



Alternative Rate Structure Analysis

Stormwater Credits

STAKEHOLDER MEETING 2 – AUGUST 13, 2019



What is the purpose of the Alternative Rate Structure Analysis?

PWD's overall mission is to provide safe and reliable drinking water to the City of Philadelphia and its customers as well as protecting the region's water resources.

While the mission has not changed, the Department continues to evolve in order to:

- Improve service;
- Meet current customer needs;
- Address aging infrastructure;
- Comply with regulatory requirements; and
- Face new and future challenges.

As such, PWD is interested in assessing whether its existing rate structure is still supports its current mission and goals and helps meet its future objectives.



Why are we having these meetings?

The objective of the proposed Alternative Rate Structure Analysis is to evaluate potential incremental rate structure updates in critical areas which present both near term and long-term challenges for the Water Department and its customers.

Focus on Three Key Areas:

- Water quantity charges
- Stormwater credits and incentives programs
- Rider for pension-related expenses

While the above are the immediate areas of focus, this is the beginning of a process that will take several years to complete.





Intended Meeting Outcomes

The purpose of the Alternative Rate Structure Stakeholder meetings is to gather input and feedback on:

1. Perceived impacts of potential rate structure changes
2. General feedback and opinions (both pros and cons) on any potential changes and associated transition
3. Potential impediments to implementation



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Meeting Schedule

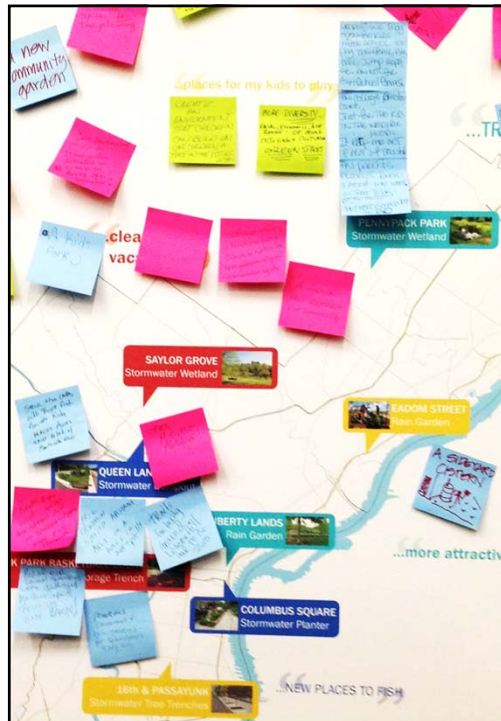
A series of **3 meetings** will be held on the following dates:

1. **Tuesday, July 30th** from 2:30 - 4:30 PM: Water quantity charges
2. **Tuesday, August 13th** from 2:30 - 4:30 PM: Stormwater credits & incentives
3. **Thursday, September 5th** from 2:30 - 4:30 PM: Rider for pension-related expenses

Request written comments be submitted by September 16th

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What will we do with your feedback?

1. The Consulting Team will develop a summary report detailing the process and feedback received.
2. The draft report will be provided for stakeholder participants' review and feedback.
3. The final report will be issued to the Rate Board and posted to their website.
4. Written comments will be posted to the Rate Board website.

Note – Comments may be provided on a rolling basis (i.e. after each meeting) or all at once. Additional commentary on areas not discussed during this meeting series is also welcomed.

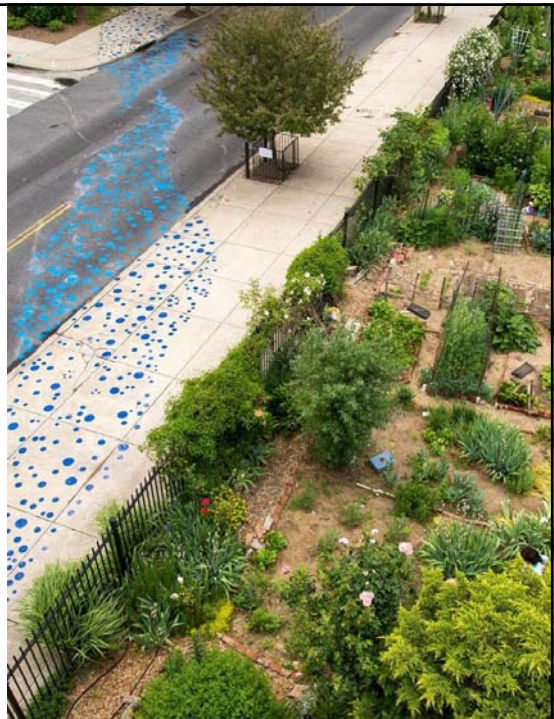
All meeting materials and written comments will be treated as public information.



Meeting Overview

- **Focus Topic – Stormwater Credits and Incentives**
- Role of Facilitators
- Meeting Objectives
- Meeting Agenda
- Meeting Ground Rules

13 August 2019



Meeting Objectives

- Understand what different stakeholders see as the pros and cons of the alternative rate structure proposals
- Develop a statement of areas of stakeholder agreement and disagreement
- Respect participants' time: Collect feedback in an efficient way
- Value participants' perspectives: Collect feedback in a way that we hear all of the different points of view

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Meeting Agenda Stormwater Credits and Incentives

- Presentation
 - Background
 - Long-Term Credit Analysis
 - Potential Credit Program Adjustments
 - Summary
- Analyzing Proposals: Small Group Notes
- Large Group Discussion

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Meeting Ground Rules

- Start and end on time.
- Stay on topic.
- It's ok to disagree . . . Respectfully (focus on issues not personalities).
- Listen for understanding . . . Don't interrupt.
- Speak up . . . Everyone contributes.
- Be present . . . Cell phones off or on vibrate.

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Focus Topic No. 2: Stormwater Credits and Incentives



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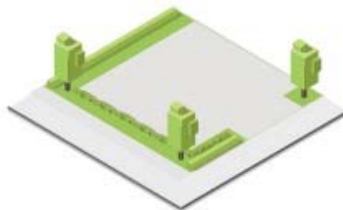
Credit Program Background

- Definitions
- Stormwater Rate Structure Overview
- Credit Program Overview
- Programs Impacting Stormwater Rates
- Recovery of Stormwater Customer Program Costs

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Gross Area (GA): A property's entire parcel area.



Open Space: The pervious area of a parcel (equal to GA minus IA).



Impervious Area (IA): A surface which restricts the infiltration of water. Examples: roofs, driveways, sidewalks, parking lots, etc.

Surface Discharge: The discharge of stormwater runoff from a property to an adjacent surface water body without use of PWD infrastructure.

Impervious Area Managed: Impervious area that directs runoff to surface water bodies or to approved Stormwater Management Practices (SMPs).

Impervious Area Reduction (IAR): IA directed to pervious area or which has characteristics similar to pervious area.

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Overview of PWD’s Current Stormwater Rate Structure



- Includes residential properties up to 4 dwelling units (excluding condominiums)
- Uniform Stormwater Charge (per parcel) based on the average residential GA and IA
- Billing and Collection Charge (per account)



- Includes all properties which cannot be classified as residential
- GA Charge (\$ per 500 square feet) based on parcel’s actual GA
- IA Charge (\$ per 500 square feet) based on parcel’s actual IA
- Billing and Collection Charge (per account)

Note – condominium properties are included with non-residential for the purposes of this presentation

Example Property – Parcel Area Based Fee



Source: PWD’s Parcel Viewer
Note: Gross Area and Impervious Area are rounded to the nearest 500 square feet for billing purposes.
sf = square feet

Gross Area Charge	
Gross Area	39,790 sf
Billed Gross Area	40,000 sf
Gross Area Unit Charge	\$0.70 / 500 sf
Monthly Gross Area Charge	\$56.08
Impervious Area Charge	
Impervious Area	39,790 sf
Billed Impervious Area	40,000 sf
Impervious Area Unit Charge	\$5.30 / 500 sf
Monthly Impervious Area Charge	\$424.32

Total Monthly Parcel Area Based Fee: \$480.40

Current Credit Program

Type	Options	Credit Maximums ³	
		Non-Surface	Surface
IA Credit	IAR	100%	100%
	IA Managed	80%	90%
GA Credit	GA Credit for IA Managed	80%	90%
	NRCS ¹ Curve Number Open Space	80%	90%
NPDES² Credit	IA Managed	7%	7%
	Open Space GA	7%	7%

Only Non-Residential and Condominium properties are eligible for SW Credit

Current credit technical criteria requires management of the first inch of runoff whereas current regulations require management of 1.5-inches of runoff.

¹ NRCS - National Resources Conservation Service

² NPDES - National Pollutant Discharge Elimination System

³ See PWD Rates and Charges § 4.5 (d) for details on maximum credit. Also refer to Stormwater Management Service Charge Credit and Appeals Manual.

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Programs Impacting Stormwater Rates

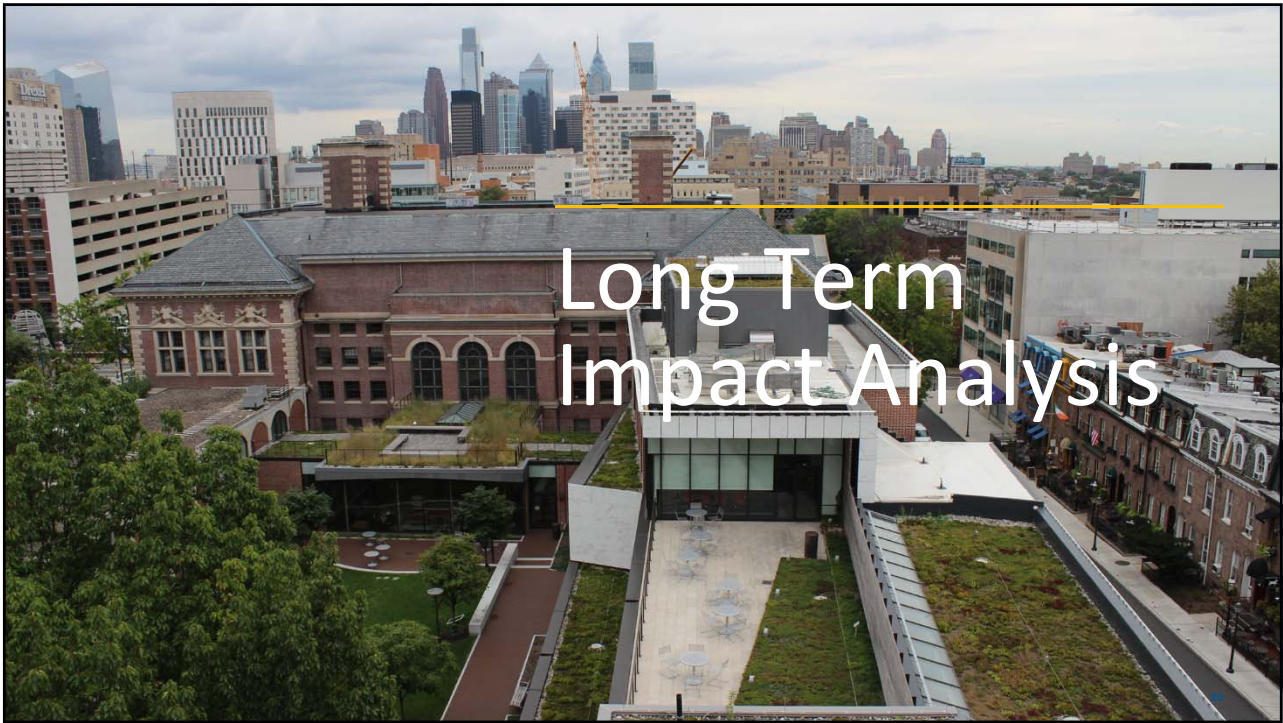
- PWD currently offers \$25 million in Stormwater Management Incentive Program (SMIP) and Greened Acre Retrofit Project (GARP) grants annually.
 - Customers receive both grant assistance and stormwater credit once the stormwater management practice is constructed and certified.
- PWD offers a Stormwater Customer Assistance Program (Stormwater CAP) to customer that were highly impacted by the transition from their meter based stormwater fee.

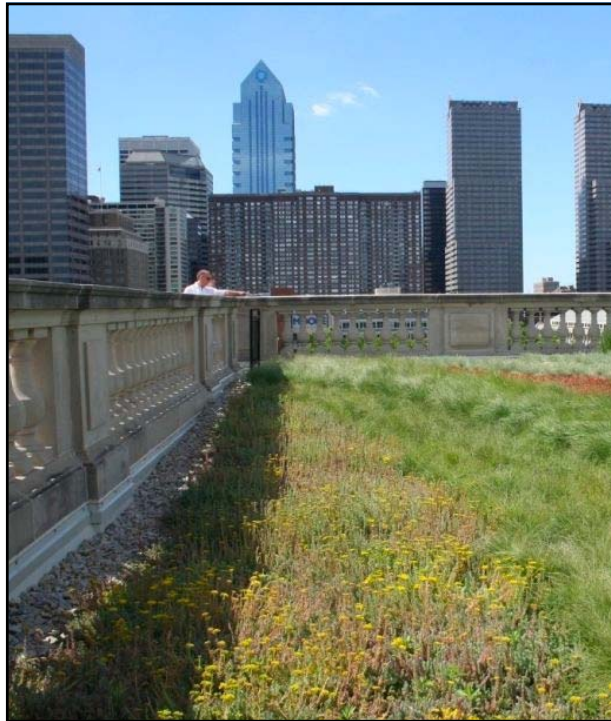
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Stormwater Customer Program Cost Recovery

Program	Cost Recovery Approach
SMIP/GARP (Grant Costs)	<ul style="list-style-type: none">Recovered by wastewater (<i>sanitary & storm</i>) revenues¹.40% recovered via sanitary rates and 60% from stormwater rates.
Stormwater Credits	<ul style="list-style-type: none">Recovered by stormwater revenues.Proportionate recovery from all stormwater customer types (via a reduction in billable units).
Stormwater CAP	<ul style="list-style-type: none">Recovered from non-residential stormwater customers only.

¹Net of wholesale allocation in accordance with applicable contract terms.





Long-Term Impact Analysis Objectives

1. Project long-term impact of the credit program on:
 - Billable units of service
 - Stormwater revenues and rates
2. Assess impacts from new 2015 Stormwater Billing Data [e.g. impervious area (IA) and gross area (GA) data]
3. Identify potential imbalances with respect to Stormwater Customers

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Credit Projections Approach

For projection purposes, credits were categorized as follows:

Category	Description	Credit Types
SMIP/GARP	Credits from SMIP/GARP funded projects	<ul style="list-style-type: none"> • IA Managed • GA Managed
Surface Discharge	Credits related to surface discharge properties	<ul style="list-style-type: none"> • IA Managed • GA Managed • Open Space GA • NPDES
All Others	Credits related to Impervious Area Reductions and Non-Surface discharge properties, typically resulting from development/redevelopment activity	Impervious Area Reductions Non-Surface Discharge: <ul style="list-style-type: none"> • IA Managed • GA Managed • Open Space GA • NPDES

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Estimated Average Annual Loss in Billable Units of Service

Category	Gross Area (square feet)	Impervious Area (square feet)
SMIP/GARP	2.4 Million	2.4 Million
Surface Discharge	13.7 Million	3.8 Million
All Others	6.5 Million	2.3 Million
TOTAL	22.6 Million	8.5 Million

Above figures assume no change in current programs or policies.
Projections are based upon stormwater billing and SMIP/GARP program data as of the end of FY 2018.



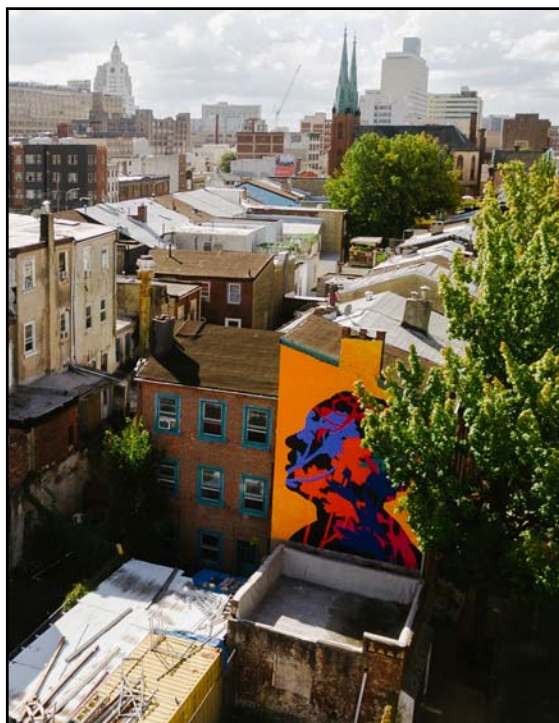
Long-Term Credit Projections - Annual Revenue Impact

- Annual CAP: Decreases from \$2.3 million in FY 2019 to \$2.1 million in FY 2021
- Annual SMIP/GARP Grant Amount: **\$25 million**
- Annual Contra Revenue from Credits increases:

	FY 2019	FY 2021
Existing Credits	\$19.6 million	\$20.5 million
Future Credits	-	\$3.8 million
Total Credits	\$19.6 million	\$24.3 million

- Contra revenue estimates are based on adjusted rates which reflect estimated 6% annual increases in stormwater cost of service and changes in billable units of service
- Contra revenues for future credits represents additional potential revenue loss without changes in current stormwater credit programs or policies

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Units of Service- Impact of 2015 Data

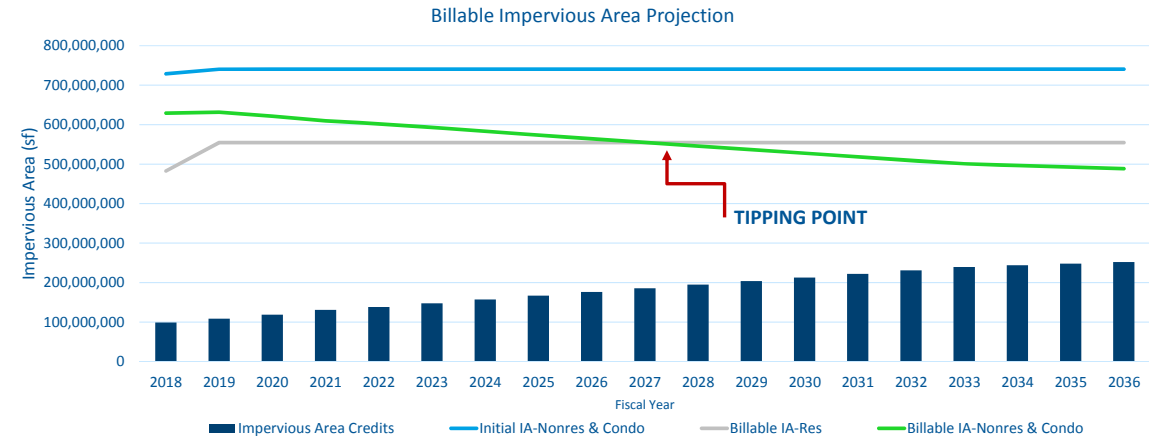
- Impervious Area (IA) Impacts
 - Residential IA: Increased by 72 million square feet (sf) or 14.9%
 - Non Residential and Condo IA: Increased by 12 million sf or 1.6%
 - Total IA: Increased by 84 million sf or 6.9%
 - Residential average IA per parcel changed from 1,050 sf to 1,200 sf
- No significant change in Gross Area (GA) square footage

New data set and associated impacts were not reflected in the most recent rate proceeding and will be incorporated in the next filing.

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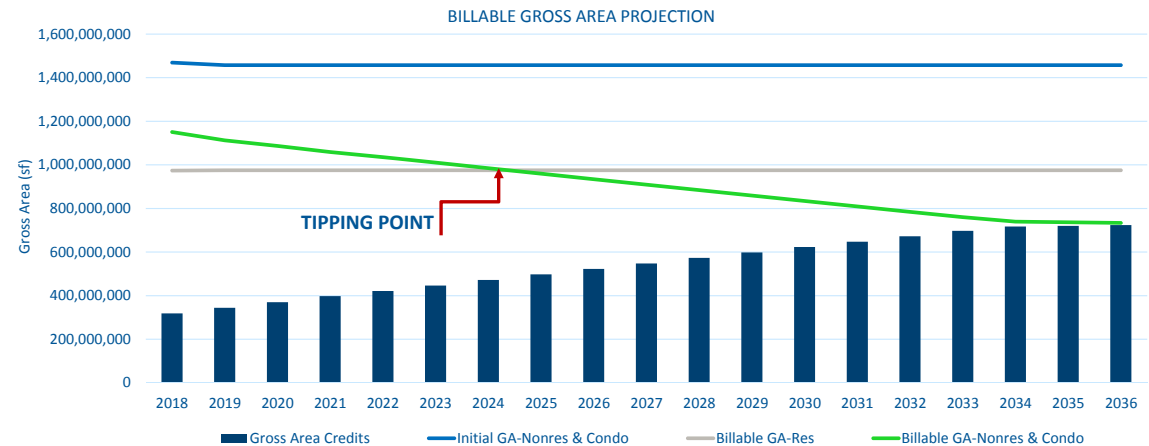


Long-Term Credit Projections – IA Units of Service

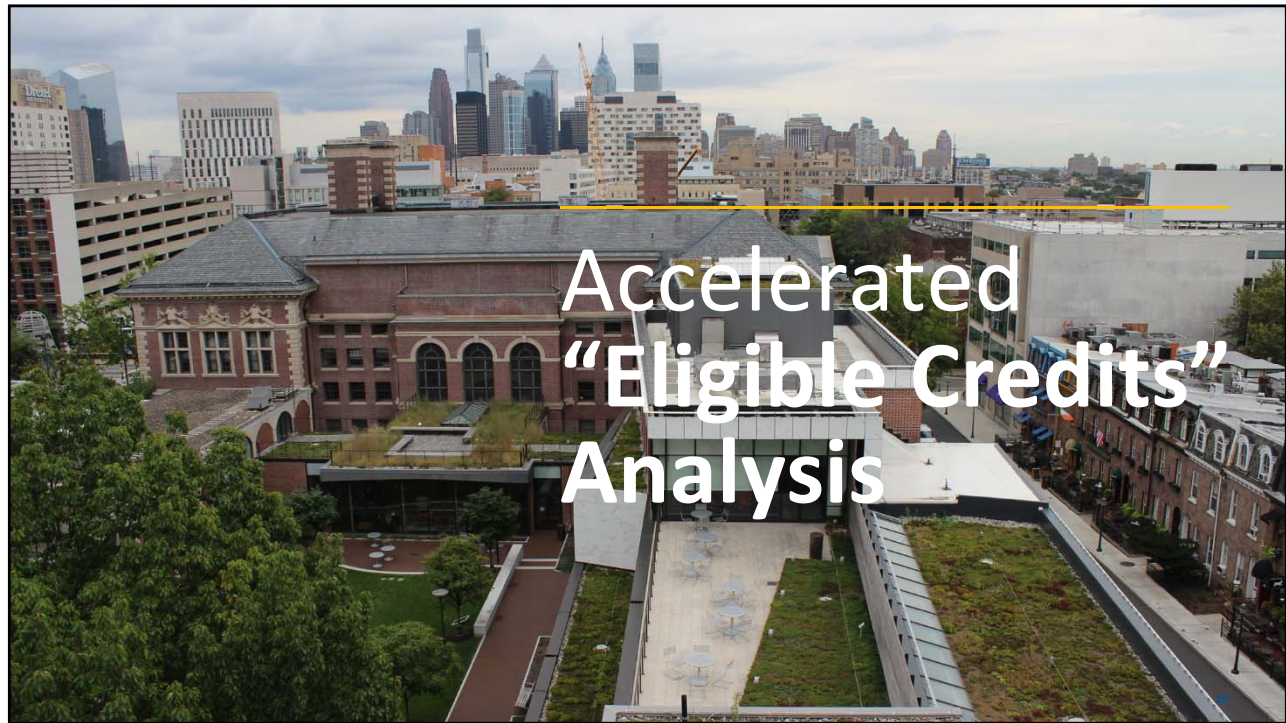


- By FY 2027:
- IA Credit: ↑ 77 million sf (reduces billable IA)
 - More Residential billable IA than Non-Residential

Long-Term Credit Projections – GA Units of Service



- By FY 2025:
- GA Credit: ↑ 153 million sf (reduces billable GA)
 - More Residential billable GA than Non-Residential



Accelerated “Eligible Credits” Analysis

Credit Eligible Parcels – create uncertainty with respect to stormwater revenues and customer rates

- Current SW Credit Program criteria requires 1-inch of runoff
- Current SW Management Requirement is 1.5-inches
- Credit Eligible Parcels - Currently Not Receiving Credits:
 - Est. Potential Non Surface Discharge Credit = 32.25M sf
 - Est. Potential Surface Discharge Credit = 8.65M sf
- “What If?” Scenario Analysis
 - Assume levels of enrollment under current credit program
 - “Eligible Credits” will apply and receive credit in FY 2020
 - Estimate tipping points and stormwater rates

Summary - “Eligible Credits” Analysis

Impact to Billable Units Tipping Point

	Status Quo	100% Apply
Residential GA > Non Res GA in	FY 2025	FY 2023
Residential IA > Non Res IA in	FY 2027	FY 2023

The results presented above assume no change / adjustments to the current credit program.

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Summary - “Eligible Credits” Analysis

Impact to Stormwater Rates

	Status Quo	100% Apply
FY 2021 Residential Rates		
IA/GA	\$15.853	\$16.381
FY 2021 Non-Residential Rates		
IA (per 500 sf)	\$5.403	\$5.604
GA (per 500 sf)	\$0.773	\$0.789

Note: Estimated Rates are provided for discussion purposes only at this time and assume there is no change to the current credit program.

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Key Take-Aways

- Continued escalation of stormwater costs and reductions in billable units of service:
 - Puts pressure on rates with compounding effects
 - Increases Contra Revenue impacts
- Within the next 6-9 years, residential customers may bear more of the burden of stormwater related costs with no ability to reduce their fees *under current programs*
- Credit Eligible Parcels have the potential to accelerate the “tipping point” and put further pressure on revenues and rates

Both short-term and long-term adjustments may be needed to mitigate these impacts.



Potential Mitigation Approaches

Short Term

- Align credit criteria with stormwater regulations
 - Regulations require management of 1.5-inch of runoff
 - Credit Program criteria requires management of 1-inch of runoff
 - Aligning policies would reduce potential credit from properties with SMPs which do not meet current regulations
- Specify an enrollment window for applying for credit following development / redevelopment
 - Allow property owners a period of time after construction to apply for credit
 - Discuss the need for a policy to address ownership changes
 - Aim to avoid build-up of "credit liability," help to manage contra revenue and customer impacts
- Adjust SMIP/GARP program budget

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Example - SMIP/GARP Program Budget Adjustment

	Current Program (No Change)	Reduced SMIP/GARP Budget (\$12,500,000)	Delta
Residential Rates: FY 2021			
IA/GA	\$15.853	\$15.111	(\$0.742)
Non Residential Rates: FY 2021			
IA (per 500 sf)	\$5.403	\$5.157	(\$0.246)
GA (per 500 sf)	\$0.773	\$0.738	(\$0.035)

Note: Estimated Rates are provided for discussion purposes only at this time

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Potential Mitigation Approaches

Long Term

- Holistic credit program updates
- Revisit stormwater rate structure

Longer term adjustments will require further evaluation and deliberation with stakeholders. Effort will take place over the next several years following the next rate proceeding.

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Summary

- Aligning stormwater credit criteria with current regulations helps manage “build-up” of potential credit
- Specifying an enrollment period helps manage longer term impacts / reduces uncertainty
- Reducing SMIP/GARP Budget provides immediate relief to rate payers
- Broader changes need to be considered in the future to address potential future equity issues

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Reflection & Check-In

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Reflection

- Purpose: capture all points of views about the questions, concerns, and suggestions related to each alternative
 1. Give everyone a chance to participate
 2. Efficiently collect feedback
- Use the note-taking handout to capture initial thoughts

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Check-In

- Purpose: quickly see level of support or concern for each idea
 1. Align credit criteria with stormwater regulations
 2. Specify enrollment window for applying for credit following construction
 3. Adjust SMIP/GARP budget



Great idea! – I support it.



Good idea, but needs work – I could support it with changes.



Bad idea, but it might work – I might support it with changes.



Bad idea! – I don't support it.

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Large Group Discussion

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Large Group Discussion

Questions, Concerns, Suggestions

1. Align credit criteria with stormwater regulations
2. Specify enrollment window for applying for credit following construction
3. Adjust SMIP/GARP budget
4. Longer-term changes?

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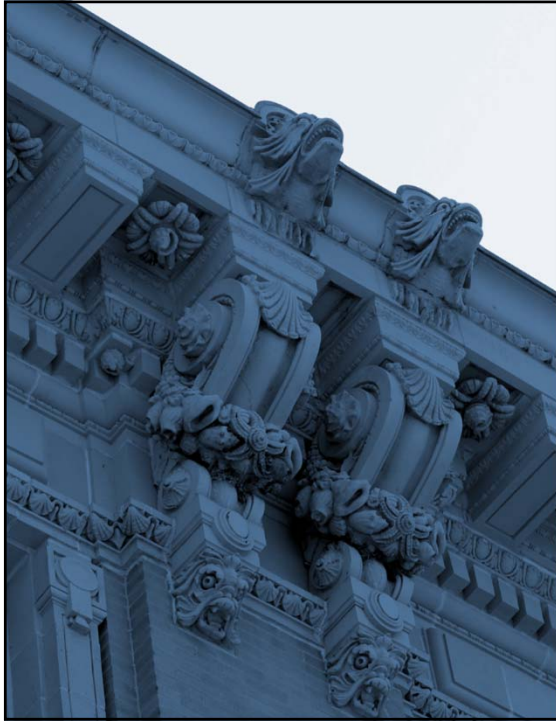


Up Next



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What's Next?

- **Today:** Complete evaluation form
- **Meeting No. 3:**
 - Topic: Pension Rider
 - Time/Date: 2:30 – 4:30 PM on September 5th
- **Comments Due on September 16th**

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