

# Stormwater Utility Development Study



**Presentation to Larger Commercial Customers  
City of Fairfax, October, 2021**



**CITY OF FAIRFAX  
STORMWATER  
MANAGEMENT**





# Agenda

- What is a Stormwater Utility?
- Why the City is considering this
- How it will work, benefits to city
- How the rate structure was built
- How you will be impacted
- Credit program and examples
- Implementation schedule
- Questions/comments



# What is a Stormwater Utility?

- Like a water or sewer utility – a fee for service
- Dedicated funding source
- Payment based on demand/impact on system







# Why is this Needed?

## 1. The Role of Weather

Infrastructure statewide, whether for stormwater, roads or dams, has been designed and engineered to withstand rainfall patterns that increasingly no longer exist.

*Jonathan Goodall, an engineering professor at the University of Virginia. (Virginia Mercury)*

# Why is it Needed?

## 2. Project Funding, Backlogs

We need to spend \$14 million by 2027 to ensure that the city meets water quality regulatory requirements, maintain existing infrastructure, and provide drainage improvements requested by the community

At the beginning of construction and just after tree removal, March 2020



After Construction & Stabilization, June 2020





# Why is it Needed?

## 3. More stringent regulations

- 80% of what the City must spend for stormwater is critical maintenance or compliance with its Municipal Separate Storm Sewer System (MS4) permit.
- This includes tackling erosion in the Accotink. Eroding streams causes loss of public and private property, loss of trees, and degrades aquatic habitats.
- It also includes other projects that provide credits towards the city's pollutant reduction requirements for the Chesapeake Bay, such as improvements to stormwater management facilities.

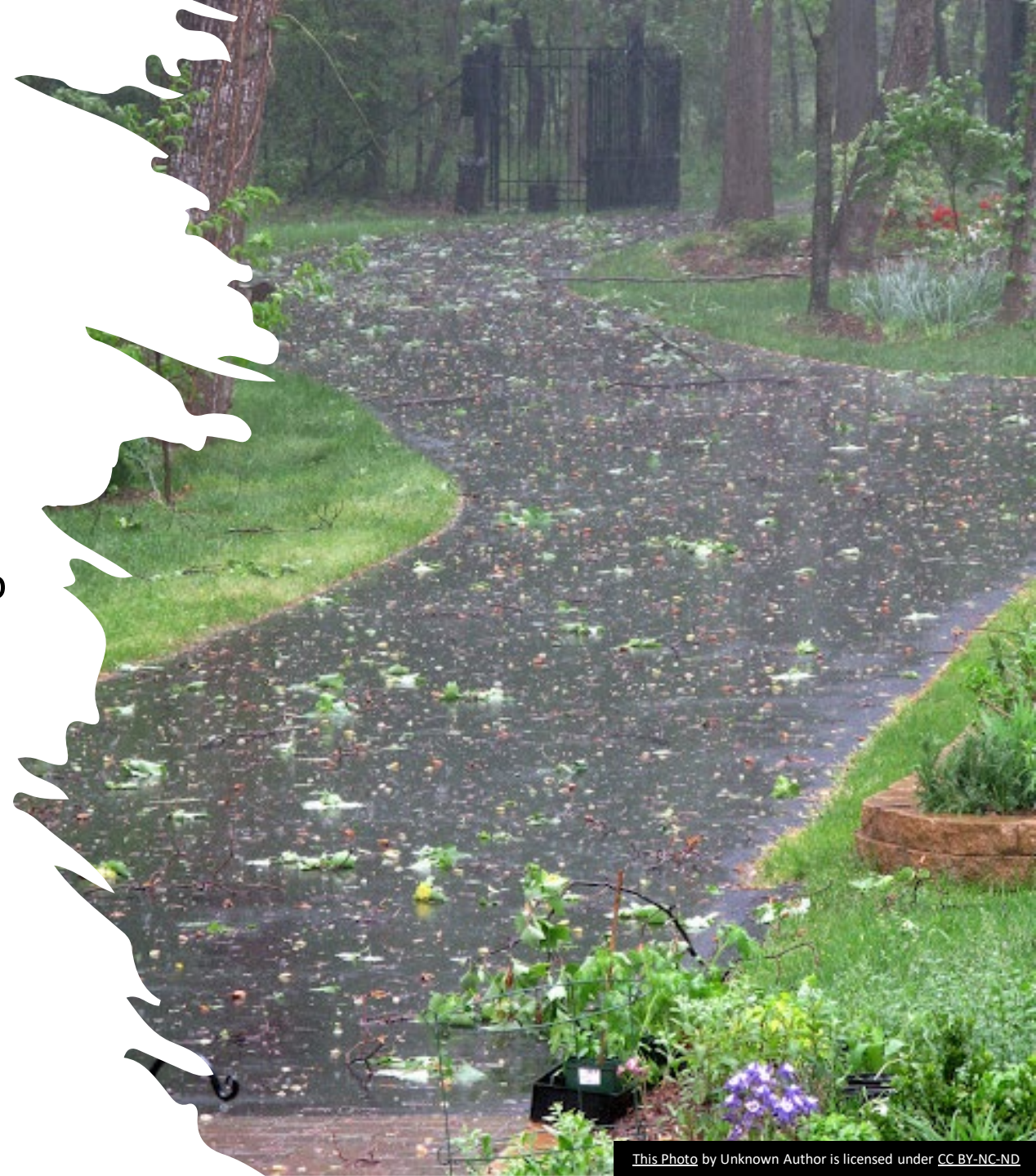




# Why is it Needed?

## 4. Fairness and Equity

- The current amount each property owner pays towards stormwater is collected through the real estate tax. (\$0.03 dedication to Stormwater Fund+ an additional \$0.027 from general fund for operating costs)
- This means what you pay into the SW fund is tied to your property's tax value, which is not related to the property's impact or demand on the City's stormwater infrastructure.
- No money is currently collected from tax-exempt properties that also have an impact or demand for stormwater infrastructure.
- The proposed fee is more equitable because it matches a property's demand on the City's stormwater services with the price paid AND assures all properties in the City are paying their fair share.





# What Are the Primary Benefits?

## Financial

- Creates an effective financing strategy providing more flexibility in debt management for both the Utility and the City.
- Fees are stable over time and are not subject to declines in property value or local general fund budgeting decisions
- Enables rates that recover actual costs, based on input from financial advisors.
- Fees can be calibrated to meet total stormwater program revenue needs and are often adjusted over time as revenue needs change





# What Are the Primary Benefits?

## Environmental

- Supports the City's projected, holistic Urban Forestry Program.
- Funds other important projects such as stream restoration and stormwater management facility upgrades to improve stream health

## Regulatory

- Enables us to meet Clean Water Act and Chesapeake Bay Protection Act requirements which ensures that the city does its part, in conjunction with others in the region, to protect these resources.





# What Are the Primary Benefits?

## Social

- Fees are equitable because they are based on how much the properties contribute to stormwater runoff
- Costs are spread over a larger base because they include tax-exempt properties
- The utility shifts stormwater program costs outside of the general fund allowing council the flexibility to consider changes to local property taxes or directing funding to other community priorities
- Protects public and private property and property values.





# What Are the Primary Benefits?

## Social

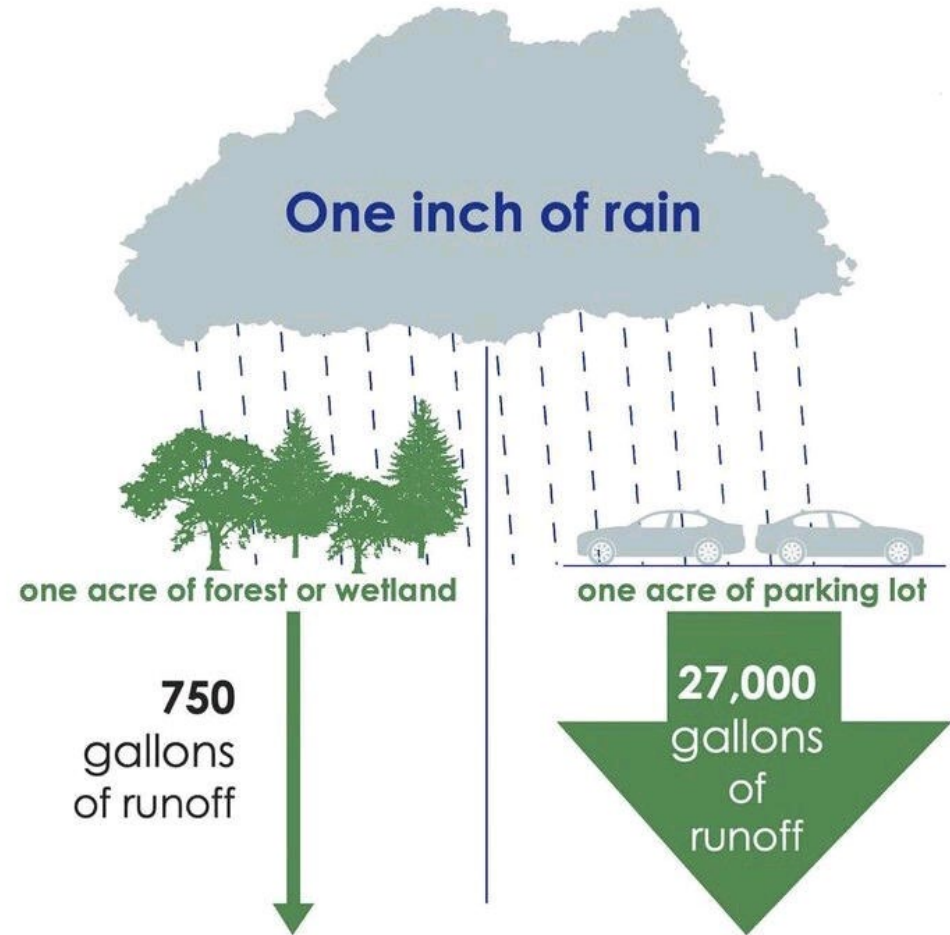
- Engages community in addressing stormwater management
- Raises awareness about the need for stormwater management and brings transparency to the amount of public investment in it
- Credit program recognizes stormwater-positive property characteristics and activities and allows property owners to reduce their fees in ways that benefit the community.





# What Do We Mean by “Equity”?

- The amount of **impervious cover** (rooftops, driveways, parking lots, etc.) on a property is the most direct indicator of how much stormwater **runoff** that property generates.
- The difference in land cover can create a dramatic difference in stormwater runoff rate

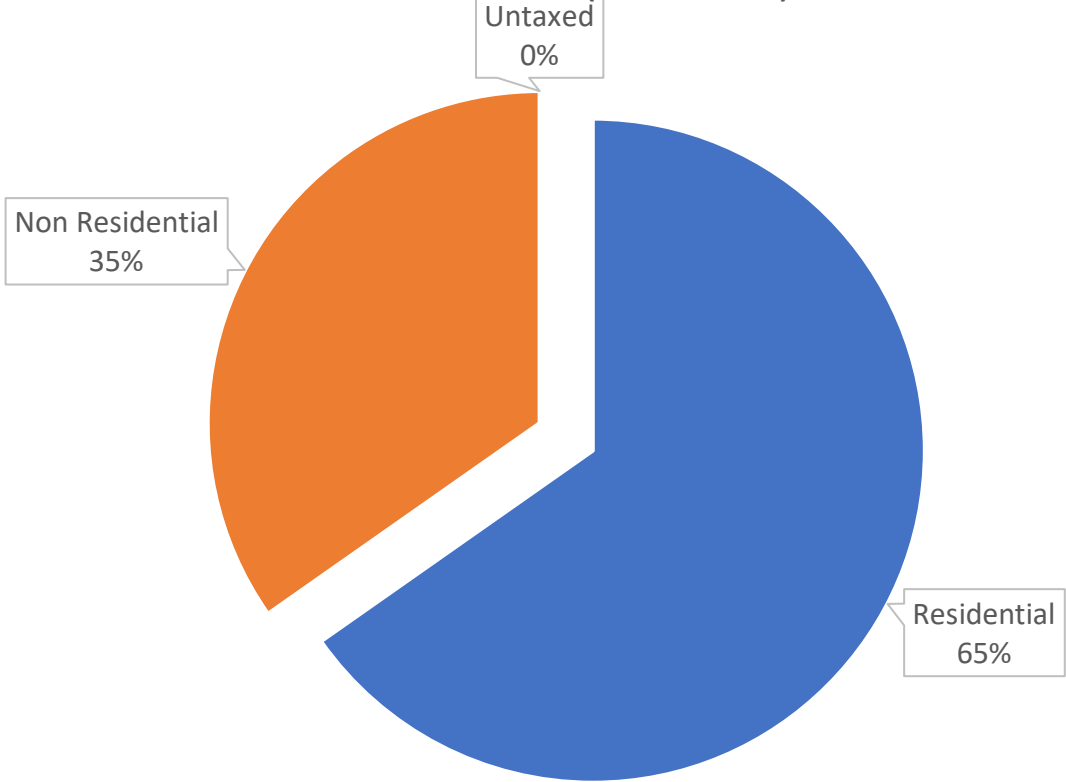


Source: Environmental Protection Agency



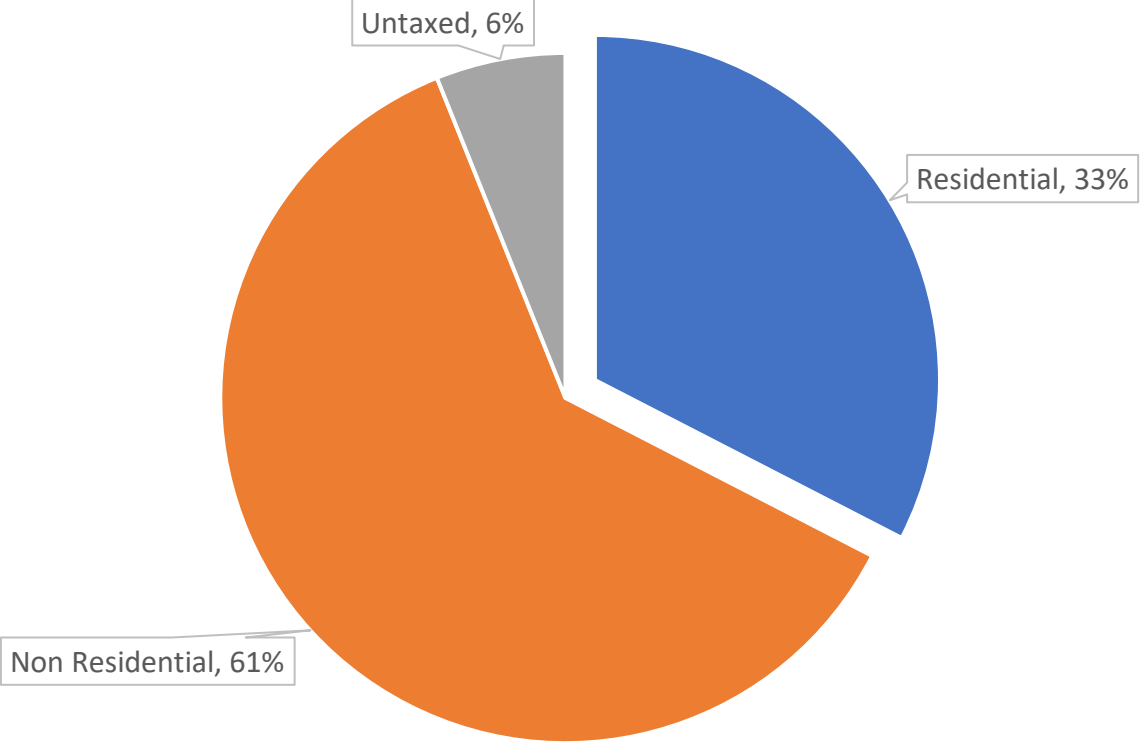
# What Do We Mean by “Equity”?

Assesed Value (\$ Billions)



■ Residential ■ Non Residential ■ Untaxed ■

Impervious Coverage



■ Residential ■ Non Residential ■ Untaxed ■



# What Do We Mean by “Equity”?





# Stormwater Utilities in Virginia

	NoVa and Other Virginia Stormwater Utilities						
Real Estate Tax Rate	Community	As of Date	Year Initiated	Annual SWU Fee per BU	Billing Unit Size (BU)	Land Area (Rate Base)	Annual Revenue
\$1.075 / \$100	City of Fairfax, VA	FY2022*	2022*	\$28.80	500 ft <sup>2</sup>	6.2 mi <sup>2</sup>	\$3.92 million*
\$1.355 / \$100	City of Falls Church, VA	FY2021	2013	\$45.90	500 ft <sup>2</sup>	2.2 mi <sup>2</sup>	\$1.65 million
\$1.11 <sup>1</sup> / \$100	City of Alexandria, VA	FY2022 <sup>1</sup>	2018	\$70.00	~500 ft <sup>2</sup>	15.0 mi <sup>2</sup>	\$16 million
\$1.46 / \$100	City of Manassas, VA	FY2021	2015	\$15.24	~500 ft <sup>2</sup>	9.9 mi <sup>2</sup>	\$3.5 million
\$1.55 / \$100	City of Manassas Park, VA	FY2021	2010	\$29.24	500 ft <sup>2</sup>	2.5 mi <sup>2</sup>	\$1.073 million
\$0.95 / \$100	City of Charlottesville, VA	FY2021	2014	\$14.40	500 ft <sup>2</sup>	10.3 mi <sup>2</sup>	\$1.95 million
\$1.22 / \$100	City of Roanoke, VA	FY2021	2014	\$10.80	500 ft <sup>2</sup>	42.9 mi <sup>2</sup>	\$6.18 million
*FY2022, January 1, 2022							
<sup>1</sup> Proposed FY2022 budget							
BU sizes and Fees per BU scaled to ~500 ft <sup>2</sup> for comparison purposes. Actual BUs/ERUs may differ.							

- 29 Stormwater Utilities in Virginia, 5 in our region.
- Rate base, level of service expectations, infrastructure condition and needs, have to be considered when comparing rates.





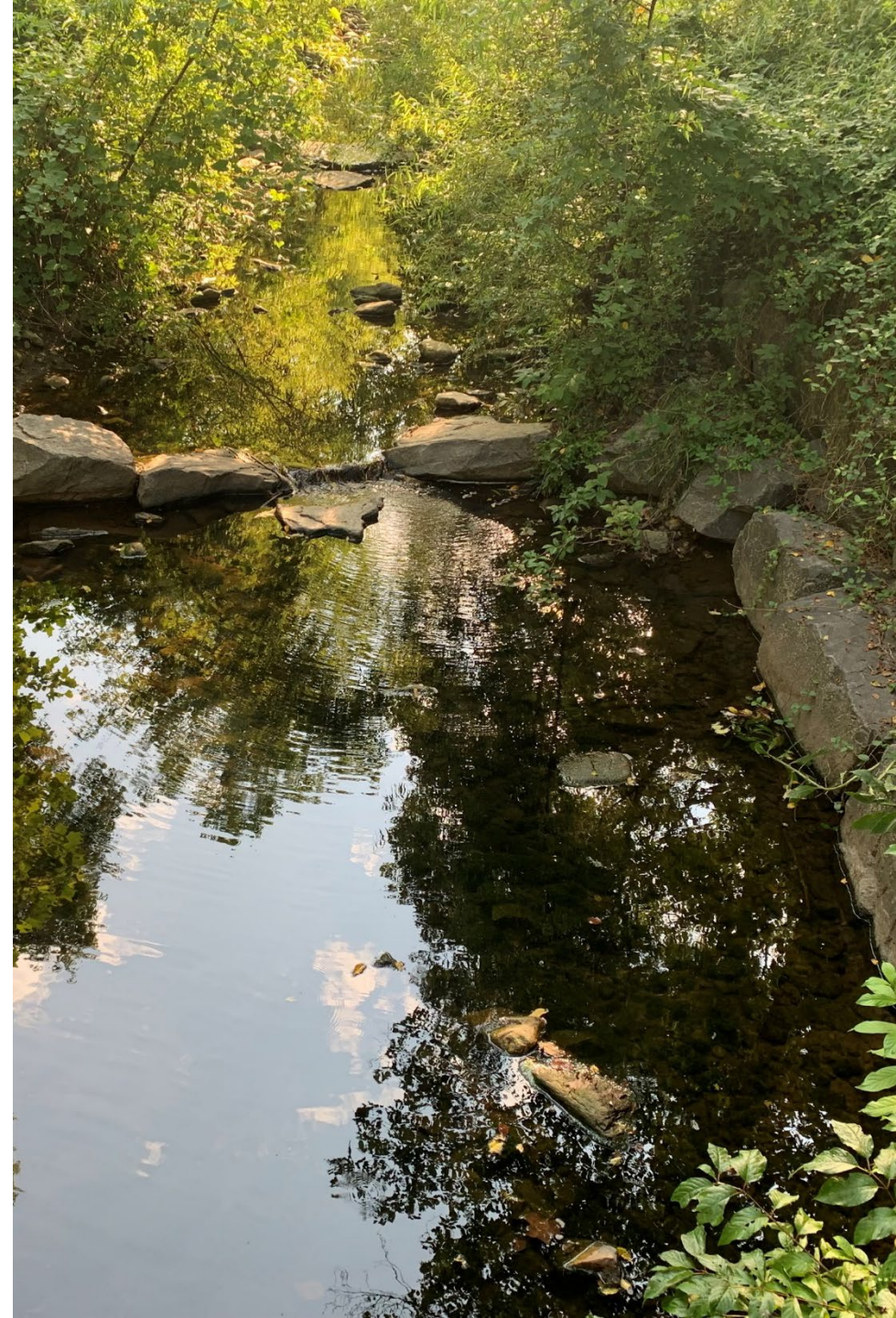
We Can't Ignore This – Too Many Risks



# How Billing Would Change

- City used GIS and aerial imagery to determine each property's surface area
- One billing unit = 500 sq ft of impervious area
- The initial\* rate per billing unit = \$28.80 to support the proposed program

\*Represents the initial SWU modeled rate; adopted rate may differ





# Sample Bill Impacts – Car Dealership



Ted Britt Ford

Currently Paying	Proposed SWU Cost*
Property Value = \$15 M	390 Billing Units
$\$0.03 + \$0.027 = \$0.057$	$390 \times \$28.80$
\$8,584	\$11,232.00

\*Represents the initial SWU modeled rate; adopted rate may differ



# Sample Bill Impacts – Mall (multi-retail space)



Fair City Mall

Currently Paying	Proposed SWU Cost*
Property Value = \$90 M	2569 Billing Units
$\$0.03 + \$0.027 = \$0.057$	$2569 \times \$28.80$
\$51,147	\$73,987

\*Represents the initial SWU modeled rate; adopted rate may differ



# Credit Program

- Stormwater Management Facility
- Voluntary structural changes
- Tree Planting
- Stream Restoration
- Adopt-A-Stream Program
- Storm Drain Marking
- Pledge To Not Fertilize

**No Cap on SWU Fee Credit Amount Eligibility**

**Removing impervious cover creates a permanent SWU Fee reduction**



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Stormwater Utility Credit Program Manual DRAFT

City of Fairfax, Virginia  
10455 Armstrong Street  
Fairfax, VA 22030

September 2021  
stormwaterutility@fairfaxva.gov



# Sample Credit Values

- Tree Planting (urban) = 1 BU per 5 trees planted
- Tree Planting (stream) = 4 BU per 5 trees planted
- Adopt-A-Stream Program = up to 15% per event, up to 3 events / 45% per year
- Storm Drain Marker Program = 15% per 50 markers, up to 150 markers / 45% per year
- No Fertilizer Pledge, 5% per year
- Stormwater Management Facility (BMP) = 20-35% for the area treated, plus additional 10-15% for off-site area treated.



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# Sample Credit – Car Dealership



Ted Britt Ford

Current SWM Contribution	Proposed SWU Cost*	Potential SWU Credits
Property Value = \$15 M	390 Billing Units	SWM facility maint; Host 2 Stream cleanups
$\$0.03 + \$0.027 = \$0.057$	$390 \times \$28.80$	SWM credit = ~\$630; 2 stream cleanups = ~\$3,370
\$8,584	\$11,232	\$7,232

\*Represents the initial SWU modeled rate; adopted rate may differ



# Sample Credit– Mall (multi-retail space)



Fair City Mall

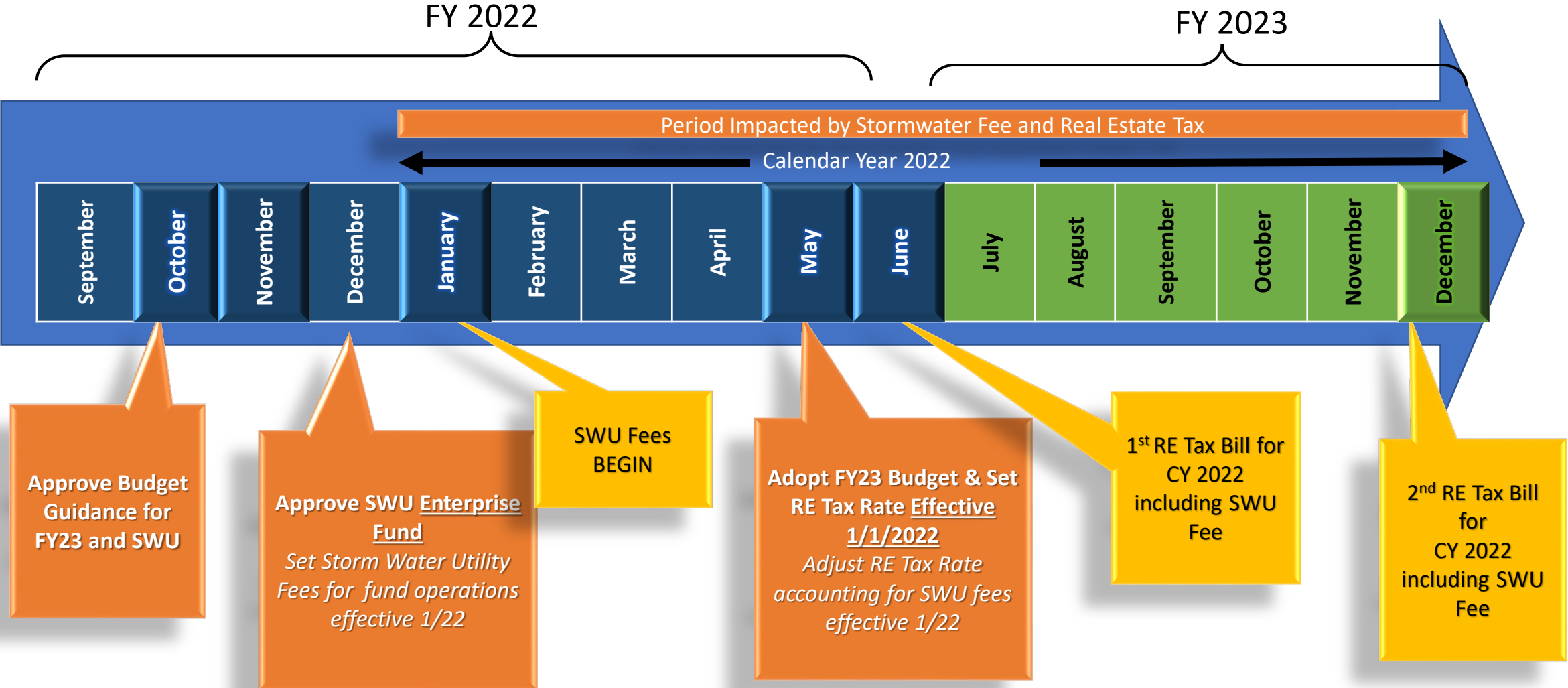
Currently Paying	Proposed Cost*	Potential SWU Credits
Property Value = \$90 M	2569 Billing Units	Host 3 Stream cleanups
\$0.03 + \$0.027 = \$0.057	2569 X \$28.80	SWU credit = \$33,294
\$51,147	\$73,987	\$40,693

\*Represents the initial SWU modeled rate; adopted rate may differ



# Implementation Schedule

## Storm Water Utility Fees Blended with Real Estate Tax Bill





# Questions/Comments

Contact the City of Fairfax  
Department of Public Works

703 273 6073 or email  
[stormwaterutility@fairfaxva.gov](mailto:stormwaterutility@fairfaxva.gov).

You can also sign up for e-mail  
updates from the City when news  
releases, public meetings, or other  
City communications on the SWU  
development effort are released at  
[www.engage.fairfaxva.gov](http://www.engage.fairfaxva.gov)

