
Regulatory Review Division

DEPARTMENT OF ENERGY & ENVIRONMENT
GOVERNMENT OF THE DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR
OVERVIEW

Guidebook and process updates

Definition changes for regulated activities

Exemptions for projects which are not development activities

Amendments to Stormwater Retention Credit (SRC) Program and Off-Site Retention Compliance

Public Comment Process
OBJECTIVES

Today’s workshop is intended to:

• Provide an update on the results of the 2013 Rule on Stormwater Management and Soil Erosion and Sediment Control (2013 Stormwater Rule)

• Explain why DOEE is amending the 2013 Stormwater Rule
  o Provide an overview of the amendments
  o Identify the expected outcomes

• Discuss and answer questions on how the proposed changes would be implemented

• Overall: help determine how proposed changes would affect projects
SUCCESES OF THE 2013 STORMWATER RULE

2013 Stormwater Rule has set the District on a long-term path to fishable and swimmable waterbodies

- Over 700 projects have been successfully reviewed
- Regulated sites will retrofit over 770 acres with Green Infrastructure (GI)
- The Stormwater Retention Credit (SRC) program has motivated private investment to retrofit approximately 20 acres with GI
- Development has increased by 20% (regulations have not slowed development)
LESSONS LEARNED FROM IMPLEMENTATION

Focus of 2013 Stormwater Rule was on Development:
- Large new buildings
- Renovated buildings
- Parking lots

Compliance has been a disproportionate burden for certain types of projects:
- Single- and two-family affordable homes
- Athletic fields, parks, and trails
- Landscaping maintenance

DOEE recognizes that many of these projects:
- Primarily consist of pervious area once complete
- Provide public benefit
- Cost of implementing SWM is often a large portion of budget
- May be less viable as a result of the stormwater regulations

Estimated 5% loss in regulated CDA (SRC changes will encourage more CDA in MS4)
UPDATES TO THE STORMWATER MANAGEMENT GUIDEBOOK AND OTHER PROCESS UPDATES
OVERVIEW OF GUIDEBOOK UPDATES

• Guidance from 2014 and 2017 Clarifications documents
  • Answers to questions from design community
  • Released to provide clarity and consistency for designers
• Changes related to regulation update
  • Understand how regulation update affects projects
  • For instance, examples of projects triggering Major Substantial Improvement and Major Land Disturbing
• Updated stormwater BMP guidance and design requirements:
  • In-line with best available research
  • Feedback from designers and inspectors
  • Consultation with subject matter experts
UNDERPINNING – CHANGE AND CLARIFICATION OF INTERPRETATION

Issue: fits both definitions of “improvement” and “land disturbance”

Previous Guidance:

• Underpinning considered “land disturbance”, even within building footprint
• Contributes to Limit of Disturbance for a Major Land Disturbing activity

Proposed Guidance:

• All four walls remain intact, considered “Improvement” → cost contributes to triggering Major Substantial Improvement
• If one wall is removed, considered “land disturbance” → contributes to Limits of Disturbance and triggering Major Land Disturbing
UNDERPINNING – IMPROVEMENT

- Slab removal and excavation inside existing the basement
- No exterior disturbance
- All walls remain intact

→ Previously: considered part of Limit of Disturbance
→ Now: Activity is considered an “improvement” and cost contributes to Major Substantial Improvement
UNDERPINNING – LAND DISTURBANCE

• Slab removal and excavation inside existing the basement
• Exterior disturbance
• One wall fully removed down to foundation

→ Previously: included within Limits of Disturbance, contributes to Major Land Disturbing activity
→ Proposed: same as before
### Issue:

- Infiltration rate \( (i) \) is not accurate to post-construction in-situ infiltration rates
  - May result in inaccurate BMP storage and drawdown calculation
  - Risk of ponding water in BMPs

### Previous Guidance:

- Use infiltration rate with safety factor, \( i/2 \), for BMP storage and drawdown

### Proposed Guidance:

- Use the \( K_{\text{sat}} \) value to determine BMP drawdown time
  - More predictive of actual infiltration characteristics of BMPs
  - More conservative value, result in less risk of BMP failure
GREEN ROOFS – DESIGN UPDATES

Purpose: Response to new products

Default retention values:
- Existing: 0.15 for soil and drainage layers
- Proposed: 0.1 for soil and 0.0 for drainage layers

Runoff:
- Existing: Only runoff into green roof from soil surface counted
- Proposed: runoff into rockwool at bottom of green roof counted

Solar panels:
- Existing: Green roofs below solar panels receive 100% retention (2017 Clarifications)
- Proposed: Same, but maximum panel size increased
IMPERVIOUS DISCONNECT – MORE RETENTION

Purpose: Response to discussion with experts

Existing Guidance:
• 15 gallons retention per 100 square feet of disconnect area

Proposed Guidance:
• Good soils: 30 gallons retention per 100 sf of disconnect area
• Poor soils: 15 gallons retention per 100 sf of disconnect area
PERMEABLE PAVEMENT – MORE RETENTION

Purpose: Response to discussion with experts

Existing Guidance:
- 33 gallons retention per 100 square feet of pavement (underdrain)

Proposed Guidance:
- 37 gallons retention per 100 sf of disconnect area (underdrain)
- Just enough to reach 50% retention for BMP surface area
Purpose: Align with DC tree canopy goals

Existing Guidance:
- Large-growing planted trees: 75 gallons retention
- Preserved Trees: 150 gallons retention

Proposed Guidance:
- Small-growing planted trees: 37 gallons
- Large-growing planted trees: 75 gallons
- Preserved trees: 150 gallons
- Preserved Special and Heritage trees: 300 gallons
RAINWATER HARVESTING TREATMENT – CLEAR GUIDANCE

Issue: previous Appendix M was challenging for designers to follow

Proposed Guidance:

• Completely new Appendix M
• Aligns with landmark report by Water Environment and Reuse Foundation
• Clear guidance for design, maintenance, and monitoring of system
• Design examples to aid engineers
PROCESS UPDATES

• Fee Inflation Adjustment
  • Has occurred every year since 2013, except:
  • This cycle includes 2 years of inflation (last update took effect April, 2017)

• Removed references to paper processes and incorporated references to the Stormwater Database

• Formal end to the ability to request vesting under transition periods to the 2013 Stormwater rule
QUESTIONS?
DEFINITION CHANGES FOR PROJECTS THAT ARE NOT DEVELOPMENT ACTIVITIES
LANDSCAPING: DEFINITION CHANGES

2013 Stormwater Rule:

• Intent: regulate development in the District
  • Assumption: cost of installing GI is low relative to total project cost

• Regulations are triggered by 5,000 square feet or greater of land disturbance and renovated building footprint

• Some projects which trigger SWM requirements are not development activities, e.g. large-scale landscaping projects
  • Cost of installing GI is high relative to project cost
  • Often do not otherwise require engineer
  • Frequently few good SWM opportunities
LANDSCAPING: DEFINITION CHANGES

Amended Rules:

- **Intent**: not regulate projects which are primarily landscaping activities
- Adds additional triggers to existing Major Land Disturbing and Major Substantial Improvement definitions:
  - 2,500 square feet or greater is impervious surface post project; or
  - There is any pre-project natural land cover
- **Land cover definition**:
  - **Impervious**: water cannot pass through surface, and also BMP cover
  - **Compacted**: functionally pervious, permeability impeded by construction (i.e. landscaping)
  - **Natural**: area dominated by vegetation, requires no human inputs (i.e. forests, meadows, etc.)
MAJOR LAND-DISTURBING ACTIVITY EXAMPLE 1

2013 Stormwater Rule

• **Major land-disturbing activity**
  • Land disturbance ≥ 5,000 square feet

Amended Rule

• **Major land-disturbing activity**
  • Land disturbance ≥ 5,000 square feet;
  • And either:
    • Post project impervious cover ≥ 2,500 square feet; or
    • Some existing natural cover

Existing Condition

Turf field (Compacted) = 5000 sf

Proposed Condition

Turf field (Compacted) = 5000 sf

LOD = 5000 sf

Is it a Major Regulated Project?

• **2013 Stormwater Rule**: Yes
• **Amended Rule**: No
MAJOR LAND-DISTURBING ACTIVITY EXAMPLE 2

2013 Stormwater Rule

• Major land-disturbing activity
  • Land disturbance ≥ 5,000 square feet

Amended Rule

• Major land-disturbing activity
  • Land disturbance ≥ 5,000 square feet;
  • And either:
    • Post project impervious cover ≥ 2,500 square feet; or
    • Some existing natural cover

Existing Condition

Backyard lawn (Compacted) = 5000 sf

Proposed Condition

Patio (impervious) = 500 sf
Backyard lawn (Compacted) = 4500 sf

LOD = 5000 sf

Is it a Major Regulated Project?

• 2013 Stormwater Rule: Yes
• Amended Rule: No
MAJOR LAND-DISTURBING ACTIVITY EXAMPLE 3

2013 Stormwater Rule

- Major land-disturbing activity
  - Land disturbance ≥ 5,000 square feet

Amended Rule

- Major land-disturbing activity
  - Land disturbance ≥ 5,000 square feet;
  - And either:
    - Post project impervious cover ≥ 2,500 square feet; or
    - Some existing natural cover

Existing Condition

Turf field (Compacted) = 5000 sf

Proposed Condition

New building (Impervious) = 3000 sf
Landscaped (compacted) = 2000 sf

Is it a Major Regulated Project?

- 2013 Stormwater Rule: Yes
- Amended Rule: Yes
**Major Land-Disturbing Activity Example 4**

### Existing Condition
- Parking lot (Impervious) = 5000 sf

### Proposed Condition
- New building (Impervious) = 3000 sf
- Landscaped (Compacted) = 2000 sf

### 2013 Stormwater Rule
- **Major land-disturbing activity**
  - Land disturbance ≥ 5,000 square feet

### Amended Rule
- **Major land-disturbing activity**
  - Land disturbance ≥ 5,000 square feet;
  - And either:
    - Post project impervious cover ≥ 2,500 square feet; or
    - Some existing natural cover

### LOD = 5000 sf

### Is it a Major Regulated Project?
- **2013 Stormwater Rule**: Yes
- **Amended Rule**: Yes
MAJOR LAND-DISTURBING ACTIVITY EXAMPLE 5

2013 Stormwater Rule

- Major land-disturbing activity
  - Land disturbance ≥ 5,000 square feet

Amended Rule

- Major land-disturbing activity
  - Land disturbance ≥ 5,000 square feet;
  - And either:
    - Post project impervious cover ≥ 2,500 square feet; or
    - Some existing natural cover

Existing Condition

- Parking lot (Impervious) = 4500 sf
- Forest (Natural) = 500 sf

LOD = 5000 sf

Proposed Condition

- New Building (Impervious) = 2000 sf
- Landscaped (Compacted) = 3000 sf

Is it a Major Regulated Project?

- 2013 Stormwater Rule: Yes
- Amended Rule: Yes
2013 Stormwater Rule

- Major land-disturbing activity
  - Land disturbance ≥ 5,000 square feet

Amended Rule

- Major land-disturbing activity
  - Land disturbance ≥ 5,000 square feet;
  - And either:
    - Post project impervious cover ≥ 2,500 square feet; or
    - Some existing natural cover

Existing Condition

- Turf field (Compacted) = 4500 sf
- Meadow (Natural) = 500 sf
- LOD = 5000 sf

Proposed Condition

- Turf field (Compacted) = 4500 sf
- Meadow (Natural) = 500 sf

Is it a Major Regulated Project?

- 2013 Stormwater Rule: Yes
- Amended Rule: Yes
MAJOR SUBSTANTIAL IMPROVEMENT ACTIVITY EXAMPLE 1

**2013 Stormwater Rule**
- **Major substantial improvement activity**
  - Renovation or addition to a structure, if:
    - Cost of project ≥ 50% of pre-project assessed value of structure
    - Combined footprint of ≥ 5,000 sf

**Amended Rule**
- **Major substantial improvement activity**
  - Renovation or addition to a structure, if:
    - Cost of project ≥ 50% of pre-project assessed value of structure
    - Combined footprint of ≥ 5,000 sf
    - And either:
      - Post project impervious cover ≥ 2,500 sf; or
      - Some existing natural cover

**Existing Condition**
- Existing Building (Impervious) = 1000 sf
- Backyard lawn (Compacted) = 4000 sf

**Proposed Condition**
- Substantially Renovated Building (Impervious) = 1000 sf
- Backyard lawn (Compacted) = 4000 sf

**Is it a Major Regulated Project?**
- **2013 Stormwater Rule**: Yes
- **Amended Rule**: No
### MAJOR SUBSTANTIAL IMPROVEMENT ACTIVITY EXAMPLE 2

#### 2013 Stormwater Rule
- Major substantial improvement activity
  - Renovation or addition to a structure, if:
    - Cost of project ≥ 50% of pre-project assessed value of structure
    - Combined footprint of ≥ 5,000 sf

#### Proposed Condition
- Substantially Renovated Building (impervious) = 3000 sf
- Backyard lawn (Compacted) = 2000 sf

#### Existing Condition
- Existing Building (Impervious) = 3000 sf
- Backyard lawn (Compacted) = 2000 sf

#### Amended Rule
- Major substantial improvement activity
  - Renovation or addition to a structure, if:
    - Cost of project ≥ 50% of pre-project assessed value of structure
    - Combined footprint of ≥ 5,000 sf
    - And either:
      - Post project impervious cover ≥ 2,500 sf; or
      - Some existing natural cover

#### LOD = 2000 sf
- Bldg. area being substantially improved = 3000 sf

**Is it a Major Regulated Project?**
- **2013 Stormwater Rule**: Yes
- **Amended Rule**: Yes
MAJOR SUBSTANTIAL IMPROVEMENT ACTIVITY
EXAMPLE 3

2013 Stormwater Rule
• Major substantial improvement activity
  • Renovation or addition to a structure, if:
    • Cost of project ≥ 50% of pre-project assessed value of structure
    • Combined footprint of ≥ 5,000 sf

Amended Rule
• Major substantial improvement activity
  • Renovation or addition to a structure, if:
    • Cost of project ≥ 50% of pre-project assessed value of structure
    • Combined footprint of ≥ 5,000 sf
    • And either:
      • Post project impervious cover ≥ 2,500 sf; or
      • Some existing natural cover

Existing Condition

<table>
<thead>
<tr>
<th>Existing Building (impervious)</th>
<th>Landscape (Compacted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>= 2000 sf</td>
<td>= 3000 sf</td>
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</tbody>
</table>

Proposed Condition

<table>
<thead>
<tr>
<th>Substantially Renovated Building (Impervious)</th>
<th>Pop-back Addition (Imp.)</th>
<th>Landscape Compacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>= 2000 sf</td>
<td>= 500 sf</td>
<td>= 2500 sf</td>
</tr>
</tbody>
</table>

LOD = 3000 sf
Bldg. area being substantially improved = 2000 sf

Is it a Major Regulated Project?
• 2013 Stormwater Rule: Yes
• Amended Rule: Yes
MAJOR SUBSTANTIAL IMPROVEMENT ACTIVITY
EXAMPLE 4

2013 Stormwater Rule

- Major substantial improvement activity
  - Renovation or addition to a structure, if:
    - Cost of project ≥ 50% of pre-project assessed value of structure
    - Combined footprint of ≥ 5,000 sf

Amended Rule

- Major substantial improvement activity
  - Renovation or addition to a structure, if:
    - Cost of project ≥ 50% of pre-project assessed value of structure
    - Combined footprint of ≥ 5,000 sf
    - And either:
      - Post project impervious cover ≥ 2,500 sf; or
      - Some existing natural cover

Existing Condition

- Existing Building (Imp.) = 3000 sf
- Landscaping (Compacted) = 9000 sf
- LOD = 9000 sf

Proposed Condition

- Substantially Renovated Building (Imp.) = 3000 sf
- Landscaping (Compacted) = 9000 sf

Is it a Major Regulated Project?

- 2013 Stormwater Rule: Yes – MLD / MSI
- Amended Rule: Yes – MSI Only
**MAJOR SUBSTANTIAL IMPROVEMENT ACTIVITY EXAMPLE 5**

### 2013 Stormwater Rule
- **Major substantial improvement activity**
  - Renovation or addition to a structure, if:
    - Cost of project ≥ 50% of pre-project assessed value of structure
    - Combined footprint of ≥ 5,000 sf

### Existing Condition

<table>
<thead>
<tr>
<th>Component</th>
<th>SF</th>
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</thead>
<tbody>
<tr>
<td>Existing Building (Imp.)</td>
<td>1000 sf</td>
</tr>
<tr>
<td>Landscaping (Compacted)</td>
<td>3500 sf</td>
</tr>
<tr>
<td>Forest (Natural)</td>
<td>500 sf</td>
</tr>
</tbody>
</table>

### Proposed Condition

<table>
<thead>
<tr>
<th>Component</th>
<th>SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substantially Renovated Building (Imp.)</td>
<td>1000 sf</td>
</tr>
<tr>
<td>Pop-back Addition (Imp.)</td>
<td>500 sf</td>
</tr>
<tr>
<td>Landscaping (Compacted)</td>
<td>3500 sf</td>
</tr>
</tbody>
</table>

### Amended Rule
- **Major substantial improvement activity**
  - Renovation or addition to a structure, if:
    - Cost of project ≥ 50% of pre-project assessed value of structure
    - Combined footprint of ≥ 5,000 sf
    - And either:
      - Post project impervious cover ≥ 2,500 sf; or
      - Some existing natural cover

**LOD = 4000 sf**

**Bldg. area being substantially improved = 1000 sf**

### Is it a Major Regulated Project?
- **2013 Stormwater Rule**: Yes
- **Amended Rule**: Yes
## MAJOR SUBSTANTIAL IMPROVEMENT ACTIVITY EXAMPLE 6

### 2013 Stormwater Rule

- **Major substantial improvement activity**
  - Renovation or addition to a structure, if:
    - Cost of project ≥ 50% of pre-project assessed value of structure
    - Combined footprint of ≥ 5,000 sf

### Amended Rule

- **Major substantial improvement activity**
  - Renovation or addition to a structure, if:
    - Cost of project ≥ 50% of pre-project assessed value of structure
    - Combined footprint of ≥ 5,000 sf
    - And either:
      - Post project impervious cover ≥ 2,500 sf; or
      - Some existing natural cover

### Existing Condition

<table>
<thead>
<tr>
<th>Existing Building (Imp.)</th>
<th>LOD = 6000 sf</th>
</tr>
</thead>
<tbody>
<tr>
<td>= 2000 sf</td>
<td></td>
</tr>
</tbody>
</table>

**Landscaping (Compacted)**

- = 6000 sf

### Proposed Condition

<table>
<thead>
<tr>
<th>Minor Building Renovations (Imp)</th>
<th>Pop-back Addition</th>
<th>LOD = 6000 sf</th>
</tr>
</thead>
<tbody>
<tr>
<td>= 2000 sf</td>
<td>= 500 sf</td>
<td></td>
</tr>
</tbody>
</table>

**Landscaping (Compacted)**

- = 5500 sf

### Is it a Major Regulated Project?

- **2013 Stormwater Rule**: Yes
- **Amended Rule**: No
QUESTIONS?
EXEMPTIONS FOR PROJECTS THAT ARE NOT DEVELOPMENT ACTIVITIES
Stormwater compliance can become a significant challenge:

- Potential for an annual off-site retention volume requirement is burdensome for low-income residents
- SWM opportunities may be small, and livability impacts large
- Can reduce the financial viability of a project
Amended Rule:

• DOEE can approve projects that have taken all reasonable steps to retain runoff
• DOEE reviews request using relief from extraordinarily difficult site conditions guidelines
• Allows consideration of:
  • Evidence of the high cost of a BMP relative to the overall cost of the project
  • Impracticability of a BMP with respect to impact on the usability of the indoor or outdoor living space.
• Land-disturbing activity on any single lot must be less than 5,000 sf
• Within 30 days of sale, purchaser must provide proof to DOEE that household income less than 80% of Area Median Income.
ATHLETIC PLAYING FIELDS, PERMEABLE PLAY AREAS, AND PERMEABLE TRACKS
ATHLETIC PLAYING FIELDS, PERMEABLE PLAY AREAS, AND PERMEABLE TRACKS

2013 Stormwater Rule:

• Athletic playing fields, permeable play areas, and permeable tracks are regulated like any other surface
• Compliance can be challenging due to site constraints

Amended Rule:

• Exempt from the stormwater management requirements, provided that:
  o No pre-project land cover is natural cover
  o The area is accessible to the public
• Any adjacent area that independently triggers the regulations would still be subject to the stormwater management requirements
**ATHLETIC PLAYING FIELDS – EXAMPLE 1**

**2013 Stormwater Rule**
- Whole project area contributes to SWM requirements

**Amended Rule**
- Field is fully exempt from SWM requirements
- Landscaping and Parking lot are not exempt

**Proposed Condition**

- **Soccer Field** = 15,000 sf
- **Landscaping** = 10,000 sf
- **Parking Lot** = 8,000 sf

**Area which contributes to SWM requirements** = 18,000 sf

**LOD = 33,000 sf**

Assumption: no pre-project natural land cover
ATHLETIC PLAYING FIELDS – EXAMPLE 2

2013 Stormwater Rule

- Whole project area contributes to SWM requirements

Amended Rule

- Project is fully exempt from SWM requirements

Proposed Condition

- Multi-use Permeable Field = 22,000 sf
- Permeable Track = 11,000 sf
- LOD = 33,000 sf

Assumption: no pre-project natural land cover
2013 Stormwater Rule:

- Regulated like any other site
- Compliance can be challenging due to site constraints
- Often few good opportunities for SWM, if any
Amended Rule:

• Can apply for exemption from the stormwater management requirements, provided that:
  o No pre-project land cover is natural cover
  o Does not involve reconstruction of Public Right of Way
  o Is not part of a larger regulated activity
  o Trail is solely for pedestrians and non-motorized vehicles

• DOEE will review the exemption request, considering intended use of trail, alternative designs, and BMP opportunities

• DOEE may require green infrastructure and other conditions
2013 Stormwater Rule

- Whole project area contributes to SWM requirements

Amended Rule

- DOEE and design engineers determine good BMP opportunities given site constraints
- May grant exemption from SWM requirements
- DOEE may make some SWM installation contingent upon granting of exemption

Proposed Condition

- LOD = 12,000 sf
- Assumption: no pre-project natural land cover
- Through plan review process, it is determined this BMP is the best SWM opportunity given site constraints

- Bike Trail = 8,000 sf
- Minor Perimeter Disturbance = 4,000 sf
SMALL STRUCTURES (E.G. PAVILIONS) AT PARKS

2013 Stormwater Rule:

• Regulated like any other site
• Compliance can be challenging due to site constraints
• Often few good opportunities for SWM, if any
Amended Rule:

- Can apply for exemption from the stormwater management requirements, provided that:
  - No pre-project land cover is natural cover
  - Does not include typical building infrastructure
  - Is not part of a larger regulated activity
  - Is located at a publicly-accessible park
- DOEE will review the exemption request, considering intended use of the structure, alternative designs, and BMP opportunities
- DOEE may require green infrastructure and other conditions
SMALL STRUCTURES - EXAMPLE

2013 Stormwater Rule
• Whole project area contributes to SWM requirements

Amended Rule
• DOEE and design engineers determine good BMP opportunities given site constraints
• May grant exemption from SWM requirements
• DOEE may make some SWM installation contingent upon granting of exemption

Proposed Condition

- Pavilion = 1000 sf
- Landscaping = 12,000 sf
- Pavilion = 1000 sf

Assumption: no pre-project natural land cover

Through plan review process, it is determined these tree plantings were the best BMP opportunities

LOD = 15,000 sf
QUESTIONS?
STORMWATER RETENTION CREDIT PROGRAM CHANGES
Among other goals, the SRC program is intended to:

- Leverage regulations to shift where green infrastructure (GI) is built
- Increase private funding spent on GI in high-priority areas
- Maximize restoration of District waterbodies with limited DOEE funding
STORMWATER INFRASTRUCTURE

- District is 43% Impervious
- Combined Sewer System (CSS)
  - 1/3 of District
  - 3.2B gallons of sewage and stormwater overflows annually
  - $2.6B ongoing capital project
- Municipal Separate Storm Sewer System (MS4)
  - 2/3 of District
  - Direct discharge without treatment
  - $7B+ GI Build-out required
  - $10M annual funds available
MAXIMIZING BENEFITS FOR WATERBODIES

• GI provides important water quality and community benefits wherever it is built, including in the CSS and MS4 areas.

• GI maximizes water quality benefit in the MS4 area where stormwater would otherwise drain untreated to streams and tributaries.

• Trading can shift GI to most vulnerable tributaries and improve socioeconomic outcomes.
RESULTS: TRADING ACROSS SEWERSHEDS

- Generated in CSS; Used in CSS: 32%
- Generated in CSS; Used in MS4: 10%
- Generated in MS4; Used in CSS: 16%
- Generated in MS4; Used in MS4: 42%
SUMMARY OF PROPOSED SRC AMENDMENTS

- Proposed amendments will:
  - Further incentivize new green infrastructure projects
  - Encourage more green infrastructure in MS4 area
  - Further support a long-term supply of affordable SRCs

- The proposed amendments will not affect:
  - The SRC Price Lock Program, SRC Aggregator Startup Grant, and SRC Site Evaluation programs
  - Calculation of SRC-eligible volume
  - Permitting, maintenance, and inspection requirements
ENCOURAGING NEW GREEN INFRASTRUCTURE

• 2013 Stormwater Rule:
  • Project must have been installed after May 1, 2009
  • Supported initial SRC supply, but discourages new projects to provide ongoing SRC supply

• Proposed Rules:
  • MS4 Permit requires change to July 1, 2013: potential requirement to change date again in the future
  • Must apply for SRCs within 3 years of project completion (requires maintenance contract)
  • Must not lapse in SRC certification for more than 6 months (requires inspection and maintenance contract)
  • New rules waived for 6 months after final rulemaking
  • Essentially no change for projects that follow this schedule
50% ON-SITE REQUIREMENT

- On-site retention ≥ 50% of required volume:
  - Free to use off-site retention (e.g. SRCs) for remaining portion of requirement
- On-site retention < 50% of required volume:
  - Must prove that on-site retention is technically infeasible or environmentally harmful.
  - Use off-site retention (e.g. SRCs) for remaining portion of requirement

Required Stormwater Retention Volume (SWRv) = 10,000 gallons
On-site minimum = 5,000 gallons

Impervious surface = 14,000 ft²
**ALLOWABLE USE OF OFF-SITE RETENTION**

On-site retention ≥ 50% of the required volume

<table>
<thead>
<tr>
<th>Required Volume</th>
<th>On-Site Retention</th>
<th>Off-Site Retention (Stormwater Retention Credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,000 GALLONS</td>
<td>5,000 GALLONS</td>
<td>5,000 GALLONS</td>
</tr>
</tbody>
</table>
PROPOSED CHANGE TO 50% ON-SITE REQUIREMENT

- 50% on-site (or relief) still required for projects:
  - Located in MS4, or
  - Located in portion of CSS where CSOs will be reduced with GI

- No minimum on-site:
  - Projects located in portion of CSS where CSOs will be reduced with storage tunnels.
  - Must use MS4 SRCs to qualify (or may pay ILF).
  - Detention/peak discharge still applicable
ENCOURAGING MORE GI IN MS4: CHANGE TO WHICH SRCS A SITE MAY USE

• 2013 Stormwater Rule:
  • Any SRC can be used to meet Offv (1:1.25 trading ratio for AWDZ sites using non-Anacostia SRCs)

• Amended Rule:
  • Limit which SRCS projects may use to meet requirement
    • MS4 projects must use MS4 SRCs
    • AWDZ projects must use MS4 SRCs (1:1.25 trading ratio if using non-Anacostia SRCs)
  • Requirements for CSS projects depend on location and amount of on-site retention
  • Any project may still pay In-Lieu Fee
### WHICH SRCs CAN A SITE USE?

<table>
<thead>
<tr>
<th>Regulated Site Location</th>
<th>On-Site Achieved</th>
<th>2013 Stormwater Rule</th>
<th>Proposed Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>AWDZ sites (relief required)</td>
<td></td>
<td>Any SRC (1.25 ratio for non-Anacostia)</td>
<td>SRCs from MS4 (1.25 ratio for non-Anacostia)</td>
</tr>
<tr>
<td>MS4</td>
<td>≥50%</td>
<td>Any SRC</td>
<td>SRCs from MS4</td>
</tr>
<tr>
<td></td>
<td>&lt;50% (relief required)</td>
<td>Any SRC</td>
<td>SRCs from MS4</td>
</tr>
<tr>
<td>CSS areas where CSOs are reduced with GI</td>
<td>≥50%</td>
<td>Any SRC</td>
<td>Any SRC</td>
</tr>
</tbody>
</table>
| CSS areas where CSOs are reduced with GI| <50% (relief required) | Any SRC                                  | • SRCs from MS4  
• SRCs from CSS areas where CSOs are reduced with GI |
| CSS areas where CSOs are reduced with storage tunnels | ≥50% | Any SRC | Any SRC |
| CSS areas where CSOs are reduced with storage tunnels | <50% (relief N/A) | [Any SRC](#) | SRCs from MS4 |

MS4 sites can continue to use CSS SRCs if:
- The site is already approved and the owner self-generates SRCs from an already-approved project, or
- The SRCs are purchased according to a contract that has already been signed.
ENOUGH MS4 CREDITS FOR CURRENT DEMAND

Current Credit Demand and Supply

- Annual Demand for Credits
- Annual MS4 Credit Availability
- MS4 Credits Currently for Sale
ENOUGH MS4 CREDITS FOR ANTICIPATED DEMAND

Anticipated Credit Demand and Supply (Approved Projects)

- Maximum Anticipated Demand for Credits
- Anticipated Annual MS4 Credit Availability
- MS4 Credits Currently for Sale

@DOEE_DC
Stormwater Retention Credit Trading Program

Notice of Public Comment Period — DOEE is requesting public comments on changes to the Stormwater Management Regulations, Stormwater Management Guidebook, and Stormwater Retention Credit program. Comments will be accepted through April 1, 2019. Learn more>>

You can generate and sell Stormwater Retention Credits (SRCs) to earn revenue for projects that reduce harmful stormwater runoff by installing green infrastructure (GI) or by removing impervious surfaces. You can lock in an SRC sale price by selling to DOEE through the SRC Price Lock Program, and you'll still have the option to sell your SRCs in an open market to properties that have regulatory requirements for managing stormwater.

DOEE offers many resources to help you get started on an SRC-generating project. You can generate SRCs on your property or you can start an SRC-aggregating business to generate SRC from multiple properties.

For more information about the SRC trading program, contact Matthew Espie at src.trading@dc.gov or (202) 715-7644.

The following pages provide additional information on the SRC trading program:

- **SRC and Off-Site Retention Volume (Offv) Registry** — Find SRCs for sale, SRC sale prices, and more market data.
- **SRC Price Lock Program** — Lock in an SRC sale price with DOEE for your green infrastructure project in the MS4.
- **SRC Aggregator Startup Grant Program** — These grants support technical and outreach work to identify potential SRC-generating green infrastructure projects in the MS4 (typically across multiple sites).
- **SRC Site Evaluation Program** — Request an evaluation of potential SRC-generating green infrastructure projects on your property (you must have at least .5 acres available and be located within the MS4).
- SRC eligibility and certification process
SRC REGISTRY INCLUDES CREDIT SUPPLY, RECENT PRICES, AND OTHER MARKET DATA
<table>
<thead>
<tr>
<th>SRC Information</th>
<th>Number of SRCS for sale</th>
<th>Asking price</th>
<th>Additional information provided by SRC seller</th>
<th>Additional Environmental and Comm...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seller</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lee Cain</td>
<td>1,076</td>
<td>$1.73</td>
<td>Description of Project(s): This meadow was...</td>
<td>Located in a priority watershed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><a href="#">More information about these SRCS</a></td>
<td>Generated by a voluntary GI project</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Generated by a vegetated GI project</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><a href="#">More information about these SRCS</a></td>
</tr>
<tr>
<td>Seller</td>
<td>1,720</td>
<td>$2.00</td>
<td></td>
<td>Located in a priority watershed</td>
</tr>
<tr>
<td>Ronda DeSplinter</td>
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<td></td>
<td></td>
<td>Generated by a voluntary GI project</td>
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<td><a href="#">More information about these SRCS</a></td>
</tr>
</tbody>
</table>
EXISTING OFFV OBLIGATIONS

• Some projects with Offv would not be regulated for stormwater management if newly-proposed exemptions had been in effect:
  • Single- and two-family affordable houses
  • Athletic playing fields, permeable tracks, and permeable play areas
• DOEE is willing to reduce or waive Offv obligations for these projects
• Any existing on-site green infrastructure must be maintained
QUESTIONS?
PUBLIC COMMENT DEADLINE: 4/1/19 AT 4:30 PM

• Email:
  • James.Dunbar@dc.gov
  • Subject: “DOEE Stormwater Management and Soil Erosion and Sediment Control Regulations”

• Mail or Hand-deliver:
  • Department of Energy and Environment
    Attention: DOEE Stormwater Management and Soil Erosion and Sediment Control Regulations
    1200 First Street NE, 5th Floor
    Washington, DC 20002

• Public Hearing:
  • March 20, 2019, 4:00 PM, 1200 First Street NE, 5th Floor
  • Registration: http://doee.dc.gov/service/2019SWRegs
    or contact Regan.Wilhelm@dc.gov or (202) 671-5004
MORE INFORMATION

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(202) 573-4925

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doe dc gov/service/2019SWRegs

DEPARTMENT OF ENERGY & ENVIRONMENT
GOVERNMENT OF THE DISTRICT OF COLUMBIA