

**Responses to Comments Received in Advance of September 28, 2020  
Public Hearing on Stormwater Master Plan Amendment.**

Several members of the public commented on the proposed amendment to the City of Salem Stormwater Master Plan in advance of the public hearing on September 28, 2020. Some comments were received in writing and will be included in the file for the public hearing. Other comments were made during the public outreach or during one-on-one conversations with staff. Several comments incorporated more than one issue and others required rewriting for clarity purposes. Staff responses to comments received by close of business on Wednesday, September 23, 2020 are provided below.

**Note:**

CIP.....Capital Improvement Plan  
DLCD .....Oregon Department of Land Conservation and Development  
FEMA ....Federal Emergency Management Agency  
FIRM.....Flood Insurance Rate Maps  
MGD.....Million gallons per day  
NFIP .....National Flood Insurance Program  
ORS .....Oregon Revised Statutes  
SDC.....System Development Charge  
SRC.....Salem Revised Code  
SWMP ...Stormwater Master Plan`

**1. Missing row in Table 1.1**

**Location:** Page 1-3

**Comment:** West Bank Basin is missing from Table 1.1

**Response:** A row was inadvertently omitted. Table 1.1 will be revised with an added row.

Table 1.1 – Stormwater Basin Plans and Sources

Basin	Source
Battle Creek	<i>Battle Creek Basin Plan</i> (City of Salem 2019a)
Croisan Creek	<i>2000 Stormwater Master Plan</i> (City of Salem 2000a)
East Bank	<i>2000 Stormwater Master Plan</i> (City of Salem 2000a)
Glenn Gibson Creek	<i>2000 Stormwater Master Plan</i> (City of Salem 2000a)
Little Pudding Creek	<i>2000 Stormwater Master Plan</i> (City of Salem 2000a)
Mill Creek	<i>Mill Creek Basin Plan</i> (City of Salem 2019b)
Pringle Creek	<i>Pringle Creek Basin Plan</i> (City of Salem 2019c)
Upper Claggett Creek	<i>2000 Stormwater Master Plan</i> (City of Salem 2000a)
<b>West Bank</b>	<b><i>2000 Stormwater Master Plan</i> (City of Salem 2000a)</b>

**Responses to Comments Received in Advance of September 28, 2020  
Public Hearing on Stormwater Master Plan Amendment.**

**2. Sentence needs updating**

**Location:** Page 1-10

**Comment:** There should be an update to the statement “DLCD expects FEMA Region 10 will develop new guidance for NFIP communities by the fall of 2017.”

**Response:** FEMA Region 10 continues to work on the guidelines with no projected date of completion. The line will be revised to read “FEMA Region 10 is developing new guidance for NFIP communities.”

**3. Confirm total number of projects listed in 2000 Stormwater Master Plan**

**Location:** Page 1-21

**Comment:** The statement “For the remaining nine basins, a total of 288 projects were listed” does not agree with Table 6-10 of the 2000 Stormwater Master Plan, which indicates the number should be 289.

**Response:** The total number of projects shown in Table 6-10 of the 2000 Stormwater Master Plan is incorrect. This table indicates there were 58 projects identified for the Pringle Creek Basin when, in fact, there were only 57. Projects listed in Table 6-7 (Pringle Creek Basin Project List) are numbered PCB1 through PCB58, but there is no PCB15. The total number of projects in the nine basins contained in the 2000 Stormwater Master Plan is, in fact, 288 and the statement on Page 1-21 of the 2020 Stormwater Master Plan is correct.

**4. Why have so few “Early Action Items” from 2000 Stormwater Master Plan been completed?**

**Location:** Page 1-21

**Comment:** Why have only eight of the 41 “Early Action Items” identified in the 2000 Stormwater Master Plan completed over the past 20 years?

**Response:** Generally, capital project expenditures for the Utility Fund over the past 20 years have focused on high priority water and wastewater facilities and less on stormwater. Examples include: Willow Lake Headworks and Pumps Project (\$104.2M), River Road Wet Weather Treatment Facility Project (\$33.0M), and 75 MGD Water Main Transmission Project (\$25.9M). Even now, significant water projects are underway, including expansion of the Aquifer Storage and Recovery system at Woodmansee Park, installation of groundwater wells on Geren Island, and construction of the ozone treatment facility also on Geren Island. Creation of the Stormwater Utility in 2013 and its full implementation in 2016 decoupled stormwater funds from wastewater funds and is expected to result in more dedicated funding for stormwater projects. Additionally, following Council adoption of the 2020 Stormwater Master Plan, the stormwater SDC methodology will be reviewed and updated, which may result in more stormwater SDC funds available for projects over time.

**Responses to Comments Received in Advance of September 28, 2020  
Public Hearing on Stormwater Master Plan Amendment.**

**5. Table 1.1 lists basins in different order than Table 1.4.**

**Location:** Page 1-22

**Comment:** Why is the order of basins listed in Table 1.4 (Planning Cycle for Salem's Stormwater Basins) different from the order of basins listed in Table 1.1 (Stormwater Basin Plans and Sources)?

**Response:** Table 1.1 lists the basins in alphabetic order; Table 1.4 lists the basins in the order that their plans will be updated.

**6. West Bank Basin map does not include portions of west Salem.**

**Location:** Page 1-24 and Chapter 15

**Comment:** Why are portions of west Salem shown as outside of the West Bank Basin on the maps?

**Response:** The map of the West Bank Basin is being carried forward unchanged from the 2000 Stormwater Master Plan. Why certain areas contiguous to the West Bank Basin were included in the basin for Willamette Slough in 2000 is not known. The West Bank Basin Plan is among the basins to be updated beginning in 2021 and the basin boundaries may be modified in the resultant basin plan.

**7. What is the relationship between boundaries of West Bank Basin and compliance with the Willamette Greenway Overlay Zone?**

**Location:** Page 2-2

**Comment:** How does exclusion of portions of west Salem from the West Bank Basin comply with Policy 1.3 (Willamette Greenway)?

**Response:** There is no relationship between the lines on a map indicating hydrologic/hydraulic basin boundaries and a policy stating that programs and projects conducted by the City of Salem within the Willamette Greenway Overlay Zone will serve to protect and enhance the natural, scenic, recreational, historical, and economic resources of the Willamette River corridor.

**8. What is the timeline for completing the inventory of stormwater assets?**

**Location:** Page 2-7

**Comment:** Is there a timeline for Policy 4.1 (Asset Inventory)?

**Response:** Policy 4.1 states that all major public and select private stormwater assets shall be inventoried and documented in the City's Geographic Information System (GIS) and the Infor Public Sector (IPS) computerized information management system. As this work will always be an ongoing effort, there is no timeline for completion.

**9. Does Policy 8.1(5) imply that stormwater SDC funds can be used for non-SDC eligible projects?**

**Location:** Page 2-2

**Comment:** Policy 8.1(5) states: "Provide for flexibility in expenditures, which will not be limited by watershed or basin, or the need for matching non-SDC funds." This policy appears to imply that projects other than 309-listed projects can appropriately be funded by Stormwater SDC moneys.

**Response:** Policy 8.1(5) clarifies that stormwater SDC (System Development Charge) funds are available system wide for SDC-eligible projects. The non-area specificity in this policy is

**Responses to Comments Received in Advance of September 28, 2020  
Public Hearing on Stormwater Master Plan Amendment.**

consistent with how SDC eligibility is addressed for transportation, parks, water, and wastewater projects. Explained another way, there is no “Battle Creek Basin SDC fund” and no “Mill Creek Basin SDC fund” but a single Stormwater SDC fund. Eligibility for SDC funding is governed by ORS 223.309 and this policy does not indicate otherwise. Regarding non-SDC fund matching, the current stormwater SDC methodology specifies for most projects that funding be divided between SDC and non-SDC sources. This policy restricts opportunities for SDC expenditures because of the need for non-SDC matching funds. This non-SDC matching fund policy was recently changed in the recent SDC methodology update for Parks and Transportation, allowing for greater flexibility in SDC expenditures. Staff anticipates that a future update to the stormwater SDC methodology will similarly eliminate the requirement for non-SDC fund matching. Note also that Policy 8.1(5) is subordinate to Policy 8.1 which states “the City shall implement a stormwater SDC methodology on new development to help pay for *eligible stormwater infrastructure*” [emphasis added].

**10. What about providing information on flood risks provided by third parties?**

**Location:** Page 2-4

**Comment:** The public nonprofit organization First Street Foundation is independently publishing flood risk information nationwide.

**Response:** This comment can be related to Policy 3.6 (Flood Risk Mapping). This policy states the “City shall make readily available to the general public information related to flooding” and lists four categories at minimum: (1) Flood Insurance Rate Maps; (2) Interim Flood Hazard Area Maps; (3) Flood inundation maps; and (4) known areas subject to past flooding. Not included in this listing is flood risk information provided by third parties.

First Street Foundation is a nonprofit research and technology group based in Brooklyn, NY. Its stated purpose is to provide accurate, property-level, publicly available flood risk information for individual properties. In June 2020 First Street Foundation released an online tool that provides a “Flood Factor” for any property located throughout the contiguous United States. (See <https://firststreet.org>.) Flood Factors are numeric values between 1 and 10; the higher the value, the higher the risk of flooding. The values are based on modeling assumptions that incorporate weather data, terrain, hydrography, soil types, and much more. In addition to using historic records, the flood model also approximates changes in environmental factors caused by global climate change.

It is recognized that flood hazards are inadequately represented in FEMA-approved Flood Insurance Rate Maps 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. The information provided by First Street Foundation can be regarded as a public service in that it illustrates the relative risks of flooding to property owners. However, private sector flood mapping information cannot be used at the municipal level for regulating development. At this time, references to the work of First Street

**Responses to Comments Received in Advance of September 28, 2020  
Public Hearing on Stormwater Master Plan Amendment.**

Foundation will not be placed on the City's public website to avoid implying endorsement and concurrence of the First Street Foundation's Flood Factor, its methodology, assumptions, caveats, limitations, results, and implications.

**11. Availability of flood risk maps?**

**Location:** Page 2-4

**Comment:** Is the City being less than transparent in providing flood risks to the public?

**Response:** It is incorrect to believe that flood mapping information is being withheld from the public. Policy 3.6 (Flood Risk Mapping) specifically states the "City shall make readily available to the general public information related to flooding" and lists four broad categories of maps. Further, the City receives Community Rating System credit points specifically because flood maps are made readily available to the public. (See, for example, <https://www.cityofsalem.net/Pages/local-floodplain.aspx>.) Additionally, Public Works staff continue to identify areas at risk of flooding and have recently 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. These maps will be made available to the public once completed. Lastly, the most recent maps showing model results of Battle Creek, Mill Creek, and Pringle Creek basins under various storm event and build out conditions are already posted on the City's public website.

**12. Should the City use the data and modeling results collected for the basin plans to update its Flood Insurance Rate Maps using the FEMA-adopted methodology?**

**Location:** Page 2-6

**Comment:** Per Policy 3.15 (Updating Floodplain maps), the City states it will not use the FEMA-approved methodology for delineating floodplains. Why?

**Response:** At issue 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 upland 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 developed by this committee 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 Area Maps and regulated accordingly.

**Responses to Comments Received in Advance of September 28, 2020  
Public Hearing on Stormwater Master Plan Amendment.**

**13. Using stormwater SDC funds to purchase property**

**Location:** Page 4-2

**Comment:** The description of an SDC improvement fee on this page states that it “reflects the cost of capacity-increasing capital projects.” Does this preclude using stormwater SDC funds to acquire property?

**Response:** The description provided on Page 4-2 is based on ORS 223.307(2), the full text below:

Improvement fees may be spent only on capacity increasing capital improvements, including expenditures relating to repayment of debt for such improvements. An increase in system capacity may be established if a capital improvement increases the level of performance or service provided by existing facilities or provides new facilities. The portion of the improvements funded by improvement fees must be related to the need for increased capacity to provide service for future users.

Property purchases are a necessary prerequisite for constructing many capacity increasing capital improvements for stormwater. Battle Creek Park, for example, was purchased in part with stormwater SDC funds to facilitate construction of detention facilities and riparian improvements. Purchasing property to construct a stormwater facility is no different from properties purchased with transportation SDC funds for roadways in advance of construction, water or wastewater SDC funds for easements purchased prior to installing underground utilities, and park property acquired with park SDC funds before master plans are completed and construction commenced. Note also that the cost of property acquisition is incorporated into the cost of several facilities listed in the Stormwater Facility Plan (Chapter 3 of the 2020 SWMP).

The concept of “capacity” in urban stormwater runoff management is more than pipes, ditches, and culverts. The 2000 Stormwater Master Plan, for example, included “bioengineering/habitat” projects that protected and improved waterway banks, and “special stream habitat” projects that restored and enhanced the stream channel and riparian corridor. Capacity can also be increased, for example, by purchasing land with trees and other natural features that will reduce overland flow through transpiration and infiltration.

**14. Oversight of expenditures of the City’s System Development Charges.**

**Location:** Page 2-12

**Comment:** There should be citizen oversight of projects funded by stormwater System Development Charges, specifically on staff recommendations to expend “unspecified” funds.

**Response:** After Council adoption of the Stormwater Master Plan, the City will be updating the stormwater SDC methodology and producing a new “309” project list in conformance with ORS 223.309. This effort will be a public process and involve members of the community in its development. Opportunities already exist for members of the Salem community to be involved in spending decision by City Council, including when Council is considering expenditures involving projects funded by System Development Charges.

**Responses to Comments Received in Advance of September 28, 2020  
Public Hearing on Stormwater Master Plan Amendment.**

Additionally, there is always a public hearing in advance of adoption of the proposed Capital Improvement Plan (CIP). The CIP process is governed by Council Policy C-9, which includes goals related to transparency of process and public involvement. Council Policy C-9 also includes a provision establishing a CIP Review Committee. This is a standing committee charged with reviewing department project requests, additions/changes to the CIP, financial assumptions, organizational capacity to complete the requests, and project plans. Projects proposed for the CIP will be reviewed and prioritized by a CIP Review Committee before being forwarded to Council for approval. There is no requirement nor a need to form an "Expenditure Review Committee" for SDC-funded projects for stormwater or for the SDC funding for transportation, parks, water, and wastewater projects.

**15. How are small conveyance systems addressed in the 2020 SWMP?**

**Location:** Page 5-3

**Comment:** The third paragraph from the bottom of Page 5-3 includes this line: "The estimated cost for these projects is based on estimates contained in the 2000 Stormwater Master Plan with a multiplier of 1.668 applied to convert the 2000 values to 2019 dollars." Why then are the modifications of 2000 SWMP project costs increased by an additional five percent in the Draft SWMP 2020 for Battle Creek Basin and, presumably, the other basins?

**Response:** In addition to applying the multiplier of 1.668 to convert costs in 2000 values to 2019, each project cost was also increased by five percent. This is stated in the last sentence of the same paragraph on Page 5-3: "A small conveyance improvement allowance of five-percent is applied to the subtotal of each project." This is a deliberate modification of the approach taken 20 years ago.

When developing the basin projects in the 2000 SWMP, the modeling methodology was only capable of analyzing large conveyance systems (defined as greater than 36 inches in diameter). To compensate, an assumption was made that the cost to improve all the small non-specified conveyance systems was equal to five percent of the all the costs of the identified major capital projects. In a July 2020 City Council decision, it was affirmed that per the 2000 SWMP and the 2002 stormwater System Development Charge (SDC) methodology, the amount identified for small conveyance improvements and listed under each basin plan could be combined and made available for use systemwide.

In drafting the 2020 SWMP, a similar approach could have been used by applying a five percent small conveyance improvement allowance to *all* projects in *all* nine basin plans, summing the values, and identifying the total as a single estimate for all small conveyance improvements needed systemwide. Doing so would be consistent with the July 2020 Council decision. However, because the 2020 project list contains *both* projects carried forward from the 2000 SWMP *and* new projects identified using a more capable modeling method, a five-percent factor may not be appropriate to be applied to all projects because the modeling methods that originally identified those projects are significantly different. Additionally, some projects included in the 2000 Stormwater

**Responses to Comments Received in Advance of September 28, 2020  
Public Hearing on Stormwater Master Plan Amendment.**

Master Plan are carried not over in the 2020 Stormwater Master Plan because they have been either been completed or are no longer needed. The relationship between completed/removed projects from 2000 and how to estimate costs for the ongoing and systemwide need for small conveyance improvements is uncertain. The five percent small conveyance factor could have been removed entirely from the overall cost estimates but doing so would not acknowledge the limitations of the modeling method and five percent assumption of the 2000 SWMP projects.

To retain the assumed relationship between small conveyance improvements and project costs carried forward from the 2000 SWMP, and to set the stage for updating the stormwater System Development Charge methodology, the five percent factor is applied only to the projects carried forward from 2000 and incorporated into each project's total estimated costs. Depending on the final Council-adopted SDC methodology, this added cost may be retained project-by-project, recalculated and incorporated into a systemwide cost estimate, or removed entirely the next time the SWMP is amended.

**16. The cost for a project in the West Bank Basin is incorrect.**

**Location:** Page 15-7

**Comment:** In Table 6-9 of the 2000 Stormwater Master Plan, the estimated cost for Project WBB11, which adds detention capacity at Woodhaven Detention Facility, is \$746,850. The estimated 2019 cost for Project WBB11 in Table 15.4 (West Bank Project List) is \$177,005. What happened?

**Response:** This is a typographical error. The correct estimated cost for Project WBB11 in 2019 dollars should be shown in Table 15.4 as \$1,311,356. This will be changed in the final version of the 2020 SWMP. The total cost for all projects in the West Bank Basin will be changed from \$2,934,157 to \$4,068,688 to reflect the new sum. We will also correct the text on Page 15-2, "The total estimated cost in 2019 dollars for all the projects currently identified for the West Bank Basin, rounded to the nearest \$10,000 is \$4,070,000. Corrected values will also be inserted in Table 3.1 and Table 3.10.

**17. Change the basin name to Willamette Slough/Wallace Marine Basin.**

**Location:** Chapter 16

**Comment:** Portions of the Willamette Slough Basin as mapped in Chapter 16 include areas in west Salem along the west bank of the Willamette River north of the Marion Street Bridge. Should this basin be renamed "Willamette Slough/Wallace Marine Basin?"

**Response:** The decision to rename the Willamette Slough Basin will be deferred until after the West Bank Basin Plan is completed. This updated plan may incorporate these areas into the West Bank Basin.



**Responses to Comments Received in Advance of September 28, 2020  
Public Hearing on Stormwater Master Plan Amendment.**

**18. The Stormwater SDC-eligible project list should be updated.**

**Location:** General comment

**Comment:** In so far as the 2020 Stormwater Master Plan contains new projects, it is incumbent upon the City to revise the 309 List of projects eligible for SDC funding per ORS 223.309.

**Response:** Agree. However, before updating the 309 list, the City will embark on a project to update the stormwater SDC methodology. A major update of SDC methodologies for parks, transportation, water, and wastewater facilities was completed in 2019. Updating the methodology for Stormwater was deferred until Council adoption of a new Stormwater Master Plan.

**19. Public notice was not provided as required by ORS 223.309(2)(a).**

**Location:** General comment

**Comment:** The City did not provide 30 days' notice as required by ORS 223.309(2)(a).

**Response:** ORS 223.309(2)(a) requires 30 days' notice prior to the City adopting changes to the City's "309 list" (the City's list of capital projects that have an identified funding source) if those changes will have the effect of increasing system development charges. The provisions of ORS 223.309(2)(a) do not apply to the proposed amendment to the Stormwater Master Plan. The proposed changes to the City's Stormwater Master Plan add projects to the plan; however, the City is not proposing to add those projects to the 309 list. Staff intends to address the SDC methodology for stormwater before adding these projects to the 309 list. At that time, the City will send notice as required under ORS 223.309(2)(a).

In regard to this Ordinance Bill No. 11-20 that is coming before Council on September 28, the City did provide 35-day notice to the State Department of Land Conservation and Development as required by ORS 197.610. Staff also provided public notice per SRC 300.1110(e), including publishing notices of the public hearing in the *Statesman Journal* for two consecutive weeks prior to the hearing. In addition, staff has conducted considerable outreach to the public and stakeholders leading up to this hearing.