



**City of Richmond**

# **When it Rains – it Pours Why we need a Stormwater Utility**

## **7<sup>th</sup> District Meeting March 27, 2010**

Bob Steidel - Deputy Director, DPU

Chris Beschler – Director, DPU



# Understanding Stormwater

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## What is Stormwater?

Precipitation from rain/melting snow that **DOES NOT** soak into the ground. Impervious surfaces like driveways, parking lots, roads and roofs prevent stormwater from soaking in.

## Stormwater Issues:

- **Flooding**
- **Pollution**
- **Poor Water Quality**
- **Soil Erosion**





# Understanding Stormwater

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## Where does it go?

Stormwater travels to the James River through...

**35,000 catch basins**

**370 stormwater outfalls**

**200 private BMP's (example: retention pond)**

**50 public BMP's**

**608 miles of drainage ditches**

**178 miles of storm sewers**

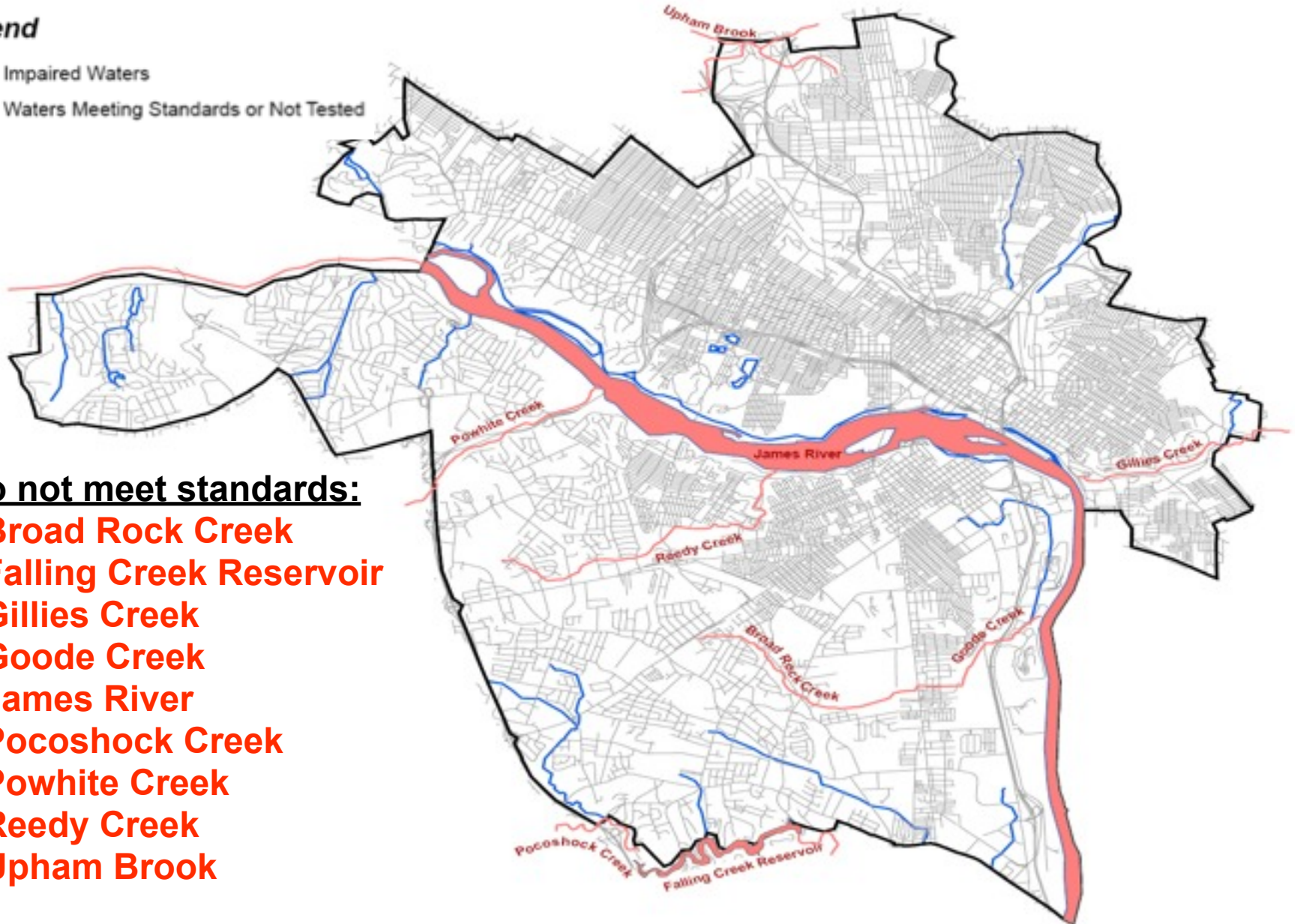
**6.5 miles of polluted creeks and streams**



# Understanding Stormwater Richmond's Polluted Waters

## Legend

- Impaired Waters
- Waters Meeting Standards or Not Tested



## Do not meet standards:

- Broad Rock Creek
- Falling Creek Reservoir
- Gillies Creek
- Goode Creek
- James River
- Pocoshock Creek
- Powhite Creek
- Reedy Creek
- Upham Brook



# Understanding Stormwater

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**What is the law?**

**We have to reduce/improve both**

**Quantity of Stormwater**

**Quality of Stormwater**





# Understanding Stormwater: Management Goals

- **Protect public and environmental health**
- **Protect residential, commercial, industrial & public properties**
- **Improve and protect public safety and mobility**
- **Improve economic opportunities with better drainage**

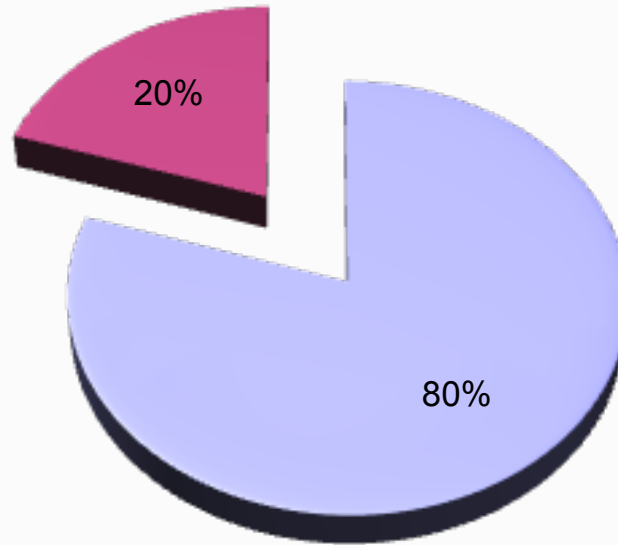




# Understanding Stormwater: Pollution Sources

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- **Contributors to Chesapeake Bay Pollution**

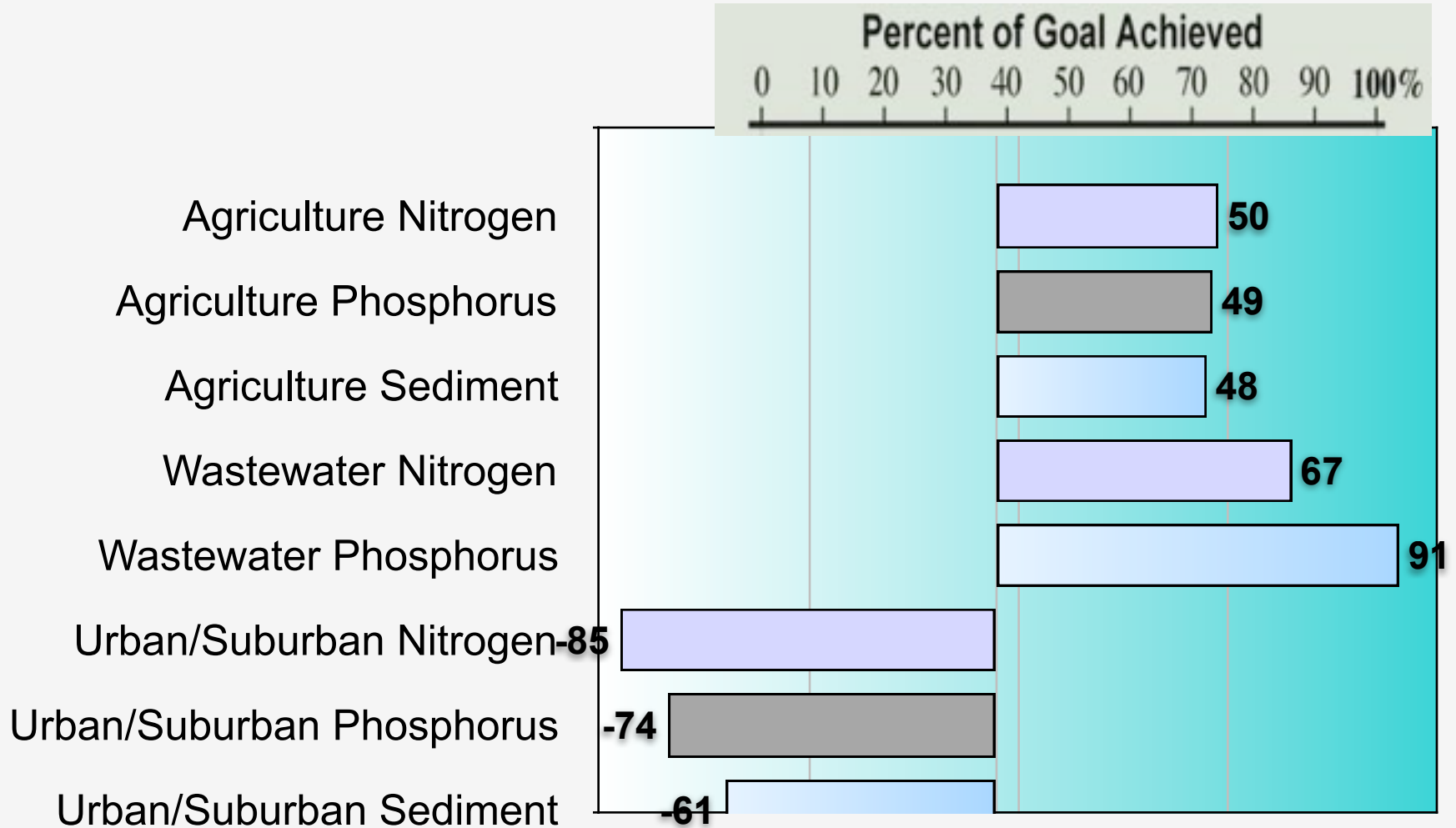


- Agriculture & Stormwater Runoff
- Wastewater Treatment Plants and Industry





# Understanding Stormwater - Pollution Reduction Progress in the Chesapeake Bay Watershed



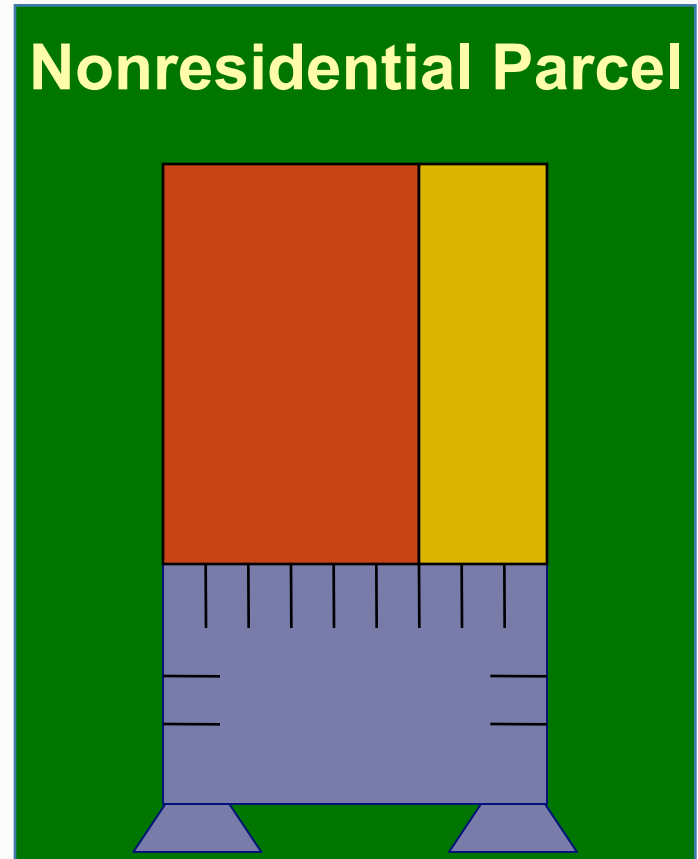
Data and Methods: [www.chesapeakebay.net/status\\_reducingpollution.aspx](http://www.chesapeakebay.net/status_reducingpollution.aspx)





# Understanding Stormwater Billing Unit Calculation

<b>Building Area</b>	10,000Ft <sup>2</sup>
<b>Parking</b>	3,250 Ft <sup>2</sup>
<b>Other Impervious Area</b>	1,000 Ft <sup>2</sup>
<b>Total</b>	14,250 Ft <sup>2</sup>



$$14,250 = 10 \text{ ERUs}$$

*1 Equivalent Residential Unit = 1,425 sq. ft*



# Understanding Stormwater Rates by Customer Category

We have a three tiered rate structure for single family residential (SFR) parcels based on the amount of impervious surface area :

Rates per SFR (*Impervious sq. ft*)

	<u>Annual Rates</u>	<u># Customers</u>
1,000 sq. ft. or less	\$25	7,906
1,001-2,399 sq. ft.	\$45	32,449
2,400 sq. ft. or more	\$70	7,609

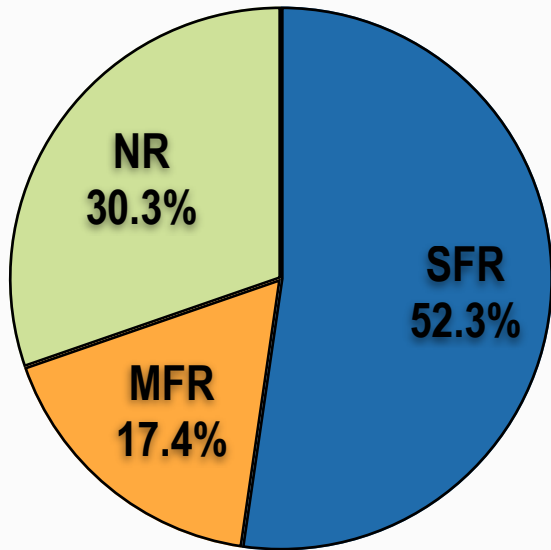
Non-residential properties are charged **per # of Equivalent Residential Units (ERU's)**. One ERU = 1,425 sq. ft.

Rates per ERU (*1 ERU =1,425 sq. ft*)

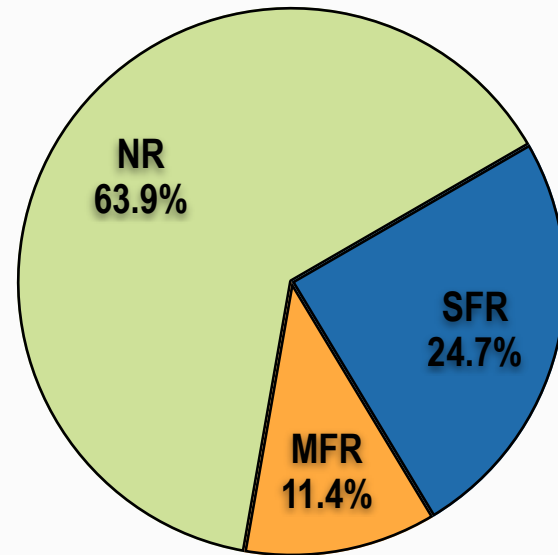
<u>Annual Rates</u>	<u># Customers</u>	
Multi-family Residential	\$45	11,220
Non-Residential	\$45	8,878
<i>(includes commercial, industrial, non-profits, churches)</i>		



# Understanding Stormwater Taxes vs. Fees



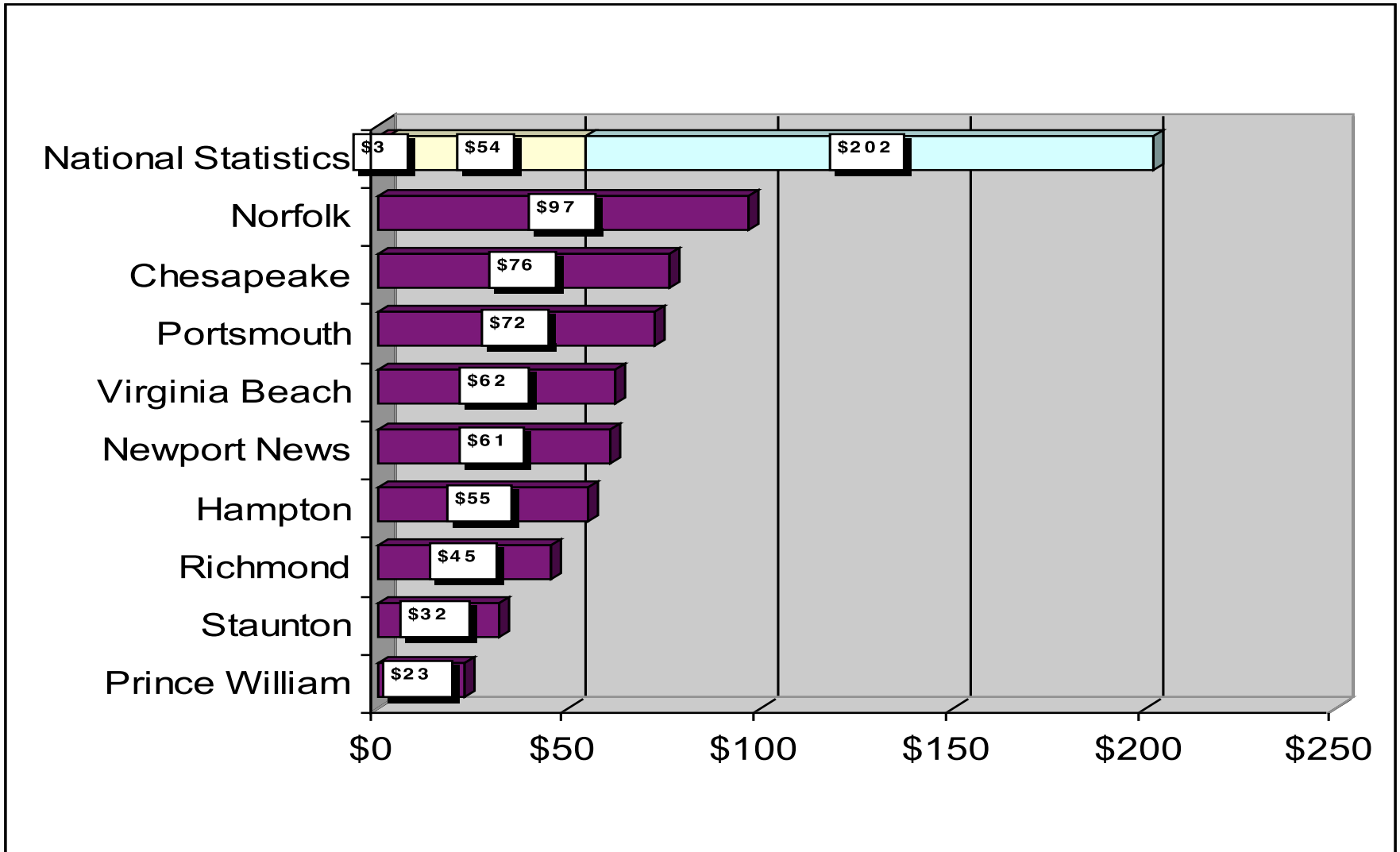
**Real Estate  
Taxes**



**Stormwater Utility  
Fees**



# Understanding Stormwater Fee Comparison to other localities



National Statistics Based on Survey of 70 Facilities (B&V, 2007)



# Understanding Stormwater Exemptions and Credits

- **Non-residential properties are eligible for partial credits that meet defined criteria**

Property Category	Onsite Facilities to Control Quantity	Low Impact Development (LID)	Participation in Pollution Prevention and/or Lawn Care Program	Maximum Allowable Credit
Non –Residential <i>(includes commercial, industrial, non-profit, churches)</i>	Up to 20%	Up to 20%	Up to 20%	50%





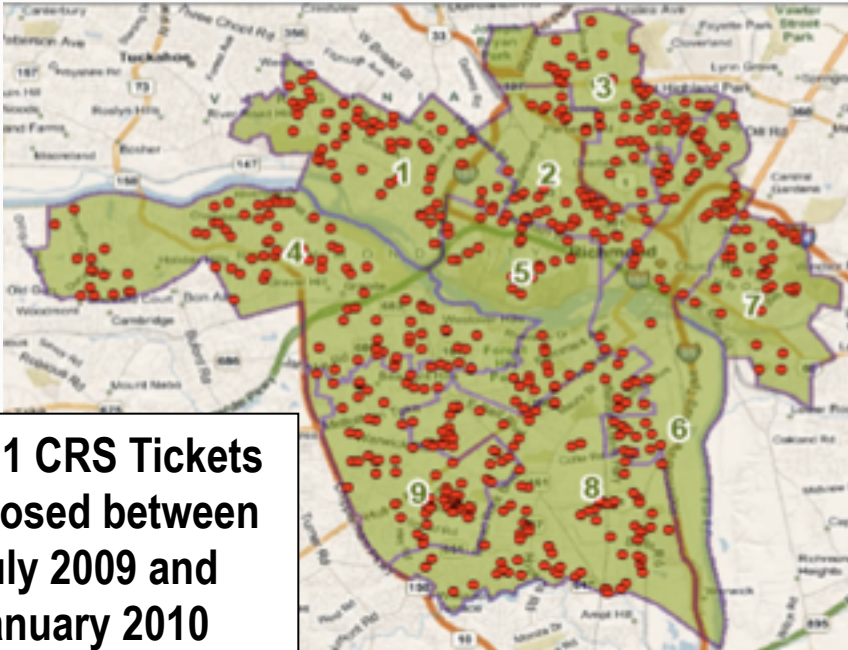
# Understanding Stormwater Payment Options

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- **How to pay**
  - Mail in payment
  - Pay by credit card on City website
  - Pay in person at City Hall and East District Initiative
- **Payment Assistance**
  - Call 644-3000
  - Customized payment plan to fit your needs



# Understanding Stormwater Completed Maintenance Requests



**611 CRS Tickets Closed between July 2009 and January 2010**

Council District	# Closed Service Requests	Cost
1	70	\$240,830
2	55	\$192,195
3	55	\$182,595
4	95	\$329,355
5	41	\$130,269
6	67	\$220,703
7	37	\$122,633
8	119	\$405,571
9	72	\$247,048

**Total: \$2,071,199**





**City of Richmond**



# Discussion