Stormwater Utility Fee

1. Overview of City Authority
2. Overview of Current Stormwater Program and Fee/Formula
3. Problems with the Current Fee/Formula
4. Suggested Changing to the Stormwater Program and Fee/Formula
5. Potential Critiques & Counter Arguments

What Legal Authority Does the City Have

1. Does the Charlottesville City Council have the authority to make these suggested changes? (Dillon Rule?)
2. **Answer: Yes - the Charlottesville City Council has the authority to make these changes; it is not a Dillon Rule issue.**
    a. The Stormwater Utility Fee was locally implemented by direction of the city counsel via the Code of the City of Charlottesville, Chapter 10, Article VI, §10-103-108.
        i. https://library.municode.com/va/charlottesville/codes/code_of_ordinances?nodeId=CO_CH10WAPR_ARTVISTUT_S10-103STUTFE
    b. The City Counsel derives its authority to define, alter, and levy this fee, its structure, and its waivers from Virginia Code § 15.2-2114.
        i. https://law.lis.virginia.gov/vacode/title15.2/chapter21/section15.2-2114/

Authority Delegated to City Under Stormwater Ordinance

§ 15.2-2114. Regulation of stormwater. (Section A) (*Please use link for § B-K*)

Any locality, by ordinance, may establish a utility or enact a system of service charges to support a local stormwater management program. [...] Income derived from a utility or system of charges shall be dedicated special revenue, may not exceed the actual costs incurred by a locality operating under the provisions of this section, and may be used only to **pay or recover costs** for the following:

1. The acquisition, as permitted by § 15.2-1800, of real and personal property, and interest therein, necessary to construct, operate and maintain stormwater control facilities;
2. The cost of administration of such programs;
3. Planning, design, engineering, construction, and debt retirement for new facilities and enlargement or improvement of existing facilities, including the enlargement or improvement of dams, levees, floodwalls, and pump stations, whether publicly or privately owned, that serve to control stormwater;
4. Facility operation and maintenance, including the maintenance of dams, levees, floodwalls, and pump stations, whether publicly or privately owned, that serve to control stormwater;
5. Monitoring of stormwater control devices and ambient water quality monitoring;
6. Contracts related to stormwater management, including contracts for the financing, construction, operation, or maintenance of stormwater management facilities, regardless of whether such facilities are located on public or private property and, in the case of private property locations, whether the contract is entered into pursuant to a stormwater management private property program under subsection J or otherwise; and
7. Other activities consistent with the state or federal regulations or permits governing stormwater management, including, but not limited to, public education, watershed planning, inspection and enforcement activities, and pollution prevention planning and implementation.

What is the Stormwater Utility Fee

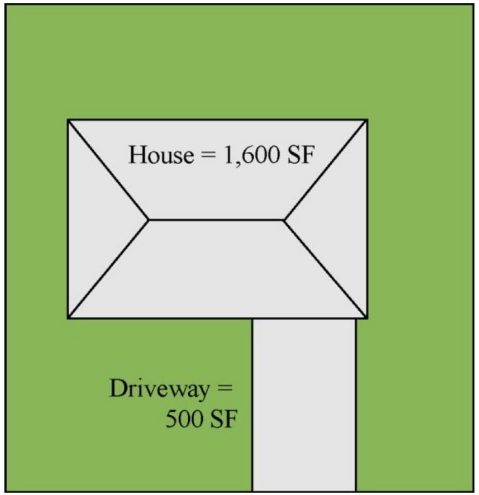
1. The SWU Fee was adopted to provide a stable source of funding for the WRPP (Watershed Restoration Protection Program)
   a. https://www.charlottesville.gov/364/Water-Resources-Protection-Program
2. The SWU Fee is a fee-for-service based on the amount of impervious surface area on a property (roofs, parking areas, walkways, etc.)
   a. This is a similar concept to how the City distributes the cost for sanitary sewer and drinking water services.
   b. Definition of Impervious Surface in the ordinance: “Area covered by hard surfaces such as structures, paving, compacted gravel, concrete, or other man-made features that prevent, restrict, or impede the downward passage of stormwater into the underlying soil.”

How is the Stormwater Utility Fee Currently Calculated?

Step 1: Calculate Business Units (BU's): Total Impervious Surface Area / 500 sqft, Round up to the next whole number.

Step 2: Calculate Total Fee

BU's * Fee Rate ($1.20) * 12 Months



Example Fee Calculation

- **Total impervious area = 2,100 SF**
- **Divide by 500 SF = 4.2**
- **Round to the next whole number = 5 billing units (BUs)**
- **Multiply the number of BUs (5) by the rate ($1.20) x 12 months for an annual fee of $72.00**

Current Storm Water Fee - Issues/Fact Finding

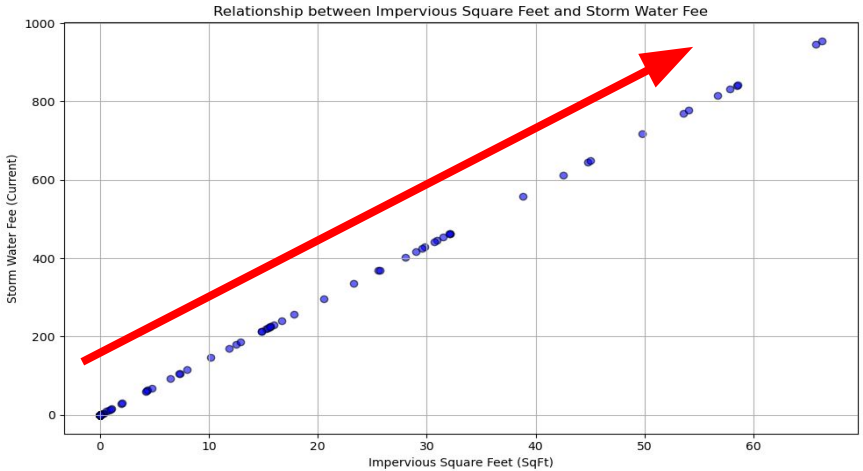
1. Current program does not fully utilize all of the authority delegated to the City by the State Government.
2. Fee/Formula has not increased and formula has not been changed since inception.
3. Fee/Formula lacks equity.
4. Program/Fee/Formula, while a step in the right direction, should be updated to more effectively provide funding for, and structure to, the stormwater fee and program which promotes the health and wellbeing of the community and its interests - including water quality, livability, and commerce.

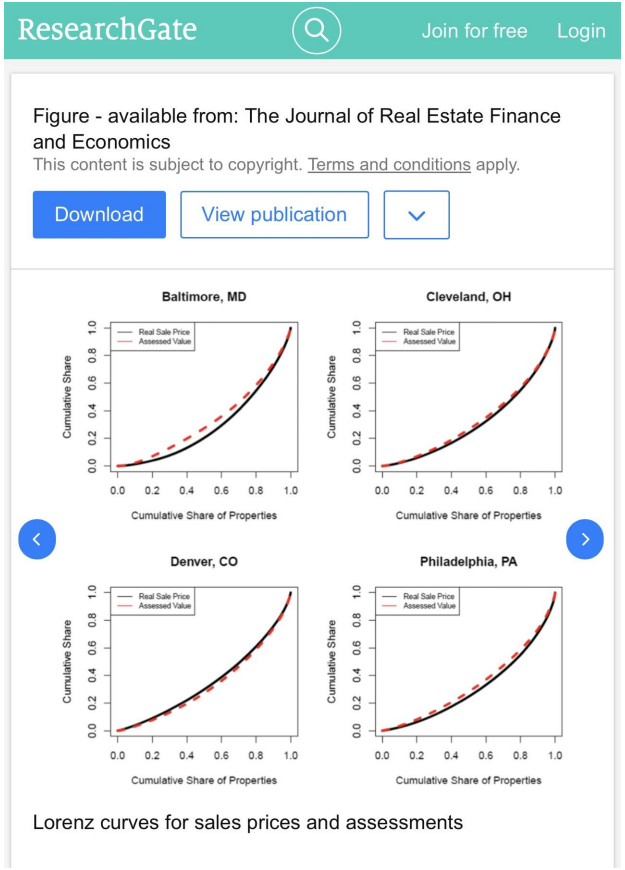
1. Suggested Stormwater Program Changes

- Include explicit reference to Green Infrastructure in the definitions of “stormwater infrastructure” and direct public utilities to include the planting of such infrastructure, including trees, in their stormwater facility designs and implementation.
- Determine what can be done to facilitate collaboration with/between existing departments that already work with trees and green infrastructure such that work is not duplicated or siloed in different departments.
    - This could take the form of directing them to work together on green infrastructure project and/or routing funding derived from the stormwater fee in new ways.
- Fully utilize the power delegated by the state to “**recover costs**”.
    - 0 East High Street, for example, could be designated as green infrastructure, removed from possible future development plans, and the cost of acquiring the property could in part be recovered via the storm water fee.

2. Suggested Stormwater Fee Changes

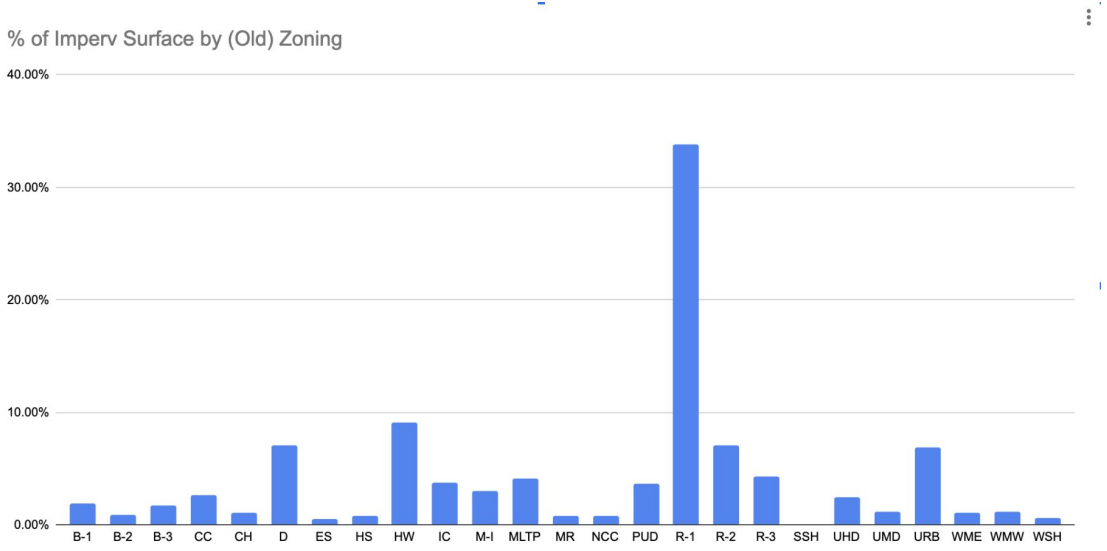
- The current Fee rounds impermeable surface area UP to the nearest 500sqft.
  - This lacks equity by scaling impermeable surface linearly and pushing the fees for lower impermeable surface lots higher, whereas wealth and property value do not scale linearly but according to a Lorenz distribution.
- **Suggested Changes:** (1) Remove Rounding-up from the Fee Formula.





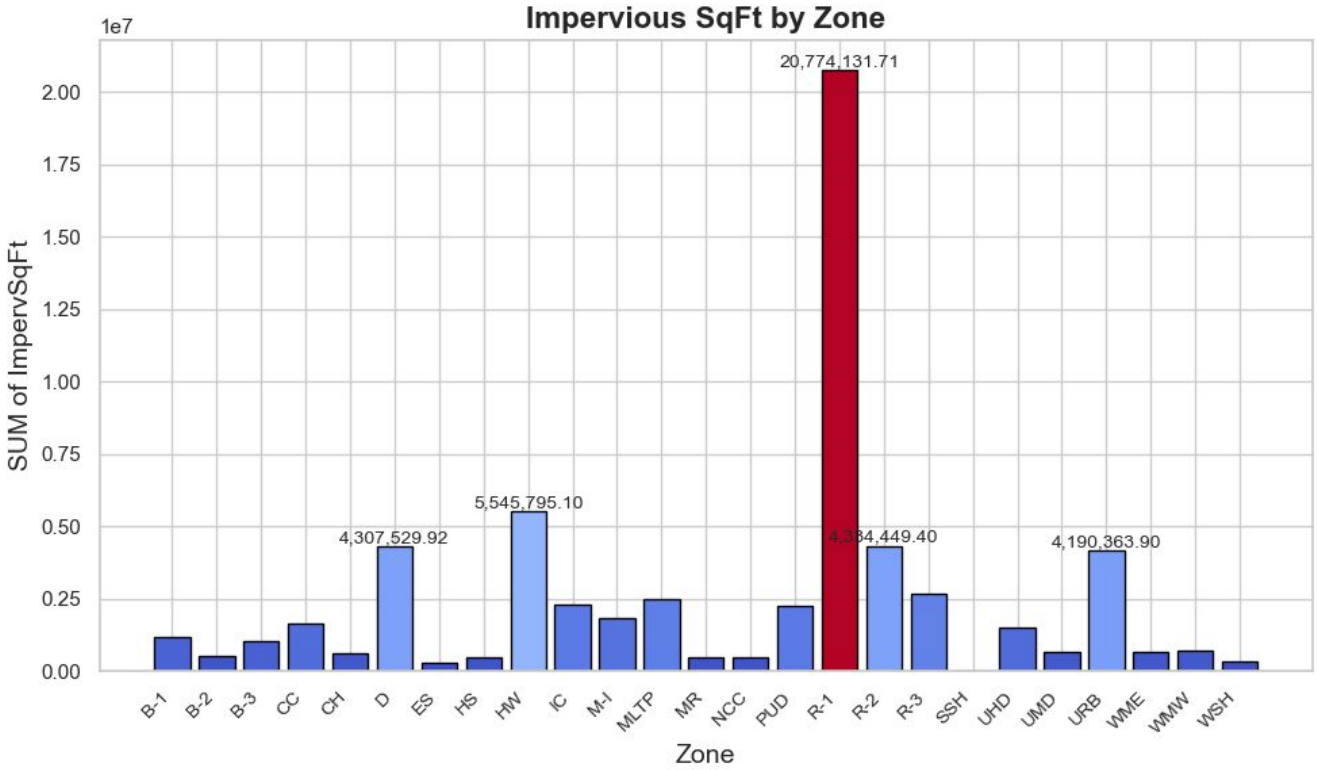
Lorenz curves for sales prices and assessments

% of Impervious Surface by (Old) Zoning

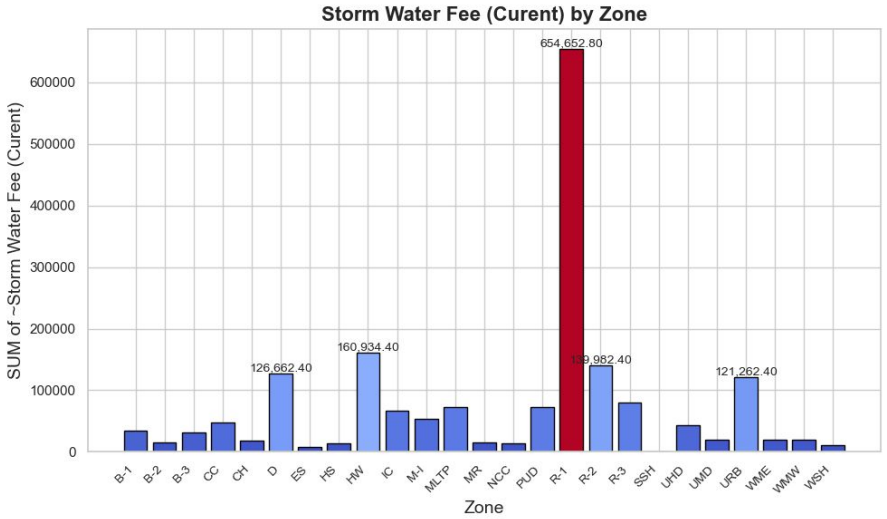


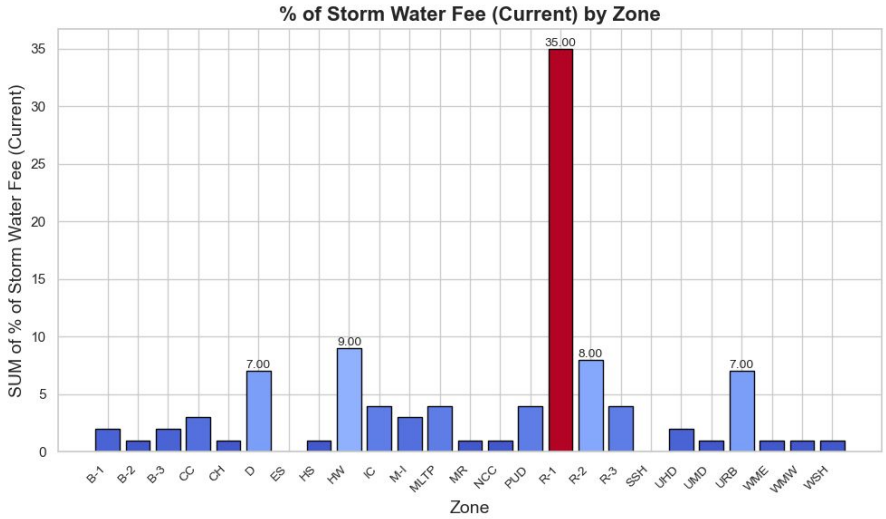
Zone	Zoning Definition	SUM of ImpervSqFt	% of total impervSqFt
B-1	Commercial 1	1,178,869.96	1.92%
B-2	Commercial 2	509,374.98	0.83%
B-3	Commercial 3	1,056,551.96	1.72%
CC	Central City	1,631,672.67	2.66%
CH	Cherry Avenue	624,105.63	1.02%
D	Downtown	4,307,529.92	7.02%
ES	Emmet Street Cooridor	286,446.43	0.47%
HS	High Street	483,971.66	0.79%
HW	Highway Corridor	5,545,795.10	9.04%
IC	Industrial Corridor	2,295,943.53	3.74%
M-I	Medium Industrial	1,847,228.06	3.01%
MLTP	Mixed-Use Low-Intensity Transition District	2,490,478.30	4.06%
MR	Mcintire - 5th Residential	490,529.80	0.80%
NCC	Neighborhood Commercial Corridor	480,177.19	0.78%
PUD	Planned Use Development	2,252,178.49	3.67%
R-1	Residential 1	20,774,131.71	33.86%
R-2	Residential 2	4,334,449.40	7.06%
R-3	Residential 3	2,656,741.90	4.33%
SSH	South Street Historic	31,181.86	0.05%
UHD	University High Density	1,497,230.02	2.44%
UMD	University Medium Density	682,261.38	1.11%
URB	Urban Corridor	4,190,363.90	6.83%
WME	West Main East Corridor	671,570.52	1.09%
WMW	West Main West Corridor	695,341.71	1.13%
WSH	Water Street Corridor	346,239.97	0.56%
		61,360,366.05	1.00

Current SWF Fee Breakdown by (Old) Zoning (1/5)

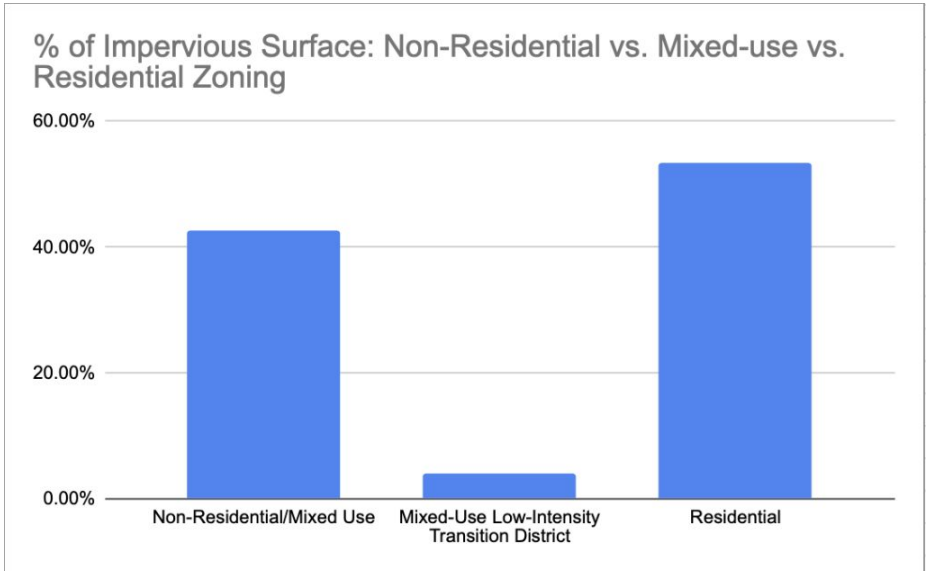


Current SWF Fee Breakdown by (Old) Zoning (2/5)





% Impervious Surface: Non-Residential vs. Mixed-use vs. Residential Zoning



	Impervious Sqft	% of Total Sqft	% of Stormwater Fee Assessed
Non-Residential/Mixed Use	26,182,365.05	42.67%	40.76%
Mixed-Use Low-Intensity Transition District	2,490,478.30	4.06%	3.84%
Residential	32,687,522.70	53.27%	55.40%
	61,360,366.05	100.00%	100.00%

2. Suggested Stormwater Fee Changes (P. 1/4)

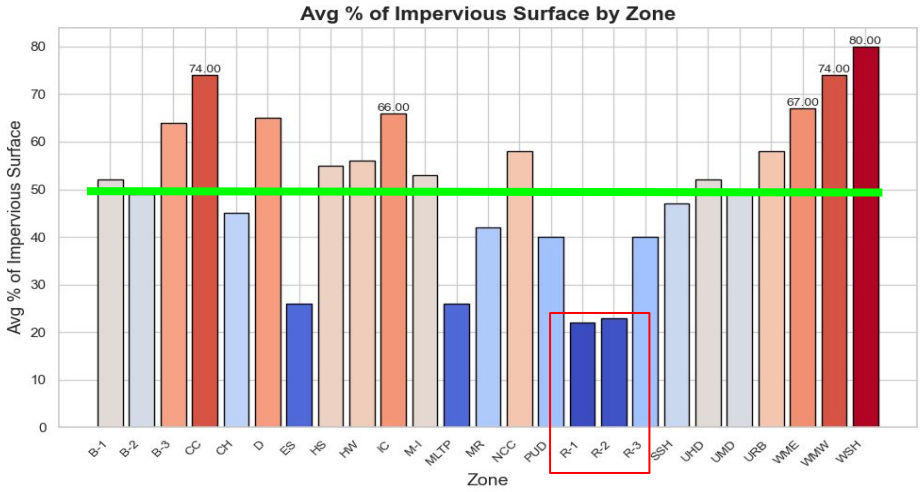
> *Sec. 10-101. - Purpose The city council finds that an adequate, sustainable source of revenue for stormwater management activities is necessary to protect the general health, safety, and welfare of the residents of the city. Further, the city council finds that property with higher amounts of impervious area contributes greater amounts of stormwater and pollutants to the stormwater management system and waters of the commonwealth and should carry a proportionate burden of the cost. Therefore, the city council determines that it is in the best interest of the public to enact a stormwater utility fee that allocates program costs to all property owners based on impervious area.*

This finding is true but it is only part of the story - higher concentrations of impermeable surface also contribute greater amounts of stormwater and pollutants to the stormwater management system and waters of the commonwealth, and should likewise carry a proportionate burden of the cost.

2. Suggested Stormwater Fee Changes (P. 2/4)

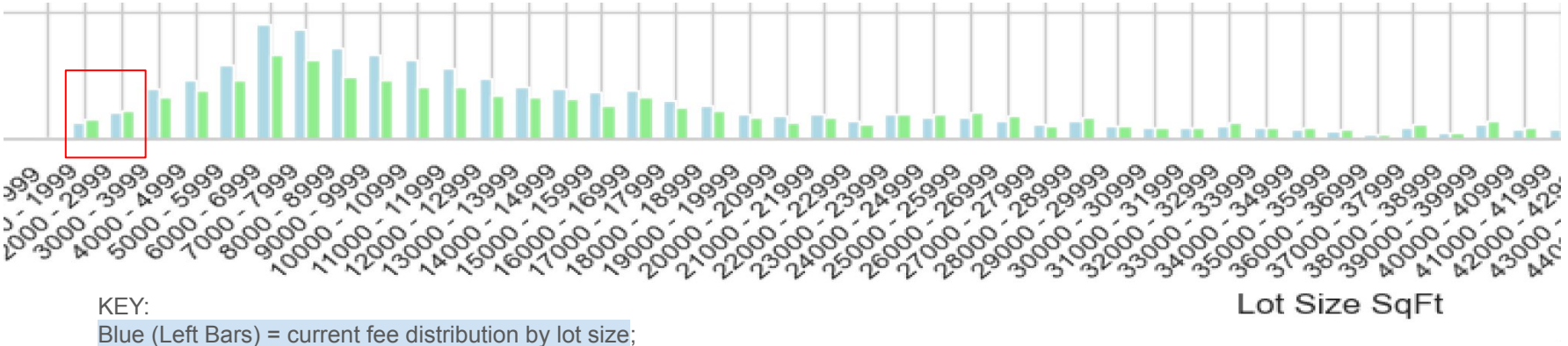
Suggested Changes:

2. Changing the fee formula to include % of lot coverage for impermeable surface in some capacity.
    - The inclusion of % of lot coverage would more effectively target lots that have an outside impact on the stormwater system by focusing the fee burden on lots with large amounts of impermeable surface AND high percentage coverage - such as parking lots.



2. Suggested Stormwater Fee Changes (P. 3/4)

3. Giving a blanket fee waiver to small lots (~ >2000sqft).
   - would address the potential equity issue that including % lot coverage would have on smaller city lots.



KEY:
Blue (Left Bars) = current fee distribution by lot size;
Green (Right Bars) = Current Fee multiplied by % of lot covered in impermeable surface

2. Suggested Stormwater Fee Changes (P. 4/4)

4. Giving a scaled waiver for higher density lots that build affordable housing as this type of housing benefits stormwater concerns by increasing utilization of densely zoned properties.
    - We do not believe that the goals of increased green infrastructure, increased canopy coverage, and increased affordable housing and density are incompatible; rather, that they can be achieved together in a synergistic way where the resources and benefits of one area are able to be brought to effect positive change in the other.
    - Put another way, Increased canopy and stormwater infrastructure leads to a city where more people want to live; increased affordable housing allows more people to live here and fund that infrastructure.

In Practice - A Tale of Two Parcels

Address Number	Address Street	Zone	LotSqFt	ImpervSqFt	Imperv %	SW Billing Units	~Storm Water Fee (Curent)	% of storm water fee (Current)	~Storm Water Fee (% Impermiable scaling)	% of storm water fee (scaled)	Storm Water Fee (Doubled)	% of doubled storm water fee	Storm Water Fee Doubled + % Impermiable Sliding Scale	% of doubled storm water fee (scaled)	Storm Water Fee (Tripled)	% of tripled storm water fee	Storm Water Fee Tripled + % Impermiable Sliding Scale	% of tripled storm water fee (scaled)
100	E WATER ST	WSH	43064.5	42659.67	99.06%	86	$1,238.40	0.0664416%	$1,226.76	0.143%	$2,476.80	0.0664%	$2,453.52	0.143%	$3,715.20	0.0664%	$3,680.28	0.1434984%
900-1000	1ST ST S	MLTP	374441.56	36259.03	9.68%	73	$1,051.20	0.0563981%	$210.67	0.012%	$2,102.40	0.0564%	$203.59	0.012%	$3,153.60	0.0564%	$305.38	0.0119071%

Why are these two lots that have such radically different uses re: % of lot covered in impermeable surface paying nearly the same amount?

Imperv %	SW Billing Units	~Storm Water Fee (Curent)	% of storm water fee (Current)	~Storm Water Fee (% Impermiable scaling)	% of storm water fee (scaled)	Storm Water Fee (Doubled)	% of doubled storm water fee	Storm Water Fee Doubled + % Impermiable Sliding Scale
99.06%	86	$1,238.40	0.0664416%	$1,226.76	0.143%	$2,476.80	0.0664%	$2,453.52
9.68%	73	$1,051.20	0.0563981%	$210.67	0.012%	$2,102.40	0.0564%	$203.59

Recap: Problem With Current Storm Water Fee System

1. **Current SWF System places the fee-burden on low density residential lots**
    a. Prioritizes “consistency of funding” over “promoting changes we want to see.”
    b. low density residential, in aggregate, accounts for the largest amount of impervious surface in the city when considered by zoning; however, these lots have a low overall *percentage* of impervious sqft when compared against lot size.
        i. These lots are therefore generally less-able to make changes that would both lower their fee when compared to lots with a higher percentage of impervious surface to lot size, such as a parking lot, and meaningfully lower their stormwater fee via the fee-waiver program.
2. **The current SWF System does not actually treat all impervious surface equally**
    a. Due to the BU system, some lots are rounded up to pay a higher fee than they actually should pay based on the actual impervious surface on their lot.
3. **The current SWF System does not take % of impervious surface of a given lot into account in addition to the overall sqft of impervious surface**
    a. This means that larger lots with high levels of impervious surface are not impacted by the fee in a way that would actually promote change in use.

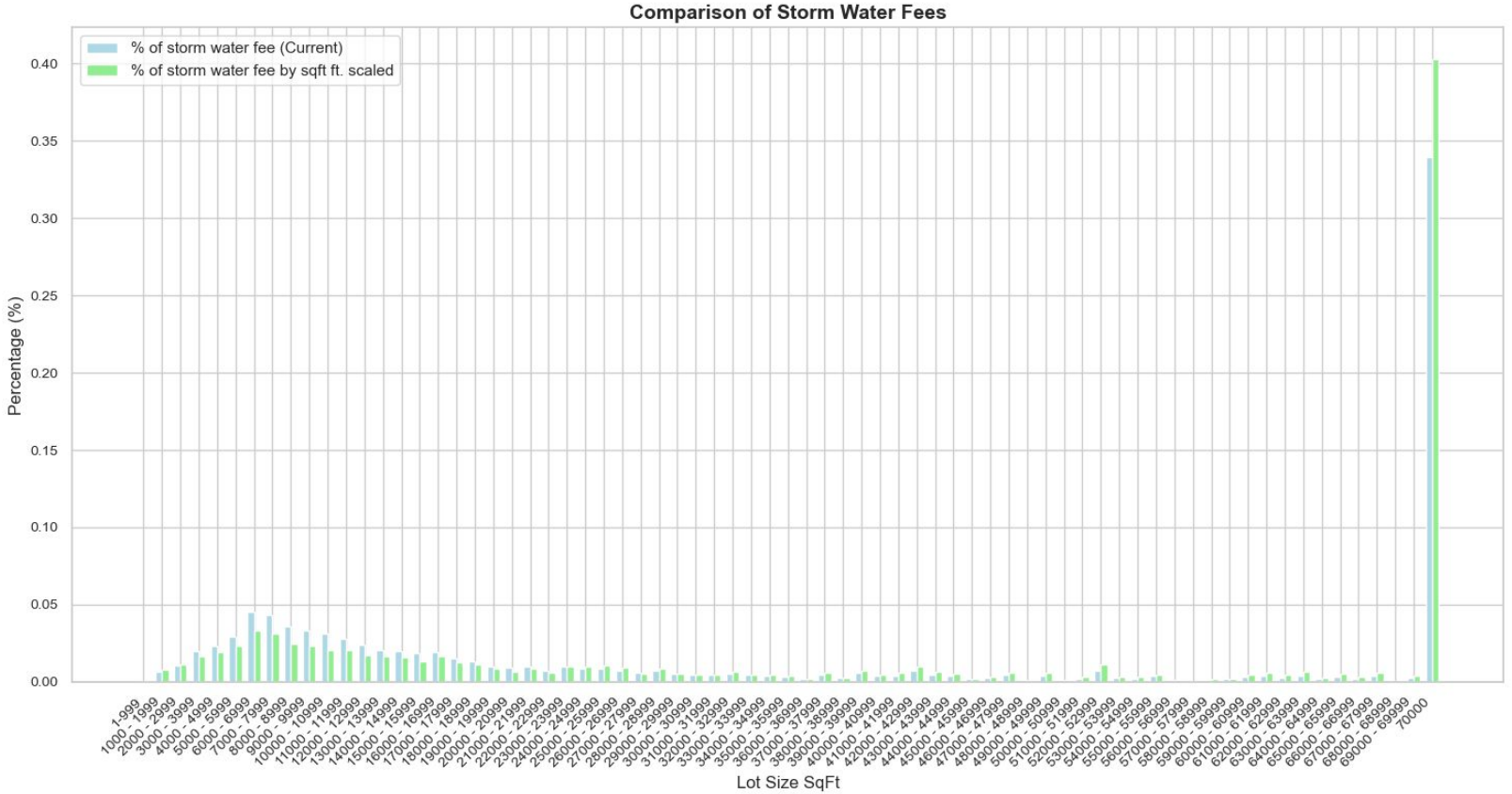
Recap: Problems These Suggested Changes Work to Address:

1. **Promote Better Development & Better Management**
    a. Incentivize Developers and Managers of existing properties with lots that have a high % of impermeable surface to engage in more sustainable practices via fee reductions and waivers for building green infrastructure.
    b. This is not a one-time fee, this is an annual fee and one that could add up to an amount that developers and managers would find significant - that is a double edged sword, because we do not want to injure local business but we do want to incentivize them to incorporate sustainable practices.
2. **Protection for large diameter trees in development**
    a. If fee-breaks or partial waivers are offered for protecting large diameter trees for the duration of their life this could, in combination with an increased and better targeted fee, convince some developers to preserve these trees.
3. **Planting trees on private property**
    a. If we can convince the city to include grown/planted infrastructure alongside built infrastructure an argument could be made to divert some of the funding from this program towards offering planting on private property.

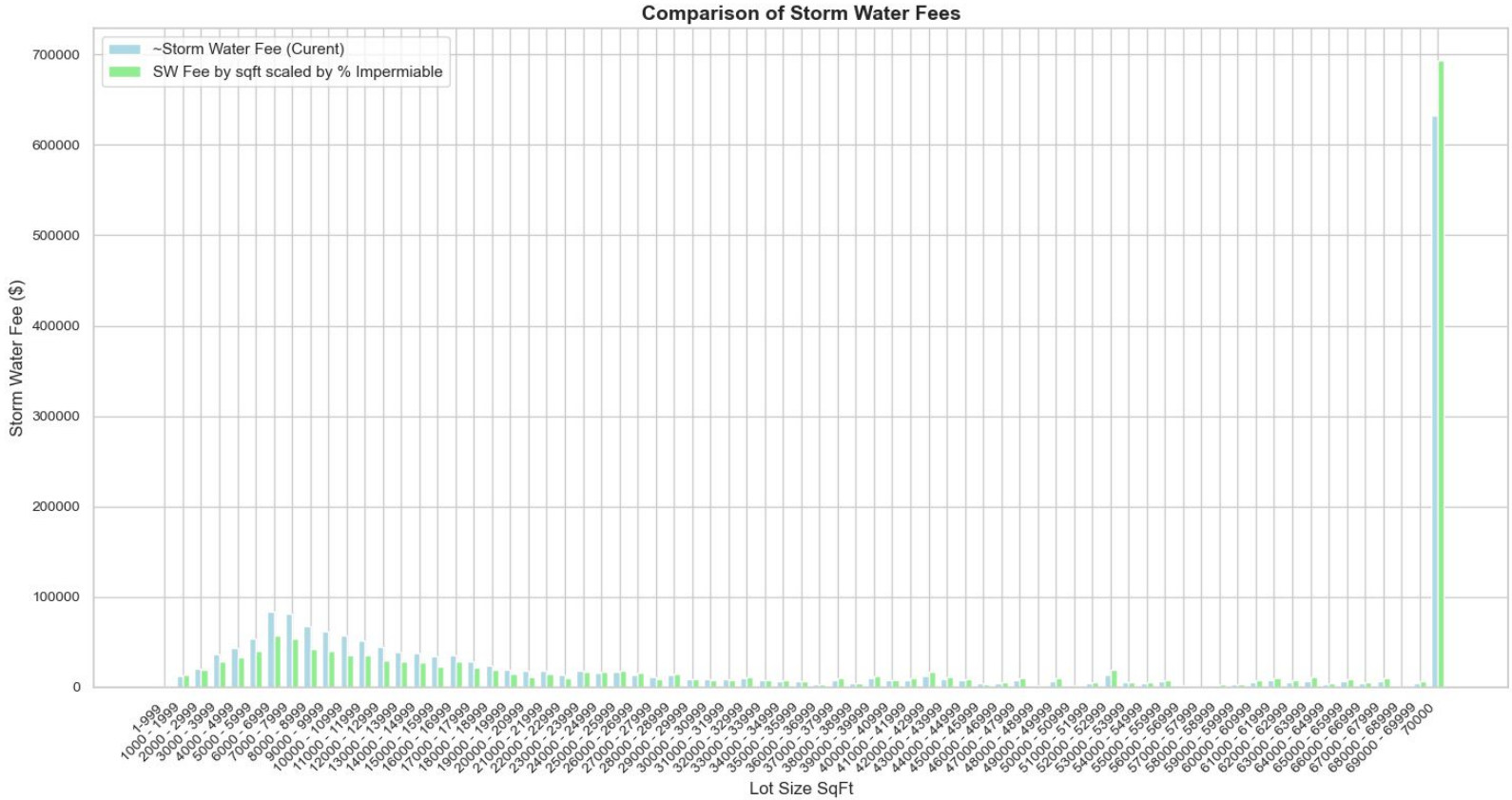
Potential Critiques

1. Using % of Impermeable Surface by Lot Size is regressive.
2. Using Tree-Plantings, or protecting large diameter trees by providing storm water fee breaks or waivers is regressive.
3. Commercial lobbying interests will oppose these changes.
    a. Some arguments here have merit - i.e., commercial property is already hurting and city council would be reluctant to make that worse.
4. The city is “almost done” with their “TMDL” requirements, which has been the primary (if not only) justification for local government environmental spending in the last decade.
    a. The city already has a long list of projects queued up to get to that goal.

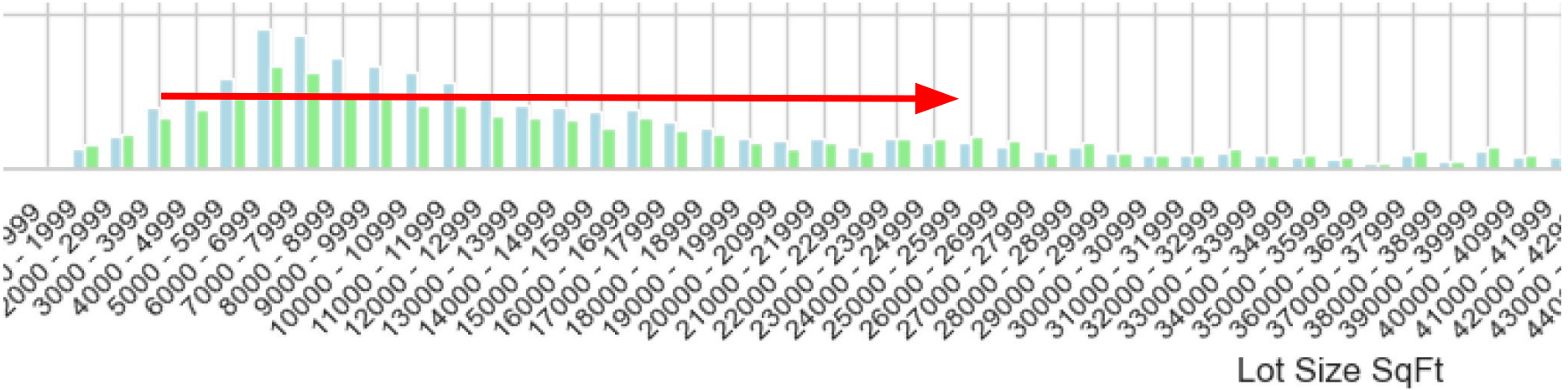
Counter to Critiques 1 & 2 (1/4): % of Total Fee Collected



Counter to Critiques 1 & 2 (2/4): Fee in Dollars



Counter to Critiques 1 & 2 (3/4)



- The change to include the % of Impermeable Surface in the SW Fee calculation actually shifts the fee burden from smaller lot sizes to larger.
- Taken in concert with the change to include % of impermeable surface in the SWF, fee breaks/waivers for tree planting and preservation of LDT's would/should be offset by the shift in fee burden away from smaller lots.
- The fee would be calculated using BOTH impervious surface amount AND % of lot covered. RE: impact on smaller lots: just as smaller lots are not able to support as many trees as larger lots, they also do not support as much impervious surface and have lower fees as a result.

Counter to Critique 3

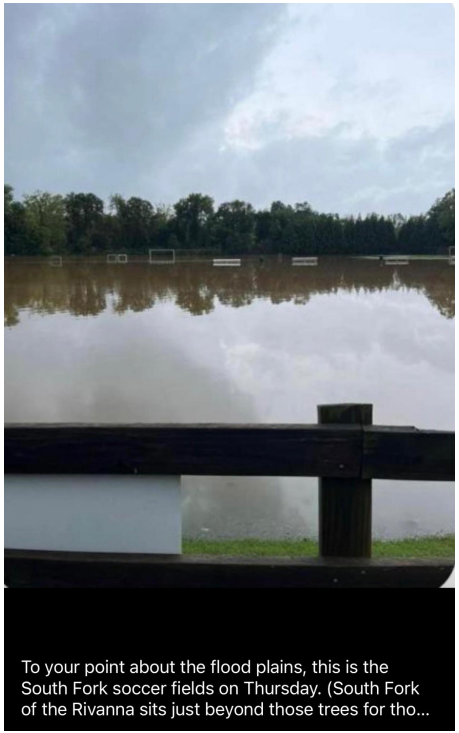
Critique 3: “Commercial lobbying interests will oppose these changes.”

- Research conducted by urban designer Dan Burden suggests that businesses operating on streets with significant tree coverage earn 12% more income than those without and that mature tree canopy streets allowed businesses to charge an 8-12% premium on their products and services.
- The EPA released a report summarizing 17 case studies on development that includes green infrastructure that estimates the capital cost savings ranged from 15% to 80% when GI was used.
    - https://nacto.org/docs/usdg/banking_on_green_odefey.pdf
- The NRDC stated in its report, “The Green Edge: How Commercial Property Investment in Green Infrastructure Creates Value,” that the following benefits to commercial property can be realized through GI investments:
    - Increased rents and property values
    - Increased retail sales
    - Reduced infrastructure costs
    - Energy savings
    - Reduced water bills

Counter to Critique 4

Critique 4: “The city is “almost done” with their “TMDL” requirements, which has been the primary (if not only) justification for local government environmental spending in the last decade.”

- What we have done, while impressive and necessary, is not enough.



Counter to Critique 4