

**SEATTLE PUBLIC UTILITIES
SEPA ENVIRONMENTAL CHECKLIST**

This SEPA environmental review of the City of Seattle’s Stormwater Code and Rule Update has been conducted in accord with the Washington State Environmental Policy Act (SEPA) (RCW 43.21C), State SEPA regulations [Washington Administrative Code (WAC) Chapter 197-11], and the City of Seattle SEPA policies and procedures [Seattle Municipal Code (SMC) Chapter 25.05]. The proposed action involves adoption of ordinances amending the City of Seattle’s Stormwater Code and associated Directors’ Rule, which is considered a non-project action under SEPA. Non-project actions are broader than a single site-specific project (WAC 197-11-774, SMC 25.05.774). This type of non-project action is not categorically exempted from a SEPA Threshold Determination (SMC 25.05.305 and SMC 25.05.800); therefore, it must be analyzed to determine if there are probable significant adverse environmental impacts. The probable significant adverse environmental impacts analyzed in a non-project SEPA environmental checklist are those impacts foreseeable at this stage, before specific project actions are planned. Seattle Public Utilities and Seattle Department of Planning and Development have prepared this SEPA Environmental Checklist under the non-project provisions of SEPA.

A. BACKGROUND

1. Name of proposed project:

City of Seattle Stormwater Code and Rule Update

2. Name of applicant:

City of Seattle

3. Address and phone number of applicant and contact person:

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4. Date checklist prepared:

February 27, 2015

5. Agency requesting checklist:

Seattle Public Utilities (SPU) and Seattle Department of Planning and Development (DPD)

6. Proposed timing or schedule (including phasing, if applicable):

On April 23, 2014, SPU and DPD submitted a proposed Draft Stormwater Code and related Directors’ Rule Update to the Washington State Department of Ecology (Ecology) for review. Ecology’s review will determine if the City of Seattle’s proposed update is equivalent with the

City of Seattle’s 2013-2018 National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Stormwater Permit (as modified, effective 2015) requirements and Ecology’s 2014 *Stormwater Management Manual for Western Washington (SWMMWW)*. SPU received Ecology’s initial written response on February 2, 2015. SPU and DPD will need to make minor revisions to the proposed Code and Directors’ Rule update for additional review by Ecology.

Due to the length of time it is taking to complete the equivalency review process and the desire to have some requirements that are not the focus of Ecology’s review in effect sooner, SPU and DPD are conducting a two-step update process consisting of the “2015 Revision to Stormwater Code” and the “2016 Stormwater Code and Manual Update.”

The “2015 Revision to Stormwater Code” process would result in the following three modifications to the 2009 Stormwater Code:

- Making water quality treatment thresholds for roadway projects less stringent and equivalent to Ecology requirements.
- Exempting SPU drinking water line of business utility projects from flow control, water quality treatment and green stormwater requirements, a standard which is equivalent to Ecology’s requirements.
- Adding flexibility to exempt flow control requirements in controlled combined sewer basins (or to be controlled under the Consent Decree) – identification of basins to be administered under Director’s Rule.

The 2015 revisions would be adopted by Seattle City Council ordinance. This ordinance process is scheduled to begin in the 1st Quarter of 2015 and will include a public hearing. SPU and DPD anticipate that the 2015 Revisions would be effective May 2015.

The “2016 Stormwater Code and Manual Update” process would consist of all other modifications to comply with Seattle’s 2013-2018 NPDES Phase 1 Municipal Stormwater Permit, provide equivalency with the 2014 *SWMMWW*, incorporate SPU/DPD policy changes, and improve usability. The 2016 process would adopt the remaining proposed Stormwater Code revisions and authorize the proposed new Stormwater Manual. This ordinance process is scheduled to begin during the 2nd Quarter of 2015 and will include a public hearing. Once authorized by ordinances, the 2016 Stormwater Code would be implemented through a joint Directors’ Rule (aka Seattle Stormwater Manual) approved by the Director of SPU and the Director of DPD. SPU and DPD anticipate the City’s updated Stormwater Code and related Directors’ Rule from this process to be effective January 2016.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

The proposal is a non-project action that is not dependent on any future action. However, once effective, the updated Stormwater Code and Directors’ Rule may need to be further updated to meet new state and federal regulatory requirements, including future revisions to the City’s NPDES Phase I Municipal Stormwater Permit requirements, or in response to new research or observed environmental change. In addition, the Stormwater Code may be updated at any time at the initiative of the Directors of SPU and DPD or by the Seattle City Council. Changes to the code may result in changes to the related Directors’ Rule. Also, as

with any document of this size, the City expects there may be presently undetected errors that would need to be corrected. These aforementioned possible actions are not sufficiently formulated or reasonably possible to include in this SEPA environmental review at this time, but would be examined at future dates to determine the appropriate level of SEPA environmental review. In on-going efforts, the City proactively promotes improved stormwater management, consistent with the Stormwater Code, in numerous areas such as existing property retrofits, pollution prevention, environmental stewardship, and waste reduction.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

A large body of existing scientific and environmental information, comprising published and unpublished data, analyses, and literature, provided a broad scientific basis for the analysis and development of the proposal. A summary of this information is presented in Seattle's 2009 *Environmentally Critical Areas: Best Available Science Review (Supplemental Report): Stormwater Code and Grading Code Revisions* and Seattle's 2015 *Environmentally Critical Areas: Best Available Science Review (Supplemental Report): 2015 Stormwater Code Revisions*. The most recent previous update of the City of Seattle's Stormwater Code and associated Directors' Rule was conducted in 2009.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

The proposal is a non-project, non-site-specific action that would take effect City-wide. The proposal is part of an on-going process designed to improve management of stormwater in the City of Seattle. There are no other applications pending for governmental approvals of other proposals directly affecting this proposal. Other (public and private) proposals for government approvals that are subject to the requirements in the City's Stormwater Code and associated Directors' Rule are pending throughout the City. The outcome of this proposal is not expected to substantively alter decision-making on any such individual pending applications unless a given project has not started construction by June 30, 2020. Following City adoption of the updated Stormwater Code and associated Directors' Rule, all properties and all development subsequently proposed inside the limits of the City of Seattle would be subject to the revised Code and Rule. Future public and private development projects may be subject to separate project-specific SEPA environmental review.

10. List any government approvals or permits that will be needed for your proposal, if known.

According to terms of the City's NPDES Permit, Ecology must determine that the City's proposed update to the Stormwater Code and associated Directors' Rule is equivalent to Appendix 1 of the Phase 1 Municipal Stormwater Permit and Ecology's 2014 *SWMMWW*. In addition, the legislation associated with this proposal will need to be approved by Seattle City Council ordinance following standard legislative rules and procedures. Once the City Council authorizing ordinance is adopted, the joint SPU/DPD Directors' Rule must then be approved by the Directors of both SPU and DPD.

11. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.

The proposal is a non-project, non-site-specific action that would take effect City-wide. The proposed action is City Council adoption and implementation of ordinances updating the City’s Stormwater Code and authorizing SPU and DPD to update the Directors’ Rule that implements the Stormwater Code. This Rule is the City’s Stormwater Manual.

Stormwater regulations protect people, property, and the environment from damage caused by stormwater runoff. Stormwater runoff can cause flooding, landslides, and erosion that can damage homes, businesses, and property. Stormwater runoff carries oil and grease, fertilizers, pesticides, and other toxic chemicals to our creeks, lakes, bays, river, and other waterways. The City of Seattle’s Stormwater Code also satisfies the City’s obligation to comply with its Municipal Stormwater Discharge NPDES Permit, issued by Ecology.

The City of Seattle’s Stormwater Code addresses:

- Drainage control submittal and review requirements;
- Where the stormwater from a development site needs to go;
- Green stormwater infrastructure (GSI);
- Erosion control requirements for projects during construction and grading activities;
- Flow control and stormwater treatment requirements; and
- How the City enforces the Stormwater Code.

Ecology re-issued the City of Seattle’s NPDES Phase I Municipal Stormwater Permit on August 1, 2012. This NPDES Permit went into effect August 1, 2013, and was subsequently modified. The modified permit was issued on December 17, 2014, went into effect on January 16, 2015, and remains in effect through July 31, 2018. The new NPDES permit requires the City of Seattle to update the City’s current Stormwater Code and Stormwater Manual. The revised Stormwater Code and Stormwater Manual must be equivalent to Appendix 1 of the Phase 1 Municipal Stormwater Permit and Ecology’s 2014 *SWMMWW*. To meet this requirement and other city objectives, the City is now proposing to revise the existing Stormwater Code (SMC 22.800-22.808) and the associated Directors’ Rule. The Directors’ Rule comprises the City of Seattle’s “Stormwater Manual.”

In May 2014, SPU and DPD published the proposed revisions to the Stormwater Code and the proposed Draft 2015 City of Seattle Stormwater Manual (Volumes 1 through 5, with appendices). Those documents are available at <http://seattle.gov/dpd/codesrules/changestocode/stormwatercode/projectdocuments/default.htm> . These documents introduced revisions associated with both the “2015 Revision to Stormwater Code” and the “2016 Stormwater Code and Manual Update.” Summaries of the May 2014 proposed changes to both the Stormwater Code and Stormwater Manual are also found at that website and are included as appendices in this Environmental Checklist:

Summary of Major Changes to Seattle’s 2009 Stormwater Code (included as Appendix A)

Summary of Major Changes to the Stormwater Manual (included as Appendix B)

A primary objective of these revisions is to obtain regulations equivalent to Appendix 1 of the Phase 1 Municipal Stormwater Permit and Ecology's 2014 *SWMMWW*. In order to achieve this objective, and in response to review comments received from Ecology on February 2, 2015, minor changes will be made to the May 2014 proposed Code and Manual revisions prior to initiating the ordinance for the 2016 Stormwater Code and Manual Update process. These changes are expected to be relatively minor, such that they do not trigger the need for an addendum to this checklist.

Additional objectives of these revisions are:

- Improve and clarify stormwater management requirements for new development in Seattle, including requirements for on-site stormwater management and green stormwater infrastructure;
- Improve and clarify requirements for construction site stormwater runoff controls;
- Clarify requirements for pollution prevention, good housekeeping, and operation and maintenance;
- Update source control and water quality treatment practices; and
- Streamline and reduce Stormwater Manual text to allow greater ease of use.

The proposed action is the legislative adoption of ordinances that approve the proposed Stormwater Code revisions and authorize SPU's and DPD's proposed changes to the existing Stormwater Manual. Generally, the proposed action would be applied to all new and existing land uses, real property, development, redevelopment, and retrofit projects within the City of Seattle. As described in response to Question A6, the proposed action will occur as two processes: the "2015 Revision to Stormwater Code" and the "2016 Stormwater Code and Manual Update."

- 12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

The geographic area affected by this proposed non-project action is the City of Seattle, Washington. Seattle has a land area of 84 square miles (217 square kilometers) and is located at latitude 47° 39' North and longitude 122° 17' West. Projects affected by the proposal may occur anywhere within Seattle's city limits. Answers to questions throughout this Environmental Checklist assume the affected geographical area for the proposal could be anywhere within the City of Seattle.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site: *[Check the applicable boxes]*

- Flat
 Rolling
 Hilly
 Steep Slopes
 Mountainous
 Other:

The geographic area affected by this proposed non-project action is the City of Seattle, Washington. The topography of the City of Seattle includes all types of terrain, from flat land to steep slopes. Most of the City has been substantially graded, developed, or otherwise disturbed.

b. What is the steepest slope on the site (approximate percent slope)?

Slopes in the City of Seattle range from 0% to greater than 40%. The steepest slopes occur primarily on the sides of the major hills in the city, including Queen Anne Hill, Capitol Hill, West Seattle, and Magnolia.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The City of Seattle has numerous soil types, including mineral soils dominated by clay, silt, or sand, as well as organic soils such as peats and mucks (see, for example, <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>). No agricultural soils or prime farmland are located within the City of Seattle. As a densely urbanized area, Seattle and much of its native soils have been extensively altered by filling, grading, and other activity.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe:

Seattle is known to be located in an active seismic area, as is the entire Puget Sound region. The City’s geologically hazardous areas are generally mapped by DPD as environmentally critical areas (ECA) (<http://web1.seattle.gov/dpd/maps/dpdgis.aspx>). Unstable soils and surfaces occur primarily in two contexts within the affected geographic area. The first context includes steep slopes and landslide-prone areas, where a combination of shallow ground water and glacial sediments deposited in layers with variable permeability increases the risk of landslides. The second context includes areas of fill or alluvial soils where loose, less cohesive soil materials below the water table may lead to the potential for liquefaction during earthquakes.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate the source of fill.

The proposed non-project action does not include any construction or development that would require filling or grading. The City of Seattle’s Grading Code regulates grading conducted by public entities and private parties and prescribes requirements for fill

material (including limitations on the type of material allowed as fill, and prohibition on use of solid waste, hazardous waste or hazardous material as fill). The proposed Stormwater Code and Stormwater Manual also regulate the timing and manner of grading. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review as appropriate.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe:

The proposed non-project action does not include any construction, development, or use that would cause erosion. Future, specific development proposals subject to the provisions of this proposal may involve clearing, construction, or uses that cause erosion. The proposed Stormwater Code and Stormwater Manual would contain requirements for Best Management Practices (BMPs) intended to be implemented to control erosion from clearing and construction activities. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review as appropriate.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The proposed non-project action does not include any construction or development that would convert pervious to impervious surfaces or create new impervious surfaces. The proposed Stormwater Code and Stormwater Manual cover the entire City of Seattle, which is a highly urbanized area and already predominantly composed of impervious surfaces. The proposed Stormwater Code and Manual support incentives for retrofitting existing development, such as opportunities for property owners to reduce their drainage rate if they install flow control and/or treatment facilities designed per the Code and Manual, which can include reducing impervious surfaces. The Code is also designed to mitigate the impacts of new development and redevelopment by requiring projects exceeding given thresholds to install green stormwater infrastructure, flow control facilities, and/or water quality treatment facilities. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review as appropriate.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

The proposed non-project action does not involve construction activity, and contains no proposed measures related to reducing or controlling erosion or other impacts at any specific location. However, the proposed Stormwater Code and Stormwater Manual contain requirements for temporary and permanent erosion and sediment control and require use of flow control and treatment facilities that further reduce potential erosion. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review as appropriate. Additional controls may be required by SPU when minimum controls are not sufficient to prevent erosion or transport of sediment or other pollutants from a specific construction site for future, specific development proposals.

2. Air

- a. What types of emissions to the air would result from the proposal [e.g., dust, automobile, odors, industrial wood smoke, greenhouse gases (GHG)] during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.**

The proposed non-project action does not include any construction or development that would directly produce emissions. As such, the proposal would not directly affect odors, greenhouse gas (GHG) emissions, or climate change.

Indirect production of GHG emissions has also been considered, but no changes to GHG emissions are expected as an indirect result of this non-project action because the incremental difference between total probable future development under the existing and the proposed Stormwater Code and Stormwater Manual would be minor. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review as appropriate.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.**

The proposed non-project action does not include any construction or development that would be affected by emissions or odors. Off-site sources of emissions or odors could exist in the vicinity of future, specific development proposals that may be subject to provisions of the proposed Stormwater Code and Stormwater Manual.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:**

The proposed non-project action does not involve construction activity, and contains no proposed measures related to reducing or controlling emissions or other impacts to air at any specific location. However, the proposed Stormwater Code and Stormwater Manual require construction practices that attempt to minimize dust from construction sites, such as stabilized entranceways and wheel washes, sweepers to keep roadways clean. Mechanical (broom) sweepers and older vacuum sweepers may be used and may cause temporary dust emissions. Use of these sweepers may be limited or prohibited by local clean air regulations. Individual development projects would be subject to applicable emission control and air quality protection requirements, as well as limits that may be in effect to reduce greenhouse gas emissions. Otherwise, there are established policies and regulations that attempt to minimize adverse air quality impacts of specific development projects.

3. Water

a. Surface:

- (1) **Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If so, describe type and provide names. If appropriate, state what stream or river it flows into.**

The proposed non-project action would affect the entire City of Seattle. Most of Seattle is located within the Lake Washington/Cedar/Sammamish Watershed (Watershed Resource Inventory Area [WRIA] 8). The Duwamish Waterway and Elliott Bay, located in southwestern Seattle, are part of the Green/Duwamish and Central Puget Sound Watershed (WRIA 9). Seattle is characterized by a variety of surface water features, including marine areas, rivers, lakes, and creeks. Each type is briefly summarized below.

Marine: Seattle's west side is situated adjacent to Puget Sound, a major marine embayment.

Rivers: Portions of south Seattle drain to the lower reaches of the Duwamish River (also known as the Duwamish Waterway). The River receives flow from the South Park basin, Norfolk basin, Longfellow Creek, and other smaller urban creeks, and drains to Elliott Bay in south Puget Sound.

Lakes: Freshwater lakes and ponds, within or adjacent to the City, include the Lake Union/Ship Canal system, which links Lake Washington and Puget Sound through the Hiram Chittenden Locks. Other freshwater lakes include Green, Haller, and Bitter lakes in the north portion of the City (also located in the Lake Union/Ship Canal drainage basin). Seattle also contains numerous small ponds and wetlands.

Creeks: Runoff from Seattle's developed cityscape drains to creek systems of varying sizes. Major creeks in the western regions of the City drain directly to Puget Sound and include Piper's and Fauntleroy creeks. Longfellow Creek is a main creek in the southwest portion of the city that drains to the Duwamish River. Thornton Creek, Taylor Creek, and other smaller creeks drain runoff from the eastern portions of the city to Lake Washington.

- (2) **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If so, please describe, and attach available plans.**

The proposed non-project action does not include any construction or development that would require work over, in, or adjacent to the surface waters. Individual projects that may be subject to provisions of this proposal may be located over, in, or adjacent to these waters. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review as appropriate.

- (3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands, and indicate the area of the site that would be affected. Indicate the source of fill material.**

The proposed non-project action does not include any construction or development or any fill and dredge in or near surface waters or wetlands. The proposed Stormwater Code and Stormwater Manual require projects to protect the functions and values of wetlands and surface waters. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review as appropriate.

- (4) Will the proposal require surface water withdrawals or diversions? If so, give general description, purpose, and approximate quantities if known.**

Because this is a non-project action, there would be no construction or development that would withdraw or divert surface waters. The proposed Stormwater Code and Stormwater Manual require preservation of natural drainage patterns and outfalls to the maximum extent feasible. Potential impacts of future, specific development proposals would be addressed through existing regulations and/or separate site-specific environmental review.

- (5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

The proposed non-project action does not include any construction or development that would lie within a 100-year floodplain. Major streams and the Duwamish River have associated 100-year floodplains within the affected geographic area. Individual projects that may be subject to provisions of this proposal may be located over, in, or adjacent to these waters and their associated floodplains. The proposed Stormwater Code and Stormwater Manual provide technical standards and guidance for development review and approval of projects that lie within the 100-year floodplain. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review as appropriate.

- (6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

The proposed non-project action does not include any construction or development that would discharge waste material to surface waters. The proposed Stormwater Code and Stormwater Manual attempt to reduce pollution to surface waters from stormwater runoff. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review as appropriate.

b. Ground:

- (1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.**

The proposed non-project action does not include any construction or development that would withdraw groundwater. The proposed Stormwater Code and Stormwater Manual prescribe treatment BMPs to protect ground water and surface water from stormwater runoff. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review.

- (2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial, containing the following chemicals...; agricultural, etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

The proposed non-project action does not include any construction or development that would discharge waste material to ground waters. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review.

c. Water Runoff (including storm water):

- (1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

The proposed non-project action does not include any construction or development that would generate runoff. The proposed Stormwater Code and Stormwater Manual attempt to reduce pollution to surface waters from stormwater runoff. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review.

- (2) Could waste materials enter ground or surface waters? If so, generally describe.**

The proposed non-project action does not include any construction or development that would generate waste materials that could enter ground or surface waters. The proposed Stormwater Code and Stormwater Manual attempt to reduce pollution to ground and surface waters from stormwater runoff. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review.

- (3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

The proposed non-project action does not include any construction or development

that would alter or otherwise affect drainage patterns. The proposed Stormwater Code and Stormwater Manual require preservation of natural drainage systems and outfalls to the maximum extent feasible and protection of existing ecological functions.

d. Proposed measures to reduce or control surface, ground, runoff water, and drainage impacts, if any:

The proposed non-project action does not include any construction or development that would have impacts to surface, ground, runoff water, and drainage. The purpose of the proposal is to further clarify and refine requirements and regulations for mitigating impacts of stormwater runoff and grading at new development and redevelopment sites. Proposed measures to reduce impacts from other public or private actions are set out in the proposal. The proposed Stormwater Code and Stormwater Manual specify source control practices to avoid contaminating stormwater runoff, construction measures to minimize erosion and sediment transport, flow control measures, and treatment BMPs to protect ground water and surface water from stormwater runoff to optimize benefits to surface waters, and to reduce potential adverse impacts.

4. Plants

a. Types of vegetation found on the site: [check the applicable boxes]

The geographic area affected by the proposed non-project action is the City of Seattle, Washington. A wide variety of native and non-native plant species and associated vegetation are found in the City of Seattle. Generally, the Puget Sound basin is home to a wide diversity of plant species that depend upon marine, estuarine, freshwater, and terrestrial environments. The City of Seattle has a broad variety of vegetation, including upland forest (deciduous, coniferous, and mixed), shrublands, riparian forests, and wetlands. This flora includes species native to the region, as well as many non-native species. Seattle is a densely developed urban area having few remaining areas of native vegetation and high-quality habitat. These remaining fragments of quality native vegetation are found in parklands and open spaces. The plants found in most urban and suburban areas are those native and non-native species that tolerate or benefit from habitat degradation and disturbance.

<input checked="" type="checkbox"/> Deciduous trees: <input checked="" type="checkbox"/> alder; <input checked="" type="checkbox"/> maple; <input checked="" type="checkbox"/> aspen; <input checked="" type="checkbox"/> other: cottonwoods, willow, etc. <input checked="" type="checkbox"/> Evergreen trees: <input checked="" type="checkbox"/> fir; <input checked="" type="checkbox"/> redcedar; <input checked="" type="checkbox"/> pine; <input checked="" type="checkbox"/> other: spruce, hemlock, cedar, etc. <input checked="" type="checkbox"/> Shrubs <input checked="" type="checkbox"/> Grass <input type="checkbox"/> Pasture <input type="checkbox"/> Crop or grain <input type="checkbox"/> Orchards, vineyards, or other permanent crops <input checked="" type="checkbox"/> Wet soil plants: <input checked="" type="checkbox"/> cattail; <input checked="" type="checkbox"/> buttercup; <input checked="" type="checkbox"/> bulrush; <input checked="" type="checkbox"/> skunk-cabbage; <input type="checkbox"/> other: <input checked="" type="checkbox"/> Water plants: <input checked="" type="checkbox"/> water lily; <input checked="" type="checkbox"/> eelgrass; <input checked="" type="checkbox"/> milfoil; <input type="checkbox"/> other: <input checked="" type="checkbox"/> Other types of vegetation: Various other vascular, non-vascular, native, and non-native plant species.
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b. What kind and amount of vegetation will be removed or altered?

The proposed non-project action does not include any construction or development that would remove or alter vegetation. The proposed Stormwater Code and Stormwater Manual encourage retaining native vegetation and limiting clearing and grading to the minimum necessary, include requirements and incentives for retaining and planting trees associated with development projects, and promote use of vegetated stormwater facilities where feasible. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review.

c. List threatened or endangered species known to be on or near the site.

The geographic area affected by the proposed non-project action is the City of Seattle, Washington. No federally-listed endangered or threatened plant species or State-listed sensitive plant species are known to occur within the municipal limits of the City of Seattle. Most of the City of Seattle has been intensively disturbed by development and redevelopment over the last 100 years. Seattle's original vegetation has been extensively cleared, excavated, filled, paved, or occupied by streets and other built structures. There is no habitat for threatened or endangered plants.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The geographic area affected by the proposed non-project action is the City of Seattle, Washington. The proposed Stormwater Code and Stormwater Manual provisions are likely to decrease habitat destruction by preventing erosion and minimizing pollution in stormwater in the affected geographical area. The Stormwater Code and Manual include requirements and incentives for retaining trees associated with development projects and includes the use of vegetated stormwater facilities. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review.

e. List all noxious weeds and invasive species known to be on or near the site.

The geographic area affected by the proposed non-project action is the City of Seattle, Washington. Many species of noxious and invasive species are found within King County and the City of Seattle. See, for example, the noxious weed lists of the King County Noxious Weed Board (<http://www.kingcounty.gov/environment/animalsAndPlants/noxious-weeds/laws/list.aspx>).

5. Animals

a. List any birds and other animals that have been observed on or near the site or are known to be on or near the site: [check the applicable boxes]

The geographic area affected by the proposed non-project action is the City of Seattle, Washington. Many species of birds, mammals, and fish are present in the City.

Generally, the Puget Sound basin is home to an extremely wide diversity of animal species that depend upon marine, estuarine, freshwater, and terrestrial environments. This fauna includes species native to the region, as well as many non-native species. Seattle is an intensely developed urban area having few remaining areas of native vegetation and high-quality habitat. These remaining fragments of quality wildlife habitat are found in parklands and open spaces throughout the planning area. The wildlife found in most urban areas are those native and non-native species that tolerate or benefit from habitat degradation or close association with humans.

Birds: Hawk Heron Eagle Songbirds
 Other: osprey, bald eagle, peregrine falcon, purple martin, owl (various species), pileated woodpecker, belted kingfisher, waterfowl species, Canada goose. Also, typical urban species associated with urban development such as starling and pigeon.

Mammals: Deer Bear Elk Beaver
 Other: California sea lion, river otter, muskrat, raccoon. Also, a variety of urban-adapted species such as possum and rat.

Fish: Bass Salmon Trout Herring
 Shellfish Other: perch, rockfish, etc.

b. List any threatened or endangered species known to be on or near the site:

The geographic area affected by the proposed non-project action is the City of Seattle, Washington . In King County, five wildlife species are listed as endangered or threatened under the Endangered Species Act (ESA), but these species are not likely to be found in the City of Seattle. These include Canada lynx (*Lynx Canadensis*; Threatened), gray wolf (*Canis lupus*; Endangered), grizzly bear (*Ursus arctos*; Endangered), marbled murrelet (*Brachyramphus marmoratus*; Threatened), and northern spotted owl (*Strix occidentalis caurina*; Threatened). King County contains federally designated critical habitat for marbled murrelet and northern spotted owl; no designated critical habitat is located in Seattle. Bald eagle (*Haliaeetus leucocephalus*) was removed from the federal list under ESA on August 8, 2007, but is federally protected under the Bald and Golden Eagle Protection Act. Bald eagles are known to reside in Seattle.

Fish species listed as endangered or threatened under the ESA and found in freshwater tributaries of Puget Sound (PS) include Chinook salmon (*Oncorhynchus tshawytscha*, Threatened, PS), steelhead (*O. mykiss*, Threatened, PS), and bull trout (*Salvelinus confluentus*, Threatened, PS). Coho salmon (*O. kisutch*) is a Candidate species for listing as Threatened. All of these species reside in or near the planning area. Lake Washington contains federally designated critical habitat for bull trout and Chinook salmon. Because much of Seattle has been previously developed and the original habitats significantly altered or eliminated, the potential for threatened or endangered animal species to be present in Seattle is low.

c. Is the site part of a migration route? If so, explain.

The geographic area affected by the proposed non-project action is the City of Seattle, Washington. The Puget Sound region is known to be an important migratory route for many animal species. Portions of the planning area provide migratory corridors for bald eagles traveling to and from foraging areas in Puget Sound or Lake Washington. Marbled murrelets travel through the planning area between marine waters and their nests in late successional/old growth forests in the Cascade Mountains. Bull trout, steelhead, and Chinook, chum, pink, and coho salmon use the Puget Sound nearshore. Chinook, coho, and sockeye salmon use Lake Washington and Lake Union as migration corridors. Anadromous trout and salmon migrate through the area river and stream systems, including urban streams in Seattle. The Puget Sound region is also within the Pacific Flyway—a flight corridor for migrating waterfowl, migratory songbirds, and other birds. The Pacific Flyway extends from Alaska to Mexico and South America.

d. Proposed measures to preserve or enhance wildlife, if any:

BMPs in the proposed Stormwater Code and Stormwater Manual are intended to prevent degradation of aquatic habitat within the City of Seattle by preventing erosion, minimizing pollution in stormwater runoff, and reducing aquatic habitat destruction through improved stormwater management regulations. The proposed Stormwater Code and Manual include requirements for retaining trees associated with development projects and includes use of vegetated stormwater facilities.

e. List any invasive animal species known to be on or near the site.

Many species of invasive animal species are found within King County and the City of Seattle, including nutria (*Myocastor coypus*), rat (*Rattus spp.*), pigeon (*Columba livia*), New Zealand Mud Snail (*Potamopyrgus antipodarum*), and Asian gypsy moth (*Lymantria dispar*).

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The proposed non-project action does not include any construction or development that would require energy to operate.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

The proposed non-project action does not include any construction or development that would affect potential use of solar energy by adjacent properties. The proposed Stormwater Code and Stormwater Manual include requirements and incentives for retaining and planting trees associated with development projects, which could result in increased shading. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review.

c. What kinds of energy conservation features are included in the plans of this proposal?

List other proposed measures to reduce or control energy impacts, if any:

The proposed non-project action does not include any energy conservation features or other measures to reduce or control energy impacts .

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal?

If so, describe:

The proposed non-project action does not include any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review.

(1) Describe any known or possible contamination at the site from present or past uses.

The proposed non-project action does not include any construction or other activities that would encounter possible site contamination. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review.

(2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

The proposed non-project action does not include any construction or other activity that would cause exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste. Potential impacts of future, specific development proposals would be addressed through regulations and/or project-specific environmental review.

(3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

The proposed action does not involve the storage, use, or production of toxic or hazardous chemicals.. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

(4) Describe special emergency services that might be required.

The proposed non-project action does not require any special emergency services. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

(5) Proposed measures to reduce or control environmental health hazards, if any:

The proposed non-project action has no associated environmental health hazards. However, the proposed Stormwater Code and Stormwater Manual provide for operation and maintenance procedures that include measures to reduce or control environmental health hazards from other private or public actions. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

b. Noise

(1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

The proposed non-project action would not be affected by noise. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

(2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

The proposed non-project action does not include any construction or development that would generate noise. However, adoption of the proposed Stormwater Code and Stormwater Manual would require that future projects construct the types of stormwater facilities described in the Stormwater Manual, which would require use of heavy equipment for a short time for activities such as for filling or grading. Use of machinery (trucks, mowers, trimmers, pumps, etc.) to maintain constructed detention and treatment facilities may also result in increased noise over what would occur if the facilities were not constructed or were not maintained according to the recommendations in the proposed Stormwater Code. Except for emergencies, noise associated with these activities would be reasonably expected to occur during normal work hours and would comply with the requirements of the City of Seattle's Noise Control Ordinance (SMC Chapter 25.08). Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

(3) Proposed measures to reduce or control noise impacts, if any:

Because the proposed non-project action would not itself generate noise, no measures to reduce or control noise are proposed. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The geographic area affected by the proposed non-project action extends throughout the City of Seattle. Generally, the City of Seattle is characterized by urban uses. Existing uses include single-family and multifamily residences, commercial, industrial, recreation, and open space. Most city properties have been developed at urban densities and existing uses are often mixed. Downtown areas often include many high-rise developments. Individual projects that may be subject to the provisions of this proposal may be located in any of these land uses. More specific information on land and shoreline use would be determined during the design, environmental review, and permitting of individual projects.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or non-forest use?

The proposed non-project action does not include construction or development that would convert agricultural or forest land to other uses. There are no designated agricultural or forest lands in the City of Seattle.

(1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversized equipment access, the application of pesticides, tilling, and harvesting? If so, how?

The proposed non-project action does not include construction or development that would be affected by agricultural or forest land business operations. There are no designated agricultural or forest lands in the City of Seattle.

c. Describe any structures on the site.

The City of Seattle urban area is developed with a wide range of structures, ranging from single-family residences to high-rise office towers to large industrial structures. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

d. Will any structures be demolished? If so, what?

The proposed non-project action does not include construction or development that would require demolition of any structures. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

e. What is the current zoning classification of the site?

Zoning in Seattle includes a range of residential, commercial, and industrial designations. Zoning designations are found in Seattle’s Land Use Code, Title 23 of the SMC. Basic zone designations are listed below, followed by their abbreviations. [Note: each different height area is a separate “zone”.]

<u>Designation</u>	<u>Abbreviation</u>
Residential, Single-family 9,600	SF 9600
Residential, Single-family 7,200	SF 7200
Residential, Single-family 5,000	SF 5000
Residential Small Lot	RSL
Residential, Multifamily, Lowrise Duplex/Triplex	LDT
Residential, Multifamily, Lowrise 1	L1
Residential, Multifamily, Lowrise 2	L2
Residential, Multifamily, Lowrise 3	L3
Residential, Multifamily, Lowrise 4	L4
Residential, Multifamily, Midrise	MR
Residential, Multifamily, Highrise	HR
Residential-Commercial	RC
Neighborhood Commercial 1	NC1
Neighborhood Commercial 2	NC2
Neighborhood Commercial 3	NC3
Seattle Mixed	SM
Commercial 1	C1
Commercial 2	C2
Downtown Office Core 1	DOC1
Downtown Office Core 2	DOC2
Downtown Retail Core	DRC
Downtown Mixed Commercial	DMC
Downtown Mixed Residential	DMR
Pioneer Square Mixed	PSM
International District Mixed	IDM
International District Residential	IDR
Downtown Harborfront 1	DH1
Downtown Harborfront 2	DH2
Pike Market Mixed	PMM
General Industrial 1	IG1
General Industrial 2	IG2
Industrial Buffer	IB
Industrial Commercial	IC

Individual projects subject to the provisions of this proposed non-project action may be located in any of these zones. More specific information on zoning would be determined during the design, environmental review, and permitting of individual projects.

f. What is the current comprehensive plan designation of the site?

The geographic area affected by the proposed non-project action extends throughout the City of Seattle. Current comprehensive plan designations in the City of Seattle can be found in the *Seattle Comprehensive Plan*, adopted on July 25, 1994, and last amended in April 2014. Individual projects that may be subject to the provisions of the proposed non-project action may be located in any of these *Comprehensive Plan* designations. More specific information on *Comprehensive Plan* designations would be determined during the design, environmental review, and permitting of individual projects.

g. If applicable, what is the current shoreline master program designation of the site?

The proposed non-project action would apply throughout the City of Seattle, which contains both freshwater and marine shorelines, resources that are regulated by the City's shoreline master program (SMP). Shoreline resources regulated under the SMP include all marine waters, larger streams and lakes, associated wetlands and floodplains, and upland areas called shorelands that extend 200 feet landward from the edges of these waters. Individual projects subject to the provisions of this proposal may be located in the Shoreline Management District. More specific information on land and shoreline use would be determined during the design, environmental review, and permitting of individual projects.

h. Has any part of the site been classified as an "environmentally critical" area? If so, specify.

The proposed non-project action would apply throughout the City of Seattle, including in environmentally critical areas. Individual projects subject to the provisions of the proposed non-project action may be located in environmentally critical areas. More specific information on site classification would be determined during the design, environmental review, and permitting of individual projects.

i. Approximately how many people would reside or work in the completed project?

The proposed non-project action would not create a completed project in which to reside or work. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

j. Approximately how many people would the completed project displace?

No people would be displaced by the proposed non-project action. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

k. Proposed measures to avoid or reduce displacement impacts, if any:

The proposed non-project action does not include any proposed measures to avoid or reduce displacement impacts. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposed non-project action does not change existing or projected land use. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

There are no designated agricultural or forest lands in the City of Seattle.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

The proposed non-project action would not provide housing. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

The proposed non-project action would not eliminate housing. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

c. Proposed measures to reduce or control housing impacts, if any:

No measures to reduce or control housing impacts are proposed. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas? What is the principal exterior building material(s) proposed?

The proposed non-project action does not include construction or development. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

b. What views in the immediate vicinity would be altered or obstructed?

The proposed non-project action would not alter or obstruct views. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

c. Proposed measures to reduce or control aesthetic impacts, if any:

No measures to reduce or control aesthetic impacts are proposed.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The proposed non-project action does not include construction or development that would produce light or glare. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

The proposed non-project action does not include construction or development that would produce light or glare. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

c. What existing off-site sources of light or glare may affect your proposal?

Light or glare would not affect the proposed non-project action. Potential impacts of light or glare on future, specific development proposals would be addressed through separate project-specific environmental review.

d. Proposed measures to reduce or control light and glare impacts, if any:

No measures to reduce or control light and glare are proposed.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

The proposed non-project action would be in effect throughout the City of Seattle. The City of Seattle Department of Parks and Recreation operates and maintains a large number of city parks, trails, gardens, playfields, swimming pools, and community centers. In addition to these public facilities, public and private schools, outdoor associations, and commercial businesses provide residents of and visitors to Seattle with a variety of organized recreational facilities and activities, such as school athletic programs, hiking and gardening groups, and private health clubs and golf courses. Seattle is particularly rich in recreational opportunities focused on the area's natural features. Seattle's many parks and shorelines offer abundant recreational opportunities, including water contact recreational activities (such as swimming, wading, snorkeling, and diving); water-related and non-water-related recreational activities (such as walking, hiking, playing, observing wildlife, and connecting with nature); and recreational activities that involve consumption of natural resources (such as fishing and noncommercial shellfish harvesting). More specific information on site-specific recreational opportunities would be determined during the design, environmental review, and permitting of individual projects.

b. Would the proposed project displace any existing recreational uses? If so, describe.

The proposed non-project action does not include construction or development that would displace any recreational activities. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

No measures to reduce or control impacts on recreation are proposed.

13. Historic and Cultural Preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

The proposed non-project action would be in effect throughout the City of Seattle. There are a number of landmarks, properties, or districts in Seattle that are listed on, or proposed for, national, state, and local preservation registers. In addition, while Seattle today comprises a highly urbanized and developed area, it is also an area with potential for Native American cultural artifacts. More specific information on site-specific historic buildings, structures, and sites would be determined during the design, environmental review, and permitting of individual projects.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

There are a number of landmarks, properties, or districts in Seattle that are listed on, or proposed for, national, state, and local preservation registers. In addition, while Seattle today comprises a highly urbanized and developed area, it is also an area with potential for Native American cultural artifacts. Potential impacts of future, specific development proposals would be identified and addressed through regulations and/or separate project-specific environmental review.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the Department of Archaeology and Historic Preservation, archaeological surveys, historic maps, GIS data, etc.

The proposed non-project action does not involve construction or disturbance of any site. No methods were used to assess potential impacts to cultural and historic resources. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.**

The proposed non-project action does not include construction or development, so there are no activities that would require the avoidance, minimization, or compensation for loss, changes to, and disturbance to historic and cultural resources. The proposed Stormwater Code and Stormwater Manual include requirements for certain projects that could require ground disturbing activity. Individual projects developed pursuant to the provisions of this proposal would be subject to environmental review (if they meet or exceed thresholds for environmental review) and to the State of Washington's and City's regulations related to the protection of historic and cultural resources.

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area, and describe proposed access to the existing street system. Show on site plans, if any.**

The proposed non-project action would be in effect throughout the City of Seattle. The City has dense grids of urban streets (residential and arterials) that provide connections to major routes, including Interstate 5 and State Route 99, which run north and south through the City, and Interstate 90 and State Route 520, which connect Seattle to points east across Lake Washington. More specific information on site-specific public streets and highways would be determined during the design, environmental review, and permitting of individual projects.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?**

The City of Seattle is served by bus, trolley, and light rail public transit. Site-specific information on the local public transit would be determined during the design, environmental review, and permitting of individual projects.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?**

The proposed non-project action would not construct or eliminate parking spaces. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).**

The proposed non-project action does not require any improvements to roads or other transportation infrastructure. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

The proposed non-project action would take effect throughout the City of Seattle. The City is served by railroads, sea ports, and airports. More specific information on proximity to and use of water, rail, and/or air transportation would be determined during the design, environmental review, and permitting of individual projects.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?**

The proposed non-project action would not generate vehicle trips. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.**

The proposed non-project action would not affect or be affected by the movement of agricultural or forest products. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

- h. Proposed measures to reduce or control transportation impacts, if any:**

No measures to reduce or control transportation impacts are proposed.

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.**

The proposed non-project action would not result in an increased need for public services. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

- b. Proposed measures to reduce or control direct impacts on public services, if any.**

No measures to reduce or control direct impacts on public services are proposed.

16. Utilities

- a. Check utilities available at the site, if any: [check the applicable boxes]**

- | | | | | |
|---|---|--|--------------------------------|---|
| <input type="checkbox"/> None | <input type="checkbox"/> Electricity | <input type="checkbox"/> Natural gas | <input type="checkbox"/> Water | <input type="checkbox"/> Refuse service |
| <input type="checkbox"/> Telephone | <input type="checkbox"/> Sanitary sewer | <input type="checkbox"/> Septic system | | |
| <input type="checkbox"/> Other (identify) | | | | |

The proposed Stormwater Code and Stormwater Manual would be in effect throughout the City of Seattle. All areas of the City have electricity, telephone, water, and refuse service. Most (but not all) areas of the City of Seattle have cable/fiber optics, sanitary sewers, and natural gas. More specific information on site-specific utilities would be determined during the design, environmental review, and permitting of individual projects.

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None

The proposed non-project action does not include construction or development of any utilities.

C. SIGNATURE

The above answers are true and complete to the best of our knowledge. We understand that the lead agencies (Seattle Public Utilities and Seattle Department of Planning and Development) are relying on them to make their decisions.

Signature:  Date: 2/27/15
Sherell Ehlers
SPU Project Manager

Signature: John L. Bue For ART RICHARDSON Date: 3/2/15
Art Richardson
DPD Acting Project Manager

Note: Section D (*Supplemental Sheet for Non-Project Actions*) is required if the proposal applies to a program, planning document, or code change.

D. SUPPLEMENTAL SHEET FOR NON-PROJECT ACTIONS

Do not use this sheet for project actions. Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment. When answering these questions, be aware of the extent of the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

The proposed action is City Council adoption and implementation of ordinances updating the City’s Stormwater Code and authorizing SPU and DPD to update the Directors’ Rule that implements the Stormwater Code (aka Seattle’s Stormwater Manual). The proposal would be implemented in a two part process: the “2015 Revision to Stormwater Code” and the “2016 Stormwater Code and Manual Update”. The proposal is a non-project, non-site-specific action that would take effect City-wide and is part of an on-going process to improve the management of stormwater in the City of Seattle.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

The proposal would result in no direct impacts and is unlikely to result in indirect or cumulative impacts related to emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise. Greenhouse gas (GHG) emissions have also been considered, and no changes to GHG emissions are expected as a result of this non-project action. Potential impacts of future, specific development proposals would be addressed through regulations and/or separate project-specific environmental review.

The proposal is designed to continue to reduce discharges of pollutants to water from stormwater runoff, including toxic and hazardous substances. Oil and grease, nutrients, heavy metals, pesticides, and other stormwater pollutants are in urban stormwater runoff and are often attached to sediment particles. The proposed Stormwater Code and Stormwater Manual use runoff treatment Best Management Practices (BMPs) designed to remove pollutants and retain sediments, thus resulting in temporary storage of potentially toxic substances. Design specifications for stormwater BMPs use a combination of engineering, materials choices, and site location considerations to ensure pollutant reduction. These include BMP maintenance, site location restrictions, and design-flow criteria and runoff prediction methods.

The proposal is also designed to continue to reduce high flows to creek basins and the public combined sewers from stormwater runoff. Implementation of the proposal would continue to reduce adverse impacts that would otherwise occur under existing conditions. The proposed Stormwater Code and Stormwater Manual encourage use of on-site stormwater management BMPs that infiltrate, disperse, and retain stormwater runoff to the maximum extent feasible. The Stormwater Code and Stormwater Manual also encourage preservation of natural vegetation, use of engineered soil/landscape systems, and infiltration of stormwater runoff.

Proposed measures to avoid or reduce such increases are:

The proposal does not produce such increases. Measures to avoid or reduce increases from future, site-specific proposals are described above.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

The proposal would result in no direct impacts and is unlikely to result in indirect or cumulative impacts related to plants, animals, fish or marine life, but, rather, would result in improved protection for such species. Among other goals, the proposal attempts to continue to protect aquatic conditions in streams, lakes, Puget Sound, and other waters.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

Improved stormwater management resulting from the proposal is described throughout the preceding responses. The proposal is anticipated to continue to protect habitat conditions for fish and marine life and would continue to benefit animals by reducing erosion and pollutant loading to aquatic environments. The proposal also includes requirements for retaining trees associated with development projects.

3. How would the proposal be likely to deplete energy or natural resources?

The proposal would not deplete energy or natural resources.

Proposed measures to protect or conserve energy and natural resources are:

The proposal would not have a negative impact on energy or natural resources; therefore, no protective measures are proposed.

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

The proposal would continue to protect aquatic conditions in wetlands, streams, lakes, and Puget Sound as described throughout the preceding responses.

Proposed measures to protect such resources or to avoid or reduce impacts are:

The proposal would continue to improve stormwater management over existing conditions by requiring the use of flow control and treatment BMPs for projects meeting threshold requirements.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

The proposal would result in no direct impacts and is unlikely to result in indirect or cumulative impacts related to land or shoreline use.

Proposed measures to avoid or reduce shoreline and land use impacts are:

No avoidance or reduction measures are proposed because no shoreline or land use changes are expected.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

The proposal would have no impact on the demands on transportation or the need for public services or utilities.

Proposed measures to reduce or respond to such demand(s) are:

No measures are proposed to reduce the demand for additional oversight or to reduce the increased demand for local stormwater services and utilities. The City of Seattle would continue to provide technical assistance to the public as it implements and maintains these services and utilities.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

There are no known conflicts or additional requirements.



APPENDIX A
Summary of Major Changes to Seattle's 2009 Stormwater Code

Chapter 22.800 - Title, Scope and Authority

1. Revised exemptions for utility projects (22.800.040.A.2.a): Revised exemptions regarding maintenance, repair, or installation of underground utility facilities so that SPU-sponsored capital improvement projects in the public right-of-way are exempt from minimum requirements for on-site stormwater management, flow control, and water quality treatment.

Remarks: This change is under review for each SPU utility system (i.e. public drainage system, public combined sewer, public sanitary sewer, and public water supply system) to evaluate the 2009 policy decision to not exempt SPU-sponsored capital improvement projects.

2. Revised exemptions for utility projects (22.800.040.A.2.a.1): Revised exemptions for utility projects to include "Minimum Requirements for On-site Stormwater Management (22.805.070)" along with existing exemptions for flow control and water quality treatment.

Remarks: The 2009 Stormwater Code intended to exempt utility projects from the Green Stormwater Infrastructure to the Maximum Extent Feasible requirement (GSI to MEF) along with Flow Control and Water Quality Treatment, but was inadvertently required when GSI to MEF was added under the subheading of 22.805.020.G.

3. Revised exemptions associated with pavement practices (22.800.040.A.2.b): Revised terminology from "Road maintenance practices" to "Pavement maintenance practices".

Remarks: This change is consistent with Seattle's 2013 Municipal Stormwater NPDES Permit.

4. Added exceptions for Roadway Projects (22.800.040.C.1.d): Exception associated with severe construction feasibility (i.e. infrastructure limitations, hydraulic limitations) added for roadway projects.

Remarks: This revision is intended to be consistent WSDOT Highway Runoff Manual and to account for the unique construction limitations associated with working within a public roadway right-of-way within an urban environment with existing infrastructure limitations.

5. Added new section for transition to Revised Stormwater Code (22.800.100): Added new section regarding effective date of Stormwater Code. Effective date dependent upon start of construction. For projects with "complete applications" submitted under previous Stormwater Code, start of construction shall be prior to June 30, 2020, otherwise 2015 Stormwater code applies.

Remarks: This revision added for consistency with Seattle's 2013 Municipal Stormwater NPDES Permit and affects both building and master use permits (including short plats).

Chapter 22.801 - Definitions

6. Added, deleted and revised terms: Approximately 5 new terms are defined and the definitions for 14 other terms have been materially revised in the 2015 Stormwater Code. Definitions for three terms no longer pertinent have been deleted. Table 1 lists the terms that have been materially modified (indicated by italicized text), added (indicated as underlined text), or deleted (indicated by strikethrough text).

Remarks: These changes are necessary to clarify certain code provisions, to implement revised minimum requirements, and to meet the provisions of Seattle’s 2013 Municipal Stormwater NPDES Permit.

Table 1: Key New or Significantly Revised Definitions

<u>Authority with jurisdiction</u>	<u>Industrial activities</u>	<u>Project Site</u>
<u>Aquatic life use</u>	Joint project	<i>Receiving water</i>
<i>Capacity-constrained system</i>	<i>Maximum extent feasible</i>	<i>Replace impervious surface</i>
Cause or contribute to a violation	<i>Nutrient-critical receiving water</i>	<i>Roadway project</i>
<i>Green stormwater infrastructure</i>	<i>Parcel-based project</i>	<i>Sidewalk project</i>
<u>Groundwater</u>	<i>Pollution-generating impervious surface</i>	<i>Site</i>
<u>Illicit Connection</u>	<i>Pollution-generating pervious surface</i>	<i>Stormwater</i>
<i>Impervious surface</i>		

Note: New definitions are underlined. Revised definitions are in italics. Deleted definitions are in strikethrough.

Chapter 22.802 – Prohibited and Permissible Discharges

7. Prohibited Discharges to Public Combined Sewers (22.802.020.D): Subsection added that discharges shall comply with SMC 22.16 (Side Sewer Code).

Remarks: Clarifies that discharges to public combined sewers shall meet the requirements of the Side Sewer Code.

8. Changes to permissible discharges (22.802.030): The list of permissible discharges has been modified and conditioned.

Remarks: The changes are nearly all based on the provisions of Seattle’s 2013 Municipal Stormwater NPDES Permit.

Table 2: Substantive Changes to Permissible Discharges (22.802.030)

<p>A. <u>Conditionally</u> Permissible Discharges to Drainage systems and Receiving Waters. Discharges from the sources listed below are permissible discharges <u>only if the stated conditions are met and</u> unless the Director of SPU determines that the type of discharge, directly or indirectly to a public drainage system, private drainage system, or a receiving water within or contiguous to Seattle city limits, whether singly or in combination with others, is causing or contributing to a violation of the City's NPDES stormwater permit or is causing or contributing to a water quality problem:</p> <ol style="list-style-type: none"> 1. <i>Discharges from potable water sources...</i> 2. <u>Discharges from swimming pools, spas, hot tubs, fountains, or similar aquatic recreation facilities and constructed water features...</u> 3. <u>Discharges of street and sidewalk washwater when the surfaces are swept prior to washing, detergents are not used, and water use is minimized...</u> 4. <u>Discharges of water from routine external building washdown when detergents are not used and water use is minimized.</u> 5. <u>Discharges of water used to control dust when water use is minimized; and</u> 6. <u>Other non-stormwater discharges, provided that these discharges are in compliance with the requirements of a stormwater pollution prevention plan that addresses control of such discharges and is approved by the Director.</u> <p>B. <u>Permissible discharges:...</u></p> <ol style="list-style-type: none"> 13. <u>Discharges of tracing dye used to establish or verify a drainage or sewer connection.</u>

Note: Underlined text indicates additions and strikethrough text indicate deletions of text based on the 2009 Stormwater Code.

9. Testing for prohibited discharges (22.802.040.A): Prior to dye testing, notice to SPU shall be provided 24-hours in advance.

Remarks: *To alert the Water Quality Hotline that dye can be expected in the drainage system.*

Chapter 22.803 – Minimum Requirements for All Discharges and All Real Property

10. Added requirement to map property drainage and plumbing infrastructure (22.803.020.A): Explicit that mapping is required.

Remarks: Added to enhance clarity of the Stormwater Code.

11. Site maintenance (22.803.030.G): New subsection to perform site maintenance to prevent transport of pollutants.

Remarks: Added requirement for all real property.

12. Minimum requirements for specific activities (22.803.040): Requires source control for specific pollution-generating activities. Clarifies requirements applicable for all discharges except those that drain only to the public combined sewer.

Remarks: Requirements specified in Volume 4 of the Stormwater Manual.

Chapter 22.805 – Minimum Requirements for All Projects

13. Revised minimum requirements for all projects (22.805.020): Revised so that On-site Stormwater management is a requirement based on project type (i.e. Single-family residential, Trail/Sidewalk, Roadway, Parcel). Relocated requirement to amend soils to On-site Stormwater Management section of the code.

Remarks: Relocated On-site Stormwater Management requirement for clarity.

14. Protect Green Stormwater Infrastructure BMPs (22.805.020.D.19): Added protection of GSI BMPs during construction and the requirement to remove and replace if not functioning.

Remarks: Added for consistency with Seattle's Municipal Stormwater NPDES Permit.

15. Minimum requirements for Single-family residential projects (22.805.030): Threshold for On-site Stormwater Management (formerly GSI to MEF) changed from all SFRs to projects with:

- a. 2,000 sf of impervious surface, or
- b. 7,000 sf of land-disturbing activity

Remarks: Consistent with Seattle's 2013 Municipal Stormwater NPDES Permit. No longer includes 1,500 sf impervious surface credit for SFRs.

16. Flow control for Parcel-based projects (22.805.050): Parcel projects not required to provide flow control in some combined basins determined to have sufficient capacity by the Director of SPU.

Remarks: The language describing basins and the designated basins are under review based upon the Combined Sewer Overflow program.

17. Flow control for Roadway projects (22.805.060): Roadway projects not required to provide flow control in some combined basins determined to have sufficient capacity by the Director of SPU.

Remarks: The language describing basins and the designated basins are under review based upon the Combined Sewer Overflow program.

18. Treatment for Roadway projects (22.805.060): Roadway projects with greater than 35% existing impervious surface not expanding the existing impervious surface by 50% are only required to provide treatment for new impervious surface greater than 5,000 sf.

Remarks: Change consistent with Seattle's Stormwater Permit requirements. Policy change based upon (1) Seattle more cost-effectively addressing roadway pollutants through implementation of Street Sweeping for Water Quality Program (begun in 2011) and (2) challenges with the installation and maintenance of limited technologies suitable for installation in Seattle's highly urbanized ROW.

19. On-site Stormwater Management (22.805.070): GSI to MEF is replaced with On-site stormwater management and relocated to this section. On-site stormwater management includes:

- a. Amend soils, and
- b. Comply with either:
 - i. On-site Performance Standard, or
 - ii. On-site List by project type

Remarks: Similar to changes in Seattle's 2013 Municipal Stormwater NPDES Permit, but complements Seattle's unique urban environment.

20. On-site Performance Standard (22.805.070.C): Includes matching the pre-developed condition of "forested" or "pasture" depending upon existing impervious surface coverage.

Remarks: Requirement is similar to Ecology On-site performance standard, but complements Seattle's existing flow control standards (i.e. Forested, Pasture).

21. On-site List (22.805.070.D): Impervious surface runoff shall be directed to a GSI BMP. GSI BMPs are categorized by priority.

Remarks: Requirement is similar to Ecology On-site lists, but BMPs are expanded and grouped slightly differently than Ecology.

22. On-site List (22.805.070.D): Competing needs (i.e. historic/archaeological, special zoning districts, health/safety, transportation, trees) may allow the reduction of BMPs when using the on-site list.

Remarks: Allowance similar to Ecology On-site lists, but tailored to Seattle's specific urban development and Seattle-specific ordinances.

23. Wetland Protection Standard (22.805.080.B.1): Wetland Protection Standard revised and Ecology guidance sheet references added.

Remarks: Revised to meet changes Seattle's 2013 Municipal Stormwater NPDES Permit.

24. Pre-developed Forested Standard (22.805.080.B.2): Standard language revised slightly.

Remarks: Revised to complement On-site Performance Standard language.

25. Pre-developed Pasture Standard (22.805.080.B.3): Standard language revised slightly.

Remarks: Revised to complement On-site Performance Standard language.

26. Enhanced Treatment (22.805.090.B.5): Standard revised to reference aquatic life use.

Remarks: Revised to meet changes Seattle's 2013 Municipal Stormwater NPDES Permit.

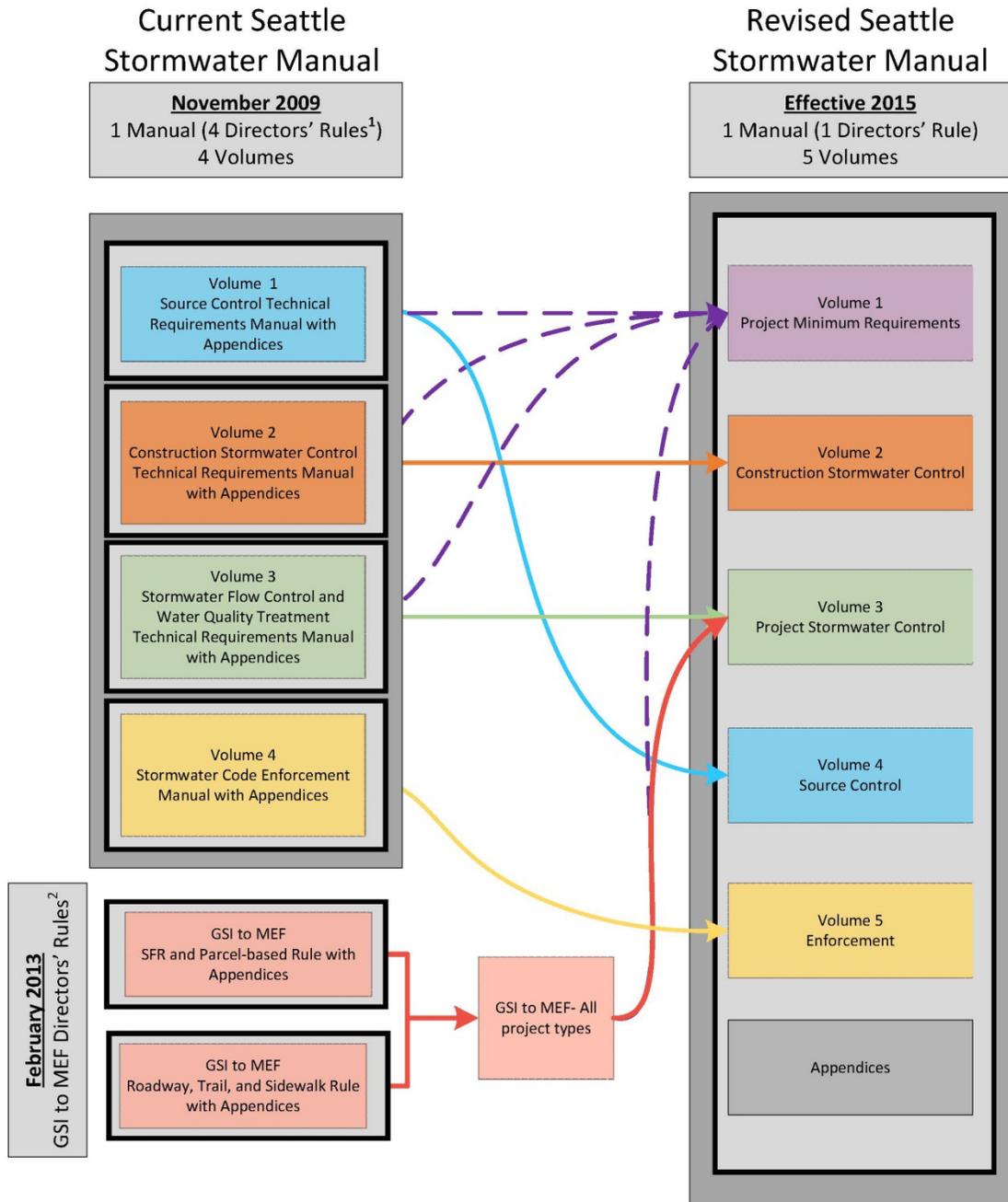
Chapter 22.808 – Stormwater Code Enforcement

27. Slight changes to enforcement: There have been slight, mainly administrative changes to this chapter:

Remarks: Overall, changes in Stormwater Code enforcement are based on feedback from SPU and DPD inspectors and are designed to make enforcement less problematic and more consistent to implement.

APPENDIX B

Summary of Proposed Major Changes to the Stormwater Manual



NOTES

1. 2009 Directors' Rules:
 - Vol. 1: [2009-003 SPU, 15-2009 DPD](#)
 - Vol. 2: [2009-004 SPU, 16-2009 DPD](#)
 - Vol. 3: [2009-005 SPU, 17-2009 DPD](#)
 - Vol. 4: [2009-006 SPU, 18-2009 DPD](#)
2. 2013 GSI to MEF Directors' Rules:
 - SFR and Parcel Based: [DWW 201.1 SPU, 15-2012 DPD](#)
 - Roadway, Trail, Sidewalk: [DWW-201.2 SPU, 16-2012 DPD](#)

Volume	Proposed 2014-2015 Stormwater Manual
Volume 1- Project Minimum Requirements	<ul style="list-style-type: none"> • Includes text and requirements from the following: <ul style="list-style-type: none"> ○ Volume 1: Source Control Technical Requirements Manual (Seattle 2009) ○ Volume 2: Construction Stormwater Control Technical Requirements Manual (Seattle 2009) ○ Volume 3: Stormwater Flow Control & Water Quality Treatment Technical Requirements Manual (Seattle 2009) ○ GSI to MEF Directors’ rules (Seattle 2013) • Revised project type requirements for parcel-based and roadway projects to include permanent dewatering of groundwater peak flow control standard • Added an On-Site Stormwater Management section to include minimum requirements from the GSI to MEF Directors’ Rules • Added receiving water figures and updated project type figures • Refer to Volume 1 summary sheet for organization and content
Volume 2- Construction Stormwater Control	<ul style="list-style-type: none"> • Edited BMPs for consistency with Ecology’s Stormwater Management Manual for Western Washington (SWMMWW) • Consolidation of text in Chapter 1 (Introduction) and Chapter 2 (The Submittal Process) • Added Element #19 – Protect Green Stormwater Infrastructure BMPs [Equivalency] • Updated, deleted, and added BMPs (refer to Volume 2 summary sheet for additional detail)
Volume 3- Project Stormwater Control	<ul style="list-style-type: none"> • Consolidation of text • Reorganized based on manual user and City staff input (refer to Volume 3 summary sheet for additional information) • Moved Chapter 6 text to Appendix F (Hydrologic Analysis and Design) • Edited BMPs for consistency with Ecology’s SWMMWW (refer to Volume 3 summary sheet for additional information)
Volume 4- Source Control	<ul style="list-style-type: none"> • Consolidation of text in BMP sections and edited BMPs for consistency with Ecology’s SWMMWW • Consolidated and deleted BMPs (refer to Volume 4 summary sheet for additional detail)
Volume 5- Enforcement	Minor edits
Appendices	<ul style="list-style-type: none"> • Appendices from each volume (2009) combined and provided in a centralized location at the end of the manual (refer to Appendix summary sheet for full list of appendices) • All relevant sections edited for consistency with Ecology’s SWMMWW, if applicable • New Appendix C that contains On-site Stormwater Management Infeasibility Criteria

Summary of Changes to Seattle’s Stormwater Manual

Seattle's New Volume
Project Minimum Requirements

- The new Volume 1: Project Minimum Requirements includes text and requirements from the following:
 - Volume 1: Source Control Technical Requirements Manual (Seattle 2009)
 - Volume 2: Construction Stormwater Control Technical Requirements Manual (Seattle 2009)
 - Volume 3: Stormwater Flow Control & Water Quality Treatment Technical Requirements Manual (Seattle 2009)
 - GSI to MEF Directors' Rules (Seattle 2013)
- Revised project type requirements for parcel-based and roadway projects to include permanent dewatering of groundwater peak control standard
- Added On-Site Stormwater Management minimum requirements (slight modifications from the GSI to MEF Directors' Rules) for consistency with Ecology's Stormwater Management Manual for Western Washington (SWMMWW)

2009 Stormwater Manual	Proposed 2014-2015 Stormwater Manual
Chapter 1 – Introduction	
Volume 3, Chapter 1- Introduction	Minor edits
Chapter 2 – Determining Minimum Requirements	
Volume 3, Section 2.3- Which Minimum Requirements Apply to My Project?	<ul style="list-style-type: none"> • Reformatted the 7 steps and added new project type figures • Removed the “Joint Project” definition • Added project types for Utility, Road Maintenance, WSDOT, and Special Circumstances Projects • Added figures showing the Creek and Small Lake Basins, Public Combined Sewer Basins, and Designated Receiving Water Drainage Areas
Chapter 3 – Minimum Requirements for All Projects	
Volume 3, Section 2.6- Other Minimum Requirements that May Apply	<ul style="list-style-type: none"> • Minor edits • Amended Soils requirement moved to On-site Stormwater Management
Chapter 4- Minimum Requirements Based on Project Type	
Volume 3, Section 2.4.1- Minimum Requirements for Single Family Residential Projects (SMC 22.805.030)	<ul style="list-style-type: none"> • New on-site stormwater management code language added • Revised flow charts to focus on project minimum requirements, flow control,
Volume 3, Section 2.4.2- Minimum Requirements for Trail and Sidewalk Projects (SMC 22.805.040)	

2009 Stormwater Manual	Proposed 2014-2015 Stormwater Manual
Volume 3, Section 2.4.3- Minimum Requirements for Parcel-Based Projects (SMC 22.805.050)	and water quality requirements for roadway and parcel-based projects
Volume 3, Section 2.4.4- Minimum Requirements for Roadway Projects (SMC 22.805.060)	<ul style="list-style-type: none"> References column added to supplement Stormwater Code language
Chapter 5- Minimum Requirement Standards	
GSI to MEF Directors' Rules, Chapter 5 (SMC 22.805.070)	New on-site stormwater management code language added.
Volume 3, Section 2.4- Minimum Requirements for Flow Control and Treatment (SMC 22.805.080 and SMC 22.805.090)	<ul style="list-style-type: none"> Updated wetland protection standard for consistency with Ecology's <i>SWMMWW</i> Minor edits to Water Quality Treatment standards
Chapter 6: Alternative Compliance	
Volume 3, Section 2.8- Alternative Compliance	Minor edits
Chapter 7: Site Assessment and Planning	
Volume 3, Chapter 3- Site Planning, Site Assessment, and Drainage Control Review	<ul style="list-style-type: none"> Split into two chapters: Chapter 7 only covers site assessment and planning Consolidation of text, minor edits
Chapter 8: Drainage Control Review and Application Requirements	
Volume 3, Chapter 3- Site Planning, Site Assessment, and Drainage Control Review	<ul style="list-style-type: none"> Split into two chapters: Chapter 8 only covers Drainage Control Review and Application Requirements Added minimum Site Plan requirements from Tip 103 Added On-site Stormwater Management Documentation section Added Memorandum of Drainage Control (MDC) requirements from SMC, Section 22.807.020.B.1.d Added code section references for survey requirements

Summary of Changes to Seattle’s Construction Stormwater Control Volume

- Volume 2: Construction Stormwater Control Technical Requirements Manual (Seattle 2009) split into Volume 1 – Project Minimum Requirements and Volume 2 – Construction Stormwater Control (*Seattle 2015*)
- Condensed text in Chapter 1 (Introduction) and Chapter 2 (The Submittal Process)
- Added Element #19 – Protect Green Stormwater Infrastructure BMPs [Equivalency]
- Updated, deleted, and added BMPs as summarized below

2009 Stormwater Manual	Proposed 2015 Stormwater Manual
Temporary Cover Practices	
BMP E1.10: Temporary Seeding	Minor edits [Equivalency]
BMP E1.15: Mulching, Matting, and Compost Blankets	Clarified minimum application depth for wood fiber and cellulose mulch. Minor edits to figures.
BMP E1.20: Clear Plastic Covering	Updated figure
BMP E1.25: Polyacrylamide for Soil Erosion Protection	Refer to Ecology’s Stormwater Management Manual for Western Washington (<i>SWMMWW</i>)
Permanent Cover Practices	
BMP E1.30: Preserving Natural Vegetation	Updated figure
BMP E1.35: Buffer Zones	Updated photo
BMP E1.40: Permanent Seeding and Planting	No edits
BMP E1.45: Sodding	No edits
BMP E1.50: Topsoiling	BMP has been removed
Temporary Erosion Control BMPs	
BMP E2.10: Stabilized Construction Entrance	Revised depth of material and clarified materials to avoid. Updated photo.
BMP E2.15: Tire Wash	Minor edits; revised figure [Equivalency]
BMP E2.20: Construction Road Stabilization	No edits
BMP E2.25: Water Bars	Refer to Ecology’s <i>SWMMWW</i>
BMP E2.30: Level Spreader	Moved BMP to Appendix E (Additional Design Requirements)
BMP E2.35: Check Dams	Added design criteria and clarified language. Updated figure.
BMP E2.40: Triangular Silt Dike (Geotextile-Encased Check Dam)	Updated figure
BMP E2.45: Dust Control	No edits
Permanent Erosion Control BMPs	
BMP E2.50: Gradient Terraces	Refer to Ecology’s <i>SWMMWW</i>
BMP E2.55: Bioengineered Protection of Very Steep Slopes	BMP has been removed
BMP E2.60: Channel Lining	Refer to Ecology’s <i>SWMMWW</i>
Temporary or Permanent Erosion Control BMPs	
BMP E2.65: Pipe Slope Drains	Moved BMP to Appendix E (Additional Design Requirements)

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2009 Stormwater Manual	Proposed 2015 Stormwater Manual
BMP E2.70: Subsurface Drains	No edits
BMP E2.75: Surface Roughening	Refer to Ecology's SWMMWW
BMP E2.80: Earth Dike and Drainage Swale	Updated figure and references [Equivalency]
BMP E2.85: Outlet Protection	Moved BMP to Appendix E (Additional Design Requirements)
BMP E2.90: Grass-Lined Channels	Refer to Ecology's SWMMWW
BMP E2.95 Turbidity Curtain	No edits
Sediment Control Practices	
BMP E3.10: Filter Fence	Added design criteria and maintenance standards section [Equivalency]. Updated photo.
BMP E3.15: Brush Barrier	Refer to Ecology's SWMMWW
BMP E3.20: Gravel Filter Berm	No edits
BMP E3.25: Storm Drain Inlet Protection	Updated photo
BMP E3.30: Vegetated Strip	No edits
BMP E3.35: Straw Wattles, Compost Socks, and Compost Berms	No edits
BMP E3.40: Sediment Trap	Minor edits [Equivalency]
BMP E3.45: Temporary Sediment Pond (or Basin)	Refer to Ecology's SWMMWW
BMP E3.50: Portable Sediment Tank	Minor edits [Equivalency]
BMP E3.55: Construction Stormwater Chemical Treatment	Refer to Ecology's SWMMWW
BMP E3.60: Construction Stormwater Filtration	Added a section on sizing criteria for flow-through treatment systems that direct discharge into designated receiving waters, or that discharge into listed creek basins or non-listed creek basins [Equivalency].
BMP E3.65: Cleaning Inlets and Catch Basins	No edits
BMP E3.70: Street Sweeping and Vacuuming	No edits
Source Control Practices	
BMP C1.10: Certified Erosion and Sediment Control Lead	No edits
BMP C1.15: Material Delivery, Storage, and Containment	No edits
BMP C1.20: Use of Chemicals During Construction	No edits
BMP C1.25: Demolition of Buildings	No edits
BMP C1.30: Building Repair, Remodeling, and Construction	No edits
BMP C1.35: Sawcutting and Paving Pollution Prevention	No edits
BMP C1.40: Temporary Dewatering	Clarified definition, purpose, and planning considerations
BMP C1.45: Solid Waste Handling and Disposal	No edits
BMP C1.50: Disposal of Asbestos PCBs	No edits
BMP C1.55: Airborne Debris Curtain	No edits
NA	New BMPs include BMP C1.56: Concrete Handling and Disposal and BMP C1.59: High pH Neutralization Using CO ₂ [Equivalency]

Summary of Changes to Seattle’s Flow Control and Water Quality Treatment Volume

- Volume 3: Stormwater Flow Control & Water Quality Treatment Technical Requirements Manual (Seattle 2009) split into Volume 1 – Project Minimum Requirements and Volume 3 – Project Stormwater Control (Seattle 2014-2015)
- Edited BMPs for consistency with Ecology’s Stormwater Management Manual for Western Washington (*SWMMWW*)
- Reorganized and condensed text based on manual user and City staff input
 - Moved stormwater education info (Chapter 1) to a Client Assistance Memo (Tips)
 - Moved Chapters 2 and 3 to Volume 1 – Project Minimum Requirements
 - Combined BMP selection for On-site Stormwater Management, Flow Control, and Water Quality Treatment into a single chapter (new Chapter 3)
 - Combined general design requirements (Sizing Approach, Bypass, Conveyance, and Pretreatment) into a single chapter (new Chapter 4)
 - Combined on-site stormwater management, flow control, and water quality BMP design sections into a single chapter along with specific design requirements for Dispersion BMPs, Infiltration BMPs, and Non-Infiltrating BMPs (new Chapter 5)
 - Moved Additional Design Requirements to an appendix (new Appendix E)
 - Moved Chapter 6 – Hydrologic Analysis and Design to an appendix (new Appendix F)

2009 Stormwater Manual	Proposed 2014-2015 Stormwater Manual
Green Stormwater Infrastructure BMPs	
Post-Construction Soil Quality and Depth	Renamed “Soil Amendment BMP”. Edits for consistency with Ecology’s Stormwater Management Manual for Western Washington (<i>SWMMWW</i>). Consolidation of text.
Tree Planting and Retention	Edits for consistency with Ecology’s <i>SWMMWW</i> . Consolidation of text.
Full Dispersion	Shortened, added reference to <i>SWMMWW</i> .
Downspout Dispersion	Split into Splashblock and Trench Downspout Dispersion BMPs. Added a new figure. Increased setback from property line or structure.
Sheet Flow Dispersion	Shortened, edits for consistency with Ecology’s <i>SWMMWW</i> .
Concentrated Flow Dispersion	New BMP. Added for consistent with Ecology’s <i>SWMMWW</i> .
Bioretention	Split into infiltrating bioretention and non-infiltrating bioretention. Edits for consistency with Ecology’s <i>SWMMWW</i> .
Rain gardens	New BMP. Added for consistency with Ecology’s <i>SWMMWW</i> .
Permeable Pavement Facilities	Edited for consistency with Ecology’s <i>SWMMWW</i> . Added requirements for run-on from specific land uses.
Infiltration Trenches	Added to the list for providing on-site stormwater management
Dry Wells	
Perforated Stub-Out Connections	
Rainwater Harvesting	Renamed “Vegetated Roofs”. Edits for consistency with Ecology’s <i>SWMMWW</i> . Consolidation of text.
Single Family Residential (SFR) Cistern	Consolidation of text.
Green Roofs	

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2009 Stormwater Manual	Proposed 2014-2015 Stormwater Manual
Permeable Pavement Surfaces	
Traditional Infiltration BMPs	
Infiltration Basins	Shortened, added references to Ecology's SWMMWW where design information is the same
Detention BMPs	
Detention Pond	Shortened, added references to Ecology's SWMMWW where design information is the same
Detention Pipe	Minor edits
Detention Vault	Shortened, added references to Ecology's SWMMWW where design information is the same
Detention Cistern	Minor edits
Other Detention Options	Minor edits
Control Structures for Flow Control Facilities	Moved to Appendix E. Removed Rectangular Sharp Crested Weir, V-Notch Sharp-Crested Weir, Proportional or Sutro Weir design information.
Non-infiltrating BMPs	
Bioretention Planter or Cells with Liners	Renamed "Non-Infiltrating Bioretention". Edits for consistency with Ecology's SWMMWW. Consolidation of text.
Basic Biofiltration Swale	Condensed into a single BMP section: "Biofiltration Swales". Shortened, added references to Ecology's SWMMWW where design information is the same.
Wet Biofiltration Swale	
Continuous Inflow Biofiltration Swale	
Basic Filter Strip and Compost Amended Vegetated Filter Strip	Condensed into a single BMP section: "Filter Strips/Drains". Terminology for Ecology Embankments updated to Media Filter Drain. Added references to Ecology's SWMMWW and WSDOT Highway Runoff Manual where design information is the same.
Ecology Embankments	
Narrow Area Filter Strip	BMP has been removed
Basic and Large Sand Filter Basins	Condensed considerably, references added to Ecology's SWMMWW where design information is the same, figures removed.
Sand Filter Vault	
Linear Sand Filter	
Wet Ponds- Basic and Large	Condensed considerably, references added to Detention Pond section and Ecology's SWMMWW where design information is the same, figures removed. Supplemental design information moved to Appendix E.
Wet Vaults	Condensed considerably, references added to Detention Vaults and Ecology's SWMMWW where design information is the same, figures revised.
Stormwater Treatment Wetlands	Condensed considerably, references added to Wet Ponds and Ecology's SWMMWW where design information is the same, figures removed.
Combined Detention and Wet Pool Facilities	
API (Baffle Type) Oil/Water Separator Bay	Condensed considerably, references added to Ecology's SWMMWW where design information is the same, figures removed.
Coalescing Plate (CP) Oil/Water Separator Bay	
Emerging Technologies	Edits for consistency with Ecology's SWMMWW. Added a table with current General Use Level Designations (GULDs).

Summary of Changes to Seattle’s Source Control Volume

- Volume 1: Source Control Technical Requirements Manual (Seattle 2009) split into Volume 1- Project Minimum Requirements and Volume 4- Source Control (2014-2015)
- Condensed text in BMP sections and edited BMPs for consistency with Ecology’s Stormwater Management Manual for Western Washington (SWMMWW)

2009 Stormwater Manual	Proposed 2014-2015 Stormwater Manual
Citywide BMPs	
BMP 1: Eliminate Illicit Connections to Storm Drains	Name change and minor edits: BMP 1: Eliminate Illicit Connections
BMP 2: Perform Routine Maintenance for Drainage System	Minor edits
BMP 3: Dispose of Fluids and Wastes Properly	Minor edits
BMP 4: Proper Storage of Solid Wastes	Minor edits
BMP 5: Spill Prevention and Cleanup	Minor edits
BMP 6: Provide Oversight and Training for Staff	Minor edits
BMP 7: Site Maintenance	New BMP; good housekeeping practices
Commercial and Industrial Activity BMPs	
BMP 7: Cleaning or Washing of Tools, Engines, and Manufacturing Equipment	Cleaning and washing activities have been condensed into a single BMP: BMP 8: Cleaning or Washing Includes an updated wash pad schematic
BMP 8: Cleaning or Washing of Food Service Establishment Equipment	
BMP 9: Washing, Pressure Washing, and Steam Cleaning of Vehicles, Equipment, and Building Structures	
BMP 10: Collection and Disposal of Wastewater in Mobile Interior Washing Operations	Includes an updated wash pad schematic
BMP 11: Loading and Unloading of Liquid or Solid Material	Minor edits; now BMP 9
BMP 12: Fueling at Dedicated Stations	Fueling pads have more explicit requirements; now BMP 10
BMP 13: Automotive Repair and Maintenance	Name change and minor edits: BMP 11: Maintenance and Repair of Vehicles and Equipment
BMP 14: Mobile Fueling of Vehicles and Heavy Equipment	Minor edits; now BMP 12
BMP 15: Concrete and Asphalt Mixing and Production at Stationary Sites	Name change and minor edits: BMP 13: Concrete and Asphalt Mixing and Production
BMP 16: Concrete Pouring, Concrete/Asphalt Cutting, and Asphalt Application	Minor edits; now BMP 14
BMP 17: Manufacturing and Post-Processing of Metal Products	Minor edits; now BMP 15
BMP 18: Wood Treatment	Name change and minor edits: BMP 16: Processing and Storage of Treated Wood
BMP 19: Commercial Composting	Minor edits; now BMP 17
BMP 20: Landscaping and Lawn and Vegetation Management	IPM requirements are more robust and include drainage; now BMP 18
BMP 21: Painting, Finishing, and Coating of Vehicles, Boats, Buildings, and Equipment	Name change and minor edits: BMP 19: Painting, Finishing, and Coating Activities

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2009 Stormwater Manual	Proposed 2014-2015 Stormwater Manual
BMP 22: Commercial Printing Operations	Minor edits; now BMP 20
BMP 23: Outdoor Manufacturing Operations	Minor edits; now BMP 21
BMP 24: Outdoor Storage or Transfer of Solid Raw Materials, Byproducts, or Finished Products	Name change and more defined requirements: BMP 22: Outdoor Storage or Transfer of Leachable or Erodible Materials
BMP 25: Storage and Treatment of Contaminated Soils	BMP has been removed
BMP 26: Temporary Storage or Processing of Fruits or Vegetables	Name change and minor edits: BMP 23: Temporary Storage or Processing of Fruits, Vegetables, or Grains
BMP 27: Recycling, Wrecking Yard, and Scrap Yard Operations	Minor edits; now BMP 24
BMP 28: Outdoor Portable Container Storage	Minor edits; now BMP 25
BMP 29: Storage of Liquids in Permanent Aboveground Tanks	Minor edits; now BMP 26
BMP 30: Parking Lot Maintenance and Storage of Vehicles and Equipment	Name change and minor edits: BMP 27: Lot Maintenance and Storage
BMP 31: Dust Control in Disturbed Land Areas and on Unpaved Roadways and Parking Lots	Minor edits; now BMP 28
BMP 32: Dust Control at Manufacturing Sites	Minor edits; now BMP 29
BMP 33: Soil Erosion and Sediment Control at Industrial Sites	Minor edits; now BMP 30
BMP 34: Commercial Animal Care and Handling	Minor edits; now BMP 31
BMP 35: Log Sorting and Handling	Refers to <i>SWMMWW</i> ; now BMP 32
BMP 36: Boat Building, Mooring, Maintenance, and Repair	Minor edits; now BMP 33
BMP 37: Logging and Tree Removal	BMP has been removed
BMP 38: Mining and Quarrying of Sand, Gravel, Rock, Peat, Clay, and Other Materials	BMP has been removed
BMP 39: Cleaning and Maintenance of Swimming Pools and Spas	Name change and minor edits: BMP 34: Cleaning and Maintenance of Pools, Spas, Hot Tubs, and Fountains
BMP 40: Deicing and Anti-icing Operations for Airports and Streets	Minor edits; now BMP 35
BMP 41: Maintenance and Management of Roof and Building Drains at Manufacturing and Commercial Buildings	Minor edits; now BMP 36
BMP 42: Maintenance and Operation of Railroad Yards	Minor edits; now BMP 37
BMP 43: Maintenance of Public and Private Utility Corridors and Facilities	Minor edits; now BMP 38
BMP 44: Maintenance of Roadside Ditches	Added language/revised ditch reshaping; now BMP 39