Stormwater Retention Credit Trading in Washington, DC

ICPRB Water Markets Brownbag
March 2, 2016
Problem of Imperviousness

➢ 43% of District’s land area is impervious

➢ A single 1.2 inch storm falling on this area produces about 525 million gallons of stormwater runoff
Stormwater Infrastructure in the District

- **Combined Sewer System**
  - 1/3 of District
  - 3.2B gallons of sewage and stormwater overflows annually
  - $2.6B+ capital project
  - Largely funded by rate payers

- **Separate Storm Sewer System**
  - 2/3 of District
  - Direct discharge without treatment
  - $7B+ Green build-out
  - $18M/year public investment
Green Infrastructure Retrofits

- Retain runoff on site to mimic natural land cover
- Stormwater retention GI gradually makes District “spongier”
- Essential for long-term restoration of waterbodies
Stormwater Retention Performance Standards

Major land-disturbing activity
- 5,000 ft\(^2\) or more of land-disturbing activity
- Retain the first 1.2” of rainfall on site or through a combination of on-site and off-site retention

Major substantial improvement activity
- Renovation for which:
  - Cost exceeds 50% pre-project value of structure and
  - Combined footprint of structure and land disturb $\geq$ 5,000 ft\(^2\)
- Retain the first 0.8” of rainfall on site or through a combination of on-site and off-site retention
Regulated Development
Key Driver of Retrofits

- Most regulated development in District is redevelopment.
- Scale of development makes it biggest driver of retrofits and key part of the solution:

  Total area subject to SWM regulations annually
  (15 Mill SF - @ 1% of land)

  Total area retrofitted with retention via DOEE direct investment annually

10 : 1

- Gradual transformation of DC’s 43% impervious land cover
Flexibility to Use Off-Site Retention

- Free to go off site after achieving 50% of required retention on site

Total Required - Minimum Required = Off-Site Required

10,000 gallons - 5,000 gallons = 5,000 gallons
Achieving Off-Site Retention Volume

- Offv is an ongoing annual obligation
- Two options to achieve off-site volume:
  - In-lieu fee (ILF) payment to DOEE = $3.58/gallon/year
  - Use of privately tradable Stormwater Retention Credits (SRCs)
- Off-site volume can be:
  - Met on yearly or multi-year basis
  - Met with a mix of ILF & SRCs and mix can change
  - Reduced in the future by increasing on-site retention
Eligible BMPs & land cover changes must:

1) Achieve retention above existing retention or regs

2) Be designed and installed in accordance with DOEE-approved SW Management Plan (SWMP)

3) Successfully complete final DOEE construction inspection and ongoing inspections by DOEE

4) Have current maintenance contract or document ability/expertise to maintain
Eligibility for SRC Certification

Type of Activity Installing Retention Capacity

Retention Volume

- Pre-project retention
- Voluntary

SRCs

- 0.8" Storm
- 1.2" Storm
- 1.7" Storm
DOEE Facilitation of the SRC Market

- SRC registry, database and website
- SRC transaction template contract
- Information:
  - Map & layer of parking lots and driveways
  - Analyses of potential financial return, SRC price, supply, demand
- Portfolio of potential SRC generating projects
- SRC purchase agreement to encourage new GI
- SRC purchase by DOEE to meet CWA requirements
- PACE for stormwater
# Market Activity

## Stormwater Database

### SRCs for Sale

<table>
<thead>
<tr>
<th>Contact Name</th>
<th>Contact Email</th>
<th>Contact Phone</th>
<th>Watershed Where SRCs are Generated</th>
<th>Asking Price per SRC</th>
<th>Number of SRCs (total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furbish Company, LLC</td>
<td><a href="mailto:MFURBISH@FURBISHCO.COM">MFURBISH@FURBISHCO.COM</a></td>
<td>(443) 324-5804</td>
<td>Potomac</td>
<td>$2.55</td>
<td>62,685</td>
</tr>
<tr>
<td>Greg DeHaven</td>
<td><a href="mailto:GDEHAVEN@LEINKIN.COM">GDEHAVEN@LEINKIN.COM</a></td>
<td>(202) 477-9917</td>
<td>Rock Creek</td>
<td>$2.00</td>
<td>12,948</td>
</tr>
<tr>
<td>Lano Parcel 12 LLC c/o City Interests LLC</td>
<td><a href="mailto:LBARDHI@CITYINTERESTS.COM">LBARDHI@CITYINTERESTS.COM</a></td>
<td>(202) 944-4729</td>
<td>Anacostia</td>
<td>$2.55</td>
<td>19,413</td>
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<tr>
<td>Mary Harting</td>
<td><a href="mailto:MHARTING@THEWESTCHESTERCORP.COM">MHARTING@THEWESTCHESTERCORP.COM</a></td>
<td>(202) 965-1514</td>
<td>Potomac</td>
<td>$2.25</td>
<td>29,223</td>
</tr>
<tr>
<td>Matt Ritz</td>
<td><a href="mailto:MRITZ@WCSMITH.COM">MRITZ@WCSMITH.COM</a></td>
<td>(202) 465-7050</td>
<td>Anacostia</td>
<td>$2.35</td>
<td>24,406</td>
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<tr>
<td>Ronan Heritier</td>
<td><a href="mailto:RONAN.HERITIER@DIPLOMATIE.GOUV.FR">RONAN.HERITIER@DIPLOMATIE.GOUV.FR</a></td>
<td>(202) 944-6196</td>
<td>Potomac</td>
<td>$2.45</td>
<td>30,495</td>
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<tr>
<td>USP 700 6th Street LLC</td>
<td><a href="mailto:MNATHAN@AKRIDGE.COM">MNATHAN@AKRIDGE.COM</a></td>
<td>(202) 756-3085</td>
<td>Anacostia</td>
<td>$2.25</td>
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**Totals (7 groups)**: 187,902

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For assistance, please contact Matthew Espie at Matthew.Espie@dc.gov or (202) 715-7644

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**DC.gov**
### Market Activity (cont’d)

#### STORMWATER DATABASE

<table>
<thead>
<tr>
<th>Watershed</th>
<th>Subshed</th>
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# Final SRC Sale Prices

<table>
<thead>
<tr>
<th>Transfer Date</th>
<th>Watershed where SRCs are generated</th>
<th>Purchase price per SRC</th>
<th>Number of SRCs (tot)</th>
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<td>Totals (2 groups)</td>
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Benefits of SRC Trading and SW Regs

- Increased annual retention District-wide
- Increased capture of first-flush volume
- Shift retention BMPs to most vulnerable tributaries and improve socioeconomic outcomes
SRC Purchases Can Accelerate Retrofits

- Regs are fundamental driver of GI retrofits
- Shifts from CSS to MS4 can accelerate MS4 retrofits
- DOEE can accelerate retrofits with SRC purchases
  - As regulated GI retrofit increase, District investment shrinks
  - Minimizes long-term burden on taxpayers and ratepayers
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+1 (202) 535-2295

For more information visit
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