

US EPA ARCHIVE DOCUMENT

Attachment 4

			2009		2010
1	MSD Green program	\$	8,000,000.00	\$	15,000,000.00
2	System-wide RDI/I	\$	2,750,000.00	\$	527,600.00
3	Trenchless technology - Manholes	\$	1,165,800.00	\$	1,235,600.00
4	Trenchless Technology - Sewers	\$	6,993,500.00	\$	7,413,700.00
5	Urgent Capacity Response	\$	2,331,100.00	\$	2,471,100.00
6	WIB Prevention Program	\$	2,800,000.00	\$	2,750,000.00
7	Wet Weather Strategy Development	\$	1,165,700.00	\$	1,235,500.00
8	Home Sewer Treatment Systems Extensions		\$1,969,695.00		\$917,600.00
	Sub Total - per year	\$	27,175,795.00	\$	31,551,100.00

GREEN PROGRAM

		2009	2010
A	LID Demonstration	\$ 5,000,000.00	\$ 5,000,000.00
B	Regional BMP		
	Planning	\$ 1,000,000.00	\$ 2,000,000.00
	Design	\$ 500,000.00	\$ 3,000,000.00
	Construction		\$ 2,000,000.00
C	Large Scale Projects		
	Lick Run - Planning	\$ 1,500,000.00	\$ 2,000,000.00
	Design		\$ 1,000,000.00
	TOTAL	\$ 8,000,000.00	\$ 15,000,000.00

Green Demonstration Program Summary

Project Status	Project Name	Project Address	Project Type	Part 1: Research & Design	Part 2: Construction	Part 3: Operation & Maintenance	Part 4: Evaluation	Part 5: Reporting
IA Expression of Interest Projects in this phase: 4								
Enright EcoVillage Street Bumpout	Schenk, Jim			\$0.00	\$0.00	\$0.00	\$0.00	Surface
Jefferson Quad	University of Cincinnati		Institution Educational	\$0.00	\$0.00	\$0.00	\$0.00	To be determined
Price Hill Pilot	MSD		Resident Single Family	\$0.00	\$0.00	\$0.00	\$0.00	Surface
								Surface
								Roof and surface
								Roof
Santa Maria Community Center	Jess Linz			\$0.00	\$0.00	\$0.00	\$0.00	Roof

Notes: This is a research and development program exploring the use of green storm water controls to manage storm water in the Greater Cincinnati MSD combined sewer areas. These research projects will be monitored to determine the relative effectiveness of a wide variety of green controls in reducing the volume of storm water runoff reaching the combined sewer system. Various design variables, runoff sources, and settings are being explored through partnerships with a wide variety of public and private entities to determine which controls perform most cost effectively and could be targeted in a larger green infrastructure program. The program is set up in two phases: Part 1 Concept and Part 2 Construction. Not all proposed projects are asked to participate in this program. Only approved Part 1 project applicants are invited to submit Part 2 applications for construction. There are multiple stages in each phase and each project only occupies one stage at a time in this report. Part 1 and Part 2 projects have the numbers "1" and "2" respectively in their status designation. The green storm water controls presented in this report are preliminary until a Part 2 Construction Application has been approved and the funding allocated. Some of the Part 1 requested funding includes approximate construction costs if those costs are presented in the Part 1 Concept Application. Questions regarding these projects should be directed to the program manager.

Project Status	Project Address	Project Name	Source Type	Part 1 Approved Funds			Part 2 Approved Funds			Runoff Source
				Approved	Estimated	Actual	Approved	Estimated	Actual	

IB Part 1 Application Sent **Projects in this phase: 12**

5500 Ridge Avenue	Vanderbar	Office/Retail Large		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Surface
										Roof
Amberley Village Green Project	Amberley Village			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Surface
CPS AMIS	Cincinnati Public Schools	Institution Educational		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Surface
CPS College Hill Elementary	Cincinnati Public Schools	Institution Educational		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Surface
CPS Daler Montessori School	Cincinnati Public Schools	Institution Educational		\$8,850.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Surface
										Surface
										Surface
										Roof
CPS New Evanston	Cincinnati Public Schools	Institution Educational		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Surface
										Roof
										Surface
CPS Rothenberg School	Cincinnati Public Schools	Institution Educational		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Surface
										Roof
CPS Western Hills- Daler High School	Cincinnati Public Schools	Institution Educational		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Roof
CPS Westwood Elementary	Cincinnati Public Schools	Institution Educational		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Surface
										Surface
										Roof
Lunken Airport	Cincinnati DOTE	Institution Other		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Surface
MI Lookout Square	Cincinnati DOTE	Roads Local		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Surface
Westwood Development	Duffy, Carolyn	Office/Retail Small		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Surface

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Project Status	Project Name	Project Location	Control Type	Part 1 Approved Funds	Part 2 Approved Funds	Control Type	Part 1 Approved Funds	Part 2 Approved Funds	Control Type	Part 1 Approved Funds	Part 2 Approved Funds	Control Type	Part 1 Approved Funds	Part 2 Approved Funds	Control Type
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Projects in this phase: 3

ID Part 1 Under First Review

City of Wyoming Rain Gardens	Wyoming Environmental Commis	Institution Govt Municipal		\$0.00	\$0.00	\$10,000.00	\$0.00	\$0.00	Rain Garden: Natural		\$0.00			Surface
Evenston Aquatic Center	Cincinnati Recreation Commissio			\$15,000.00	\$0.00	\$0.00			Biofiltration Basin		\$0.00			Surface
									Pervious Pavement: Concrete					Surface
									Pervious Pavement: Pavers					Surface
Green Streets	City of Cincinnati	Roads Local		\$241,000.00	\$0.00	\$0.00			Biofiltration Trench		\$0.00			
									Curb Extension					
									Pervious Pavement: Concrete					Roof and surface
									Rain Garden: Urban Planter					

Projects in this phase: 6

IE Part 1 Information Needed

Barrett Condo Green Roof	Barrett, Catherine	Resident Multiple Family		\$15,000.00	\$0.00	\$0.00			Green Roof: Extensive (shallow)		\$0.00			Roof
Dent	Dent, Wade	Resident Multiple Family		\$0.00	\$0.00	\$0.00			Rainwater Harvesting: Cistern		\$0.00			Roof
Green Off the Grid	Cincinnati State Technical Colleg	Institution Educational		\$0.00	\$0.00	\$0.00			To be determined		\$0.00			Roof and surface
O'Neal Green Roof 1	O'Neal, Todd	Resident Single Family		\$10,000.00	\$0.00	\$0.00			Green Roof: Extensive (shallow)		\$0.00			Roof
O'Neal Green Roof 2	O'Neal, Todd	Resident Multiple Family		\$0.00	\$0.00	\$0.00			Green Roof: Extensive (shallow)		\$0.00			Roof
The Arbors	City Lands Development	Resident Single Family		\$21,000.00	\$0.00	\$0.00			Pervious Pavement: Asphalt		\$0.00			Surface
									Rain Garden: Natural					Surface

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Regional BMP's

Regional BMPs relate to green infrastructure projects affecting larger sewer sheds with anticipated stormwater capture benefits of greater than 10 million gallons.

Regional BMP's

2009	T.O No.	Project Name	Phase	Planning Cost	Design cost	Construction Cost	Total Cost
1	078090007	Kings Run - Stream Removal	P + D	\$49,900	\$50,000		\$99,900
2	028090006	St Leo - Stream Removal	P	\$80,000			\$80,000
3	118090004	CSO #410 - Stream Removal	P + D	\$77,109	\$77,000		\$154,109
4	108090003	CSO #416 - Stream Removal (Gilday Park Bioretention Basin)	P + D	\$80,559	\$80,000		\$160,559
5		4609 Crawford - Stream Removal	P	\$80,000			\$80,000
6		4815 Winton Road	P	\$80,000			\$80,000
7		2888 Marxhall Ave	P	\$80,000			\$80,000
8		3071 Massachusetts Ave	P	\$80,000			\$80,000
9		Blair Basin	P	\$80,000			\$80,000
10		MH42202005	P	\$80,000			\$80,000
11		MH45608036	P	\$80,000			\$80,000
12		MH47611006	P	\$80,000			\$80,000
13		MH42203004	P	\$80,000			\$80,000
14		MH42109031	P	\$80,000			\$80,000
15		MH40802001	P	\$80,000			\$80,000
total				\$877,668	\$157,000	\$0	\$1,374,568

2010

1	078090007	Kings Run - Stream Removal	C			\$3,300,000	\$3,300,000
2		St Leo - Stream Removal	D		\$80,000		\$80,000
3		4609 Crawford - Stream Removal	D		\$80,000		\$80,000
4		4815 Winton Road	D		\$80,000		\$80,000
5		2888 Marxhall Ave	D		\$80,000		\$80,000
6		3071 Massachusetts Ave	D		\$80,000		\$80,000
7		Blair Basin	D		\$80,000		\$80,000
8		2856 Fischer Place (park)	P+D	\$80,000	\$80,000		\$160,000
9		3301 Beekman St	P+D	\$80,000	\$80,000		\$160,000

10		4932 Kirby Road		P+D	\$80,000	\$80,000		\$160,000
11		4481 Colerain Ave (from Airy Park)		P+D	\$80,000	\$80,000		\$160,000
12		MH42202005		D		\$80,000		\$80,000
13		MH45608036		D		\$80,000		\$80,000
14		MH47611006		D		\$80,000		\$80,000
15		MH42203004		D		\$80,000		\$80,000
16		MH42109031		D		\$80,000		\$80,000
17		MH40802001		D		\$80,000		\$80,000
18		MH42315049		P+D	\$80,000	\$80,000		\$160,000
19		MH47615013		P+D	\$80,000	\$80,000		\$160,000
20		MH42805028		P+D	\$80,000	\$80,000		\$160,000
21		MH45402004		P+D	\$80,000	\$80,000		\$160,000
				total	\$640,000	\$1,600,000	\$3,300,000	\$5,540,000

Long Term Projects

Description		2009	2010
Land use/Community coordination	Regional Planning Commission	\$ 150,000.00	\$ 175,000.00
Breen BMP's Inform/Influence	Ohio State University	\$ 250,000.00	\$ 275,000.00
Research Support	University of Cincinnati	\$ 200,000.00	\$ 500,000.00
Water quantity/quality monitoring	USGIS/Federal EPA Joint Research	\$ 200,000.00	\$ 300,000.00
Lick Run/Muddy Creek Sewershed Planning	Strand/AECOM/Human Nature	\$ 700,000.00	\$ 750,000.00
Lick Run- Design		\$	\$ 700,000.00
Muddy West - Design		\$	\$ 300,000.00
Sub Total		\$ 1,500,000.00	\$ 3,000,000.00