City of Annapolis

Stormwater Utility Rate and Fee Reduction Program

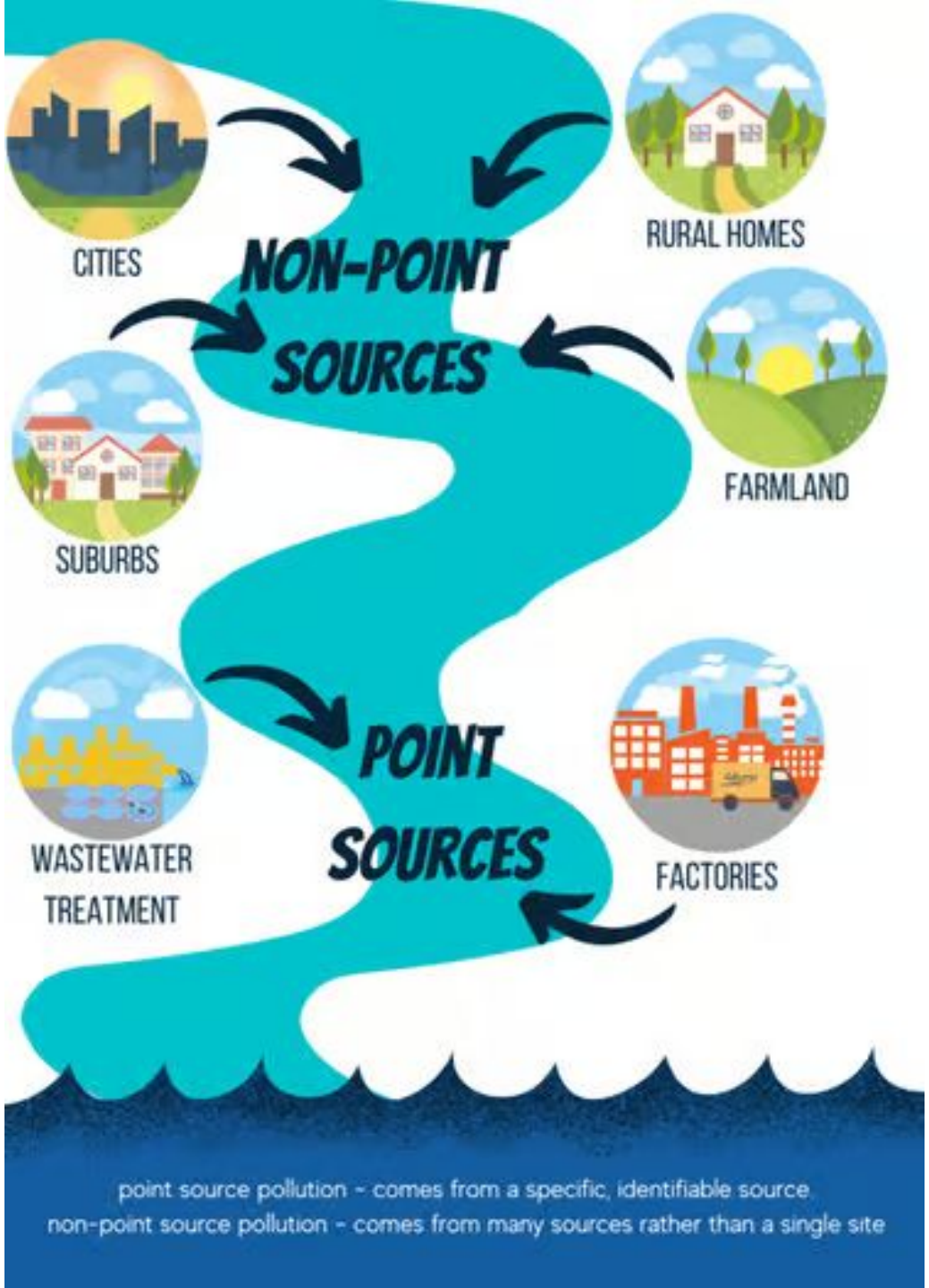
2/12/2026

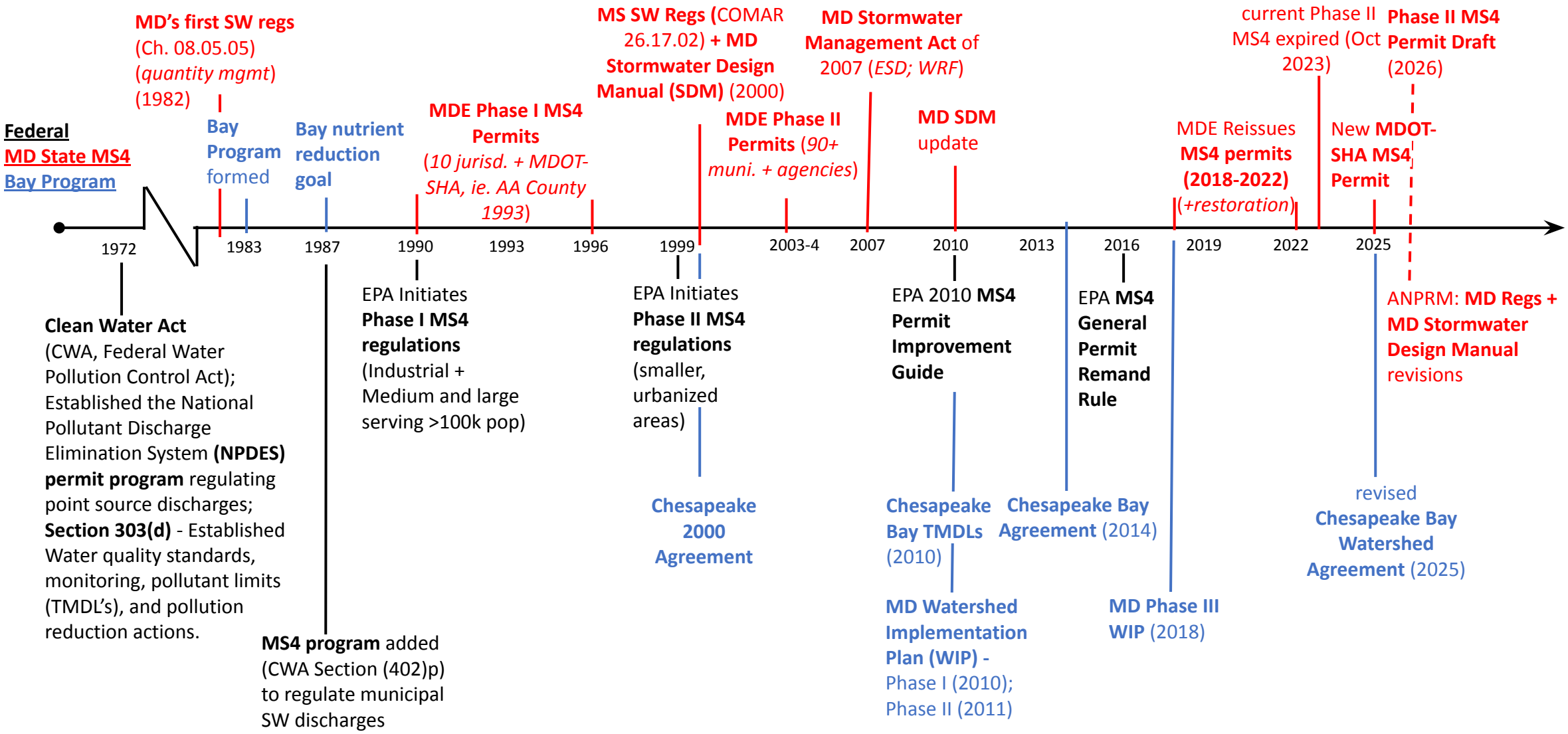
Stantec

Agenda

- Water Quality / **Stormwater** (SW) Regulations background
  - Pollutants: Point and Non-Point Sources
  - Key Statutes and Regulations
- **Municipal Separate Storm Sewer System** (MS4) Program Overview
  - What's included (and what's not)
  - The Watershed Restoration Fund and the DPW Stormwater Program
- City of Annapolis Stormwater Utility fee structure and rates
  - SW Utility Fees based on Impervious Area
  - Regional benchmarks
  - Proposed Non-Residential rate change
  - Potential Residential rate fee structure
- SW Utility Fee Reduction Program
  - **Stormwater Management** (SWM) practice-based fee reductions
  - Non-Residential Alternative Compliance path
- Next Steps

Water Pollution Sources





Federal permit standard: "**require controls to reduce the discharge of pollutants to the maximum extent practicable**, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants"
(CWA Section 402(p)(3)(B)(iii))

MS4 (Municipal Separate Storm Sewer System) Permits for Stormwater Discharges

Restoration Target

- 20% reduction from 2018 baseline (current permit)

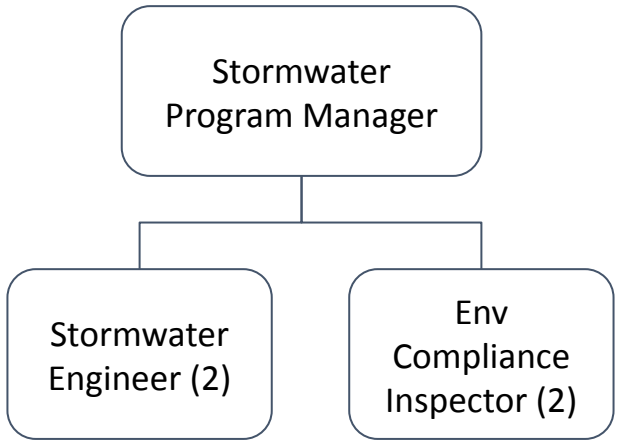
Minimum Control Measures (MCMs):

1. public education and outreach
2. public involvement and participation
3. illicit discharge detection and elimination
4. construction site stormwater runoff control
5. post construction stormwater management
6. pollution prevention and good housekeeping

Not Regulated via MS4 Permit:

- Industrial NPDES Permits
- Sanitary Sewer Systems
- Combined Sewer Systems
- widespread, general non-point sources ie. agricultural runoff or atmospheric deposition
- Drinking Water/Septic Systems
- Discharges from Non-Regulated Areas (ie. small construction sites)
- Flood / Volume Control
- Toxins (SDWA, TASCA)
- Hazardous Water Disposal (RCRA)
- Superfund cleanup (CERCLA)

City of Annapolis SW Program and the Watershed Restoration Fund



Watershed Restoration Fund:

Supports the operations and capital projects related to:

- public stormwater management systems
- watershed implementation plans
- stream and wetland restoration activities
- NPDES/MS4 and TMDL requirements and goals

Truxtun Cove - Watershed Planning

CBT Maintenance Grant

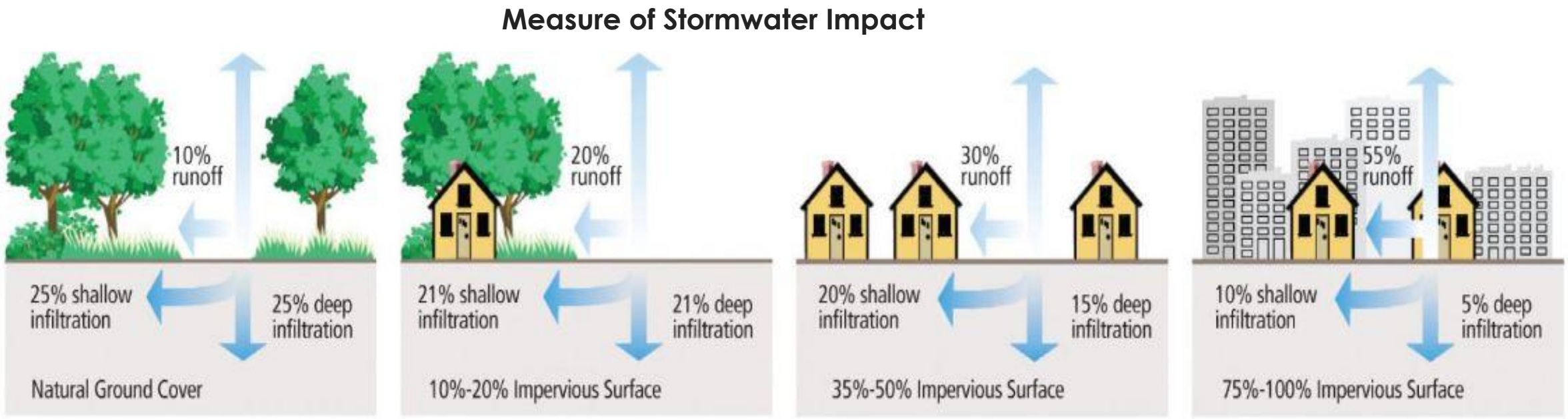
College Creek - Wetland Restoration

Cedar Ridge - Stormwater

AACO River Days - Outreach

City Facilities - Green Roof Maintenance

Stormwater Utility Fee Based on Impervious Area

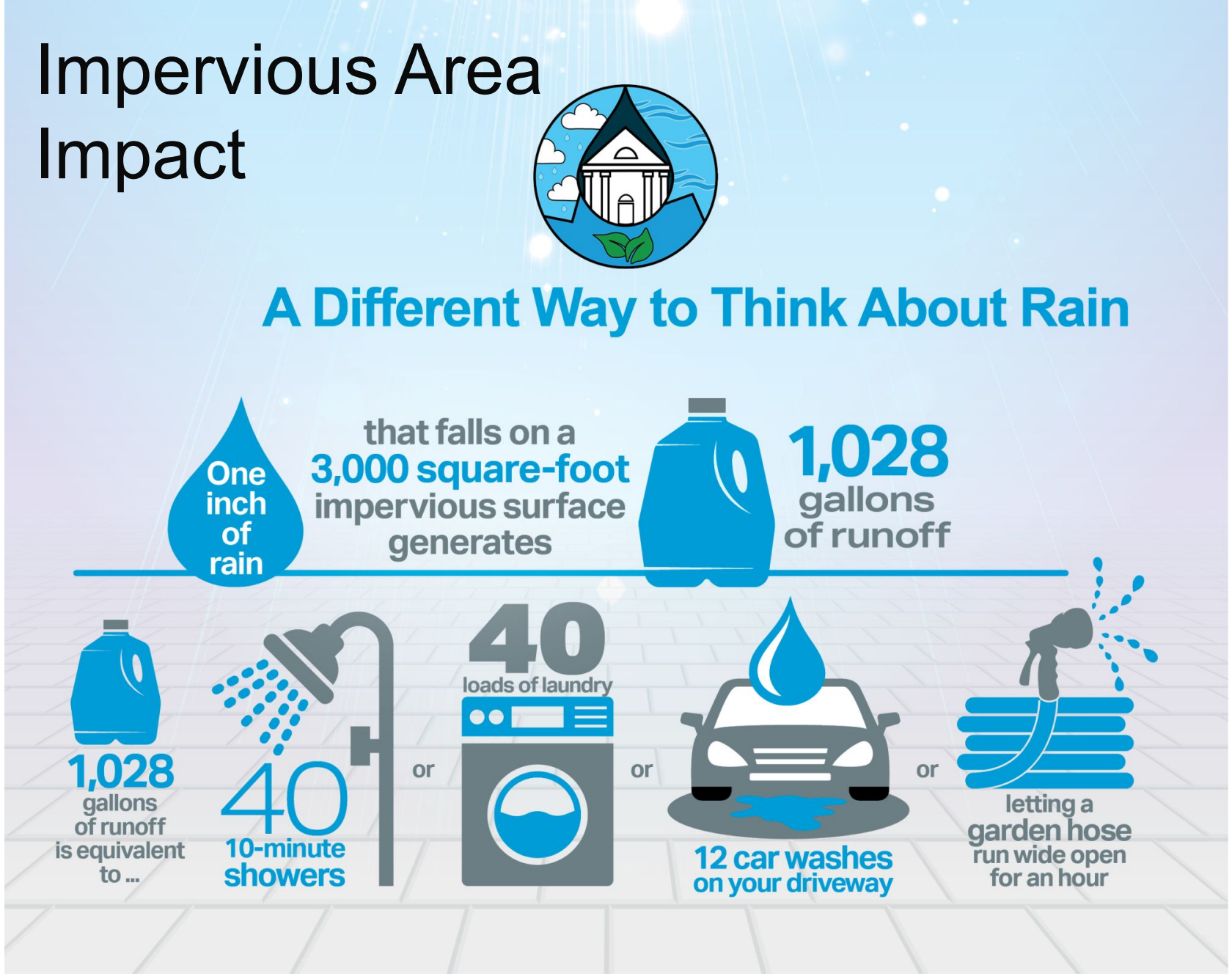


Source: Lowimpactdevelopment

Increasing Impervious Area (IA) = Increasing Runoff Generated

Stormwater fees based on Impervious Area (IA) reflect potential use of and contribution to the system

Impervious Area Impact



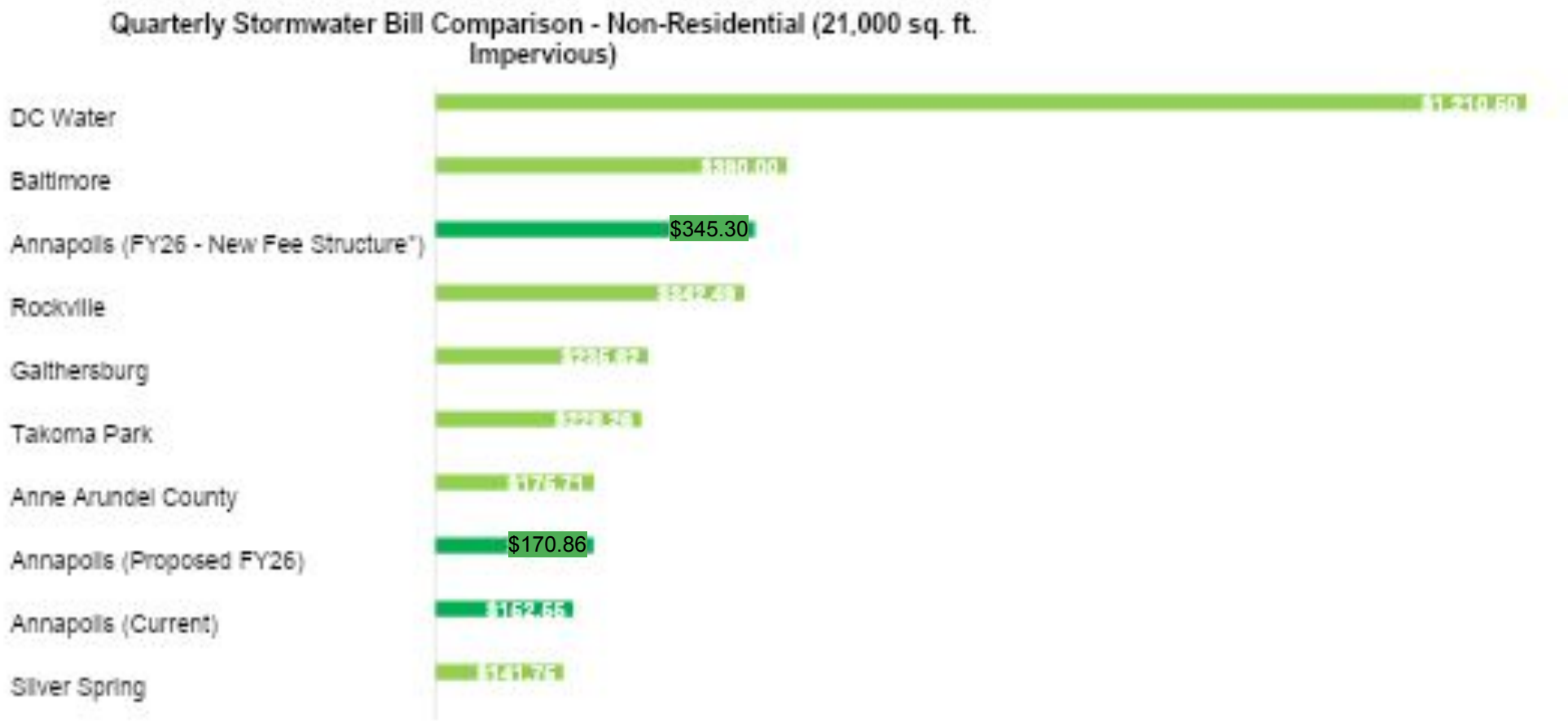
Source: https://www.fairfaxva.gov/Services/Water/Stormwater/Stormwater-Utility

Stormwater Fees (Current Structure)

Quarterly Stormwater Fees	FY25	FY26 (12%)
Non-Residential (tiered Impervious Area):		
Tier 1: 0 - 5,000 sq. ft.	$30.83	$34.53
Tier 2: 5,001 - 25,000 sq. ft.	$152.55	$170.86
Tier 3: 25,001 - 80,000 sq. ft.	$644.29	$721.60
Tier 4: Over 80,000 sq. ft	$1,992.92	$2,232.07
Residential (Flat Fee):		
Residential Single Family	$30.83	$34.53
Multi-Family (per unit)	$15.41	$17.26

Non-Residential Stormwater Fee Comparison

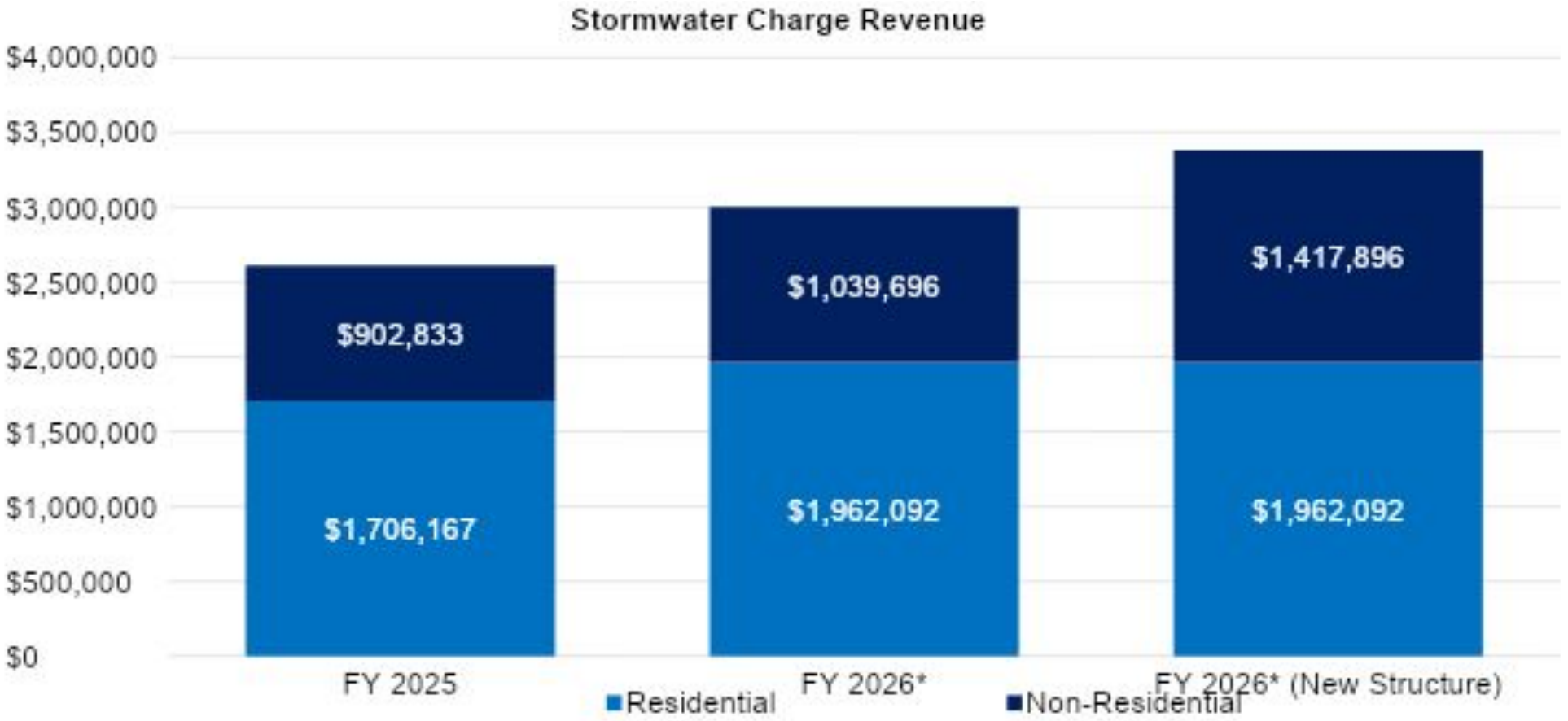
(21,000 sq. ft. property)



**Does not include any stormwater fee credits*

Residential Stormwater Fee Comparison

Annual Stormwater Fee Revenues by Property Type



**Assumes FY26 adoption of 15% stormwater fee increase (12% actual)*

Potential Fee Structure Revisions

1. Transition non-residential to an **ERU basis** using measured impervious area (1 ERU equals 2,100 sq. ft)

	ERU	Rate
<u>Non-Residential:</u>		
ERU-Based (Measured Impervious Area)	1.0 = 2,100 sq. ft.	$34.53 per ERU

2. Evaluate transition for residential properties from flat fee to **ERU basis or tiered** using measured impervious area

<u>Residential:</u>		
ERU-Based (Measured Impervious Area)	1.0 = 2,100 sq. ft.	$34.53 per ERU
<u>Tiered:</u>		
Tier 1: 0 - 1,400 sq. ft.	2/3	$23.02
Tier 2: 1,401 - 2,800 sq. ft.	1	$34.53
Tier 3: 2,801 - 3,200 sq. ft.	1.5	$51.80
Tier 4: Over 3,200 sq. ft.	3+	$103.59

Non-Residential Stormwater Utility Fee + Credit Program

PROPOSAL:

1. Change SW fee structure for non-residential ratepayers from tiered to an **ERU basi**s using measured impervious area with the goals of:

- more accurately reflect existing impervious conditions and SW practices
- more equitable billing approach*
- raise awareness and incentivize SW management by large property owners

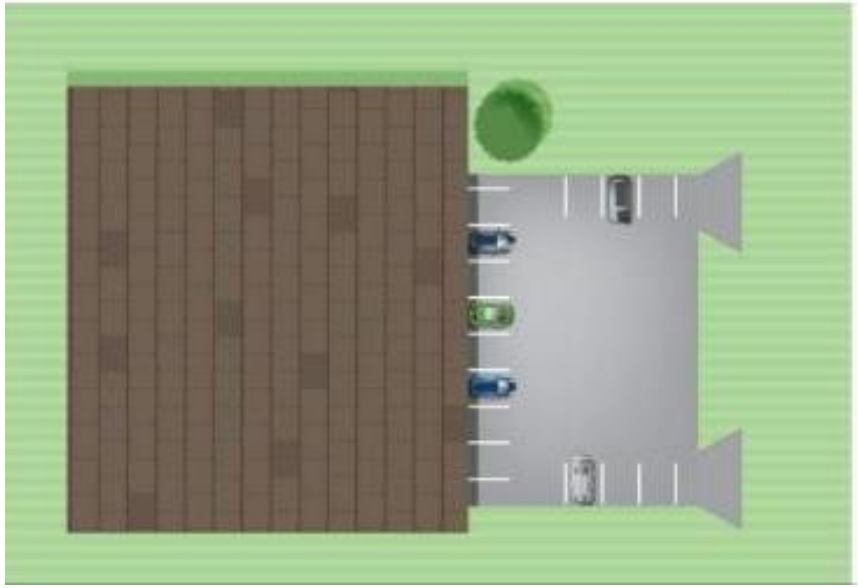
**Impact on non-residential ratepayers will vary, with some rates increasing and some decreasing.*

Example Non-Residential Property (Current Tiered Structure)

- Property owners pay the same rate within a given tier.

Tier 1: 0 - 5,000 sq. ft.	$34.53
Tier 2: 5,001 - 25,000 sq. ft.	$170.86
Tier 3: 25,001 - 80,000 sq. ft.	$721.60
Tier 4: Over 80,000 sq. ft	$2,232.07

- Properties towards the top of tier range (like this one) pay less than their use/ contribution to the system



Impervious Area

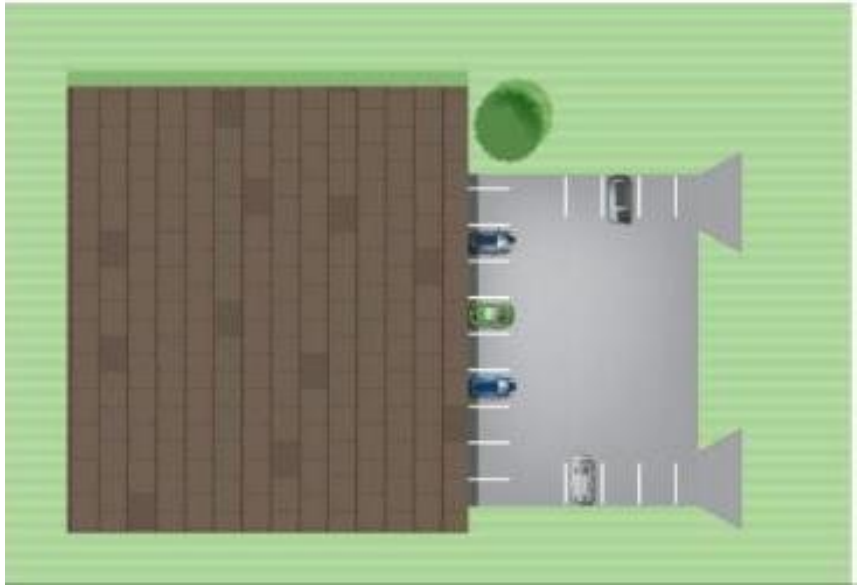
Roof:	15,000 sq. ft.
Parking Lot:	6,000 sq. ft.
Total:	**21,000 sq. ft.**

Tier 2 (5,001-25,000 sq. ft.)

Fee = FY 26 Impervious Area Tier 2 Rate = $170.86 QTR

Example Non-Residential Property (Proposed ERU-based structure)

- Fee based on measured impervious area as multiples of Equivalent Residential Units (ERUs)
- Property owners with more impervious cover would pay more to fund the stormwater system (not limited by tiers and cap)

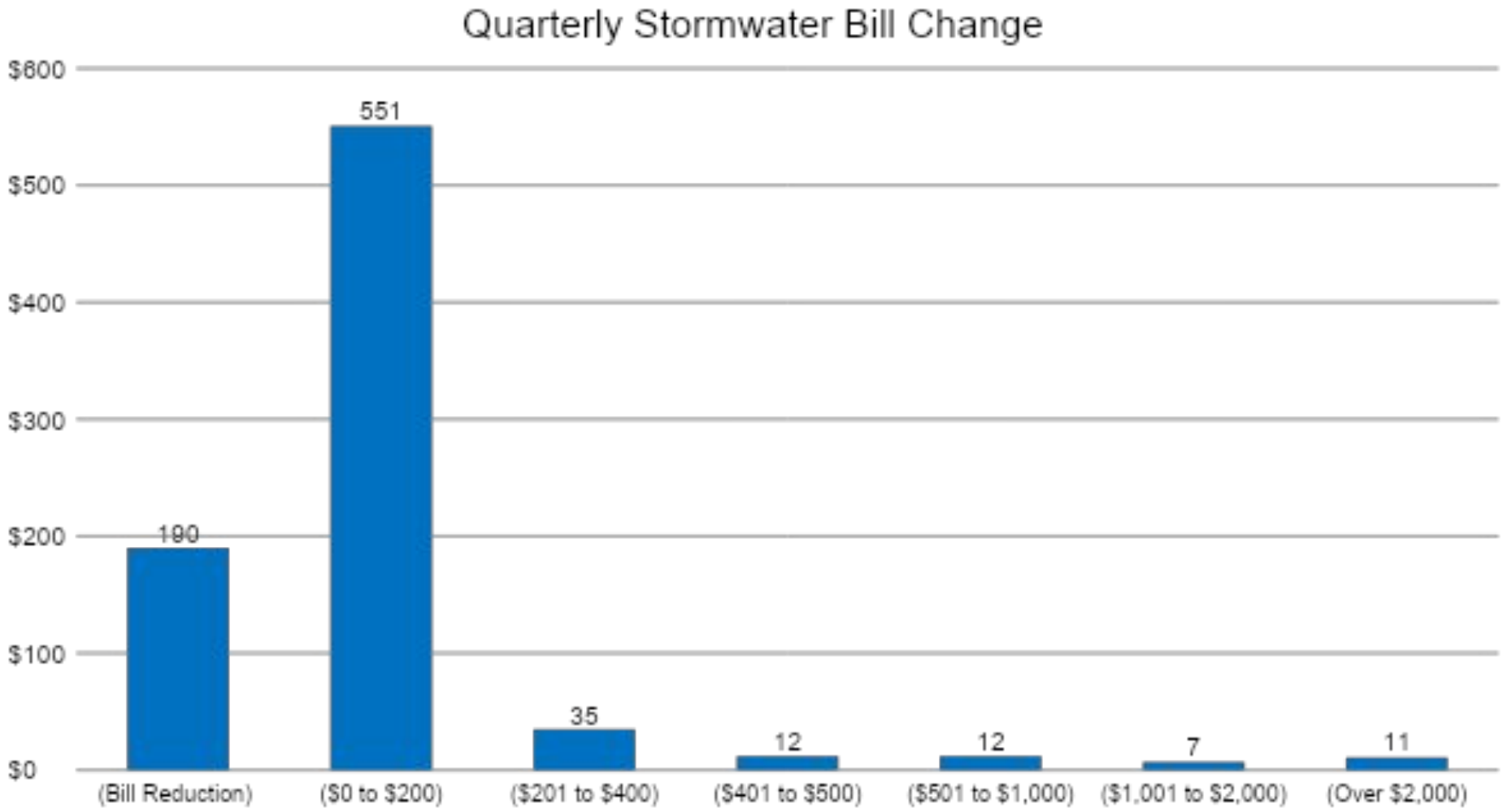


Impervious Area

Roof:	15,000 sq. ft.
Parking Lot:	6,000 sq. ft.
Total:	**21,000 sq. ft. = 10 ERUs**

Fee = # of ERUs Impervious Area X FY26 QTR Base Rate = (10 x $34.53) = $345.30 QTR

Distribution of Impacts on Non-Residential Ratepayers



Note: Represents change from current tiered fee structure to measured impervious area fee.

**Assumes adoption of 15% stormwater fee increase (12% actual)*

Distribution of Impacts by Property Use*

Use Type	FY 26 Current (Quarterly Total)	FY 26 New Structure (Quarterly Total)	Quarterly Change
GOVT-S/F/O	$11,144	$18,507	$7,363
OFFICES	$39,187	$47,828	$8,642
SCHL-NOTPB	$5,145	$13,721	$8,575
CHURCH	$13,061	$13,047	($14)
OTHER BUSI	$86,219	$131,075	$44,856
HOTEL/MOTEL	$5,112	$3,085	($2,027)
RETAIL	$52,969	$54,316	$1,347
OTHR NONB	$950	$1,028	$78
MIXED USE	$1,189	$1,879	$690
RESTAURANT	$10,223	$11,629	$1,406
GOVT-CITY	$526	$567	$41
GAS STA	$4,893	$5,495	$602
GOVT-COUNT	$6,842	$5,318	($1,524)
SCHL-COUNT	$12,307	$25,598	$13,292

**Assumes FY26 adoption of 15% stormwater fee increase (12% actual)*

Residential Stormwater Utility Fee Structure

EVALUATE:

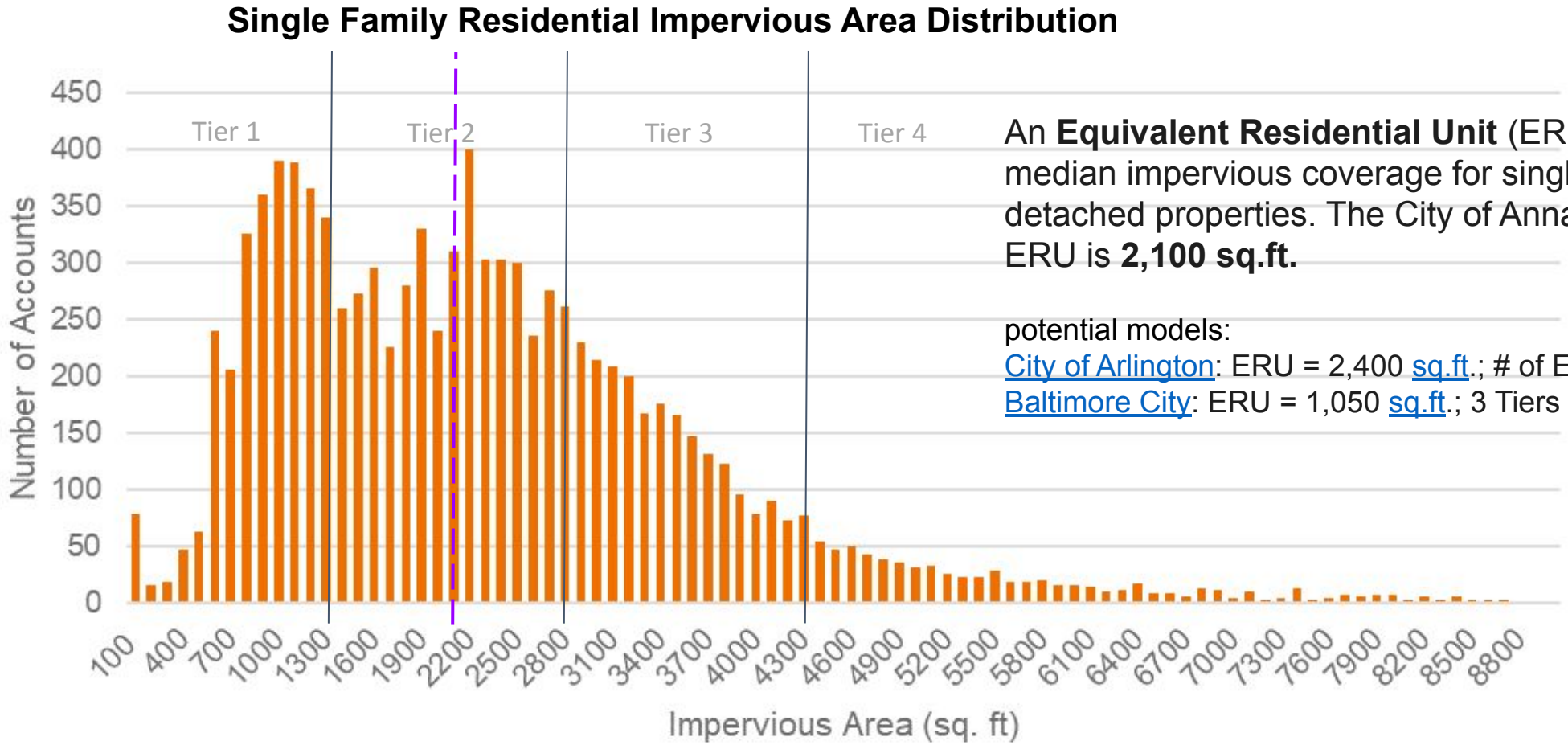
2. Change SW fee structure for residential ratepayers from flat fee to impervious area based or tiered with the goals of:

- more accurately reflecting existing impervious conditions and SWM practices
- more equitable billing approach
- raise awareness and incentivize SWM by large property owners

Residential Stormwater Fee Structure

Quarterly Stormwater Fees	ERI	FY26 (12%)
Residential (Flat Fee):		
Residential Single Family		$34.53
Multi-Family (per unit)		$17.26
ERU-Based (Measured Impervious Area)	1.0 = 2,100 sq. ft.	$34.53 per ERU
Tiered:		
Tier 1: 0 - 1,400 sq. ft.	2/3	$23.02
Tier 2: 1,401 - 2,800 sq. ft.	1	$34.53
Tier 3: 2,801 - 4,400 sq. ft.	1-2/3	$57.55
Tier 4: Over 4,400 sq. ft.	3	$103.59

Stormwater Utility Fee Based on Equivalent Residential Unit (ERU)



An **Equivalent Residential Unit** (ERU) = the median impervious coverage for single-family detached properties. The City of Annapolis ERU is **2,100 sq.ft.**

potential models:
City of Arlington: ERU = 2,400 sq.ft.; # of ERUs
Baltimore City: ERU = 1,050 sq.ft.; 3 Tiers

Stormwater flat fees based on ERU's reflect a *typical* property's use of and contribution to the system

Example Residential Property - Small (Revised Structure)

- Current Flat Fee: $34.53
- ERU-Based: No change
- Tiered: Fee reduced by ⅓ (-$49.64 / annual)

Impervious Area

Roof:	950 sq. ft.
Parking Lot:	60 sq. ft.
Total:	**1,010 sq. ft. = 1.0 ERU*, OR Tier 1**

Fee = # of ERUs Impervious Area X FY26 QTR Base Rate = (1 x $34.53) = $34.53 QTR

Fee = FY 26 Impervious Area Residential Tier 1 Rate = $23.02 QTR

Example Residential Property - Large (Revised Structure)

- Current Flat Fee: $34.53
- ERU-Based: fee tripled (+$276.24 / annual)
  ** ERU rounded doud to the nearest number to account for data resolution issues*
- Tiered: fee tripled (+$276.24 / annual)

Impervious Area

Roof:	5,000 sq. ft.
Parking Lot:	300 sq. ft.
Total:	**5,300 sq. ft. = 2.0 ERUs*, OR Tier 4**

Fee = # of ERUs Impervious Area X FY26 QTR Base Rate = (3 x $34.53) = $103.59 QTR

Fee = FY 26 Impervious Area Residential Tier 4 Rate = $103.59 QTR

Residential Stormwater Utility Fee Structure

Potential Barriers/challenges:

- **Administrative requirement** for data validation, appeals, tracking, and maintenance (estimate 1.5 FTE to manage this structure, more at startup). These additional costs could offset the savings some smaller properties would see (est. 10% rate increase).
- Multi-unit properties (ie.HOAs) could be especially sticky to assess and bill equitably.

Potential benefits:

- A measured structure for single family may result in a few dollar savings for smaller properties and a few dollars more for larger parcels. This results in a **limited equity impact** and may not incentivize individuals to manage their impervious area.
  Installation costs for typical SWM practices would not be covered by potential savings within a reasonable return period (ie. $10k / $275 annual = 36+ years)

Can we shift to a tiered system more easily?

- Recording and tracking the measured impervious area of each lot is required for both tiered and ERU-based structures, therefore **administrative burden is equivalent**.
- Billing with a tiered system may somewhat reduce the number of appeals?
- Confirm with billing department if any advantage of tiered vs. measured system.

Stormwater Fee Reduction Program

Stormwater Practices (up to 50% max. allowable)

All Non-Residential Properties - Application and supporting documentation required (3 year renewable)

Bioretention facility
SOURCE: CITY OF ALEXANDRIA

Wet swale
SOURCE: CHESAPEAKESTORMWATER.NET

Permeable pavement
SOURCE: CITY OF ALEXANDRIA

Vegetated green roof
SOURCE: CITY OF ALEXANDRIA

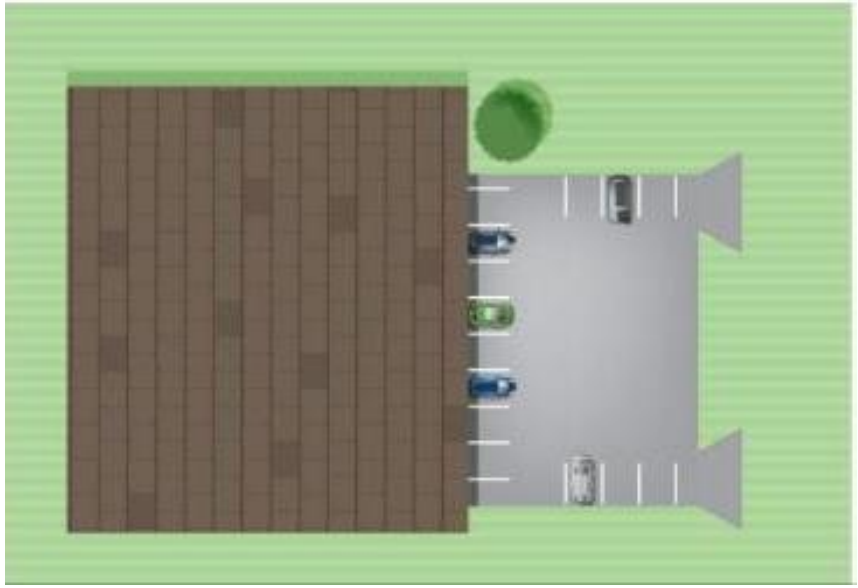
Submittal Requirements:

- Submit completed application form. For each Stormwater Management Facility constructed and installed according to Maryland State requirements for stormwater management, indicate the Drainage Area to Structure, Impervious Area Treated (in acres), and the Target Rainfall, P_E (in inches).
- Site Plan showing property lines and location of stormwater management device(s).
- A copy of the Stormwater Management Facility Maintenance Agreement and supporting documentation detailing the maintenance, repair, and improvement history. If you do not have a maintenance agreement or can not find one, contact Annapolis Office of Law at (410) 263-7954. For multiple owners who share responsibility of a stormwater management facility, provide a copy of any legal documents describing legal agreements for ownership and maintenance of the facility.
- Schedule a site visit which will be performed to verify your application. A City staff member will contact you when we are in receipt of your application.

Note: This credit **expires after ~~two~~ (three) years and can be renewed** upon submission of updated documentation.

Example Non-Residential Property (Proposed ERU Structure)

- Large property owners will see the highest increases in overall fees and most likely to be incentivized to increase SW management practices.
- Many nonprofits and religious institutions have limited capital to finance these installation first costs.

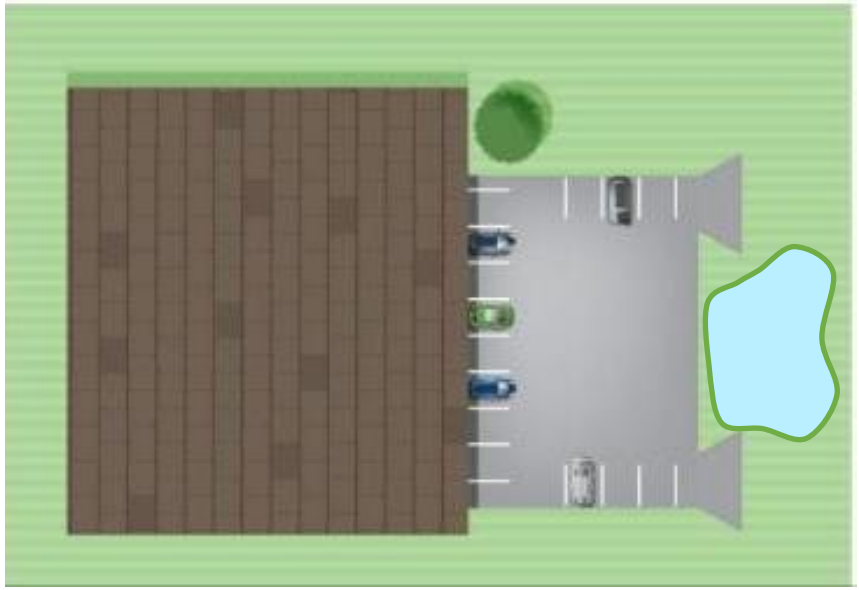


Impervious Area

Roof:	15,000 sq. ft.
Parking Lot:	6,000 sq. ft.
Total:	**21,000 sq. ft. = 10 ERUs**

Fee = # of ERUs Impervious Area X FY26 QTR Base Rate = (10 x $34.53) = $345.30 QTR

Non-Residential Fee Reduction Calculation



Step 1. Calculate % Fee Reduction (SW Practices)

The pond is designed to treat 1" of precipitation, therefore the Treatment Value Is 1. The maximum allowable credit for a wet pond is 50%, and 60% of the total impervious cover is directed to the wet pond.

% Credit = Max. Credit X % of Impervious Area Treated X Treatment Value = (50% x 60% x 1) = 30%

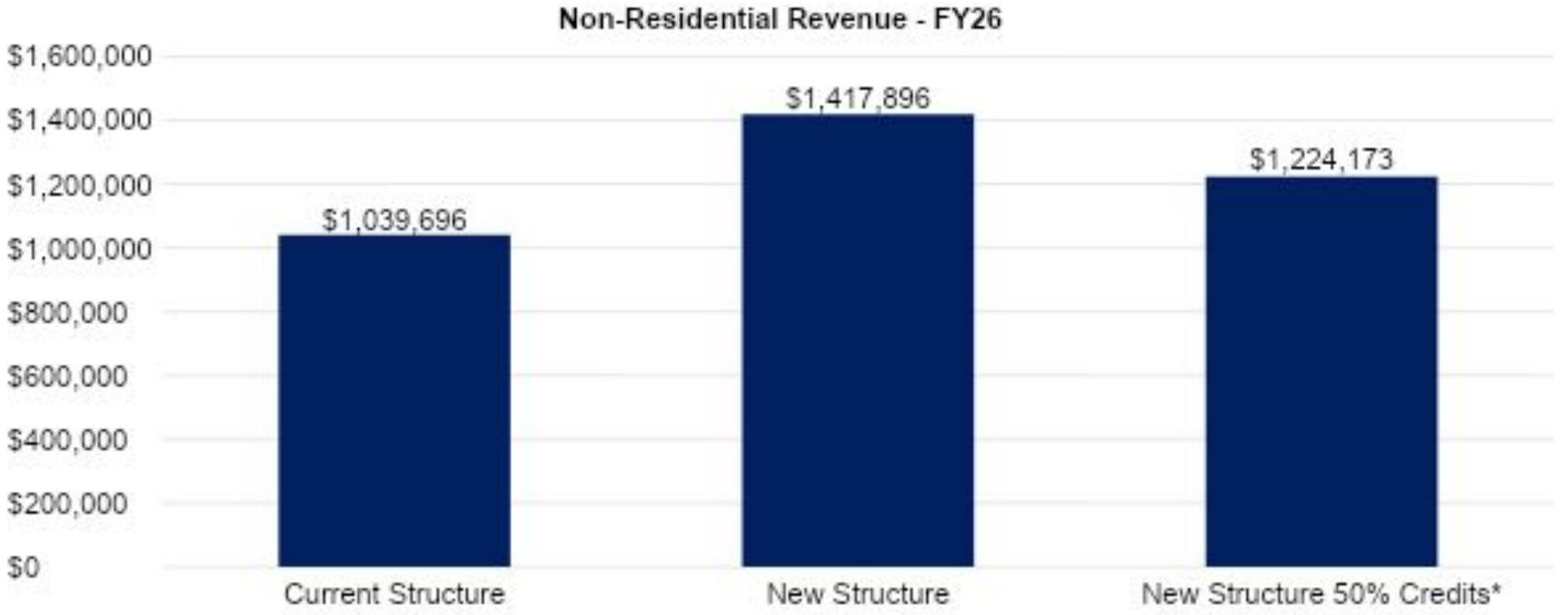
Treatment Value equals 100% if at least 1" of rainfall is treated by the eligible practices. If less than 1", use the % of 1" treated.

Step 2: Calculate Fee with Reduction

The commercial property pays $345.30 per quarter based on a calculated fee for 10 ERUs (21,000 sq. ft. of impervious cover). Based on the percentage fee reduction, the quarterly fee for the property owner is:

Fee with Credit = FY26 QTR Rate X (1 -% Credit) = ($345.30 x (1-30%)) = $241.71 QTR

Non-Residential Stormwater Charge Revenue – Credit Program Potential Impact



**Assumes properties with existing BMPs receive a 50% credit.*

Non-Residential Fee Reduction Program

PROPOSAL:

3. Roll out concurrent expanded Non-Residential program with the goals to:

- provide incentive/opportunity to maintain existing practices and create new SWM practices
- limit new financial hardship for non-commercial non-residential ratepayers (ie. religious, non-profit)
- leverage community partners' activities-based education/outreach efforts to advance DPW SW Program's stormwater public education and outreach (MCM 1) and public involvement and participation (MCM 2) initiatives.

SW Fee Reduction Program Considerations

ELIGIBILITY

- Who is eligible to receive reductions? (Property Type and Use)
- Hardship Waiver eligibility or other exemptions

QUALIFYING ACTIVITIES

- Which stormwater management BMPs qualify? On-site and offsite? Activities-based?
- Threshold for qualification

LEVEL

- Define level of reduction and period associated with each activity
- Determine maximum available credit per activity

Credit programs typically EVOLVE over time

Model SW Fee Reduction Programs Highlights

- Anne Arundel County, MD – watershed restoration grant program, property use exemptions, tax credit, DNR Clean Marina
- Baltimore City, MD - use carve outs, ie. NPDES permit holders, harbor discharge, religious, K-12, small green and limited dev. spaces
- Prince George's County, MD - Alternative Compliance, rebate program
- Portland, ME - credit for water quality (85%) and quantity (15%)
- Philadelphia, PA - incentives including SW Grant Program, (non PWD) long term financing tool, PWD purchase of BMPs, and zoning allowances
- Alexandria, VA - SWM Facilities (up to 20%), Landscaping Practices (20% annual, 30% one-time Tree Planting), Dry Floodproofing Practices (20%)

SW Fee Reduction Program Recommendations

ELIGIBILITY

- Type: All (SW practices); Non-Residential (Alternative Compliance)
- Use: Tax-exempt Religious or other 501(c) non-profit for Alternative Compliance and Hardship Waiver

QUALIFYING ACTIVITIES

- State approved, on-site BMPs with City maintenance agreement
- Threshold: New/Redev or retrofit = Meet/exceed guidelines; Existing = Passing inspection
- Activities-based: Alternative Compliance (ie. PG County) - Outreach & Education, Green Care & Good Housekeeping
- Future considerations: Green Marina; City easement/purchase; zoning allowances

LEVEL

- 50% max credit for existing, new, or retrofit SWM Practices (**3 year**, renewable)
- and/or 50% max credit for Alternative Compliance (1 year, renewable)
- 100% Hardship Waiver (3 year, renewable)

Credit programs typically EVOLVE over time

Non-Residential SW Fee Reduction Program

Option A. Stormwater Practices (up to 50% max. allowable)

All Non-Residential Properties - Application and supporting documentation required (3 year renewable)

***NEW -** Option B. Alternative Compliance (up to 50% max. allowable)*

Religious and other 501(c) Organizations - Application and annual reporting required (1 year renewable)

- *Outreach & Education (25%)* - campaign participation AND host one annual event (onsite trash cleanup, recycling, waste management, SWM maintenance education event, tree planting)
- *Green Care & Good Housekeeping (25%)* – certified lawn management company and 3 GH practices (nutrient management, conservation landscaping, mature tree preservation, pollution prevention)

***NEW -** Option C. Hardship Waiver (100%)*

Religious and Other 501(c) Organizations - Application required (1 year renewable)

Non-Residential Credit Example
Alternative Compliance

Option B1. Outreach & Education - (25% Fee Reduction)

The Property owner agrees to take part in the City's education and outreach campaign to encourage other property owners as well as members of their organization to participate in and to contribute toward the restoration and protection of City and County watersheds.

AND

Property owner agrees to host City's representative to organize and/or conduct annually **one (1) of the following activities**:

- On-site trash pick-up event
- On-site recycling and better waste management
- Host a City Stormwater BMP maintenance education event
- Plant at least five (5) trees on site (based on approved tree list coordinated with the City Arborist and provided through City's Replant Annapolis program)

Non-Residential Credit Example
Alternative Compliance

Option B2. Green Care & Good Housekeeping - (25% Fee Reduction)

Property owner agrees to use landscape management companies* that are certified in the proper use and application of fertilizers in connection with their landscaping and lawns.

**Companies must be listed in the Maryland Department of Agriculture's searchable pesticide database under the appropriate license category.*

AND

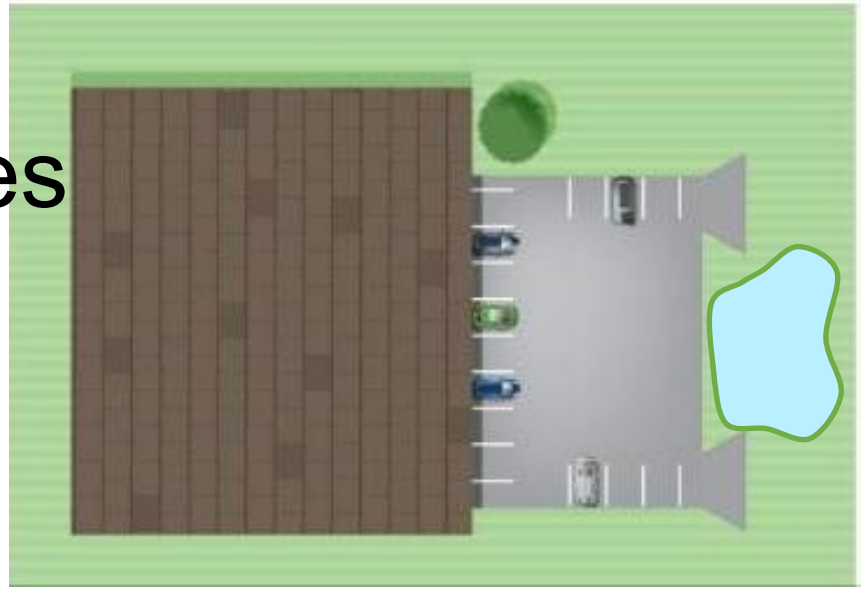
Non-Residential Credit Example
Alternative Compliance

Option B2. Green Care & Good Housekeeping - (25% Fee Reduction)

Property owner agrees to good housekeeping practices for ensuring clean lots and pledges **at least three (3) of the following activities**:

- URBAN NUTRIENT MANAGEMENT PLAN
  Create a written plan to reduce or eliminate fertilizer and pesticide use and application.
- CONSERVATION LANDSCAPING (ie. Alexandria)
  Conservation Landscaping is the conversion of lawn and hard surfaces into mulched beds planted with native perennial plants, shrubs and/or small trees. This practice benefits stormwater quality and quantity by retaining rainfall and absorbing runoff from adjacent lawns or impervious surfaces. A minimum 50 sq. ft. is required to receive credit.
- MATURE TREE PRESERVATION (ie. Alexandria)
  Preserving the existing tree canopy is critical to stormwater management because mature trees provide water quality and quantity benefits by intercepting part of the rainfall that would otherwise run off impervious surfaces and be transported to the stormwater drainage system and our local waterways. Mature trees that are eligible for this credit must be established, have a trunk that is at least 12 inches in diameter at breast height, which is 4½ feet from the ground.
- Keep their site clean by regularly sweeping up trash and debris. Responsibly manage common chemicals used and stored on their property, and properly dispose of hazardous products or materials.
- Practice proper pollution prevention measures.
- Other (Specify):

Non-Residential Credit Example Stormwater Management Practices



Step 1. Calculate Total Fee Reduction (Option B)

The property owner has an approved application for stormwater management practices that manage 30% of the site's impervious area and participation in both Non-Compliance Options 1 and 2.

% Credit = % Reduction SW Practices + % Reduction Option B1 + % Reduction Option B2 = (30+25 +25) = 80%

Step 2: Calculate Fee with Credit (Proposed Impervious Area Structure)

The property pays $354.50 per quarter based on a calculated fee for 10 ERUs (21,000 sq. ft. of impervious cover). Based on the percentage fee reduction, the quarterly fee for the property owner is:

Fee with Credit = FY26 QTR Rate X (1 -% Credit) = ($345.30 x (1-80%)) = $69.06 QTR

Recommended Next Steps

1. **Transition Non-Residential to an ERU basis using impervious area (1 ERU equals 2,100 sq. ft)**

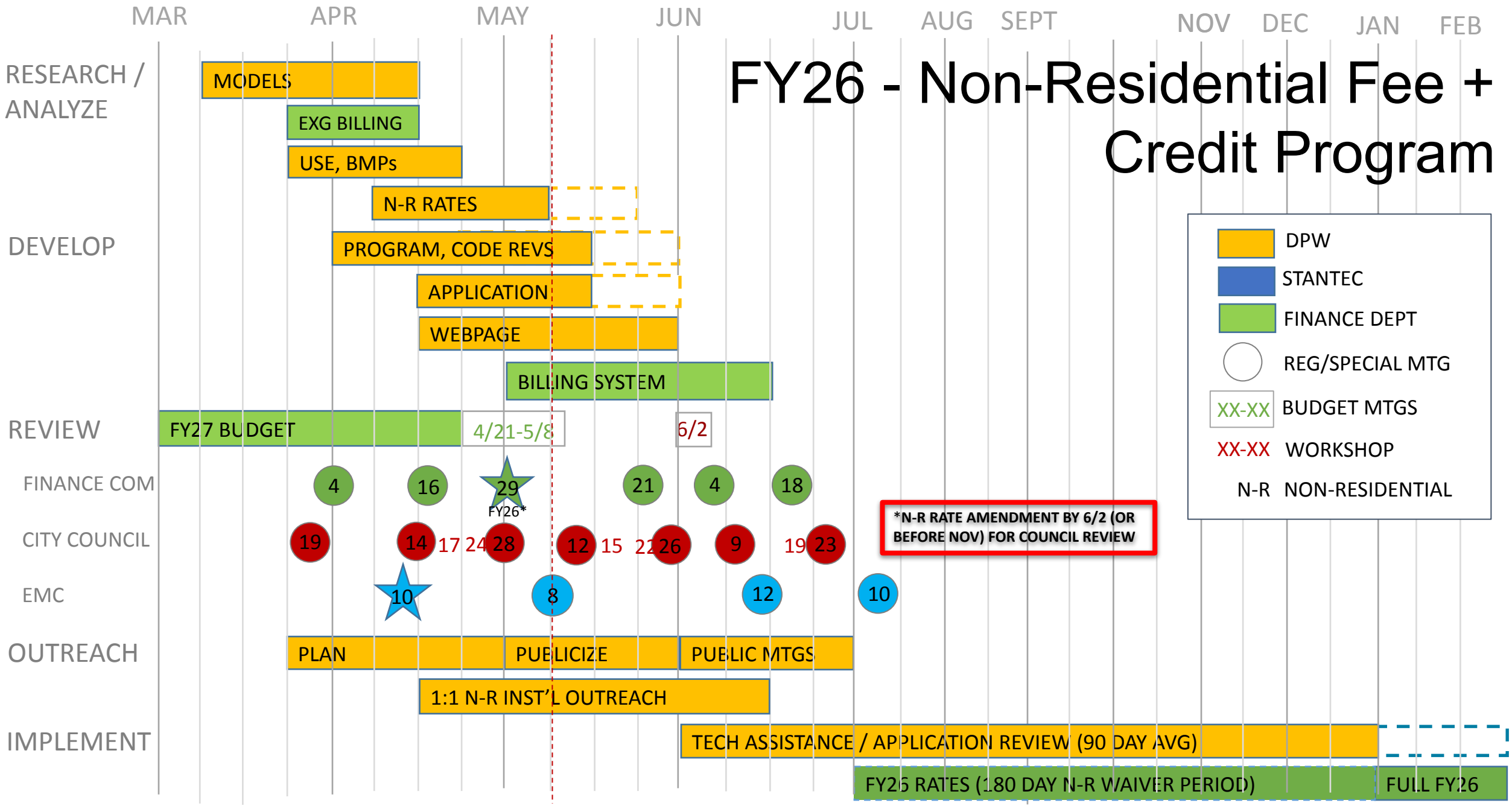
	ERU	Rate
Non-Residential		
Measured Impervious Area	1.0 = 2,100 sf	$34.53 per ERU

2. **Maintain current structure for residential properties as residential impervious area is relatively homogeneous.**

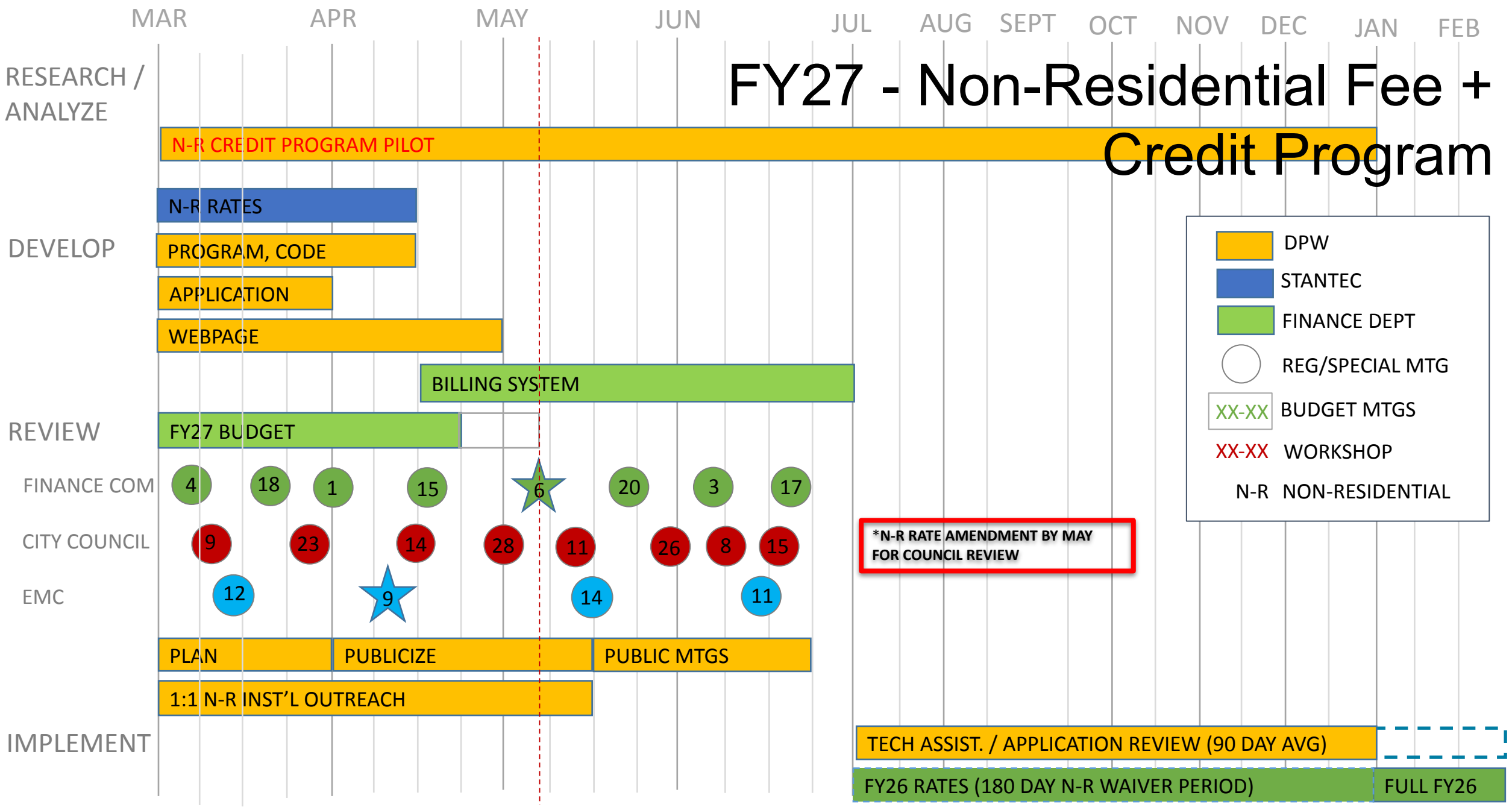
Residential		
Single Family	1.0	$34.53
Multi-Family (per unit)	0.5	$17.26

3. **Implement revised fee reduction program to include Non-Residential Alternative Compliance Path and Hardship Waiver.**

FY26 - Non-Residential Fee + Credit Program



FY27 - Non-Residential Fee + Credit Program

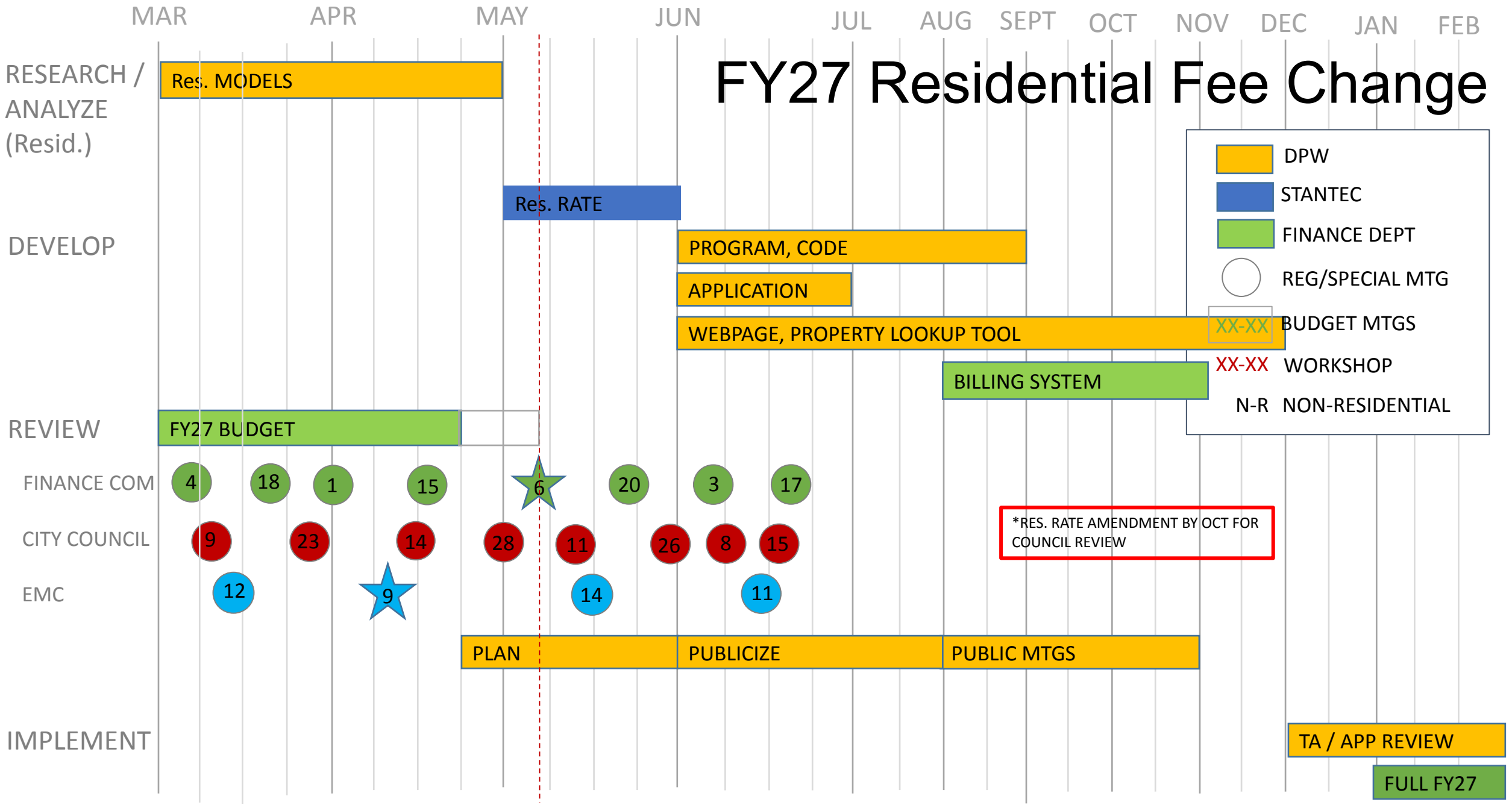


Non-Residential Rate/Credit Implementation

ADMINISTRATION

- Code Updates
  - 17.10.180 - Watershed restoration fund
  - 21.30 - Appeals
- Website:
  - Intro, Manual, FAQs, Forms
  - Links to Utilities, City SW, and Watershed Restoration grant pages
- Applications + Renewals (online and PDF):
  - Stormwater Management Practices – Existing, New/Redevelopment, and Retrofits
  - Alternative Compliance
  - Hardship Waiver
- Appeals Process
- Outreach
  - Mailer / Flyer to Current Ratepayers
  - Social Media
  - 1:1 most impacted property owners
- Future opportunities:
  - Online Fee lookup (ie. PG County) or GIS (ie. Arlington Stormwater Utility Viewer)
  - Additional / updated programs and incentives

FY27 Residential Fee Change



Questions / Discussion