

Chesapeake Bay TMDL <u>Urban Retrofit</u> <u>Next-Gen LID/GI Technology / Alterative Financing</u>



EPA Region 3

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Legend Anacostia Candidate Sites Paint Northwest Little Branch Stream Restoration Branch Paint etland Restoration Branch Fish Blockage parian Referestation, etc. Trash Reduction Prince Parkland Acquisition George's County Indian Creek Upper Beaverdam Creek Montgomery County Sligo Creek Still Creek **Brier Ditch Hickey Run** Northeast Tidal River CSO Branch Tidal River District of Columbia Lower Beaverdam Creek Watts Branch Fort Dupont Tributary Branch *Tidal CSO area contains Greenroof and Greenstreet projects not specifically identified on this map.

Anacostia Retrofit Plan

Billions of Dollars in Projects

Costs and Water Quality Benefits

							Permit/TMDL Targets	
Watershed	Fiscal Year	2015	2017	2020	2025	2030	2017	2020
Countywide	Impervious Treated (acres)	4,302	6,014	7,722	10,518	11,154	6,008	7,723
	ESD (% Impervious)	18%	34%	47%	60%	63%		
	Cost (Million \$)	305	622	987	1,687	1,884		
	ESD (% Cost)	53%	66%	70%	80%	80%		
	Nitrogen	18%	25%	36%	46%	51%	9%	20%
	Phosphorus	17%	23%	34%	44%	46%	12%	34%
	Sediment	23%	34%	54%	60%	62%	20%	37%
	Bacteria	11%	15%	20%	28%	30%		
	Trash	18%	26%	33%	41%	42%		





Urban Retrofit Programs Using Decentralized Practices

Seattle Green Factor

Chicago Green Alley







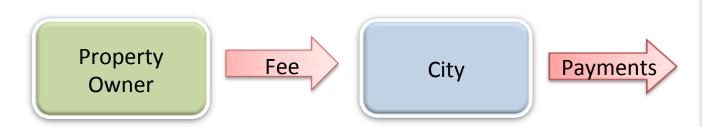
Technology Initiatives

- 1. Remove roadblocks to innovation.
- 2. Simplify verification.
- 3. Develop more robust standards for BMPs.
- 4. Leverage private sector resources.
- 5. Address asset management.

Financial Initiatives

- 1. Improve affordability / efficiency of the business model.
- 2. Examine pros and cons of alternative business models.
- 3. Generate revenues from all sources.
- 4. Examine privately financed public private partnerships.

<u>Performance Based Privately Financed</u> <u>Urban Retrofit Program Model</u>



Important Factors

- Dependable Funding Source.
- Affordability for local government.
- Technologies Key (Efficiency / Cost / Value).
- Stimulate Innovation.
- Drive efficiency through market forces.
- Ensure Long-term Maintenance and Performance.
- Reduce risk.
- Performance Incentive (Fee / Acre Controlled).
- Optimize economic, environmental & social benefits.

Private
Consortium
Admin.LLC
Equity
Design
Construction
O &M

