



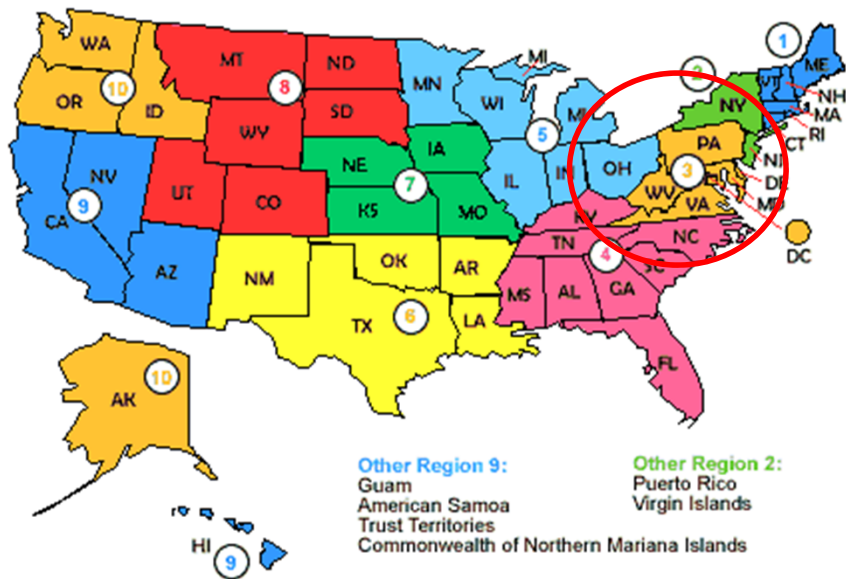
Stormwater Financing 101: Getting Started on Financing your Stormwater Management Plan

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Environmental Finance Center
University of Maryland
Barboursville, WV
July 9, 2013



The Environmental Finance Center: Who are we?

- One of 10 University-based centers across the country



- Provide innovative solutions to managing the costs of environmental protection and improvement by assisting communities:
 - Address internal capacity
 - Develop organizational capacity
 - Assess, recommend, and implement watershed protection financing programs
 - Identify funding and financing opportunities

- Address the issue of “how to pay” by working across sectors



Elements of a Comprehensive Stormwater Program

1. Administration
2. Billing and Finance
3. Public Education and Involvement
4. Technical Support
5. Engineering and Planning
6. Operation and Maintenance
7. Capital Improvements
8. Regulation and Enforcement



Stormwater Today: The Impact on WV Municipalities

- *Many new MS4 Phase II*
- *More attention to Phase II communities than ever before*
- *Additional responsibility to meet TMDL*

All this at a time when too few resources and limited capacity available to properly manage stormwater



Don't Confuse Funding with Financing

FINANCING

- Provides a revenue
- Often dedicated
- Sustainable
- Can be invested

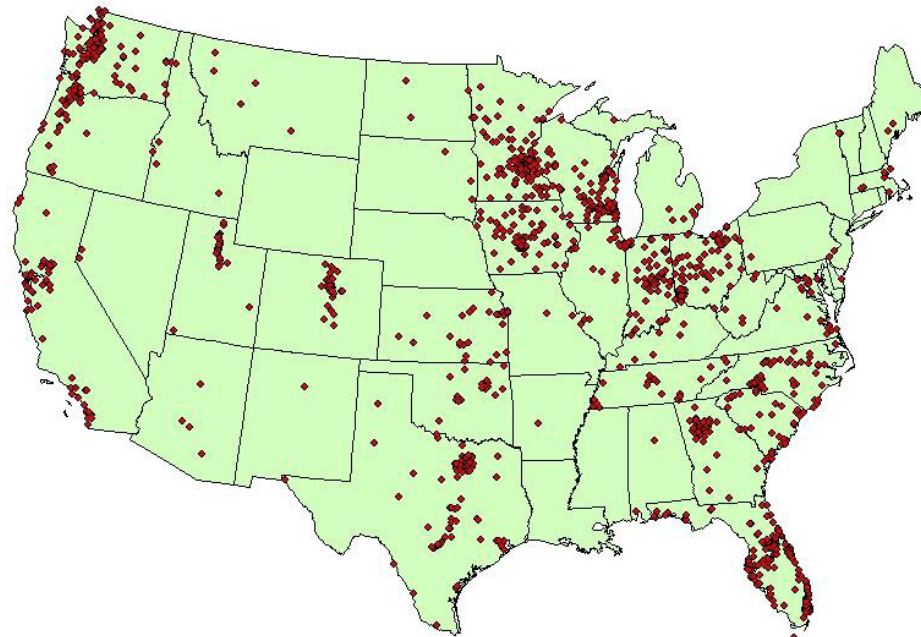
FUNDING

- Provides a revenue
- Finite
- Volatile
- Unsustainable



You are Not Alone: Stormwater Financing Around the Country

Stormwater Utilities 2012

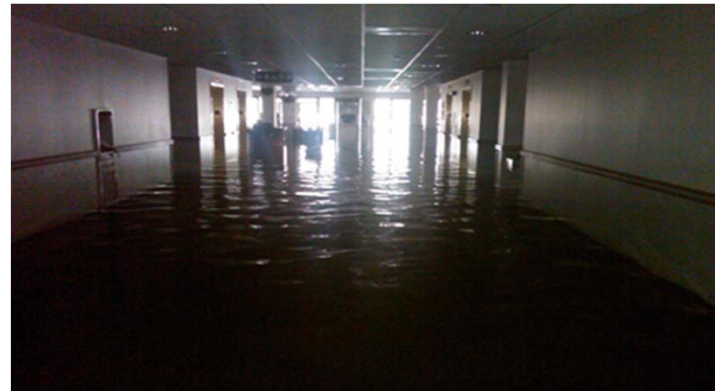


Source: Western Kentucky University Stormwater Utility Survey 2012; report surveys 1,314 stormwater utilities across 39 states and DC



Where Does It All Begin?

- It starts with a comprehensive strategy
- Estimate annually but plan for the long term
- Make program transparent and cost effective
- Get to know your system – above and below the ground
- **Engage public early and often**



No Time like the Present to get Started

- Know what you are responsible for
- Get more familiar with your permit
- Develop a strategy – short and long term
- Better organize your stormwater department
- Build a communication strategy
- Write, record, and document EVERYTHING!
- Create your Stormwater Champion(s) locally

Minimum Control Measures

1. **Public Education and Outreach:** Written plan, list of targeted audiences
2. **Public Involvement and Participation:** Promoting, tracking and soliciting feedback
3. **IDD&E:** Tracking inspections/complaints
4. **Construction Site SW Runoff Control:** Track progress
5. **Post Construction SW Management:** Procedures, written O&M schedule
6. **Good Housekeeping/Pollution Prevention:** Cleaning schedule, training



Understanding Local Stormwater Financing

Is there:

- Enough data?
- Measurable goals?
- A tracking system?
- Ways to create efficiencies?

Making the right decision

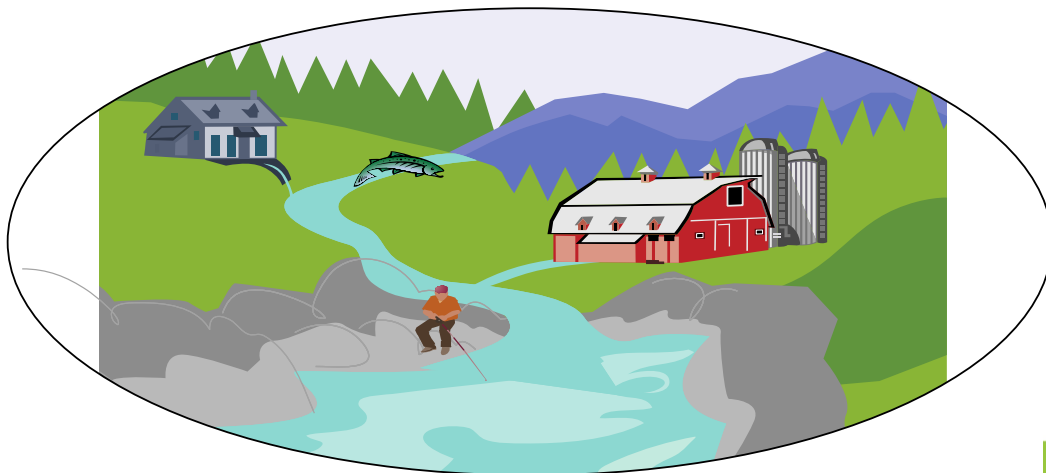
should be:

- Fair
- Transparent
- Adequate revenue
- Equitable



Easy Ways to Improve Program on a Limited Budget

- Get departments to communicate better
- Centralize stormwater responsibility
- Let others do some of the work for you without guilt
- Work together to reduce costs, create efficiencies



Technical Steps to Take Now

- **Step 1:** Conduct assessment of current stormwater program through data gathering
- **Step 2:** Evaluate existing program structure; evaluate current capacity; identify trends in funding
- **Step 3:** Identify gaps in existing program and evaluate future needs
- **Step 4:** Determine where current program fits into LOS; evaluate exact costs
- **Step 5:** Develop and finalize proposed stormwater program budget for year 1; project out budget



Designing a Level of Service

OPERATIONS AND MAINTENANCE

- Maintain, inspect, and evaluate the effectiveness of BMPs owned or maintained by the City, as well as those which are privately owned. (General Permit)

Level of Service Options	Program Gap	Additional Staff	Additional Operating Costs	Yearly/One Time Expense	Capital Cost
Minimal	Continue to perform maintenance on BMPs as resources become available.				
Medium	Systematically address backlog of City's BMP's maintenance by adding additional crew.	1 FTE to inspect a minimum of 1/3 of all facilities annually	\$30,000 - \$35,000 salary with and additional \$4,500 - \$5,250 in benefits; \$5,000 annually for vehicle maintenance	yearly	Cell phone, camera, laptop; \$40,000 for truck
High	Address all backlogs and add new BMPs around city.				



Getting at True Costs is Important

- Current Operating Expenditures

\$376,600

- Current Capital Expenditures

\$186,250

- True Costs for what is needed in 1 year is:

\$1,638,945

	Current* (2013)	Year 1 (2014)	Year 2 (2015)	Year 3 (2016)	Year 4 (2017)	Year 5 (2018)
Sub-Total	\$186,250	\$736,250	\$302,250	\$352,250	\$579,750	\$202,250
Capital Expen	\$186,250	\$766,250	\$317,250	\$352,250	\$579,750	\$202,250
Total Expend	\$562,850	\$1,638,945	\$1,211,762	\$1,269,125	\$1,519,547	\$1,165,542

Document, Track, and Record!

IS4web
PERMIT MANAGER

Permit Manager

Outfalls

Search based on Date Range

Start Date End Date

Outfall ID Community

Outfall Type Watershed

Tracking ID Subwatershed

Dry Weather Receiving Waters

Wet Weather Illicit

Discharging Acceptable

Outfall Search Results:

Edit	TrackingID	OutfallID	DateEntered	Location	Watershed	OutfallType	Outfall Size	ReceivingStream	
Edit		33	02/08/2012	General De Gaulle Dr.		Open Drainage	36	West Bank Introcoastal Waterway	PDF
Edit		32	02/08/2012	Vixen St.		Open Drainage	36	West Bank Introcoastal Waterway	PDF
Edit		31	02/08/2012	Anson, St.		Open Drainage	36	West Bank Introcoastal Waterway	PDF
Edit		30	02/08/2012	Wall Blvd.		Open Drainage	36	West Bank Introcoastal Waterway	PDF
Edit		29	02/08/2012	General Collins Ave.		Open Drainage	36	West Bank Introcoastal Waterway	PDF
Edit		28	02/08/2012	Flanders St.		Open Drainage	36	West Bank Introcoastal Waterway	PDF
Edit		27	02/08/2012	Murf St.		Open Drainage	36	West Bank Introcoastal Waterway	PDF
Edit		26	02/08/2012			Open Drainage		West Bank Introcoastal Waterway	PDF
Edit		25	02/08/2012			Open Drainage		West Bank Introcoastal Waterway	PDF
Edit		24	02/08/2012			Open Drainage		West Bank Introcoastal Waterway	PDF
Edit		23	02/08/2012			Open Drainage		West Bank Introcoastal Waterway	PDF
Edit		22	02/08/2012			Open Drainage		West Bank Introcoastal Waterway	PDF
Edit		21	02/08/2012			Open Drainage		West Bank Introcoastal Waterway	PDF

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Page 1 of 2, items

Have a Staffing Plan

<u>Permit Activity Projection</u>			<u>Local Revenue From Permits</u>	
<i>Permit Application Growth Rates</i>			State Share of Permit Fees	
Year 1 - 5	4%			28%
Year 6 - 7	0%		<u>Budget</u>	
Year 8 - 11	3%		% of Current Year Permit Fees held in Reserve for future Monitoring	10%
<i>Number of New Permits in Year One</i>			<u>Average # of Weeks Requiring Staff Activities for an Open Permit (Weeks)</u>	
less than 1 acre	20		less than 1 acre	10
1 - 5 acre	10		1 - 5 acre	15
5 - 10 acre	4		5 - 10 acre	30
10 - 50 acre	3		10 - 50 acre	40
50 - 100 acre	2		50 - 100 acre	50
greater than 100 acre	1		greater than 100 acre	60
<u>Staff Time Requirements Assumptions</u>			<u>Staff Labor Cost Assumptions</u>	
Review Time per Permit	30	minutes	Labor Inflation Rate	4%
Time per Pre-Construction Meeting	60	minutes	SWP Labor Costs Year One (Includes Taxes, Benefits, etc)	\$35
SWP Professional Time Per Week Per Permit with no issues	30	minutes	E&S Hourly Labor Costs Year One (Includes Overhead)	\$35
E&S and Staff time per week per permit with no issues	15	minutes	Clerical Hourly Labor Costs Year One (Includes Overhead)	\$25
Support and Clerical Time per week per permit with no issues	15	minutes	Administrative Hourly Labor Costs Year One (Includes Overhead)	\$35
Program Administration Time per week per permit (Reporting, Accepting Fees and Bonds, Enforcement, inspections, BMP Agreement Maintenance)	15	minutes	Monitoring Hourly Labor Cost Year One (Includes Overhead)	\$35
Increase in time per week due to a permit with issues	250%		Monitoring Support Hourly Labor Cost Year One Includes Overhead	\$25
Percentage of Permits that will have issues	33%			
Percentage of permits with no issues	67%			
Professional Time per permits per Year for monitoring activities (Hrs)	1	Hours		
Support/Clerical Time per permit per Year for monitoring (Hrs)	0.5	Hours		

Example

Output Flows into Budget

STAFFING BUDGET - Comparison of Estimated Revenue Fees to Estimated Labor Costs										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	
REVENUE										
Jurisdictional Share of Permit Fee Revenue Collected	58,824	61,177	63,624	66,169	68,816	71,568	71,568	71,568	73,715	75
Permit Fees attributable to future year monitoring transferred to reserve	(5,882)	(6,118)	(6,362)	(6,617)	(6,882)	(7,157)	(7,157)	(7,157)	(7,372)	(7
Net Fee Collection Current Year	52,942	55,059	57,262	59,552	61,934	64,412	64,412	64,412	66,344	68
Fee Collected in Prior Years transferred to current year for monitoring activities		588	1,200	1,836	2,498	3,186	3,902	4,617	5,333	6
Net Current Year Revenue from Permit Fees	52,942	55,648	58,462	61,388	64,432	67,598	68,313	69,029	71,677	74
EXPENSES										
Labor										
Estimated SWP	21,722	22,591	23,494	24,434	25,412	26,428	26,428	26,428	27,221	28,
Estimated E&S	9,811	10,203	10,612	11,036	11,477	11,937	11,937	11,937	12,295	12,
Estimated Clerical	7,008	7,288	7,580	7,883	8,198	8,526	8,526	8,526	8,782	9,0
Estimated Admin	6,563	6,825	7,098	7,382	7,677	7,984	7,984	7,984	8,224	8,4
Estimated SWP Monitoring	1,400	2,856	4,370	5,945	7,583	9,286	10,989	12,693	14,447	16,
Estimated Clerical Monitoring	500	1,020	1,561	2,123	2,708	3,316	3,925	4,533	5,160	5,8
Total Estimated Personnel Expense	47,003	50,783	54,715	58,803	63,055	67,478	69,789	72,101	76,128	80
Net (Permit Revenue Less Labor Costs Only) [Before Other Costs such as Equipment, Engineering, Education, Etc. Etc.]	5,938	4,864	3,747	2,585	1,377	120	(1,476)	(3,072)	(4,451)	(5
Equipment and Support Expense										
Equipment										
Computer and Software										
Office Equipment and Supplies										
Vehicles and Gas										
Training/Travel/Per Diem	-	-	-	-	-	-	-	-	-	-
Camera and GIS										
Meetings and Outreach Education										



Project Approach: Technical Process

- Conduct an assessment of current stormwater management program through data gathering
- Evaluate existing stormwater management program
- Identify gaps in program and evaluate future needs
- Develop proposed stormwater program budget
- Estimate revenue needs for short and long term
- Recommendations on supporting a sustainable stormwater program – find ways to pay for it!



Project Approach: Outreach Process

One of the most important ways to achieve a high degree of accuracy in our recommendations is to engage local businesses and residents throughout the process

- Leveraged community partnerships
- Created an outreach and marketing plan
- Conducted outreach activities
- Collect and share information about stormwater with the community as a whole



Examples of Effective Outreach

- Special activities
 - Economic Development Council
 - Chamber of Commerce activities
 - Homeowner Association picnics
 - Home and Garden Show
 - Local festivals
 - School or church events
- Stormwater written material
- City Meetings
- Stormwater Advisory Groups



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Local Examples of Outreach for Stormwater




Storm Drain Graffiti



Mascots, Marketing Campaigns, and Commercials

TAKE A DIP!




PET WASTE

MOTOR OIL

LITTER

STORMWATER POLLUTANTS FIND THEIR WAY INTO WHERE WE FISH, WHAT WE DRINK AND WHERE WE SWIM. Everything that goes into our storm drains—grass clippings, soap, pesticides, pet waste, whatever—makes its way straight to our streams. Stormwater pollution is our biggest source of water pollution. It all adds up. It all comes back. And you're the solution, now that you know where it goes. Find out more today! Visit KnowWhereItGoes.org.



THINK PICKING UP SPIKE'S POOP IS GROSS? TRY SWIMMING IN IT.



When you leave dog poop on the ground – or throw it down a storm drain – the rain carries Spike's mess into storm drains and straight to our rivers, lakes, and ponds making them unsafe for swimming.

**THINK AGAIN.
THINK BLUE.**

Help keep our waters blue...pick up after your dog and throw the waste in the trash.

www.ThinkBlueMA.org/ConnecticutRiver



Highlighting Stormwater at Local Events



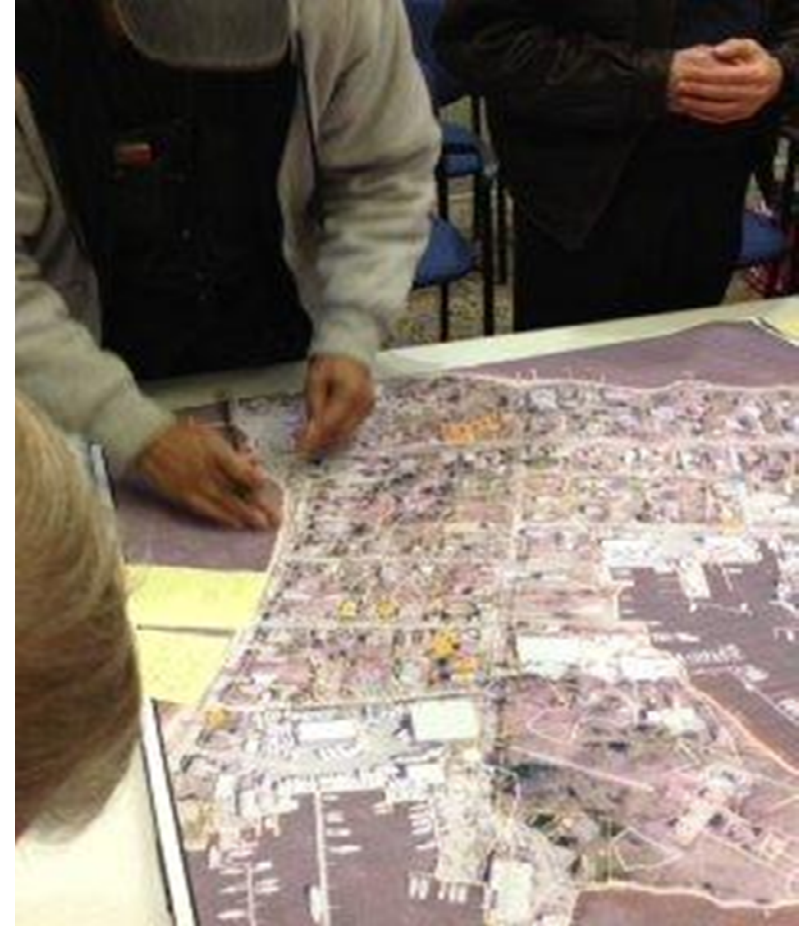
Stormwater Education Made Fun



EFC



Engaging the Public Gives Them a Voice



EFC



Public Engagement is Essential



7/23/2013

Not Everything Has to Cost A Lot

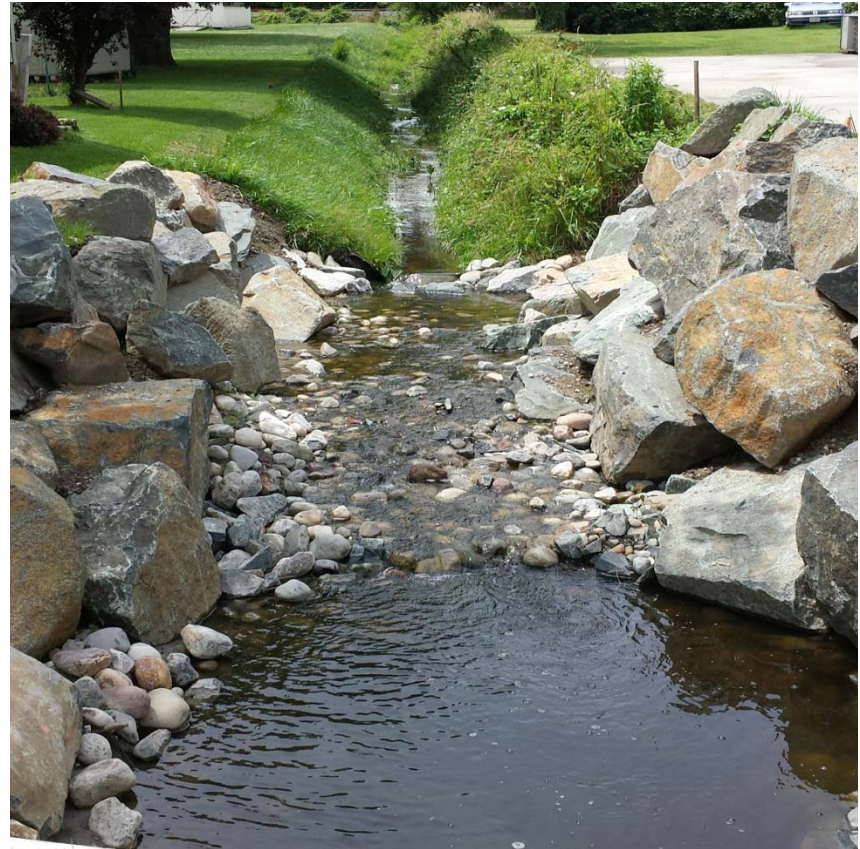


Collaboration and Regionalization May be Key to Success

- Create efficiencies through partnerships
- Think beyond municipal boundaries
- Explore innovative technologies together
- Share resources and combine local priorities



Example of what Dedicated Funding can Do for you



Footer Text



**Stormwater Alternatives
through Green Enhancement**





WHAT IS SAGE?

SAGE is a donation-funded, municipality-managed program.

- Beautifies the local streetscape
- Helps to meet TMDL requirements through Green Infrastructure
- Alignment with local (municipality/city) stormwater management requirements





WHY SAGE WORKS

Cost Example

- 2 donors contribute \$12,500 each
- Garden construction \$5,000
- One year of maintenance is \$2,000
- \$25,000 renewal after 5 years





SAGE IN ACTION

Lynchburg, Virginia

- 55 sponsored gardens (10 acres total)
- \$1,200,000 5-year garden sponsorship value
- 92 donors
- 40 acres of meadow
- 1,300 street trees planted outside of gardens
- \$1.6MM in donations to date
- \$225,000 surplus currently in program account



FEC



BUSINESS PARTICIPATION



Bank of America



CENTRA



DAVIDSON, DOYLE & HILTON
CERTIFIED PUBLIC ACCOUNTANTS
P.O. Box 800, Lynchburg, VA 24505

Everyone deserves a good meal.™



EFC





DONOR RECOGNITION SIGNS



FEC

Thank you!
Questions and Comments?

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