

AGENDA

LACEY PLANNING COMMISSION MEETING

Tuesday, February 1, 2022 – 5:00 p.m.

MEETING WILL BE CONDUCTED REMOTELY, NOT IN-PERSON

Please click the link below to join the webinar:

<https://us02web.zoom.us/j/89198228831>

Or Telephone:

Dial(for higher quality, dial a number based on your current location):

US: +1 253 215 8782 or +1 206 337 9723 or 888 788 0099 (Toll Free) or 877 853 5247 (Toll Free)

Webinar ID: 891 9822 8831

YouTube: <https://youtu.be/NDA8h56vt2k>

Call to Order: 5:00 p.m.

Approval of Agenda & Consent Items: 5:01 p.m.

- A. Approval of Agenda
- B. Approval of January 18 meeting minutes

Public Comments: 5:02 p.m.

Commission Members' Reports: 5:04 p.m.

Director's Report: 5:05 p.m.

Old Business: 5:10 p.m.

Stormwater Design Manual Update: Doug Christenson, Stormwater Engineer. The Planning Commission will receive a briefing on the proposed draft revisions to the City of Lacey Stormwater Design Manual. Staff will conduct public outreach on the draft revisions to the Manual and a public hearing will be scheduled for spring.

Communications and Announcements: 5:55 p.m.

Next Meeting: February 15, 2022.

Adjournment: 6:00 p.m.

1/24/22

CITY OF LACEY PLANNING COMMISSION WORK SCHEDULE

**Joint Planning Commission/City
Council Meeting**

1. **2022 Comprehensive Plan Docket Requests**
2. **2022 Work Program**

January 27, 2022

**Planning Commission Meeting
February 1, 2022**

1. **Work Session:** Stormwater Design Manual Update

Packets due: January 27, 2022

**Planning Commission Meeting
February 15, 2022**

Packets due: February 10, 2022

MINUTES

Lacey Planning Commission Meeting
Tuesday, January 18, 2022 – 5:00 p.m.
Conducted remotely via videoconference

Meeting was called to order at 5:00 p.m. by Dave Wasson.

Planning Commission members present: Dave Wasson, Gail Madden, Peg Evans-Brown, Kyrian MacMichael, Mark Mininger, and Daphne Retzlaff. Staff present: Rick Walk, Ryan Andrews, and Grant Beck.

Dave noted a quorum present.

Gail Madden made a motion, seconded by Mark Mininger, to approve the agenda for tonight's meeting and the January 4 meeting minutes. All were in favor, the motion carried.

1. **Public Comments:** None.

2. **Commission Members Reports:**

- Kyrian reported on her attendance at the last Council meeting and the History Talks presentation.
- Peg reported on her attendance at the History Talks presentation, the Lacey Chamber of Commerce meeting, and Council worksession.

3. **Director's Report:**

- Rick reported on the recruitment for two new Planning Commissioners and shared upcoming Council agenda items.
- Ryan reported on the new hire to fill the senior planner position.
- Rick reminded commissioners about the joint meeting with Council at 6 p.m., Thursday, January 27.

4. **New Business:**

2022 Work Program: Ryan Andrews, Planning Manager.

- Ryan gave a presentation and went over the Work Program.
- Discussions followed and Staff answered questions.

5. **Communications and Announcements:**

- Dave reminded Commissioners of the joint meeting with Council on January 27.
- Rick clarified that the Council meeting is at 6 p.m., the next Planning Commission meeting is at 5, and will continue with 5 p.m. start time while meetings are held virtually.

6. **Next Meeting:** February 1, 2022.

7. **Adjournment:** 6:05 p.m.

To hear the full discussion of a specific topic, or the complete meeting, watch the recorded video available on YouTube – <https://youtu.be/aTGVeOejHIY>



LACEY PLANNING COMMISSION STAFF REPORT

February 1, 2022

SUBJECT: Stormwater Design Manual, 2022 Update - Public Review Draft

RECOMMENDATION: Receive a briefing from staff on the public review draft of the 2022 Stormwater Design Manual (SDM). The 2022 SDM will be scheduled for a public hearing this spring.

TO: Lacey Planning Commission

STAFF CONTACTS: Ryan Andrews, Planning Manager *RA*
Doug Christenson, Water Resources Engineer *DC*

ATTACHMENT(S): 1. 2022 SDM Update Summary
2. Website link to draft chapters of 2022 Stormwater Design Manual:
[Currently Under Review | Reports & Plans | City Government | City of Lacey, Washington, USA](#)

PRIOR REVIEW: Planning Commission briefing on January 4, 2022.

BACKGROUND:

The City of Lacey's Stormwater Design Manual (SDM) is our local regulatory document for stormwater management on development and construction sites. The SDM provides best management practices (BMPs) for construction sites to prevent impacts from erosion of exposed sediment, design criteria for runoff treatment and flow control BMPs to protect water quality and prevent flooding, and guidance for site plan/report submittals for project permit approval. The SDM is based on the Department of Ecology's *Stormwater Management Manual for Western Washington* for baseline minimum requirements, thresholds, and definitions, with local adjustments and submittal criteria for applicability within Lacey.

The current 2016 SDM is being updated to create a 2022 edition of the SDM, in compliance with the 2019-2024 *Western Washington Phase II Municipal Stormwater Permit*. Section S5.C.6 of the Permit requires local jurisdictions to "implement an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects" and to "adopt and make effective a local program, no later than June 30, 2022, that meets the requirements" stipulated in the Permit. Lacey's well-established Stormwater Management Program includes implementation of the SDM, along with many related activities such as site plan review, field inspections, drainage system maintenance, etc. The 2022 SDM update will keep our "local program" in compliance with Permit Section S5.C.6.

Initial draft chapters of the updated SDM were reviewed by internal stakeholders in late 2021, then in January 2022 the draft chapters of the 2022 SDM begun public review. The draft 2022 SDM totals about 960 pages (30 MB), so it is posted as nine individual chapters on the City of Lacey website, along with a brief accompanying document that summarizes the changes. The draft 2022 SDM “redline” chapters (showing changes and edits) will be posted for public review on the City of Lacey website through at least the month of February.

The 2022 SDM is a moderate update to the current 2016 SDM. The chapter format, Core Requirements, and best management practices (BMPs) are largely the same as in the 2016 SDM, as Ecology’s required updates for technical equivalency are not as extensive as in the previous update (for the 2016 SDM). However, there are revisions throughout the 2022 SDM, many of which are for clarity and consistency. The attached document summarizes the SDM changes in three parts: (1) a table describing Ecology’s nine significant changes that are required for equivalency; (2) a second table of non-required updates and enhancements in each of the SDM’s nine chapters; and (3) a bulleted listing of various minor changes made throughout the 2022 SDM.

The Stormwater Design Manual is a technical manual containing guidance and requirements applicable to virtually any land-altering project in the city, public or private. The primary users of the manual are civil design engineers, geotechnical professionals, and City of Lacey staff, so these users will be specifically targeted by outreach efforts to be conducted during the public review period. Comments will be incorporated as appropriate into a final version of the 2022 SDM, which must be formally adopted by the City Council and made effective by no later than June 30, 2022 to comply with the Phase II Municipal Stormwater Permit.

RECOMMENDATION:

Review the public review draft of the 2022 Stormwater Design Manual, and conduct a public hearing during the coming spring (tentatively on May 3, 2022) to formally recommend the 2022 SDM for adoption by council.

City of Lacey Stormwater Design Manual: 2022 Update Summary

January 2022 Public Review Draft

The City of Lacey is updating the 2016 Stormwater Design Manual (SDM) as required by the Washington State Department of Ecology for compliance with the 2019-2024 Western Washington Phase II Municipal Stormwater Permit. Per Appendix 10 of the Permit, Ecology determined that the following list of runoff controls for new development, redevelopment, and construction sites shall be used to amend any enforceable documents (e.g., Lacey's SDM) to be functionally equivalent to Appendix I in the *Western Washington Phase II Municipal Stormwater Permit* (effective August 1, 2019) and the required portions of Ecology's 2019 *Stormwater Management Manual for Western Washington* (SWMMWW).

The updated local program for controlling runoff (including the 2022 SDM) must be adopted and made effective by no later than June 30, 2022.

Significant Changes in the Department of Ecology's 2019 <i>Stormwater Management Manual for Western Washington</i>	SDM Chapter(s) Affected	Resulting changes in the City of Lacey 2022 <i>Stormwater Design Manual</i>
1. Continuous Simulation Modeling: Text throughout the SWMMWW has been updated to require continuous simulation models that include: - The ability to directly model BMPs (best management practices) that may be used in LID (low-impact development) applications, such as bioretention, permeable pavement, and green roofs. 15-minute time steps. - Incorporation of the van Genuchten algorithm to model bioretention.	Chapter 2: Core Requirements for Development Chapter 4: Stormwater BMP Selection Chapter 5: Construction Stormwater Pollution Prevention Chapter 6: Hydrologic Analysis Methods and Conveyance Design	Updated to 15-minute time step requirement. Removed references to MGSFlood since this model is not commonly used by applicants and City staff do not have access to MGSFlood software. A reference is provided to the Ecology-approved models, which now includes MGSFlood as an approved continuous simulation model.
2. Replaced Hard Surfaces Redevelopment Threshold: The minimum requirement thresholds for non-road related commercial or industrial redevelopment projects have been updated to require the project proponent to compare the value of the proposed improvements to the value of the Project Site (the limits of disturbance) improvements, rather than the Site (the entire parcel) improvements.	Chapter 2: Core Requirements for Development	Updated the Redevelopment wording in Section 2.1.2 and the Figure 2.2 flow chart to reflect Ecology's updated valuation threshold.

Significant Changes in the Department of Ecology's 2019 Stormwater Management Manual for Western Washington	SDM Chapter(s) Affected	Resulting changes in the City of Lacey 2022 Stormwater Design Manual
3. Equivalent Areas: The Redevelopment Project Thresholds have been updated to allow a project proponent to provide Stormwater Management BMPs for an equivalent area. The equivalent area may be on-site, or off-site if the area drains to the same receiving water and the guidance for in-basin transfers is followed.	Chapter 2: Core Requirements for Development	Updated the Redevelopment wording in Section 2.1.2 to reflect Ecology's updated allowance for equivalent areas.
4. Minimum Requirement 2: The 13 Elements in MR 2 (Construction Stormwater Pollution Prevention) have been updated to incorporate changes that were made to the 2015-2020 Construction Stormwater General Permit.	Chapter 5: Construction Stormwater Pollution Prevention	Updated the 13 Elements described in Section 5.2 to incorporate minor text revisions for consistency with Ecology's changes. The names of a few of Ecology's BMPs have also been updated and were updated in the SDM for consistency.
5. Minimum Requirement 5: MR 5 (On-Site Stormwater Management) has been updated to require BMP T5.13 (Soil Quality and Depth) when choosing to use the LID Performance Standard to meet MR 5 for Minimum Requirement 1-5 projects.	Chapter 2: Core Requirements for Development	Core Requirement #5 already included this requirement in the 2016 SDM.
6. Minimum Requirement 7: MR 7 (Flow Control) has been updated to ensure that a TDA (threshold discharge area) discharging to a marine waterbody meets all exemption requirements before it can be determined to be Flow Control exempt.	Chapter 2: Core Requirements for Development	Updated language to clarify that the Nisqually River and Puget Sound are considered to be flow control exempt if specific exemption requirements have been met.
7. Concrete Washout: BMP C154 (Concrete Washout Area) has been updated to clarify that auxiliary concrete truck components and small concrete handling equipment may be washed into formed areas awaiting concrete pour, while concrete truck drums must be washed either off-site or into a concrete washout area.	Chapter 5: Construction Stormwater Pollution Prevention	Revised wording for BMP C154 in Chapter 5, including conditions of use, design and installation specifications, and maintenance standards.

Significant Changes in the Department of Ecology's 2019 <i>Stormwater Management Manual for Western Washington</i>	SDM Chapter(s) Affected	Resulting changes in the City of Lacey 2022 <i>Stormwater Design Manual</i>
8. Source Control BMPs: Volume IV (Source Control BMP Library) has been updated with Source Control BMPs for activities not listed in previous versions of the manual. Seventeen new activities with Source Control BMPs were added, including: • S435 BMPs for Pesticides and Integrated Pest Management • S449 BMPs for Nurseries and Greenhouses • S438 BMPs for Construction Demolition • S440 BMPs for Pet Waste • S451 BMPs for Building, Repair, Remodeling, Painting, and Construction • and a dozen other activities.	Chapter 9: Source Control	Added references to the new BMPs for the previously-unlisted activities in the list of Source Control BMPs in Appendix 9A.
9. Wetlands Guidance: Appendix I-C (Wetland Protection Guidelines) and Minimum Requirement 8 (Wetlands Protection) have been updated to require monitoring and modeling of high value wetlands, if the project proponent has legal access to them. The 2014 wetland guidance is retained, but refined, for modeling requirements for lower value wetlands (and high value wetlands that the project proponent does not have legal access to).	Chapter 2: Core Requirements for Development	Updated reference to Ecology's Wetlands Guidance in Core Requirement #8 – Wetlands Protection, in Section 2.2.8 of the 2022 SDM. Also, added Figure 2.4 - Flow Chart for Determining Wetland Protection Level Requirements.

Non-permit-required changes in the City of Lacey 2022 *Stormwater Design Manual* include:

SDM Chapter	Updates and Enhancements in the City of Lacey 2022 <i>Stormwater Design Manual</i>
Chapter 1: Introduction	- Updated the Acknowledgments page (to be completed for final version of 2022 SDM) - Updated Underground Injection Control (UIC) Program overview (Section 1.7.13) - Added and revised some definitions in the Glossary
Chapter 2: Core Requirements for Development	- Clarified that CR #3: Source Control of Pollution applies to the finished project site, after development - Shifted the List Approach to CR #5 compliance into a tabular format (Table 2.1) for clarity
Chapter 3: Stormwater Submittals	- Abbreviated Drainage Plan Report and Drainage Control Plan Report contents have been more clearly outlined and described (added Table 2.2 and expanded Section 3.3.2; updated and reorganized content in Section 3.3.3) - Added Section 3.4.3 to outline maintenance covenant requirements
Chapter 4: Stormwater BMP Selection	Updated Figure 4.1 (Threshold Discharge Areas) for consistency with the updated figure in Ecology's 2019 SWMMWW.
Chapter 5: Construction Stormwater Pollution Prevention	- Added potential SWPPP amendment for wet-season site work - Added guidance for use of broken concrete on construction sites; and allowing the use of "functionally-equivalent technologies" for construction sites.
Chapter 6: Hydrologic Analysis Methods and Conveyance Design	Added Table 6.6, listing minimum pipe slopes for storm drains based on pipe diameter.
Chapter 7: Flow Control Design	- Updated infeasibility criteria (Appendix 7B) - Added Appendix 7C which includes guidance for UIC wells (based on Ecology's 2019 SWMMWW) and expanded City-specific guidance for deep UIC wells
Chapter 8: Runoff Treatment BMPs	Revised Figure 8.1 – Runoff Treatment BMP Selection flow chart, and updated Appendix 8B – Wellhead Protection Areas Map
Chapter 9: Source Control	- Added local amendments to two Source Control BMPs, for fueling stations and materials storage - Revised the Stormwater Pollution Source Control Checklist and Worksheet (Appendix 9A) - Added Ecology's complete list of Source Control BMPs (with reference to Volume IV of the 2019 SWMMWW) to Appendix 9C

Other changes throughout the City of Lacey 2022 *Stormwater Design Manual* include:

- Updated references to Ecology's *Stormwater Management Manual for Western Washington* from 2012/2014 edition to 2019 edition.
- Replaced the word "facility" with "BMP" (best management practice) for consistency with Ecology's 2019 SWMMWW.
- Replaced the term "water quality treatment" with "runoff treatment" for consistency with Ecology's 2019 SWMMWW.
- Corrected Lacey Municipal Code (LMC) references for appropriate use of the terms title/chapter/section (e.g., LMC Title 14, Chapter 14.27, Section 14.27.060).
- "Abbreviated Plan" changed to "Abbreviated Drainage Plan" for clarity and consistency.
- Replaced "city" (lowercase) with "City" (capitalized).
- Replaced "hardpan" with "glacial till."
- Replaced "flowpath" (as one word) with "flow path" (two words).
- Replaced "artificial" with "constructed" in reference to BMPs such as conveyance channels and wetlands.
- Removed duplicate infeasibility criteria from the main text of Chapter 7 (with individual BMPs) if these criteria appeared in Appendix 7B.
- Added "high performance bioretention soil mix" for use near phosphorus-sensitive surface water bodies.
- Replaced some paragraphs with bullet points or tabular format, for increased clarity.
- Corrected minor errata and typos, and made minor revisions and edits for accuracy and/or clarification.
- Updated technical information, figures, and references.