Exhibit A

Directors' Report and Recommendation
February 8, 2021

Introduction

The purpose of the City of Seattle's Stormwater Code (Chapters 22.800 – 22.808 SMC) is to protect life, property, public health, and the environment from the adverse impacts of urban stormwater runoff. Adverse impacts can include flooding, water pollution, landslides, and erosion. The Stormwater Code was substantially updated in 2009 and revised in 2015 and 2016. This revision, the "2021 Stormwater Code Update," includes various additions and revisions to the City's Stormwater Code and associated Directors' Rule (Stormwater Manual). In addition, a new Director's Rule is proposed in association with new Stormwater Code language related to public mainline extensions and drainage requirements in the public right-of-way.

The Stormwater Code and associated joint Seattle Public Utilities/Seattle Department of Construction and Inspections (SPU/SDCI) Directors' Rules (Stormwater Manual) are being revised in order to comply with the requirements of the City's coverage under the 2019-2024 Phase I Municipal Stormwater Permit (MS4 Permit, Ecology 2019). The Permit was issued by the Washington State Department of Ecology (Ecology) under both the National Pollutant Discharge Elimination System (NPDES) program established by the federal Clean Water Act and the State of Washington Water Pollution Control Law. The Permit was issued on July 1, 2019, and became effective on August 1, 2019. The MS4 Permit requires that the City's Stormwater Code and associated Stormwater Manual (to be contained in the Directors' Rule) include minimum requirements, thresholds, definitions, and other specified requirements, limitations and criteria, determined by Ecology to be equivalent to Appendix 1 of the MS4 Permit for new development, redevelopment and construction. In addition, maintenance provisions must be at least as protective of facility function as, and source control provisions must be functionally equivalent to, Ecology's Stormwater Management Manual for Western Washington (SWMMWW, Ecology 2019).

SPU – in close collaboration with SDCI, other City departments, and external stakeholders – is in the process of updating the Stormwater Code to 1) incorporate new Ecology requirements, 2) incorporate policy changes, and 3) improve usability. All updates to the Stormwater Code must occur at one time with an effective date of July 1, 2021.

This Directors' Report, for the "2021 Stormwater Code Update," is submitted jointly by the Directors of SPU and SDCI. It answers frequently asked questions about Seattle's Stormwater Code, provides regulatory context, summarizes significant proposed modifications and rationale, and provides recommendations regarding the proposed legislation.

Exhibit A

Frequently Asked Questions

Why do we have a Stormwater Code? Rain water running off of urban land surfaces can cause flooding, landslides, erosion, and other hazards. It can also carry pollutants into creeks, lakes, bays and other receiving waters. Stormwater regulations are needed to protect people, property, and the environment from damage that can be caused by stormwater runoff. Seattle's stormwater Code and regulations are also written to satisfy the City's obligation to comply with the 2019-2024 Phase I Municipal Stormwater Permit, as modified (the MS4 Permit), under which coverage is issued to the City by Ecology.

What is in Seattle's Stormwater Code? Seattle's Stormwater Code includes:

- A description of the purpose, scope, applicability, exemptions, adjustments, exceptions, authorities, and compliance requirements
- Definitions of key terms
- Prohibitions of certain discharges and conditions for permissible discharges
- Minimum requirements for all discharges and all real property, designed to reduce the introduction of pollutants into stormwater runoff as close to the source as possible
- Minimum requirements for all projects regarding stormwater pollution prevention during construction and grading activities
- Minimum requirements for all projects regarding on-site stormwater management, flow control, and water quality treatment facilities
- Drainage control review and application requirements
- Requirements to maintain stormwater facilities
- Procedures for enforcing the Stormwater Code.

Why are we updating the Stormwater Code? The Stormwater Code is being updated to comply with the City's obligations under the MS4 Permit, to incorporate policy changes, and to improve usability.

Who is responsible for updating the Stormwater Code? It is an SPU-led project being conducted in close collaboration with SDCI, the Seattle Department of Transportation (SDOT), other City departments, and internal and external stakeholders.

What are the major changes in the revised Stormwater Code? The "Significant Modifications" section of this Exhibit provides details on the primary proposed modifications to the Stormwater Code. Of the proposed modifications outlined in that section, the four most significant involve: 1) Exemptions for certain land-disturbing activities and authority for alternative stormwater code compliance (#1 & #2 in Significant Modifications section);2) revisions to the effective date of the Stormwater Code relative to project application dates and construction dates to meet the City's MS4 Permit obligations (#3); 3) additions, revisions, and deleting of various terminology (#4); 4) changes to source control requirements for certain activities (#5 & #6); 5) changes to the minimum requirements that apply to all development projects to meet the City's MS4 Permit obligations and account for Seattle's unique development patterns and infrastructure (#7 - #14); and 6) additions and revisions to submittal and drainage review requirements (#15 & #16).

Exhibit A

What has been the extent of public participation? Beginning in October 2019, a series of in-person and online public meetings have been conducted to inform interested stakeholders about proposed updates to the Stormwater Code and solicit input on proposed updates. These meetings included representatives from the development community, environmental advocacy groups, and engineering and consulting firms. Additionally, announcements have been sent to interested stakeholders through the SDCI Stormwater Code list serv and the SPU DSO Subscribers list serv, and articles have been included in SDCI's Building Connection Newsletter. There has also been information shared at Master Builders Association meetings. The dates and content of the public meetings, list serv announcements, the Building Connection newsletter, and meetings are shown below.

Public Engagement on Stormwater Code Update Process

Date	Meeting or Listserv Announcement
October 3, 2019	**External Code and Manual Users Early Input Stakeholder Meeting**
March 2, 2020	SDCI Stormwater Code Listserv: "Updating the City's Stormwater Regulations"
March 3, 2020	SDCI Building Connections Newsletter: "Updated Seattle Stormwater Code Regulations"
March 9, 2020	DSO Subscribers Listserv: "Updating the City's Stormwater Regulations"
April 1, 2020	SDCI Building Connections Newsletter: "Updating the City's Stormwater Regulations"
April 1, 2020	SDCI Stormwater Code Listserv: "Updating the City's Stormwater Regulations – Public Comment Period Now Open
April 1, 2020	DSO Listserv: "Updating the City's Stormwater Regulations – Public Comment Period Now Live"
April 16, 2020	SDCI Listerv: "Updating the City's Stormwater Regulations - Public Presentation Updates - Public Comment Period Now Open"
April 27, 2020	SDCI Listserv: "Updating the City's Stormwater Regulations - Online Public Presentation this Wed. April 29!"
April 29, 2020	**Public Meeting: Stormwater Code & Manual Updates (Virtual)**
May 4, 2020	SDCI Listserv: "Updating the City's Stormwater Regulations - Online Public Presentation this Wed. May 6!"
May 6, 2020	**Public Meeting: Stormwater Code & Manual Updates (Virtual)**
May 13, 2020	SDCI Listserv: "Updating the City's Stormwater Regulations - Phase 1 Public Comment Period Ending May 16
June 9, 2020	SDCI Building Connections Newsletter: "What's Happening with the Stormwater Code Update?"
June 17, 2020	Master Builders Association Permitting Meeting
September 1, 2020	Master Builders Association Permitting Meeting
September 30, 2020	SDCI Building Connections Newsletter: "What's Happening with the Stormwater Code Update?"
October 5, 2020	DSO Listserv: "What's Happening with the Stormwater Code Update"
October 21, 2020	Master Builders Association Permitting Meeting
November 2, 2020	SDCI Building Connections Newsletter: "Stormwater Code Update – Public Review Period Open / Upcoming Public Meetings"

Exhibit A

November 2, 2020	SDCI Listserv: "Announcement of the draft 2021 stormwater code public review period and upcoming public meeting."
November 2, 2020	DSO Listserv: "Stormwater Code Update – Public Review Period Open/Upcoming Public Meetings"
November 10, 2020	SDCI Listserv: "Stormwater Code Update - Public Meeting Reminder - Thursday, November 12 at 3:15 p.m."
November 10, 2020	DSO Listserv: "Stormwater Code Update – Public Meeting Reminder – This Thursday, November 12th at 3:15"
November 12, 2020	**Public Meeting: Stormwater Code (Virtual)**
November 18, 2020	SDCI List Serv: "Stormwater Code Updates - The Public Review Period Ends Friday, November 20"
November 18, 2020	Master Builders Association Permitting Meeting
December 10, 2020	SDCI List Serv: "Stormwater Code Update - SEPA Checklist, Determination of Non-Significance and Comment Period"
December 10, 2020	DSO List Serv: "Final Public Review Period for Draft Stormwater Code/Manual Starting Today"
December 20, 2020	Master Builders Association Permitting Meeting
January 5, 2021	SDCI Building Connections Newsletter: "Customer Alert - Final Public Review Period for Draft Stormwater Code/Manual Approaching"
January 6, 2021	SDCI List Serv: "Stormwater Code Update - The Draft 2021 Stormwater Code and Manual will be posted soon for the Final Public Review/Comment Period"
January 6, 2021	DSO List Serv: "Final Public Review Period for Draft Stormwater Code/Manual Approaching"
January 11, 2021	SDCI List Serv: "Stormwater Cope Update - The Draft 2021 Stormwater Code and Manual has been posted for the Final Public Review/Comment Period"
January 11, 2021	DSO List Serv: "Final Public Review Period for Draft Stormwater Code/Manual Starting Today"
January 20, 2021	Master Builders Association Permitting Meeting
January 27, 2021	SDCI List Serv: "Stormwater Code Update - Public Meeting Reminder"
January 28, 2021	**Public Meeting: Stormwater Code & Manual Updates and new Public Drainage System Director's Rule (Virtual)**

Exhibit A

Regulatory Context

NPDES Municipal Stormwater Permit (MS4 Permit). Seattle's Stormwater Code and associated Stormwater Manual (to be contained in the Directors' Rule) are now being revised in order to comply with the MS4 Permit, as well as to incorporate policy changes and improve usability. After the updated Stormwater Code and Stormwater Manual are adopted, it is anticipated that Ecology will modify the current MS4 Permit to include Ecology's determination that Seattle's updated Stormwater Code and Stormwater Manual meet relevant MS4 Permit requirements and achieves equivalency. The MS4 Permit authorizes the City to discharge municipal stormwater to waters of the State of Washington from municipal separate storm sewers that it owns or operates. Discharges covered under the MS4 Permit, as required by paragraph 402(p)(3) of the Clean Water Act, must effectively prohibit non-stormwater discharges into storm sewers that discharge to surface waters. Per the Clean Water Act, permittees must apply controls to reduce the discharge of pollutants to the maximum extent practicable. Ecology also took action through the issuance of the MS4 Permit, as authorized by Revised Code of Washington (RCW) Chapter 90.48, particularly RCW 90.48.162, to control impacts of stormwater discharges to waters of Washington State, including ground waters, unless the discharges are authorized by another regulatory program. (Ecology 2018)

The MS4 Permit requires that the City's Stormwater Code and associated Stormwater Manual include minimum requirements, thresholds, definitions, and other specified requirements, limitations and criteria, determined by Ecology to be equivalent to Appendix 1 of the MS4 Permit for new development, redevelopment and construction. Ecology has reviewed the City's proposed revisions to the Stormwater Code and associated Stormwater Manual that require Ecology approval, and Ecology has made a preliminary determination that the revisions meet the regulatory requirements of the MS4 Permit. The City is in the final stages of Ecology review to secure Ecology's final approval. It is anticipated that Ecology's final approval will require very limited, if any, changes. Any changes to the Stormwater Code, including any made through the City's legislative process, that could affect Ecology's equivalency determination will be reviewed by Ecology.

Seattle Stormwater Code and Stormwater Manual. The City of Seattle's Stormwater Code (Chapters 22.800-22.808 SMC) contains requirements designed to protect life, property, public health, and the environment from the adverse impacts of urban stormwater runoff. Adverse impacts can include flooding, pollution, landslides, erosion, and other potential hazards. The Stormwater Code applies to:

- All drainage and erosion control, whether or not a permit is required
- All land disturbing activities, whether or not a permit is required
- All discharges directly or indirectly to a public drainage system or (proposed) a public combined sewer
- All discharges directly or indirectly into receiving waters within or contiguous to Seattle city limits
- All new and existing land uses
- All real property.

Exhibit A

To support the implementation of the Stormwater Code, the Director of SPU and the Director of SDCI issue joint Directors' Rule (Seattle's Stormwater Manual), which clarify or interpret the Stormwater Code by specifying methods, details, and general guidelines as authorized by the Code. The 2021 Seattle Stormwater Manual will consist of the following sections:

- Volume 1 – Project Minimum Requirements (pursuant to the Stormwater Code Minimum Requirements)
- Volume 2 – Construction Stormwater Control
- Volume 3 – Project Stormwater Control
- Volume 4 – Source Control
- Volume 5 – Enforcement
- Appendices.

Seattle Stormwater Code and Public Drainage System Director's Rule. The City of Seattle's Stormwater Code (Chapter 22.805 SMC) addresses:

- Minimum Requirements for all Projects, specifically
    - Minimum Requirements for Discharge Point
    - Ensure Sufficient Capacity
    - Extension of the Public Drainage System:
        - For projects not constructed in the public right-of-way
        - For projects constructed in the public right-of-way
    - Requirements for projects conducted in public right of way.

To support the implementation of these portions of the Stormwater Code, the Director of SPU is issuing a new Director's Rule (Public Drainage System Director's Rule), that relates directly to the Stormwater Code and clarifies or interprets it by specifying methods, details, and general guidelines as authorized by the Code. The Public Drainage System Director's Rule will consist of the sections noted above.

Best Available Science – When the City updated its Environmentally Critical Areas (ECA) ordinance, it presented a detailed review of the best available science regarding wetlands, fish and wildlife conservation areas, geologic hazard areas, flood-prone areas, abandoned landfills, and critical aquifer recharge areas in its report Environmental Critical Areas: Best Available Science Review (Seattle 2005). As part of the 2009 Stormwater Code Update, the City prepared a document describing the best available science specific to urban stormwater runoff management (Seattle 2009). This document was updated during the 2016 Stormwater Code update (Seattle 2015). The document has been updated for this proposed legislation and is included as part of the Bill Summary and Fiscal Note for this legislation, as Exhibit B.

Significant Modifications

Exhibit A

The proposed modifications to the Stormwater Code will affect administration, source control, development, and construction site stormwater pollution prevention control. The major modifications being proposed to the Stormwater Code are summarized below by Chapter.

Chapter 22.800 - Title, Scope, and Authority

1. Added exemptions: land disturbing activities that are not required to comply with certain requirements (22.800.040.A.2.c and d):

    a. "c" Adds new language that exempts "land disturbing activity that includes replacing the ground surface with in-kind material or materials with equivalent runoff characteristics and is associated solely with soil remediation or tank removal for the purpose of removing contaminants and pollutants and not associated with other development." Language was also added clarifying the limits of this exemption, noting that projects "that include any development in addition to soil remediation or tank removal replaced with in-kind material or materials with equivalent runoff characteristics are not exempt."

    b. Similarly, 22.800.040.A.2.d includes new language that exempts "drainage control facilities that are part of a public retrofit project…or other voluntary retrofit project" from certain minimum requirements. However, the new language also clarifies that these new exemptions only apply to the retrofit project elements and "do not include land disturbing activities or hard surfaces that are not integral to or are in addition to the drainage control facilities described above, or installation of drainage control facilities that are otherwise required to meet this subtitle."

    The intent of these changes is to simplify the process for these types of improvement projects, which by their nature are designed to minimize pollution and/or improve water quality conditions.

2. Clarified Authority (22.800.080.F) regarding the option for a developer to manage flow control, water quality treatment, on-site stormwater management, or wetlands protection requirements at an alternative location (i.e., off site) or by contributing funds. The revisions are focused on clarifying the specific conditions that must be met to allow compliance using an alternative location and the logistics of this compliance approach. The revisions are proposed primarily to comply with updated Ecology requirements presented in the City's MS4 Permit, and also to clarify for easier use.

3. Revised language regarding the applicability of Stormwater Code revisions in relation to project permit application and construction dates (22.800.100), in association with the Code's effective date of July 1, 2021. The 2021 Stormwater Code Update will apply to permit applications submitted on or after July 1, 2021. In addition, for projects considered under the current Stormwater Code before amendment, if construction has not started by July 1, 2026, the permit expires and the 2021 Stormwater Code will apply. These revisions are made for consistency with the City's MS4 Permit requirements (which apply to areas that discharge to the City's municipal stormwater system) and affects both building and master use permits (including subdivisions).

Exhibit A

Chapter 22.801 – Definitions

4. Added, revised, and deleted terms: In the 2021 Stormwater Code Update, new terms have been added to this Chapter, the definitions for other terms have been materially modified, and the definitions for terms have been deleted. The items below outline the most notable terms that are proposed to be added or materially modified. These proposed definition changes are necessary to clarify certain Stormwater Code provisions, to implement revised minimum requirements, and to meet the provisions of the City's MS4 Permit. A complete list of proposed definition changes is in the draft Stormwater Code (Attachment C).
    a. Changes made to be equivalent with the City's MS4 Permit (unless otherwise noted):
        i. Added definition for "Basic treatment receiving water" to match existing Manual language (which is already in alignment with the City's MS4 Permit).
        ii. Modified definition of "Creek" to match Washington Administrative Code (WAC) stream typing. Similarly, modified "Stream" definition to match updated "Creek" definition (refers to Type S, F, Np or Ns water).
        iii. Modified "Development" definition.
        iv. Added "New hard surface" definition.
        v. Added "New impervious surface" definition.
        vi. Modified "Pollution-generating pervious surface" definition.
        vii. Modified "Pollution-generating impervious surface" definition, including adding "rail lines, railways, and rail yards" as pollution-generating based on Ecology's response to MS4 Permit comments.
        viii. Modified "Project" definition.
        ix. Modified "Project site" definition.
        x. Modified "Replaced hard surface" definition" and "Replaced impervious surface" definitions.
        xi. Modified "Site" definition.
    b. Changes made to implement existing or new City policies or clarify intent:
        i. Added curbs and gutters to listed example components of a "Drainage system" as they are used to convey stormwater in addition to distinguishing between the roadway and non-roadway sections of the right-of-way.
        ii. Modified "Single-family residential project" definition by adding "associated accessory dwelling unit". Also modified threshold from 10,000 sf to 5,000 sf total new plus replaced hard surface and removed reference to pollution generating hard surface threshold since no longer applicable. Modified threshold to simplify code, avoid confusion with other project types, and to acknowledge that minimizing impervious surfaces by design meets "Low Impact Development" principles, which is a requirement of the City's MS4 Permit. All projects with greater than 5,000 sf of new plus replaced hard

surfaces are considered "Parcel-based projects" and are additionally subject to flow control and water quality treatment, which Single-family residential projects are not.

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

5. Added new BMP for Source Controls for All Real Property (22.803.030): The proposed revisions include source control BMPs for rooftop dog runs, stating: "Rooftop Dog Runs. Dog runs located on private property on rooftops or above-grade plazas must prevent stormwater from the dog run from discharging directly or indirectly to a public drainage system, private drainage system, or receiving water body."

6. Added new minimum requirements for Source Controls for Businesses and Public Entities for Specific Activities (22.803.040): The proposed revisions include source control BMPs for certain pollution-generating activities to prevent contaminants from coming into contact with drainage water, public combined sewer, or receiving waters. Such activities include: Fueling; vehicle/equipment repair / maintenance; concrete/asphalt handling/production; recycling/scrap yard operations; aboveground liquid tank storage.

Chapter 22.805 – Minimum Requirements for Projects

7. The proposed revisions include several added general requirements to clarify the applicability of the minimum requirements (22.805.010.B, C, and D): Specifically,

    a. 22.805.010.B was added to clarify that "Closely related projects shall be considered as one project for purposes of applying the Stormwater Code…" This aligns with how the City applies SEPA categorical exemptions and Design Review to development proposals. When separate development proposals are closely related, they are evaluated as one proposal for purposes of applying Stormwater Code thresholds.

    b. 22.805.010.C was added to clarify that "When an application requires preliminary drainage review… applications for building permits, grading permits, and other construction permits on the site receiving preliminary drainage review shall comply with the provisions of the approved preliminary drainage control plan." This change was added to align with the new category and submittal requirements for Preliminary Drainage Review (22.807.020.A.1), summarized further under subsection 22.807.020 below.

    c. 22.805.010.D was added to clarify the required timing of construction of stormwater facilities that will serve multiple proposed lots, parcels, or tracts to mitigate impacts prior to installation of hard surfaces associated with the development.

8. Added two new sections to the Minimum Requirements for All Projects (22.805.020) related to extension of the public drainage system: For projects not constructed in the public right-of-way, new section 22.805.020.L – Extension of the Public Drainage System outlines specific conditions when "extension of the piped public drainage system across the full extent of the parcel boundary shall be required." Similarly, for projects that are constructed in the public right-of-way, new section 22.805.020.M – Extension of the Public Drainage System outlines when "extension of the piped public drainage system across the full extent of the site shall be required." Current extension requirements are located in "Authority" 22.800.080, but these sections are added to be more transparent regarding project requirement to extend the public

drainage system by adding to "Minimum Requirements for All Projects" section of the code. Additional details regarding conveyance requirements in the right of way will be addressed in a new Public Drainage System Requirements Director's Rule.

9. Added a new section to the Minimum Requirements for all Projects (22.805.020.N) stating that the public drainage system shall be constructed in accordance with the City's Standard Plans and Specifications, and other rules promulgated by the Director of SPU. The Stormwater Code was previously silent on this requirement.

10. Revised Minimum Requirements for Parcel-based Projects (22.805.050):

    a. Added reference to 22.805.020.E (Protect Wetlands) to require Parcel-based Projects to comply with minimum requirements for wetland protection. This change was made for consistency with the City's MS4 Permit.

    b. Updated the flow-related portion of the thresholds presented in 22.805.050.C.2.a.4 (for compliance with the Pre-Developed Forested Standard) from 0.1 cubic feet per second (cfs) to 0.15 cfs. This change was made for consistency with the City's MS4 Permit.

    c. Revised the flow control standard for Parcel-based Projects discharging to small lake basins (Bitter Lake, Green Lake, or Haller Lake, or to the drainage basin of such lake) from the Peak Standard to the "Existing Condition Standard" which aligns with the City's MS4 Permit requirements for these areas in Seattle.

    d. The following project thresholds were revised for Parcel-based projects. The intent of these changes is to further simplify the code by shifting most of the thresholds to be at 5,000 sf of new plus replaced hard surface:

        i. Revised the threshold for Parcel-based Projects required to meet the Pasture Standard in creek basins from 2,000 sf to 5,000 sf of new plus replaced hard surfaces.

        ii. Revised the threshold for Parcel-based Projects required to meet the Peak Standard in small lake basins from 2,000 sf to 5,000 sf of new plus replaced hard surfaces.

        iii. Revised the threshold for Parcel-based Projects required to meet the Peak Standard in public combined sewer basins from 10,000 sf to 5,000 sf of new plus replaced hard surfaces.

11. Revised Minimum Requirements for Roadway Projects (22.805.050): Several code changes are proposed affecting how stormwater is managed in the right of way. For items "c" through "f" below, the combined changes reflect a shift in City objectives regarding stormwater management in the right of way. Specifically, the proposed code changes aim to more effectively use ratepayer and taxpayer funding to manage stormwater impacts of roadway projects by 1) allowing SPU to focus on managing environmental impacts in creeks and combined sewer areas (i.e., environmental flow control needs are better addressed through SPU programs than through by Stormwater Code requirements applied to individual roadway projects), and 2) allowing SDOT to shift priorities to focus more on managing stormwater conveyance issues in the right of way.

Exhibit A

a. Added reference to 22.805.020.E (Protect Wetlands) to require Roadway Projects to comply with minimum requirements for wetland protection. Also added requirements and thresholds related to compliance with the minimum requirements for wetland protection contained in subsection 22.805.080.B.1 (Wetland Protection Standards). This change was made for consistency with the City's MS4 Permit as well the shift in objectives noted above.

b. Updated the flow-related portion of the thresholds presented in 22.805.050.C.2.a.4 (for compliance with the Pre-Developed Forested Standard) from 0.1 cubic feet per second (cfs) to 0.15 cfs. This change was made for consistency with the City's MS4 Permit.

c. Revised the flow control standard for Roadway Projects discharging to creek basins from the Pasture Standard to the "Existing Condition Standard".

d. Revised the threshold trigger from "new plus replaced hard surface" to "new hard surface" for certain Roadway Project scenarios most applicable in the City.

e. Revised the flow control standard for Roadway Projects discharging to small lake basins (Bitter Lake, Green Lake, or Haller Lake, or to the drainage basin of such lake), capacity-constrained systems, and discharges from groundwater from the Peak Standard to the "Existing Condition Standard".

f. Removed flow control requirements for Roadway Projects in the public combined sewer.

12. Revised Minimum Requirements for On-Site Stormwater Management (22.805.070): Most of the updates to this section are focused on minor changes to the On-site Stormwater Management Lists (22.805.070.D) designed to expand the On-site Stormwater Management toolbox options and/or clarify the choices of BMPs that are available to meet the On-site Stormwater Management requirements. Notable revisions include:

a. Added clarification that tables apply to roofs and other hard surfaces.

b. Added that Infiltration Trenches and Drywells can be used for non-roof hard surfaces, but evaluation is not required (applies to Single-family Residential Projects and Parcel-based Projects.

c. Moved Non-infiltrating Bioretention and Vegetated Roofs to Category 4 (shifted former Category 4 BMPs to Category 5) (applies to Single-family Residential Projects and Parcel- based Projects).

d. Clarified that water quality treatment BMPs can be used in lieu of non-infiltrating bioretention unless a combined sewer basin.

e. Added new Category 2 BMP – Sidewalk / Trail Compost Amended Strip (applies to all On-site Lists). This new BMP provides a relatively simple and effective BMP specific to narrow sidewalk and trail projects common in the City. Note that this BMP is not applicable to Roadway or other pollution-generating surfaces.

f. Added trees to a new Category 4 (applies to Trail and Sidewalk Projects and Roadway Projects).

Exhibit A

g. Added Rainwater Harvesting to Category 4 for SFR and Parcel-based Projects.

h. Added footnotes outlining the Rainwater Harvesting sizing requirements under Category 2 and Category 4 applications. Specifically, Category 2 rainwater harvesting shall be sized to meet the on-site performance standard (22.805.070.C) whereas Category 4 rainwater harvesting shall be sized to reduce the runoff volume by 25 percent or more on an annual average basis. Change based on public feedback regarding feasibility and sizing of rainwater harvesting.

i. Revised footnotes for Parcel-based and Roadway Projects to clarify that rain gardens cannot be used to meet requirements for areas of 5,000 sf or more.

13. Revised Minimum Requirements for Flow Control (22.805.080):

a. 22.805.080.B.1 (Wetland Protection Standards) was substantially modified to reflect updated guidance developed by the Department of Ecology (and as required by the City's MS4 Permit). The changes outline requirements for new discharges to a wetland, wetland classifications (based on state requirements), and applicable wetland protection standards and methods to achieve those standards. These changes were for consistency with the City's MS4 Permit.

b. Add a new "Existing Conditions Standard" (22.805.080.B.4) based on matching post-development stormwater discharge durations to those of the existing (i.e., pre-project) land cover conditions. As noted previously, this new standard applies to Parcel-based Projects discharging to small lake basins, as well as most Roadway Projects.

c. Revised the technical requirements of the Peak Control Standard (22.805.080.B.5) to better reflect the downstream impacts of peak flows from a typical project, and therefore to optimize flow control designs based on smaller storm events.

14. Revised Minimum Requirements for Treatment (22.805.090):

a. Added the option for pollution generating pervious areas (PGPS) to develop a landscape management plan (LMP) as an alternative to providing water quality treatment for PGPS. In most cases, a LMP would be the preferred and most effective method for minimizing water quality pollution from PGPS. New guidelines for developing an LMP are also provided in the Manual, and each individual LMP must be approved by the City.

b. Clarified that Enhanced Treatment requirements (22.805.090.B.5) do not apply to projects discharging to a basic treatment receiving water (22.801.030 "B"). This change is for consistency with the City's MS4 Permit.

c. Added that Enhanced Treatment (22.805.090.B.5) is required for parcel-based projects that propose four or more dwelling units. This change is for consistency with the City's MS4 Permit.

Chapter 22.807 – Drainage Control Review and Application Requirements

15. Revised Drainage control review and application requirements (22.807.020):

a. Added a new category and submittal requirements for "Preliminary Drainage Review." (22.807.020.A.1) to facilitate drainage review being adequately performed

Exhibit A

during the Master Use Permit process. Specifically, "Preliminary drainage review and approval is required for applications for the following approvals:

i. Subdivisions

ii. Short plats

iii. Unit lot subdivisions

iv. Lot boundary adjustments

v. Master use permits that would allow development that includes 750 square feet or more of new plus replaced hard surface or 5,000 square feet of land disturbing activity where the Director has determined that a preliminary drainage review is required considering, but not limited, to the following attributes of the site: 1) Location within an environmentally critical area or buffer; 2) Proximity and tributary to an environmentally critical area or buffer; and 3) Proximity and tributary to an area with adequacy, erosion, water quality, or flooding problems."

b. Updated the thresholds and terminology for "Standard Drainage Review" (22.807.020.A.1). These revisions were made to align with the new "Preliminary Drainage Review" category described above and to reflect general changes in terminology throughout the Stormwater Code and Manual (and MS4 Permit). In addition, the requirement for Standard Drainage Review and Approval was revised to include specific activities and projects such as new or substantially-altered fueling stations; in-water and over-water fueling; maintenance and repair of vehicles and equipment; concrete and asphalt mixing and production; recycling, wrecking yard, and scrap yard operations; and storage of liquids in aboveground tanks (also reflected in 22.803.040.A "Minimum Requirements for Source Controls For Businesses and Public Entities for Specific Activities").

c. Added the requirement that drainage control review thresholds also be applied to "closely related projects." Specifically: "For purposes of applying the thresholds in this subtitle, all closely related projects as determined according to subsection 22.805.010.B shall be counted toward the threshold."

d. Added a requirement that the drainage control plan for any project that "includes development conducted in or near a receiving water requiring a Hydraulic Project Approval (WAC 220-660)" shall be prepared by a licensed civil engineer.

16. Revised Maintenance and Inspection requirements (22.807.090):

a. Revised the "Responsibility for Maintenance and Inspection" requirements to include the maintenance of "management plans." Similarly, when informing future purchasers and other successors and assignees to the property, language was added to require the owners to inform purchasers regarding "the implementation of a landscape management plan, if one exists." This language was added to reflect the addition of landscape management plans as an option to meet water quality treatment requirements for PGPS as outlined previously.

Exhibit A

Conclusion & Recommendation

All the proposed 2021 modifications to the Stormwater Code are either equivalent or unrelated to Ecology requirements in the MS4 Permit and have been developed in consideration of the best available science.

The Director of SPU and the Director of SDCI recommend that the "2021 Revision to Stormwater Code" modifications be adopted.

References

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