Attachment C

DRAFT 2024 Stormwater Management Manual for Western Washington

Executive Summary of the 2024 Revisions

The *Stormwater Management Manual for Western Washington* (SWMMWW) provides guidance on the measures necessary to control the quantity and quality of stormwater runoff. Local jurisdictions use this manual to set stormwater requirements for new development and redevelopment projects. Land developers and designers use this manual to design permanent stormwater control plans, develop construction stormwater pollution prevention plans, and determine stormwater infrastructure. Businesses use this manual to help design their stormwater pollution prevention plans.

The greatest use of the SWMMWW has been through National Pollutant Discharge Elimination System (NPDES) stormwater permits. The Municipal Stormwater General Permits for western Washington incorporate and reference the SWMMWW. The Industrial Stormwater General Permit, Construction Stormwater General Permit, Boatyard General Permit, and the Sand and Gravel General Permit reference the SWMMWW. Since 2005, Ecology has reissued or issued for the first time all of these NPDES stormwater permits. The 2024 revisions to the SWMMWW will continue to help permittees comply with these permits.

Types of Revisions

Statewide Consistency

One focus of the 2024 update was to provide consistent statewide guidance, where appropriate. This included evaluating both the content and layout of the guidance in the SWMMWW and SWMMEW, and editing for statewide consistency where appropriate.

Usability Enhancements

A second focus of the 2024 update was to enhance the usability, which will result in improved implementation of the stormwater permits that rely on this guidance. Enhancements include:

- Continuing to embrace the online user (i.e. maintaining the interactive online format)
- Consolidating repetitive information

- Revising text for clarity
- Reordering sections for a better flow of concepts

Significant Changes

Ecology also identified the following significant changes that were made in order to continue to provide the best guidance available:

1. **New Development and Redevelopment Project Thresholds:** The thresholds for applying the Minimum Requirements to new development and redevelopment projects have been updated. The threshold updates are at both the "Project Level" and the "TDA Level".
    - Project Level - Redevelopment Thresholds / Road Related Projects

      The updated threshold for road related projects states that all Minimum Requirements apply to the new and replaced hard surfaces and converted vegetation areas if the project adds 5,000 square feet of new plus replaced hard surfaces AND the new plus replaced hard surfaces total 50% or more of the existing hard surfaces on the Site (underline shows the new language).

    - Project Level - Redevelopment Thresholds / Commercial or Industrial Projects

      The updates include a new threshold for commercial or industrial Sites. The new threshold states that all Minimum Requirements apply to the new and replaced hard surfaces and converted vegetation areas if the new plus replaced hard surfaces total 50% or more of the existing hard surfaces within the Site.

    - TDA Level - Minimum Requirement 6 (Runoff Treatment)

      The updated TDA threshold within Minimum Requirement 6 states that Runoff Treatment BMPs must be provided for TDAs that have a total of 2,000 square feet or more of pollution-generating hard surface (PGHS), The previous version of this threshold referred to 5,000 square feet of PGHS.

2. See I-3.3 Applicability of the Minimum Requirements andI-3.4.6 MR6: Runoff Treatment.

2. **Pavement Maintenance Project and Underground Utility Project Exemptions:** The text describing the exemptions for Pavement Maintenance Projects and Underground Utility Projects has been updated to ensure project scope does not exceed the intention of these limited exemptions.

   The updated text clarifies that the exemptions may only be used if the only purpose of the project is for pavement maintenance or underground utility work (depending on the exemption). The entire project must be for the sole purpose of maintaining pavement area or installing or maintaining an underground utility. Redevelopment work or changing the characteristic of the roadway are not considered pavement maintenance, and do not qualify for the pavement maintenance exemption. Underground utility work that is part of a new or redevelopment project that also includes other disturbed areas does not qualify for the underground utility project exemption.

   See I-3.2 Exemptions.

3. **Wetland Hydroperiod Protection Method 2:** The hydroperiod protection requirements for Criteria 2 in Method 2 have been updated. The updates include an increase from 15% to 20% allowable monthly discharge volume deviations during October, November, and December, and an “allowable exception” for summer months.

   See I-C.4 Wetland Hydroperiod Protection.

4. **Light Rail Tracks as PGIS:** The manual has been updated to identify Light Rail tracks (both elevated and non-elevated) as a pollution generating impervious surface. Light Rail tracks are also identified as a site type that requires metals treatment.

   See the Glossary and III-1.2 Choosing Your Runoff Treatment BMPs.

5. **Light Rail BMPs:** The following BMPs have been added as options for Source Control and Flow Control for Light Rail projects and activities:

- BMP F6.70: Light Rail Elevated Guideway Dispersion
- S453 BMPs for Washing Light Rail Tracks
- S454 BMPs for Washing Light Rail Vehicles

6. **Climate Change:** A new topic for climate change guidance has been added. The topic includes a high level overview of the impacts of climate change on stormwater patterns, and suggestions from Ecology for how to help mitigate for climate change using stormwater management techniques.

   See I-1.4 Climate Change Impacts on Stormwater Management.

7. **Nutrients and Toxic Organics:** New guidance for Nutrients and Toxic Organics - including pollutants from rubber preservatives (e.g. 6PPD-q), Polycyclic Aromatic Hydrocarbons (PAHs), and Polychlorinated Biphenyls (PCBs) has been added to the manual. The updated guidance includes background information on what land uses and/or activities can introduce the pollutant to stormwater, and some suggestions on the types of BMPs that may provide either Source Control or Runoff Treatment for the pollutant.

   See I-1.5 Stormwater Pollutants and Their Adverse Impacts.

8. **Source Control BMPs - PCB Edits:** The following Source Control BMPs have been updated to include guidance for preventing pollution from PCBs in building materials:
   - S424 BMPs for Roof / Building Drains at Manufacturing and Commercial Buildings
   - S431 BMPs for Washing and Steam Cleaning Vehicles / Equipment / Building Structures
   - S438 BMPs for Construction Demolition
   - S451 BMPs for Building Repair, Remodeling, Painting, and Construction

9. **Bioretention:** The guidance within BMP T7.30: Bioretention has been updated to include the option to use the High Performance Bioretention Soil Mix (HPBSM). The design guidance was also updated to clarify the design infiltration rate to use for all three bioretention soil mix options.

   See BMP T7.30: Bioretention.

10. **UIC Program Guidelines:** The UIC Program Guidelines have been updated for general clarity, as well as targeted edits for deep UIC wells. The edits to the deep UIC wells topic includes guidance for deep UIC wells within sensitive groundwater areas, guidance for requirements for deep UIC wells in wellhead protection areas, and the associated registration process requireements.

    See I-4 UIC Program Guidelines and I-4.15 Deep UIC Wells.

Other Updates

For a more comprehensive list of the updates, please see the Chart Of Changes: 2019 - 2024 SWMMWW.

How to Find Corrections, Updates, and Additional Information

With a publication of this size and complexity there will inevitably be errors that must be corrected and clarifications that are needed. There will also be new information and technological updates.

Ecology intends to incorporate errata changes within the text of the interactive online version of the 2024 SWMMWW. Other updates, such as new technical information (emerging guidance), FAQs, and/or training videos, may be posted as "Additional Resources" with the interactive online manual. The "Additional Resources" can be accessed from the navigation pane of the interactive online manual, but will not be incorporated within the manual text until Ecology officially updates the publication.

Ecology will not use the interactive online version to make revisions in key policy areas – such as the thresholds and Minimum Requirements in Volume I. Please check the interactive online version periodically for corrections and updates.

Public Involvement Leading Up to the 2024 SWMMWW

Ecology provided public involvement opportunities and received public comments in preparation of the 2024 SWMMWW through individual user feedback, listening sessions, meetings with experts in selected fields, a preliminary draft public comment period, and a formal draft public comment period.

- **Ongoing Individual User Feedback**

Since the release of the 2019 SWMMWW, Ecology has collected feedback in the form of emails and phone calls from individual manual users. Ecology took note of common questions, and has provided clarification in the edits.

- **Meetings With Experts**

  In a few cases, Ecology met with internal and external experts to discuss needed changes to the SWMMWW. For example, Ecology held meetings to discuss the updates to Appendix I-C: Wetland Protection Guidelines.

- **Fall 2021: Open House**

  In the Fall of 2021, Ecology hosted a virtual open house regarding proposed usability and consistency updates to the SWMMWW and SWMMEW.

  Below is a video of the presentation made by Ecology at the Fall 2021 open house:

  Video Presentation: **How Ecology Will Enhance the Usability of the (next) SWMMEW** (18 minutes, as presented at the open house in Fall 2021)

- **February 2022: Early input received**

  Ecology received early input for consideration from stakeholders.

- **Spring 2022: Listening Sessions**

  In the Spring of 2022, Ecology hosted virtual listening sessions regarding early thoughts proposed SWMMWW updates.

Below is a video of the presentation made by Ecology at the Spring 2022 listening sessions.

Video Presentation: **An Overview of Ecology's Plans for the (Next) Stormwater Manual Updates** (21 minutes, as presented at the listening sessions in Spring 2022)

- **Fall 2022: Preliminary Draft, with Public Comment Period**

  In the Fall of 2022, Ecology provided preliminary draft sections of the SWMMWW for informal public comment, and hosted virtual workshops with presentations on the preliminary draft topics. Ecology considered the comments received while finalizing the formal draft.

  Below is a video of the presentation made by Ecology for the Fall 2022 preliminary draft package.

  Video Presentation: **An Overview of Ecology's Stormwater Management Manual Preliminary Draft Package (Western Washington Focus)** (22 minutes, as presented at the preliminary draft workshops in Fall 2022)

- **Summer 2023: Formal Draft, with Public Comment Period**

In the Summer of 2023, Ecology provided a formal draft package of the 2024 SWMMWW for public comment. Ecology considered the comments received and made the final changes to the 2024 SWMMWW. Ecology has issued a response to comments with the final version of the 2024 SWMMWW.

Below is a video of the presentation made by Ecology at the Summer/Fall 2023 public workshops about the formal draft package.

Video Presentation: **An Overview of Ecology's Stormwater Management Manual Draft Package (**Western **Washington Focus)** (23 minutes, as presented at the formal draft workshops in Summer/Fall 2023)