

Large Customer Workshop: Understanding the Drainage Charge

September 2016

Agenda

1:30pm - 3:00pm



- Welcome/Introductions
- Drainage Charge Program Update
 - Why am I Paying?
- Understanding Drainage Rates
 - How Much Will I Pay?
- Dealing With the Basics of Your Property
- Drainage Charge Credits
 - How Do I Reduce My Bill?
- Q&A

Meeting Objectives



- Explain Drainage Charge Program
 - How and when does it impact you
 - What you can do to reduce the impact
- Help Customers Manage Their Bills
- Promote Green Infrastructure
- Answer Your Questions and Hear Your Feedback

Video



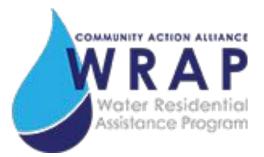




DRAINAGE CHARGE PROGRAM UPDATE

The New DWSD

Detroit, suburbs reach water deal





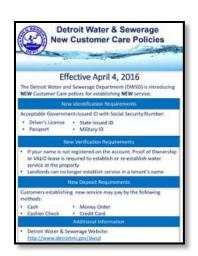


City of Detroit Blue Ribbon Panel on Affordability
FINAL REPORT

Detroit Water and Sewerage Department is offering Lead and Copper Testing









DWSD mobilizes city-wide effort to address flooding



Drainage Charge

Bringing Green Infrastructure to Vacant Lots in the Cody Rouge Neighborhood



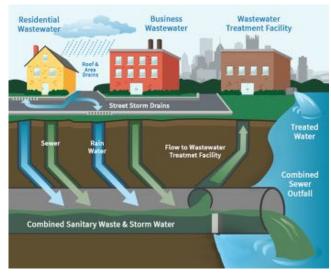
"Fair Share" Drainage Charge



Since 1975, DWSD has charged customers for drainage.

DWSD incurs more than \$125 million each year to store, transport and treat billions of gallons of storm water runoff and ice melt that flow into the city's combined sewer system.

DWSD invested **\$1 billion** in Combined Sewer Overflow facilities (CSOs). May be required to invest in additional facilities, costing everyone more.



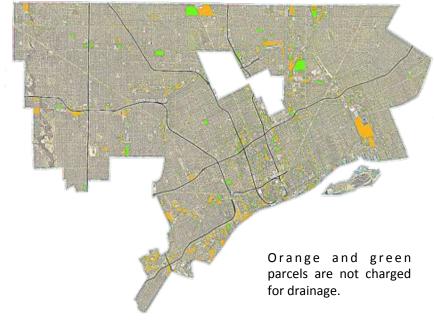


"Fair Share" Drainage Charge



Working with City Assessor data and flyover views, DWSD identified **22,000 parcels** (surface parking lots) that contribute to the city's drainage flows are not being billed for drainage.

Letters sent in August notifying property owners these parcels will be charged \$750 per impervious acre per month starting October 2016. No backbilling.



Including these parcels in the billing system could provide up to \$10 million revenue and offset costs on paying DWSD customers.

Uniform Rate and Impervious-Based Billing



Over 3 years, all property owners will be transitioned to a uniform rate based on impervious acreage. DWSD is establishing credits to soften the impact and promote storm water management and green infrastructure.

Drainage charge = Total impervious surface area of the parcel x Impervious acre rate (dollars per acre per month)

Impervious cover is hard surfaces such as rooftops, driveways, parking lots that prevent or limit the amount of infiltration. Less impervious cover results in a lower charge. Use **Parcel Viewer** Tool to view parcel(s): http://arcg.is/29KWCpY









UNDERSTANDING DRAINAGE RATES

FY 2017 Drainage Charges



Class*	Description	Billable Unit (% of Base Rate)	Rate Per Unit (Meter Size or Impervious Acre)
Fixed Fee Low	Meter Size – 5/8" to 1"		\$20.36
Fixed Fee High	Meter Size > 1"		\$190.56
Class 1	10-24% Impervious Area	17%	\$149.97
Class 2	25-49% Impervious Area	37%	\$326.41
Class 3	50-74% Impervious Area	62%	\$546.95
Class 4	Standard	72%	\$635.19
Class 5	75 – 100% Impervious Area	87.5%	\$771.91
Base Rate			\$882.19
Rate for converted properties			\$750.00

^{*} Wayne County and the Michigan Department of Transportation are charged drainage charges under settlement agreements.

Billing Inconsistency



Non-Residential Customer A

Billed per Impervious Acre x Class 5 Rate



Paying \$9,500 a month in Drainage

Non-Residential Customer B

Billed per 3"plus Meter Size



Paying \$330 a month in Drainage

Non-Residential Customer C

Billed per 3"plus Meter Size



Paying \$185 a month in Drainage

Non-Residential Customer D

Billed per 1"plus Meter Size

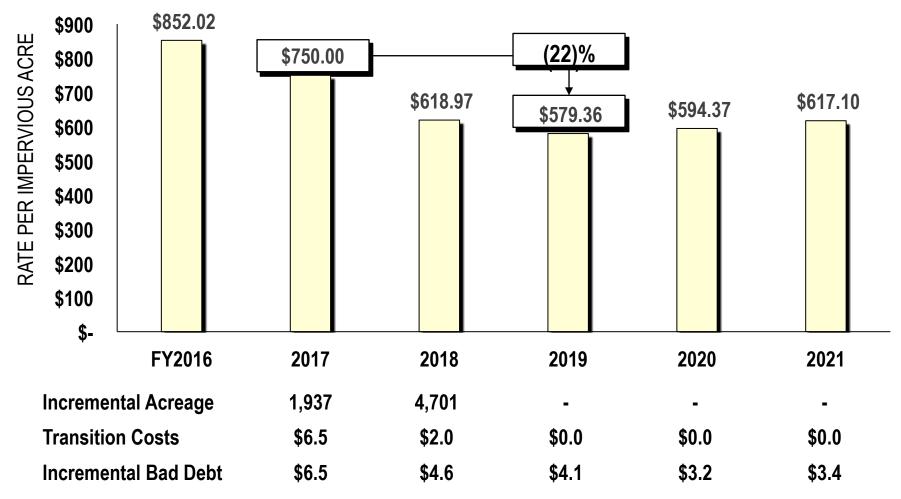


Paying \$20 a month in Drainage

Impervious Rate Could Decrease by 32% in 3 Years



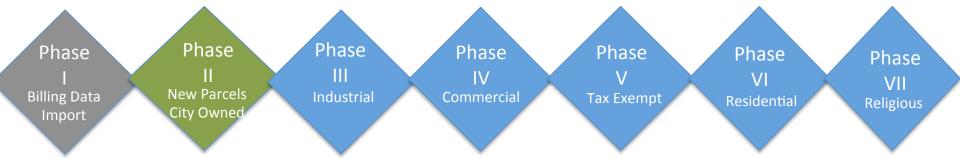
ESTIMATED IMPERVIOUS PER ACRE CHARGE FY '16 – FY '21 (1)



(1) Before application of credits

Impervious Based Billing Phasing Plan





Target Dates:

July 2016 October 2016 January 2017 April 2017 June 2017 October 2017 January 2018

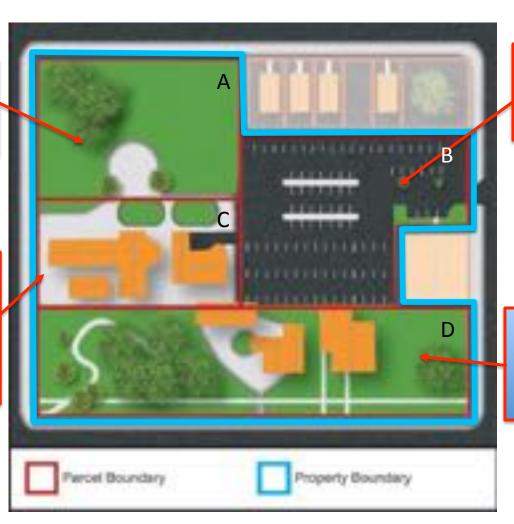
- Parcels will convert to acreage billing based on zoning classification
- Previously unbilled parcels charged \$750/impervious acre/month (October 2016)
- Parcels billed on acreage basis will convert to the new billing rate per schedule

Sample Commercial Multi-Parcel Site



New Parcel: No bill Cot 2016: IA x Rate

Meter-Based Bill: \$190.56 Apr. 2017: IA x Rate (66% credit)



New Parcel: No bill Oct 2016: IA x Rate

Current Acreage-Based bill: \$816.03 Apr. 2017: IA x Rate



DEALING WITH THE BASICS OF YOUR PROPERTY

"Top 100" Characteristics



- Multiple parcels
- Multiple sites
- (Potentially) multiple responsible parties
- Complex property data

Step 1: Verify Ownership and Account Info



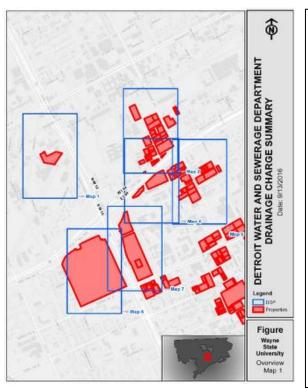
- Confirm ownership data
- Confirm responsible property owner
- Confirm account information
- ☐ Identify your organization point of contact

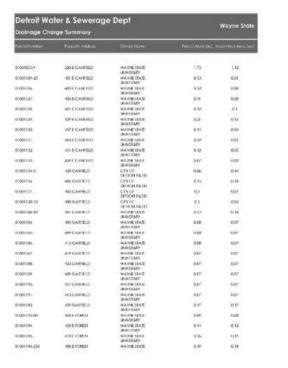
This may involve an iterative process between the customer, DWSD and the Assessor's office

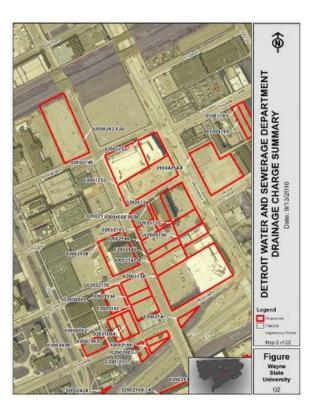
Property Data Packages



Data packages have been prepared for most customers who RSVP'd through last week.







Step 2: Review Existing Billing Method



- ☐ Identify how parcels are currently billed
 - DWSD will pull records
 - Customer should gather bills
- Consider consolidation
- Determine transition impact
- Schedule detailed review if necessary

Property Billing Records



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Step 3: Determine Eligibility for Adjustments



- ☐ Identify change in impervious cover
 - Modifications to site
 - Type of cover
 - Impervious cover measurement
- Identify direct discharge to surface waters
 - Develop site map
 - Gather NPDES permit information
 - Submit documents to DWSD for review and billing adjustment

Impervious Cover Definition







Impervious Cover Adjustment



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Step 4: Submit Forms



- Complete necessary forms
- Prepare supporting documentation
- DWSD makes necessary adjustments
- Determine if site visit is necessary





DRAINAGE CHARGE CREDITS

What is Green Infrastructure?



Green Infrastructure refers to systems and practices that use or <u>mimic natural processes</u> to infiltrate, return water to the atmosphere or reuse storm water or runoff on the site where it is generated.









Drainage Charge Credits Launch October 2016



Customers can earn up to 80% bill credit. Up to 40% credit for reducing annual volume of flow, and up to 40% credit for controlling peak flow rate.

Credits apply only to the managed area of a parcel.

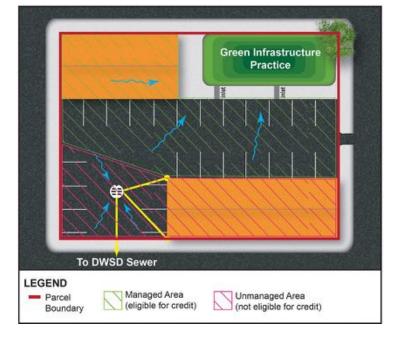
Eligible Practices and Range of Credits:

Bioretention: 0-80%

Detention Pond: 0-40%

Permeable Pavement: 0-80%

Disconnected downspouts/disconnected imperviousness: 0-40%



Implemented Practices





https://www.youtube.com/watch? v=i4E8awPJjRA&feature=youtu.be



https://www.youtube.com/watch?v=lbXVYG2cuHk



http://erbff.org/annual-report/
videos/rain-gardens-to-the-rescue



<u>http://www.erbff.org/annual-report/videos/northern-rain-gardens</u>



http://www.erbff.org/annualreport/videos/detroit-farm-andgarden



http://www.erbff.org/annual-report/videos/recovery-farms



http://www.erbff.org/annualreport/videos/clinton-riverwatershed-council



Storm water retention pond
GM Detroit-Hamtramck
Assembly Plant

You May Already Be Eligible!





CAYMC Green Roof



Disconnected Imperviousness



WCCC dry detention pond



Water Reuse

Drainage Charge Credit Process



- Validate Parcel and Billing data
- Attend Green Infrastructure Workshop (starting October 2016)
- Complete Application for Implemented Practices
- Design and Implement New Practices
- Maintain Practices

New Practices Process



Customer **DWSD Predetermination** Concept **Determination** Design Verify Construct **Maintain Renew Credit**

Evolving Green Infrastructure Credit Program



Phase I Oct. – Dec. 2016 Phase II Jan. – June 2017 Phase III FY 2018

- Simple practices
 established
- Drainage charge manual online
- Demonstration projects

- Off-site mitigation options validated
- Administration institutionalized
- Contractor training, further implementation assistance

- Internal DWSD credit admin / staff
- Technical assistance institutionalized
- Maintenance agreement

Contact Us



Website:

http://www.detroitmi.gov/drainage

Email (recommended):

drainage@detroitmi.gov

Phone Number:

313-267-8000, follow prompts

Summary



- Clarify Drainage Charge Program and Customer Impact
- Validate Customer Data and Billing
- Promote Drainage Charge Credits (Reduce Your Bill)



QUESTIONS?





facebook.com/DWSDDetroit



@DetroitWaterDep



@detroitwatersewerage

Our Team



DWSD Executive Team Sponsors

Program Management

Billing /
Customer
Service

Green Infrastructure

IT / DATA

Legal / Financial Public Relations / Customer Outreach

Workgroups

Off-site Storm Water Credits

(including Outreach / Education)

GI Technical Assistance

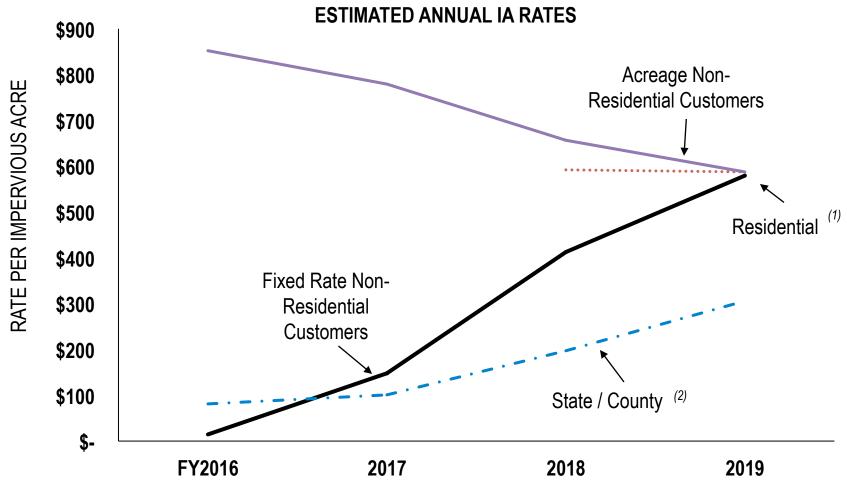
Site Assessment Contractor Trg Demonstrations **Credit Administration**

Collections Enforcement

Public
Relations /
Customer
Relations

Price Equalization Anticipated by 2019



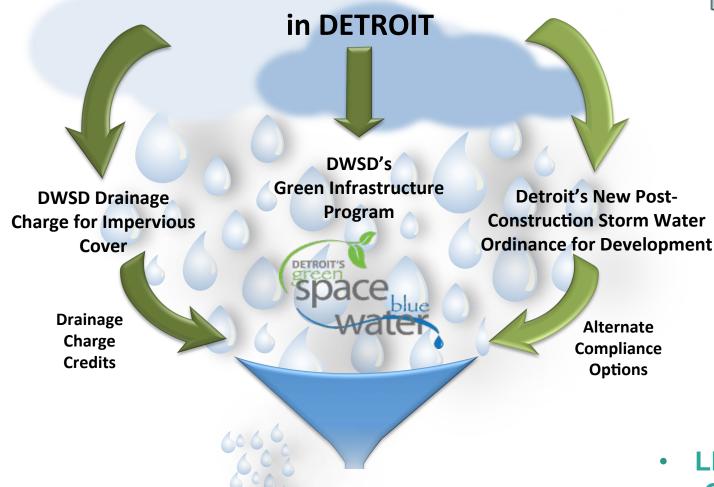


- (1) Residential rates exclude 25% automatic credit to reflect typical rain drainage patterns unique to residential homes which lower effective imperviousness
- (2) State and County rates calculated exclusive of local conveyances

Programs for Better

STORM WATER MANAGEMENT





Reduced Storm Water into Detroit's Combined Sewer System

- LESS TREATMENT
- CLEANER WATER
- SHARED INVESTMENTS

Impervious Cover Definition



Land Cover Type	Impervious	Pervious	Storm Water Practice*
Buildings and roofs	✓		
Concrete (parking, driveways, sidewalks, etc.)	✓		
Asphalt (parking, driveways, sidewalks, etc.)	✓		
Brick Surface (parking, driveways, sidewalks, etc.)	✓		
Gravel or dirt surface used for vehicular traffic (driving or parking)	✓		
Uncompacted dirt/gravel (no vehicular traffic)		✓	
Decks, pavement below	✓		
Decks, vegetation or earth below		✓	
Stockpiled dirt/gravel/sand/other materials		✓	
Railroads with gravel ballast		✓	
Gravel or decorative stone used for landscaping (not compacted, open-graded)		1	
Gravel walkway (no vehicular traffic)		✓	
Lawn, vegetated areas		✓	
Permeable pavement*	✓		✓
Ponds (natural, ornamental)		✓	
Buildings with green roofs*	✓		✓
Swimming pools		✓	

How Does It Work?

Customer Initiates Process



Verify Parcel Information

Is ownership and impervious area measurement correct?

NO

Complete DWSD Parcel Survey and Submit Supporting Documentation

Maintain Practice at All Times
Recertify every three years

YES

Are There Existing Storm Water Practices on Site?

NO

Customer Develops Concept for New Storm Water Practices

Review Charges with DWSD for Adjusted Credit Calculations

YES

Complete Credit Application

Provide supporting documentation and site plan with proposed practices and H/

Submit to DWSD for Review

DWSD provides

pre-determination of drainage

charge credit

Apply Credit to Account as of Construction Completion Date and Certification

Add Design and Final calculation

YES

DWSD Inspects Practice

Have All Necessary
Permits Been Obtained?

NO

YES

Is practice constructed or pre-approved?

NO

Customer Submits Credit
Application to DWSD

Fax, email, or USPS mail

DWSD Reviews and Provides Written Response

Contact Permit Agencies and Obtain Required Permits

Confirm Construction
Completion and Submit
Constructed Drawings
to DWSD

Implementation Assistance



- Site assessment and design assistance
- Online tools
- Contractor training
- Potential drainage credit for outreach
- Capital assistance
- Maintenance agreement

