



## City of Salem Stormwater Advisory Group – Meeting #2

Monday, April 15, 2024, from 11:30 a.m. to 1:00 p.m.

**Meeting will be conducted both in-person and via Zoom**

In-Person Location: City Hall, Public Works Department, Traffic Control Conference Room, 555 Liberty Street SE, Room #325

Zoom: <https://us02web.zoom.us/j/87855952172>

Si necesita ayuda para comprender esta información, por favor llame 503-540-2371

### **PARTICIPANTS**

#### Stormwater Advisory Group (SWAG) Members

Councilor Linda Nishioka, Ken Bierly, Gene Bolante, Natalie Janny, Matt Knudsen, Bill Lawyer, Rick Massey, Tyler Roth, Josh Wells

#### City Staff & Consultant Support

Robert Chandler, Allen Dannen, Fred Wilson, Robin Dalke, Laurel Christian, Don Whitehurst, Anita Panko, Nitin Joshi, Keith Kuenzi, Dwayne Barnes, Heather Dimke, Angela Wieland, Shelby Gilmartin, Brandon Teetsel, Rose Horton

### **AGENDA**

1. Welcome
2. Follow-up Questions Received
3. Technical Infiltration Infeasibility Criteria
  - a. Steep Slopes & Landslide Hazards
  - b. Contaminated & Fill Soils
  - c. Seasonal High Groundwater
  - d. Domestic Wells
  - e. Additional Facility Restrictions (Stormwater Siting Limitations)
4. Stormwater Design Standards – Appendix 4A (Stormwater Submittal Requirements)
5. Site Assessment & Planning Checklist (New)
  - a. For Submittal at Land Use

### **ADDITIONAL MEETING DETAILS**

Stormwater Advisory Group meeting documents and updates will be available at this link:

<https://www.cityofsalem.net/government/boards-commissions/other-advisory-groups/stormwater-advisory-group>

**Point of Contact:** Questions or comments can be directed to Heather Dimke, Management Analyst II, [hdimke@cityofsalem.net](mailto:hdimke@cityofsalem.net) or 503-588-6211 ext. 7389.

Special accommodations are available, upon request, for persons with disabilities or those needing sign language interpretation, or languages other than English. To request accommodations or services, please call 503-540-2371 (TTD/TTY 503-588-6439) at least two business days in advance.

It is the City of Salem's policy to assure that no person shall be discriminated against on the grounds of race, religion, color, sex, marital status, familial status, national origin, age, mental or physical disability, sexual orientation, gender identity, and source of income, as provided by Salem Revised Code 97. The City of Salem also fully complies with Title VI of the Civil Rights Act of 1964, Americans with Disabilities Act of 1990, and related statutes and regulations, in all programs and activities.



## STORMWATER ADVISORY GROUP

MEETING NOTES - March 11, 2024

City of Salem, Library Anderson Room A & Via Zoom

### **MEMBERS PRESENT**

Linda Nishioka, City Council  
Natalie Janney, Multi-Tech Engineering  
Matt Knudsen, Marion County  
Rick Massey, Richard Massey Construction  
Tyler Roth, AKS Engineering & Forestry  
Josh Wells, Westech Engineering  
Ken Bierly, Glenn-Gibson Watershed Council

### **STAFF/CONSULTANT SUPPORT PRESENT**

Robert Chandler, City of Salem  
Allen Dannen, City of Salem  
Don Whitehurst, City of Salem  
Anita Panko, City of Salem  
Laurel Christian, City of Salem  
Robin Dalke, City of Salem  
Nitin Joshi, City of Salem  
Heather Dimke, City of Salem  
Angela Wieland, Brown & Caldwell  
Marjorie Wolfe, Wolfe Water Resources

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### **1. Welcome & Introductions**

Staff, consultants, and Stormwater Advisory Group participants introduced themselves for the record.

### **2. Overview & Purpose**

Staff shared that the City's most recently updated Municipal Separate Storm Sewer System (MS4) Permit with the Oregon Department of Environmental Quality (ODEQ) includes new impervious surface thresholds and performance standards for post-construction stormwater runoff. To address these new permit requirements revisions to Salem Revised Code (Code) and the Public Works Design Standards (Design Standards) are needed and must be in effect by November 1, 2024. The purpose of the Stormwater Advisory Group will be to provide feedback on the revisions that are made to Code and guidance on potential improvements to the plan submittal and review process.

A draft timeline for the meetings and revisions was shared with the group. At present, four to five Stormwater Advisory Group meetings are anticipated, with an intent to have draft Code and Design Standard documents ready to begin public notification procedures by late June or early July of this year. A public hearing on these proposed changes will need to take place in late July or August to meet the City's MS4 Permit deadline.

### **3. Updated Stormwater Regulations**

The City's Phase 1 MS4 Permit was reissued in 2021 and includes a number of new requirements and deliverables associated with post-construction stormwater runoff. These include updates to impervious surface area thresholds, updated performance standards, and a strategy for

implementing and promoting Low Impact Development (LID) and Green Stormwater Infrastructure (GSI). A brief overview of the significant updates was provided to the group.

**a. Impervious Area Thresholds**

These thresholds identify the amount of new or replaced impervious surface area from development that triggers requirements for post-construction stormwater controls (stormwater facilities).

- The threshold for Single-Family development remains unchanged (**1,300 square feet**). The upper threshold will likely be capped at 5,000 square feet as this is the new threshold for other/large development projects (see bullet below). Staff anticipate updating the present definition for “Single-Family Residential” in Code to “Residential” to incorporate small apartments and accessory dwelling units.
- The threshold for all other development has been reduced (**from 10,000 to 5,000 square feet**).

**b. Low Impact Development (LID) & Green Infrastructure (GI) Strategy Implementation**

Low Impact Development is a management approach for mitigating the impacts of increased stormwater runoff and pollutant loads in urban settings by promoting natural systems, green infrastructure, and other processes that encourage infiltration. Green Infrastructure (or Green Stormwater Infrastructure) refers to stormwater facilities that are designed to mimic natural hydrologic functions. The City’s MS4 Permit prioritizes these practices and required the submittal of a LID/GI Strategy to the ODEQ by November 1, 2023. The Strategy that was submitted referenced the current (2024) review and updated process with anticipated clarifications to the Site Assessment requirements, infiltration guidelines, and additional stormwater facility information to further encourage LID/GI in Salem.

**c. Performance Standards**

The MS4 Permit now requires the City to establish a Numeric Stormwater Retention Requirement (NSRR) that requires retention and infiltration of a specified storm event. Salem’s current Design Standards include a defined water quality design storm (1.38”/24-hours) that can be used to meet this requirement. Updates to the Design Standards will reference the use of design over measured infiltration rates to clarify where infiltration and partial infiltration facilities can be used to meet the NSRR. Technical Infeasibility Criteria (slopes, groundwater, contaminated soils) will clarify where these facilities cannot be used based on the existing site conditions.

**d. Potential Revisions to Code and Public Works Design Standards**

Staff are looking at additional updates that include a reorganization of the Design Standards, clarification on exemptions and design methods, additional stormwater facility information, and the inclusion of a checklist that outlines the submittal information required at land use.

#### **4. Roundtable Discussion – Issues & Opportunities for Improvement**

Staff opened the meeting up for continued questions and initial comments from the group (please see the ***Detailed Discussion Items – March 2024*** included at the end of these notes).

This process provides an opportunity to improve and add clarity to the Design Standards as well as the development review process. It was requested that members of the Stormwater Advisory Group reach out to staff with any concerns regarding current stormwater related definitions, ideas on submittal items for the Land Use checklist staff are working on, or any additional questions or comments. It was noted that Otak staff presently perform stormwater plan reviews for the City and have also been providing feedback on improvements needed to the Design Standards.

In closing, it was suggested that we keep in mind that the purpose of the various requirements are to address water quality, hydromodification (stream erosion), and flooding. We are trying to find solutions that most efficiently address each of these.



## **STORMWATER ADVISORY GROUP**

### **DETAILED DISCUSSION ITEMS**

**(March 2024)**

#### **Residential Development Thresholds**

A question was raised on how middle housing and Accessory Dwelling Units are impacted by the 1,300 sq ft. impervious surface threshold for Single-Family Residential projects. Staff anticipate an update to the definition in Code for Single-Family Residential projects to include middle housing if the project is between 1,300 and 5,000 square feet of impervious surface. This will be clarified both in Code and the Design Standards. All projects that are under 10,000 square feet of impervious surface area will be able to use either the Simplified Method or Engineered Method to size their stormwater facilities.

#### **Stormwater Treatment Processes**

It was noted that there can be challenges with ensuring that Engineered stormwater facilities support the biocriteria necessary to provide water quality treatment. That said, the MS4 permit required emphasis on retention and infiltration through the use of green stormwater infrastructure should help to promote increased filtration through soils and vegetation.

#### **Time of Concentration (TOC)**

Interest was expressed in changing the TOC. Please note that time of concentration is an engineering standard practice and not defined by the City.

#### **Site Constraints – Technical Infeasibility Criteria**

It was noted that much of the developable land that remains may have landslide hazards, riparian zones, high groundwater, or other potential site concerns that make onsite infiltration a challenge. As such, staff will work to identify technical infeasibility criteria that will clarify where infiltration and partial infiltration facilities will not be allowed. This is in compliance with the City's municipal stormwater permit. Staff are working on a checklist that will allow technical infeasibility criteria to be identified by developers at Land Use.

#### **Numeric Stormwater Retention Requirement (NSRR)**

A question was raised regarding the NSRR and whether infiltrating the water quality event is all that is needed to address this requirement or if additional analysis was needed? It was confirmed that infiltrating the water quality design storm addresses the NSRR, but that additional analysis would be needed to address the flow control standards.

#### **Water Quality Design Storm**

It was asked if we will be revisiting the definition of the water quality design storm event (1.38"/24-hour period). We are not anticipating any new rainfall analysis at this time.

#### **Groundwater**

High groundwater will be listed as a technical infeasibility criteria to onsite infiltration or partial infiltration. How this is determined given seasonal fluctuations will need to be clarified. It was noted that a geotechnical engineer may be needed.

**Infiltration Rates**

The .5" infiltration rate for infiltration-based facilities will be defined based on designed not measured rates. Partial infiltration facilities can be used where rates are less than .5". Infiltration rates through media will be limited to 2".

**Standard Details**

There will be a small set of Standard Details that will updated as part of a separate process.

**Simplified Method**

Staff are working on updates to the Simplified Method Form that can be used for projects that are <10,000 square feet and/or are not utilizing an engineer. This will include options for estimating onsite infiltration in lieu of testing.