Final

# Managing Drainage

## Steering Committee Meeting

## July 14, 2016

# Agenda

- Welcome/Introductions: Charlie Fleetham
- DWSD Update: Gary Brown
- Understanding Drainage Rates: Marcus Hudson, Eric Rothstein
- Green Infrastructure Credits: Palencia Mobley, Valerie Novaes
- Communication and Outreach: Chandra Lewis, Heaster Wheeler
- Q&A
- Meeting Adjourn

# Our Team

Julie Bonenfant
Gary Brown
Linda Clark
Kellie Dubay
Paul Fulton
Charlie Fleetham
Marcus Hudson
Carol Hufnagel
Mathew Kannanthanam
Chandra Lewis
Palencia Mobley
Valerie Novaes
Bryan Peckinpaugh
Robert Presnell, Jr.
Eric Rothstein
Richard Sulaka
Gary Watkins
Heaster Wheeler

# Meeting Objectives

- Review prior discussion and action items
- Outline current direction and progress
- Answer your questions and hear your feedback
- Outline what's next and your involvement

# Follow-up Items

- Confirm rate calculation
- Managing road and freeways plus City properties
- Service center kiosks and updates
- “Softening the blow”

# DWSD UPDATE

Gary Brown, DWSD Director

# The New DWSD

DETROIT Water & Sewerage Department

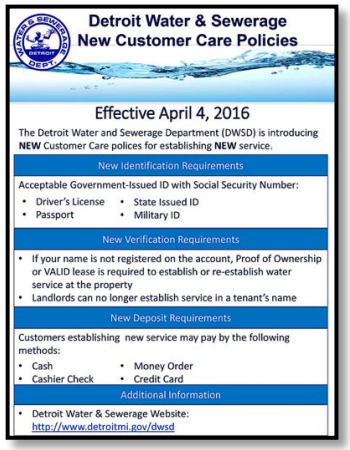
npr **Detroit, suburbs reach water deal**

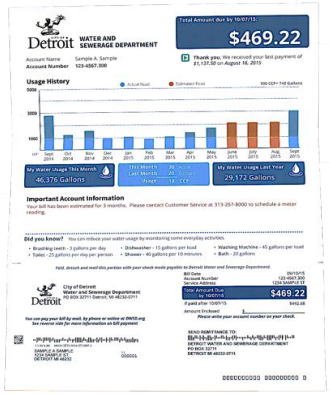
City of Detroit Blue Ribbon Panel on Affordability
FINAL REPORT

COMMUNITY ACTION ALLIANCE WRAP
Water Residential Assistance Program

DWSD 10 30 50 PLAN

Detroit Water and Sewerage Department is offering
**FREE**
Lead and Copper Testing

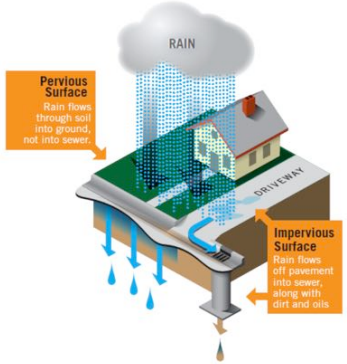



**New Billing System**
**Payment Kiosks**

VOICE OF THE COMMUNITY SINCE 1936
MICHIGAN CHRONICLE

**DWSD mobilizes city-wide effort to address flooding**

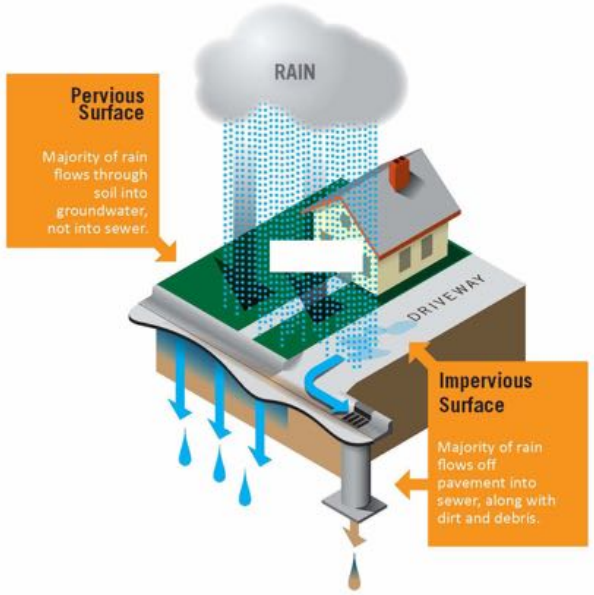



**Drainage Charge**

**Bringing Green Infrastructure to Vacant Lots in the Cody Rouge Neighborhood**

# Fair Share Drainage Charge

- DWSD environmentally treats **millions** of gallons of water of contaminated stormwater run-off and snowmelt each year.
- **Since 1975**, many DWSD customers have been paying for drainage.
- With billing system advances and City Assessor's data, **more than 20,000 parcels** will now be billed for drainage.




- Beginning October 2016 and over the next 18 months, all property owners will be billed for their **fair share** of the City's annual drainage costs.

# Billing Inconsistency

## Church A

Billed per Impervious Acre x Class 5 Rate

**Paying $9,500 a month in Drainage**

## Church B

Billed per 3”plus Meter Size

**Paying $330 a month in Drainage**

**Everyone Paying their Fair Share Balances the Billing System**

# Billing Inconsistency

## Business A

Billed per 3”plus Meter Size

**Paying $185 a month in Drainage**

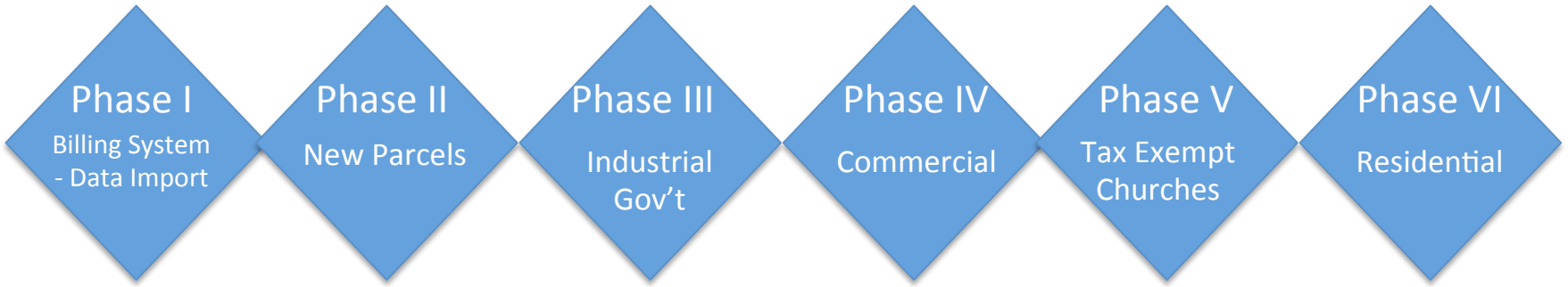
## Business B

Billed per 1”plus Meter Size

**Paying $20 a month in Drainage**

# Phased Billing Consistency

## "Fair Share" Drainage Charge Promoting Green Infrastructure




| Target Dates: | July 2016 | October 2016 | December 2016 | March 2017 | June 2017 | July 2017 |
|---|---|---|---|---|---|---|

### Guiding Principles:

- Comprehensive policies
- Billing data accuracy and fairness
- Green Infrastructure credits
- Effective communications
- Robust customer service experience
- Community engagement

# UNDERSTANDING DRAINAGE RATES – FY 2017 & FORWARD

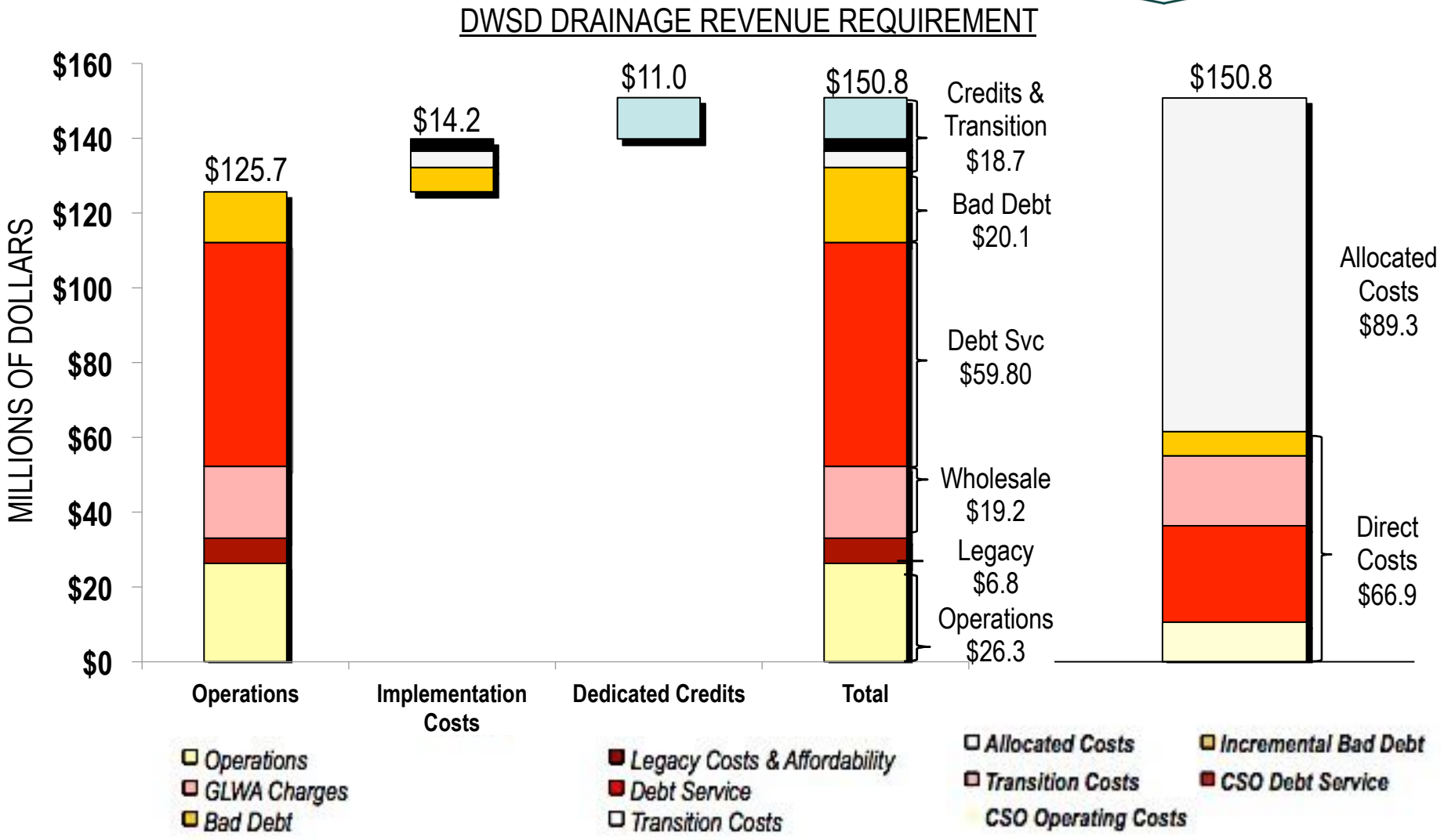
Marcus Hudson, DWSD CFO

Eric Rothstein, Drainage Charge Program Director

# Today's Objectives

- **Provide overview of improved methodology for calculating drainage rates in FY 2017 going forward**
  - Cost build-up
  - Simplification of rate calculation
- **Provide basis for customers to determine "what does this mean for me?"**
  - Estimated initial rate and change in rates over time
  - Illustrative distribution of impact of methodology on certain customer classes
- **Identify most common questions**

# DWSD must recover $151 million in direct and allocated costs



# Impervious Acreage Based Billing

Simplifying rate computation and promoting customer equity

DETROIT Water & Sewerage Department

## Complicated Old Calculation

| | | | |
|---|---|---|---|
| (1) | Residential Acreage 46,892 | Non-Residential Acreage 41,237 | State / County Acreage 1,214 |
| (2) | Residential Impervious % 44% | Non-Residential Impervious % 58% | State / County Impervious % 75% |
| (3) = (1) X (2) | Residential Impervious 20,363 | Non-Residential Impervious 23,917 | State / County Impervious 911 |
| (4) | Residential Rel. Impervious 45% | Non-Residential Rel. Impervious 53% | State / County Rel. Impervious 2% |
| (5) | $150.8 | | |
| (6) = (4) X (5) | Residential Cost Allocation $67.9 | Non-Residential Cost Allocation $79.9 | State / County Cost Allocation $3.0 |
| (7) | Residential Cost Driver 182K Accounts | Non-Residential Cost Driver 13,400 Billable Acres | State / County Cost Driver 1,214 Acres |
| (6) / (7) | **ESTIMATED RATES VARY BY CLASS** | | |

## Simplified New Calculation

| | | |
|---|---|---|
| (1) | Revenue Requirement | $150.8 |
| (2) | State / County Recovery | $(2.8) |
| (3) | Billable Impervious Area | 18,807 |
| (4) = [(1)+(2)] / (3) / 12 | Monthly Impervious Rate | $655.78 |

- Classes collapsed
- Meter size eliminated as factor
- Single rate applied to all
- Costs shared by all drainage customers

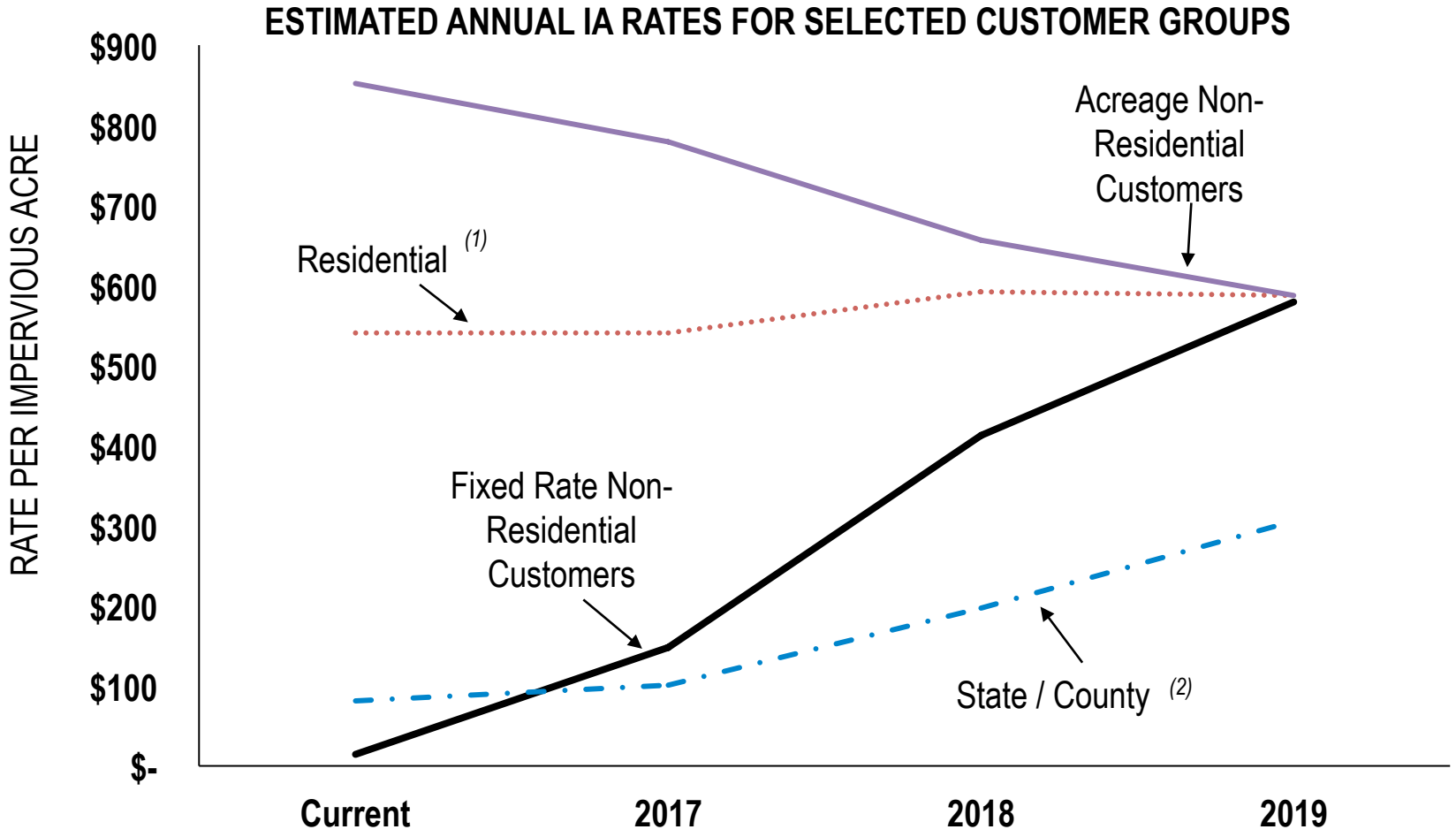
# Phased Rate Structure Avoids System "Shock"

- **Immediate transition to the new rate structure would cause significant increases to several groups of current customers**

- **Substantial increases in rates could be counter-productive to minimizing costs as bad debt expense is likely to increase**

- **Accordingly, we have devised a phase-in program for fully implementing the new pricing methodology**
  - State & County rates to be phased in over 3 years
  - Commercial and Industrial fixed fee customers to be phased in over 3 years beginning in FY'17
  - Residential customers to be phased in over 3 years beginning in FY '18

# Price Equalization Across Customers Anticipated FY '2019

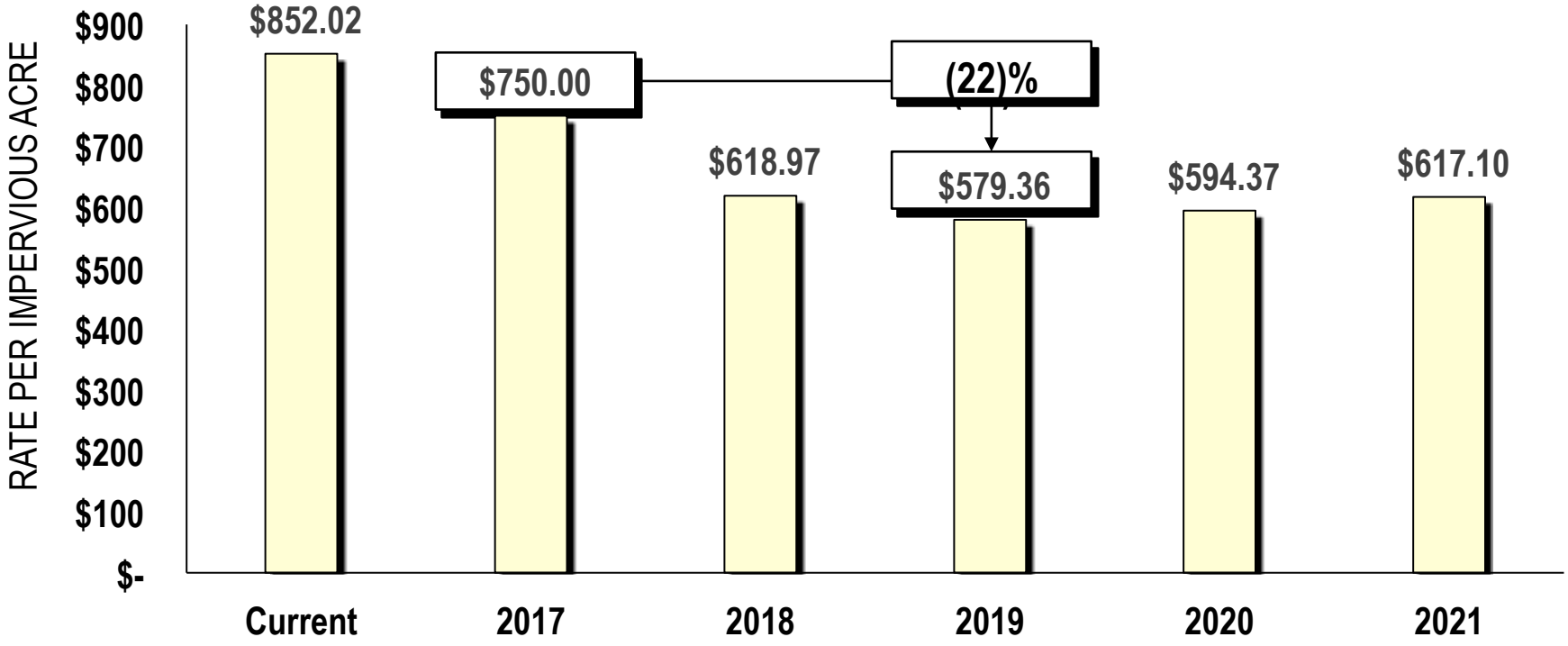



(1) *Residential rates exclude 25% automatic credit to reflect typical rain drainage patterns unique to residential homes which lower effective imperviousness*
(2) *State and County rates calculated exclusive of local conveyances*

# Impervious Rate Could Decrease by 32% in 3 Years

DETROIT Water & Sewerage Department

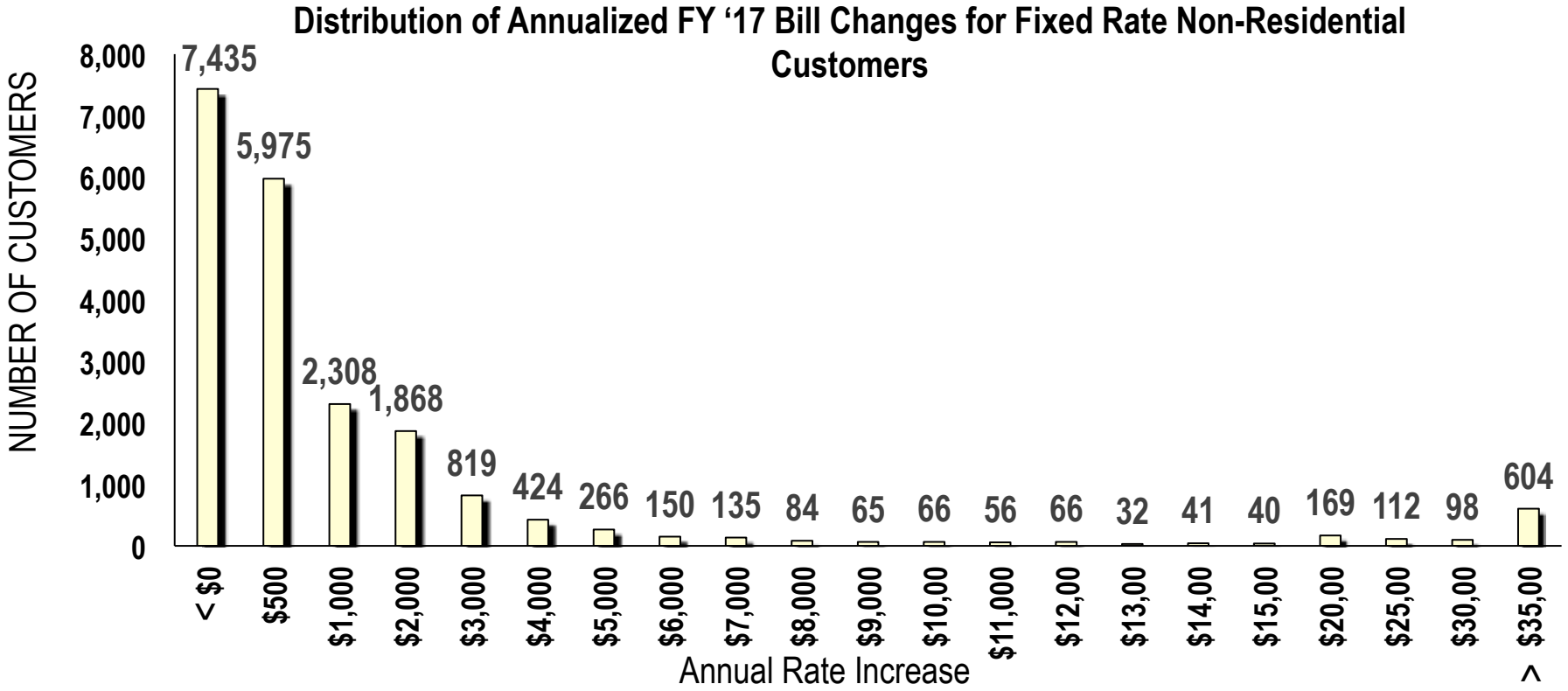
**ESTIMATED IMPERVIOUS PER ACRE CHARGE FY '16 – FY '21** *(1)*




| | Current | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|
| Incremental Acreage | | 1,937 | 4,701 | - | - | - |
| Transition Costs | | $6.5 | $2.0 | $0.0 | $0.0 | $0.0 |
| Incremental Bad Debt | | $6.5 | $4.6 | $4.1 | $3.2 | $3.4 |

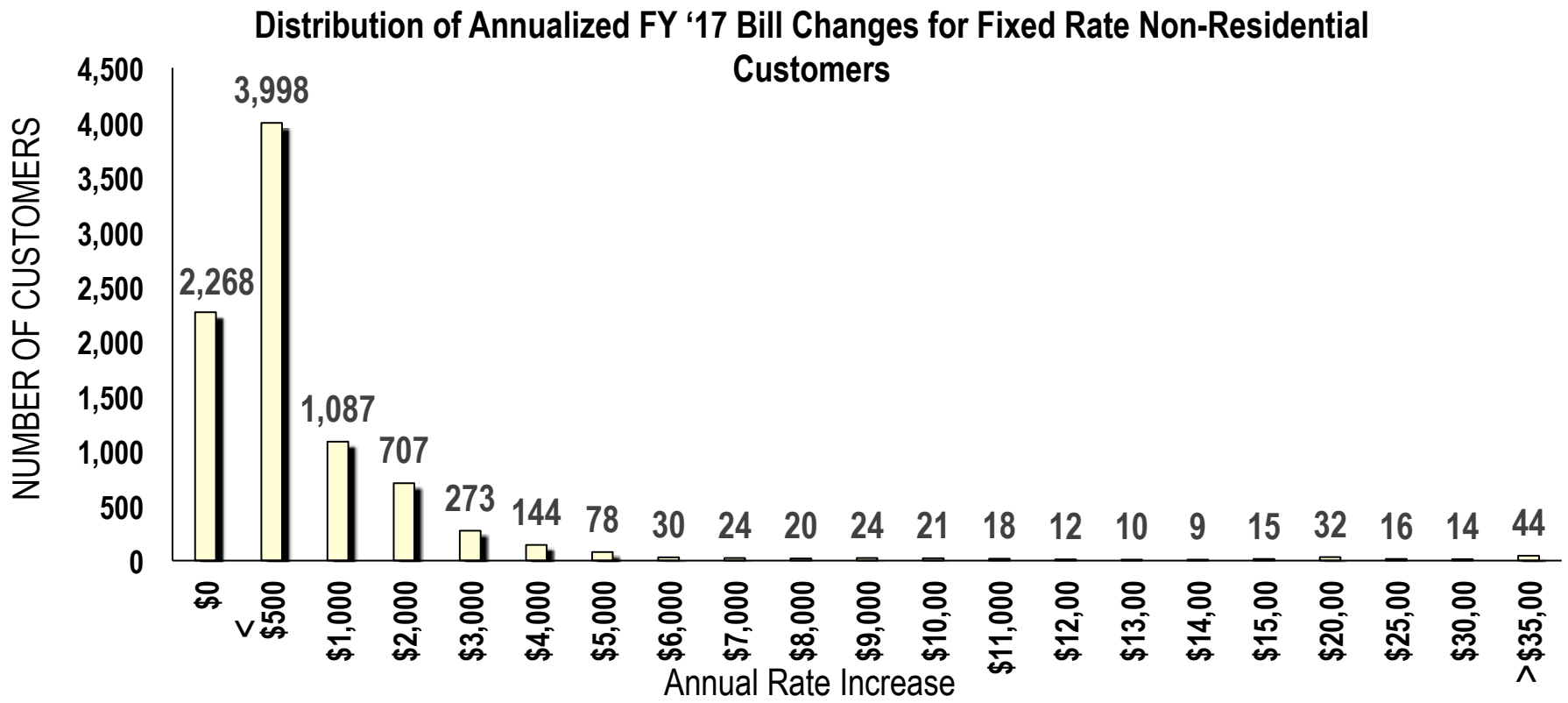
*(1) Before application of credits*

# 63% of Non-Residential Fixed Rate Customers Will Likely See Annual Rise




- **The rate implied by fixed charges is significantly understated for many non-residential customers**
  - Lower tier rate implies .02 impervious acres – this is less than 1/5$^{th}$ of the typical household
  - Higher tiers rate implies .22 impervious acres
- **Fixed rate parcels with more than .02 impervious acres (low rate) or .22 impervious acres (high) rate will realize a proportional rate increase**

# 70% of Non-Residential Acreage Customers Will Likely See Annual Rise




Why Acreage Based Rates Could Increase

- Impervious area lower than that recorded by the City assessor office
- Current rate on "low-end" of Class

Why Acreage Based Rates Could Decrease

- Impervious area higher than that recorded by the City assessor office
- Current rate on "high-end" of Class
- Costs spread over increased acreage

# Summary

- What did you hear?
- What surprised you?
- Questions/Concerns?

# GREEN INFRASTRUCTURE CREDITS

Palencia Mobley, P.E., DWSD Deputy Director and Chief Engineer

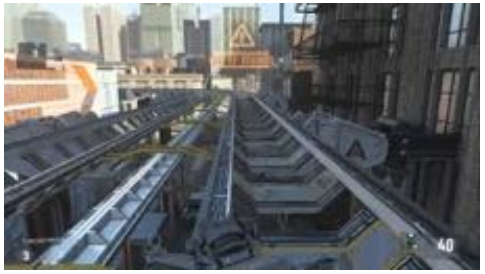
Valerie Novaes, P.E., Tetra Tech

# What is Impervious Cover?

**Impervious cover** is pavement such as rooftops, driveways, parking lots or similar hard surfaces that cause storm water to run off, rather than allowing it to soak into the ground.

Less impervious cover can result in a lower charge.

It is our goal to substantially reduce the city's impervious cover now and into the future.



DETROIT Water & Sewerage Department

GREEN INFRASTRUCTURE

# Programs for Better STORM WATER MANAGEMENT in DETROIT

**LESS TREATMENT • CLEANER WATER • SHARED INVESTMENTS**

# Drainage Charge Credits

Offered for storm water management efforts that reduce annual volume of flow and/or control peak flow rate

&

Helps avoid future infrastructure costs associated with managing drainage from properties in Detroit

# Credit Eligible Practices

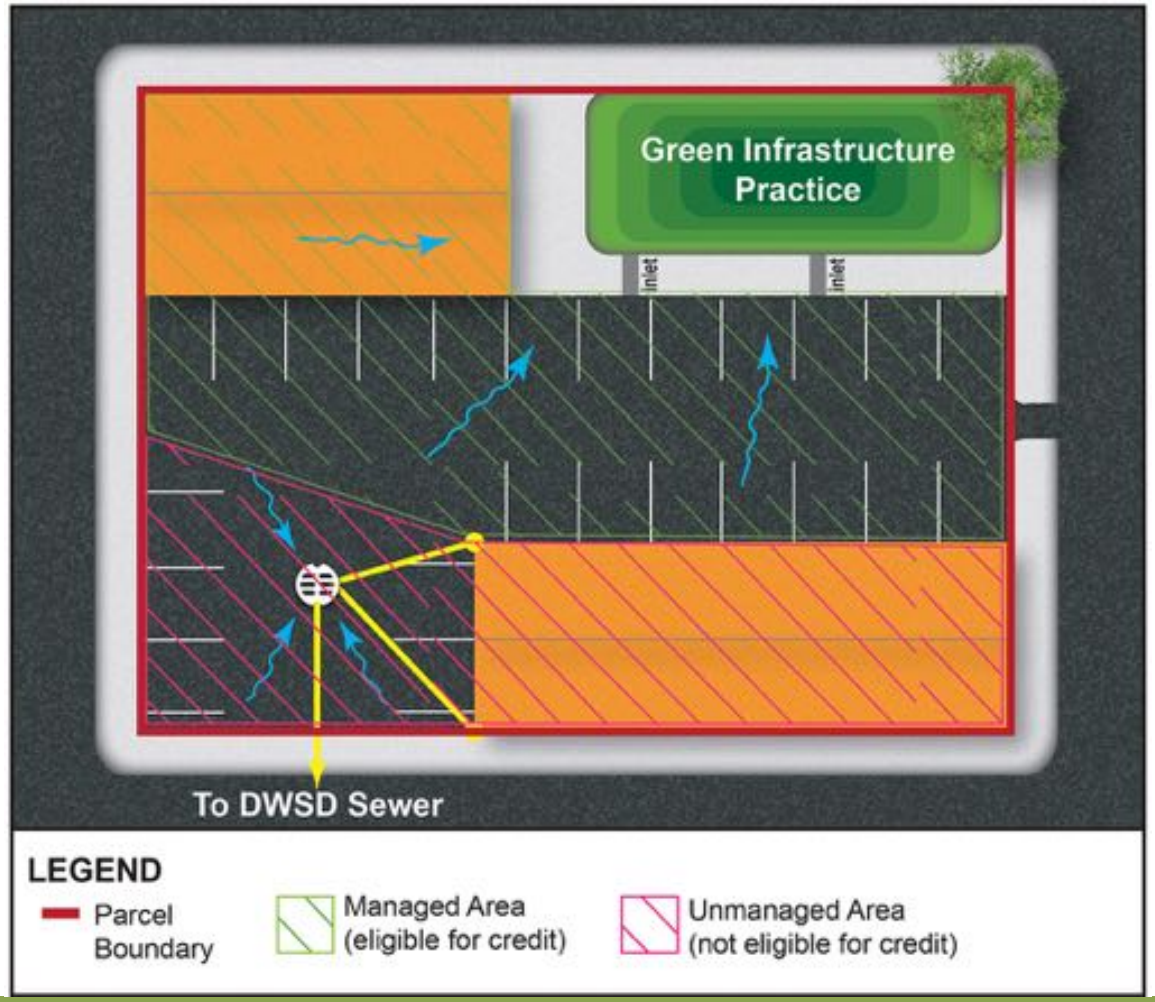
## and probable range of credits on drainage charge bill

- Bioretention: 10-35%
- Detention Pond: 25-40%*
- Permeable Pavement: 20-40%*
- Disconnected downspouts/disconnected imperviousness: 10-25%

* Customers who implement additional features may be eligible for additional credit

# Drainage Charge Credits for Portion of Site Managed

Credit for implementation of green infrastructure practice applies only to the managed area of a parcel



# Potential for Shared Green Infrastructure Practice

- Multiple Parcels
- Single “shared” green infrastructure practice
- Procedure to receive credit still in process

# How Do I Get a Credit?

- Drainage charge program information can be found: www.detroitmi.gov/drainage *
- Download and complete the credit application
- Provide supporting documentation, including:
  - Site plan showing proposed practices
  - Hydrologic/Hydraulic calculations
- DWSD and/or its contractors will contact you to set up an appointment (as necessary)

*Expected August 2016

# Breakout Session

- Questions?
- What guidance/clarity do you need most in a "how to" manual?
- How can DWSD grow green infrastructure throughout the city?

# COMMUNICATION AND OUTREACH

Chandra Lewis, The Allen Lewis Agency

Heaster Wheeler, Heaster Wheeler Speaks

# Customer Notification

**Newly billed parcels communication**:

- Mid July: Notification letter, FAQ. Press release. Website content. Video. Social media.
- Summer: Meetings and Outreach. Info workshops. Print brochure. Postcard reminder.

**For each program phase**:

- Notification letters and FAQs.
- Print and electronic collateral: flyers, tri-fold brochures and postcards.
- Informational workshops and events.
- Media relations.
- Website updates.
- Social media and blogger engagement.
- Advertising.

www.detroitmi.gov/drainage

# Parcel Viewer Tool

## Highlights

Uses City Assessor's Office Data

Online Access Available 24/7

Searchable by Property Address

Total and Impervious Parcel Data Provided

http://dwsd.maps.arcgis.com/apps/webappviewer/index.html?id=aa5e687db0b9430b8b29408569bedd61

# Video

# Alliances and Partnerships

# QUESTIONS?

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