CITY OF SALEM

Written Testimony #1

City Council

555 Liberty St SE
Salem, OR 97301

Monday, September 28, 2020 6:00 PM Virtual Meeting

4.a. 20-338 Public Hearing on Amendment to Salem's Stormwater Master Plan.

Ward(s): All Wards
Councilor(s): All Councilors
Neighborhood(s): All Neighborhoods
Result Area(s): Natural Environment Stewardship; Safe Community; Safe, Reliable and Efficient Infrastructure.

Recommendation: Advance Ordinance Bill No. 11-20, which amends Salem's Stormwater Master Plan, to first reading.

Attachments:
Ordinance Bill 11-20
SWMP Amendment_2020
Battle Creek Basin Plan_2019
Mill Creek Basin Plan_2019
Pringle Creek Basin Plan_2019
SWMP Plan Virtual Open House Comments
Questions+Answers
Public Comments received by 9-17-20
Responses to Comments
Public Comments received by 9-23-20
Additional Public Comments received

Add - Written Testimony.

7.1a. 20-339 Amendment to Salem's Stormwater Master Plan.

Ward(s): All Wards
Councilor(s): All Councilors
Neighborhood(s): All Neighborhoods
Result Area(s): Natural Environment Stewardship; Safe Community; Safe, Reliable, and Efficient Infrastructure.

Recommendation: Advance Ordinance Bill No. 11-20, which amends Salem's Stormwater Master Plan, to second reading.

Attachments: Ordinance 11-20

SWMP Amendment 2020

Battle Creek Basin Plan_2019

Mill Creek Basin Plan_2019

Pringle Creek Basin Plan_2019

Public Comments received by 9-17-20.pdf

Responses to Comments

Public Comments received by 9-23-20

Additional Public Comments received

Add - Written Testimony.

7.2a. 20-333 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.

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.

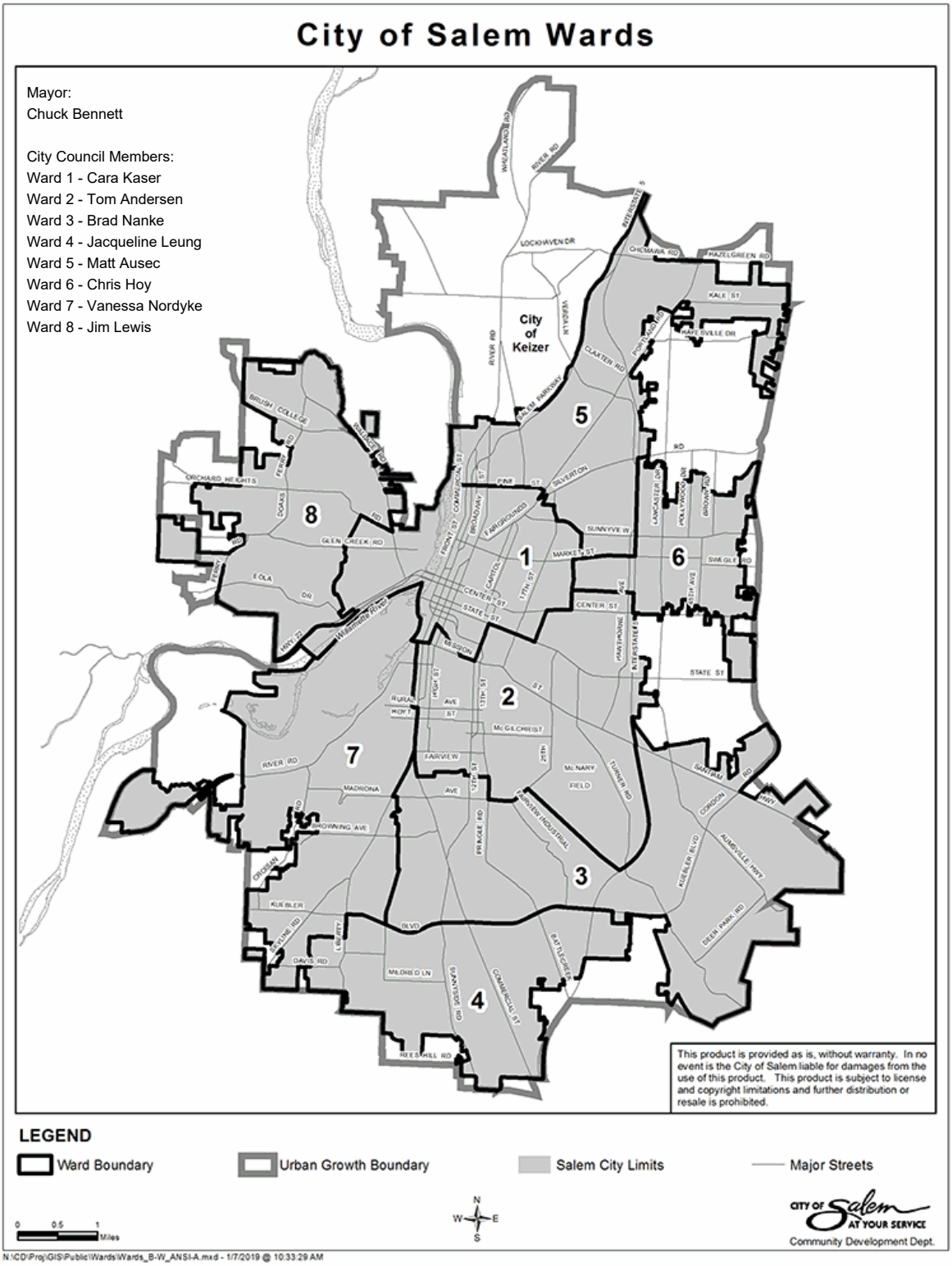
Attachments: SRC 71 Engrossed Ordinance 8-20

SRC 71 Exhibit A Ordinance 8-20

Public Comments received 9-14-20.pdf

Additional Public Comments received

Add - Written Testimony.


City of Salem Wards
Mayor:
Chuck Bennett
City Council Members:
Ward 1 - Cara Kaser
Ward 2 - Tom Andersen
Ward 3 - Brad Nanke
Ward 4 - Jacqueline Leung
Ward 5 - Matt Ausec
Ward 6 - Chris Hoy
Ward 7 - Vanessa Nordyke
Ward 8 - Jim Lewis
City of Keizer
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This product is provided as is, without warranty. In no event is the City of Salem liable for damages from the use of this product. This product is subject to license and copyright limitations and further distribution or resale is prohibited.
LEGEND
Ward Boundary
Urban Growth Boundary
Salem City Limits
Major Streets
0 0.5 1 Miles
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S
CITY OF Salem AT YOUR SERVICE
Community Development Dept.
N:\CD\Proj\GIS\Public\Wards\Wards_B-W_ANSI-A.mxd - 1/7/2019 @ 10:33:29 AM

Amy Johnson

From: Glenn Baly <glennbaly12345@gmail.com>
Sent: Friday, September 25, 2020 2:39 PM
To: CityRecorder; citycouncil
Cc: Irma Dowd; Lora Meisner
Subject: SGNA Comments on Salem Stormwater Master Plan - September 28, 2020 City Council Meeting
Attachments: 25 July 2017 Flood Meeting (3).pdf; SGNA Comments on Stormwater Management Plan.docx

Categories: Follow-up

Attached are the South Gateway Neighborhood Association's comments and attachment on the Salem Stormwater Master Plan on the agenda for the September 28th City Council meeting.

Glenn Baly
South Gateway Neighborhood Association

Sent from Mail for Windows 10

Thursday, July 27, 2017

City of Salem
Public Works Department
Salem, OR

Subject: Meeting to discuss mitigation of damaging flood water from the Battle Creek Basin.

Attendees: Lora Meisner, John Shepard, Peter Fernandez, Robert Chandler, Robin Dalke.

The Battle Creek Basin is a significant source of storm water that enters the Salem Storm drainage systems (known as the creeks and streams flowing through the City). The City currently does not know the capacities of these drainage systems yet development is directed by Salem City Code to connect all storm water drainage to the Salem Storm drainage system. This practice has contributed to flooding in 1996 and 2012 that exceeded flood water height and area coverage as predicted on the FEMA flood maps. These flood maps have been used by the City and Development to establish the limits of risk for flooding. Property damage has occurred to home and business owners as a result of these practices.

We discussed:

1. Development practices, what was called "Our sins of the past" and that the Public Works Department is aware of the issue.
2. The issue of flooding is affecting Salem in several ways.
    a. Potential significant increases in Flood Insurance Premiums could devastate the Salem Real Estate Market. This is caused by changes in lending regulations, and Flood Insurance policy changes under consideration by FEMA.
    b. Long time residents and business are bearing the storm water flood burden of new development occurring in the Battle Creek Basin.
    c. The Battle Creek Basin is one of two prime areas for the future growth of Salem due to Oregon State Land Use laws.
    d. Some buildings and properties are at unsolvable risk and may require acquisition by Public Works.
    e. Water detention has a cost.
    f. Existing property owners may need to be burdened with retrofitting costs.
3. Lora presented a simple concept that needs to be considered if Salem residents are to be protected from flooding.
    a. Reduce the addition of more storm water into an overburdened Storm Water System
        i. **A Battle Creek Basin Special Development Zone**
            1. The suggested zone would require any new developments to maintain storm water on site as well as preserve 50% of trees over 6" in diameter. The purpose is to limit flooding in Salem as well as Turner. One of the biggest hurdles to developing a special zone would be political. The city council (because many members are new) would have to be informed about the problems of flooding and agree with the concept and parameters of a special development zone.

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    a. the issue of retrofitting many properties developed 20-30 years ago with rain gardens and other storm water management controls.
    b. Potentially retrofitting efforts of present owners might provide savings in storm water fees.
5. Finally, the potential for new Creekside development was briefly reviewed.
    a. The property presents a rare opportunity for storm water detention. It is one of the last level areas in the basin where water running down the basin can pool and slow down before proceeding on towards Turner and downtown Salem.

We want to thank you for meeting and discussing this important subject that affects property owners in 4 of the 8 Salem City Wards.

We look forward to concrete policy changes that will mitigate the damaging flood issues to current Salem property owners while creating an opportunity for new development in South Salem.

Sincerely,

Lora Meisner
1347 Spyglass Court SE
Salem, OR 97306

CC: John Shepard, Chuck Bennett

South Gateway
NEIGHBORHOOD ASSOCIATION
555 LIBERTY ST. SE RM. 305 SALEM OR 97301 • 503-588-6207• WWW.CITYOFSALEM.NET/NEIGHBOR

September 21, 2020

Mayor and City Council
City of Salem
555 Liberty Street
Salem OR 97301

Dear Mayor and City Council,

Storm water management and flooding is of particular concern to the South Gateway Neighborhood Association due to the vulnerability of our area. We welcomed the City's update to the existing Storm water Plan, but have serious concerns about the plan being discussed at your September 28 Council meeting.

The Stormwater Master Plan's primary purpose is the provide City leaders and the community with direction on dealing with "Urban Storm Water Run-off". In addition the plan provides direction for current and future storm water projects in the City. This 2020 plan has applied advanced modeling programs, utilizing local Salem data. It is not just based on FEMA flood plan maps, which fail to take into account recent and future changes that affect flooding.

The FEMA flood maps for the Battle Creek Basin were developed from FEMA modeling done in the 1960s. This aged modeling has been used to regulate and approve the stormwater management in the basin for the past 50 years. Based on the 1996 and 2012 storm events SGNA residents have personal experience with how this planning has failed to protect the community.

The proposed Stormwater Master Plan looks at the Battlecreek Basin, for the first time using modern engineering methods, and identifies the issues that residents have stated to the Council and Public Works since 2007.

"The old plan is not working. The creeks are beyond capacity. Turn the water off, please!"

We encourage adoption of this Stormwater Master Plan as it relates to the Battle Creek Basin. The City Code needs to reflect the findings identified, particularly changes related to storm duration. The current Salem Code uses a "24 hour Design Storm" language. The research used to identify stormwater issues in the plan demonstrate the failure of is this metric to reflect the type of impact the two recent storm

events had on the community. We strongly recommend the use of a *72 hour* 100 year storm metric with detention on sight of large projects when the flow rate downstream will be increased greater than 350 cfs beyond current conditions.

Residents in Salem, when we buy property, have an expectation that the city's code and development standards will protect our homes from damage during the normal events. This expectation is not limited to the year of purchase but extends into the life expectancy of the residence. When development upstream occurs and the floodwaters from storm runoff cause existing homes to be damaged residents turn to the city and ask why? The First Street Foundation https://firststreet.org/ has developed and published nationwide flood risk maps that build on the FEMA data, include both current and future modeling that takes into account environmental changes to provide a more accurate estimate of current and future impact to homes. We recommend that the councilors visit this site and see for themselves the impact on Salem.

John Shepard, a SGNA resident and member of the Salem Stormwater Master Plan development committee, was briefed on the modeling data now published in the final draft of the Stormwater Master Plan 2020 (see his memo to SGNA below). The idea of using the new knowledge of flood inundation was rejected by other committee members (which consisted primarily of developers/realtors), because it would be "bad for business", would require some residents to pay higher flood insurance rates, and would include some residents in flood plains that were not in flood plains when they purchased their homes. The publishing of such model data by First Street Foundation and linking their data to Realtor.com where the marketplace can see it, both buyers and sellers, means the errors of the past are now public. It is time that Salem regulations regarding development address the technical information provide in the proposed Stormwater Master Plan and the code modified to reflect the type of storm durations, soil conditions, runoff issues specific to Salem.

We note that the plan includes a list of project recommendations for CIP projects on how stormwater management can be more effective. We favor the projects that have specific reduction or elimination of flooding for residents in the area of 13th street and Greenside Village. We favor specific development standards that promote more retention of stormwater runoff from upstream properties. This is especially important in the Battlecreek Basin since stormwater runoff from the surrounding hills is a chief culprit for downstream flooding. We advocate for a special development zone in the basin to restrict the volume of storm water flowing into the basin instead of merely expanding detention at the bottom of the basin.

In a meeting arranged by Chuck Bennett with Peter Fernandez and Robert Chandler with Lora Meisner and John Shepard the idea of a South Salem Hills Special Development zone was discussed. At the time, Peter and Bob said it would be a *political* decision—mayor and council could decide—in order to have this zone develop which would require more storm water detained on developments that would feed into the Battle Creek Basin. (See attached memo).

SGNA requests that the City implement plans that will take into account the mission of the city to protect residents. Incorporate the need to have a 72 hour storm….. City Council needs to direct the public works staff to design parameters for the special development zone.

Sincerely,
Glenn Baly
Chair, South Gateway Neighborhood Association

Included—Memo from John Shepard:

Glenn, SGNA Board

I have been thinking about how to address the issue. I am more of a historian than an engineer or a writer of policy about the subject of flooding in the Battle Creek Basin.

I was participant in the work concerning the Future use of Battle Creek Golf course. The property owner one day in 2007 announced his intent to develop the property into a 55-plus housing project on the 85 acers. The property was zoned "Public Amusement". The Comprehensive Plan would require a change. We argued that the property served a public purpose in detaining flood storm water. During the process I learned from Public Works staff that the city had no knowledge of the stream capacities. A Zoning and Development standard from the 70's required connection of all storm water to the streams. The 1996 flood demonstrated that the stream capacities were beyond the FEMA Flood Plain mapping (models developed in the late 50 early 60's for the area. Building was dependent on the FEMA maps. The city prepared an assessment plan with a budget to address the stream flow conflicts at culverts. The culvert at 13th street as an example was changed from three 24inch pipes to a large box culvert the width of the stream bed and the height of the roadway. This increased the capacity of water to flow under 13th street more than 10-fold. The city did very little more regarding the engineer recommendations for 13 million in improvements. The city did not change their Zoning and Development standards. Storm water was directed to be added to the streams and with each new development the volume of storm water in the creeks increased.

Summary:

In 2017/2018 I participated as a member of the Storm water Master Plan committee to revise the long over update. During our discussions the Public Works dept. informed the committee that they had a new modeling method developed to identify the level of flood water inundation. We were told the modeling was state of the art. It showed that the stream capacities were indeed exceeded by the present level of storm water being emptied into the creeks. New and greater damage would be occurring during 25 plus year storm events.

When the question was asked "Should we include this new data into our practice for accessing

the risk to property from flood damage?" the development community was against the idea. It would devastate property values. Validation of the model was not clear. Residents would lose their life savings in their homes as flood at risk homes would kill the real estate market. Insurance costs would be enormous. The flood insurance rates, which the City had been championing, would be lost.

I argued you cannot keep this information from the public. The city must be transparent. You know that some homes will be flooded now. The individuals who purchased these homes had reason to believe the city when they asked if these homes are safe. To be told, FEMA mapping shows these are outside of the flood zone, yet the city model shows that they are now in a flood risk zone was wrong. We need to consider zone and development standards that protect the residents. If you buy a home in the hills your home and development cannot flood out the older homes downstream. When the committee voted the decision was to not do anything about this information. It would be up to the Public Works department to decide to use or not use the information.

In this day and age, you cannot keep secrets for long. August 26th, Realtor.com announced a new feature on their website. Flood Risk data now available for home shoppers.

There is a new feature provided by the nonprofit First Street Foundation. The flood data includes an estimate of a home's FEMA flood zone as well as FLOOD FACTOR™, comprehensive flood risk data displayed on the property level in the form of a risk score, ranging from 1 (minimal risk) to 10 (extreme risk). The Realtor.com site displays the current risk of flooding for a home; weather the risk is increasing or decreasing, or constant; and the likely hood of that property experiencing a flood event over the next 30 years.

Research identified in the Wall Street Journal indicate, Homes outside the high-risk flood zone appreciate faster than homes inside those zones between 2012 and 2017.

SGNA's position on the Storm water Master Plan may reflect concern for the lack of transparency by Public Works in the preparation of the plan. The Salem Council can have an impact on the issue by considering where in Salem are the risks and having zoning and development standards that reflect the need to reduce the risk to all Salem residents.

Here is a link to the area around Battle Creek and 13th. Many of these homes are showing 10 risk assessments yet they are outside the FEMA flood plain. This can only happen if the volume of water in the creeks is greater than the FEMA models (and standards for development decisions) consider

https://floodfactor.com/county/marion-county/41047_fsid#score_map

Perhaps the Storm water Master plan should consider a modification to require onsite storm

water detention for all storms.

John Shepard

Information provided has been resourced and supporting documents are available upon request.

Amy Johnson

From: E Easterly <emeasterly@comcast.net>
Sent: Monday, September 28, 2020 10:48 AM
To: citycouncil
Subject: Testimony Agenda 4.a

To: Salem City Council via email: citycouncil@cityofsalem.net

From: E.M. Easterly

Re: Agenda 4.a SWMP Policy 8.1 SDC expenditure Oversight Committee

Date: September 28, 2020

Mayor Bennett and Council Members,

The staff document **"Responses to Comments Received in Advance of September 28, 2020 Public Hearing on Stormwater Master Plan Amendment.",** written by Dr. Chandler, responded at Item #14 to my request for Council to establish a Stormwater SDC fund oversight committee with a gentle "there is no requirement nor need." . Dr. Chandler offers examples of community involvement. He claims:

1. Community involvement "when Council is considering expenditures involving projects funded by System Development Charges."

2. Community involvement via "a public hearing in advance of adoption of the proposed Capital Improvement Plan (CIP).

3. Community involvement "also includes a provision establishing a CIP Review Committee."

However, budgetary records consistently show otherwise. Stormwater SDC expenditures are not being appropriately monitored.

In 2019 staff recommended a stormwater SDC expenditure to purchase land that was **not a CIP project**. That expenditure recommendation was not reviewed by a CIP Review Committee. The recommendation to Council was not publicly reviewed before adoption. There was no community oversight.

Historically "unspecified" Stormwater SDC funds have been expended without scrutiny. It is for this reason that I requested the inclusion of a SDC expenditure oversight committee as a constructive addition to the well written 2020 Stormwater Master Plan.

I recognize that staff is reluctant to expose their pragmatic recommendations to public scrutiny. I also recognize that Council usually takes the easiest path by acquiescing to a staff affirmed recommendation, whether that recommendation conforms to adopted City policy or legal requirements, or not.

I repeat my September 23 rd request. I ask Council to add a sixth item to SWMP Policy 8.1

(6) "Establish an expenditure review committee to vet and advise Council on staff recommendations to expend "Stormwater - Unspecified" SDC funds."

The reasons for my request include:

- It would provide important connections with Watershed Councils.

- It would facilitate increased transparency.

- It would reveal to City Councilors insights to aid in their decision-making.

- It would accomplish the intent of land use Goal One.

Amy Johnson

From: Shannon Priem <spriem@hotmail.com>
Sent: Monday, September 28, 2020 3:21 PM
To: CityRecorder; Tom Andersen; Robert Chandler
Cc: Irma Dowd; jeff503@fastmail.us
Subject: SESNA's letter as testimony for Stormwater Masterplan hearing
Attachments: 2020 Storm Plan SESNA comments.pdf

SESNA would like to submit the attached letter for tonight's public hearing on the 2020 Stormwater Master Plan.

Shannon Priem, Chair

Southeast Salem Neighborhood Association

September 28th, 2020

Subject: SESNA's position on the proposed 2020 Stormwater Master Plan

Dear Mayor and Councilors:

While the Southeast Salem Neighborhood Association appreciates the extensive work behind the proposed Stormwater Master Plan, we encourage you to delay adoption for a variety of reasons. We are mainly concerned because it does not mention or address two major issues which cannot be improved with capital improvement projects -- but have a major impact on the flooding in Salem.

North Santiam River Overflow into Mill Creek

After 2012 rainstorm, the flooding peaked in SESNA along Mill Creek the next evening due to inflow from the North Santiam River. The Mill Creek Basin Plan does not mention the inflow from this basin other than "...provides water for irrigation and augments low flow conditions in Mill Creek during the summer months."

The Stormwater Master Plan Policy 3.6 - Flood Risk Mapping states "The City shall make readily available information related to flooding..." The plan should at least acknowledge inflow from North Santiam River flooding. This is one of the most significant issues in the Mill Creek basin. The inflow from the North Santiam River is a challenging and complex regional issue that Salem can on solve alone. Even if there is not a capital improvement project ready to fix this issue, the first step in solving this is to acknowledge the problem and inform the public.

Climate Change not adequately addressed

The federal government has documented concerns about increased flooding due to climate change. Why is there no mention of possible increased flooding in Salem? The EPS states about the Pacific Northwest that "Further, increased flood risks around rivers that receive waters from both winter rains and peak runoff in late spring are expected"

https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-northwest_.html

Here is more about the Pacific Northwest: "Regional climate models project increases of 0% to 20% in extreme daily precipitation, depending on location..."

https://nca2014.globalchange.gov/report/regions/northwest#intro-section-2

The 2020 Stormwater Master Plan contains valuable capital improvement projects we support -- but we need to plan for major issues even if they cannot be mitigated by Salem capital improvement projects. The city just announced an important new climate change task force -- so why not wait for their study to finalize this masterplan, so we have a unified, science-based direction?

The plan also doesn't include adequate recommendations on how to manage stormwater through more stringent development rules to assure those of us living "downstream" that new subdivisions will include on-site stormwater retention.

Lastly, after reaching out to other neighborhood associations taking a position on this plan, we learned that a more current model could be explored from the First Street Foundation (they developed a national system of calculating flood risks, by household, in fact.) While we're not experts on whether their model provides more valid data, we'd like to learn more about it, and/or why the city believes it's not worth exploring.

Thank you for the opportunity to share our concerns as part of the Sept. 28 public hearing.

Southeast Neighborhood Association Board

Shannon Brem, chair

Amy Johnson

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Included—Memo from John Shepard:

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I was participant in the work concerning the Future use of Battle Creek Golf course. The property owner one day in 2007 announced his intent to develop the property into a 55-plus housing project on the 85 acers. The property was zoned "Public Amusement". The Comprehensive Plan would require a change. We argued that the property served a public purpose in detaining flood storm water. During the process I learned from Public Works staff that the city had no knowledge of the stream capacities. A Zoning and Development standard from the 70's required connection of all storm water to the streams. The 1996 flood demonstrated that the stream capacities were beyond the FEMA Flood Plain mapping (models developed in the late 50 early 60's for the area. Building was dependent on the FEMA maps. The city prepared an assessment plan with a budget to address the stream flow conflicts at culverts. The culvert at 13th street as an example was changed from three 24inch pipes to a large box culvert the width of the stream bed and the height of the roadway. This increased the capacity of water to flow under 13th street more than 10-fold. The city did very little more regarding the engineer recommendations for 13 million in improvements. The city did not change their Zoning and Development standards. Storm water was directed to be added to the streams and with each new development the volume of storm water in the creeks increased.

Summary:

In 2017/2018 I participated as a member of the Storm water Master Plan committee to revise the long over update. During our discussions the Public Works dept. informed the committee that they had a new modeling method developed to identify the level of flood water inundation. We were told the modeling was state of the art. It showed that the stream capacities were indeed exceeded by the present level of storm water being emptied into the creeks. New and greater damage would be occurring during 25 plus year storm events.

When the question was asked "Should we include this new data into our practice for accessing

the risk to property from flood damage?" the development community was against the idea. It would devastate property values. Validation of the model was not clear. Residents would lose their life savings in their homes as flood at risk homes would kill the real estate market. Insurance costs would be enormous. The flood insurance rates, which the City had been championing, would be lost.

I argued you cannot keep this information from the public. The city must be transparent. You know that some homes will be flooded now. The individuals who purchased these homes had reason to believe the city when they asked if these homes are safe. To be told, FEMA mapping shows these are outside of the flood zone, yet the city model shows that they are now in a flood risk zone was wrong. We need to consider zone and development standards that protect the residents. If you buy a home in the hills your home and development cannot flood out the older homes downstream. When the committee voted the decision was to not do anything about this information. It would be up to the Public Works department to decide to use or not use the information.

In this day and age, you cannot keep secrets for long. August 26th, Realtor.com announced a new feature on their website. Flood Risk data now available for home shoppers.

There is a new feature provided by the nonprofit First Street Foundation. The flood data includes an estimate of a home's FEMA flood zone as well as FLOOD FACTOR™, comprehensive flood risk data displayed on the property level in the form of a risk score, ranging from 1 (minimal risk) to 10 (extreme risk). The Realtor.com site displays the current risk of flooding for a home; weather the risk is increasing or decreasing, or constant; and the likely hood of that property experiencing a flood event over the next 30 years.

Research identified in the Wall Street Journal indicate, Homes outside the high-risk flood zone appreciate faster than homes inside those zones between 2012 and 2017.

SGNA's position on the Storm water Master Plan may reflect concern for the lack of transparency by Public Works in the preparation of the plan. The Salem Council can have an impact on the issue by considering where in Salem are the risks and having zoning and development standards that reflect the need to reduce the risk to all Salem residents.

Here is a link to the area around Battle Creek and 13th. Many of these homes are showing 10 risk assessments yet they are outside the FEMA flood plain. This can only happen if the volume of water in the creeks is greater than the FEMA models (and standards for development decisions) consider

https://floodfactor.com/county/marion-county/41047_fsid#score_map

Perhaps the Storm water Master plan should consider a modification to require onsite storm

water detention for all storms.

John Shepard

Information provided has been resourced and supporting documents are available upon request.

Amy Johnson

From: E Easterly <emeasterly@comcast.net>
Sent: Monday, September 28, 2020 10:48 AM
To: citycouncil
Subject: Testimony Agenda 4.a

To: Salem City Council via email: citycouncil@cityofsalem.net

From: E.M. Easterly

Re: Agenda 4.a SWMP Policy 8.1 SDC expenditure Oversight Committee

Date: September 28, 2020

Mayor Bennett and Council Members,

The staff document **"Responses to Comments Received in Advance of September 28, 2020 Public Hearing on Stormwater Master Plan Amendment.",** written by Dr. Chandler, responded at Item #14 to my request for Council to establish a Stormwater SDC fund oversight committee with a gentle "there is no requirement nor need." . Dr. Chandler offers examples of community involvement. He claims:

1. Community involvement "when Council is considering expenditures involving projects funded by System Development Charges."

2. Community involvement via "a public hearing in advance of adoption of the proposed Capital Improvement Plan (CIP).

3. Community involvement "also includes a provision establishing a CIP Review Committee."

However, budgetary records consistently show otherwise. Stormwater SDC expenditures are not being appropriately monitored.

In 2019 staff recommended a stormwater SDC expenditure to purchase land that was **not a CIP project**. That expenditure recommendation was not reviewed by a CIP Review Committee. The recommendation to Council was not publicly reviewed before adoption. There was no community oversight.

Historically "unspecified" Stormwater SDC funds have been expended without scrutiny. It is for this reason that I requested the inclusion of a SDC expenditure oversight committee as a constructive addition to the well written 2020 Stormwater Master Plan.

I recognize that staff is reluctant to expose their pragmatic recommendations to public scrutiny. I also recognize that Council usually takes the easiest path by acquiescing to a staff affirmed recommendation, whether that recommendation conforms to adopted City policy or legal requirements, or not.

I repeat my September 23 rd request. I ask Council to add a sixth item to SWMP Policy 8.1

(6) "Establish an expenditure review committee to vet and advise Council on staff recommendations to expend "Stormwater - Unspecified" SDC funds."

The reasons for my request include:

- It would provide important connections with Watershed Councils.

- It would facilitate increased transparency.

- It would reveal to City Councilors insights to aid in their decision-making.

- It would accomplish the intent of land use Goal One.

Amy Johnson

From: Shannon Priem <spriem@hotmail.com>
Sent: Monday, September 28, 2020 3:21 PM
To: CityRecorder; Tom Andersen; Robert Chandler
Cc: Irma Dowd; jeff503@fastmail.us
Subject: SESNA's letter as testimony for Stormwater Masterplan hearing
Attachments: 2020 Storm Plan SESNA comments.pdf

SESNA would like to submit the attached letter for tonight's public hearing on the 2020 Stormwater Master Plan.

Shannon Priem, Chair

Southeast Salem Neighborhood Association

September 28th, 2020

Subject: SESNA's position on the proposed 2020 Stormwater Master Plan

Dear Mayor and Councilors:

While the Southeast Salem Neighborhood Association appreciates the extensive work behind the proposed Stormwater Master Plan, we encourage you to delay adoption for a variety of reasons. We are mainly concerned because it does not mention or address two major issues which cannot be improved with capital improvement projects -- but have a major impact on the flooding in Salem.

North Santiam River Overflow into Mill Creek

After 2012 rainstorm, the flooding peaked in SESNA along Mill Creek the next evening due to inflow from the North Santiam River. The Mill Creek Basin Plan does not mention the inflow from this basin other than "...provides water for irrigation and augments low flow conditions in Mill Creek during the summer months."

The Stormwater Master Plan Policy 3.6 - Flood Risk Mapping states "The City shall make readily available information related to flooding..." The plan should at least acknowledge inflow from North Santiam River flooding. This is one of the most significant issues in the Mill Creek basin. The inflow from the North Santiam River is a challenging and complex regional issue that Salem can on solve alone. Even if there is not a capital improvement project ready to fix this issue, the first step in solving this is to acknowledge the problem and inform the public.

Climate Change not adequately addressed

The federal government has documented concerns about increased flooding due to climate change. Why is there no mention of possible increased flooding in Salem? The EPS states about the Pacific Northwest that "Further, increased flood risks around rivers that receive waters from both winter rains and peak runoff in late spring are expected"

https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-northwest_.html

Here is more about the Pacific Northwest: "Regional climate models project increases of 0% to 20% in extreme daily precipitation, depending on location..."

https://nca2014.globalchange.gov/report/regions/northwest#intro-section-2

The 2020 Stormwater Master Plan contains valuable capital improvement projects we support -- but we need to plan for major issues even if they cannot be mitigated by Salem capital improvement projects. The city just announced an important new climate change task force -- so why not wait for their study to finalize this masterplan, so we have a unified, science-based direction?

The plan also doesn't include adequate recommendations on how to manage stormwater through more stringent development rules to assure those of us living "downstream" that new subdivisions will include on-site stormwater retention.

Lastly, after reaching out to other neighborhood associations taking a position on this plan, we learned that a more current model could be explored from the First Street Foundation (they developed a national system of calculating flood risks, by household, in fact.) While we're not experts on whether their model provides more valid data, we'd like to learn more about it, and/or why the city believes it's not worth exploring.

Thank you for the opportunity to share our concerns as part of the Sept. 28 public hearing.

Southeast Neighborhood Association Board

Shannon Brem, chair

Amy Johnson

From: John Shepard <emailjcs@comcast.net>
Sent: Monday, September 28, 2020 12:06 PM
To: citycouncil; CityRecorder
Subject: Testimony for 28 September City Council agenda item 7.2a
Attachments: Amending Salem Revised Code Chapter 70 (Utilities), Chapter 71 (Stormwater), and Chapter 601 (Floodplain Overlay Zone) - Submission A.pdf; Amending Salem Revised Code Chapter 70 (Utilities), Chapter 71 (Stormwater), and Chapter 601 (Floodplain Overlay Zone) - Submission B 24HR Design Storm .pdf

I have requested to speak during the meeting to address the issues submitted in these documents.

I recognize that what is being submitted is an understanding of a complex subject. I will be limited to 3 minutes. I understand that the Councilors will need to digest the subjects herein to be able to render an objective decision that serves the best interests of Salem Residents.

I thank you for the difficult work you do in service to Salem and those who live here.

John Shepard
emailjcs@comcast.net
WARD 4. Salem Oregon
(503) 362-4438

SUBJECT:
Amending Salem Revised Code Chapters 70 (Utilities), 71 (Stormwater), and 601 (Floodplain Overlay Zone)

Revisions to the Salem Revised Code should be a positive act that improves the future of Salem. The code changes recommended by staff, in part are positive, and do conform to staff findings that the approval is in the best interest of the of the public health, safety and welfare of the city. I fully support the work accomplished by the Staff regarding Floodplain management and particularly the successful efforts to secure insurance premium savings through the FEMA Community Rating System program.

However, Staff Proposed Amendments to SRC 71.090(b) contain flaws that do not meet approval criteria of SCR 110.085(b).

> **Sec. 110.085. - Amendments to the UDC.**
> (b)*Criteria.* An amendment to the UDC may be made if:
> (1) The amendment is in the best interest of the public health, safety, and welfare of the City; and
> (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.

Staff Proposed Amendment is to eliminate to SRC 71.090(b):

~~(b) "Provide additional stormwater facilities or improve the public stormwater system to adequately accommodate the stormwater flows from the site if insufficient capacity exists in the public stormwater system to carry existing and anticipated discharge flows, including any flows from dewatering activities. The Director may require the developer to conduct analysis to ensure sufficient capacity exists downstream from the location where the drainage water is discharged from the site".~~

SRC71.095. - Flow control facilities.

(b) Design.

(4) The Director may allow construction of a flow control facility at a location other than the site if:

(B) The flow control facility constructed at a location other than the site will mitigate similar impacts that have been identified as a consequence of the project.

The reading of clauses of SRC 71.090 and SRC 71.095 shows they are interdependent. They are not an either-or construct. The two clauses work in tandem to provide the Director authority to regulate and manage the consequences of stormwater from the development of large projects.

How then can staff claim the amendment complies with SRC110.085(b)(1)?

SRC 70.095 (b) addresses Design of Storm Control Facilities.
Clause (4) identifies criteria to be used to " allow the construction of a flow control facility at a location other than the site if:" Paragraph (B) "The flow control facility constructed at a location other than the site will mitigate similar impacts that have been identified as a consequence of the project" clarifies this criteria.

A proposal must be relevant and positive in order "mitigate similar impacts that have been identified".

1. How can a project impact be identified **without analysis**?
2. What are we asking the project to do? Mitigate stormwater that is connected to a new "large project".
3. What impacts are being considered? I can imagine the list must be long and involved, but at the top of the list should be:
    a. Will this large project increase the volume of stormwater flow downstream from the project and flood current Salem residents out of their homes?

Analysis of downstream stormwater flows is important to safety.

Let's go back to SRC71.090.

> Paragraph (b) "Provide additional stormwater facilities or improve the public stormwater system to adequately accommodate the stormwater flows from the site if insufficient capacity exists in the public stormwater system to carry existing and anticipated discharge flows, including any flows from dewatering activities. The Director may require the developer to conduct analysis to **ensure sufficient capacity exists downstream** from the location where the drainage water is discharged from the site".

This SRC71.090(b) language specifically provides for downstream analysis. This is proposed by staff to be deleted. This Analysis is required to ensure sufficient stream capacity exist downstream. The **sufficient capacity** is what determines if residents homes, downstream from a large project, are at risk of being flooded on Christmas day when it has been raining and the children are engaged in celebration.

From what I have heard, current large project managers have preferred to ignore analysis of downstream capacity. Instead, Public Works tells them how much detention to locate on site. If the developer does not like the detention requirement they negotiate.

How are these negotiations being conducted without analysis of the downstream impacts?

I ask that council modify the code changes being requested by Staff.

Preserve SRC 71.090 REQUIREMENTS FOR LARGE PROJECTS paragraph (b) in its entirety.
It does not detract from the Salem Revised Code; it enhances safety, the criteria set out in SCR 110.085.

SUBJECT:
Amending Salem Revised Code Chapters 70 (Utilities), 71 (Stormwater), and 601 (Floodplain Overlay Zone)

Staff Proposed Amendments to SRC 71.095(c). contain flaws that do not meet approval criteria of SCR 110.085.

Sec. 110.085. - Amendments to the UDC.

(b)*Criteria.* An amendment to the UDC may be made if:

(1) The amendment is in the best interest of the public health, safety, and welfare of the City; and

(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.

Staff Proposed Amendments to SRC 71.095(c):

SRC71.095 (c) Flow control facility performance standard.

(1) The post-development peak runoff rates from design storm events equal to or less than one-half the two-year, 24-hour design storm event shall not exceed the predevelopment peak runoff rate for one-half the two-year, 24-hour design storm event;

(2) The post-development peak runoff rates from design storm events equal to or less than the ten-year, 24-hour design storm event shall not exceed the predevelopment peak runoff rate for the ten-year, 24-hour design storm event; and

(3) ~~If a volume-based stormwater flow control facility is used, the detention volume shall be sufficient to detain a 100-year design storm event without overflow.~~ The post- development peak runoff rates from design storm events equal to or less than the twenty- five-year, 24-hour design storm event shall not exceed the predevelopment peak runoff rate for the twenty-five-year, 24-hour design storm event; and

(4) The post-development peak runoff rates from design storm events equal to or less than the one-hundred-year, 24-hour design storm event shall not exceed the predevelopment peak runoff rate for the one-hundred-year, 24-hour design storm event.

Staff affirms the proposed changes “ensures that peak flows from a large project do not exceed existing flows during large storms”.

The FLOW CONTROL FACILITY PERFORMANCE STANDARD of SRC 71.095(c) in both current and the proposed language rely on use of a "24-Hour Design Storm". Staff identifies this "a standard practice for many municipalities across the U.S. and has been the practice since at least 2013 when Council adopted SRC 71 (Stormwater). "

To support the argument, staff states: "Further, this definition meets the requirements for the Community Rating System of the Federal Emergency Management Agency (FEMA)"

This claim contradicts conversations I conducted with FEMA representatives. During my discussion with FEMA staff regarding the utility of a 24-hour design storm in connection with CRS, I learned that such a standard is not specified. Any and all methodologies are considered that can be shown to have positive impact on the control of pre and post development stormwater runoff. FEMA's intent is to limit and reduce the risk of flooding. If a "Standard" has been shown to be not effective it is up to the community to develop methods that demonstrate results, and then clearly show FEMA how the solution will work. Certainly, in some jurisdictions a 24-hour Design Storm works. Where it does not, it cannot be relied upon. **Salem is one of those communities where the 24-hour design storm does not work.**

A Design Storm as stated in SRC 70.005 Definitions

> *Design storm event* means the size of the storm event used to calculate runoff volumes and peak rates of discharge when designing stormwater facilities. The design storm event is the total inches of rainfall, distributed during a 24-hour period using a standard synthetic rainfall distribution identified as Type I-A by the Natural Resources Conservation Service.

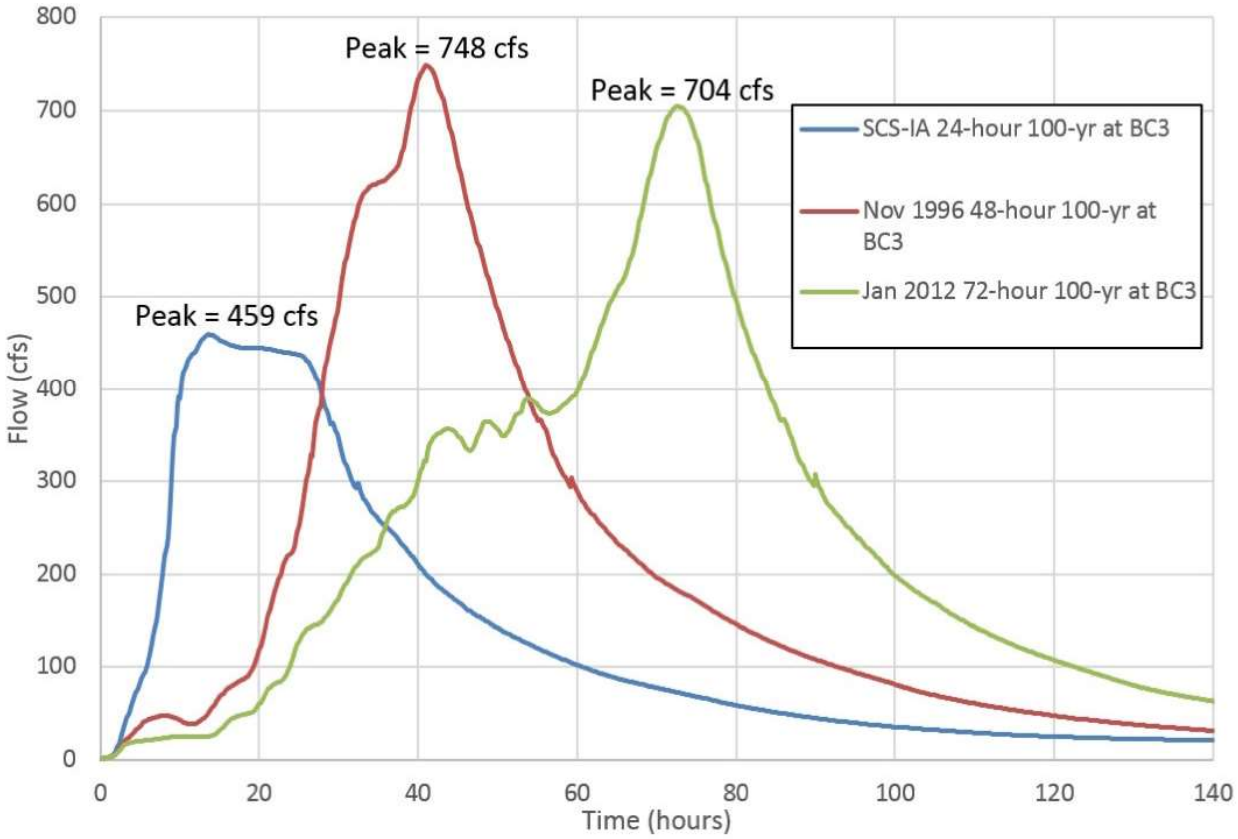
A "synthetic rainfall distribution" has been used in Salem well before the Councils approval of SRC 71. It has been used as a tool to help engineers identify a metric for "synthetic" rainfall and to help calculate the volume of stormwater in a given place for a defined amount of time.

The problem: The 24-hour design storm standard is not the tool to be used in the Pacific NW, nor in Salem Oregon.

The State of Washington has learned that the 24-hour design storm does not provide a safe metric. Washington has directed communities to review their use of the tool. The City of Seattle and King County have already moved into the 21st century and are now using "continuous flow modeling". Our State of Oregon has this same issue under review. Salem has pursued own efforts to understand why homes along the streams of Battlecreek, Mill Creek and the other 10 Salem Stormwater basins flood during winter storm events.

The investment by Public Works has yielded valuable information. The engineering data and modeling was used to prepare Salem's 2020 Stormwater Master Plan (SWMP). The pending SWMP update is perceived as "State of the art, Best Practice" information. It should be considered when addressing changes to the SRC. **Why then is the possibility of this Best Practice being arbitrarily excluded in the pending revisions to SRC Chapter 71?**

Specifically, the results of these Salem studies conclude, the 24-hour Design Storm method failed to adequately identify flood peaks and flow volumes in the Battlecreek Basin.



Residents have said since 2007, when we have a storm in the Pacific NW the timing and duration of the storm rainfall has not been adequately considered when approving development activity in the hills of the basin. The tool (24-hour Design Storm) used by Public works and engineers serving development does not meet the requirements of UDC Sec 110.085 (b)

Engineers have relied on 24-hour Design Storm “Standard” to help them value stream flow volume.

Salem needs a different metric. With gauges in the creeks and analysis of the impact of “Flow Volume”, a short cut to resolve the complexity is for the City to regulate “Stream Flow Volume”.

Using a “new standard” of “Flow Volume at say 300 cf/s” identifies a specific limit that all parties must adhere. New Projects would need to limit their flow to assure that stormwater runoff would not increase the peak flows beyond the “Flow Volume” limit. Existing flow

volumes can be reviewed, and Public Work requirements can be selected based on best results to meeting stormwater runoff flow volume in the basins.

Such regulation can be applied scientifically to each basin using a common Salem based standard.

When floods happen and your regulatory actions fail, insurance claims will occur. Repetitive claims will cause the loss of CRS points and discounts will evaporate.

The 24-hour design storm is a flawed standard for Salem. I ask that the council preserve SRC71.090(b) until a better solution is adopted.