Scaling Green Infrastructure in Washington, DC

Brian Van Wye
Regulations Key to MS4 Stormwater Solution

- Municipal Separate Storm Sewer System
  - $7B+ GI build-out
  - $10 Mil/yr for GI
  - GI stormwater regulations can achieve 10x the GI retrofits of voluntary programs
Flexibility for Regulated Development
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➤ 43% of the District’s land is impervious.
Flexibility for Regulated Development

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Optimizing Environmental Outcomes
GI located in MS4 is
- More beneficial for waterbodies
- Less expensive
- Provides greater environmental justice outcomes.

GI size/capacity can be optimized
Stormwater Retention Credit Trading

- Regulated site free to go off site after achieving 50% of required retention on site.

- Impervious surface = 14,000 sf
  - 1.2” retention required = 10,000 gal.
  - On-site minimum = 5,000 gal.

- Off-site volume is ongoing annual obligation.

- Two options to achieve Offv:
  - In-lieu fee (ILF) payment to DOEE = $3.58/gallon/year.
  - Privately tradable SRCs. 1 SRC/gallon/year.
DOEE SRC Purchase Program

- Pay for performance option contract.
  - 1 SRC = 1 gallon of installed GI retention capacity.
  - DOEE pays for 3 years at a time.
  - SRC generator has option to sell to DOEE per contract terms.
- Price floor provides certainty to private investors and SRC generators.
- Engage private capital – e.g. $1.7M investment from Prudential.
- Incentivize GI retrofits in priority locations of MS4.
- Initial $11.5M investment to scale up if successful.
Leveraging private capital via DOEE SRC Purchase Program

Investor

SRC Aggregator

SRCs

GI Retrofit

Discount on SW Fee

SRCs
Benefits for District of SRC Purchase Program

- Risk of maintenance failure not born by DOEE.
- Risk of selecting site that will trigger regs not born by DOEE.
- Incentive to find least-cost opportunities on public & private land.
- Savings for ratepayers compared to DOEE building GI itself.
- SRCs as regulatory currency facilitates scaling up and down.

Projection of DC MS4 Impervious Area Retrofitted
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SRC Market Data

- **SRC trades**
  - 10 trades, 8 in 2016
  - 46,998 SRCs sold
  - $92,209 in sales
  - Average price - $1.85 per SRC

- **Demand:**
  - Approximately 12% of regulated sites (35 projects) have opted to meet some of their retention obligation off site.
  - Compliance required at end of construction.
  - 25 of 35 sites still in construction.
  - Approximately 252,000 gal. of annual demand vs. annual retention capacity for SRCs of 201,000 gallons.

- 80% of SRCs used were generated in MS4 and meet demand in CSS.
- 13% of SRCs used were generated in MS4 and meet demand in MS4.
For More Information

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SRC trading - green.dc.gov/src
RiverSmart Rewards discount - green.dc.gov/riversmartrewards
Stormwater management regulations - green.dc.gov/swregs