



# SUSTAINABLE

Water Management Conference

2018



## Incentives for Green Infrastructure on Private Property: Program Options & Lessons Learned WRF 4684

Janet Clements

[jclements@coronaenv.com](mailto:jclements@coronaenv.com)

Bob Raucher

Jim Henderson

Corona Environmental Consulting



# Acknowledgements

- **Water Research Foundation, Project 4864**
  - Alison Witheridge and Jonathan Cuppett at WRF
  - Project Advisory Committee
- **Principal Authors**
  - Janet Clements (PI)
  - Jim Henderson
- **Valuable input from several utilities, and the Brendle Group**

# Why Focus on Incentives for GI on Private Property?

- **Large proportion of land area privately held**
- **Some relatively large tracts of private land – creates opportunities for economies of scale**
- **Opportunities to focus on key runoff locations – supports spatial targeting**
- **Fewer site constraints than most public spaces**
- **Educational benefits by engaging the public**

# What did we do?

- **Identify existing incentive programs** (database of basic program information)
- **Use case studies** to document key considerations, challenges, and successes (a lot of phone calls)
- Tap **private sector perspectives** (more phone calls)
- **Develop pathway to program development**
- **Identify best practices**

# Incentive program types

- **Grant programs**
- **Rebates, installation financing, tax incentives**
- **Stormwater fee discounts**
- **Credit trading**
- **Development incentives**
- **Awards/recognition and certification programs**



# Rebates and Cost Share Programs

Provide partial funding or reimbursement for installing specified GI practices

- **Advantages**
  - Can reach large numbers of property owners
  - Scalable to align with budget and program goals
- **Limitations**
  - Small installations may not be c-e to meet WQ goals
  - Barriers to public spending on private property
- **Typical Applications**
  - Residential and small commercial lots
  - Incentivize GI at new or redevelopment sites
- **Case studies:** Montgomery County and Toronto

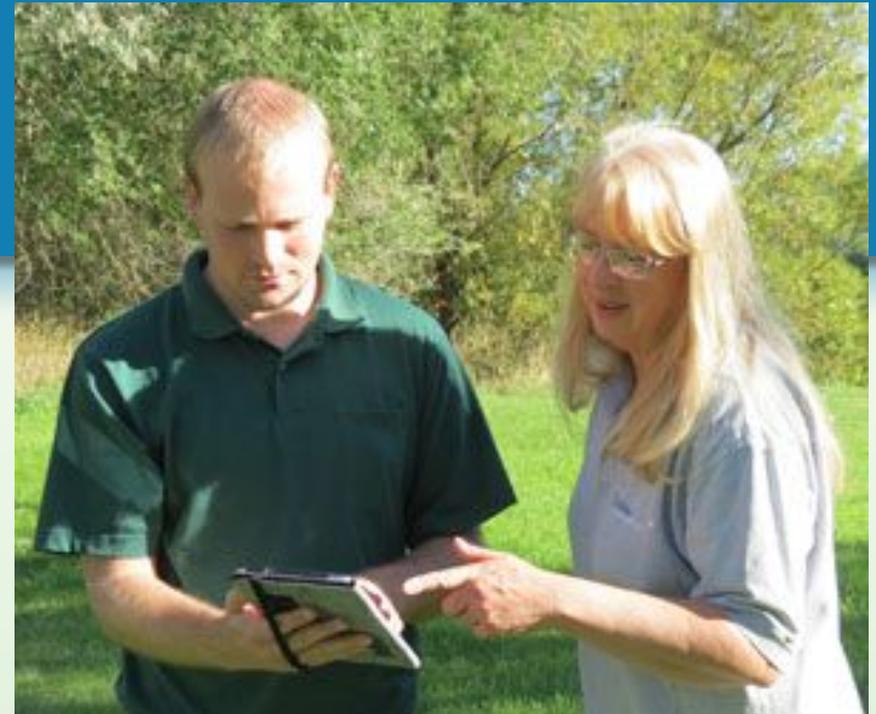
# Montgomery County, Maryland

## Rebates Rewards through RainScapes

- Goal to manage 50 acres of impervious area w/GSI
- **\$2,500 per single-family lot**
- up to **\$10,000 per multi-family or commercial lot**
- \$890,800 in RainScapes Rewards, 863 projects
- 90% on single family properties
- Water Quality Protection Charge discount

# Montgomery County – What's working?

- Contractor training
- Data standardization and innovation
- Aggressive marketing
- Partial reimbursement
- Adequate staffing/recognizing staff strengths
- Targeting specific property types



Answer Options	Response Percent	Response Count
From a friend, neighbor, or family member	15.50%	34
From a landscaping professional	11.00%	24
From a Master Gardener	7.30%	16
At a workshop or class	12.80%	28
Through an online search that took me to the RainScapes website	29.20%	64
Through a community/ neighborhood listserv or email group	13.70%	30
From nursery or garden center staff	6.80%	15
From a flier/brochure	15.50%	34
From a school or community demo project	2.70%	6
Don't remember	10.00%	22
Other, please specify:	21.90%	48

# Montgomery County - What challenges remain?

- Commercial sector is “weak link.”
  - absentee owners
  - rebate amounts/structure
  - redevelopment potential
- 1099 taxable income issue
- Lack of departmental unity and integration with Capital Improvement Plan
- Maintenance agreement and inspections

# Grants

Provide up to 100% funding for customized GI projects

- **Advantages**

- Can incentivize larger, cost-effective GI projects
- Can leverage other funding sources
- Educational benefits from high visibility projects

- **Limitations**

- Upfront & design resource needs may reduce participation
- Extensive property owner maintenance agreements

- **Typical Applications**

- Retrofits on large commercial, industrial, and institutional properties

- **Case studies:** Philadelphia and Northeast Ohio

# Grants: The Philadelphia Story

- **Stormwater Management Incentives Program (SMIP)**
- **Greened Acre Retrofit Program (GARP):** Allows contractors to aggregate and apply for funding for projects across multiple properties:
  - Reduces transaction costs
  - Economies of scale
  - Decreases administrative burden



# But It's More Than Just a Good Idea . . . .

- Timeline and scale play a big role
- Counts towards 10,000 greened acres goal
- Clear business case
- Third party administrator and other partners
- Clear guidance/resources
- Suite of programs allows for effective targeting
- Barrier to aggregation: Capacity  
(SMIP as stepping stone)

# Fee Discounts

Discount on stormwater fee if owner implements GI or reduces impervious area

- **Advantages**

- Relief for property owners with large impervious area
- Helps cover GI maintenance costs
- Stimulates participation in other GI incentive programs

- **Limitations**

- Only applies where there is a stormwater fee
- Typically too small to incentivize GI on its own
- Reduces stormwater fee revenues

- **Typical Applications**

- Most useful on larger properties, and/or retrofit projects

# Development and Redevelopment Incentives

Reward developers with increased potential revenues -- or reduced costs, delays, or risks (e.g., streamlined permitting)

- **Advantages**
  - Several low- or no-cost options for municipalities
  - Can target to needs of local development community
- **Limitations**
  - Coordination across multiple city agencies
  - May compete with other green building incentives or municipal priorities
- **Typical Applications**
  - Often limited to large-scale new development or redevelopment sites in urban areas
- **Case studies:** Chicago and Seattle

# Awards and Recognition Programs

Issuing awards, green business certifications, signage, and other forms of recognition

- **Advantages**

- Can be low-cost option, or scaled up by municipalities
- Can promote exemplary or innovative projects

- **Limitations**

- Not typically enough of an incentive on its own
- May compete with other green building initiatives

- **Typical Applications**

- Tiers often applied across residential, commercial, and new development sites

- **Case studies:** Philadelphia and Pima County

# Stormwater Credit Trading Programs

Allows developers and owners to meet stormwater requirements off-site by purchasing credits from others implementing GI

- **Advantages**

- Provides flexibility to developers and c-e retention
- Can be low-cost option, once set up and running

- **Limitations**

- Requires adequate market and level of development
- Can be costly to establish (DC has only functioning market)

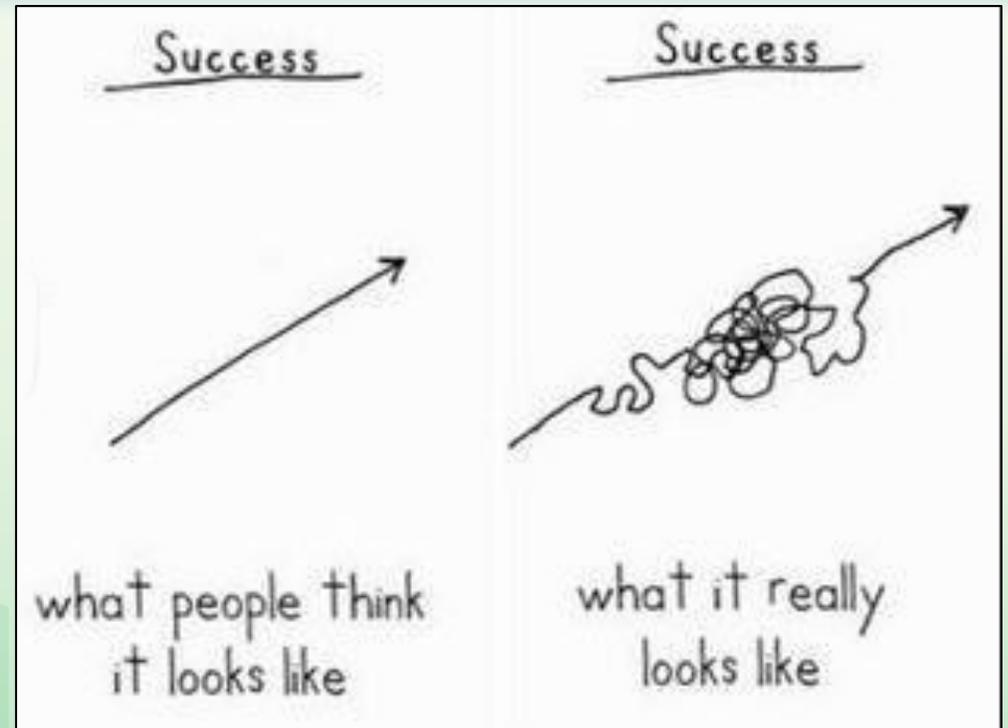
- **Typical Applications**

- Can incentivize GI for existing properties as well as new/redevelopment projects

- **Case studies:** Washington, DC, and Chatanooga

# 9 Program Success Strategies

1. Identify and Align with Program Objectives
2. Start Where You Are
3. Take a Targeted Approach
4. Show Value
5. Lower Barriers to Entry
6. Build Partnerships
7. Coordinate Citywide
8. Ensure Continued Performance
9. Keep Learning and Improving



# Portland, OR – Stepwise Implementation

- Downspout Disconnect (1993 – 2011)
  - 60,000 downspouts, millions of gallons
- Ecoroof incentive (2007 – 2012)
  - Intentional 5-year set up
  - Successful in creating awareness/market place

# Portland, OR – Stepwise Implementation

- Clean River Rewards (2007 – ongoing)
- Stormwater fee discount and targeted retrofit installations (CSO area)
  - Residential – first tier
  - Neighborhood level (target low-hanging fruit)
  - Business case to justify spending on private property
  - On-call contractors (avoids procurement issues)
  - Maintenance plan recorded with property
- Commercial property owners much more complex

# Path to program development: What you need to know to select and maximize your GI incentives program(s)

- **Know your program goals and budget**
  - Goals drive your target areas, types of GI and incentive programs, budget needs, etc.
  - Do they align with political support and private buy-in?

# Path to program development: What you need to know to select and maximize your GI incentives program(s)

- **Know your program goals and budget**
  - Goals drive your target areas, types of GI and incentive programs, budget needs, etc.
  - Do they align with political support and private buy-in?
- **Know your customer classes**
  - Who makes up the largest impervious land areas
  - Who is easiest to work with

# Path to program development: What you need to know to select and maximize your GI incentives program(s)

- **Know your program goals and budget**
  - Goals drive your target areas, types of GI and incentive programs, budget needs, etc.
  - Do they align with political support and private buy-in?
- **Know your customer classes**
  - Who makes up the largest impervious land areas
  - Who is easiest to work with
- **Know local development trends and projections**
  - What types of projects, where, and when?
  - Potential for inter-departmental collaboration

# Path to program development: What you need to know to select and maximize your GI incentives programs (cont.)

- **Know your local and state rules, codes, ordinances**
  - ID policies that may discourage and complicate
  - Can public monies be used to pay private entities?

# Path to program development: What you need to know to select and maximize your GI incentives programs (cont.)

- Know your local and state rules, codes, ordinances
  - ID policies that may discourage and complicate
  - Can public monies be used to pay private entities?
- **Know your Community**
  - Awareness/ environmental ethic
  - Social equity considerations related to stormwater
- **Know your key potential partners and supporters**
  - Leadership/buy-in from upper management
  - Partners to help administer and/or fund program

**Thank you!**

**Questions?**

***Contacts:***

**Janet Clements**

**[jclements@coronaenv.com](mailto:jclements@coronaenv.com)**

**Jim Henderson**

**[jhenderson@coronaenv.com](mailto:jhenderson@coronaenv.com)**