



Green More, Pay Less: Drainage Charge & Storm Water Management

Steering Committee Meeting
October 26, 2016

Agenda

9:00am – 11:00am



- Welcome - Desired Outcomes
- DWSD Update
- Drainage Charge Program Update
- Drainage Credits Overview
- Q&A

Desired Outcomes



- Share status, progress, lessons learned regarding Drainage Charge Program rollout and outreach. Review next steps.
- Outline available drainage charge credits and illustrate how customers apply.



DWSD UPDATE

The New DWSD



Detroit Water and Sewerage Department Steps Up Collections Efforts

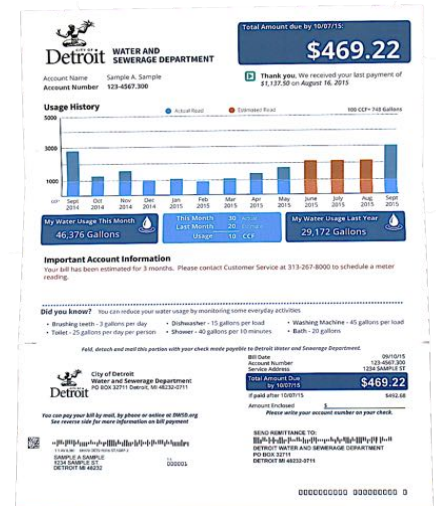


DWSD mobilizes city-wide effort to address flooding

Detroiters to see 'modest' increase on water rate

Water authority sells bonds in hopes of saving \$309M

Detroit banks on green infrastructure to rescue city from heavy rains



Customer Service



- Improvements
 - Training
 - Website
 - New Bill
 - Phone Upgrades
 - Payment Kiosks and Online Payments
- Water Affordability
 - Blue Ribbon Panel on Affordability
 - WRAP, Payment Plans
 - Property lien/foreclosure policy



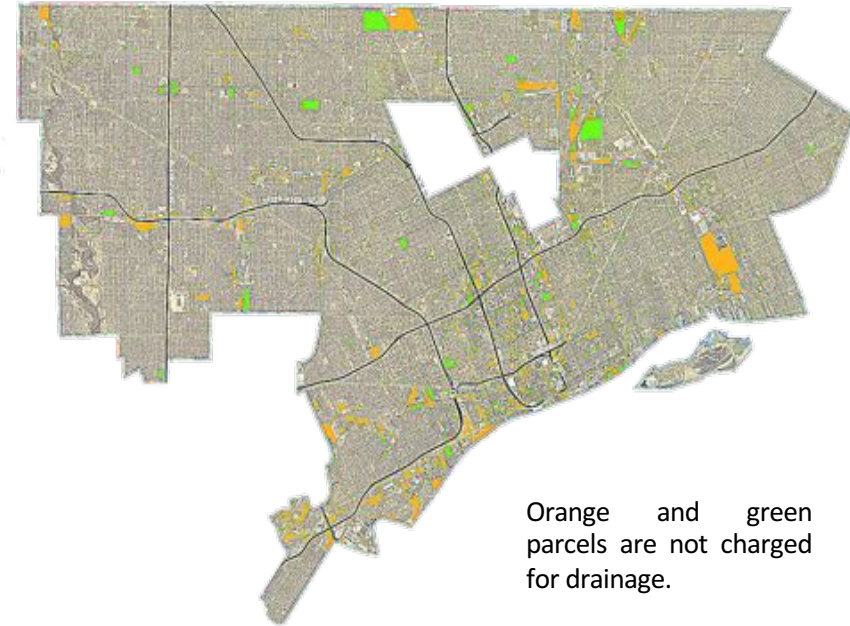
DRAINAGE PROGRAM UPDATE

Phase II: Not Being Billed



More than **20,000 previously unbilled parcels** begin to accrue charges of \$750 per impervious acre or 1.7 cents per impervious square foot per month October 2016. First bills received in November. No back-billing.

Parcels with less than 0.02 impervious acres (871 square feet) will not be billed.



Orange and green parcels are not charged for drainage.

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

Billing these previously unbilled parcels could provide additional revenue and offset costs. If everyone pays their “fair share”, DWSD can bring down rates and all customers pay less.

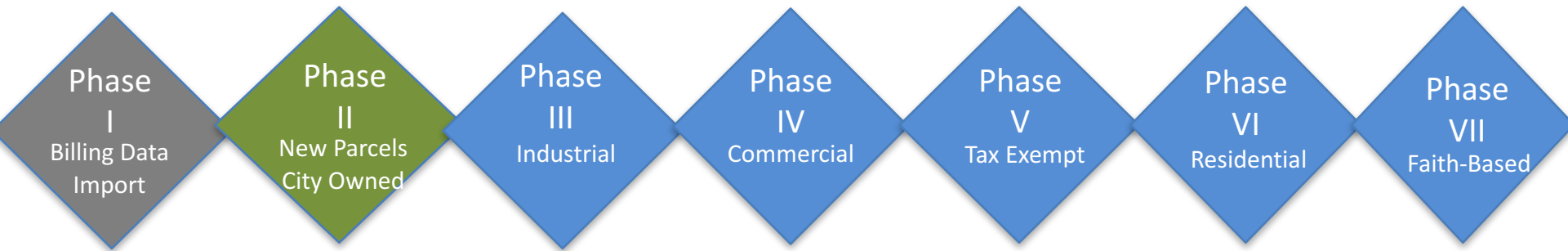
Drainage Charge Examples



Not including green infrastructure or transition credits

Site	Impervious Acres	Year 1 \$750/mo	Year 2 \$619/mo	Year 3 \$579/mo
1	0.04	\$30	\$25	\$23
2	0.18	\$135	\$111	\$104
3	0.39	\$292	\$241	\$226
4	0.50	\$375	\$310	\$290
5	1.00	\$750	\$619	\$579

Phasing Plan



Target Dates:

July 2016	October 2016	January 2017	April 2017	June 2017	October 2017	January 2018
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- By 2018, all customers pay same rate based on impervious acreage.
- “New” parcels charged \$750/IA or \$0.017/ISF per month starting October 2016. Bill issued the month following the accrual of charges.
- IA rate reduced from \$852 to \$750/month. 32% rate decrease over 3 years planned.
- Drainage credits soften transition impact and reduce customer bills.

Large Customer Workshops



- Held September 28 and October 5, 2016
- Multiple parcels
- Multiple sites
- (Potentially) multiple responsible parties
- Complex property data
- Post-workshop individual discussions about parcels, billing
- Outline path to drainage charge credits

Drainage Credits Program



A Guide to the Drainage Charge

This guide describes how the drainage charge is calculated.

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Properties Exempt from Drainage Charges	2
Properties Discharging to Surface Waters	2
Parcels and Properties	
Parcel Information	
Collapsed Parcels	
How the Drainage Charge is Calculated	
Impervious Surface Area	
How is Impervious Area Measured	
Precision of the Measurement	
Billable Impervious Area	
The Linkage Between Account and Property	
Payment Responsibility	

A Guide to Drainage Charge Credits

A drainage charge credit is a reduction in the drainage charge to a property based on the implementation and continuing proper operation of a storm water management practice. Customers are encouraged to adopt sustainable methods of storm water management that reduce storm water flows to the drainage system, enhance the natural environment, and protect against flooding and sewer overflows. The installation of storm water practices that result in a measurable reduction in volume and/or peak flow rates will qualify the property owner for a credit to their bill. This guide provides an overview of the types of credits available for common storm water practices.

Contents

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Peak Flow Rate Related Costs	4
Base Costs	4
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What is a Storm Water Practice?

Storm water practices are designed or constructed to reduce or control the volume and rate at which storm water leaves a site. Storm water practices can be structural or non-structural. Storm water practices may use vegetation, soils, and other elements to restore some of the natural processes that reduce runoff. Examples of storm water practices include disconnected downspouts, rain gardens, bioretention practices, permeable pavement, green roofs, and detention ponds.



Detroit Water and Sewerage Department
735 Randolph Street, Room 808
Detroit, MI 48226
313.267.8000 | drainage@detroitmi.gov

Non-Residential Drainage Credit Application (Please fill out one form per property)

Email completed application and supporting documentation to:
drainage@detroitmi.gov

Alternatively, applications can be mailed to:
DWSD Drainage Charge Program
735 Randolph Street, Room 808
Detroit, MI 48226

Additional questions? email drainage@detroitmi.gov or call 313.267.8000

Contact Information (Please print or type)

1. Property Owner (Business Name): _____
2. Contact Name (Name and Title): _____
3. Mailing Address: _____
Street Address City Zip
4. Phone: _____ 5. Email: _____
6. Authorized Representative (name, address, email): _____

DWSD drainage account must be established with name and tax identification number prior to being eligible for credits. Any consultant representative of the owner must have an authorization letter with the application.

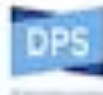
Service Location Information (Please print or type; use back if necessary)

7. Service Address: _____
 8. For each parcel, include Parcel ID and DWSD Account Number, attach separate list if necessary:
- | Item | Parcel ID | DWSD Account Number |
|------|-----------|---------------------|
| 1 | | |
| 2 | | |
| 3 | | |

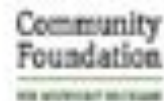
Targeted Alliances and Partners



Fred A. and Barbara M.
Erb Family Foundation



Chaldean American
Chamber of Commerce

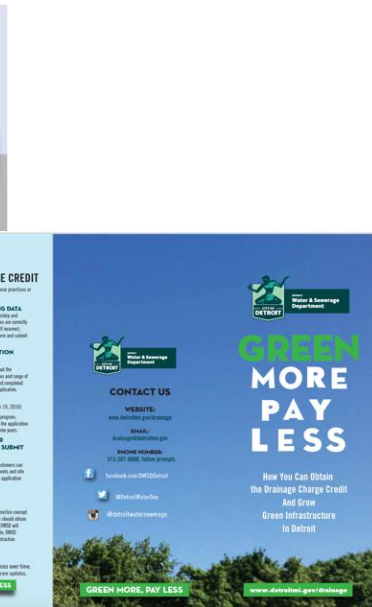
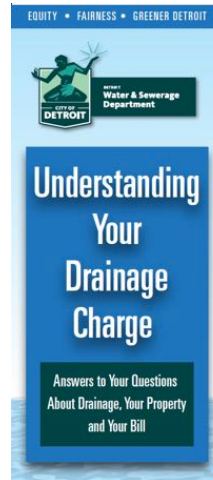


Outreach



- Retail Customer Meetings since Fall 2015
 - Focus Group Meetings: Oct 19-22, 2015
 - Customer Steering Committee: Nov 23 & Dec 17, 2015. Jan 21, Apr 21 July 14 & Oct 26, 2016.
 - Large Customer Meetings – September 14 and October 5, 2016
 - Individual Meetings (ongoing weekly since September 2016)
 - Drainage Charge Credit Workshops – starting October 19, 2016
- Stakeholder meetings since Spring 2016
 - **Faith-Based:** Council of Baptist Pastors, COGIC Council of Bishops, Michigan Interfaith Power & Light, MOSES, Fellowship Chapel, Second Ebenezer, Greater Grace, Mayor's Meeting Sept 29.
 - **NGOs:** Greening of Detroit, Blue/Green Infrastructure Workgroup, Erb Foundation, Nature Conservancy, Sierra Club, SEMCOG, Community Foundation, Michigan Community Resources, Green Task Force, Detroit Agency on Aging, Food and Water Watch.
 - **Business and Community Associations:** DTE Community Partners, Downtown Detroit Partnership, Arab American/Chaldean Merchants, Arab American Civil Rights League, Chaldean Chamber, Corktown Business Assoc., Detroit Hispanic Development Corp., SDBA.
 - **HOAs:** Mohican Regent, North Rosedale Park.
 - **Academia:** University of Michigan. Detroit Public Schools.
 - **Mayor's Office, City Council, City Departments, BOWC, GLWA**
- Press: Media and Community Leaders and Editorial Boards (Summer 2016)

Communications



Translations Available



DRAINAGE CHARGE CREDITS

Programs for Better STORM WATER MANAGEMENT in DETROIT



- **LESS TREATMENT**
- **CLEANER WATER**
- **SHARED INVESTMENTS**

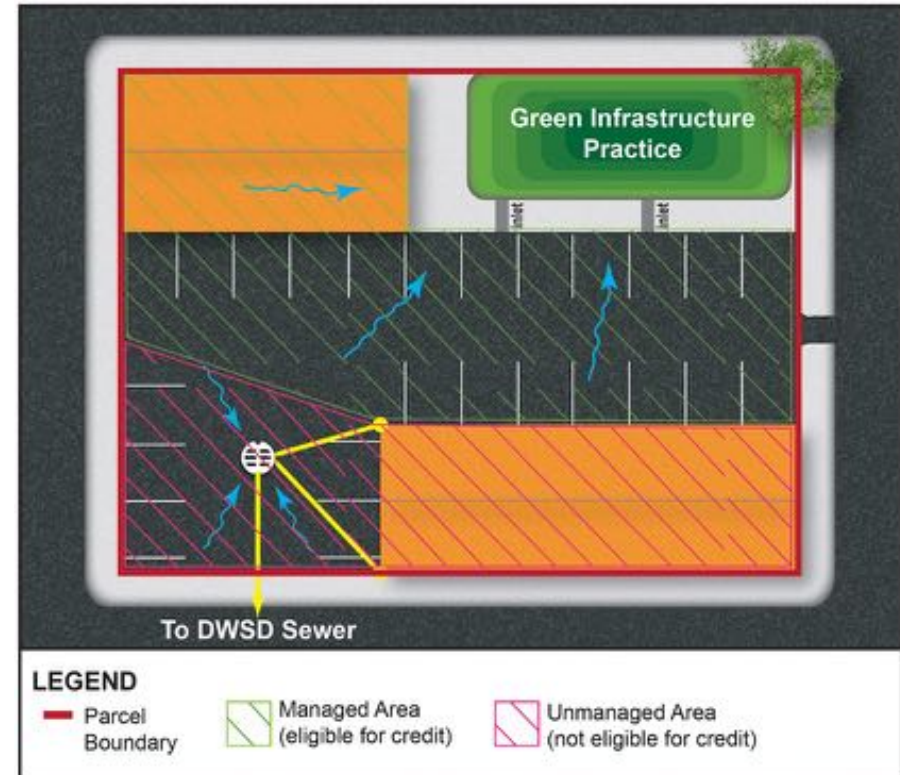
Drainage Charge Credits Launch October 2016



Customers can earn up to 80% bill credit.*

- Up to 40% for reducing annual volume of flow – i.e. how much water you prevent from going into the sewer per year.
- Up to 40% for controlling peak flow rate – i.e. slowing the rate at which water leaves your site and enters the sewer.

*Credits apply only to the managed area of a parcel



Impervious Cover Definition

Not Impervious Cover



Impervious Cover



Impervious Cover Definition (2)

Not Impervious Cover



Impervious Cover



Check Impervious Area via the Parcel Viewer:

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

Drainage Credits Methods



	Volume Credit	Peak Flow Credit
Purpose	Reduce amount of storm water flow treated at WWTP	Reduce combined sewer overflows and operation of CSO facilities
How	Infiltrate, evaporate, reuse	Store temporarily, control flow rate to the sewer system
Based On	Average annual runoff removed (controlled)	Detention provided
How is it calculated?	$\frac{\text{Annual volume removed}}{\text{Annual volume generated}}$	$\frac{\text{Detention provided}}{100 \text{ year detention required}}$

Eligible Practices and Potential Credits



Detention Pond: 0-40%



Bioretention: 0-80%



Green Roof: 0-30%



**Disconnected imperviousness:
0-40%**



**Permeable Pavement:
0-80%**



**Water Harvesting:
0-80%**

Implemented Practices



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



<https://www.youtube.com/watch?v=IbXVYG2cuHk>



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



<http://www.roofingcontractor.com/articles/86479-green-gains-a-foothold-in-the-motor-city>



<http://www.erbff.org/annual-report/videos/detroit-farm-and-garden>



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



<http://www.erbff.org/annual-report/videos/clinton-river-watershed-council>



[Storm water retention pond
GM Detroit-Hamtramck
Assembly Plant](#)

Technical Resources



1. Drainage Charge Manuals and documentation
2. Drainage Charge & Credit Workshops
3. Credit Calculator
4. Data Review Meetings & Data Packages
5. Technical Assistance “Office Hours” with DWSD
6. Site Assessments



Correct Your Data



1. Verify ownership and account information.
2. Review existing billing method. Consider consolidation
3. Determine eligibility for adjustments.
4. Submit forms.

DRAINAGE AND GREEN CREDIT PROGRAM IMPERVIOUS COVER SURVEY FORM

Section 1 - PROPERTY INFORMATION

Section 2 - BUILDING INFORMATION

Section 3 - PAVED / UNPAVED SURFACE INFORMATION

Authorization and Consent for Consolidated Billing

I, _____, am the account holder for the following account numbers that receive drainage charges from the Detroit Water and Sewerage Department.

For each parcel, include Parcel ID and DWSD:

Item	Parcel ID
1	
2	
3	
4	
5	

I wish to have all drainage charges for the above following Parcel ID location:

(Street Number and Name) (City) (State)

By signing below, I authorize the Detroit Water and Sewerage Department to collect drainage charges (listed by account number) sent to the address indicated on this form until I change or revoke this authorization and remain current on my bill. Failure to pay parcels and removal from the program.

By: _____

Name: _____ Please Print

Date: _____

If you have any questions, please call _____

Drainage Charge Adjustment Application
(Please fill out one form per property)

Contact Information (Please print or type)

Property Owner: _____

Mailing Address: _____

Street Address _____ City _____ Zip _____

Phone: _____ Email: _____

Must match owner name in Assessor's parcel database. If different than owner, must provide Power of Attorney or proof of tenant.

Service Location Information (Please print or type; use back if necessary)

Service Address: _____

Parcel ID and _____

DWSD Account No: _____

For Non-Residential Customers: Please provide copy of Articles of Incorporation or equivalent document and EIN or TIN Number: _____

Reason for Adjustment Request:

Fee free to provide a brief description of the adjustment(s) you are requesting in the space below. Refer to the following page for common appeal types and required back-up documentation.

Mondays 9am – 12pm or Select Dates. Location: Detroit Water and Sewerage Department, Central Services Facility, 6425 Huber, Room A201. **Contact:** Julie Bonenfant, Julie@ProjectInnovations.com

Drainage Credit Process



1. Validate Parcel and Billing Data
2. Review program information on website
3. Attend Drainage Charge Credit Workshop (November 9, 2016)
4. Assess Your Site.
5. Complete Application for Implemented Practices and Submit to DWSD.
6. Present New Concept(s). Design and Implement New Practice(s). Complete Application and Submit to DWSD.
7. Maintain Practice(s).

The flyer for the "NONRESIDENTIAL PROPERTY OWNER DRAINAGE CHARGE CREDIT WORKSHOP" is dated Wednesday, November 9, 2016, at SEMCOG (Woodward Room) - 1001 Woodward Avenue, Suite 1400. It includes a "Before" and "After" photo of a street with a drainage improvement. The flyer also mentions a "Morning Session" from 9:00 am to 11:30 am and provides a link to <http://www.detroitmi.gov/PRR-FNG-PREA> to learn more and register. Below the flyer is a "Non-Residential Drainage Credit Application" form. The form includes contact information for the Detroit Water and Sewerage Department, a section for property owner information, and a section for service location information. The form also includes a table for listing multiple parcels.

Green More, Pay Less!
Are you a Detroit nonresidential property owner interested in knowing how you can receive a drainage charge credit?

The Detroit Water and Sewerage Department invites you to participate in a
NONRESIDENTIAL PROPERTY OWNER DRAINAGE CHARGE CREDIT WORKSHOP
Wednesday, November 9, 2016
SEMCOG (Woodward Room) - 1001 Woodward Avenue, Suite 1400

Before **After**

Please RSVP for the drainage charge credit workshop & register by November 8. Space is limited to:

Morning Session
9:00 am - 11:30 am
Go to <http://www.detroitmi.gov/PRR-FNG-PREA> to learn more and register.

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Street Address City Zip

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1		
2		
3		

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New Practices



Customer

DWSD

Concept



Predetermination

Design



Determination

Construct



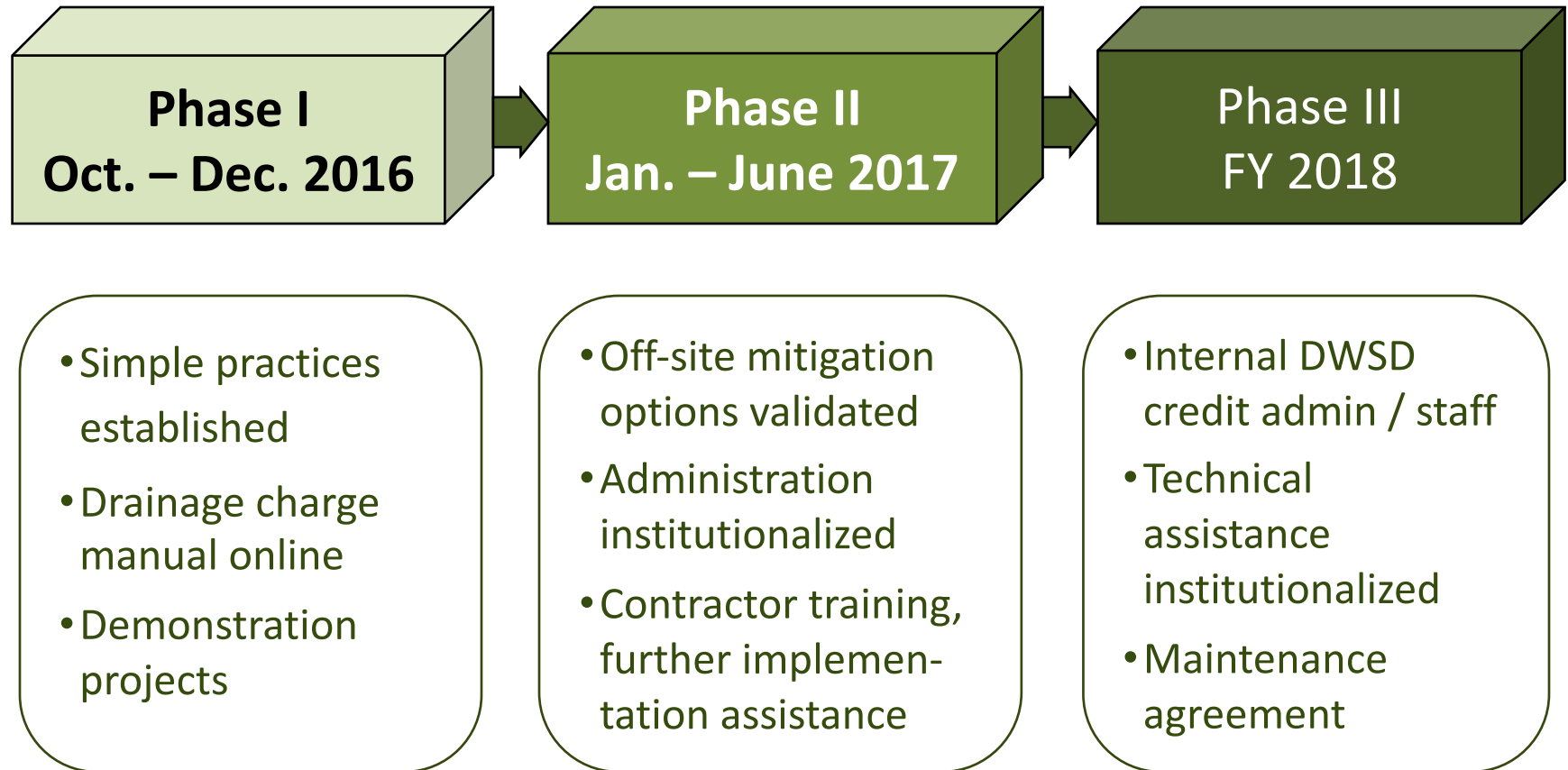
Verify

Maintain



Renew Credit

Evolving Green Infrastructure Credit Program



Implementation Assistance



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



Let's Start A Credit Application!



Detroit Water and Sewerage Department
735 Randolph Street, Room 806
Detroit, MI 48226
313.267.8000 | drainage@detroitmi.gov

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drainage@detroitmi.gov

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1		
2		
3		

Website:

www.detroitmi.gov/drainage

Email (recommended):

drainage@detroitmi.gov

Phone Number:

313-267-8000, follow prompts



QUESTIONS?



Website:

www.detroitmi.gov/drainage

Email (recommended):

drainage@detroitmi.gov

Phone Number:

313-267-8000, follow prompts



facebook.com/DWSDDetroit



@DetroitWaterDep



@detroitwatersewerage