



Staff Report

File #: 20-333

Version: 2

Date: 9/28/2020

Item #: 7.2a.

TO: Mayor and City Council
THROUGH: Steve Powers, City Manager
FROM: Peter Fernandez, PE, Public Works Director

SUBJECT:

Amending *Salem Revised Code* Chapter 70 (Utilities), Chapter 71 (Stormwater), and Chapter 601 (Floodplain Overlay Zone).

Ward(s): All Wards

Councilor(s): All Councilors

Neighborhood(s): All Neighborhoods

Result Area(s): Natural Environment Stewardship.

ISSUE:

Shall City Council conduct second reading and enact Engrossed Ordinance Bill No. 8-20, amending Chapter 70 (Utilities), Chapter 71 (Stormwater), and Chapter 601 (Floodplain Overlay Zone) of the *Salem Revised Code*?

RECOMMENDATION:

Conduct second reading and enact Engrossed Ordinance Bill No. 8-20, amending Chapter 70 (Utilities), Chapter 71 (Stormwater), and Chapter 601 (Floodplain Overlay Zone) of the *Salem Revised Code*.

SUMMARY:

Engrossed Ordinance Bill No. 8-20 (Attachment 1) amends Chapters 70, 71, and 601 of *Salem Revised Code* (SRC) in order to improve Salem's rating within the Federal Emergency Management Agency's (FEMA's) Community Rating System (CRS) program. Based on CRS credit points awarded to a community, there is a discount on flood insurance premiums ranging from five percent to 45 percent. CRS classifications range from Class 9 to Class 1, with Class 1 being best. Currently, the best rating statewide is Class 5; a rating that Salem shares with two other communities. A Class 5 CRS rating results in a 25 percent reduction to all flood insurance premiums within Salem when compared to an undiscounted rate. FEMA requires certain minimum prerequisites to be met in order for Salem to improve to Class 4 rating. Salem is eligible for a Class 4 rating once it has met the

mandatory prerequisites at the Class 4 level. A Class 4 level would reduce flood insurance premiums 30 percent when compared to an undiscounted rate.

Engrossed Ordinance Bill No. 8-20 includes amendments to the SRC that are required for Salem to have a Class 4 rating and sets the stage for Salem to earn additional credit points to improve up to a Class 2 rating, which will result in a 40 percent reduction to all flood insurance premiums within Salem.

Approximately 20,000 communities nationwide participate in the National Flood Insurance Program. As of October 2019, only five of those communities have achieved a CRS rating of Class 4. Only 12 communities nationwide have achieved a CRS rating of Class 3 or better. Salem is scheduled for a review of its CRS rating by FEMA at the end of year 2020 and is tentatively projected to achieve a Class 4 rating.

Pursuant to SRC 300.1110(e), staff has sent notice of the proposed amendments to all flood-prone properties as well as Neighborhood Associations, Marion Polk Home Builders Association, Salem Realtors Association, Salem Area Chamber of Commerce, watershed councils, and other interested stakeholders.

FACTS AND FINDINGS:

Procedural Findings

1. Oregon Revised Statute (ORS) 197.610 and Oregon Administrative Rule (OAR) 660-018-0020 require that notice be provided to the Department of Land Conservation and Development (DLCD) on any proposed amendment to a local land use regulation at least 35 days prior to the first public hearing. The public hearing on this matter was held August 24, 2020. Notice to DLCD was provided within 35 days of the proposed hearing date.
2. Public notice has been sent by mail and published in the *Statesman Journal* newspaper, as required under SRC 300.1110(e).

Proposed Amendments

1. The complete text of the proposed amendments is included as Exhibit A to Engrossed Ordinance Bill No. 8-20 (see Attachment 2). The majority of the ordinance reflects the minimum requirements needed to comply with the prerequisites for achieving CRS Class 4 rating or better. Other minor modifications are included that have been compiled over time as staff has discovered inconsistencies or missing information in the SRC.
2. Ordinance Bill No. 8-20 was engrossed to correct a scrivener's error in the proposed revisions to SRC 71.095(c) regarding the twenty-five-year storm event. Amendments

proposed in Engrossed Ordinance Bill No. 8-20 are described below:

- a. The definition of "Large project" is modified in SRC 70.005. This term is used primarily in SRC 71.090 to establish the minimum threshold for projects that require stormwater flow control and treatment facilities. The ordinance changes "ground disturbance" to "new pervious surface" as explained below. In addition, the definition of "Large project" is clarified to distinguish between projects in the right-of-way and projects on private property. Because stormwater facilities on private property are owned and regulated differently than stormwater facilities in the right-of-way, the existing definition can result in small, ineffective, and expensive facilities that do not provide any measurable benefit to the stormwater system.
 - b. "New pervious surface" is added to better clarify the term "ground disturbance" in the definition of "Large project." The term "ground disturbance" was used when SRC Chapter 71 was originally adopted in 2013 in order to be consistent with terminology used in SRC Chapter 75 (Erosion Prevention and Sediment Control). Staff has discovered over time that the term "ground disturbance" is not effective in SRC Chapter 71 because landscaping or other similar ground disturbance does not warrant construction of flow control or treatment facilities. However, the definition of "new pervious surface" includes large areas stripped of vegetation that are compacted and otherwise modified in a way that does not mimic natural hydrologic functions and warrant flow control and treatment.
 - c. SRC 71.090(b) is eliminated because changes proposed to SRC 71.095 eliminate the potential for additional peak stormwater flows to be discharged from large project sites.
 - d. SRC 71.095(c) ensures that peak flows from a large project do not exceed existing flows during larger storms. This reduces the risks of flood damage on downstream properties. This amendment is required in FEMA's Class 4 prerequisites for achieving a CRS rating of Class 4 or better. The proposed amendment has been approved by FEMA as conforming with CRS Class 4 prerequisites.
 - e. SRC 601.070(a)(5) is amended as required in FEMA's Class 4 prerequisites for achieving a CRS rating of Class 4 or better. This change corrects scrivener's errors from Ordinance 17-19 because the changes proposed to SRC 601.070(a)(5) in Ordinance 17-19 are consistent with the information shared by staff during the public hearing for Ordinance 17-19.
3. Changes to SRC 71.095(c) further restrict peak flows from development projects during larger storm events and require additional storage volume for flow control facilities. Staff has estimated the impact that changes to SRC 71.095(c) will have on development projects as follows:

- a. Residential Subdivisions: A typical subdivision dedicates approximately five percent of its land for stormwater treatment and flow control facilities. For a 100-lot subdivision, the equivalent of six lots need to be set aside for stormwater facilities. Changes to SRC 71.095(c) will add approximately 20 to 50 percent to the required volume of stormwater facilities. This increases the percentage of land dedicated to stormwater facilities from five percent to approximately seven to nine percent. Under the new regulation, approximately seven to nine lots would need to be set aside for that same 100-lot subdivision, reducing the number of buildable lots by one to three percent.
- b. Commercial/Industrial Building Sites: A typical building development dedicates approximately eight percent of its land for stormwater treatment and flow control facilities. For a 100-space parking lot, the equivalent of eight parking spaces need to be set aside for stormwater facilities. Changes to SRC 71.095(c) add approximately 20 to 50 percent to the required volume of stormwater facilities, which increases the percentage of land dedicated to stormwater facilities from eight percent to approximately 10 to 12 percent. Under the new regulation, approximately 10 to 12 parking spaces would need to be set aside for that same 100-space parking lot, reducing the number of available spaces by two to four percent.

Substantive Findings

SRC 110.085 establishes the following approval criteria that must be met for a Code amendment to be approved:

1. *The amendment is in the best interest of the public health, safety, and welfare of the City.*

Finding: The Code amendment is in the best interest of the public health, safety, and welfare of the City because it minimizes peak stormwater discharges from new and replaced impervious surfaces and reduces risks of flood damage for flood-prone properties.

2. *The amendment conforms with the Salem Area Comprehensive Plan, applicable Statewide Planning Goals, and applicable administrative rules adopted by the Department of Land Conservation and Development.*

Finding: The *Salem Area Comprehensive Plan* (SACP) is the long-range plan for guiding development in the Salem urban area. The overall goal of the plan is to accommodate development in a timely, orderly, and efficient arrangement of land uses and public facilities and services that meet the needs of present and future residents of the Salem urban area.

The proposed Code amendment was reviewed for conformance with the applicable goals and policies of the SACP, Statewide Planning Goals, and administrative rules adopted by the Department of Land Conservation and Development. The following goals and policies relate to the proposed Code amendment:

- ***Natural Resources Goal***: *To conserve open space, protect natural, historic, cultural and*

scenic resources, and to protect life and property from natural disasters and hazards.

Policy 7: Flood Hazards

Development in the floodplain shall be regulated to preserve and maintain the capability of the floodplain to convey the flood water discharges and to minimize danger to life and property.

The proposed Code amendment is consistent with the above SACP natural resources goal and policy because it minimizes peak stormwater discharges from new and replaced impervious surfaces and minimizes danger to life and property by reducing risks of flood damage for flood-prone properties.

- **Statewide Land Use Planning Goal 7 - Areas Subject to Natural Disasters and Hazards:** *Goal 7(C)(7) Local governments will be deemed to comply with Goal 7 for coastal and riverine flood hazards by adopting and implementing local floodplain regulations that meet the minimum National Flood Insurance Program (NFIP) requirements.*

The proposed Code amendment conforms to this goal because it implements NFIP requirements established by FEMA for Salem to improve its Community Rating System classification and reduce flood insurance premiums.

Responses to Comments Received on September 14, 2020

Three residents provided oral or written testimony at the September 14, 2020, Council meeting objecting to changes proposed in Engrossed Ordinance Bill No. 8-20. The written comments are provided as Attachment 3. The objections are summarized below with staff responses:

1. **SRC 71.090 (Downstream Capacity)**. A resident objected to elimination of SRC 71.090(b), which currently requires developers to provide additional stormwater facilities or improve the public stormwater system if insufficient capacity exists in the downstream public stormwater system.

The concern is likely based on a misperception that developments could be constructed without correcting deficiencies in downstream stormwater facilities. SRC 71.090(b) is eliminated specifically because of changes to SRC 71.095(c). Modifications to SRC 71.095(c) require that development projects increase detention volume and flow restriction to ensure that downstream peak flows do not increase for four major storm events (one half of the 2-year, 10-year, 25-year, and 100-year storm events). Because changes to SRC 71.095(c) mandate that developments do not increase downstream peak flows, SRC 71.090 is unnecessary because impacts of the development are addressed within the project site, not downstream.

2. **SRC 70.005 (Design Storm)**. A resident objected to the definition of “design storm” because it specifies a 24-hour time period, which does not accurately reflect storm events in the Mid-Willamette Valley.

There are merits to the argument that using longer duration storm events or continuous rainfall simulation models will more closely match observed conditions. However, using a 24-hour design storm is a standard practice for many municipalities across the U.S. and has been the practice of the City since at least 2013 when Council adopted SRC 71 (Stormwater). The definition is simply being carried forward unchanged under Engrossed Ordinance Bill No. 8-20. Further, this definition meets the requirements for the Community Rating System of the Federal Emergency Management Agency (FEMA). Lastly, the definition of design storm is generally addressed as part of the City's Municipal Separate Storm Sewer System (MS4) permit issued under the federal Clean Water Act. The City's permit is currently under review by the Oregon Department of Environmental Quality. At this point, staff does not expect any changes to be proposed as a requirement of an updated MS4 permit. Should the next MS4 permit require changes, staff will return to Council with proposed amendments to SRC 70 and SRC 71.

3. Availability of Flood Maps. A resident testified that the City is being less than transparent in providing flood risk information to the public. The resident added that although the City was reluctant to use the latest modeling information to update FEMA-adopted Flood Insurance Rate Maps, the public nonprofit organization First Street Foundation is independently making the information available nationwide.

This comment is not relevant to Engrossed Ordinance Bill No. 8-20 but is, rather, related to the proposed amendment to the *Stormwater Master Plan* (SWMP), which is scheduled for a public hearing September 28, 2020. Nevertheless, three points:

- 1) At issue in the testimony is whether the data and analysis used to develop the basin plans in the SWMP should be used to update the Flood Insurance Rate Maps (FIRMs) *using the methodology approved by FEMA*. The advantage of updating the FIRMs and gaining FEMA approval is that errors in the current maps can be corrected. The disadvantage of using FEMA's methodology is that FEMA requires the analysis to assume all "non-leveed embankments" will fail. This could result, for example, in a property located on the inland side of a raised highway or an elevated railroad line being placed in the regulated floodplain when, in fact, the probability of flooding is very small. Policy 3.15 (Updating Floodplain Maps) in the proposed SWMP amendment was developed in 2018 with the help of a Stormwater Advisory Committee. In part, this policy states that the City will not use the FEMA-approved methodology for delineating floodplains but will use "a methodology that applies best professional judgement regarding whether non-accredited levee systems should be credited for reducing risks of flooding." The resulting floodplain maps will be promulgated locally as Interim Flood Hazard Areas and regulated accordingly.
- 2) It is incorrect to believe that flood mapping information is being withheld from the public. In fact, the City receives Community Rating System credit points specifically because flood maps are made readily available to the public. (See, for example, <https://www.cityofsaalem.net/Pages/local-floodplain.aspx>.) Additionally, Public Works

staff have entered into two separate contracts with a local engineering consultant to generate new flood inundation maps for the purpose of adopting Interim Flood Hazard Maps pursuant to SRC 601.030.

- 3) It is correct to note that flood hazards are inadequately represented in FEMA-approved FIRMs or in City-adopted Interim Flood Hazard Areas. City staff have consistently alerted property owners that lines on government-produced maps showing the boundaries of a regulated floodplain *do not* represent physical barriers to floodwaters. Privately produced flood maps can be illustrative of the risks of flooding to properties and the referenced nonprofit organization does so by calculating a "Flood Factor" ranging from 1 to 10, with the higher score indicating a higher risk of flooding. (See <https://firststreet.org>.) However, private sector flood mapping information cannot be used at the municipal level for regulating development.

BACKGROUND:

Engrossed Ordinance Bill No. 8-20 (Attachment 1) updates Chapters 70, 71, and 601 of *Salem Revised Code* (SRC) in order to meet minimum requirements of the Federal Emergency Management Agency's (FEMA's) Community Rating System (CRS) program. CRS classifications range from Class 9 to Class 1, with Class 1 being best.

The CRS program includes a system of earning credit points for implementing floodplain management activities that exceed minimum standards of the National Flood Insurance Program. Communities can choose from a wide variety of activities to achieve their CRS rating, and each 500 credit points accrued by a community improves its CRS rating by one classification. However, CRS rating levels 9, 6, 4, and 1 are restricted by mandatory prerequisites; a community cannot progress beyond these rating levels regardless of credit point totals if the prerequisites for that rating level are not met.

Salem has over 3,000 credit points and is potentially eligible for a Class 4 rating, but Salem's current rating is Class 5 because it has not met the mandatory prerequisites at the Class 4 level. Engrossed Ordinance Bill No. 8-20 includes amendments to SRC that are required for Salem to have a Class 4 rating and opens the opportunity for Salem to earn additional credit points to improve up to a Class 2 rating.

Approximately 20,000 communities participate in the NFIP nationwide. As of October 2019, only five of those communities have achieved a CRS rating of Class 4, which provides a 30 percent reduction to flood insurance premiums. Only 12 communities nationwide have achieved a CRS rating of Class 3 or better. Salem is scheduled for a review of its CRS rating by FEMA at the end of year 2020 and is tentatively projected to achieve a Class 4 rating.

First reading of Ordinance Bill No. 8-20 was conducted at the July 13, 2020, City Council meeting. The ordinance was engrossed and was the subject of a public hearing conducted at the August 24, 2020, City Council meeting.

Robert D. Chandler, PhD, PE
Assistant Public Works Director

Attachments:

1. Engrossed Ordinance Bill No. 8-20
2. Exhibit A to Engrossed Ordinance Bill No. 8-20
3. Public Comments received 9-14-2020