater Permits rely on the EPA-approved TMDLs and the documents that support the TMDL approval. These documents are not updated with permit reissuance.

13. Lake Whatcom - Updates were made to Appendix 2, Lake Whatcom TMDL in the formal draft Permit that incorporate comments made on the preliminary draft. In the final WWA Phase II Permit, Appendix 2 -Lake Whatcom TMDL:

    - For both City of Bellingham and Whatcom County action 4) Water Quality Monitoring and Effectiveness Evaluation, Ecology has adjusted a QAPP deadline to be concurrent with other actions in Lake Whatcom TMDL.
    - For Whatcom County in section 2) Stormwater Management Ecology has aligned City and County actions in regards for providing "Funding Status and Sources" information on Stormwater Capital Improvement Projects with each annual report, which was inadvertently omitted from the County's list of actions.

14. Puyallup River (Fecal Coliform) – Ecology agrees that permit language under the first and third bullet points are nearly identical and that one of the two bullet points should be deleted.

15. Clarks Creek (DO and Sediment) – Ecology agrees that the annual sediment reduction and stormwater volume treated (or removed) calculations for each stormwater treatment facility/BMP are pollutant load reduction estimates. The County *Clarks Creek Restoration Plan* (March 2017) and the City *Clarks Creek Retrofit Plan* (September 2017) both describe a methodology for calculating facility stormwater volume treated or removed and sediment load reduced.

    The method includes developing stage-storage-discharge relationships for each facility based on its specific dimensions, outlet configuration, and infiltration characteristics; using the TMDL HSPF model to simulate flow and sediment loads and TSS concentrations as influent to the facility for a 50-year simulation period; and using HSPF to route flows through each facility to estimate volume treated and infiltrated (removed) for the simulated October 21, 2003 event, and the average annual sediment load reduction (as the difference between incoming TSS load and effluent TSS load over the 50-year simulation period).

    Ecology believes the water quality improvement project (WQIP) pollutant load reduction estimates presented in the City's and the County's Plans represent a reasonable compliance measure (or target) for the first five years of Plan implementation. Including the words "are estimated to" before this numeric annual sediment reduction target (or volume treated/ removed target) makes the amount of sediment reduction (or volume treated/removed) required by Year Five of Plan implementation ambiguous. For this reason, Ecology rejects the

offered edit to include the words "are estimated to" when describing the sediment reduction and volume treated/removed targets.

Ecology modified the sediment removal and volume treated/removed Year Five targets for both the County and the City. These targets in the draft 2019 Permits included sediment removal estimates for channel stabilization WQIPs. Ecology subtracted sediment load reduction estimates attributed to stream channel stabilization WQIPs from the Year Five sediment removal targets for Pierce County and the City of Puyallup. The rational for this change is elaborated in this Response to Comments. The City's Retrofit Plan includes an EcoStorm WQ Treatment System and modular wetland systems (MWS) estimated to remove 2.18 tons/year of sediment and treat/remove 0.94 MG. The Retrofit Plan describes these estimates (2.18 tons/year and 0.94 MG) as potentially "high" (an upper bound) because neither estimate accounts for backwater effects. From the City's Plan: "Backwater effects would reduce the head available for discharge from those facilities, reducing their volume treated" (September 2017). Recognizing uncertainty in these estimates, Ecology's Year Five targets (or compliance measures) require the City achieve 90% of the 2.18 tons/year and 0.94 MG targets, respectively.

The City's draft 2019 Permit targets changed as follows: 155 tons/year to 51.0 tons/year (sediment); 51.0 = 155 minus 103.8 (channel stabilization) minus 0.22 (correction factor to achieve 90% of the combined estimate for EcoStorm and MWS); 21.5 MG to 21.4 MG (volume treated/removed); 21.4 MG = 21.5 minus 0.1 (correction factor to achieve 90% of the combined estimate for EcoStorm and MWS). The County's draft 2019 Permit targets changed as follows: 54.4 tons/year to 38.8 tons/year; 38.8 = 54.4 minus 14 (channel stabilization) minus 1.6 (correction factor); 15.8 MG to 13.7 MG; 13.7 MG = 15.8 MG minus 2.1 MG (correction factor). The referenced correction factor represents the County's replacement of the 104th Street E Pond with a treatment wetland and the difference in sediment reduction and volume treated/removed between these two projects. Field investigations indicated the proposed 104th Street E Pond could be affected by high groundwater during the wet season. Because of this site suitability constraint, the County changed the 104th Street E Pond to a treatment wetland.

16. Clarks Creek (DO and Sediment) – Ecology agrees with the proposed addition of the words "remove or" in front of "treat 21.5 MG…" The stormwater implementation target for dissolved oxygen deficit (DOD) in the TMDL is "a 50% reduction or treatment in the volume of untreated stormwater from the 10/21/2003 event…" that "may be achieved either by a direct reduction in stormwater runoff volume or by converting volume from untreated to treated status." Expression of this 21.5 MG five-year implementation target as volume removed or treated is consistent with implementation of the DOD WLA in the TMDL. The City's 21.5 MG implementation target was adjusted to 21.4 MG. This adjusted volume treated/removed target acknowledges the City's comment that 21.5 MG treated/removed by projects is an estimate, and that the combined EcoStorm and MWS volume treated/removed estimate is a high estimate.

17. Clarks Creek (DO and Sediment) – Ecology has revised the #7 (formerly #6) permit requirement to address this comment. Ecology added the following to #7: "A crediting exception can be made for stormwater treatment facilities monitored to determine actual removal or treatment rates in accordance with methods and procedures in an Ecology-approved QAPP and an

individual facility operation and maintenance plan." This addition gives the Permittee the option to develop and submit a QAPP for an alternative facility crediting method. Ecology also added the following to #7 for clarity: "Facilities/BMPs that exceed maintenance standards must perform required maintenance in accordance with schedules under S5.C.10.a." S5.C.10.a references the Phase I Permit; this permit reference was replaced with the equivalent reference in the Phase II Permit (i.e., S5.C.7.a) under #7 of actions required of the City of Puyallup.

18. Clarks Creek (DO and Sediment) – The proposed preamble narrative includes background information on the TMDL, DRA and Ecology-Pierce County communications on the County's Clarks Creek Restoration Plan (Plan); it also includes the County's proposed handling of sediment reduction credit generated from in-stream restoration projects, and the County's commitment to fulfill its TMDL implementation obligations. The preamble narrative generally does not depict permit requirements. For this reason, Ecology decided not to revise Appendix 2 to include this narrative. Ecology agrees with the County that both the TMDL and DRA allow for the crediting of in-stream restoration projects that remove in-stream sources of sediment through channel stabilization. Ecology disagrees with the County's proposed inclusion of in-stream sediment removal crediting (until 2022) under the *Western Washington Phase I* or *II Municipal Stormwater Permits*. Only the removal of ***upland*** sediment sources originating from the MS4 through structural facilities/BMPs (or an Ecology-approved street sweeping program) shall be credited under the Phase I and II Permits. Because the TMDL (and DRA) allow for the crediting of in-stream sediment removal water quality improvement projects (WQIPs), Ecology will allow Pierce County and the City of Puyallup to credit sediment removal for these in-stream projects toward the sediment WLA under an administrative order. Ecology agrees with the TMDL implementation commitments expressed in the DRA.

19. Clarks Creek (DO and Sediment) - Ecology accepted several of Pierce County's suggested revisions to the actions required of the County. Ecology carried over accepted revisions to actions required of the City of Puyallup, where applicable. Ecology agrees with (and accepted) the following suggested edits (or similar) from the County:

    - Requirements #1 and #2. Change "The Permittee shall construct and implement water quality improvement projects (WQIPs) that achieve…" to "The Permittee shall operate, inspect and maintain…" and "The Permittee shall construct, operate, inspect and maintain…" Ecology differentiates existing WQIPs (already constructed) from future WQIPs with this revision.

    - Requirements #1 and #2. Change "…by end of 2021" to "by December 31, 2021." Ecology agrees with the commenter that this edit makes the compliance date clear.

    - Requirements #1 and #2. The County referred to "new implementation accounting tools to better track capital investments and the attainment of the TMDL clean water targets" in the offered preamble language. Ecology makes clear in requirements #1, #2, #3 and #6 that the Permittee shall use these "accounting tools" from the Permittee's Plan to track sediment reduction and volumes treated/removed with these statements: "The Permittee shall apply crediting methodologies described in the Restoration Plan (hereafter, the Plan) or update of this Plan to determine stormwater treatment facility/BMP sediment removal rates [or

volumes treated or removed by each WQIP]…The Permittee shall submit a reporting ledger that quantifies annual sediment reduction (tons) credits and stormwater volume treated or reduced (MG) credits awarded to all operational projects during the first six years of Plan implementation…"

- Requirement #3. Change "The Permittee shall submit a reporting ledger on the crediting system quantifying water quality benefits represented by past and future capital projects and program actions taken during the first three years of Plan implementation (i.e., 2017-2019) by January 1, 2020…" to "The Permittee shall develop and submit a reporting ledger for the County Pollutant Load Reduction crediting system by March 31, 2020. This reporting ledger shall quantify annual sediment reduction (tons) credits and stormwater volume treated or reduced (MG) credits awarded to all operational WQIPs during the first three years of implementation of the Plan (i.e., 2017 -2019)…" Ecology agrees with the County's characterization of this reporting ledger as quantifying "annual sediment reduction (tons) credits and stormwater volume treated (MG) credits awarded to all operational projects…" Ecology agrees that this description is a clearer depiction of this ledger as compared to the description of this ledger in the draft 2019 Permits.

- Requirement #3. Pierce County offered the language, "All projects constructed since October 21, 2003 shall receive annual sediment reduction credit (tons) and/or stormwater volume treated (MG) credit for each year the project was inspected, maintained and deemed operational." Ecology clarified that: "**Past retrofit or redevelopment** projects constructed since October 21, 2003 may receive sediment reduction (tons) or stormwater volume treated or reduced (MG) credits for each year the project was inspected, maintained and deemed operational. All WQIPs must be inspected, maintained and deemed operational to receive annual sediment reduction and/or volume treated/reduced credits." Ecology modified the offered permit language to make clear that retrofit and redevelopment projects (excluding new development) constructed since October 21, 2003 are credit eligible. (Requirement 3 includes credit for both volume treated **or reduced** (MG); Ecology accepted the City of Puyallup's comment to include volume reduced.)

- Requirements #4 and #5. Ecology agrees with the County's characterization of this submittal as "an update of the (existing) Clarks Creek Restoration Plan." The revised #4 reflects this submittal characterization.

Ecology opted not to accept the following suggested revisions from the County to the actions required and/or we clarified permit language as follows:

- Requirements #1 and #2. Ecology refers to existing and future WQIPs rather than referencing the six or four WQIPs in Section 4 of the County's Plan. Ecology clarified through footnote that "Existing WQIPs are stormwater treatment facilities/BMPs constructed and operational after October 21, 2003. These include treatment facilities/BMPs implemented through retrofit and redevelopment." This definition is consistent with creditable projects in the Dispute Resolution Agreement. Ecology disagrees with crediting in-stream sediment removal projects in Appendix 2 of the Phase I and II Permits. Only the removal of upland sediment sources originating from the MS4 are eligible for credit in the Phase I and II

Permits. That being said, because the TMDL and DRA allow for crediting in-stream channel stabilization projects toward the sediment WLA, Ecology agrees that these projects can be credited through an administrative order. Removal of credits for the Diru and Rody Creeks channel stabilization projects reduced the 54.4 tons/year sediment reduction estimate to 40.4 tons/year. Ecology subtracted an additional 1.6 tons/year in accounting for the replacement of the 104th Street E Pond with the treatment wetland WQIP. Project site suitability constraints of the 104th Street E Pond led the County to decide to replace this project with a different project.

- Requirements #4 and #5. The April 1, 2021 updated Plan submittal for the January 1, 2022 – July 31, 2024 reporting period must include "the WQIPs proposed..." and "the sediment reduction and/or volume treated/reduced credit estimated for each WQIP proposed, as well as the crediting methodologies for crediting facility sediment removal and volumes treated or removed." The #4 and #5 requirements offered by the County described the "update of the Clarks Creek Restoration Plan" as "listing the water quality improvement projects proposed for the January 1, 2022 to July 31, 2024 reporting period" (or for the five-year reporting period beginning August 1, 2024). Ecology agrees that this updated Plan must list proposed WQIPs for the stated reporting period; however, it must also include estimated credits and the methodologies employed to estimate each project's credits. Ecology made these additional updated Plan requirements clear in revised permit language.

- Requirements #4, #5 and #6. Pierce County offered this description of the annual reporting ledger in its comments on requirements #4 and #5: "The annual reporting ledger will account for the annual sediment reduction credits (tons) and stormwater volume treated (MG) credits based on their annual inspection reports and corresponding maintenance actions. Pierce County's pollutant reduction credit reporting ledger will serve as the database to track each year's earned credits and apply them toward the numeric targets with the Permittee's two assigned WLAs." Ecology agrees with this description of the reporting ledger, and intended for this to be a submittal requirement. The permit language that the County offered does not require a reporting ledger submittal to Ecology. Ecology added #6 so as to include an annual reporting ledger submittal requirement for the first six years of Plan implementation (i.e., 2017-2022) by March 31, 2023. This reporting ledger of WQIP crediting is a separate submittal requirement from requirements #4 and #5 (i.e., the Plan update submittals due April 1, 2021 and November 1, 2023).

- Requirement # 8. Street Sweeping Program. The County omitted #7 from the draft 2019 Permits (what is now #8. Street Sweeping Program in the 2019 Permits). Ecology disagrees with the removal of this QAPP requirement. If a Permittee intends to credit its street sweeping program toward meeting the Year Five sediment removal target, Ecology requires an approved QAPP submittal for this program. That being said, Ecology has made this submittal conditional (i.e., if not taking sediment reduction credit for sweeping, no QAPP submittal is needed). If the Permittee can achieve the Year Five sediment removal target without crediting sediment removal from sweeping, the Permittee should not be required to prepare and submit a QAPP for this program. Ecology acknowledges the County's omission of '#7. Street Sweeping Program' in making this a conditional permit requirement.

Requirement #8 Street Sweeping Program (previously #7) clearly allows the Permittee to credit sediment reduction under this program through an Ecology-approved QAPP.

18.5 Comments related to Eastern Washington's Appendix 2

Summarized comment

1. Regarding City of Pullman's actions for the Palouse River TMDL - B.2. Replace "January, 15, 2020" with, "45 days after Ecology acceptance of the updated 4-Year Action Plan." And, C. delete "or revised recreational use criteria."

Response to comment

1. Ecology did not change the date to provide additional time, rather than a date certain – which may end up reducing the time for Pullman. Ecology deleted the reference to recreational use criteria.

19.0 S8 – Monitoring and Assessment

Comments apply to Special Condition S8 requirements in the Phase I, Eastern and Western Washington Phase II Permits.

See also comments on Appendix 2 and Appendix 9 and responses

Summarized commenters: Chelan County Public Works, City of Brier, City of Edmonds, City of East Wenatchee, City of Federal Way, City of Kirkland, City of Mukilteo, City of Port Angeles, City of Seattle, City of Shoreline, City of Snoqualmie, City of Tacoma, City of Vancouver, Clark County, Douglas County, E. WA Stormwater Group, Phyllis Farrell, King County, Kitsap County, Pierce County, Snohomish County, Stormwater Work Group, Thurston County, Yakima County, Clayton Verellen.

Summarized comments

10. We agree with removing the permit condition S8.A of the 2013 permit that required Permittees to submit non-permit required monitoring information through their annual reports
11. Clarify that both S8.A.1 and S8.B.1 are a one-time payment that covers the time period from August 2019 through August 2020
12. Make the sentence read, "payments are due on or before December 1, 2019"
13. Keep wording consistent among sections, i.e., "payment amounts"
14. For both S8.A.2 and S8.B.2, to whom must the written notification be sent?
15. Can this be an electronic submittal using the same system as the annual report?
16. Does the notification require a G19 certification?
17. We fully support/do not support the revised S8.A and S8.B payment amounts and schedule

18. Include an ending date for S8.A and S8.B payments; clarify that the last required payment is due August 15, 2023, prior to the permit expiration date
19. Use consistent language: either "for the duration of this permit" or "for this permit cycle"
20. The extension of the 2018 permit to August 2019 raised issues regarding monitoring payments and annual reporting
21. Why is the first payment due date December 1 and the rest are August 15?
22. Make the first payment due date August 15, 2020.
23. Each Permittee's annual payment amount is lower while preserving adequate funding for each SAM component
    - Five new SAM effectiveness and source identification studies per year is an appropriate level of effort
24. We object to Ecology using our local agency resources to achieve regional impacts
25. Receiving water monitoring should/should not be included in the permit S8 and/or in the permit Appendix 2
    - Regional receiving water monitoring provides substantial value to Ecology, Permittees, and other stakeholders
    - Assess and monitor water quality of receiving waters along our shorelines
    - The Permit regulates MS4 discharges and other, non-MS4 sources are likely to contribute to any receiving water impairment
    - Permittees need more ways to tailor permit requirements to local water quality concerns
    - TMDL monitoring should not be required
    - Receiving water studies are/should be eligible to compete for SAM effectiveness and source identification study funding
    - If the TMDL receiving water monitoring requirements are retained, Permittees' expenditures should count toward S8 receiving water monitoring payments
    - The S8.B payment for SWMP effectiveness studies should cover all costs of any TMDL-related monitoring required of that Permittee for Appendix 2
    - Delete the Surface Water Monitoring sections of the following Appendix 2 TMDLs: Stillaguamish River, Snohomish River, North Creek, Swamp Creek
26. Local monitoring should count as in-kind service toward S8.A
    - Local governments conduct monitoring similar to SAM receiving water monitoring and their data are accessible for SAM to use
    - Even Permittees whose local monitoring falls short of the minimum requirements outlined in the permit should get some credit for that effort
    - Our costs for TMDL monitoring required in Appendix 2 should count towards our SAM payment contribution

- Monitoring for the new Comprehensive Planning requirement should also count

27. Clarify that all Phase I and Phase II Southwest Washington Permittees will meet S8.A.2 permit requirements by paying into a collective fund, managed by Ecology, for a contract with Clark County to conduct status and trends monitoring in the Lower Columbia Region.
28. Change S8.C title to "Stormwater discharge and local receiving water monitoring" and allow Permittees an option similar to the Phase I S8.B “halfway opt-out” whereby Permittees contribute a smaller amount for SAM receiving water status and trends monitoring
29. Include an ending date for S8.A and S8.B payments; clarify that the last required payment is due August 15, 2023, prior to the permit expiration date
30. Use consistent language: either “for the duration of this permit” or “for this permit cycle”
31. The extension of the 2018 permit to August 2019 raised issues regarding monitoring payments and annual reporting
32. Why is the first payment due date December 1 and the rest are August 15?
33. Make the first payment due date August 15, 2020.
34. Expand water quantity and quality monitoring for toxics in road runoff. Coordinate the receiving water monitoring with WSDOT to assess impacts of road and highway discharges.
35. Maintain Permittee payments for Lower Columbia Region stream monitoring in an account separate from the account for Puget Sound receiving water status and trends monitoring
36. Pay administrative costs for Lower Columbia Region stream monitoring contracting and oversight out of this separate account
37. Lower Columbia stakeholders should fully participate in the SAM Pooled Resources Oversight Committee
    - Stormwater Work Group (SWG), which oversees SAM, is under the Puget Sound Ecosystem Monitoring Program umbrella
    - Status and trends data produced in the Puget Sound and Lower Columbia studies may not be applicable to each other
    - Puget Sound stakeholders may be unwilling to review Lower Columbia studies
    - Clark County would have to recuse themselves from oversight of the Lower Columbia stream monitoring
38. Change the title of the draft Lower Columbia Region stream monitoring QAPP
39. The wording in the permit does not match the draft QAPP title. Clark County prefers the use of the geographic area as "Urban Streams in Clark and Cowlitz Counties in the Lower Columbia River Region."
40. Lower Columbia Region implies a much larger area on a par with the Puget Sound Region. The project is more narrowly focused than the term "Lower Columbia" used in the draft permit.

41. Change the due date for the final site location table and map for the Lower Columbia Region stream monitoring QAPP
42. It is unlikely that the final site location table and map can be completed in two months
43. Site selection is part of a Permittee-driven stakeholder process and not a task solely for Clark County
44. Final site selection hinges on variables outside the control of Permittees such as access rights and suitability for deploying instrumentation
45. A preliminary site list is possible in that time frame
46. The first submittal could be the preliminary site findings followed by the final site selection in the draft QAPP submittal
47. Permit section S8.B.2.c.ii.(b) approval for a Phase I effectiveness study QAPP should be based solely on meeting the requirements of S8.B.3.c.ii.(a).
48. Delete/retain the S8.B.3 provision that requires Permittees to submit records of SWMP activities for regional effectiveness and source identification studies
49. The new requirement will help Stormwater Action Monitoring (SAM) provide much more meaningful findings for Permittees to use.
50. Clarify how the request will be transmitted and add the following:
    - An official notification method with a formal data request
        - Specify who at Ecology will make the request and who in the Permittee's organization will receive the request
        - Include the amount of time that will be allowed to prepare and deliver the information, following standards under state law for the timing of providing documents
    - An official way to submit the requested information
    - An official manner to get a receipt for submission
    - An Annual Report yes/no/NA question "Responded to requests for data from the SAM Coordinator" including a way to indicate why data was not provided
51. This provision is open-ended, vague, and impossible to plan for; it may pose an undue burden on Permittees and exposes Permittees to liability, particularly for Permittees who may not have the data being requested
    - This requirement allows Ecology to add a unknown future records submittal requirement under the permit that is not subject to public process including formal appeal
    - The specific requests for data must be listed as part of the written and defined permit requirements prior to issuance
    - This requirement will be determined without the Permittees being offered a vote or a controlling say in what studies SAM undertakes

- A process should be in place to determine expectations to respond to requests
- In approving the SAM studies, the Stormwater Work Group will ensure that these are valid and reasonable requests
- Consider timing these requests with the Annual Report due dates
- Specify that this will occur no more often than once per year
- In the 2013 permit term, extensive data requests were made without regard to the unbudgeted time and effort needed to meet them
- Clarify this is only for records required to be retained as specified under the permit not any other records that a Permittee may have.
- Clarify the maximum number of requests that would be allowed per year and per permit cycle
- Rather than being a permit requirement, study proposals should include data acquisition and commitments of support from jurisdictions
- It is legal and more practical to require Permittees to enter data into standardized database if Ecology is going to use the data to improve the permit
- If a Permittee is unable to provide records for a legitimate reason, it would be a permit violation
- Permittees' staff time and materials to comply with this requirement should be reimbursed
- Permittees' records are not in a format designed to respond to a mass reporting request
- Change the requirement to something along of the lines of "to the best of the Permittee's ability, provide the requested data"
- Permittees should not be required to both pay into SAM and provide data
- This provision should be voluntary

52. This provision is unnecessary, since Permittees are already required to share information on Ecology's request
    - State law has standards in RCW chapter 42.56 for public information requests that are not clearly defined in the permit
53. It is unclear what is meant by "under active SAM contract"
54. This requirement should be limited to current SAM studies, not open-ended for unknown future studies
55. Do not authorize SAM funding for any study unless the project proponent can demonstrate they either have the data needed or have secured commitments from the data providers
56. These sort of regional efforts should be done with Ecology resources and not by continuing to drain resources and limited budgets of local agencies
57. This provision was not explained in the fact sheet

58. Confirm that permit-required behavior change evaluation may be funded by SAM
59. Retain/consider other alternatives to the proposed S8.C stormwater discharge monitoring:
60. Agree with the proposed stormwater discharge monitoring alternative
61. Need a strong incentive for Permittees to participate in regional monitoring; would prefer there be no "opt-out" alternative
62. Stormwater discharge monitoring is the individual monitoring SAM was designed to replace
63. Require Permittees who select an opt-out alternative to produce a fact sheet
64. Because stormwater discharge monitoring is not receiving water monitoring, it is not an appropriate alternative to S8.A monitoring
65. Continue the approach in the 2013 permit
66. Provide Phase II Permittees with an option similar to the Phase I option to opt out of effectiveness studies halfway
67. Allow Permittees to redirect a portion of their S8.A contribution to local monitoring, modeling, and other analyses that direct their local stormwater management activities.
68. This would enable Permittees to identify whether their stormwater management actions are protecting or improving local waters in the jurisdiction
69. Develop a standard Ecology QAPP for local receiving water monitoring that all jurisdictions would follow if they choose this option
70. Monitoring for the new Comprehensive Planning requirement should also count
71. Clarify S8.C language and requirements
72. Phase I Permit language in S8.B.2.b.i.a creates redundancy and confusion. Remove it to be clear as to the additive nature of the number of sites required
73. Phase I S8.C language is clear; and Phase II language is clear
74. Clarify how to submit S8.C reports and data to Ecology

Range of comments on Eastern Washington Effectiveness study requirements

1. Do not require additional effectiveness studies in Eastern Washington during the 2019 permit cycle. Complete the eight studies that began during the 2013 permit before beginning additional studies.
    - Provide more time to implement the changes recommended by the findings of the current studies
2. Modify E WA S8.A.2 as follows: "Coordinate with other local governments in your designated Urban Area to Plan and begin an additional stormwater management effectiveness study. Two or more Permittees Urban Areas may collaborate on a single study."
3. Do not require Eastern Washington Permittees to coordinate on effectiveness studies
    - Allow each jurisdiction to propose their own study

19.1 Response to Comments on Monitoring

Summary of changes made to S8 in the permits:

See also changes to Appendix 2 and Appendix 9.

Clarified language around due dates for S8.A and S8.B payments. Added section S8.D with payment instructions. Clarified that Clark County and City of Seattle, who chose effectiveness studies Option #3 in the 2013 Phase I Permit, shall pay half the amount listed in Appendix 11 for their S8.B.1 payment due on December 1, 2019.

Extended the date in S8.A.3.a.i from September 30, 2019 to January 31, 2020 to provide Clark County additional time to complete and submit the site verification report.

Added to S8.B.3 that a maximum of two requests will be made; also that the request(s) will be transmitted via the Ecology permit manager and Permittees shall have 90 days to provide the requested records.

Minor editorial changes to S8.C. Replaced language that gave default QAPP approval after 90 days, if Ecology did not provide comments, with language that instead allows the Permittee additional time to begin the study if Ecology's review is delayed. Similar change was made in Phase I Permit S8.B.2.c.ii(b).

Listed the ten E WA Urban Areas associated with the permit to clarify the coordination requirement and the option that one or more Urban Areas may cooperate on a study.

Rationale

The S8 monitoring requirements in the general municipal stormwater permits are in lieu of compliance monitoring or stormwater management program effectiveness monitoring by individual Permittees. Stormwater Action Monitoring (SAM) program was included in the 2013 permits following a multi-year stakeholder process that resulted in compelling consensus stakeholder recommendations. SAM was launched in 2014 and the Pooled Resources Oversight Committee and Stormwater Work Group (SWG) have lauded the work of the SAM Coordinator and the accomplishments of the new approach to monitoring overall. The SWG, a formal stakeholder group, will continue to make decisions about SAM priorities and projects.

Ecology disagrees that local monitoring programs constitute in-kind contribution to regional monitoring. Local monitoring (whether TMDL-driven or otherwise) is designed to answer different questions, and giving credit for answering those questions will result in diminished capacity to answer the regional program effectiveness questions.

Ecology disagrees that S8.B funds should cover TMDL-driven monitoring requirements. TMDL-driven receiving water monitoring requirements in Appendix 2 are specifically linked to actions that have been determined to be required above and beyond the other requirements of the general municipal stormwater permits.

Ecology disagrees that an end date is appropriate for SAM contributions. The comment about annual reports and monitoring payments during the permit extension applies to the 2013 permit.

However, if the 2019 permit is administratively extended, monitoring will continue to be implemented just as any other permit-required stormwater management program activity. Permittees selecting S8.A.2.a and/or S8.B.2.a (or S8.B.3.b.ii in the Phase I Permit) should plan for the payment requirements to continue if the permit remains in effect beyond 2024.

Ecology agrees that two months might not be sufficient for Clark County to finalize the sampling site verification report for the urban streams monitoring. Six months should be adequate since this work has been underway.

Ecology disagrees that submission of records for effectiveness studies will pose an undue burden for Permittees who are appropriately managing their permit-required records. Permittees are encouraged to participate in the SWG's process of selecting effectiveness studies. Language was added that a maximum of three requests will be made during this permit term. The request(s) will be transmitted via the Ecology permit manager and Permittees shall have 90 days to provide the requested records.

Ecology disagrees that different or additional alternative to regional monitoring besides stormwater discharge monitoring should be included in the permits. The broad range of comments on this section during both the informal and formal draft comment periods on this permit language indicate that there is no perfect "opt-out" alternative. Ecology decided that the default should be the stormwater discharge monitoring required in the 2005 Phase I Permits and replaced by SAM in the 2013 permits is an appropriate "opt-out" alternative.

EPA requires that Ecology provide QA/QC review and approval of Permittees' QAPPs. Allowing default approval of a QAPP if Ecology does not provide timely comments could result in poor quality assurance and control (QA/QC). Replacing the earlier language that gave default QAPP approval after 90 days, if Ecology did not provide comments, with language that instead allows the Permittee additional time to begin the study, if Ecology's review is delayed, both meets EPA's and Ecology's needs for QA/QC review and addresses Permittees concerns about ability to comply with the permit requirement.

Ecology disagrees that new Eastern Washington effectiveness studies should not begin until the current studies are completed. During the 2013 permit term, with Ecology's financial support, E WA Permittees developed an extensive list of study ideas that includes many that do not depend on completion of the first set of studies. Many of these unrelated topics were ranked by the Permittees as being of high interest.

Ecology disagrees that each Permittee should be allowed to conduct their own study. All E WA effectiveness studies should be valuable to multiple Permittees, and the permit requires cooperation at least among Permittees in the same geographic location and hydrogeologic setting.

Ecology encourages one or more groups of Permittees across all E WA Urban Areas to cooperate on future studies. The ten permit Urban Areas are: Clarkston, Ellensburg, Moses Lake, Pullman, Spokane, Sunnyside, Tri-Cities (Quad Cities), Walla Walla, Wenatchee, and Yakima.

20.0 S9 – Reporting Requirements and Annual Report Appendices

Comments apply to all three municipal stormwater permits, appendices 3, 4, and 5.

Commenters: City of Marysville, Clark County, City of SeaTac, City of Newcastle, City of Redmond, City of Sumner, City of Brier, King County, City of Renton, City of Sammamish, City of Lake Forest Park, Skagit County, Snohomish County, City of Kirkland, City of Lynnwood, City of Tacoma, City of Snoqualmie, City of Shoreline, City of Federal Way, City of Everett, , Thurston County, Washington Environmental Council

20.1 General comments on annual reporting

Permit reference: **Phase I** – S9

WWA Phase II – S9 and Appendix 3

EWA Phase II – S9 and Appendix 3 and Appendix 4

Summary of the range of comments

1. Request for a gap year in annual reporting requirements.
2. August Ecology should have the first annual report comprise of the questions from the previous permit cycle so that there aren't two different permit questions/requirements being reported on in one annual report.
3. "Permittees unable to submit electronically through Ecology's WQWebPortal must contact Ecology to request a waiver and obtain instructions on how to submit an annual report in an alternative format."

   Recommend that this process be applied to all submissions and source materials that currently only refer to an electronic source. The concern is not being able to access or submit electronically for various reasons such as power failure, website taken down, etc

   a. Edit Annual Report questions to be consistent with any clarifications or updates in the permit
   b. Order questions so they align with the order of the permit.
   c. Add permit citations to all questions.
   d. Format all the questions regarding training the same.
   e. There should be clarity on what the intent is behind collecting this data. Consider the publication of data for all jurisdictions to see. The data collected should be used in conjunction with the SAM Effectiveness Studies to alter and modify the permit requirements. "
   f. Municipalities should be required to provide more informative annual Stormwater Management reports, or to submit more supporting documentation to meet reporting requirements, so that the Department of Ecology and the public can accurately evaluate their activities. We recommend phrasing all questions in question format, and refraining

from asking any "yes or no" questions unless that is truly the best way of conveying progress.

g. Question 36 Replace “amount of times” with “number of times"

h. The following information would be better suited in the SWMP than in the Annual report:

i. Opportunities created for the public to participate in the decision making process of the SWMP

j. List of Stewardship opportunities

k. General Awareness efforts

l. Report developed in accordance with S5.C.11.a.ii.e

m. How your hotline telephone number is being publicized

n. If you have implemented procedures for conducting IDDE investigations

o. Field screening techniques used to determine the percent of the MS4 screened per year

p. Actions taken to implement the Source Control program.

q. There are several instances in the Annual Report questions where Ecology is requesting reports or information that is not shown in the Permit language itself. The Annual Report should not add requirements that are not within the permit itself.

r. An electronic version of the annual report should be available for Permittees to be able to see the requirements for each response during the public comment period.

Response to the range of comments

1. Ecology will require an annual report for the 2019 calendar year. Permittees will be asked to report on on-going requirements covered under both the 2013, and the 2019 permits.
2. Ecology currently does not have plans to expand this option to other electronic submissions. Ecology would use enforcement discretion to deal with late submissions due to power outages, etc.
3. Ecology agrees that, where applicable, clarifications in the Permits should translate to clarifications in the annual report questions as well, and that all questions should have an accompanying Permit citation. Ecology also made an effort to organize questions in the order they apply to the Permits, where it makes sense.
4. Ecology disagrees with formatting all of the questions regarding training the same, and instead retained the format which aligns with the applicable permit language.
5. Ecology disagrees with revising questions stated in a ‘yes or no’ format. Ecology’s goal is to get comparable answers that help gauge compliance across jurisdictions. Ecology applies the following list of objectives when developing the draft Annual Report appendices:
    - Track the compliance status of Permittees.
    - Gather information to improve Permits.
    - Identify needs for technical assistance.

- Identify successful outcomes of program for the public.
- Help Permittees coordinate internally.
- Gather meaningful quantitative information statewide.

For some questions, this can be as simple as providing a 'yes or no' answer. For questions that provide a numerical value, this is generally compared against the performance standard outlined in the permit, or to provide Ecology with more information to inform future requirements.

6. Ecology disagrees that the requested information would be better in the SWMP. The SWMP is a forward facing document, whereas annual report questions capture what the Permittee accomplished during the previous year.
7. Ecology agrees that the annual report should not add additional requirements that are not outlined in the permit, however disagrees that we have done so. Ecology also disagrees that all requirements for each response weren't available during the public comment period, as all annual report information is listed in appendices 3, 4, and 5 in each permit.

20.2 Comments on annual report questions, by topic

Permit reference: Phase I Permit – Appendix 3
Western Washington Phase II Permit - Appendix 3, Appendix 4
Eastern Washington Phase II Permit - Appendix 3, Appendix 4

Annual Report for the Port of Seattle and Port of Tacoma

Summary of range of comments

Q 25. Comment Text from previous version of permit should be deleted.

Response to range of comments

Ecology has updated the question with the correct date.

Coordination

Summary of range of comments

1. Q.8 should be eliminated. It is overly duplicative with Q.9. The permit states to update the agreement if needed and to submit information in the Annual Report due not later that March 31, 2020. Q.9.a Is in conflict with permit section S5.C.3.a - which does not state to submit only updates, that permit section states "Permittees shall include a written description of internal coordination mechanisms in the Annual Report, due no later than March 31, 2020." This does not say "updated".

Response to range of comments

1. Ecology does not agree that Question 8 and 9 are duplicative of each other. Question 8 is asking about continued implementation, while question 9 is asking about any updates to your coordination agreements. Ecology also disagrees that Question 9a is in conflict with S5.C.3.a.

The question is asking for submission of the entire description of internal coordination mechanisms, if they have been updated.

Mapping

Summary of range of comments

Q. 5.a - Why is it necessary for Permittees to submit a spreadsheet of outfall data, vs another format of submittal?

Response to range of comments

Ecology is requesting this format of submittal for ease of review.

Education and outreach

Summary of range of comments

For the questions referring to the Education and Outreach section, only the question referring to the 'General Awareness' section asks about participating in a regional program. The other applicable annual report questions should be crafted to allow Permittees to explain which parts of their Education and Outreach program they participated in regionally.

Please remove any blanket requirement to attempt to change understanding or evaluate changes in understanding as part of behavior change efforts, as effective behavior change does not always require changes in understanding.

Response to range of comments

Ecology agrees that Permittees should be able to explain how they participated regionally in all aspects of their Education and Outreach program. A separate questions inquiring about regional participation has been added.

Please see discussion in the Education and Outreach section regarding 'changes in understanding'.

IDDE

Summary of range of comments

1. Any section that requires the Permittee to start recording new information should include a ramp up period of at least one year to allow Permittees to update existing databases, processes, and procedures - and allow time to train staff on any new information needs
2. PH I Q. 38. The wording of this question makes a response difficult. Please reword
3. Questions 40a and 41 (PH I) It appears that these questions doesn't provide a useful measure of ""level of effort""
4. For the question asking for the total MS4 screened, would this be unique sections of the MS4 or if the section was reinvestigated during the permit term would that be counted twice? If a section was visually inspected and then also inspected via downstream outfall monitoring would it be counted once or twice?

5. PH I Q 41: Ecology should use consistent language when talking about conveyance systems and the MS4. The term here should be "known conveyance system".
6. PH I Q. 45 - Reword question to request the number of illicit discharges "identified" since follow up will be described in the answer for Q. 46. Not every illicit discharge has record of being eliminated. Also, the last sentence has the phrase "all of the applicable information", please clarify this meaning.

Response to range of comments

1. A ramp-up period has been added to the reporting requirement for IDDE. See additional discussion in the IDDE section.
2. Ecology disagrees that PH I Q 38 is unclear. Question retained without edits.
3. When calculating the total percent of the MS4 screened, Permittees may include sections that were re-screened.
4. Ecology disagrees that questions 40 and 41 de not communicate permit compliance. S5.C.9.c.i requires a Permittee to document their field screening methodology in their annual report. Question 41 addresses if 'on average' Permittees are screening at least 12% of their MS4 per year.
5. Ecology believes the terms MS4 and conveyance system are being correctly used.
6. Ecology disagrees with the request to reword question 45. The requirement is to have procedures for eliminating illicit discharges.
7. 'As describes in S5.C.9.a' has been added to question 46 for clarity.

Controlling Runoff

Summary of range of comments

Q. 25 - Because the NOI is now an electronic document it is unclear how this requirement is intended to be met and why it is necessary to report on this in the annual report.

Response to range of comments

Making the NOI's for construction and industrial activities available is a permit requirement, and Ecology is using this question to gauge compliance with that requirement. See discussion in controlling runoff section regarding how this requirement can be met.

O&M

Summary of range of comments

1. Q61 Remove the new "cleaned as needed" question or split the questions so the Permittees can provide separate responses.
2. Q61 Remove 'inlet' from the question

3. Q 51- This states to attach documentation of any maintenance delays. Revise the Annual Report question to align with the Permit section: "Attach documentation of maintenance time frame exceedances that were beyond the Permittee's control".
4. The Permit states to inspect all stormwater treatment and flow control facilities owned or operated by the Permittee while the annual report question states municipally owned or operated stormwater treatment and flow control BMPs/facilities. Please use consistent language and defined terms.
5. PH II Q54 can be deleted. The following Q (55) answers this question
6. Q58 can be deleted. Qs 58a-c answer the same Q in greater detail.
7. Q59 should be revised to say "Attach documentation of alternative catch basin INSPECTION approach, if used

Response to range of comments

1. PH I Q 61, WW PH II Q 58, EWA PH II Q 46. Ecology disagrees with removing this question. However, “Cleaned as needed” has been added as its own sub-question in all three permits, and the word ‘inlet’ has been removed to be consistent with the Permits.
2. Ecology agrees with the change made to the question regarding maintenance delays, and has updated the language accordingly.
3. Questions referring to ‘municipally owned or operated’ have been updated to refer to ‘owned or operated by the Permittee’.
4. Question 54 has been retained.
5. Question 59 of the PH II permit has been corrected to refer to catch basin inspection approach.

Source Control

Summary of range of comments

1. Q 36- "Attach a list of inspections, per S5.C.8.b.iii, organized by the business category, noting the amount of times each business was inspected, and if enforcement actions were taken.”
2. Reporting out on the number of inspections done by business category will only show that Source Control efforts tend to focus on food service establishments, automotive detailing/repair shops and private-residential stormwater device maintenance.
3. What is meant by noting the amount of time each business was inspected?
4. How does this information indicate permit compliance?
5. Enforcement philosophies vary across jurisdictions so the number of enforcement actions taken by jurisdiction should not be considered comparable data. Different programs will compel compliance in different ways.
6. Sorting enforcement actions by business type is an irrelevant exercise. Business type does not drive enforcement – personality type of the responsible party, or the Source Control staff, drives enforcement.

7. Retooling an existing database to sort data for this annual reporting requirement will not produce any newly useful information and is overly burdensome to Permittees. For this type of reporting, there should be a minimum one year ramp up period. In addition, the permit section does not require tracking by business category. It appears that the annual report question is attempting to establish a requirement that is not in the permit. Remove the requirement to organize by business category. Please delete this reporting requirement or use the question from the 2013 permit."
8. PH I Q.34 - revise this question and the permit language from "at least once every 5 years" to "once within a permit term". The start point for the 5 years is unclear.
9. PH II Q67 can be deleted. It is answered in detail by Q68.

Response to range of comments

1. Q 36 PH I, Q 68 WW PH II. Question retained without edits. Annual report questions help gauge compliance, as well as inform future requirements. Ecology agrees that business type does not drive enforcement, but characterizing which businesses are enforced upon the most can help Permittees prioritize future inspections. Ecology disagrees that these questions result in irrelevant exercises for Permittees.
2. PH I Q 34-- The 5 year timeline starts from the date of last update. Question updated to match permit language.

Stormwater Planning

Summary of range of comments

1. PH I Q.27 This provision of S5.C.6 does not give a deadline and so it is unclear when this question will be answered for evaluating permit compliance. Clarify deadline or remove this question.
2. PH I Q. 28 - The permit section (S5.C.6.a.i) states two different things: that the Permittee shall describe in the Annual Report how they are meeting this requirement and that they must submit reports on specific dates. The Permit language never states that this Report must be submitted to Ecology. Clarify language within the Permit and describe how this report will be used by Ecology (why it needs to be submitted to Ecology). Update the permit section and annual report questions to be consistent. Revise the reporting date to March 31, 2022.
3. PH I Q. 29 – For the LID updates, the Permit language states that Permittees must create a report for this requirement. If a separate report is being created it is unclear why the Permittee also has to attach a separate summary document.
4. The question regarding convening an interdisciplinary team should be deleted, as it's covered in the question asking about internal coordination mechanisms.
5. PH II Q10: This Q can be eliminated. Just ask for the attachment in 10a.
6. PH II Q11: This Q can be eliminated. Revise to 11a as "Attach Stormwater Management Action Plan developed for at least one high priority area."

Response to range of comments

1. The Stormwater Planning section of the Permits underwent significant revisions from the Formal Draft. Because of this, many of the annual report questions that were commented on have either been significantly changed, or deleted altogether.
2. Ecology disagrees with the general format of just asking for an attachment. See discussion under 'General' of this section for an explanation of question formatting.

Structural Stormwater Controls

Summary of the range of comments

Q.32 Revise this question to add ""for the purpose of meeting S5.C.7.d"" after ...permit term..."

Response to range of comments

Ecology agrees with this revision and updated the question accordingly.

General Conditions

Summary of the range of comments

1. There is no notification procedure for G3 reporting requirements listed.
2. It is unclear how to answer the question regarding G20 notifications, if the Permittee had no G20 notifications during that reporting year.

Response to range of comments

1. See discussion under General Conditions regarding G3 reporting.
2. The question regarding G20 notifications will have a N/A option available.

Appendix 1

Summary of the range of comments

Is Q. 16 and Q. 17 meant to be the total number of adjustments and exceptions with 16a and 17a just meant to show the number of adjustments/exceptions made only to MR#5? Or will the answer to 16 and 17 include the totals from 16a and 17a and others? Additionally, MR #5 contains infeasibility criteria - it is not likely that an applicant will require an adjustment or exception request to a Minimum Requirement - they will likely use the infeasibility criteria to not utilize a given BMP.

Response to range of comments

Yes, the initial question should be the total. So, for question 16, it would be the total adjustments including the adjustments to MR #5, then 16a, would just be the adjustments made to MR #5. Ecology retained this question without edits.

21.0 General Conditions

Comments apply to all three municipal stormwater permits.

21.1 G3 Notification of Discharge, Including Spills

Commenters: City of Edmonds, Clark County, City of Bellevue, King County, Snohomish County, City of Olympia, City of Tacoma, City of Shoreline, City of Port Angeles, City of East Wenatchee, Clayton Verellen.

Summary of the range of comments

1. Permittees reporting spills or discharges of oils or hazardous substances to the Ecology regional office (spills), Washington Emergency Management Division, and submitting a G3 notification to Ecology via the ERTS system creates redundant reports for responders and regulators alike, and slows the on-scene spill response actions. This reporting process should be streamlined and more clearly defined.
2. Clarify in the permit or fact sheet the relationship of the G3 notification to the Environmental Report Tracking System (ERTS) and when an ERTS notification is required of Permittees, if ever.
3. G3. B. Ecology should continue to clearly publish contact numbers for reporting spills. Often efforts to identify the appropriate contact at Ecology is not straight forward, which delays response times and results in confusion in the roles and responsibilities of each agency.
4. G3. The permit needs to clearly specify how the notification should occur. If this information is not included, it is not possible to know the correct method for notification. It could be expected that a formal letter with G19 certification could be submitted by postmarking within 24 hours. Permittees must be able to clearly understand how to be compliant with this requirement. The online submittal should include a receipt capability.
5. G3.C - Why is this section specific to marine waters?
6. G3.D - Add the words "if appropriate" after the word "and" in this sentence. It is not always required to report to both of these authorities.
7. G10. First sentence - Define storm sewer system or revise to MS4, conveyance system or another defined term. Capitalize Waters of the State.
8. G19. To help facilitate Permit compliance, provide a list of all items that are required to be submitted to Ecology and how they are required to be submitted and to whom.
9. G20 - Add as Item 4 "4. G19 certification language".

Response to range of comments

1. Ecology retained the permit language. We provide notification guidance on our Municipal Stormwater Permit guidance webpages, including several tables and Frequently Asked Questions on G3 and when and who to notify, and signatory requirements when it applies.
2. We maintained the proposed change to G3. The Ecology municipal stormwater permit contact at the regional office can assist if a Permittee has trouble finding the correct reporting contact.

Ecology removed the contact reporting numbers for spills in preparation for alternative reporting methods currently under development.

3. Ecology is currently compiling a list of all items that are required to be submitted to Ecology and how they are required to be submitted.
4. G10 has been revised to state 'MS4' instead of storm sewer system.
5. G19 describes when an authorized signature is required, and does not need to be repeated in other sections of the permit.

21.2 G9 Monitoring

Commenters: City of Everett

Summary of comments

1. Add to G9.F Lab Accreditation: "….Ammonia, surfactants, salinity and other quick field methods of detection." This needs to be changed to add additional parameters done in the field, if Ecology chooses to include IDDE sampling in this same category.

Response to comments

1. Ecology agreed with the comment and modified the permit language so that, in cases where the purpose of sampling is to identify and remove a suspected illicit discharge, quick methods of field detection of pollutants are exempt from G9 Lab Accreditation.

22.0 Definitions

Comments in this section apply to all three municipal stormwater permits, although not all the terms are in all three permits.

Commenters: Clark County, City of Redmond, Thurston County, King County, Snohomish County, City of Tacoma, Washington State Department of Transportation

Summary of the range of comments

1. The following terms were asked to be defined:
    - Redevelopment
    - Construction activities
    - Project
2. The following terms were asked to be defined in context with the Mapping section:
    - Surface waters
    - Stormwater treatment and flow control facilities owned or operated by the Permittee
    - Associated emergency overflows

- Geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface water
- Equivalent cross-sectional area
- Associated drainage areas
- Land uses
- Public entities
- Privately-owned stormwater systems

3. The following terms were asked to be defined in context with Controlling Runoff:
    - Site scale
    - Subdivision scale
    - 'Ecology approved basin plans or other similar water quality and quantity planning efforts'
    - Private stormwater facilities
    - Permitted development site
    - Construction site
    - Permanent stormwater facility
    - Scheduled inspection
    - Fully stabilized
4. The following terms were asked to be defined in context with the Structural Stormwater Controls section and Appendix 12:
    - New flow control facilities
    - New treatment facilities
    - Large capital construction projects
    - Likely development site
    - Permanent removal
    - Complete, as used in determining incentive points
5. The following terms were asked to be defined in context with the Source Control section:
    - Commercial and industrial properties which have the potential to generate pollutants to the Permittee's MS4
    - Other pollutant generating sources
    - Mobile business
    - Home-based business
    - Multi-family properties

- Legitimate complaint
- Sites

6. The following term was asked to be defined in context with the IDDE section:
    - Potential illicit discharge
7. The following term was asked to be defined in context with the O&M section:
    - New residential developments
8. The following terms were asked to be defined in context with Appendix 1:
    - Resurfacing
    - Pavement preservation activities
    - Motor vehicles
9. The following term was asked to be defined in context with Appendix 6:
    - Street waste liquids
10. The following terms were asked to be defined in context with Appendix 7:
    - Development site
    - Marine near-shore habitat
    - Anthropogenic barriers
11. Include definitions for all words and terms where definitions were requested in other comments.
12. Add definition "stormwater facility regulated by the Permittee" to match Phase I Permit
13. In the definition of discharge point the term "MS4 facilities/BMPs designed to infiltrate" is used. MS4 facilities/BMPs is not a defined term, consider using "Stormwater facilities regulated by the Permittee" or "stormwater treatment and flow control BMPs/facilities" or define "MS4 facilities/BMPs".
14. The definition of "Outfall" has the phrase "means point source as defined by 40 CFR 122.2 at the point where a discharge" repeated twice - please remove repeated phrase.
15. Definition of Stormwater Treatment and Flow Control BMPs/Facilities - The word "permanent" appears to have been placed in the wrong location. As written, permanent would only apply to treatment BMPs/facilities and would not apply to detention facilities or any of the other facilities noted in the definition. Is the intent to include temporary construction detention facilities and other temporary facilities in this definition? Also rewrite to clarify that all BMPs/Facilities in this definition would help meet minimum requirement #6 or #7.
16. The definition of SWMMWW refers to the 2019 SWMMWW but Ecology has indicated that Permittees could utilize portions of the 2014 SWMMWW and be compliant. Consider revising this definition to only include those sections of the SWMMWW as required to be changed by Appendix 10.

17. Interflow should not be included in the definition of stormwater because it is waters of the state, it is underground waters, not stormwater runoff. Interflow would be a groundwater receiving water for stormwater runoff.
18. Remove 'Beneficial uses', as it's not used in the permit
19. Remove 'approved by Ecology' in the definition of BMP, or use EPA's definition
20. To maintain consistency with S2.A.1, the definition of "discharge point" should indicate that it excludes Underground Injection Control (UIC) facilities.
21. The definitions for "outfall," "discharge point," and "receiving waters" are not consistent with those in the WSDOT Municipal Stormwater Permit, or the 2014 settlement agreement (Stipulation and Agreed Order of Dismissal) resolving the appeal of the 2013 Phase II Municipal Permit for Western Washington. Although WSDOT does not object to the continued use of the existing permit definitions of "outfall," "discharge point," and "receiving waters," in the Phase I, Phase II Western Washington, or Phase II Eastern Washington stormwater permits, WSDOT does not waive its right to later enforce the original settlement agreement (Stipulation and Agreed Order of Dismissal), if appropriate and as WSDOT deems necessary.

Response to range of comments

1. Ecology has added 'surface water' to the definitions section of all three Permits. We used the existing definition from the WAC 173-201 A, reflected already in Ecology's ISGP and CSWGP.
2. New residential development refers to new development as determined by using the thresholds outline in Appendix 1, for residential projects.
3. Ecology does not agree that these terms all need permit definitions. Many of the terms used follow a standard dictionary definition and/or the context of the permit provision and Stormwater manuals provides adequate information for Permittees to determine how to comply with the requirements. Ecology added definitions for the terms "surface waters" and "fully stabilized", taken from the Construction Stormwater General Permit, to all three permits. The definition for 'land-disturbing activity' from the SWMMEW was added to the Eastern Washington Phase II Permit.
4. The proposed revision for 'stormwater treatment and flow control BMPs/facilities' is intended to restore mapping and O&M requirements as detention and facilities and permanent treatment BMPs/facilities that were included under the 2007 Permit. The intent to limit the mapping and O&M requirements of permeable pavement, bioretention, and vegetated roofs to those that help to meet MR #6 and 7, or both, is maintained.
5. 'Stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee' is already a defined term in the Permit. There are no instances of 'Stormwater treatment and flow control facilities owned or operated by the Permittee'.
6. In reference to 'outfalls' and 'discharge point', the settlement language that resulted from the appeal process mentioned includes 'inadvertent infiltration through ditches or swales' as a type of discharge point. Therefore, Ecology made clarifications as outlined in the Response to Comments for the 2014 modification, found in Appendix B of the 2011 fact sheet.

23.0 Western Washington Appendix 1

Commenters: Michael Martinez, Clark County, Company - LDC, Inc, Building Industry Association of Washington, Futurewise, Port of Seattle, City of Redmond, The Northwest Seaport Alliance, Pierce County, WEC, PSK, Futurewise, King County, City of Renton, City of Seattle, Master Builders Association of King and Snohomish Counties, City of Sammamish, City of Mukilteo, Snohomish County, City of Snoqualmie, City of Port Angeles, Puget Soundkeeper Alliance, City of Poulsbo

23.1 General Comments

Summarized comments

1. Multiple comments requesting references to specific volumes, sections, page numbers, etc. in the SWMMWW whenever guidance from the SWMMWW is referred to.
2. Items such as BMPs in Appendix 1 need to reference the SWMMWW as the references are not included within the Permit. (e.g. BMP T7.30: Bioretention should be SWMMWW BMP T7.30 Bioretention)
3. Per S5.C5.b.i, the Permittee is required to adopt Minimum Requirements, thresholds, and definitions in Appendix 1 that are determined to be equivalent by Ecology. In Appendix 1, Ecology should explicitly call out which sections of the SWMMWW that must be adopted for equivalency. For example, Section 4.3 Minimum Requirement #3, should specify which portion of the SWMMWW shall be adopted for equivalency (i.e. Volume IV).
4. Sections 4.6 and 4.7 include a confusing qualifier at the beginning of the section: "Except as provided below…". Which exception is ECY referring to? It seems to be clearer to just state: "The Permittee must require (Runoff Treatment/Flow Control as appropriate) BMPs in accordance with the following thresholds, standards, and requirements..."

Response to comments

1. Ecology will update Appendix 1 of the permit to reference specific topics within the manual, by section number, where appropriate.
2. Ecology has taken care to cite Ecology's full BMP name and number, when specific BMPs are referenced in Appendix 1. It is understood that Ecology is referencing its own collection of design documentation for that BMP, as contained in the 2019 SWMMWW. No change made.
3. Appendix 10 of the *Phase I Municipal Stormwater Permit* details what updates must be made to a Permittee's enforceable documents for equivalency evaluation by Ecology. No change made.
4. MRs 5, 6, 7, and 8 all included a similar introductory statement. The intent of the "except as provided below" portion of the statement was to clarify that for some projects, if the thresholds/standards/requirements are followed, it may not result in a BMP being required (e.g. a project that is broken into two TDAs, neither of which meet the TDA Thresholds for Flow Control). Ecology updated MRs 5, 6, 7, and 8 as requested.

23.2 Section 1. Exemptions

Summarized comments

1. Include the construction of chip seal on top of dirt and/or gravel as a new impervious surface.
2. Provide clarification regarding when resurfacing by upgrading from BST to asphalt or concrete is considered a new impervious surface. In some applications BST is used directly over a base course. In others it is used to provide an overlay or wearing course over existing pavement (asphalt or concrete). Resurfacing of the latter should not be considered new impervious surface as the characteristics of the surface have not been altered. REVISE as follows: "...upgrading from a bituminous surface treatment ("chip seal") used directly over a base course to asphalt or concrete..."
3. Pavement Maintenance - This section lacks clarification as to whether pavement maintenance activities are exempt as an element of a project, or only if pavement maintenance is exempt only if done as a stand-alone project and not an element of a project or triggered as a threshold requirement of another project. Provide additional clarifying language.
4. Consider making voluntary cleanup projects as described in WAC 173-340-400 exempt from the Minimum Requirements.
5. Recommend adding ADA pavement retrofits that are done to provide ADA accessibility as an exemption.
6. Consider including repair of pavement sink holes to maintenance practices that are exempt.
7. Consider including repair or reroofing with equivalent hard surface material to maintenance practices that are exempt.
8. Clarify whether the addition of a roof over an existing impervious surface, such as a patio or deck is considered a new or replaced impervious surface or if it is not new/replaced impervious.

Response to comments

1. Change made. Ecology agrees that an upgrade from dirt or gravel to chip seal is a new impervious surface.
2. Ecology updated the text in the definition of "new impervious surface" in the glossary.
3. The exemption applies to pavement maintenance practices only. The exemption does not apply to pavement maintenance that is part of a new or redevelopment project. If the project contains more than pavement maintenance, it is not exempt and must be evaluated to determine which minimum requirements apply. No change made.
4. Stormwater controls apply to all projects that trigger thresholds, including cleanup projects. No change made.
5. No change made. Ecology has acknowledged ADA challenges with respect to stormwater requirements as reflected by the competing needs infeasibility requirement for Minimum Requirement #5.

Consider that the thresholds for ADA retrofits would need to be exceeded prior to needing to meet the Minimum Requirements. For replaced surfaces, this would mean that more than the corresponding 50% threshold (50% of the existing hard surfaces within the project area for road related projects, 50% of the assessed value for other redevelopment projects) would need to be exceeded prior to needing to address the Minimum Requirements for replaced surfaces. Ecology considers this a reasonable threshold to maintain. Utility projects have different characteristics which would be expected to include much large square footage requirements. These are not considered akin to ADA retrofits.

6. Where "sink holes" could be classified as maintenance within the existing guidelines, this would be acceptable. Ecology feels like the existing language already provides adequate guidance to substantiate the suitable exemption. No change made.

7. Roof repair or re-roofing would not be expected to be called replaced surfaces because it does not extend to the foundation per the definition of replaced hard surfaces. An exemption would be redundant. No change made.

8. A roof is considered an impervious surface. Whether or not it is a new or a replaced impervious surface will depend on whether or not the surface it is covering is considered an existing impervious surface. The commenter refers to decks and patios, which may or may not be considered impervious surfaces.

   An existing concrete or asphalt patio would be considered an existing impervious surface, and the addition of a roof over it would not be considered a new or a replaced impervious surface (unless the patio is removed to base course and rebuilt in the process, in which case it would be considered a replaced impervious surface).

   For decks that allow water to pass through them, the status of the surface underlying the deck is the controlling factor to determine whether or not it is an existing impervious surface.

   If a deck is solid, so that water does not pass through, it should be considered impervious.

   Local governments may choose to designate all decks as impervious surface.

   This determination was based on good engineering practice and Ecology did not feel the need to impose prescriptive guidance. Ecology believes that the qualified professional will have sufficient information to determine the appropriate modeling approach and that the Permittee has sufficient technical capacity to judge the correct implementation for their jurisdiction. No change made.

23.3 Section 2. Definitions Related to Minimum Requirements

Summarized comments

1. Multiple comments requesting definitions for multiple terms.

2. Commenter requests changes to the definition for "CESCL". Specifically, the commenter requests that the definition state that CESCLs must be listed as current on Ecology's website.

3. Commenter requesting clarification on if the concept of "common plan of development or sale" only applies when determining if a Construction Stormwater General Permit is required.

4. Comment requests that the definition for "new impervious surface" include mention of structure construction.
5. Commenter thinks that the definition for "new impervious surface" is a new definition.
6. Clarify whether the addition of a roof over an existing impervious surface, such as a patio or deck is considered a new or replaced impervious surface or if it is not new/replaced impervious.
7. Revise definition of "pollution generating hard surface" (PGHS). Current definition refers only to PGIS surfaces, omits permeable pavement (and green roofs).
8. Comment requests adding "storage or use of erodible or leachable materials . ." to the definition for "pollution generating impervious surface".
9. Comments requesting more information on the status of artificial turf (pervious, impervious, pollution-generating, non-pollution generating).
10. Comment requests expansion on the definition for "pollution generating pervious surface".
11. Comment requesting Ecology's determination on whether or not specific types of surfaces are considered pollution generating.
12. Comments requesting edits to the definition for "project".
13. Comment requesting addition of a reference to TDAs in the definition of "Project Site".
14. Comments regarding the definition for "threshold discharge area". Comments note that the definition differs from the definition in the HRM, and that "discharge point" is used differently than the defined term "discharge point".
15. Comments requesting clarification of whether "light rail" and "heavy rail" are considered subject to regular use by "motor vehicles". Comment specifically refers to the definition for "vehicular use."

Response to range of comments

1. Ecology has taken care to define terms used in the SWMMWW that are not standard industry terms. If a term is not defined, then it is either a standard industry term, or Ecology has intentionally not defined the term to allow discretion to local governments.
2. No change made. A CESCL's certification is not voided if Ecology's database is not current.
3. The term Common Plan of Development or Sale applies to the Construction Permit and is no longer used for determining the Municipal Stormwater Permit minimum requirement thresholds in the western Washington Municipal Stormwater Permits (the phrase is still used in the Eastern Washington Permit for determining thresholds). The western WA Municipal Stormwater Permit removed the term during the 2013 permit cycle, when the minimum requirement thresholds were reduced.

   However, if a development project contains multiple phases, even in western Washington, Ecology would expect the project proponent to consider (and the jurisdiction to review for) the entire project (i.e. all phases) when evaluating project thresholds. Projects should not be proposed piecemeal in order to reduce thresholds and avoid applying the permit's minimum requirements.

4. Edited text to include an impervious structure as an example of an impervious surface.
5. This is not a new definition, it is just new to the glossary. Ecology hasn't changed the idea that going from chip seal to asphalt is a new impervious surface. This definition has been in the SWMMWW and Appendix I of the Permit since the 2001 version. See the third bullet under Pavement Maintenance in Vol I - Section 2.2.
6. This decision will be based on the site specific conditions.

   Where the roof is 100% impervious with no gaps and the underlying surface was pervious, this would be considered new impervious.

   In the case where the deck has slats that allows the precipitation to continue to go through and infiltrate, the jurisdiction may want to consider this as non-impervious, because the material under the deck is the governing runoff mechanism.

   The definition of "new impervious surface" has been updated to include impervious structures as an example of an impervious surface.
7. No change made. The definition of PGHS refers to the definition of PGIS for the list of activities that would make a surface pollution generating. Permeable pavement would, if subject to vehicular use, be identified as a pollution generating hard surface based on the existing definitions.
8. No change. The use of erodible materials should be managed by appropriate source control BMPs. The local jurisdiction may add requirements for treatment BMPs for situations with ongoing use of such materials.
9. The definition of Pollution-generating pervious surface (PGPS) in the glossary specifically mentions "sports fields (natural and artificial turf). Ecology considers cases where the artificial turf is underdrained as Pollution-generating impervious surfaces since there is no reduction in flow to the surface. artificial turf fields that are not underdrained and water draining through the fields infiltrates directly under the field are considered pervious. Seattle's interpretation matches that of Ecology.
10. Ecology is unable to expand on the reference to pesticides and fertilizers and name specific products. This is thought to mean use of toxic chemicals to control pests and weeds that are widely spread or sprayed on the landscaping. Compost is not included in this since we include a required use of compost in BMP T5.13. Ecology would prefer use of "natural" methods for routine landscape maintenance. This decision ultimately lies with the jurisdiction. No change made.
11. Ecology is unable to list every types of specific surface that would be considered pollution generating. Ecology has provided guidelines within the definitions, and leaves it to the discretion of the jurisdiction to make site specific determinations. For the surfaces listed in the comment, Ecology would anticipate that there would be risk of chemicals, erodible materials or other pollutants as listed within the corresponding definitions. No change made.
12. Ecology has reviewed the existing definition for "project', and feels it is adequate. New development and redevelopment are types of projects. No change made.

13. The term "Threshold Discharge Area" (TDA) has its own entry in the Glossary. The definition for "project site" will remain focused on defining the term "project site". No change made.
14. Ecology recognizes that this definition remains different from the WSDOT HRM. This is not a change. This figure is a clarification of the language, which is unchanged from the prior manual. No change made.
15. Based on a general consideration of how railways are constructed and operated, they are pollution generating surfaces and railways are subject to the vehicle use definition. We do not currently have specific guidance for rail projects, but many of the BMPs in the manual can and should appropriately be applied.

23.4 Applicability of the Minimum Requirements

Summarized comments

1. Comment on Figure 2 of Appendix 1: "Flow Chart for Determining Whether the Permittee Must Regulate the Project"
4. The first block of the flow chart says, "Will the project discharge stormwater either directly or indirectly into an MS4 owned or operated by the Permittee?" If the answer is "no" the Permittee is not required to apply the minimum requirements; however a project may be at the perimeter/city limits of a regulated MS4 and due to topography discharge directly outside the boundary into someone else's MS4. Based on the flow chart, the project won't be subject to minimum requirements yet it could flow into someone else's regulated MS4. Consider changing the last two words in the first block to say, "...a Permittee" or ".....any Permittee"
2. Phase I Permit App. 1 Section 3, Figure 1-4.2, p.16 (redline) Reference to "Figure 1-2.4.2" This reference appears incorrect. Shouldn't it be to "Figure 1-4.3"?
3. Page 97: In the Permit language box, change "development" to "new development".
4. The thresholds are based upon the time of application for subdivision, plat, short plat, building permit, or other construction permit. Subdivision, short plat, building permit, and construction permit are not defined. The definition of plat appears to encompass the definitions of subdivision and short plat. Consider revising language for clarity. It appears the intent to set vesting requirements for when the MRs should apply to a project. Consider changing plat, short plat, and subdivision to land use actions whose ultimate goal includes new development or redevelopment.
5. New Development/Redevelopment Thresholds. The way the language is written, for new development and redevelopment projects, you only ever have to comply with the MRs for the land disturbing activities if the lesser thresholds are met as the language for land disturbances is left out of the MR#1-9 section. This is likely not the intent. Revise language.
6. It is unclear why projects located on parcels that are privately funded are not allowed to use an equivalent area outside their parcel boundaries
7. It is unclear why only redevelopment projects may utilize regional facilities. Provide justification.

8. Multiple comments expressing confusion about determining Minimum Requirement applicability at the project level vs. the TDA level.
9. Multiple comments expressing concern that there is an unintended consequence (loophole) of the redevelopment thresholds for non-road redevelopment projects. The loophole appears to happen for redevelopment projects on large sites that have valuable existing improvements.

   Suggestions include to revise the flow chart (Figure I-3.2) and associated language in the text to eliminate the 50% assessed value rule for redevelopment and replace it with a threshold of a replaced impervious surface area that exceeds 22,000 square feet or exceeds $100,000 in value.

   Concerns expressed by commenters include:

   a. "There is no environmental justification for linking stormwater treatment to the market value of a building and this loophole results in harmful actions on the ground."

   b. "As property values in our region soar, we fear that fewer and fewer stormwater controls will be required under this scheme. "

   c. "As property values have increased, the likely effect is that less and less LID will be required."
10. Eliminate the option for local governments to exempt or institute a stop loss provision for redevelopment projects from compliance with Minimum Requirement #5, #6, #7, and/or #8 as applied to the replaced hard surfaces.
11. Consider adding a “change of use” threshold to the SWMMWW. Currently if a building is razed to leave behind a parking lot the thresholds for Runoff Treatment would not be met even though there is essentially a new pollution generating hard surface created.
12. "Flow Chart for Determining Requirements for New Development" appears to have an error - Change first box from "impervious surface" to "hard surface" to match the definition of "redevelopment" on page 9 of 47.
13. Appendix 1 Section 3.4 "Additional Requirements for Redevelopment" The first paragraph in this section states " Road-related projects shall comply with all the Minimum Requirements for the new and replaced hard surfaces (including pavement, shoulders, curbs, and sidewalks) and the converted vegetation areas if the new hard surfaces total 5,000 square feet of more and total 50% or more of the existing hard surfaces within the Site."

    This proposed paragraph removes the limits of the road - related projects and replaces it with the word "Site". Since road-related projects are located in right-of-way, and right-of-way conceivably does not have a beginning and an end we request that a definition of "Site" be added to the "Definitions and Acronyms" part of the draft Phase 1 Permit. If the definition of "Site" that is contained in the 2019 Draft SWMMWW is added to the Definitions and Acronyms part of the draft Phase 1 Permit this would address our concern.
14. Runoff from road bridges needs to be captured and conveyed to soil columns prior to discharge into surface waters. Direct discharges into surface waters should be treated using soil columns.

15. Multiple comments requesting lower thresholds and stronger requirements for BMP application.

    Specific concerns that current requirements for LID implementation are not enough. Comments request stronger and expanded requirements around LID principles and practices.

16. Multiple comments with concerns that new or redevelopment of single family homes will not trigger Minimum Requirements. Comment notes that the average home size is approximately 2500 square feet, which would put the project below the thresholds for Minimum Requirements.

17. It is not obvious how to apply the minimum requirements to a project that has construction proposed both on parcels and within the right-of-way. Define and use “project” and “project site” more carefully.

Response to range of comments

1. Ecology carefully considered the problem identified in this comment, and decided not to change the language because it would raise a number of legal and policy issues related to the legal authority to control discharges to and from MS4 owned or operated by the Permittee. Ecology also believes that most jurisdictions generally will apply the minimum requirements and regulate projects located within its political jurisdiction, even if the site discharges to a neighboring municipality’s MS4. Ecology also believes this is another opportunity for inter-jurisdiction coordination to address any particular project that falls into this gray area of regulatory control.

2. Thank you for noting this error. Ecology has updated the Figure "Flow Chart for Determining Requirements for New Development", and corrected the reference. Because the figure is shared by both Appendix 1 and the SWMMWW, the new reference within the figure uses the figure name rather than the figure number.

3. Ecology agrees with Summarized comment #3, and has updated the text.

4. Thank you for your comment. Ecology is opting to not alter this long-standing language. No change made.

5. Only MRs 1-5 would be applicable to areas of disturbed land. MRs 6, 7, and 8 are to mitigate runoff from new or replaced hard surfaces and vegetation areas. Note that if the MR 1-9 thresholds are met, the MR 1-5 thresholds are also met, and the project would require MRs 1-5 for the areas of disturbed land. No change made.

6. The text regarding equivalent areas has been updated for consistency with the in-basin transfer guidance. Any project may use an in-basin transfer, so long as the guidance provided in Appendix I-D is followed.

7. The manual does not state that only redevelopment may use regional facilities.

8. The use of Threshold Discharge Areas has been in the SWMMWW since the 2001 edition. As clarified in the 2019 manual, the project proponent must first determine what MRs apply using data (i.e. areas) for the whole project. If MRs 6, 7, and 8 apply to the whole project, there is a secondary step to determine if BMPs are required in individual TDAs in order to comply with the requirement. MRs 6, 7, and 8 have their own thresholds for the TDA level analysis.

The edits to the 2019 SWMMWW did not change the guidance, but rather intends to add clarity about the distinction between the project level thresholds and the TDA level thresholds.

9. Ecology has had the opportunity to get some clarification from one of the commenters on the case commonly referenced in the comments. The commonly referenced case applies to a large industrial/commercial property where the portions subject to redevelopment will likely never trigger the redevelopment criteria. The portions of the site subject to redevelopment appear to effectively operate as discrete parcels within the site. It was not Ecology's intent to favor large commercial or industrial properties that can market slices for redevelopment. Ecology updated the threshold to specifically address these large commercial and industrial property cases.

   The threshold has been updated so that for commercial or industrial projects, the valuation of the proposed improvements, including interior improvements, is compared against 50% of the assessed value of the existing *Project Site* improvements, rather than the *Site* improvements, as was previously used. This change captures the original intent of the threshold, which is to require stormwater controls for replaced surfaces for redevelopment projects that propose a significant upgrade to the existing property.

   Ecology has sought to balance providing support for redevelopment and recognize the value of maintaining non-impervious surfaces. Lowering the thresholds to a square footage would have the coincident effect of reducing the incentive to redevelop existing impervious surfaces. This is important in infill areas. There are acknowledged environmental benefits to infill development that Ecology seeks to continue to support.

   Ecology's current guidance encourages a redevelopment threshold basis on a certain dollar value or a ratio of new hard surface to replaced hard surface (See "Options for Local Governments"). Ecology will continue to encourage jurisdictions to consider a cost option that is consistent with their location, market and implementation structure that is consistent with their jurisdiction. A statewide fixed numeric threshold would risk being an uneven application of environmental protection.

   The permit language specifically mentions that the valuation only relates to the site improvements. An increase in land values will not impact the 50% valuation. The supporting guidance further clarifies some implementation examples that specify site improvements.

   The threshold for LID, as applied through Minimum Requirement #5, does not consider the value of site improvements.

10. No change made. Ecology will continue to allow the long standing option described in Summarized comment 10, above.

11. The basis for the Minimum Requirements is development projects that provide improvements and will have an associated investment of capital. The Minimum requirements seek to leverage that investment in an effort to move to water quality improvements. The case listed may not trip the minimum requirements if a building is razed and no improvements are made. So, the house would be razed and the dirt would be left behind. That investment would be limited to the demolition costs. If, however, the building was razed and then a parking lot was installed there are provisions within the redevelopment criteria that may make this project subject to the

Minimum Requirements. If the paving was more than half of the existing improvements on the site, it would be subject to the Minimum Requirements.

12. Thank you - "impervious surface" has been changed to "hard surface".
13. The definition of "Site" details that for road projects, the length of the project site and the right-of-way boundaries define the site. The definition of Site is included in both the SWMMWW and Section 2 of Appendix 1 of the Municipal Stormwater Permits.
14. New and redevelopment projects, including roads and bridges, would need to provide Flow Control and Runoff Treatment to meet the Minimum Requirements triggered. BMP selection is up to the project proponent, so long as the BMP selected meets the Minimum Requirement performance standards. No change made.
15. The minimum requirement thresholds must consider all new/replaced hard surfaces and converted vegetation areas, not just the footprint of the house. When the driveway and landscaping is considered, many single family homes will have to comply with at least MRs 1-5, if not all MRs.
16. The terms "Project", "Project Site", and "Site" are all used to determine the applicability of the Minimum Requirements, and all three terms are defined in the Glossary. If a Project spans multiple parcels, or a parcel/right of way, then the Site and Project Site also span those parcels or parcel/right of way. Ecology has been careful with the use of these terms. If there is specific text that is causing confusion, please comment on that specific text.

23.5 Section 4. Minimum Requirements

Summarized comments

1. Consider adding TDA discussion to this section and/or reference TDAs in this section instead of repeating multiple times in MRs. Similar comment for Appendix 1 to Permit.

Response to range of comments

1. TDAs are used to evaluate a secondary threshold for individual MRs, as explained in the Applicability of the Minimum Requirements topic. The TDA thresholds that are specific to each MR are then described in each MR. No change made.

23.6 Minimum Requirement #2: Construction Stormwater Pollution Prevention Plan (SWPPP)

Summarized comments

1. Under Element #1, define duff layer, native top soil, and natural vegetation. In the urban environment, there is likely no duff layer, native top soil or native vegetation. The intent of this section should be to only clear what is necessary to clear. Consider adding some language or guidance for the urban environment.
2. Under element #3, define development sites or change to new development and redevelopment project sites.

3. Element #12 - It is unclear if the requirement for CESCL only applies to projects that disturb greater than one acre and have a Construction Stormwater General Permit or all projects that disturb one acre or more.
4. Reference page 117 - element 9.d, recommend protection to groundwater be added as follows excerpt, *prevents discharge to surface/ground water, or to the sanitary...The high ground water table shall be at least 3 feet from the ground surface prior to proposed infiltration*, since the manual is not a permit.
5. Reference page 118 - element 9.J, recommend the last sentence include a reference to the human caused variation of .2 or .5 for pH neutralization in compliance with the surface water quality standards, since the manual is not a permit.
6. Element 10, Control Dewatering, does not mention the tanks (e.g. Baker tanks) that are commonly used for temporary storage and sedimentation. They should be included in the list of "Other dewatering treatment or disposal options may include:". Also, under the third bullet, add "Temporary storage and onsite treatment may be required for small urban lots, or where infiltration is infeasible".
7. Element 4: What amount of vegetative cover is needed for full stabilization? How established should the vegetation be?
8. Comments direct the CESCL to have a log book of a certain type that they maintain on the project site. The separate comments identify specific times that the log book must be edited.
9. Revise text regarding sediment controls in Element 4 to read: "e. Install sediment controls in a manner that protects the sensitive areas and their buffers marked in accordance with SWPPP Element 1. f. Where feasible, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration."

Response to range of comments

1. No change to the text. Comment noted. Duff, native top soil and natural vegetation are relatively common terms; therefore, definitions will not be added. Ecology acknowledges that native vegetation may not be present in the urban environment. I-3.4.2 MR2 guidance states, "retain the natural vegetation in an undisturbed state to the maximum degree practicable".
2. No change to text. Development site is the term used in the Construction Stormwater General Permit (CSWGP). If the term is defined or changed during the CSWGP reissuance, then the SWMMWW will be updated.
3. No change to text. Projects greater than 1 acre (requiring an Ecology permit) must have a CESCL. Projects that don't have an Ecology permit are guided by the requirements of the local jurisdiction.
4. No change to text. Element 9: Control Pollutants d. Text within the blue box was copied directly from the CSWGP. If the text is changed during the CSWGP reissuance, then the SWMMWW will be updated.
5. Regarding Summarized comment #5, there was no change to text made. This level of precision is not applicable to the SWMMWW.

6. No change to text. Element 10: Control Dewatering: d. iii. States: Ecology-approved chemical treatment or other suitable treatment options. "Other suitable options" allows for flexibility, including baker tanks.
7. No change to text: Full stabilization is established in BMP C120: Temporary and Permanent Seeding: Conditions of Use: Final stabilization means the completion of all soil disturbing activities at the site and the establishment of a permanent vegetative cover, or equivalent permanent stabilization measures (such as pavement, riprap, gabions, or geotextiles) which will prevent erosion.
8. No change to text. The role and responsibilities of the CESCL are provided in I-3.4.2 MR2-Construction Stormwater Pollution Prevention Plan (SWPPP): Element 12: Manage the Project, a-d.
9. Suggested edit involves language in the CSWGP and can't be changed in the SWMMWW. The suggested language is added to the Additional Guidance for Element #4.

23.7 Minimum Requirement #4: Preservation of Natural Drainage Systems and Outfalls.

Summarized comments

1. MR#4 states that discharges from the project site shall occur at the natural location. The natural location is then defined as location of channels, swales, and other non-manmade conveyance systems as defined by the first documented contours existing for the subject property. Define property. Additionally, most projects are of the size that there may not have been channels, swales, or conveyances on the particular project site at any time. Provide additional language or guidance for those sites that have no defined conveyance systems in old photos or maps, where old photos or maps are not available, or in the urban environment where stormwater systems were installed prior to modern stormwater requirements.

Response to range of comments

1. The SWMMWW provides a definition for Project Site, which is the term used in the language.

   Ecology's guidance discusses the existing conveyance. There is not a reference that requires discussion of historic conveyance.

   No change made.

23.8 Minimum Requirement #5: On-Site Stormwater Management

Summarized comments

1. Suggest referencing the MR#7 TDA Exemption when referring to projects that are flow control exempt.
2. Ecology should consider adding guidance or creating additional documentation about MR#5 and its applicability to the Asarco Smelter Plume. The Asarco Smelter Plume is far reaching, affecting many jurisdictions, and there is no clear guidance on how to apply LID in this known contaminated site. This could be appropriate in the infeasibility section.

3. When using the LID Performance Standard - when is BMP T5.13 deemed to be infeasible. Can you utilize the flow credits within the BMP to help achieve the LID Performance Standard and consider them part of the Flow Control BMPs or are they meant to be separate and distinct?
4. The List Approach: As written it does not say that the applicant is required to document for each BMP in the list why it was infeasible, only if the entire list is infeasible. Is this the intent? Consider revising language.
5. Under List #3 why is Full Dispersion not considered as a option for the roofs or other hard surfaces?
6. Commenter requests to change the focus from porous asphalt/concrete usage to functionally equivalent designs.
7. Multiple comments about Ecology's intent with the text *"If the project can't meet the LID Performance Standard, it must seek and be granted an exception/variance."*
8. Do not require the LID Performance Standard for 5 acre lots outside of the UGA.
9. There are some sites where LID BMPs are not feasible and the only option is the use of a detention system. It has been our experience that there is no way to design a detention pond that will meet the LID Performance Criteria without implementation of some LID BMP. This would mean that an applicant would have to go through a variance/exception process to obtain approval of their project. Was this Ecology's intent? That a variance would be necessary for this situation?
10. The Draft 2019 SWMMWW Chart of Changes Section I.3.4.7 MR7 Flow Control identifies that adding Marine waterbodies to the Flow Control Exempt Receiving Water list "will ensure the same protection of waterways between the TDA discharge point and the marine waterbody as is provided with other types of exempt waterbodies." An exception should be added to the new requirement so that waterfront properties/project sites discharging directly into a marine waterbody or flow control exempt receiving water are not required to evaluate/implement these flow control/LID BMPs as there are no waterways to protect between the discharge point and flow control exempt receiving water.
11. Flow Control Exempt projects should not be required to use BMPT5.10A. It is not needed. This will be used to reduce treatment facility size if feasible.
12. Section 4.5: – Please list the Competing Needs Criteria in the Permit, rather than referring to SWMMWW as the section is currently drafted, just before Table 1-10.2. If Ecology refers to SWMMWW, include (as before) the specific section and date of version, to provide the necessary certainty to Permittees as to which requirements apply.
13. There's a limited list of stormwater BMPs for MR5. I would like to see additional clarification of how BMPs such as regional storm ponds, vegetated roofs, rainwater catchment systems, and proprietary systems come into play within the list of required BMPs.

    Would like to see additional stormwater BMPs included in MR5 when there is limited available space to install a facility. The County has many areas where the approved list of BMPs will not work. Many of the common issues we run into are:

- C\D type soils
- Lack of sufficient space for dispersion
- Groundwater table is too high for infiltration
- Majority of site is critical area, solid rock (Fidalgo Island), covered by well protection zone(s), etc.

14. Section 4.5. In the LID Performance Standard Section, state that any Flow Control BMP can be used to achieve the standard as well as LID BMPs (except rain gardens). Seattle assumes that other LID BMPs, such as Permeable Pavements and Downspout Full Infiltration can also be used in addition to Flow Control BMPs and Bioretention to meet the LID Performance Standard.
15. In multiple locations for conciseness, instead of stating that a project can "Use any Flow Control BMPs desired to achieve the LID Performance Standard", please revert back to the current permit language that states that a project shall "Meet the LID Performance Standard". Then in the "LID Performance Standard" state how the performance standard can be met (i.e. use any "Flow BMP or LID BMP (except for rain gardens))".
16. For section "Projects that Trigger Only Minimum Requirements #1 - #5", in first sentence insert "and" after exempt, to read "Projects that are not Flow Control exempt and that…"
17. Phase I Permit App. 1 Section 4.5, p.29 (redline) Table 1-10.1 Use of "project" Ecology replaced the defined terms "new development" and "redevelopment" with the undefined word "project." Ecology should use appropriate defined terms.
18. We strongly urge Ecology to move away from an LID BMP "list" approach towards a site planning approach. We strongly disagree with the requirements in the Manual that only the first feasible BMP from the appropriate list is required. The core principle of LID is to integrate multiple small-scale BMPs across a site to reduce the generation of stormwater and infiltrate what remains. These help achieve the goal of no-net runoff during storm events. Ecology should require that BMPs be chosen and implemented to eliminate as much runoff as technically feasible - all BMPS that will further reduce stormwater runoff, reduce impervious surfaces, and/or increase native vegetation should be implemented if feasible. This is consistent with the Clean Water Act and Ecology's MEP and AKART requirements.
19. Low Impact Development techniques are new and effective tools to manage stormwater. LID should be a market-based environmental solution. The tools that are available should be promoted and supported by Ecology, rather than required. It is well known that each site is different, and many LID techniques may not be appropriate and desirable for a specific site. The requirement creates a disincentive and the "where feasible" test encourages attempting to find the techniques are "not feasible" rather than attempting to find ways to implement LID techniques. The sequencing of LID techniques in the prescriptive path should be eliminated as it attempts to pre-select techniques - this should be left to the design engineer.
20. The table titled *Minimum Requirement # 5 Compliance Options for Projects Triggering Minimum Requirements #1 - # 9*. This table seems to be missing compliance options for Projects outside the UGA, on a parcel smaller than 5 acres.

Response to range of comments

1. Under "Compliance Options by Project Type"/ "Flow Control exempt Projects", the text reads:

   "*Projects qualifying as Flow Control exempt in accordance with TDA Exemption in I-3.4.7 MR7: Flow Control shall either:*"

   The text includes hyperlinks to the referenced sections. No change made.

2. Ecology provides guidance that there are infeasibility criteria that apply to contaminated soils. Wherever contaminated soils are known to be problematic, it may be evaluated to determine if LID is feasible.

3. The infeasibility criteria for BMP T5.13 is listed within that BMP and the other locations that list LID infeasibility criteria (for instance, competing needs). There is no separate distinction when it is used in conjunction with the LID Performance Standard.

   The runoff model representation guidance provided in BMP T5.13 should be used in the post-developed scenario when using the LID Performance Standard to comply with MR5.

4. Text revised to indicate that the documentation is required for each BMP.

5. The prior guidance did not require considering full dispersion or other similar Flow related BMPs to reflect the fact that the site is located within a flow control exempt area where this effort is not as critical to environmental protection and restoration. The 2019 SWMMWW continues this approach.

6. Ecology allows the flexibility to meet LID requirements by modeling compliance with the LID Performance standard. This would include BMPs within the Manual. Ecology urges caution that only those BMPs within an approved equivalent manual meet the presumptive approach to meeting the municipal stormwater permit. Jurisdictions must document other BMPs they are using to meet the permit as discussed in Phase I, S5.C.5bii and WWA Phase II S5.C.6bii).

7. Ecology did not intend for this clarification to mean that a jurisdiction must grant the exception/variance if the project proponent seeks it. Ecology sees how this statement can cause confusion, and has removed it.

   Ecology will rely on the section "Exceptions/Variances to the MRs" to direct project proponents and jurisdictions on how and when exceptions/variances are appropriate.

8. The permits seek to provide the protection and restoration to the maximum extent practicable. Comparing to other forms of development is not the correct goal. Ecology provided a rationale in the November 4, 2011 Municipal Stormwater Permit. The commenter has not provided a rationale to demonstrate that the list will be as protective. For reference, the rationale provided in the November 4, 2011 fact sheet was:

   "*Projects on parcels of five acres or larger outside the urban growth area must comply with the LID performance standard, which is discussed in detail in the next section. These projects have sufficient land area to utilize LID BMPs and LID principles to keep stormwater on-site and meet the standard. In addition, these are generally areas where reasonably good aquatic habitat conditions exist. Compliance with the LID performance standard is a more reliable approach to not degrading those conditions. Inside the UGA, where individual parcel sizes are much smaller, and development densities much higher, there can be complicating factors that make keeping*

runoff on-site more difficult, and in many cases infeasible. While Ecology would prefer all sites to meet the LID performance standard, it is not feasible in many cases without employing rainwater harvesting and reuse internal to the structure. Ecology is not prepared to mandate rainwater harvesting and reuse as a standard technique at new development sites. So Ecology proposes to allow development sites within the urban growth boundary to choose the mandatory list option described above."

9. An exception/variance is not required in the scenario described. As per the list approach in MR5: "If all BMPs in the list are infeasible, then the designer must document the site conditions and infeasibility criteria used to deem the BMP infeasible. This documentation will demonstrate compliance with Minimum Requirement #5."

10. The Municipal Stormwater Permits only regulate discharges to and from the MS4. Therefore direct discharges to receiving water, such as from private stormwater conveyance pipes or ditches, are not regulated by the Permits. Marine waters, streams, lakes, and wetlands will still benefit from protective guidance provided in the SWMMWW and programs implemented under the permits such as education, public involvement, and source control.

11. BMP T5.10A has been in the on-site BMP list since the 2001 manual. Ecology must retain the same level of protection as was in place under previous permits. Thus, BMP T5.10A remains in List #3.

12. Ecology has opted to list the Competing Needs Criteria within the MR5 topic in the SWMMWW. Appendix 1 of the Municipal Stormwater Permit has been updated to refer to MR5's specific section number within the SWMMWW.

13. Use of the List Approach is not required, it is one option to comply with MR5. Projects may choose the LID Performance Standard, where they can use whichever BMPs serve to satisfy the LID Performance Standard.

    There are infeasibility that exclude where LID BMPs can be applied when using the List Approach. As mentioned in MR5, there are places where LID BMPs may be deemed infeasible.

    Some C/D soils may be infeasible, but they are not wholesale excluded as a category. The project must provide documentation on why the soils at the site are not suitable for LID. Broad regional classifications of soils from NRCS maps are not generally considered an adequate level of detail. Some soils will have infiltrations above 0.3 inches per hour when tested, but may be classified as C or, in rare circumstances, D soils.

    Lack of space, separation to groundwater, presence of a hardpan layer, part of groundwater protection zones are all listed infeasibility criteria.

14. In order to meet the LID Performance Standard, a designer may use any Flow Control BMP in the SWMMWW without regard to whether it infiltrates water or not. This is already stated in the draft text in both Appendix 1 of the Permit and in the SWMMWW, in the table “Minimum Requirement #5 Compliance Options for Projects Triggering Minimum Requirements #1 - #9”. Language has also been added to the Supplemental Guidelines to reflect the ability to use any Flow Control BMP.

    Note that permeable pavement and downspout full infiltration are Flow Control BMPs.

15. Thank you for the suggestion. At this time, Ecology will leave the text regarding the LID Performance Standard as is. No change made.
16. The change suggested in Summarized comment 16 was not made.
17. Ecology consolidated the table "Minimum Requirement #5 Compliance Options for Projects Triggering Minimum Requirements #1 - #9. "Project" is defined in the SWMMWW. Ecology will add the definition to Section 2 of Appendix 1 of the Municipal Stormwater Permit.
18. The LID BMP List approach was accepted last permit cycle as meeting the AKART and MEP criteria.

    The application of all feasible LID techniques would be redundant and not bring additional Environmental benefit. Ecology had purposely designed the list to use multiple, non duplicative LID techniques to provide the maximum feasible benefit at development sites.
19. PCHB clearly ruled and Ecology agrees that LID is within All Known and Reasonable Measures (AKART) and must be applied to the Maximum Extent Practicable (MEP). A market based approach would not be sufficient.
20. The table "Minimum Requirement # 5 Compliance Options for Projects Triggering Minimum Requirements #1 - # 9" shows the compliance options in the right column. The compliance options are the same for "Projects inside the UGA, on any size parcel" and "Projects outside the UGA, on a parcel smaller than 5 acres", so they share the cell in the right column describing the compliance options. No change made.

23.9 Minimum Requirement #6: Runoff Treatment

Summarized comments

1. In Section 4.6, the new subheading "Runoff Treatment Performance Goal Thresholds" appears incorrect as this section is instead describing when certain treatment types are required (e.g. Oil Control). The "Performance Goals" are instead described within the SWMMWW. Consider changing the title of this section to: "Runoff Treatment Thresholds".
2. The "Additional Requirements" box states that the local government cannot approve untreated stormwater discharge to groundwater, except for infiltration and dispersion of runoff through LID BMPs. How does this apply when LID BMPs are also used to meet MR 6 or 7?
3. Is there a lower threshold where facilities are no longer considered to be discharging to groundwater? For example, are unlined stormwater ponds in Till soils exempt even if the underlying soils do not meet treatment criteria? How about synthetic sports fields with infiltration rates less than 0.3 inches/hr, but still "some" infiltration potential?
4. Page 1232 and 136 and 137, PGPS definition references landscape areas. Clarify how this applies to the site design for redevelopment of a small lot. For example if a 5001 square feet of new pollution generating hard surface is created but the new landscape area is under 3/4 of an acre, is water quality treatment to be designed for capturing and treating just the 5001 of new PGHS or is it required that the new landscape area (under 3/4 of an acre) also be treated? This can be challenging to design on a small commercial lot (i.e. landscape beds all four corners of the site

per development code and parking lot in back). i.e. Is it required that all landscape areas be designed with a collection system and routed to water quality treatment facilities on the project?

5. Multiple comments from a single commenter who was unable to find text that was highlighted in the blue boxes in the SWMMWW within the permit. Text in blue boxes in the SWMMWW is noted to originate from either Appendix 1 of the Phase I / Phase II Municipal Stormwater Permits or the Construction Stormwater General Permit.
6. Phase I Permit App. 1 Section 4.6, p.40 (redline) "Additional Requirements: The (direct or indirect) discharge of untreated stormwater..." What is Ecology's intended meaning in inserting the parenthetical? How does Ecology define an indirect discharge?
7. In the Puget Sound region, studies have demonstrated that bioinfiltration can provide a cost effective treatment solution: "simple and inexpensive soil columns can be very effective at removing chemical contaminants" and protecting the health of coho and other aquatic species. In this regard, reliance on street sweeping BMPs is insufficient for controlling roadway runoff.

Response to range of comments

1. Ecology chose this subheading intentionally, because the text within describes the thresholds for *when* different Runoff Treatment Performance Goals are required, not *what* the Runoff Treatment Performance Goals are. These thresholds are different from the "TDA Thresholds" immediately prior to this subheading. The Runoff Treatment Performance Goals themselves are then detailed in the SWMMWW.
2. LID BMPs cannot be used to meet MR6 or 7. Runoff Treatment and Flow Control BMPs are used to meet MR6 and 7. The statement says that no further treatment is needed for BMPs used as a result of selection using the List Approach in MR5. No change made.
3. Ecology has specific guidance for the requirement for pond liners to protect groundwater that the applicant should consult within the SWMMWW. Ecology does not have a prescriptive determination of when there is risk to groundwater. Ecology expects that when the SWMMWW is applied, the development has met the presumptive standard of protection under the permit.
4. If any of the TDA thresholds are met, MR6 applies to the surfaces as determined from the Project Level Analysis (new hard surfaces and converted vegetation areas, or new and replaced hard surfaces and converted vegetation areas). No change made.
5. The 2019 SWMMWW contains text highlighted in blue boxes to signify that it originates from either the Municipal Stormwater Permit or the Construction Stormwater General Permit. The text originates from the permit(s), but is not always verbatim, due to the differences in the audiences of the documents.
6. Ecology's intent with the parenthetical is to clarify that **no** discharge of untreated stormwater from pollution-generating hard surfaces to ground water can be authorized by the local government, except as noted (LID BMPs from the List Approach). No change made.
7. Ecology has not approved Street Sweeping as the sole means to meet Minimum Requirement #6, Runoff Treatment. Ecology has a suite of BMPs that were deemed to be suitable to address surface runoff. There are sites where bioinfiltration (assumed to refer to Bioretention in Ecology's language) is not the best management practice available.

Ecology concurs that there are situations where Bioretention is an appropriate option. This is reflected by Bioretention's place in the List Approach for Minimum Requirement #5.

However, Ecology does not want to limit the opportunities for treatment. Requiring only Bioretention will preclude some sites from getting treatment. Further, the requirement of this BMP everywhere could result in known negative effects.

For example: placing Bioretention in high groundwater areas may encourage the release of metals when the Bioretention Soil Mix becomes saturated for long periods of time. Bioretention discharges that lead to phosphorus sensitive water bodies would likely increase the phosphorus load, exacerbating a known problem. These potential negative effects are mitigated within the guidance through infeasibility criteria and design requirements, which would preclude building Bioretention in these areas.

23.10 Runoff Treatment Performance Goal Thresholds

Summarized comments

1. Section 4.6. How should a Permittee determine if project site is a "Commercial project site"? For example, are public parks considered commercial?
2. Comments regarding the text explaining when Phosphorus treatment is required for a project. The text in question was consolidated form 3 locations in Ecology's current permit and supporting guidance.
3. Reconsider use of AADT - Annual Average Daily Traffic. Our City does not have this data readily available. We have ADT - Average Daily Trips. Using ADT would be consistent with where oil control is necessary (page 36).
4. Consider revising the oil control thresholds in the SWMM. Currently, a large building with multiple car trips per day (such as a retail building) will not trigger oil control whereas a smaller building with multiple car trips per day (such as a convenience store) will trigger oil control.
5. Should enhanced treatment be more broadly utilized (i.e. for marine discharges) given the available science on saltwater fish and other aquatic life?
6. Require enhanced treatment for residential lots that are less than 7,200 square feet.
7. Any project discharging to known or potential salmon streams should be required to treat any stormwater that cannot be infiltrated using enhanced treatment methods.
8. Comments ask if the level of treatment for metals has changed and have there been tests for BMPs regarding their removal efficiency.

   The commenter also expresses concern that all multifamily sites have the same treatment requirement as commercial and industrial sites.
9. There are numerous streams with 303d listing that Ecology has yet to prepare a TMDL. In those cases, any new development should be required to design using enhanced stormwater controls to address the 303d exceedance, e.g. Temperature, Oxygen, Zn, Cu, etc.

Response to range of comments

1. Ecology opted to continue to leave the term "Commercial project site" to the Permittee's discretion. This discretion must be documented, if questioned, to demonstrate that AKART is applied to the MEP.

   For the example of a public park, the jurisdiction might state that a park with use (parking, pollution generating impervious surfaces) similar to a commercial business (maybe certain skate parks with ample parking and limited forest cover) should be considered for enhanced treatment. An opposite example would be a forested park with minimal parking such that the pollution generating characteristic was more akin to a residential area.

   The jurisdiction has a better knowledge of their characteristics and it would be impractical for Ecology to provide a prescriptive definition for "public park".

2. The content in this section is based, in part, on verbatim language from the 2014 SWMMWW Vol. V.3.3 Phosphorus Treatment Menu. The revised/Final 2019 SWMMWW and Permit Appendix 1 Phosphorus Treatment language is also based on similar, but different, language that was found in the 2013-2018 Municipal Stormwater Permit Appendix 1, as well as 2014 SWMMWW Vol.V, 2.1 Step By Step Selection Process for Treatment Facilities.

   Ecology has further revised the text based on the comments received for clarity.

3. The criteria for Enhanced Treatment for roads were set in a previous edition of the manual and were based on AADT. Ecology did not review additional data on this topic. Therefore, the current criteria remain unchanged. Ecology does not have the data to demonstrate how this study translates to ADT. Ecology accepts that a Jurisdiction may wish to demonstrate how ADT can serve as a suitable surrogate for AADT. The jurisdiction will be responsible for documenting how their approach is at least as protective as the permit. No change made.

4. The guidance for UICs already identifies a number of vehicles that would trigger “high pollution potential”, regardless of building size. Ecology has updated the oil control thresholds similarly.

5. To make this change requires more study than available at this time. No change at this time.

6. Ecology recognizes that Enhanced treatment has been shown to be effective on higher metal influent concentrations. Applying Enhanced treatment to lower metals concentration is not expected to bring additional treatment. Ecology proposes to maintain the approach of more options for treatment to ensure that the maximum feasible level of treatment is attained. This is not considered a failure to address the harms of stormwater, but a recognition of the limitation of the treatments available.

   Ecology appreciates that the Enhanced treatment is an increased requirement on multifamily housing. Ecology does not support incentivizing other benefits at the expense of appropriate treatment for demonstrated higher pollution risks. In this case those risks relate directly to the characteristics of the multifamily land use developments.

   This section of the permit focuses on the impacts from land development on stormwater. There are other sections of the permit and separate programs that acknowledge the benefits by reduced traffic and other non-land development specific impacts. Ecology will continue to support those other instruments.

7. Ecology is not changing this long standing threshold without studies to support the change. Runoff Treatment thresholds are based on land use. Enhanced treatment is required for land uses that have been shown to produce significant amounts of dissolved metals.
8. There is no change to the removal efficiencies for metal removal. The levels in the SWMMWW are those used in the TAPE evaluation process.

   Ecology has revised the definition for multifamily property to "A parcel that contains four or more residential dwelling units."
9. Ecology has considered the comment in light of the Appendix 1 requirements for new development, redevelopment, and construction sites. Ecology has concluded that the minimum requirements, thresholds and definitions in Appendix 1 and the SWMMWW, fulfill the AKART and MEP standards for municipal stormwater discharges, whether the receiving water is a Category 5 impaired waterbody, or otherwise. There have been no examples of TMDLs in WA State requiring municipal stormwater Permittees to have development/redevelopment implement enhanced or additional treatment to address stormwater pollutants of concern. A final EPA-approved TMDL would provide the proper mechanism and timing for additional water quality-based requirements to be brought into municipal stormwater permits and applicable local codes. For these reasons, the suggested edit was not made.

23.11 Runoff Treatment BMP Sizing

Summarized comments

1. Describe the basis and actual calculations used to establish the difference of flowrates for Off-line vs On-line Runoff Treatment BMPs as calculated by WWHM or MGS Flood.
2. (Water Quality Design Volume) Delete the use of the single storm event software in its entirety. This software is obsolete, expensive, and many municipalities lack knowledgeable staff to review the design calculations. To simply review and reduce the chance of error, eliminate the use of SBUH or single storm event software in its entirety.

Response to range of comments

1. Both WWHM and MGSFlood have internal algorithms for calculating Off-Line and On-Line water quality treatment design flows. The description of the calculation approach for Off-line versus On-line water quality design flows is well documented, with graphic details, in the MGSFlood User Manual.
2. This option has been allowed in the current and past versions of the stormwater manual and it generally results in similar size treatment facilities that are based on 24-hour retention volume. With this option, the use of or familiarity with the continuous hydrologic models such as WWHM or MGSFlood is not necessary for some volume-based BMPs.

   There are also Construction Stormwater BMPs that use the single storm event for sizing, and therefore the guidance needs to remain in the manual. If jurisdictions wish to eliminate its use, they can do so, but we aren't going to remove it from a regional guidance manual because some people don't want to use a single event model. In regard to the cost, there are free copies of single event software available, such as HEC-HMS.

23.12 Minimum Requirement #7: Flow Control

Summarized comments

1. Regarding the first sentence under 4.7 Minimum Requirement #7: Flow Control, TDA Exemption section, Appendix 10 and Appendix 1 have conflicting language. Clarify the name of the referred appendix as "Flow Control Exempt Receiving Waters Appendix" or "Appendix I-E".
2. Commenter requests clarification on flow control exemptions with respect to tide gates and similar structures. A system can be flow control exempt if hydraulically connected to a flow control exempt waterbody. A tide gate can potentially interrupt that hydraulic connection.
3. The list of Flow Control Exempt Waterbodies has been revised to include the addition of marine waterbodies. This will now require a hydraulic analysis of the jurisdiction's conveyance system (sometimes for miles) to ensure it have sufficient hydraulic capacity to convey discharges. Sufficient hydraulic capacity is not defined. This addition allows Ecology to regulate jurisdictions conveyance system sizes - which may not be directly correlated to the ability of the receiving water to handle increased flowrates. This change in language will require additional flow control in many places where it may not be appropriate to protect receiving waters. The objective of Minimum Requirement #7 is specific to stream channel erosion rates not marine environments. Remove marine waterbodies from the list.
4. Page 141" Postproject" should be two words.
5. Multiple comments with questions about the note stating "If the discharge from the TDA is to a stream that leads to a wetland, or to a wetland that has an outflow to a stream, both this Minimum Requirement and I-3.4.8 MR8: Wetlands Protection apply to the TDA."
6. Flow control exemption appears to require discharge through an MS4. That should be removed because a conveyance system may not be an MS4. Is that language there because the manual is intended to only apply to MS4s? For example a commercial site regulated by a county that does not include a discharge up hill to a road but downhill to an exempt water body.
7. Multiple comments from a single commenter who was unable to find text that was highlighted in the blue boxes in the SWMMWW within the permit. Text in blue boxes in the SWMMWW is noted to originate from either Appendix 1 of the Phase I / Phase II Municipal Stormwater Permits or the Construction Stormwater General Permit.
8. Flow Control Performance Standard: Delete the guidance that allows the pre-developed condition to be matched to be pasture or the existing land cover condition (if certain conditions are met).
9. Multiple comments about the text that was previously in a footnote of the manual. The footnote was updated to reflect the latest modeling and brought into the main body of the text:

   "The 0.15 cfs increase should be a comparison of the postproject runoff to the existing condition runoff. For the purpose of applying this threshold, the existing condition is either the pre-project land cover, or the land cover that existed at the site as of a date when the local jurisdiction first adopted Flow Control requirements into code or rules."

   Comments include:

- This appears to be a text change.
- Does the jurisdiction get to choose how to apply MR#7 in terms of the pre-project land cover or the land cover that existed at the time when flow control requirements were adopted?
- Is the intention of the text to let the jurisdiction choose which "existing condition" to apply for this threshold? Or to choose the most conservative existing condition of those listed e.g. lowest runoff? A developer will choose whichever is advantageous e.g. not triggering a facility.

10. Comment requesting a definition for "effective hard surface".
11. New development must retain and treat all resulting stormwater, at a minimum, with no net increase in stormwater flows. In other words, new development must provide sufficient ecosystem services infrastructure to eliminate any harmful impacts specifically attributable to this new development.

Response to range of comments

1. Thank you for noting this error. Ecology has updated Appendix 10 such that this language discrepancy no longer exists.
2. One of the specific requirements for a flow control exempt water body is that “The TDA must be drained by a conveyance system that is comprised entirely of manmade conveyance elements (e.g., pipes, ditches, outfall protection) and extends to the ordinary high water line of the exempt receiving water”. Any tide gates are likely to be above the ordinary high water line, thus the presence or absence of a tide gate is not a criteria in flow control exemption.
3. By adding marine waterbodies to the Flow Control Exempt Receiving Waters list, it ensures the same level of protection between the TDA discharge point and the marine waterbody as is provided for all other Flow Control exempt receiving waters. The flow control exemption considers the impact of a specific project on the receiving water. Since the size of the marine waters is significantly larger than most any project site, the impact of the additional flow on the receiving water is negligible and marine waters should be exempt. If runoff from the site enters a stream channel before it gets to the marine waters, it is not flow control exempt and the stream channel is protected.
4. ‘Postproject’ was separated into two words.
5. Ecology has removed the note. The designer does not need to follow the discharge flow path beyond the receiving water. If the receiving water is a stream, then MR7 applies. If the receiving water is a wetland, then MR7 and MR8 apply (as directed by the Project Level and TDA level thresholds). The designer must identify the receiving water, no matter how far downstream it is, in order to determine the appropriate requirements for the site.
6. The Municipal Stormwater Permits only regulate discharges to and from the MS4. Therefore direct discharges to receiving water, such as from private stormwater conveyance pipes or ditches, are not regulated by the Permits. Marine waters, streams, lakes, and wetlands will still benefit from protective guidance provided in the SWMMWW and programs implemented under the permits such as education, public involvement, and source control.

7. The 2019 SWMMWW contains text highlighted in blue boxes to signify that it originates from either the Municipal Stormwater Permit or the Construction Stormwater General Permit. The text originates from the permit(s), but is not always verbatim, due to the differences in the audiences of the documents.
8. Ecology is maintaining these long standing exemptions and is looking towards a comprehensive stormwater approach to help determine the most efficient approach to meeting the Municipal Stormwater Permit requirements.
9. This is not a text change. This text was previously in a footnote. The footnote was updated to reflect the latest modeling and brought into the main body of the text.

   As stated in the text, this guidance only applies to the TDA threshold that is being described. This text is not related to the pre-developed condition for the Flow Control Performance Standard.

   For the purpose of applying the threshold in the third bullet, Ecology allows the jurisdiction to choose the existing condition to be either the pre-project land cover, or the land cover that existed at the site as of a date when the local jurisdiction first adopted Flow Control requirements into code or rules. The local jurisdiction may also choose a more protective land cover condition.

   No change made.
10. Ecology has provided a definition for "effective impervious surface", and a definition for the term "hard surface". No change made.
11. Ecology has used detailed studies and science to focus Minimum Requirement #7, Flow Control to the most likely range when an impact will be felt from development. This approach optimizes the efforts and allows mitigation resources to do the most good. A blanket, wider application of flow range would require significantly more effort with no likely further gain.

    Ecology does agree that the impacts from past development practices need to be mitigated. That is why Ecology, in accordance with the PCHB Rosemere decision, seeks to require additional measures beyond the site by site approach. In this permit cycle, Ecology has proposed an approach that requires jurisdictions to review their situation and come up with a broader plan of how to address these legacy issues. One of the options proposed includes more stringent site by site approaches. While this is one option, Ecology did not want to limit it to that approach, which may not be the most effective for all communities.

23.13 4.8 Minimum Requirement #8: Wetlands Protection

Summarized comments

1. Consider adding a 1/4 mile (or some other distance) cutoff for sites that discharge through a conveyance system to a wetland. Alternately, an area based methodology could be used, for example sites with more than XX% of the total tributary area to a wetland.
2. Consider a higher threshold for applying MR #8 based on project size and wetland size. Doing the analysis for a short plat or small commercial project seems like overkill. Also, I hear there are problems applying the WWHM to small projects.

Response to range of comments

1. The designer must identify the receiving water, no matter how far downstream it is, in order to determine the appropriate requirements for the site.

   If the receiving water is a wetland, then the designer must evaluate the requirements detailed in MR8 to determine what level of wetland protection is necessary for the project.

2. Ecology has revised the text in MR8 to more clearly identify the TDA thresholds.

23.14 Adjustments

Summarized comments

1. Commenter who was unable to find text that was highlighted in the blue boxes in the SWMMWW within the permit. Text in blue boxes in the SWMMWW is noted to originate from either Appendix 1 of the Phase I / Phase II Municipal Stormwater Permits or the Construction Stormwater General Permit.
2. ADD: • Any adjustment to the Minimum Requirements shall be submitted to Ecology for approval, prior to any construction permit issuance or preliminary plat approval."
3. Restore previous language to match common usage and a later portion of text; replace : "…a written finding of fact that documents…" with " ...written findings of fact that document…"

Response to range of comments

1. The 2019 SWMMWW contains text highlighted in blue boxes to signify that it originates from either the Municipal Stormwater Permit or the Construction Stormwater General Permit. The text originates from the permit(s), but is not always verbatim, due to the differences in the audiences of the documents.
2. Adjustments are necessary site/project specific changes that the jurisdiction has the discretion to approve using professional judgement. Ecology does not review adjustments to the MRs. No change made.
3. Thank you. Text edit made to match comment 3.

23.15 Exceptions/Variances

Summarized comments

1. Put the definition of an exception here. It is one sentence in the glossary.
2. Commenter who was unable to find text that was highlighted in the blue boxes in the SWMMWW within the permit. Text in blue boxes in the SWMMWW is noted to originate from either Appendix 1 of the Phase I / Phase II Municipal Stormwater Permits or the Construction Stormwater General Permit.
3. This section states that the Permittee may grant an exception to the Minimum Requirements if such application imposes a severe and unexpected economic hardship. Please consider adding language that the Permittee may also grant an exception if the resulting design creates an environmental benefit. An example would be diverting runoff from a ravine or stream that is

experiencing significant erosion, to a different drainage basin that is capable of receiving the additional runoff without creating a significant adverse impact.

4. Permittees should be required to implement projects that provide a net benefit by reducing existing stormwater impacts. Permittees should be required to explain why they missed any opportunity to provide these net benefits.

Response to range of comments

1. With the definition of 'exception' already in the Glossary, there is no need to repeat it here.
2. The 2019 SWMMWW contains text highlighted in blue boxes to signify that it originates from either the Municipal Stormwater Permit or the Construction Stormwater General Permit. The text originates from the permit(s), but is not always verbatim, due to the differences in the audiences of the documents.
3. The situation described in the comments sounds like an adjustment rather than a variance. The commenter should refer to the adjustment section for the situation described.

   Ecology is not intending to comment on the specifics of the situation proposed. The Permittee would have to weigh this benefit while respecting the protections offered by Minimum Requirement #4 Preservation of Natural Drainages. As specified in the Adjustment section, the Permittee would be required to present findings of fact to substantiate their decision.
4. The fundamental principal of the Municipal Stormwater General Permit is to require Permittees to apply all known, available, and reasonable methods of prevention, control, and treatment (AKART); and to develop, implement and enforce stormwater management programs designed to reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP).

   There is a stringent Exceptions and Variance section that specifies that Permittees are required to justify significant variations from the Minimum Requirements.

24.0 Eastern Washington Appendix 1

Commenters: Chelan County Public Works, City of East Wenatchee, Douglas County, Clayton Verellen

Comment on Appendix 1

Appendix 1 , page 4+, Core Element #2: Construction Stormwater Pollution Prevention. The requirements outlined within this appendix provide details beyond what is actually needed. This information is already included within Chapter 7 of the updated Stormwater Management Manual for Eastern Washington (SWMMEW) and duplication within Appendix 1 of this permit is unnecessary. All of the core elements should be addresses similar to Core Element #1, where a reference to the SWMMEW is made.

Response to comment

Appendix 1 describes the Core Elements in the permit and the information in the SWMMEW provides additional guidance on how to meet the permit requirements. The duplicate language is intentional to reflect the fact that the SWMMEW follows the requirements in the permit.

25.0 Appendix 6 – Street Waste Disposal

Comments apply to the Phase I and Western Washington Phase II and Eastern Washington Phase II.

Commenters: King County, City of Tacoma

Summarized comments

1. Option 2 specifies decant liquid only from catch basins and wetvaults. What about decant liquid from other facility types?
2. Appendix 6 A6-2 "the removed water has been stored in a clean container or into an appropriate temporary holding facility.
5. Maintenance activities that handle waters removed from facilities during maintenance, on occasion, will construct a temporary holding facility instead of using a container as described. The use and operation for these facilities is identical to the use and operation of the containers listed in the section."

Response to the range of comments:

1. Ecology updated this appendix to follow the manuals and recently revised state law. Each option listed is specific to the facilities listed, see option 3 for other facilities.
2. Ecology agreed to revise the language to allow for a temporary holding facilities used for the purposes of handling stormwater or clean water.

26.0 Appendix 7 - Inspection of High Sediment Transport Potential

Applies to the Phase I and Western Washington Phase II Permits.

Commenter: King County, City of Federal Way

Summary of the range of comments

1. Correct pagination.
2. Unfunded mandate significantly increasing the City's liability and the required time to implement this site assessment.

Response to the range of comments

1. Thank you, correction made.
2. Ecology did not make changes to Appendix 7. Permittees have the option to inspect all site if the evaluation of each site according to Appendix 7 is deemed burdensome. Ecology provides

capacity funds, as well as other funding sources, that can be used to help meet permit requirements.

27.0 Appendix 9 – Stormwater Discharge Monitoring

Comments apply to the Phase I and the Western Washington Phase II Permits.

Summary of the range of comments

1. Appendix 9 Monitoring Table 9-1 Three parameters are still included in Table 9-1 under conventional parameters (Particle Size Distribution, Grain Size, and pH) that have been dropped from required parameters in the Appendix 9 text on page 3. The new lower MRL for Bis(2-ethylhexyl)phthalate of 0.250 is not routinely achievable in commercial labs due to high likelihood of cross contamination, and should remain at 1.0 micrograms/L.
2. Appendix 9 Monitoring Table 9-2 For Percent Solids, Method SM2540B cannot be correctly done on centrifuged samples. Hence, Method 160.3M should also be included to address pipetting issues of a mostly solid sediment sample by mass rather than volume for aliquoting. Two parameters are still included in Table 9-2 under conventional parameters (Total Phosphorus, Total Volatile Solids) that have been dropped from required parameters in the Appendix 9 text on page 4. Also BTEX is included in Table 9-2 but not included in Appendix 9 text on page 4 for sediment samples.
3. Flow Monitoring - More detail on the flow monitoring requirement would be helpful. Does Ecology intend that Permittees opting for the S8.C pathway conduct flow monitoring a full year before sampling? If so, does that mean that flow monitoring has to begin a year before the permit takes effect, or that the first year of monitoring is not required to include samples? Please clarify as it's also unclear what "continuous" entails (e.g., 15 minute, hourly, once per day, etc.? Are these details intended to be worked out in the QAPP?
4. Types of Sampling - It is difficult to find the referenced SOPs. A more direct link to the specific Fortress location would help. The list of SOPs at the website provided does not include all of the SOPs described in the permit (e.g., there is no link to a "Standard Operating Procedure for Grab Sampling for Stormwater Monitoring" on that page.).
5. Grab Samples - Requiring grab samples in the early part of a storm event to the monitoring regime dramatically increases the complexity and cost of sampling because it adds an additional field visit to every site for every event. The SAM program dropped grab sample monitoring for bacteria in favor of a literature and data review. It's unclear why the outfall monitoring alternative should include bacteria data where the SAM regional program does not. Suggest dropping the grab sample requirement and replacing it with regularly scheduled receiving water bacteria monitoring near or at the outfall which is much easier to integrate into existing programs.
6. First sentence and the three bullets that follow - Three years is probably insufficient for trend analysis, barring a major change in the watershed. The results will most likely be statistically meaningless. Suggest dropping this requirement or adding detail on the statistical algorithms Permittees are expected to use.

7. Refrigeration is required for sediment samples, but not specified for water samples. Some of the parameters collected, like BOD5, generally require refrigeration. Is refrigeration expected or required? This makes a big difference for total cost of implementing the program because if refrigeration is required, a field visit to add ice to the autosampler will be required before every event. Since modern autosamplers can be triggered remotely, if refrigeration is not required, sample retrieval and setup for the next event could occur during the same site visit.
8. With regard to methods for PCBs, note that no one in Washington is accredited to perform Method 1668C. Samples would have to be sent to a lab in Surrey, BC or California for this analysis. Costs for this congener analysis would be approximately $600 per sample. The Permit requires 5 samples at twice per year at a total cost of $6,000 per year. There may also be Customs issues with using the Canadian lab.
9. EPA Method 200.8 SIM is superfluous/odd. SIM should be removed from the metals method.
10. Metals should be revised to remove the word "recoverable" as it is not applicable.
11. In this table, there is no reference for footnote "a". The text currently referenced in footnote "a" is applicable to footnote "b", all others are also off by one letter.
12. Footnote E says "...first 2 samples...". Similar to the comment on the Annual Monitoring Report above, please clarify whether method change would come after two samples, four samples, or if this is dependent on the number of samples taken per year.
13. Parameters: Flow Weighted Composite Samples: Add that some parameters may be dropped from the analysis based on past sampling performance under the 2013-2018 Permit.
14. Parameters: Stormwater Solids Samples: Add that Ecology may approve a different priority order for some locations - "or as otherwise approved by Ecology". For example, the City of Tacoma sampling also meets the needs of the EPA stormwater monitoring required as part of the Superfund cleanup of the Thea Foss Waterway. A different priority order for parameters has been established to best meet the requirements of these two monitoring programs.
15. Parameters: Stormwater Solids Samples: Remove "shall" from collection of additional sample if insufficient sample exists. Based upon the City's experience, there are issues with collecting sufficient sample volumes currently in our annual stormwater solids monitoring (once per year) to complete all of the parameters on the list. Collection of additional samples to run all of the organic parameters would be non- representative of a "yearly" accumulated sediment sample. Use of the sample would be limited to absence/presence and could not be included in Statistical analysis of the annual data. Installation of an additional sampling apparatus at the monitoring location to collect the additional sample would create an obstruction in the pipes and disrupt the collection of the current annual sample.
16. Parameters: Stormwater Solids Samples: Add that some parameters may be dropped from the analysis based on past sampling performance under the 2013-2018 Permit.
17. Recordkeeping and Reporting: Add statement that the first annual report will include data for the complete water year if the sampling program is continued from the past sampling performance under the 2013-2018 Permit.

18. Recordkeeping and Reporting: Annual Monitoring Report. 4th bullet under Description of Stormwater solids sampling event: Says "Whether after 4 sampling events, a more sensitive analytical method was needed to detect PCBs." This should be clarified to take into account the possibility that Ecology may have approved sampling once per year instead of twice per year as allowed under Types of Sampling. It is unclear whether the more sensitive analytical method would be discussed after two years of sampling (i.e. 4 total samples if sampling twice per year) or after four years of sampling if sampling once per year.
19. The list of parameters in Table A9-2 requires at least 8 liters of stormwater to be collected for each storm event. With Tacoma's current S8 monitoring program, we were able to collect enough sample volume for all parameters only 70-80% of the time (a minimum of 5 Liters for all parameters and 1 liter for Lab QA). Due to typical available sample volume, it is unlikely that the newly added parameter of PSD will be analyzed for very often. Please support the prioritization of parameters based on the available sample volume.
20. Particle size distribution - is this being added? Note that per the method included in Wet Sieving and Laser Diffraction Measurement Procedures, two liters of sample are required. Based on the City's experience, there are currently issues collecting enough volume for the current list of parameters; therefore it is unlikely that this analysis could ever be run based on the priority list.
21. Footnote C indicates that Ecology recommends modifying the method to analyze (filter) the entire field sample. Note that it will always be a subsample if you are analyzing for any other parameters.
22. Qualifying Storm Event Criteria: Antecedent dry period during wet season: 6 hour antecedent dry period (<0.05" rain) does not allow some sites to return to baseflow conditions. Sampling with this short antecedent could result in capturing flows from the previous event in a storm. It is unclear how events would be separated without a true 6 hour inter-event dry period following a storm.
23. Flow Weighted Composite Sample. City of Tacoma has one outfall location that is a time composited site. It has been approved by Ecology for the NPDES Outfall monitoring. Please add: Ecology may approve time composite sample if the Permittee provides evidence demonstrating that a time composite sample is representative for a specific location.
24. Parameters: Flow Weighted Composite Samples: Add that Ecology may approve a different priority order for some locations - "or as otherwise approved by Ecology". For example, the City of Tacoma sampling also meets the needs of the EPA stormwater monitoring required as part of the Superfund cleanup of the Thea Foss Waterway. A different priority order for parameters has been established to best meet the requirements of these two monitoring programs.

Response to range of comments

1. No change. Appendix 9, Table 9-1 discusses land use, not parameters. Parameters are first described in text on pages 4 and 5 of Appendix 9, where the general terms are given, such as metals. The reader is directed to the Table A9-2 and A9-3 to identify the specific parameter to be monitored. Phthalates are listed with a reporting limit of 1.0 ug/L.
2. No change. Table A9-2 does not contain percent solids. Table A9-3 Percent Solids method is SM2540G, not SM2540B. SM2540G is appropriate for a solids sample. Parameters are first

described in text on pages 4 and 5 of Appendix 9, where the general terms are given, such as metals. The reader is directed to the Table A9-2 and A9-3 to identify the specific parameter to be monitored.

3. No change. Precipitation and flow monitoring should be done the first year of the permit cycle to establish at each site a rainfall/runoff relationship and to quantify baseflow. Continuous flow data, often stage, is used to trigger the autosampler and that threshold must be determined for each site. Baseflow must be known for storm event sampling. A stormwater characterization monitoring program will need to meet monitoring goals of sampling 75% of the hydrograph.
4. No change. The full website address and link was given in the formal draft permit.
5. No change. Fecal indicator bacteria and total petroleum hydrocarbons cannot be sampled using the compositing autosampler, therefore the required 11 storm event grab samples are needed. Ecology kept this language the same as the prior permit requirements. The regional monitoring program did not launch a new regional bacteria program and instead learned from the data already collected by 27 different entities (local and regional) bacterial data. The data review effort recommended another regional status and trend program is not needed. Bacteria remain a problem in many surface waters in western Washington often due in part to stormwater. The study also recommended Permittees focus on specific sites and use the data to target management actions and source control efforts.
6. No change. Trend is a reporting goal, a key aspect of feedback for adaptive management. The statistical tests are not pre-determined, but rigor of the test is important for decision making. The timeframe needed to detect a trend are dependent on the system, parameter and activities.
7. No change. Refridgeration is not mentioned in Appendix 9. Appropriate sample handling must be described in the QAPP. Ice will be needed for the auotsampler to keep samples cool while aliquots are collected througout the storm hydrograph.
8. Changes. Ecology recognizes the concern, and because this monitoring describes characterization and is also used as a source control initiation step, the stormwater suspended solids was changed back to EPA Method 8082 or 608.3. Several in-state labs are accredited by Ecology for this method and concentrations in storm solids are expected to be detectable.
9. Changes. Selective Ion Monitoring Mode or (SIM) is part of the EPA method 200.8 as published in 1994. Ecology recognizes this mode is standard practice at laboratories and the term SIM isn't currently part of the common nomenclature. Ecology's Laboratory Accreditation does not use SIM for EPA Method 200.8 for metals. SIM was removed from the method specification in Appendix 9 tables.
10. Changes. Total recoverable metals was the nomenclarture used in EPA method 200.8 as published in 1994. Ecology recognizes that currently the term 'recoverable' is often left out of the nomenclature. Ecology's Laboratory Accreditation does not use SIM for EPA Method 200.8 for metals. The term 'recoverable' was removed from the method specification in Appendix 9 tables.
11. Changes. The footnote letter "a" was missing on Table A9-3, it was added to the table heading "Reporting Limit or LLOQ".

12. Changes. The method change requirement was removed from Footnote "e". The following sentence was added: "If a more sensitive congener analysis is conducted (EPA Method 8082A or EPA Method 1668C) then those individual compound concentrations should also be reported in the annual report."

13. Changes. All green are the same comment. Agreed, Ecology retains the authority to approve deviations from Appendix 9 when approving the QAPP. All deviations must be evidence based, the evidence coming from prior QAPP approvals or data provided by Permittees. The following paragraph was added to page 1 of Appendix 9. "Permittees continuing their stormwater monitoring discharge programs from prior permits are required to update their QAPP to reflect the changes of this Appendix 9 and extend the timeframe. Locations, methodology, and laboratory techniques previously approved by Ecology should be discussed in the QAPP update. Ecology will use provided evidence summarized by the Permittee to evaluate reduced requirements."

14. Changes. All green are the same comment. Agreed, Ecology retains the authority to approve deviations from Appendix 9 when approving the QAPP. All deviations must be evidence based, the evidence coming from prior QAPP approvals or data provided by Permittees. The following paragraph was added to page 1 of Appendix 9. "Permittees continuing their stormwater monitoring discharge programs from prior permits are required to update their QAPP to reflect the changes of this Appendix 9 and extend the timeframe. Locations, methodology, and laboratory techniques previously approved by Ecology should be discussed in the QAPP update. Ecology will use provided evidence summarized by the Permittee to evaluate reduced requirements."

15. No changes. The very next sentence states: "Ecology may approve reducing this requirement to a once per year frequency if the Permittee provides evidence demonstrating that insufficient material is present in the conveyance." Ecology can approve the QAPP, or QAPP addendum for a reduced frequency given enough evidence in the QAPP.

16. Changes. All green are the same comment. Agreed, Ecology retains the authority to approve deviations from Appendix 9 when approving the QAPP. All deviations must be evidence based, the evidence coming from prior QAPP approvals or data provided by Permittees. The following paragraph was added to page 1 of Appendix 9. "Permittees continuing their stormwater monitoring discharge programs from prior permits are required to update their QAPP to reflect the changes of this Appendix 9 and extend the timeframe. Locations, methodology, and laboratory techniques previously approved by Ecology should be discussed in the QAPP update. Ecology will use provided evidence summarized by the Permittee to evaluate reduced requirements."

17. Changes. Added the following sentence under Recordkeeping and Reporting: "Permittees continuing their stormwater monitoring discharge programs at the same locations will continue summarizing data from the sampling periods under prior permit periods."

18. Changes. This bullet was deleted to agree with Footnote "e" of Table A9-3 changes made to remove the more sensitive method requirement.

19. Changes. The parameter was deleted from Table 9A-2 and the methodology deleted from the end of Appendix 9. Particle Size Distribution (PSD) for stormwater sampling was specific to the 2007 permit's Effectiveness Monitoring requirement (S8.E) and was erroneously retained in Table 9A-2.
20. Changes. This footnote was revised to read "Research results indicate that errors may be introduced by decanting a subsample, care and use of tools like a funnel splitter may help." Ecology agrees that composited samples must be split (carefully) into subsamples for analysis. Filtering the entire composited storm sample is not recommended.
21. Changes. The bullet was revised to read: "Antecedent dry period: Less than or equal to 0.05” rain in the previous 6 hours, unless more time is needed to return to baseflow at the sampling point." The requirement of a 24hr antecedant was causing many storm events to be missed, particularly for sites with small drainage basins. Ecology aggrees, that if the flow at that site has not returned to baseflow, then the antecedant timeframe must be longer.
22. Changes. Agreed, Ecology retains the authority to approve deviations from Appendix 9 when approving the QAPP. All deviations must be evidence based, the evidence coming from prior QAPP approvals or data provided by Permittees. The following paragraph was added to page 1 of Appendix 9. "Permittees continuing their stormwater monitoring discharge programs from prior permits are required to update their QAPP to reflect the changes of this Appendix 9 and extend the timeframe. Locations, methodology, and laboratory techniques previously approved by Ecology should be discussed in the QAPP update. Ecology will use provided evidence summarized by the Permittee to evaluate reduced requirements."

28.0 Appendix 13

Comments apply to the Phase I Permit.

Commenters: City of Seattle

Summarized comments

1. There is a new Seattle-owned basin on the West Side of the waterway. The name is Herrings House, Separated Stormwater Drainage Basin Area, size is 6.07 Acres, the Outfall Diameter is 30 inches, Effectiveness Monitoring Location is null, Sampling to Fill Data Gap is Yes
2. 1st Ave. S (east) outfall that is currently listed in Table 1 should be 'outfall owned or installed by others' [WSDOT], thus moved from Table 1 to Table 2.

Response to range of comments

Ecology agrees with both suggested changes and has updated Appendix 13 accordingly.