CITY OF BEND

City Hall
710 NW Wall Street
Bend, OR 97703

# AGENDA

## Water Advisory Group

**Date:** April 1, 2026

**Time:** 11 a.m.-12:30 p.m.

**Location:** **Hybrid Meeting**

**In-person:** City of Bend Public Works Headquarters Building
21051 NE Talus Place, First Floor Roundabout Room

**Online:** **Microsoft Teams Meeting Link**

**Speakers:** Lori Faha, Environmental Resources Manager
Elisabeth O'Keefe, Stormwater Program Manager
Aubrie Koenig, Facilitator

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### Agenda

***Purpose:*** *Share drainage and density policy updates and collect input on general approach and key considerations for neighborhood-scale and residential infill implementation.*

1. **Welcome and Introduction** – *10 mins*
    a. March meeting reflections
        i. *Any additional questions about how the water rights presentation relates to Bend's water operations?*
    b. New codes and standards updates
2. **100 Years of Water Update** – *5 mins*
    a. Earth Day event
3. **Drainage and Density Discussion** – *70 mins*
    a. Overview of needs and objectives – *10 mins*
        i. Recap observations, issues, master plan policy discussion (see excerpted Stormwater Master Plan Section 6)
        ii. Rollout of template for single-family lots (challenges, interim steps)
        iii. Discussion questions:
            1. *What type and degree of stormwater drainage issues are you seeing? (during permitting, design, construction, post-construction)*
    b. Neighborhood-scale development – *25 mins*

i. Highlight approach and ways to encourage neighborhood-scale facilities for new development
ii. Discussion questions:
1. *How can the City encourage developer implementation of neighborhood-scale facilities?*
2. *If the City maintains these facilities, how should we fund this work? Should the City allow for homeowner associations to provide "higher level" landscape maintenance?*
3. *If a developer chooses not to build a neighborhood-scale facility, how can the City better ensure that single-family lot facilities are adequately sized?*
4. *Is it feasible to require a deed restriction or similar at Land Use/Land Division to reserve space on each lot?*

c. Residential "infill" development - *25 mins*
i. Highlight approach and share proposed tools
ii. Discussion questions:
1. *Should the City require a minimum amount of on-lot storm storage if the development is allowed to discharge the remainder to the right-of-way to an existing storm system?*
2. *Is it reasonable to charge developers for City staff time to determine if there is capacity in the existing right-of-way storm system?*
3. *What would be the best ways to make certain small infill lots with onsite storm management install adequate facilities?*

d. Planned outreach and next steps – *10 min*
i. Additional external outreach
ii. Discussion questions:
1. *How would you recommend the City best explain stormwater drainage problems and issues and proposed solutions and impacts?*
2. *How do you think the City should fund additional staff time for permitting, inspections, and maintenance?*

4. **Summary and Closing** – *5 mins*
a. Next meeting: May 6, 2026
b. Reminder: June meeting is an in-person tour in Bend

# WAG Meeting Roadmap *draft*

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|---|---|
| **May 6, 2026**<br>11 a.m.-12:30 p.m.<br>Hybrid: in-person at City PW Headquarters or virtual on Teams | **Stormwater Program Update and WaterWise/FireWise Topic**<br>• Discuss stormwater program maintenance agreement education resources<br>• Discuss coordinated materials and efforts underway to accommodate multiple goals and standards for water conservation landscapes, FireWise codes, and urban forests |
| **June 3, 2026**<br>11 a.m.-12:30 p.m.<br>In-person in Bend | **Hatfield Ponds Tour**<br>• See Hatfield Pond facilities firsthand and discuss Water Reclamation Facilities planning topics |
| **July-August 2026** | **Summer Break** |
| **Fall 2026 Topics** | Potential topics:<br>• 100 years of water campaign takeaways<br>• Central Oregon Stormwater Manual update<br>• Water Management Conservation Plan draft |

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# Section 6. Policy Discussion

Two white papers were developed for this SMP to advance policy development or strategic planning around issues and challenges facing stormwater management in Bend. Drainage and density, level of service, climate change, and new stormwater management techniques were selected as topics of interest. Each issue is summarized below, and supporting materials are provided in Appendix D.

## 6.1. Drainage and Density

Bend's 2016 Comprehensive Plan identified the need for 17,234 new housing units and the City is also planning for over 60,000 new jobs by 2028. Various recent state laws direct cities to allow more types of housing. To accommodate this growth, the City has enacted policies to create a diversity of housing options and to identify land to support economic development. With rapid growth, the City is densifying. Increasingly, lots are smaller, leaving little room for construction of stormwater management facilities. An increasing number of lots with geology and site conditions that are not conducive to stormwater management are being developed. Therefore, City staff and developers are calling for more options to manage stormwater both on-site and in a more centralized or regional fashion. A white paper explores some of the opportunities and limitations of Bend's existing policies and approaches to managing stormwater, and it contemplates additional options.

### 6.1.1. Stormwater Policy for Development

Bend's default and most common pattern for stormwater system development is decentralized and privatized. Unless alternate allowable arrangements are made, stormwater runoff must be kept on the lot of origin and managed by the property owner. This document refers to this method of managing stormwater on individual lots as "lot-scale stormwater management." Lot-scale stormwater management is described in the following codes and standards:

- Bend Municipal Code (BMC) Title 16 – Grading, Erosion Control, Stormwater, Illicit Discharge, Tree Protection, and Wells
- Bend Design Standards and Specifications, Part II, Chapter 6, Stormwater
- Central Oregon Stormwater Manual (COSM)
- Bend Development Code (BDC) Title 2, Land Use Districts
- BDC Title 3, Design Standards
- BDC Title 4, Applications and Review Procedures

To comply with the MS4 Permit, Bend is updating its stormwater development procedures in 2025 to seek more consistent enforcement of stormwater standards and more effective facility design and construction on residential lots for subdivision and short plat applications.

While the lot-scale pattern described in these codes and standards relieves the City of providing an all-inclusive public stormwater system, it has drawbacks. Disadvantages include the following:

- Crowding out owner-preferred elements of residential landscaping/hardscaping such as lawns, planting beds, or patios on small lots.
- Assuming that individual lots have capacity to manage urban stormwater runoff, including appropriate geology, and space to place facilities outside of setbacks to other properties, streets, and hazardous features such as steep slopes.

- Entrusting individual property owners or HOAs with responsibility for systems that can be difficult to inspect, operate, and maintain.
- The frequently long time period between land disturbance on individual lots (grubbing, rough grading) and provision of stormwater facilities during development of some large subdivisions can mean that stormwater facilities in the streets are exposed to more sediment running off of lots that have not been stabilized.

The review of the existing codes and standards revealed that alternate stormwater system development options are allowable but face administrative barriers, are not widely known or understood, and are infrequently used.

### 6.1.2. Alternatives to Lot-Scale Stormwater Management

To mitigate some of the disadvantages of lot-scale stormwater management, the white paper explores alternatives the City could allow or promote. The options include techniques other than lot-scale stormwater management that are allowed but infrequently used as well as techniques that may not currently be allowed in Bend.

**Centralized On-site Stormwater Management**

One option is centralized on-site stormwater management, defined as the provision of a unified stormwater conveyance network and centralized stormwater treatment facilities which may manage runoff from both private lots and public streets. Centralized on-site stormwater management is allowed in Bend through a master planned development and may also be allowed in other circumstances. However, it is rarely used. The review of governing policies found that:

- The drainage submittal requirements in BMC 16.15.010.B allow for residential, commercial, institutional, or industrial development to apply stormwater management standards to the common land development plan, rather than lot by lot, if the development has a master plan that includes formal arrangements for stormwater drainage across multiple properties. However, Specification 6.4.1 allows only residential developments to pipe runoff to the ROW. City staff have indicated that no commercial or industrial projects have been permitted to comingle runoff with public runoff in the ROW.
- BMC 16.15.040.A.4 requires stormwater drainage in excess of the predevelopment rates or volumes to be retained on the lot of origin and not trespass onto the public right-of-way or private property except: a) if City determines retaining would pose a threat to public safety or adjacent properties, b) when the owners of the lots of origin compensate the City for the cost of constructing, operating, and maintaining additional stormwater drainage and treatment capacity, c) access is provided to on-site stormwater facilities, or d) if the development has a master plan that includes formal arrangements for stormwater drainage across multiple properties
- BMC 16.15.040.A.6 allows stormwater facilities within residential subdivisions to serve multiple lots and/or combination of lots and roadways if stormwater facilities are located on a lot owned and maintained by an HOA.

The white paper explores how centralized on-site stormwater management has been used successfully for residential subdivisions and non-residential site development in Bend and other Oregon communities. It identifies infill as a type of development that could benefit from more investigation into the barriers to and opportunities for centralizing stormwater management systems. See Table 17.

**Table 17 Summary of Centralized On-Site Stormwater Management Options**

| Development Type | Location of Stormwater Facility | Who is Draining | Facility Owner Existing Options [Recommended Options] | Approval Process |
|---|---|---|---|---|
| Residential Subdivision, streets and lots managed together | Street, tract, or individual lot, or combination | Lots and Street | Varies, HOA or City [HOA on tract; City in ROW] | Typically Type II* |
| Non-Residential Site Development | Lot | Lot | Commercial/Multifamily property owner [Commercial/Multifamily property owner] | Typically Type II* |
| Infill | Private property within easement or street, in limited cases | Private | Private, could be HOA or individual owners | Minimum Development Standards (MDS) Review** |

** Type II decisions are made by the Community and Economic Development Director following public notice and an opportunity for parties to comment but without a public hearing. (BDC 4.1.415)*
*** MDS Applications are generally reviewed under the Type I process, which may be handled administratively by the Community and Economic Development Director without public notice or hearing because this is neither a land use decision nor a limited land use decision (BDC 4.1.310). MDS are defined within BDC 4.2.*

The white paper explores the barriers to centralized on-site stormwater management, which include current code, standards, procedures, and public funding.

**ROW Comingled Stormwater Management Options**

Another alternative for stormwater management is to allow private or comingled public/private stormwater facilities in the City's ROW. Managing lot runoff in the ROW could be accomplished either by allowing a development such as infill to drain to existing public conveyances and facilities or allowing a development to construct a system in the ROW. Managing lot runoff in the ROW would be a bigger departure from current practice than centralized on-site stormwater management. ROW stormwater management options may be most needed for infill that does not have adequate space for functional on-lot or multi-lot facilities.

The review of governing policies found that BMC 16.15.040.A.4 allows drainage from private property to enter the ROW when the owners of the lots of origin compensate the City for the cost of constructing, operating, and maintaining additional stormwater drainage and treatment capacity. This option is not approvable because the City has established neither a mechanism for calculating, charging, collecting, and using such a fee nor standards for demonstrating that an existing public system has adequate capacity. In addition, developments that might benefit from this option (infill) typically go through the MDS Review instead of full land use review, and the purpose of the MDS Review is to streamline and simplify approvals for development. If this option were approvable, then the applicant could connect to or construct a stormwater facility in the ROW as part of an infill land division. Facilities would require a ROW permit and would be built to public improvement standards. The City would need to establish a mechanism and determine if the applicant would reimburse the City for future operation and maintenance, and the City would then own and operate the facilities.

The white paper explores the barriers to ROW comingled stormwater management, which include the MDS Review process, lack of funding for maintenance of more public stormwater facilities, and perception of fairness when using public assets to provide a service that is typically provided by private parties.

**Regional Facilities or Regional Stormwater Strategies**

The City of Bend is investing in several locations such as Central Core/Midtown with the multiple aims of supporting economic development, improving public safety, providing adequate housing inventory, improving circulation, and beautification. Creation of regional stormwater strategies and/or regional stormwater facilities can support these aims by planning for or providing required infrastructure in advance of redevelopment, which could reduce costs and streamline permitting. A regional stormwater strategy addresses conveyance, water quantity control, and water quality treatment through a planned set of public, private, and/or public and private stormwater infrastructure. A regional stormwater strategy could include several types of solutions to manage runoff in a coordinated manner. A regional stormwater facility is typically described as a large stormwater management solution strategically situated and designed to serve multiple properties, which often are under varied ownership and span a large area, to optimize stormwater management as part of a development project or to facilitate redevelopment.

Regional stormwater planning requires significant investment from the City, starting with commitment to exploring opportunities and then coordinating with community stakeholders, identifying or developing a funding mechanism, and permitting implementation by updating policies and codes. The white paper explores these steps in greater detail and provides numerous successful examples from the Pacific Northwest.

### 6.1.3. Recommendations and Next Steps

The recommendation is for Bend to provide more flexible options for managing stormwater on development and redevelopment sites. Bend must also maintain compliance with NPDES and WPCF permits from the state and protect public safety by regulating conveyance capacity, downstream impacts, and technical feasibility of stormwater facilities based on site conditions. City staff have articulated the following overarching tenets for guiding further investigation or implementation of changes to stormwater management policies:

- Public stormwater facilities should be constructed to public improvement standards and provide adequate access for maintenance.
- Stormwater facilities in the ROW should be owned and operated by the City.
- The City should identify adequate resources to maintain a larger inventory of public facilities if any recommendations to allow more public facilities are pursued and implemented.
- The City should establish an internal committee to determine the steps necessary to implement recommendations in this SMP, including code/standards updates, development permitting processes, fees/funding adjustments if needed, and stakeholder involvement.
- The City should evaluate the budget and planning resources necessary to develop a specific stormwater master plan for the Central Core/Mid Town area that evaluates and recommends district-specific public-private stormwater management.

The white paper lists specific policies and technical standards which the City may explore updating.