



Chesapeake Bay TMDL

Urban Retrofit

Next-Gen LID/GI Technology / Alternative Financing



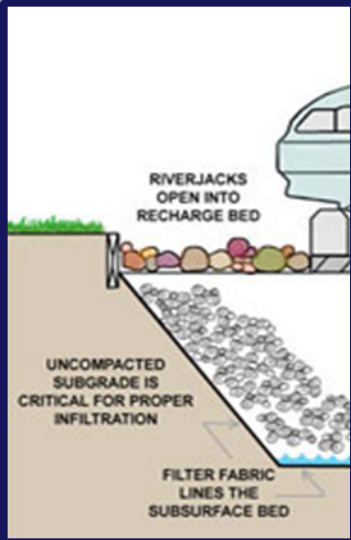
EPA Region 3

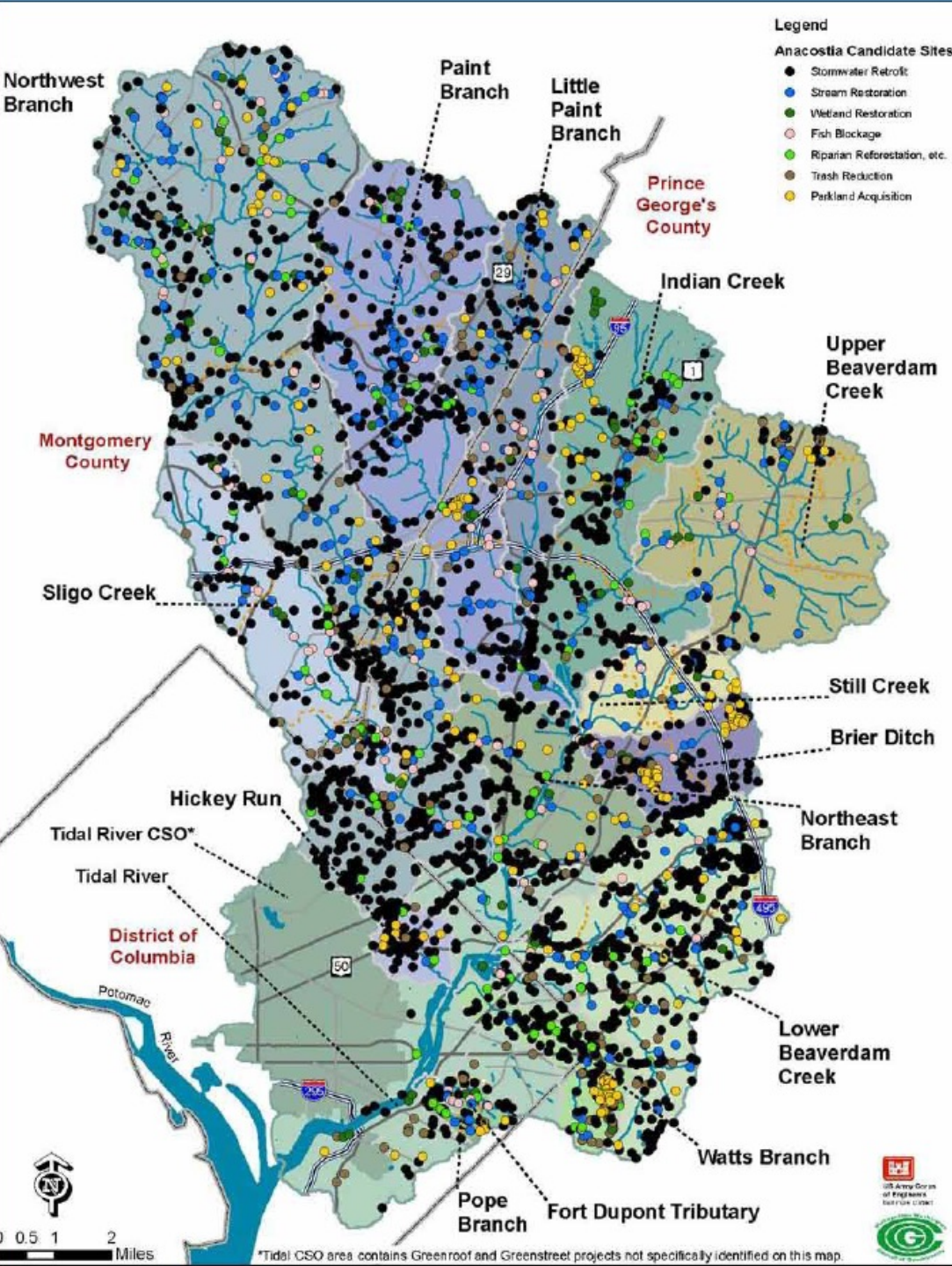
Dominique Lueckenhoff

Lueckenhoff.Dominique@epamail.epa.gov

Larry Coffman, President - Stormwater Services - l.coffman@att.net





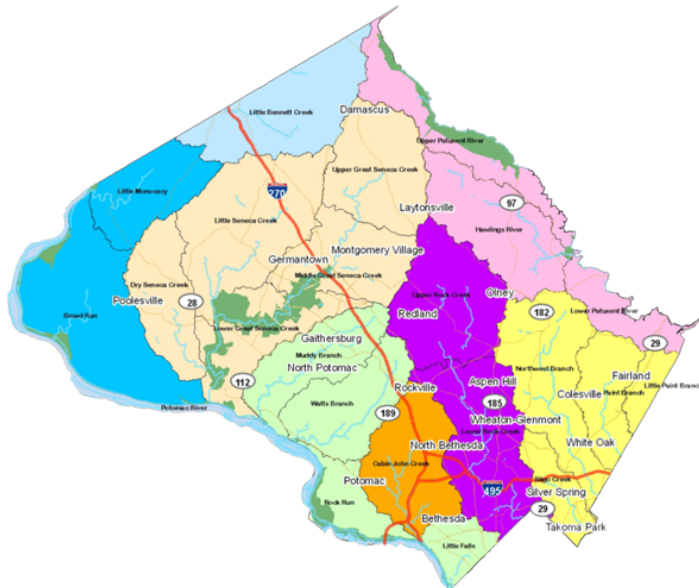


Anacostia Retrofit Plan

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.**

Performance Based Privately Financed Urban Retrofit Program Model

