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A Collaborative Summit, Protecting Water Quality Through Actions on Urban-suburban Properties, February 13-14, 2013, Williamsburg, VA

Wetlands Watch

Alliance for the Chesapeake Bay

Virginia Institute of Marine Science

University of Virginia's Institute for Environmental Negotiation

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A Collaborative Summit:

Protecting Water Quality Through Actions on Urban-Suburban Properties

February 13-14, 2013
Williamsburg, VA

Project Partners and Co-Authors:

Wetlands Watch
Alliance for the Chesapeake Bay
Virginia Institute of Marine Science
University of Virginia's Institute for Environmental Negotiation

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Wetlands Watch
 Alliance for the Chesapeake Bay
 The University of Virginia Institute for Environmental Negotiation
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Executive Summary

The clock is ticking for local governments. Beginning in 2014, many local governments must plan, finance, and implement stormwater management/pollutant reduction action plans that achieve a significant decrease in polluted stormwater runoff within the next 10 to 15 years. These plans are required to meet regulatory commitments associated with Virginia Stormwater Management Program and Municipal Separate Storm Sewer System (MS4) stormwater permits, Virginia's Watershed Implementation Plan (WIP), and the Chesapeake Bay Total Maximum Daily Load (Bay TMDL) allocations.

To achieve our water quality goals, we will need to take a coordinated, structured, and collaborative approach - coordinating across sectors and creating alignment in our policies, funding, and programs to achieve a Collective Impact.¹ This will require not only a certain level of commitment from a diverse group of stakeholders, but also require a certain amount of trust. It will likewise require local, regional, state, and Bay-wide programs and efforts to align their programs to support shared goals.

The Collaborative Summit on Protecting Water Quality through Actions on Urban-Suburban Properties, convened February 13-14, 2013 in Williamsburg, VA, was a grassroots effort designed to begin this alignment process. The Summit was conceived and planned by Wetlands Watch, the Alliance for the Chesapeake Bay (the Alliance), the Virginia Institute of Marine Science Center for Coastal Resources Management (VIMS), and the University of Virginia Institute for Environmental Negotiation (IEN) with substantive guidance from Steering Committee members. Major funding and sponsors for

the event include the National Fish and Wildlife Foundation (NFWF) through the Chesapeake RiverWise Communities grant project, The Campbell Foundation, the U.S. Environmental Protection Agency (EPA), the Virginia Coastal Zone Management Program (CZM), VIMS, and Filterra Biopave™.

With 179 people attending, the Summit was a unique convening of a diverse group of interests, experiences, and perspectives from government, non-profit, research, education and private sectors. All assembled for two days to join forces to tackle one of the most difficult but necessary water quality challenges for Virginia and the Chesapeake Bay Region: achieving a widespread, accelerated use of watershed restoration and stormwater retrofit best management practices (BMPs) on privately owned urban-suburban properties. Practices most suitable for residential scale properties are landscaping-type practices like rain gardens, soil amendments, dry wells, disconnected downspouts, rain barrels, native plant buffers, permeable pavers, planting trees, green roofs, living shorelines and urban nutrient management techniques like water-friendly lawns.

As government(s) are looking for ways to incentivize, increase, track and quantify water quality impacts of these residential scale practices on private property, many other concerned groups and private businesses are also involved in efforts to increase stewardship, advocacy and actions to clean local waterways, restore habitat and protect wildlife. There is an unprecedented need for citizen support and collaborative strategies that are almost impossible without better communication, networking and coordination of policies, funding, practices and programs at the local level and within Virginia. There are examples of innovative collaborative partnerships using incentives and social marketing techniques to increase stewardship and actions that can serve as potential models to be adapted and customized by others. However, many stakeholders are unaware of these models, existing resources, or potential partnership opportunities.

¹ For more information on the Collective Impact Approach see *Channeling Change: Making Collective Impact Work* at http://www.ssireview.org/blog/entry/channeling_change_making_collective_impact_work?cpgn=WP%20DL%20-%20Channeling%20Change.

Following a series of presentations on the first morning about stormwater issues, challenges, and approaches, the remainder of the Summit was devoted to structured discussions and action planning among participants. Participants were asked to envision 2030 as a time when individual urban-suburban properties are not contributing pollution to Virginia's waters and the Chesapeake Bay, and to formulate a path forward. By the end, participants had engaged in 21 different small group discussions that developed specific collaborative actions and prioritized those collaborative actions with a vote. The two top action items that emerged from this vote are:

- ▶ **Integrating local/state/federal water quality programs** including a coordination of roles and responsibilities between different levels of government, between different programs and policies, and with non-profit organizations and the private sector.
- ▶ **Promoting more comprehensive local stormwater management planning** using a watershed-based approach to align all stakeholders around common goals and provide a roadmap of implementation strategies uniquely focused on local priorities and issues of concern by sub-watersheds.

Further analysis of session notes revealed an overarching priority interwoven within all discussions was the desire of participants to **build an effective and integrated network of powerful water quality and stormwater experts and advocates – or a “Community of Practice.”** Other common themes and strategies commonly articulated during group discussions fall into the following broad categories:

1. Form Strategic Task Force(s) or Steering Committee.

Many groups expressed the need for a centralizing, cross-sector group of influential leaders and decision-makers to assess, plan, implement and manage statewide, local, and regional efforts to align water quality-related programs, policies, practices, and coordinate people through a “Community of Practice.” At the Summit, 25 people signed up to form a Steering Committee to review the

summit outcomes and move the collective goals of the Summit forward. At the same time, there is a need for a high level Water-Quality Task Force to align water quality programs at the State and Federal level. There also may be a need for regional and local task forces to align watershed-based planning efforts.

2. Assess and Clarify Roles, Responsibilities, Expertise, and Expectations.

There is a need to catalog and clarify different stakeholder roles and responsibilities, to instill clarity and confidence about mutual expectations, reduce overlapping or redundant activities, and identify gaps and training needs. Most critical is the need to accomplish this goal for different government agencies and municipalities, and their interactions with various non-profits, community groups and the private sector. While there is a statewide need that should be addressed by the Steering Committee, any watershed-based planning effort should assess this at the watershed and local level during plan development.

3. Improve Connection and Networking through an Online Clearinghouse and Directory.

There is a need for better information sharing and improved communication to keep the “Community of Practice” connected, networked, and informed. In addition to a clearinghouse and directory, information sharing should include ongoing workshops and forums and provide a means for community members to celebrate and share successes. The Steering Committee should not reinvent the wheel, but look for an existing organization or network that could take on this function and consider that the primary function of the network might be a “Hub.” One of the greatest concerns for participants was the lack of effective communication between stormwater actors. Current barriers participants identified include overlap in efforts and even counter-productive programming.

4. Develop Consistent Practice-Related Resources, Training and Tools.

The collective group of players is large and diverse with true or perceived differences in need, methods, and language regarding water quality and stormwater actions. To measure success in achiev-

ing water quality goals and reduce the risks, uncertainties, and costs associated with partnering and implementation of best practices, a “Community of Practice” needs consistent guidance, protocol, training, and tools to ensure the practices are designed, installed, maintained, inspected and tracked using State and EPA-approved protocol. Without this consistency, localities cannot use the actions installed by many groups to fulfill regulatory requirements or get credit for Bay-related nutrient and sediment reductions. Those experienced with homeowner incentive programs are looking for simple, cost-effective, easily maintained, and attractive landscape-type practices. Ongoing maintenance is a concern for many stormwater managers. There is a need for consistent training and certification of potential partners, particularly landscape professionals and an interest in a tracking tool and system to promote consistent and easy reporting of actions to localities and transfer of data to the State and Chesapeake Bay Program. Many different groups including the Chesapeake RiverWise Communities partners are already working on this effort and the new Steering Committee should work to coordinate with these groups.

An overarching priority emerged to build an effective and integrated Community of Practice.

5. Develop and Share Consistent Education and Social Marketing Guidance, Tools, and Strategies and Provide Training and Mentoring.

Community-Based Social Marketing² was identified as a successful way to increase advocacy and promote behavior change. Participants felt that education, communication and social marketing are important and should be funded. Guidance is needed on methods to expand the volunteer base, raise awareness and gain support for programs and funding from elected officials and citizens. Guidance is needed to facilitate interaction and improve relations with private property owners. Guidance is also needed to “reach the unreached,” including minority and possibly bi-lingual groups. To provide this guidance, there is a need for increased

training workshops, informational guidance, and messaging geared to particular audiences for particular subjects. Several Summit participants voiced the need for and willingness to participate in a Community-Based Social Marketing workgroup.

6. Leverage Financial Opportunities and Develop Long-Term, Sustainable Funding Strategies.

Financing is critical for enabling partners to implement projects and programs. Funding can engage the private sector and should promote public/private/non-profit/volunteer partnerships. Through partnerships, some efficiencies and economies of scale can be achieved. Examples include a Bay-wide certification program for landscape professionals, regional technical advisors; joint-regional background research for social marketing campaigns; and efficient use of free and contracted skilled labor to implement watershed restoration

stormwater retrofit programs. A collective approach to grant making that encourages partnerships, leverages limited resources, yet still promotes and incentivizes innovative efforts at the local scale and within the free market;

should be promoted and encouraged by the Steering Committee. Consistency and predictability in a market encourages private investors and can lead to opportunities to leverage innovation and competition from the private sector.

7. Use a Watershed-Based Approach as an Integrated Stormwater Management Strategy.

This comprehensive approach suggests all critical stakeholders (government and private sector) within a watershed are engaged in planning and implementation. A watershed-based approach is applicable for different scale projects, and integrates stormwater management programs with other related government programs and policies including land-use planning and environmental programs.

² For more information on Community-Based Social Marketing see *Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing* at <http://www.cbsm.com/pages/guide/preface/>.

What's Next?

A clear mandate emerged from the Summit for moving forward together as a “Community of Practice” and working on the Summit’s collective water quality goals using a coordinated, structured and collaborative organizational approach. Most of the immediate recommendations for “next steps” presented in the report will fall under the charge and oversight of the Steering Committee formed from the Collaborative Summit. However, successful dialogue and implementation of these recommendations will only be possible with the help of the many Summit participants and the support and engagement of the still greater stormwater networks and actors and their associated efforts.

Additionally, the findings of this Summit are already informing the work of a number of collaborative efforts at the State, regional, local and even Bay-wide level. The Chesapeake **RiverWise** Communities program, a Bay-wide Sustainable Landscape Certification Program, the Chesapeake Bay Stormwater Training Partnership, the Virginia Native Plants Marketing Partnership, a Community-Based Social Marketing Tool and workgroup, and the Virginia Environmental Professionals Organization are just a few of these Bay and State-wide efforts.

Summit Partners are currently involved in specific next steps outlined at the Summit:

- ▶ **Wetlands Watch** has established the Collaborative Connection group on the Chesapeake Network to serve as an interim communication hub for follow-up to the Summit. Wetlands Watch and the Alliance will work with committee volunteers to convene the Steering Committee and begin the process of organizing for impact.
- ▶ **Chesapeake RiverWise Communities partners** coordinated by the Alliance will continue developing Chesapeake *RiverWise* Communities tools, guidance, and training for a model on-site BMP retrofit incentive program. In addition, team members will take the lead in hosting at least one follow-up workshop later in 2013 to address specific issues raised at the Summit and to ensure that implementation moves forward. The Team also will host *RiverWise*-related workshops.
- ▶ **The UVa Institute for Environmental Negotiation** will work with Wetlands Watch to prepare a draft summary report, for review first by the Summit Partners, and next by the original Summit Steering Committee.



Credit: 2013 Collaborative Summit

Purpose of the Summit

Restoration of the Chesapeake Bay watershed and local waters has become one of the most important – and challenging – water quality goals for Virginia localities. As localities work to find ways to meet their nutrient and sediment reduction targets specified by their Watershed Implementation Plans (WIPs), stormwater permits, the Chesapeake Bay Total Maximum Daily Load (TMDL) obligations and local TMDLs, they are exploring all avenues for attaining their goals. Many urbanized localities within Virginia are just beginning the process of developing detailed long-term plans, and assessing their organizational and financial capacity. Localities are looking for cost-effective, reliable watershed restoration and stormwater retrofit strategies (best management practices or BMPs) for urban-suburban properties, particularly privately owned properties. The practices most suitable for residential scale properties are landscaping-type practices like rain gardens, soil amendments, dry wells, disconnected downspouts, rain barrels, native plant buffers, permeable pavers, planting trees, green roofs, water-friendly lawns and living shorelines. Most experts agree that localities will not be able to do this alone – they will need to find ways to motivate citizens and businesses to do their part and they will need to empower and leverage competition and innovation in the private sector.¹

Within the Bay region, there are many people working on innovative incentive programs, forming public-private-nonprofit partnerships to increase stewardship, gain citizen support, and increase the use of landscaping-type practices on private property. These programs can provide models that others can use or adapt as implementation strategies; however, a recent study by Wetlands Watch for the Hampton Roads Planning District Commission (HRPDC)² determined that these programs and their successful strategies are not well communicated in Virginia

and many relied primarily on short-term grant funding. Wetlands Watch also found a number of other issues that impact the successful collaboration and implementation of these incentive programs that could be improved with better communication, coordination and networking.

The Collaborative Summit on Protecting Water Quality through Actions on Urban-Suburban Properties, convened February 13-14, 2013 in Williamsburg, VA, was a grassroots effort conceived and planned by several partners: Wetlands Watch, the Alliance for the Chesapeake Bay (the Alliance), the Virginia Institute of Marine Science Center for Coastal Resources Management (VIMS), and the University of Virginia Institute for Environmental Negotiation (IEN) with substantive guidance from Steering Committee members (see Appendix A). This Summit was designed to overcome these communication, coordination and networking issues while also building a coalition of motivated, informed and experienced public-private-nonprofit stakeholders to envision a “Path Forward.” Participants were challenged to devise an integrated set of strategies that will empower, fund and support localities efforts to meet their regulatory obligations, while also allowing individual efforts to achieve their related goals. With funding from the National Fish and Wildlife Foundation (NFWF) through the Chesapeake *River-Wise* Communities (see Appendix B) grant project, The Campbell Foundation, the U.S. Environmental Protection Agency (EPA), the Virginia Coastal Zone Management Program (CZM), VIMS, and Filterra Biopave™, the Summit aimed to bring together a broad community of people who work on stormwater policy and implementation issues. This community included local, state and federal government representatives, a diverse group of watershed organizations, engineers, landscape businesses and professionals, researchers, educators and volunteers.

¹ Ness, D. (Producer). (2012, September 26). Stormwater Financing, by Dan Ness, University of Maryland. WERF. Podcast retrieved from <http://www.youtube.com>

² Wetlands Watch. (2012, June). Reducing Nutrients on Private Property: Evaluation of Programs, Practices, and Incentives. Retrieved from http://www.hrpdcva.gov/documents/phys%20planning/2012chesbayTMDL/final_peg-12-05_reducingnutrientsonprivateprop.pdf

Through presentations, facilitated discussions, and informal conversations, the Summit provided participants with opportunities to:

1. **Refine understanding** of the barriers and challenges associated with private property stormwater retrofit programs and the use of voluntary BMP-incentive programs as an implementation strategy to meet water quality and stormwater goals.
2. **Discover innovative initiatives**, both government and non-government, that use stakeholder partnerships, social marketing techniques, and incentives to build capacity and overcome barriers.
3. **Envision 2030** as a time when individual urban-suburban properties are not contributing pollution to Virginia's waters and the Chesapeake Bay, and formulate a path forward with an integrated set of unifying, Virginia-specific strategies. Participants were asked to consider the following 7 strategic paths to guide this process:
 - ▶ Strategic Path 1 – **BMPs guidance and accounting tools** to accelerate the adoption and long-term maintenance of site-appropriate, fully functional BMPs on developed private property, *and* verify and account for those practices to local government.
 - ▶ Strategic Path 2 – **Education and social marketing** to increase environmental stewardship and identify motivated stakeholders and community leaders who will support programs, politically and financially, and who will set examples by adopting and promoting more water- and habitat-friendly actions on their own property or within their community.
 - ▶ Strategic Path 3 – **Training** to inform, empower, and promote businesses, certified consultants, and trade organizations to adopt and market water and habitat-friendly practices, services and supplies. The goal is to dramatically increase the number of consistently trained/certified volunteers (environmental stewards), staff, and contractors/consultants to do the above.
 - ▶ Strategic Path 4 – **Improve communication and networking** to share resources, reduce redundant efforts, costs and learning curves associated with planning, costs and implementation, and thus accelerate the speed to market of a more unified local watershed restoration and stormwater retrofit plans and programs.
 - ▶ Strategic Path 5 - **Foster and create viable partnerships** and better communication between and within all government levels (federal, state, regional, local) as well as other related non-governmental programs and efforts.
 - ▶ Strategic Path 6 - **Foster coordinated oversight and management** of all related government plans and programs within localities and include non-governmental watershed restoration efforts and programs within those localities.
 - ▶ Strategic Path 7 – **Identify and develop long-term, stable funding** sources and strategies.

Throughout the Summit, participants were encouraged to become part of the solution and raise topics they felt were important for improving implementation of stormwater practices on private urban-suburban properties. Participants were able to gain an increased understanding of the tools and techniques currently available; become better connected to available resources; and network with others who are striving to achieve similar goals.



Credit: Elizabeth River Project

Participants

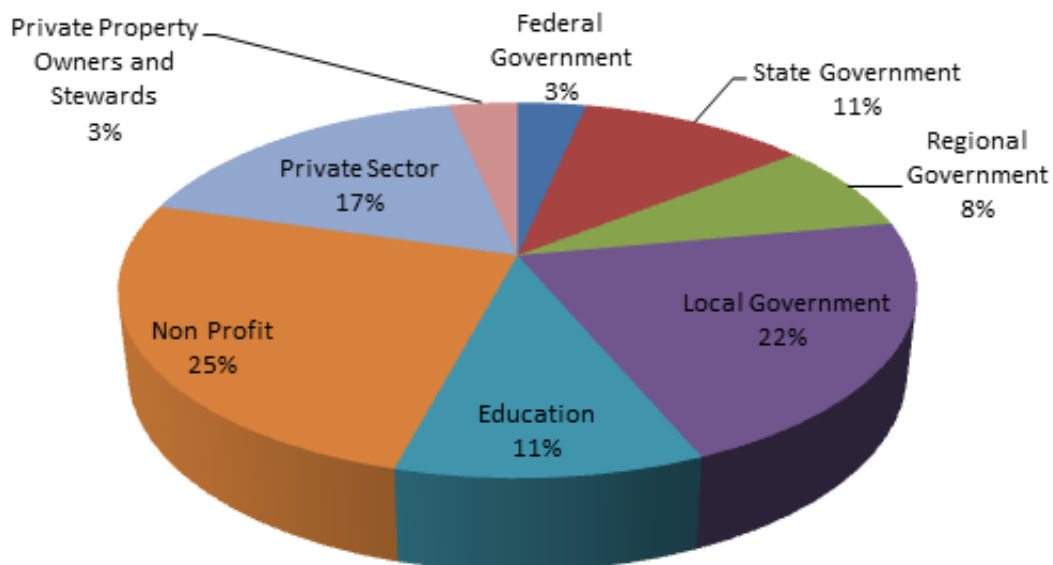
The goal for the Summit was to bring together a diverse assembly of knowledgeable people who, by collaborating, could make a real difference and suggest realistic solutions to meeting our water quality goals. The Summit emphasized the importance of using a coordinated, structured and collaborative approach that results in a widespread, accelerated use of watershed restoration and stormwater retrofits (best management practices or BMPs) on privately owned urban-suburban properties.

Both the invitees and the Steering Committee were selected to allow a sufficiently diverse representation of critical stakeholders. The Core Planning Team and the Steering Committee worked for several months to identify specific people to invite to the Summit, including people who are in charge of local stormwater programs, state regulation and federal oversight; people who are rallying volunteer

and nonprofit efforts to implement watershed restoration and stormwater retrofit practices on the ground; private businesses that offer a variety of services in this realm; as well as people who can who offer technical expertise or substantive assistance.

Personal invitations were initially extended to over 400 people, and nearly half attended. Not including the IEN support team, 179 people representing nonprofit, business, research, education, stewards and government sectors attended the Summit (see Appendix C). The success of the Summit is attributed in large part to selecting Steering Committee members who garner respect and influence within their respective communities of practice. This Steering Committee played a significant role in developing the invitation and presenter list, and it helped attract people who are invested, passionate, and able to provide vision, leadership and technical know-how for future implementation.

Summit Participant Affiliation



Summit Format and Key Findings

Presentations

Although many of the participants were experienced and engaged in related activities and programs, those attending were not all armed with the same knowledge, experiences, or access to key resources. There also was an observation among Summit coordinators that while there are many excellent stormwater activities and programs, many are unknown throughout the stormwater community. People within Virginia are unaware of related stormwater mitigation efforts, common barriers, available resources, and funding issues. Duplication of efforts or delivery of conflicting messages and promoting contradictory actions was also an important obstacle noticed by Summit coordinators. Presentations at the start of the Collaborative Summit and information provided prior to the Summit (see Appendix D) were therefore designed to build a common understanding among Summit participants of current stormwater work as well as pertinent issues.

Presentations were selected to provide attendees with a range of perspectives from leaders in the field beginning with a big-picture/Bay-wide perspective narrowing down in focus and ending with case studies of potential model programs including: a citizen stormwater auditor program, a local Virginia stormwater retrofit incentive program, and a professional certification program for conservation landscape professionals. The presentations were videotaped by the Alliance and can be found on the Alliance YouTube channel website.¹ Presenters and presentation topics are provided in the Summit Agenda (Appendix E). Copies of the presentations are also posted on the Chesapeake Network Group: “A Collaborative Connection”.² Summit attendees will be invited to join the group for access to these presentations.

¹ The YouTube channel can be found at <http://www.youtube.com/watch?v=B2xWLCV0AEQ>.

² Please see the following link: <http://www.chesapeakenetwork.org/group.htm?mode=home&igid=99375&z=60f7fcz2h1>. Please also note that if you are not currently a member of the Network, you will need to join.



Credit: 2013 Collaborative Summit



Credit: 2013 Collaborative Summit

Circle Conversations

Following presentations, participants were engaged in a discussion about challenges, barriers, and emerging trends. Using a series of three circle conversations, participants were first asked to divide themselves into three groups according to their main interest and function including: (1) regulatory, funding and accountability; (2) education, training and outreach; and (3) installation, design and maintenance. The circle conversations were designed to give participants an opportunity to both speak and listen to each other more intently, or intentionally, to enable learning about each others' challenges in implementing best management practices on existing urban/suburban properties, as well gaps in programs, resources and tools. This was also an opportunity for participants to discuss opportunities for improving implementation of BMPs and for collaboration and partnerships.

Common Challenges and Opportunities

During the three circle conversations, participants raised numerous challenges and suggested several possible strategies for addressing those challenges. At the end of the circle conversation, all participants in that group voted via an online, interactive tool on: 1) the most important issues identified by their group, overall; and 2) the highest priority

issues for discussing at the Summit. Specific priorities and their level of importance to each group that emerged from each circle conversation are provided below with detailed notes in Appendix F. The top three priorities for each group are as follows:

Circle 1: The Regulatory, Funding, and Accountability Conversation

- Maintenance
- Funding (tied for #1)
- Clear Roles for Partners

Circle 2: The Education, Training and Outreach Conversation

- Environmental Literacy in Schools
- Compelling Message
- How to Expand the Choir

Circle 3: The Installation, Design and Maintenance Functions Conversation

- Maintenance of Facilities
- Educate Landscape Community (tied for #1)
- Incentives to Homeowners (tied for #1)

Questions Posed to Each Circle Conversation
What are the biggest <i>challenges / barriers</i> to implementing best management practices on existing urban / suburban properties?
Where are the biggest <i>gaps / needs</i> in programs / resources / tools between what we have done and still need to do?
Where are the biggest <i>opportunities</i> for improving implementation of BMPs on urban / suburban properties?
What (specifically) do you need to be able to <i>partner and collaborate</i> effectively with other sectors?

The Most Important Issues Identified by Each Circle Conversation



A review of the concerns, challenges, gaps, recommendations and priorities identified by Circle participants revealed that the Summit participants agree with many of the findings and recommendations of the Wetlands Watch report. The Circle conversations raised awareness of these issues to a larger audience and allowed experienced stakeholders to share additional insights. The following are four common overarching concerns and challenges shared by the three Circles.

A. Facilitating Effective Long-term Maintenance:

Participants in all sectors are eager to find ways to create low maintenance or maintenance-free BMPs, and to encourage and ensure maintenance of BMPs.

B. Facilitating Effective Communication and Education:

Communication issues raised included the need to educate homeowners, reach youth (and thereby also reach parents), educate landscapers about the latest research and methods for effective BMPs, develop targeted messaging, and develop social marketing messages to facilitate behavioral change. Additionally, people saw the need for developing easy, effective ways to share information about water quality strategies – such as BMP design, installation, credits, monitoring, and maintenance.

C. Facilitating Effective Networking:

Each circle also expressed how improving the connectivity between the players is critical for improving their effectiveness. For example, homeowners, businesses and nonprofits all need help getting connected with BMP contractors and landscapers. Connecting people is also paramount so that work is not duplicated, stormwater actors understand each other's roles, and information is exchanged easily and quickly. This overarching priority reflects the reality of today's world where networking is essential for developing partnerships and, in turn, partnerships are often the key to getting things done effectively and efficiently.



Credit: 2013 Collaborative Summit

D. Facilitating Sustainable Use of Limited Resources:

Each circle also identified the challenges associated with limitations on organization resources such as funding, staff, and time. How can strategies be implemented with insufficient funding, staff, and time? How can efforts be sustained over time? How can all players be engaged and effective while also reducing their competition for limited resources? One pathway, for example, is to use the limited resources to stimulate businesses and homeowners to take action on their own. Different ideas offered for achieving this were the use of incentives, or education and social messaging, or cost sharing. While different circles suggested options for specific pathways, all shared this common overarching priority of finding ways to stretch resources for sustainability.

Open Space Discussions

At the Summit, participants developed their own agenda of parallel working sessions around the central strategic theme for the meeting. Essentially this created 21 parallel self-managed work sessions – each discussing a specific project, priority, or issue, led by the individual who proposed the topic, and attended by anybody else in the group passionate about pursuing that particular subject. The range of topics was very broad, including comprehensive planning, roles and responsibilities among water quality and stormwater actors, social marketing, inclusion of minority groups, sea level rise, ways to reduce risks, uncertainties, and costs associated with BMPs, and watershed restoration/stormwater management planning and implementation. (See Appendix G for detailed discussion reports.)

The Summit’s Central Strategic Theme

We envision 2030 as a time when individual urban-suburban properties are not contributing pollution to Virginia’s waters and the Chesapeake Bay.

Guiding Question for Open Space Discussions

What initiatives and collaborations in these 7 strategic paths would help us achieve this vision?

Strategic Paths	1. BMP guidance and accounting
	2. Education and social marketing
	3. Training programs
	4. Communication / Networks
	5. Partnerships between/ within all government levels and with all NGOs and the private sector
	6. Oversight/management of watershed restoration efforts and programs within localities
	7. Funding for runoff reduction, pollution prevention, and watershed/habitat restoration

Common Themes and Priority Strategies

At the conclusion of the Open Space discussions, group leaders posted their reports in the central meeting room where participants had an opportunity to review all the outcomes and vote on the topic/issues they considered most important.

On the next page is a table showing small group sessions in order of votes. Individual topic discussion reports and notes are provided in Appendix G in order of most votes.

Open Space Discussion Group	Strategic Paths / Themes								Votes Received
	Roles and Responsibilities	BMP Guidance and Accounting	Education and Social Marketing	Training Programs	Communication / Networks	Partnerships between/within all Government Levels and all NGOs and the Private Sector	Oversight/Management of watershed restoration efforts and programs within localities	Funding for runoff reduction, pollution prevention, and watershed/habitat restoration	
1. (Group G1) - Integrating state and local water quality programs. Roles and responsibilities.	✓				✓	✓	✓		49
2. (Group A1)- How to promote comprehensive local stormwater planning					✓	✓	✓		43
3. (Group F3)- Reaching the un-reached	✓		✓	✓	✓	✓			37
4. (Group E1&2)- Roles and responsibilities of partners	✓	✓	✓	✓	✓		✓		33
5. (Group C2)- Educating decision-makers to connect environmental issues with funding			✓		✓	✓		✓	29
6. (Group H2)- Homeowner and practitioner network development		✓	✓	✓	✓	✓		✓	28
7. (Group A3)- Coordinating voluntary on-lot BMP implementation		✓	✓	✓	✓	✓	✓		26
8. (Group H3)- Maintenance	✓	✓		✓	✓	✓			26
9. (Group G2)- Connecting contractors to projects and customers	✓	✓		✓	✓	✓			22
10. (Group G3)- Keeping it simple – more small efforts on a large scale		✓	✓	✓		✓		✓	22
11. (Group D1) - Building capacity to deliver Community-Based social marketing			✓	✓	✓				19
12. (Group B1)- Developing a community of practice	✓		✓		✓	✓			18
13. (Group C3)- Using funding more efficiently and effectively	✓	✓			✓	✓	✓	✓	18
14. (Group H1)- Stream monitoring to document improvement				✓	✓	✓			16
15. (Group B2)- How to collect and distribute best education practices			✓	✓	✓				14
16. (Group D2) - Native plant marketing partnership		✓	✓	✓	✓	✓		✓	14
17. (Group F1)- Multi-cultural eco-literacy/action		✓	✓	✓	✓	✓		✓	13
18. (Group A2)- Promote citizen volunteers to do hot-spot and BMP site scouting	✓		✓		✓	✓	✓	✓	12
19. (Group E3)- What can citizen activists do?	✓		✓			✓	✓	✓	11
20. (Group C1)- Alternative funding system(s)		✓	✓			✓		✓	10
21. (Group B3)- Sea-level rise			✓			✓	✓		6
Number of Groups Tackling Each Strategy	9	10	15	12	17	18	7	10	

The two top action items that emerged from this vote: *Integrating local/state/federal water quality programs* and *How to promote more comprehensive local stormwater management planning* (see Appendix G for detailed notes) indicate a desire among participants for a collective and collaborative approach not only between all levels of government and the private sector in Virginia, but also at the local/regional level with a watershed-based approach to achieve local, State and Bay-wide water quality goals.

Further analysis of the session notes reveals a set of common themes and priorities informed by the 7 strategic paths originally suggested by the Summit partners as well as the topics discussed during the Circle Conversations. The overarching priority interwoven within all discussions was the desire of participants to **build an effective and integrated network of powerful water quality and stormwater experts and advocates – or a “Community of Practice.”** This was explicitly articulated by 16 of the 21 groups.

Other common themes and strategies discussed during the Summit include the need to:

1. **Form Strategic Task Force(s) or Steering Committee** (sometimes called “Champion Groups”) to play a centralizing leadership role in organizing and aligning water quality-related programs, policies, practices and funding, and developing and managing a “Community of Practice”. These terms were used to express the need for centralizing, cross-sector groups to play a leadership role including:
 - ▶ A Water-Quality Task Force to lead and promote coordination and alignment of local/state/federal water quality programs and assess roles and responsibilities between all stakeholders. This term was also used to describe a government task force to conduct an inter- and intra-agency assessment of water-quality programs.
 - ▶ A statewide coalition, or Steering Committee, to guide and coordinate alignment of programs and people, develop and manage the clearinghouse and directory, catalog best management practices, resources, tools, and model programs, and form a “Community of Practice.” This coalition would ensure credibility, consistency, and the lasting management of information within the database.
 - ▶ Watershed-based regional and local task forces may also be formed to coordinate, manage and oversee local and regional implementation plans. The task forces should include a local government staff as a point of contact to coordinate activities and partners and be the information hub for the locality.
2. **Assess and Clarify Roles, Responsibilities, Expertise and Expectations, and stop re-inventing the wheel.** It might be said that this issue was implicit in the need to hold the Summit, as the need for more effective networking and coordination (identified as a priority need by the Wetlands Watch report for the HRPDC) implies an even more basic need to define roles and expectations. There is a need to catalog and clarify different stakeholder roles and responsibilities, to instill clarity and confidence about mutual expectations, reduce overlapping or redundant activities, and identify gaps and training needs. Most critical is the need to accomplish this goal for and between different state and federal government agencies and municipalities, and their interactions with various non-profits and community groups. While there is a statewide need that should be addressed by the Steering Committee, any watershed-based planning effort should assess this at the watershed and local level during plan development. Lack of clarity on roles, accountability, standards, and guidelines was identified consistently as a major challenge in effective stormwater efforts and, consequently, a priority “next step.”
 3. **Improve Connection and Networking through an Online Clearinghouse and Central Directory** to provide continuous and open communication. One of the greatest concerns for participants was the lack of effective communication between all the water-quality related actors, programs, and resources. Current barriers participants identified include overlap in efforts and even counter-productive programming. To address this, several different open space groups came up with similar ideas of creating an information and communication hub for a “Community of Practice.” The hub will serve as a clearinghouse of critical and consistent resources on best management practices, model programs, community-based social

marketing tools, and a central directory to connect agencies, organizations, practitioners, and communities. This clearinghouse should also celebrate successes! Participants felt it is important to celebrate successes and use these as a promotional highlight to raise awareness, build support, and encourage additional, and more frequent use of watershed restoration and stormwater retrofit practices. While more details can be found in the open space notes, the following provide a list of the more common suggestions:

- ▶ This online clearinghouse should include “best” guidance, tools, resources, model programs, best management practices and costs.
- ▶ It should include vendors, technical experts, and connect agencies, organizations, practitioners, and communities. There is a need to connect certified contractors with homeowners and other potential clients; this role might be assumed by local non-profits or trade groups like the Chesapeake Conservation Landscaping Council or Virginia Society of Landscape Designers. Angie’s List could serve as a model for contractor listings and specialty services, stream restoration, green roofs, etc.
- ▶ The platform should be able to measure and communicate successes.
- ▶ The oversight and management of this clearinghouse should have long-term funding and be maintained and updated regularly.
- ▶ *Don’t reinvent the wheel:* look for existing organizations or networks like the Virginia Stormwater Management BMP Clearinghouse, the Chesapeake Stormwater Network, the Chesapeake Network, the Center for Watershed Protection, or the Virginia Environmental Professionals Organization. Consider that this may serve as a hub and provide links to other resources and networks.

...the desire of participants to build an effective and integrated network of powerful water quality and stormwater experts and advocates – to create a “Community of Practice.”

- ▶ Some suggested that the clearinghouse be connected to or developed by universities along the lines of VIMS shoreline inventory and tools, or the Virginia Tech BMP Clearinghouse.

4. Develop Consistent Practice-Related Resources, Training and Tools

to reduce risks, uncertainties, and costs associated with implementation of best practices. Localities want guarantees that the program, practices, products and resources are recognized, approved and can be credited toward fulfilling regulatory requirements or helping to meet Bay TMDL allocations by the Chesapeake Bay Program and Virginia regulatory

authorities prior to use. Stormwater managers are concerned about maintenance – an entire group conversation revolved around maintenance-related concerns. Participants are interested in a tracking tool and standard track-

ing system that allows actions to be reported to localities in the appropriate format. Most practitioners, non-profits, landscaping professionals, and stewards are looking for simple, cost-effective, easily maintained, and attractive landscape-type practices that use natural plant systems and soil amendments and would like guidance to reduce conflicts with homeowners associations and local permitting. The following are some specific findings to consider when developing consistent guidance, terminology, protocol, training, and tools for watershed restoration and stormwater retrofit programs:

Guidance, Resources, and Protocol Considerations:

- ▶ Provide guidance on who is best qualified or suited to perform each task (e.g., coordination, technical oversight, site assessment, design, installation, inspection, maintenance, tracking) on a watershed restoration or stormwater retrofit project.

- ▶ Provide guidance on how to establish partnerships with vendors, local nonprofits, and watershed groups.
- ▶ Provide guidance on regional and site-specific practice limitations (e.g., urban, coastal plain, karst).
- ▶ Keep instructions and protocol jargon-free – consider providing a light version of the BMP Clearinghouse.
- ▶ Provide guidance on how to comply and align projects with local permitting and approval processes.
- ▶ Keep guidance, practices, and protocol simple and inexpensive – take a functional landscaping approach that solves landscape and drainage problems with easy to maintain, attractive landscaping practices.
- ▶ Develop standard agreements for homeowner stewardship, maintenance, and access for inspections.
- ▶ Develop a strategy to address obstacles to BMPs associated with homeowner association covenants.

Incentives and Cost Considerations:

- ▶ Identify best Incentives, cost-share, and crediting strategies.
- ▶ Provide guidance on cost effective BMPs and how to achieve cost efficiencies. Look at costs per pound nutrient reduction through retrofits on private property.
- ▶ Get the cost to the homeowner down to \$50.

Tracking and Reporting Considerations:

- ▶ Keep the tracking, crediting, and approval process simple and straightforward.
- ▶ Make the tracking tool compatible for tracking and reporting at the local level yet allow for easy transfer of information from localities to the State (and the E-Permitting system), EPA, and the Chesapeake Bay Program.

- ▶ Consider developing a multi-lingual/Spanish tracking tool application.
- ▶ Survey and examine existing tracking systems; develop a model tracking system for localities and share with others.

Training and Certification:

- ▶ Develop a common certification/training program for contractors (stormwater, landscaping, etc.), non-profits, local staff, and volunteers.
- ▶ Include a homeowners training component including how the practices function, their ongoing responsibilities including maintenance, reporting/verification, etc.
- ▶ Work with trade organizations (e.g. Chesapeake Conservation Landscaping Council, Virginia Society of Landscape Designers, Virginia Nursery and Landscape Association).
- ▶ Make sure the landscape and grounds maintenance people are trained – consider bi-lingual training.
- ▶ Provide regional training for local programs to improve understanding of best management practices and maintenance needs.
- ▶ Provide a means of connecting trained people with property owners and/or a local government point person. Angie’s List could serve as a model for contractor listings and specialty services, stream restoration, green roofs, and other needs.

5. Develop and Share Consistent Education and Social Marketing Guidance, Tools, and Strategies and Provide Training and Mentoring. Community-Based Social Marketing was identified as a successful way to increase advocacy and promote behavior change. Participants felt that education, communication, and social marketing are important tools to accomplish several goals: (1) to expand the volunteer base; (2) raise awareness and gain support for programs and funding from elected officials and citizens; (3) facilitate interaction and improve relations with private property owners; and also (4) “reaching the unreachable” which includes minority sectors

and groups that may require bilingual capacities. Several groups also discussed the distinction between *educating* to garner support for programs and funding versus *social marketing* as a strategy to build stewardship, change behavior, and motivate people to “do their part.” Both are equally important. An important educational priority expressed was the need for increased training workshops, resource-sharing and informational guidance geared to a particular audience, on a particular subject (e.g. native plants, addressing language barriers, available resources and how to access them, improving communication between government agencies, etc.). Education and social marketing findings from the Summit small group sessions are provided below.

- ▶ Community-Based Social Marketing works, plays a critical role in successful stormwater retrofit and watershed restoration-type incentive programs, and should be funded at the local and regional level.
- ▶ Trained watershed groups and stewards are valuable partners for localities and best suited as liaisons with property owners; the liaison service should be funded so that these groups have adequate financial resources. For example, Lynnhaven River NOW provides outreach and education for the City of Virginia Beach and is partially funded to perform those services. Another example of this type of partnership is the Arlington County partnership with Arlingtonians for a Clean Environment (A.C.E.).
- ▶ Localities should consider pooling resources to hire someone to do social marketing research and coordinate a campaign. The Elizabeth River Project has been working with Doug McKenzie-Mohr on their River Star Homes program. In addition, the CZM has funded several regional partnerships to conduct native plants social marketing campaigns using the Plant ES Natives Campaign as a model.
- ▶ As a first step in a social marketing campaign, convene a local, diverse group and conduct a needs assessment, then compile and map the information so that it can be shared by many. A list of potential local champions and partners can be found in the Group D1 Summary for *Building*

capacity to deliver community-based social marketing provided in Appendix G.

- ▶ Bay-wide, there is a need for different messages for different target audiences that address quality of life, economic, and environment issues. There is also a need for effective arguments to show quantitative benefits and impacts geared towards each audience (e.g. homeowners, elected officials, government staff, landscaping community, etc.).
- ▶ Summit participants voiced a need for guidance on how to bring all stakeholders to the table and reach the unreached and identified a number of potential target audiences including: youth groups/school kids, the Chamber of Commerce, multi-lingual/cultural groups, contractors, the landscape community, city employees, elected officials, homeowners, churches/institutions, and businesses.
- ▶ Consistent Training is needed for:
 - Local government staff and elected officials – on how to speak and interact with citizens.
 - Non-profits and watershed groups – on how to design and conduct social marketing campaigns.
 - Landscape Community – on how to sell native plants and landscaping-type stormwater management features to clients.
 - Government staff on how to improve intra- and inter-agency communication and coordination.

Any education and outreach programs should include consultation and collaboration with the Chesapeake Conservation Landscaping Council, the Virginia Society of Landscape Architects, the Virginia Society of Landscape Designers, the Virginia Nursery and Landscapers Association, the Green Building Council, Virginia Naturally, Virginia Office of Environmental Education, Virginia Environmental Educators, the Virginia Natural Resources Leadership Institute, the Virginia Master Gardeners/Master Naturalists and the Virginia Native Plants Marketing

Campaign; and with the Anne Arundel County Watershed Stewards Academy, which is considered a model for education, outreach, and stewardship program in the Bay watershed.

6. Leverage Financial Opportunities and Develop Long-Term, Sustainable Funding Strategies

that empower the private sector and include public-private-nonprofit partnerships. This collective approach should facilitate grant making that encourages partnerships, leverages limited resources, yet still promotes and incentivizes innovative efforts at the local scale and within the free market. There is a strong need to facilitate a collective approach so that limited resources can be used most effectively, and implementation costs are reduced. Through partnerships, some efficiencies and economies of scale can be achieved: examples include a Bay-wide certification program for landscape professionals and regional technical advisors; joint-regional background research for social marketing campaigns; and efficient use of free and contracted skill to implement watershed restoration stormwater retrofit programs. Consistent practice would be facilitated by guidance, protocol, and tracking/reporting tools, which would also minimize “re-inventing the wheel” issues. Some participants noted that consistency and predictability in a market is an attractive investment scenario for private investors, and can lead to opportunities to leverage innovation and competition from the private sector. Many suggested a need to simplify permitting, approval, and crediting procedures, as well as to identify the most cost-effective simple actions, best incentives and implementation strategies.

7. Use a Watershed-Based Approach as an Integrated Stormwater Management Strategy.

This concept was discussed in detail by Group H1 and found in several other group discussions as well. This comprehensive approach suggests all critical stakeholders (both government and private sector) within a watershed are engaged in planning and implementation. A watershed-based approach is applicable for different scale projects, and integrates stormwater management programs with other related government programs and policies including land-use planning

and environmental programs. The following are a compilation of issues found in group discussion:

- ▶ Establish a Watershed Task Force to lead, implement, and manage the plan.
- ▶ At the beginning of the planning process align a diverse group of stakeholders and neighboring localities around a joint plan. Catalog existing key stakeholders groups, assess roles and responsibilities, identify gaps and needs, communicate those needs to others, and establish a network to keep people connected and informed.
- ▶ Planning should include a comprehensive assessment of existing local conditions including pollutants of concern, identify hot spots and environmentally sensitive areas, and prioritize locally relevant watershed restoration and stormwater retrofit actions.
- ▶ Have a local or watershed communication plan and directory to keep stakeholders informed and networked.
- ▶ Aggregate all data within the watershed (state, regional, local, research/monitoring, non-profit) and track and report practice-related data, locally.
- ▶ Have local staff act as a point of contact to provide technical guidance and coordinate non-profits, watershed groups, volunteer groups, contractors and vendors.
- ▶ Summit participants noted that State-funded regional Watershed Roundtables designed to organize, engage, and inform stakeholders would be more effective with more direction and leadership from the State.
- ▶ Identify opportunities to outsource and augment tasks to non-profits and private contractors, and consider partnering with universities and training students as partners.

- ▶ Consider the following ways to connect qualified contractors and practitioners with property owners:
 - ❑ Local Public Utility could include an insert of a qualified contractor list.
 - ❑ Use nongovernmental organizations or trade organizations to connect certified contractors with customers and training opportunities to contractors.
- ▶ Local governments need to:
 - ❑ Address the obstacles to BMPs associated with homeowner association covenants.
 - ❑ Make sure the landscape and grounds maintenance people are trained – consider bi-lingual training.
 - ❑ Include runoff management in local codes and consider consequences for non-compliance for serious issues of concern.
 - ❑ Look for opportunities to retrofit parking areas and right-of-ways.
 - ❑ Work with VDOT to facilitate the use of right of ways for retrofits.
- ▶ Regions should make better use of the existing state-funded Watershed Roundtables that were designed to organize, engage, and inform stakeholders. Participants noted that these Roundtables needed more leadership and direction from the State.

In summary, it appears that participants agree with the following statement: ***To achieve our water quality goals, we will need to take a coordinated, structured, and collaborative approach – coordinating across sectors and creating alignment in our policies, funding, and programs (Collective Impact). This will require not only a certain level of commitment from a diverse group of stakeholders, but also require a certain amount of trust. Additionally, it will require local, regional, state, and Bay-wide programs working together and aligning their programs to support shared goals.***



Credit: Elizabeth River Project - River Star homeowner Kathy King has a completely organic lawn and only uses compost top dressing as fertilizer



Credit: A satellite view of sediment plume from Tropical Storm Lee and Hurricane Irene, courtesy of NASA

Next Steps and Recommendations

Participants at the Summit showed an overwhelming support for a coordinated, structured, and collaborative approach towards watershed and habitat restoration and stormwater management in Virginia in order to achieve our water quality goals for the Bay and local waters in the next 15 years. To do this, participants identified a need for a coalition or “Community of Practice” to align individual efforts toward our common water quality goals. Summit partners agreed to do their part to facilitate this process and work on the following:

Wetlands Watch will take the lead in serving as an interim communication hub for follow-up to the Summit, and Wetlands Watch and the Alliance will help to convene the new statewide coalition Steering Committee. Wetlands Watch will also summarize Community-Based Social Marketing findings and make recommendations to Erin Ling to inform her tool and guidance development.

Chesapeake RiverWise Communities partners coordinated by the Alliance will continue developing **RiverWise** tools, guidance and training for a model on-site BMP retrofit incentive program. Wetlands Watch will make recommendations, based on the findings of the Summit on issues that the partners will address and consider in development and refinement of the model program.

The UVa Institute for Environmental Negotiation will work with Wetlands Watch to prepare the draft summary report for review by the organizers and Summit Steering Committee.

The Chesapeake RiverWise Communities Team will take the lead in hosting at least one follow-up workshop later in 2013 to address specific issues raised at the Summit and to ensure that implementation moves forward.

Most of the immediate recommendations (or next steps) presented here will fall under the charge and oversight of the Steering Committee formed from the Collaborative Summit. The findings from the Summit will also be used to inform and refine a number of ongoing and/or developing collaborative efforts at the State, regional, local and even Bay-wide level. The Chesapeake **RiverWise** Communities program, a Bay-wide Sustainable Landscape Certification Program, the Chesapeake Bay Stormwater Training Partnership, the Virginia Native Plants Marketing Partnership, a Community-Based Social Marketing Tool and work group, and the Virginia Environmental Professionals Organization – are just a few of the Bay and State-wide efforts.

In the interim, Wetlands Watch has established the “Collaborative Connection” Group on the Chesapeake Network to keep Summit participants informed and networked until a more formal form of communication is established by the Steering Committee. Summit participants were invited to join the Group in early June 2013.

Successful dialogue and implementation of the following recommendations will only be possible with the help of the many Summit participants, and with the support and engagement of the still greater stormwater networks and actors and their associated efforts. To support the implementation of the priority Next Steps following the Summit, the Summit partners offer the following recommendations.

Collective Impact Through a Community of Practice

The concept of Collective Impact introduced to the Summit participants, provides a framework to coordinate and align programs, policies, practices, and funding. It also provides a process to build and maintain a network or “Community of Practice” of key people across different sectors: public, non-profit, business, government, and funders. Although there are many organizational techniques, Summit participants were introduced to this collective approach which provides a strategic pathway for building our “Community of Practice.”

The Collective Impact approach, while structured and systematic, is not a top-down planning and organizational approach; it is more a coordination and alignment of many parallel efforts at different scales (see Figure 1).

In concert with this model, one of the purposes of this Summit was to raise awareness of existing parallel efforts and discuss how all the different community members might partner and coordinate their work in a mutually beneficial fashion.

Essentially, the Collective Impact approach includes three pre-conditions with three distinct phases to planning, organization, and management (see Figure 2) and five organizational conditions needed for success (see Figure 3). The three pre-conditions are¹:

- ▶ *An influential champion (or coalition of champions)* – capable of garnering the respect and committed engagement of a cross-sector of high level leaders.

- ▶ *Adequate financial resources*, with at least one primary funder willing to fund a two to three year effort to “support and mobilize other resources needed for infrastructure and planning processes.”
- ▶ A sense of *urgency for change* around an issue that aligns people to willingly work together.

“Together, these preconditions create the opportunity and motivation necessary to bring people who

have never before worked together into a collective impact initiative and hold them in place until the initiative’s own momentum takes over.”

The Collective Impact approach...is more a coordination and alignment of many parallel efforts at different scales...



Credit: 2013 Collaborative Summit

¹ Hanleybrown, F., Kania, J., & Kramer, M. (2012, January 26). Channeling Change: Making Collective Impact Work. *Stanford Social Innovation Review*. Retrieved from http://www.ssireview.org/blog/entry/channeling_change_making_collective_impact_work?cpgn=WP%20DL%20-%20Channeling%20Change



Figure 1. Cascading Levels of Collaboration.¹

Phases of Collective Impact			
Components for Success	PHASE I Initiate Action	PHASE II Organize for Impact	PHASE III Sustain Action and Impact
Governance and Infrastructure	Identify champions and form cross-sector group	Create infrastructure (backbone and processes)	Facilitate and refine
Strategic Planning	Map the landscape and use data to make case	Create common agenda (goals and strategy)	Support implementation (alignment to goals and strategies)
Community Involvement	Facilitate community outreach	Engage community and build public will	Continue engagement and conduct advocacy
Evaluation and Improvement	Analyze baseline data to identify key issues and gaps	Establish shared metrics (indicators, measurement, and approach)	Collect, track, and report progress (process to learn and improve)

Figure 2. Three Phases of a Collective Impact Initiative.²

¹ Kania, J. & Kramer, M. (2013, January 21). Embracing Emergence: How Collective Impact Addresses Complexity. *Stanford Social Innovation Review*. Retrieved from http://www.ssireview.org/blog/entry/embracing_emergence_how_collective_impact_addresses_complexity

² Hanleybrown, F., Kania, J., & Kramer, M. (2012).

The Five Conditions of Collective Impact

Common Agenda	All participants have a shared vision for change including a common understanding of the problem and a joint approach to solving it through agreed upon actions.
Shared Measurement	Collecting data and measuring results consistently across all participants ensures efforts remain aligned and participants hold each other accountable.
Mutually Reinforcing Activities	Participant activities must be differentiated while still being coordinated through a mutually reinforcing plan of action.
Continuous Communication	Consistent and open communication is needed across the many players to build trust, assure mutual objectives, and create common motivation.
Backbone Support	Creating and managing collective impact requires a separate organization(s) with staff and a specific set of skills to serve as the backbone for the entire initiative and coordinate participating organizations and agencies.

Figure 3. Five Conditions of Collective Impact.¹



Credit: Photograph taken by Beth Furgurson for the Jul./Aug 2011 issue of R HOME, Landscape Design by Scotty Guinn Dilworth of SG Designs, Installed by Capitol Greenroofs

¹ Hanleybrown, F., Kania, J., & Kramer, M. (2012).

Initiating Action

Toward this end, as a first organizing step, the Summit partners, funders and Steering Committee members identified an urgent need for change and coordination of stakeholders. They also identified potential champions, and made a preliminary assessment of existing conditions by identifying key issues and gaps. Using their influence and funding resources, they pulled together critical stakeholders, to build a common understanding of the urgent need for better coordination, communication, and networking. Through this collective effort, the Summit initiated a collective impact to support local efforts in Virginia to meet the water quality and stormwater management targets and regulatory deadlines for urban-suburban properties over the next five, ten, and 15-year increments.

Participants at the Summit agreed that **stakeholders would benefit from regional collaboration, coordination, and networking** among and between NGOs, local, state, and federal government agencies - conditions that do not currently exist in most of the Chesapeake Bay watershed. To move this forward, Summit participants identified a need and desire for a single entity (or backbone organization) to serve this function, to ensure credibility, consistency, and the lasting management of information within a clearinghouse and directory. The next step in the collective impact model would be to convene a Steering Committee (“Coalition of Champions”) to continue the work begun at the Summit (see Figure 3), and to act as a hub or “backbone organization.” This was successfully accomplished at the Summit when 25 people signed up to join forces as a Steering Committee, thereby completing Phase I of a collective initiative, and moving the effort into Phase II, *Organizing for Impact*. In Phase II, the goal will be to facilitate the development of a Community of Practice by aligning all related programs, policies, practices, and funding across the different sectors – public, non-profit, business, government, and funders.



Credit: K. Duhring VIMS-CCRM



Credit: Alliance for the Chesapeake Bay



Credit: Lynnhaven River NOW

Organizing for Impact

Convene the Steering Committee and create a common agenda:

Wetlands Watch and the Alliance will convene the Steering Committee to discuss and agree on goals, role, direction, commitment and leadership of committee members; identify potential gaps in cross-sector representation (include high-level decision makers, elected leaders, a representative from the Virginia Association of Counties and Virginia Municipal League); and develop a funding and organizational strategy. To identify who will provide the ongoing “Backbone Support” needed to keep the collective initiative going, a core principle will be to avoid re-inventing the wheel. Rather, existing organizations or coalitions will be considered that might serve or guide this function, such as the Alliance, the Chesapeake Funders Network, the Center for Watershed Protection, Chesapeake Stormwater Network, the newly formed Virginia Environmental Professionals Organization, or a State Water Quality Task Force like the Virginia Water Resources Research Center.

Assess and clarify roles, responsibilities and expertise:

A priority next step will be to provide opportunities for players to gain clarity and confidence about mutual expectations, reduce overlapping, redundant or conflicting activities, reduce BMP-related risk and uncertainties, create efficiencies and reduce implementation costs, ensure BMPs installed are accounted for, and identify gaps and training needs. Most critical is the need to accomplish this goal for different government agencies and municipalities, and their interactions with various non-profits and community groups. Specific suggestions include:

- ▶ Convene a local, regional, state, and federal intra-agency collaborative workshop on mandated responsibilities for sediment, nitrogen and phosphorous reductions associated with the Virginia Stormwater Management Program and Municipal Separate Storm Sewer System (MS4) stormwater permits, Virginia’s Watershed Implementation Plan (WIP), and the Chesapeake Bay Total Maximum Daily Load (Bay TMDL) allocations.
- ▶ The State agencies should establish a joint Clean Water Task Force and conduct an internal audit of roles and responsibilities to identify agency overlaps. The reorganization of Virginia Stormwater Management programs as well as the need for multi-departmental collaboration on the Urban Nutrient Trading program provides a unique opportunity for many different state agencies to conduct inter- and intra-agency audits of water quality-related programs and look for opportunities for better coordination within the agencies and with Federal regulating agencies.
- ▶ The State should provide leadership and direction to Watershed Roundtables.
- ▶ Identify most suitable roles, responsibilities, and necessary skills of different stakeholders (example non-profit groups, stewards, contractors, local government staff). Action should then be taken to fill any gaps that are identified.
- ▶ Catalog, assess, and compare existing implementation models for localities as well as Watershed Roundtables, and share recommendations on the best models. Recommendations should include a review of grant work plans and consider task forces organized by sub-watersheds from Watershed Roundtables.

Improve connection and networking:

To provide continuous and open communication, the community of practice should establish an online clearinghouse and central directory. It would also be helpful to convene follow-up meetings like the Summit on a regular basis to assess progress, reconnect stakeholders, identify gaps and needs, and reassess goals and strategies moving forward. Specific suggestions for this task are provided in the previous section of this report.

Decide how to measure success using a shared form of measurement:

The community of practice will help establish and communicate a consistent protocol, criteria, and reporting formats to ensure BMPs installed are captured, maintained, tracked and credited. The following are desirable strategies:

- ▶ Coordinate with the Chesapeake Bay Program best management practice panels and Urban Stormwater Workgroup and the State as well as other efforts like the Alliance *RiverWise* partners, to ensure practice guidance, protocol, and tracking are consistent, that practices are accounted for at the local level, and that progress is communicated to the State and EPA. Facilitate the testing, refinement, and Virginia/Chesapeake Bay Program approval of a simple residential BMP guidance and crediting system being developed by the Chesapeake Stormwater Network and the Chesapeake *RiverWise* partners, *Guide to the Design, Construction, Planting and Upkeep of Your Rain Gardens (and other stewardship projects, too!)*.¹

- ▶ Work with the Department of Conservation & Recreation (DCR) and the Department of Environmental Quality (DEQ) to first review existing tracking tools and then establish a standard tracking tool and system for watershed restoration and stormwater retrofits that can be easily adapted and used by localities and their partners and is compatible with the Virginia *E-Permitting* system. Facilitate the testing and refinement of the BMP tracking tool being developed by the University of Maryland Sea Grant Program through the *RiverWise* project.

Work with funders:

The community of practice will work with funders to develop and guide funding strategies that support collaborative projects, leverage financial opportunities, and promote the evolution of grant projects into long-term, financially sustainable strategies at the local level – while still recognizing and valuing new innovative solutions. It will also make recommendations on ways to reduce cost barriers to implementation by identifying the most cost-effective simple actions and implementation strategies, and by distributing that information. Two desired approaches are to identify and share innovative financial strategies, and coordinate with the University of Maryland Environmental Finance Center on upcoming Virginia stormwater financial strategies workshops.



Credit: 2013 Collaborative Summit

¹ A draft version of this guide can be accessed on the CSN website at <http://chesapeakestormwater.net/2013/04/homeowner-bmp-guide/>.

Collective Impact at the Regional and Local Level

There are many existing collaborative efforts already working to achieve Collective Impact at the local and regional level. Some of these efforts were identified as potential models in the Wetlands Watch/HRPDC report. Others are in various stages of planning and implementation in response to the recent regulatory programs associated with Chesapeake Bay watershed implementation plans and the Virginia Stormwater MS4 permit requirements. Many of these programs can benefit from the findings of the Summit and, eventually from the formation of a Statewide Community of Practice. Members of these collaborative efforts are encouraged to keep people engaged and provide ongoing input and support to the Steering Committee as well as participate in and encourage more local or interest-specific efforts to achieve collective impact.

Localities should “organize programs around a comprehensive planning effort that includes watershed restoration at the subwatershed level. A comprehensive planning approach will allow localities to define the problems, compile a list of common goals and overlapping interests, identify barriers, identify opportunities for coordinated and collaborative solutions that focus on local priorities and areas of concern by neighborhood, identify budgetary needs, and provide all stakeholders with a common vision and road map of implementation strategies...Stakeholders involved in plan development should include community leaders; local, state, and regional government agencies; private sector technical experts, service providers, and suppliers; trained environmental stewards; and local and regional watershed and civic groups.”¹

Several small group sessions recommended a comprehensive watershed-based planning approach to integrate stormwater management with other department programs (planning, wetlands, open space, etc.). They envision this approach should include a diverse group of stakeholders from the beginning of the planning process, and also engage neighboring localities at the local level. Summit participants also recommended that the local business community (e.g., Chamber of Commerce) and regulated entities (e.g., homebuilder organizations, commercial builder organizations, etc.) be involved in such stakeholder processes. These recommendations support a similar finding by the Wetlands Watch/HRPDC report:

A list of suggestions and guidance for this effort is provided in the previous section of this report. One suggestion from the Summit has already come to fruition: guidance for using a watershed-based approach for more comprehensive local stormwater planning is now incorporated into Appendix 5-B of Chapter 5 of the new 2013 Virginia Stormwater Management Handbook. This Handbook should be finalized by summer 2013. In addition, localities and regional watershed efforts could make use of the following three resources:

- ▶ “Urban Subwatershed Restoration Manual No. 1: An Integrated Framework to Restore Small Urban Watersheds”²
- ▶ “Local Watershed Management Planning in Virginia: A Community Water Quality Approach” developed by the Virginia Department of Conservation & Recreation.³
- ▶ “The Smart Watershed Benchmarking Tool”⁴

² Center for Watershed Protection. (2005). *Urban Subwatershed Restoration Manual No. 1: An Integrated Framework to Restore Small Urban Watersheds* (Version 2.0). Ellicott City, MD: Tom Schueler.

³ Local Watershed Management Planning in Virginia: A Community Water Quality Approach. Retrieved from http://www.dcr.virginia.gov/stormwater_management/documents/wshedguideb2b.pdf

⁴ Center for Watershed Protection. (2006). *The Smart Watershed Benchmarking Tool*. Ellicott City, MD: Pam Rowe and Tom Schueler.

¹ Wetlands Watch, (2012, June). Reducing Nutrients on Private Property: Evaluation of Programs, Practices, and Incentives. Retrieved from http://hrpdc.org/documents/phys%20planning/2012/chesbayTMDL/FINAL_PEP-12-05_reducingnutrientsonprivateprop.pdf

Media Contacts:

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Appendices

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Appendix A : Summit Partners

The Collaborative Summit was a grassroots effort that evolved through an alignment of several separate but related initiatives of the Summit partners: Wetlands Watch, the Alliance for the Bay (Alliance), the Virginia Institute for Marine Science - Center for Coastal Resources (VIMS), and the University of Virginia Institute for Environmental Negotiation (IEN). By joining forces and leveraging funding, with each using their unique skills and technical knowledge, partners were able to leverage several funding sources and collectively address a common overarching goal: ***improve networking, communication, and coordination of critical stakeholders; of funding and water quality-related programs; and of practices, policies, and resources throughout Virginia.***

The event was originally conceived by Wetlands Watch and VIMS as a way to bring together, coordinate and refine existing watershed stewardship programs in Virginia, and to coordinate stewardship efforts and messages with local watershed implementation plans for the Chesapeake TMDL. Wetlands Watch and VIMS were pursuing this as members of a Chesapeake Bay Program (CBP) Master Watershed Stewards Action Team (Action Team). Using the Anne Arundel County, Maryland Watershed Stewards Academy as a model, the primary mission of the Action Team was to determine how to expand existing watershed stewards programs that train citizens to organize and conduct restoration in a series of priority landscapes and watersheds. This mission was developed to execute Chesapeake Executive Order 13508.

Wetlands Watch, in partnership with the Hampton Roads Planning District Commission (HRPDC), and using funding from The Campbell Foundation and CZM, conducted an investigation into the feasibility, opportunities and constraints of utilizing stormwater retrofits and other landscaping-type watershed restoration practices on private property to achieve nutrient and sediment reductions credits. The intent of the study, *Reducing Nutrients on Private Property: Evaluation of Programs, Practices and Incentives*¹, was to provide Hampton Roads localities with Watershed Implementation Plan strategies for private properties.

The study conducted an extensive review of existing programs, processes and practices of stormwater management, and identified a number of potential collaborative models organized and managed by Soil and Water Conservation Districts, local government, regional and local

¹ For more information please visit
<http://www.hrpdc.org/Documents/Phys%20Planning/2012/ChesBayTMDL/FINAL_PEP-12-05_ReducingNutrientsonPrivateProp.pdf>.

non-profit watershed groups, and/or state agencies. All of these programs are finding success through a *Collective Impact approach*² that includes public-private-nonprofit-steward partnerships.

The findings of this study further confirmed the need for more effective communication and networking between key stakeholders across sectors, and suggested the convening of a Summit. The Summit would engage a coalition of motivated and experienced stakeholders to facilitate and expedite the alignment of people, programs, practices, policies, and funding at the state, local, and regional level to help localities meet regulatory compliance goals over the next 15 to 20 years. Wetlands Watch was particularly interested in facilitating the formation of regional technical consortiums similar to the one assembled by the Anne Arundel County Watershed Stewards Academy or the Watershed Assistance Collaborative initiated in Maryland. Significant findings from this study also informed the selection of speakers, topics of discussion, general Summit process and the suggested 7 Strategic Paths.

The Alliance is involved at many different levels in the restoration of the Bay and Virginia's waters. Currently, the Alliance is partnering with local governments, other watershed groups and private contractors on two incentive programs identified as potential models for collaboration in the HRPDC study: the Reedy Creek Coalition in Richmond, VA and *RiverSmart Homes* in Washington D.C. Through the Chesapeake *RiverWise* Communities NFWF-funded grant project, the Alliance has assembled a team of experts to develop a comprehensive, site scale, stormwater reduction program that will provide guidance for: 1) conducting outreach to property owners, 2) conducting stormwater audits, 3) developing stormwater reports, common practice design standards, and options for local financial incentives; 4) training for volunteers that perform audits and inspections; 5) developing operation and maintenance agreements, and protocols for evaluating performance; and 6) tracking practices and a tracking tool to report pollutant load reductions for localities, the states and Chesapeake Bay Program.

The objective of this Alliance project is to increase local adoption of green infrastructure practices. The project method is to develop tools that engage citizens and incentivize urban stormwater management BMP implementation at the site-scale for homeowners as well as non-residential property owners. At the completion of this project, the Partnership will have created a transferrable, ready-made program that can be easily adopted and implemented by other non-profit watershed organizations, community groups, or local or state governments. The program will be implemented and piloted in targeted Virginia localities. *RiverWise* partners include the Alliance, Chesapeake Stormwater Network, University of Maryland Sea Grant

² For more information on the Collective Impact Approach see *Channeling Change: Making Collective Impact Work* at http://www.ssireview.org/blog/entry/channeling_change_making_collective_impact_work?cpgn=WP%20DL%20-%20Channeling%20Change.

Extension, EPA's Offices of Wastewater Management and Research & Development, the City of Falls Church, VA, Wetlands Watch, and Virginia Polytechnic Institute and State University (Virginia Tech). The Summit provides the *RiverWise* partners with an opportunity to gather input from potential end-users as well as experienced practitioners to inform the design and development of this model program and identify priority issues to address. The final product will be a valuable resource that is ground-truthed and can be adopted by others or used to supplement existing programs.

Staff at the Center for Coastal Resources Management, VIMS has been engaged in the process of improving stormwater management for the achievement of water quality goals for many years. VIMS helped facilitate some of the early conversations among Summit partners regarding the needs and concerns of local governments in trying to manage stormwater in order to address Chesapeake Bay Program goals and Virginia's commitment to the Watershed Implementation Plan. Building on that work and our commitment to working with local governments, VIMS is interested in continued engagement in stormwater and water quality issues. The Summit provided VIMS with a forum for information exchange and input on policy and scientific questions that need to be addressed in order to effectively implement urban/suburban stormwater practices in a meaningful way. Efficient and effective monitoring has been identified as a critical need prior to and at the Summit. Most localities have expressed concerns over their existing capacity to perform the necessary monitoring. To that end, VIMS is seeking to assist in the engagement of citizens to assist localities in the monitoring of BMP practices.

The Institute for Environmental Negotiation has worked within the field of environmental dispute resolution for over 30 years and has facilitated numerous water related issues at local, state and national levels. IEN's involvement in the Collaborative Summit began in 2010, when the EPA asked IEN to explore the potential for convening a dialogue for the Elizabeth River Cities and U.S. Navy to explore mutually acceptable ways of improving storm water management. Stakeholders were interested in addressing regulatory questions and clarifying the roles and responsibilities of local, state and federal parties. After two dialogue sessions, IEN also learned of an emerging need identified by the Wetlands Watch study for a large summit, to enable stakeholders to discuss and identify ways to work together collaboratively to improve water quality. Rather than continuing a separate dialogue on stormwater, EPA approved the idea that IEN would work with Wetlands Watch and other regional partners to convene the Collaborative Summit for a broader group of stakeholders. Using the Collaborative Summit as a base, IEN viewed the work at the Summit as a way to enable substantive dialogue between coastal municipalities and EPA about key stormwater issues, while also expanding the dialogue to include other important stormwater actors, such as NGOs, private businesses and citizens.

Appendix B : Chesapeake *RiverWise* Communities Background



Chesapeake *RiverWise* Community

Stormwater runoff is the fastest growing source of pollution to local rivers and streams. What if we were able to prevent polluted stormwater from getting into our waterways? This may seem unrealistic, but simple landscaping improvements at your home or business can effectively reduce stormwater runoff, multiplying our efforts throughout a community creating major water quality improvements.

The **Chesapeake *RiverWise* Communities** Program demonstrates how individuals can be diligent stewards of the Bay where they live and work. The *RiverWise* Program provides tools and resources that will incentivize and enable citizens and businesses to reduce stormwater runoff by making important changes to how they manage their properties, including the installation of best management practices (BMPs) such as rain barrels, rain gardens, permeable pavement and the planting of trees.

For communities or organizations that don't have an existing incentive program to promote these practices, the program will provide a ready-made, comprehensive package that can be incorporated into their own watershed restoration and stormwater reduction programs. For existing incentive programs – *RiverWise* is not meant to replace, but rather support these innovative efforts, functioning as a network among citizens, businesses, watershed organizations, and local and state governments, that will enable us to share resources, effectively track and receive credit for the practices that are implemented, and inspect and maintain existing practices to ensure their effectiveness over time.

To do this, the Alliance and our partners, The Chesapeake Stormwater Network and University of Maryland Sea Grant Extension are developing the following tools that will be available to partners over the coming year:

- Stormwater Audit Procedures
- Urban Cost Share/ Financial Incentive Program Model
- Mobile tracking tool – that will allow automatic uploads of practices and associated reductions and feed this data to local/state tracking systems
- Inspection Protocols
- Maintenance Methods
- Training Programs

We will be using the information and insight of many others shared during the Collaborative Summit – Protecting Water Quality through Actions on Urban-Suburban Properties to also inform the program design.

To find out more about **Chesapeake RiverWise Community**, please contact Nissa Dean Virginia Director, Alliance for the Chesapeake Bay at 804.775.0951 or ndean@allianceforthebay.org.

Appendix C : Summit Participant List

Leah Aguilar	York County
Justin Altice	Institute for Environmental Negotiation
Michael Anaya	City of Hampton
Katherine Antos	Environmental Protection Agency, Chesapeake Bay Program Office
LeAnne Astin	Fairfax County, Stormwater Planning Division
Chris Ausink	City of Hampton
Allen Ayers	James City Stormwater Advisory Committee
Amanda Bassow	National Fish and Wildlife Foundation
Joe Battiata	Center For Watershed Protection
Jacob Baukman	Alliance for the Chesapeake Bay
Sharon Baxter	Department of Environmental Quality
Erin Belt	Isle of Wight County
Clay Bernick	Virginia Beach Environment & Sustainability
Kim Berry	Eco Discovery Park
Elsy Blanco	City of Newport News
Scott Blossom	Williamsburg Environmental Group
Thomas Brame	Culpeper Soil and Water Conservation District
Tom Brasek	Norfolk Homeowner
Jane Bren	Caretakers of God's Creation
Karl Bren	Caretakers of God's Creation
Deb Brown	EMCO Site Solutions
Barbara Brumbaugh	City of Chesapeake, Stormwater Management
Trevor Buckley	SG Designs
Kevin F. Byrnes	George Washington Regional Commission
Angela Carcich	Landscape Designer
Randy Chambers	College of William & Mary, Keck Lab
Doug Clarke	EMCO Site Solutions
Michael Collins	Center for Natural Capital
Sharon Conner	Hanover-Caroline Soil and Water Conservation District
Diane Cook	Prince George County
Scott Crafton	Department of Conservation and Recreation
Alycia Crall	Virginia Master Naturalists
Steve Curtis	Luck Stone Corporation
Anne Darby	Richmond Regional Planning District Commission
Beth Davis	James City Service Authority
James Davis-Martin	Department of Conservation and Recreation

Nissa Dean	Alliance for the Chesapeake Bay
Blaine Delaney	United States Department of Agriculture, Natural Resources Conservation Service
Tanya Denckla Cobb	Institute for Environmental Negotiation
Tamara Dietrich	Daily Press
Steve Droter	Alliance for the Chesapeake Bay
Kevin Du Bois	City of Norfolk
Charlie Dubay	Jamestown High School
Karen Duhring	Virginia Institute of Marine Science, Center for Coastal Resources Management
Frank Dukes	Institute for Environmental Negotiation
Melinda Dunlap	York County
Joseph M. Durant	City of Newport News
Sandra Erdle	Chesapeake Bay National Estuarine Research Reserve
Lou Etgen	Alliance for the Chesapeake Bay
Suzanne Etgen	Chesapeake Conservation & Landscaping Council/Watershed Stewards
Christy Everett	Hampton Roads Chesapeake Bay Foundation
John Farrell	A. Morton Thomas & Associates, Inc.
Dot Field	Virginia Department of Conservation and Recreation, Natural Heritage
Kelly Fieldhouse	Alliance for the Chesapeake Bay
Tara Fisher	City of Chesapeake
Jonah Fogel	Virginia Tech
Tatum Ford	Chesapeake Bay Foundation
Mike Foreman	Virginia Department of Conservation and Recreation, Office of Environmental Education
Karen Forget	Lynnhaven River NOW
Laurie Fox	Virginia Tech's Hampton Roads Agricultural Research & Extension
Lynne Frailing	Portsmouth Master Gardeners Water Steward
Vance Fuller	Filtterra Bioretention Systems
Kit Gage	Friends of Sligo Creek (Maryland) Stormwater Committee
Fran Geissler	James City County
Mariah Gleason	Institute for Environmental Negotiation
Laura Grape	Northern Virginia Soil & Water Conservation District
Jackie Guild	Chesapeake Legal Alliance
Scotty Guinn Dilworth	SG Designs, Sustainable Landscapes
Eric Gunderson	Southern Branch Nursery
Kayleen Hadd	Northern Neck Master Gardener Water Steward
Chris Hale	Williamsburg Environmental Group
Olivia Hall	Henrico County Department of Public Works
Susan D. Hamilton	City of Richmond Department of Public Utilities
Lisa Hardy	Hampton Roads Planning District Commission
Arne Hasselquist	City of Hampton Wetlands Board
Erin Hawkins	City of Lynchburg
Greta Hawkins	Kimley-Horn and Associates, Inc.

Carol Heiser	Virginia Department of Game and Inland Fisheries
Carl Hershner	Virginia Institute of Marine Science, Center for Coastal Resources Management
Ann Hewitt	Friends of Powhatan Creek Watershed
Julia Hillegass	Hampton Roads Planning District Commission
Todd Hopkins	City of Richmond Department of Public Utilities
Carolyn Howard	Draper Aden Associates
Shereen Hughes	Wetlands Watch
Shannon Hulst	Wetlands Watch
Kim E. Hummel	Isle of Wight County
Brent Hunsinger	Brent's Native Plantings
Heather Jentilet	Alliance for the Chesapeake Bay
Terri Johnson	United States Environmental Protection Agency
Christin Jolicoeur	Arlington County/Chesapeake Conservation Landscaping Council
Shana Jones	William & Mary Law School, Virginia Coastal Policy Clinic
Marissa Kassir	Timmons Group
Melissa Keywood	Institute for Environmental Negotiation
Richard Klein	Community & Environmental Defense Services
Michelle Kokolis	James River Association
Dave Kuzma	City of Newport News
Cecilia Lane	Chesapeake Stormwater Network
Cameron Langille	Institute for Environmental Negotiation
Ursula Lemanski	United States National Park Service
Erin Ling	Virginia Tech/Virginia Cooperative Extension
Judy S. Lyttle	South Hampton Roads Resource Conservation and Development Council
Bonnie Mahl	Eastern Shore Soil and Water Conservation District
Pam Mason	Virginia Institute of Marine Science, Center for Coastal Resources Management
Anna Mathis	Alliance for the Chesapeake Bay
Linda McConahey	Northern Neck Master Gardeners
Laura McKay	Virginia Coastal Zone Management Program
John Mcleod	Elizabeth River Project
Craig Metcalfe	James City County Citizens' Coalition
Corey Miles	Northern Virginia Regional Commission
Kelly O. Mills	City of Chesapeake, Development & Permits
Molly Mitchell	Virginia Institute of Marine Science, Center for Coastal Resources Management
Marian Moody	Hanover-Caroline Soil and Water Conservation District
Shep Moon	Virginia Coastal Zone Management Program
Chris Moore	Chesapeake Bay Foundation
Kip Mumaw	Ecosystem Services, LLC
Angela M. Neilan	Virginia Department of Environmental Quality
Elizabeth Nellums	National Fish and Wildlife Foundation
Quinton Nottingham	City of Richmond Department of Public Utilities

Brian Noyes	Colonial Soil and Water Conservation District
Greg Osband	A. Morton Thomas & Associates, Inc.
Richard Phillips	College of William & Mary
Beth Polack	Virginia Coastal Zone Management Program
Wyn Price	City of Richmond, Parks and Recreation
Nina Randolph	Virginia Environmental Endowment
Sara Reiter	Eastern Shore of Virginia Resource Conservation and Development
Rodney Rhodes	City of Williamsburg
Chip Rice	Friends of the Rappahannock
Jackie Rickards	Middle Peninsula Planning District Commission
Joe Rieger	Elizabeth River Project
Judy Ripley	Landscape Design Consultant, Master Gardener
Amy Robins	Alliance for the Chesapeake Bay
Amanda Rockler	University of Maryland, Sea Grant Extension
Virginia Rockwell	Gentle Gardener Green Design
Jon Roller	Ecosystem Services, LLC
Steve Rose	Fairfax County, Public Works and Environmental
Fred Rose	Eco Discovery Park
Rogard Ross	Friends of Indian River
Asad Rouhi	Northern Virginia Soil and Water Conservation District
R. Douglas Rowland	United States Geological Survey
David Ruble	Virginia Department of Conservation and Recreation, Environmental Education
Joan Salvati	Virginia Department of Conservation and Recreation, Program, Policy and Guidance Development
David Sample	Virginia Tech
Jennifer Schock-Bolles	Prince William County, Virginia Cooperative Extension
Tom Schueler	Chesapeake Stormwater Network
Ted Scott	Stormwater Maintenance & Consulting, LLC
PJ Scully	City of Virginia Beach
Justin Shafer	City of Norfolk Public Works
Bill Shanabruach	Department of Environmental Quality
Ellen Shepard	Holton Elementary Outdoor Classroom, Volunteer
Deana Simmons	Alliance for the Chesapeake Bay, Intern
Corey Simonpietri	ACF Environmental
Hunter Sledd	Newport News Master Gardeners, Integrated Shoreline Evaluation
May Sligh	Department of Conservation and Recreation
Warren Smigo	Virginia Department of Environmental Quality, Piedmont Regional Office
Margaret Smigo	Virginia Department of Environmental Quality
Ginny Snead	Virginia Department of Conservation and Recreation, Regulatory Programs
Sarah Stewart	Richmond Regional Planning District Commission
Skip Stiles	Wetlands Watch

Anna Sullivan	Private Property Owners
John Sullivan	Private Property Owners
Piotr Swietuchowski	Vanasse Hangen Brustlin, Inc.
Roberto Tapia	Stormwater Maintenance & Consulting, LLC
Don Tapley	Filterra Bioretention Systems
Elizabeth Taraski	Nansemond River Preservation Alliance
Jay Taylor	Wetlands Watch
Scott J. Thomas	James City County Engineering Resource Protection
Megan Tierney	Virginia Cooperative Extension, Hampton, Virginia
Mary Tilton	Back Bay Restoration Foundation
Albert Todd	Alliance for the Chesapeake Bay
Phillip Todd	River Works
Jenny Tribo	Hampton Roads Planning District Commission
Kevin Utt	City of Fredericksburg
Elizabeth Vaughn	City of Chesapeake
Brian Wagner	Ecosystem Services, LLC
Jennifer Welch	Henrico County Department of Public Works
John Wessel	Lynnhaven River NOW
Kelley West	Department of Environmental Quality
Barbara White	Department of Forestry
Eric Whitehurst	City of Richmond
Amanda Winks	City of Lynchburg
Warner Winthrop	Colesville Nursery
Virginia Witmer	Virginia Coastal Zone Management Program
Alan Wubbels	Forest Lane Botanicals
Gene Yagow	Virginia Tech, Biological Systems Engineering
Weston Young	City of Hampton

Appendix D : Preceding the Summit

Five days prior to the Summit, registered attendees were asked to do a little homework – to review 4 short YouTube videos. The videos introduced Stormwater Financing strategies that promote collaboration of local government with citizens and the private sector, and the concept of *Collective Impact*³ as a plausible process for coordinating a diverse group of organizations and efforts across sectors.

Pre-Summit Video Links

- 1 – **Financial Strategies for Local Stormwater Programs** by Dan Nees, UME Environmental Finance Center – <http://youtu.be/6UHMLntBVYU>
- 2 - **Collective Impact 1** - The Concept of Aligning Different Stakeholders around a Common Agenda <http://bcove.me/phinucr5>
- 3 - **Collective Impact 2** - Elizabeth River Project Uses Collective Impact for Results! <http://bcove.me/fkz4ivs4>
- 4 – **Collective Impact 3** - How funding can support a Collective Approach by John Kania
<http://www.fsq.org/tabid/191/ArticleId/233/Default.aspx?spush=true>

³ Fay Hanleybrown, John Kania, & Mark Kramer Collective Impact
http://www.ssireview.org/blog/entry/channeling_change_making_collective_impact_work?cpgn=WP%20DL%20-%20Channeling%20Change

Summit Handouts

Arlington County Program Description

Now that you've watched the 4 Videos that we asked you to review, you understand, hopefully, that for localities to achieve water quality and stormwater management goals each locality will need a coordinated, structured and collaborative approach that includes some organization within the locality (or regionally) functioning as a Backbone organization to keep organizations and people coordinated across sectors with alignment in our policies, funding, and programs (Collective Impact). We will also need to build awareness and advocacy for local government's action and implementation plans. And we'll need to agree on a common agenda, with common forms of measurement, and speak in a common language. This will require not only a certain level of commitment from a diverse group of stakeholders, but also require a certain amount of Trust. You've already seen how a Non-profit group, the Elizabeth River Project aligned efforts in their watershed.

Let's look at how Arlington County uses collective impact approach to meet and promote citizen's desire and support for "green" living and the County's vision of "sustainable" growth. Stormwater management and stream/watershed restoration is of critical concern because over 42% of the County is covered by impervious surfaces and much of the County was developed without stormwater facilities to capture and treat stormwater.

Take a minute to look at how Stormwater is one of several sustainability initiatives – then look at all the different types of inter-related efforts Arlington is promoting and implementing to address watershed restoration and stormwater management issues:

<http://www.arlingtonva.us/departments/EnvironmentalServices/Sustainability/page87394.aspx>. As you can see, the StormwaterWise Landscapes incentive program is one of several different strategies that Arlington County uses to increase actions on public and private property to control stormwater, protect water quality, and restore watersheds as well as promote clean air, green building, and reduced energy use.

Arlington County, VA, Department of Environmental Services is the Backbone Organization for the County and partners with Arlingtonians for a Clean Environment (ACE). ACE, a nongovernmental organization (NGO), was founded by, and is primarily funded by the Department of Environmental Services (formerly the Department of Public Works) as an outreach, education, and involvement organization. It also raises funds as a non-profit group. ACE is a key partner for County environmental stewardship programs. The organization manages and promotes environmental stewardship and sustainable living (green practices) initiatives including: a litter control program; volunteer programs, tree planting program; wild-life habitat certification program; the *Livable Neighborhoods Water Stewardship Program*; and *StormwaterWise Landscapes* (a new incentive program). ACE through this well coordinated partnership builds awareness and advocacy while facilitating citizen action.

Arlington County also partners with other local organizations and businesses to train landscaping professionals. The County has used local and regional experts throughout Virginia to carry out advanced training for the landscaping community and to create a base of trained contractors. They have cooperated with other jurisdictions, organizations and government agencies on that training - notably Fairfax County park authority, Virginia Cooperative Extension, the Northern Virginia Soil & Water Conservation District, CCLC and several established landscape designers in the conservation-type landscaping arena. In developing the StormwaterWise program, the County consulted with other localities like Fairfax County, DC, and Montgomery County, incorporating lessons-learned and adapting tools as needed. The County is currently working with CWP to develop stormwater retrofit plans, including green streets retrofits, for all the subwatersheds in Arlington.

The County funds stormwater and watershed management primarily through two funding mechanisms. In 2008, the County established the Arlington Sanitary District and began collecting the Arlington Sanitary District Tax, which taxes property owners 1.3 cents per \$100 of the assessed value of a property. The tax dollars collected (\$5 to \$7 million dollars per year) are placed in a stormwater management fund that funds the stormwater management program. In addition, the County maintains a Watershed Management Fund. This fund accepts fees in lieu of BMP implementation during development when implementation is not feasible. However, due to strengthening of the County's stormwater management policies, such contributions are currently relatively rare.

Approximately \$2.98 million in EPA State and Tribal Assistance Grants (STAG) distributed by the Virginia Department of Environmental Quality from 2004 to 2011 provide another source of funds for Arlington. The STAG grants are being used by Arlington and the City of Alexandria to implement the Four Mile Run Restoration Master Plan (Arlington County Board Agenda Item for Meeting of June 11, 2011).

StormwaterWise Landscapes is a new Department of Environmental Services/ACE partnership that funded on-site stormwater retrofits on 40 private residential or business properties during 2012. Funding is available for 60 properties in 2013. County staff will conduct stormwater audits and provide property owners with guidance on recommended practices maps showing existing site conditions and recommended BMPs, and a list of trained contractors. Once property owners have installed at least one recommended practice, they must arrange for an inspection to be performed by County staff. Once notified of project approval, property owners submit receipts to ACE for grant disbursements. Property owners must agree to maintain the practice installed and agree to be featured in a case study (McDonnell and Jolicoeur, 2012).

BMPs available for reimbursement of 50% of the project cost include: cisterns; conservation landscapes (conversion of lawn or non-native invasive plantings to native plantings); green roofs; infiltration trenches and dry wells; pervious pavers or concrete for driveway, walkway, and patio installations; removal of impervious pavement; and rain gardens. The size of the conservation landscape, green roof, or pervious pavement projects must be a minimum of

150 square feet. The total amount of reimbursement depends on the type of practice installed and ranges from \$500 to \$1000 per practice.

While the BMPs promoted through the *StormwaterWise Landscapes* program could be used to achieve credit for the Chesapeake Bay TMDL, Arlington is treating the program as an outreach, education, and engagement activity for the Municipal Stormwater (MS4) permit. The program is funded in part through the Arlington County stormwater management funds. In 2013-2014, a grant from the National Fish and Wildlife Foundation will provide additional funding.

In addition to the *StormwaterWise Landscapes* Program, the County has other incentive programs to increase stormwater retrofits and watershed restoration Best Management Practices (BMPs) on private property including: a tree-planting program, Rain Garden Training Workshops, Regional Rain Barrel Program. The tree-planting program provides grants to community groups to plant trees and contracts local companies to plant the trees. Arlington County has partnered with the Northern Virginia Regional Commission and the Northern Virginia Soil and Water Conservation District since 2006 to conduct Rain Garden for Homeowners Workshops. The workshops cover the definition of a rain garden, proper site selection, design, construction, planting, and maintenance. Hundreds of residents have attended the Rain Gardens for Homeowners workshops since their inception and follow up surveys show that approximately 25% of attendees install a rain garden after taking the training. Arlington County also supports a regional rain barrel program in partnership with other local jurisdictions. Through this program, 3000 rain barrels have been sold, with more than 800 of those rain barrels going to Arlington residents, with a 90% satisfaction rate for workshop participants. This equates to 125,000 gallons of stormwater that is collected and retained during every storm event.

Surveys are conducted every 2 years to assess the effectiveness of the Northern Virginia Rain Barrel program. The survey of workshop attendees in 2010 showed that many participants took additional actions to reduce stormwater runoff from their homes. Survey results showed that 85% of respondents had installed their barrels. 64% of respondents purchased one rain barrel, and 27% purchased two rain barrels. The primary motivation for installing a rain barrel was water conservation (85%), followed by having water during dry periods (32%) and reducing runoff (27%); 93% of respondents stated they are satisfied with their rain barrel. In addition, many workshop participants have taken other actions to reduce stormwater runoff, such as installing rain gardens (6%), re-directing downspouts (30%), reducing paved areas or adding permeable pavement (7%), or reduced lawn area (30%).

Arlington County is just one example of how a Virginia locality has used Collective Impact to increase actions on private property, build advocacy and support among citizens and businesses, and aligned many different programs, policies and interest groups to meet their stormwater management and watershed restoration goals and many other sustainable goals.

Please refer to Section 2 of our Hampton Roads Planning District Report [“Reducing Nutrients on Private Property: Evaluation of Programs, Practices, and Incentives” for other model programs.](#)

Summit-Related References

Partner Websites

Alliance for the Chesapeake Bay <https://allianceforthebay.org>

Center for Coastal Resources Management, VIMS <http://www.ccrm.vims.edu>

Institute for Environmental Negotiation, University of Virginia
<http://ien.arch.virginia.edu>

Wetlands Watch <http://www.wetlandswatch.org>

Sponsors, Steering Committee and Speaker Affiliations

Arlington County Stormwater Program
<http://www.arlingtonva.us/departments/EnvironmentalServices/Sustainability/page87394.aspx>

A. Morton Thomas & Associates <http://www.amtengineering.com>

Center for Watershed Protection <http://www.cwp.org>

Chesapeake Bay Program Office of the US EPA
<http://www.epa.gov/chesapeakebaytmdl/>

Chesapeake Conservation Landscaping Council <http://www.chesapeakelandscape.org>

Chesapeake Legal Alliance <http://chesapeakelegal.org>

Chesapeake Stormwater Network <http://chesapeakestormwater.net>

City of Chesapeake, Public Works Stormwater Management
<http://www.cityofchesapeake.net/Government/City-Departments/Departments/Public-Works-Department/Divisions/stormwatermanagement/Chesapeake.htm>

Colonial Williamsburg Lodge <http://www.history.org/foundation/>

Colonial Soil and Water Conservation District <http://colonialswcd.net/about/>

Community & Environmental Defense Services <http://ceds.org>

Eco Discovery Park <http://ecodiscoverypark.org>

Elizabeth River Project <http://www.elizabethriver.org>

Filtterra <http://www.filtterra.com>

Hampton Roads Planning District Commission <http://www.hrpdc.org>

Lynnhaven River Now <http://www.lynnhavenrivernow.org>

National Fish and Wildlife Foundation

<http://www.nfwf.org/Pages/default.aspx#.URUKOqWsbww>

PaveDrain – EMCO Solutions <http://www.pavedrain.com>

Southern Branch Nursery <http://www.southernbranchnursery.com>

Stormwater Maintenance and Consulting <http://swmaintenance.com> &
<http://mdswm.com>

The Campbell Foundation <http://www.campbellfoundation.org/chesapeake>

University of Maryland Sea Grant Extension Program -
<http://www.mdsg.umd.edu/programs/extension/>

Virginia Cooperative Extension Service – Hampton <http://offices.ext.vt.edu/hampton/>

Virginia Coastal Zone Management Program – DEQ
<http://www.deq.virginia.gov/Programs/CoastalZoneManagement.aspx>

Department of Conservation & Recreation Stormwater -
http://www.dcr.virginia.gov/stormwater_management/stormwat.shtml

DCR - Chesapeake Bay TMDL <http://www.dcr.virginia.gov/vabaytmdl/>

Virginia Tech – Virginia Cooperative Extension – Household Water Quality Program
<http://www.wellwater.bse.vt.edu>

A Few Additional Resources

Please note that this is a select group of resources - more available in the Wetlands Watch Report for the Hampton Roads Planning District Commission at

<http://www.wetlandswatch.org/NewsPublications/DirectorsBlog/tabid/110/articleType/ArticleView/articleId/87/Wetlands-Watch-Study-on-Conservation-Landscaping-to-Save-the-Bay.aspx>

1. Best Management Practices (BMPs) guidance & tracking tools
 - a. Chesapeake *RiverWise* Communities – in development
 - b. Rainscaping.org - <http://www.rainscaping.org>
 - c. Arlington County –
<http://www.arlingtonva.us/departments/EnvironmentalServices/sustainability/page83039.aspx>

- d. Chesapeake Stormwater Network –
<http://chesapeakestormwater.net/category/publications/>
 - e. Green Up DC <http://greenup.dc.gov/Default.aspx>
 - f. Anne Arundel County – Watershed Steward Academy Online Reporting -
<http://www.aacounty.org/DPW/Watershed/Restoration/index.cfm>
 - g. University of Connecticut NEMO Rain Garden Phone App.
<http://nemo.uconn.edu/tools/app/raingarden.htm>
2. Education and social marketing
- a. Anne Arundel County Watershed Stewards Academy - <http://www.aawsa.org>
 - b. Flag Programs
 - i. Elizabeth River Project – <http://www.elizabethriver.org>
 - ii. Lynnhaven River Now - <http://www.lynnhavenrivernow.org>
 - c. Virginia Coastal Zone Management Program – Plant ES Natives
 - d. National Fish & Wildlife Foundation tool – Erin Ling – coming soon
 - e. Falls Church Stormwater Challenge Game – in development through Chesapeake *RiverWise* Communities program
3. Training programs & Free Marketing for Private Sector
- a. <http://www.irava.org/what-we-do/river-hero/resources>
 - b. <http://www.lynnhavenrivernow.org/pages/207/default.aspx>
 - c. Chesapeake *RiverWise* Communities – in Richmond
 - d. <http://www.arlingtonva.us/departments/EnvironmentalServices/Sustainability/page78114.aspx>
 - e. Chesapeake Bay Stormwater Training Partnership
<http://chesapeakestormwater.net/training-library/>
 - f. Montgomery County MD
<http://www6.montgomerycountymd.gov/dectmpl.asp?url=/content/dep/water/rainresources.asp>
 - g. Virginia Urban Nutrient Management Certification -
http://www.dcr.virginia.gov/stormwater_management/nmtrain.shtml

- h.
 - i. Master Gardener Water Steward and Tree Steward Advanced Training;
Master Naturalists
4. Communication/networks/meetings
- a. Baywide
 - i. Chesapeake Network - <http://www.chesapeakenetwork.org/welcome.htm?z=mi0sg2>
 - ii. Chesapeake Watershed Forum
 - iii. Chesapeake Stormwater Network
 - iv. Chesapeake Commons (data) - <http://chesapeakecommons.org>
 - b. State - Virginia Conservation Network
 - i. Environment Virginia
<http://www.vmi.edu/Content.aspx?id=10737419910>
 - c. Regional - askHRGreen - <http://askhrgreen.org>
 - d. Watershed Roundtables
 - e. Local - <http://www.aawsa.org/solutions/main.html>
5. Funding for pollution prevention
- a. Chesapeake Funders Network - <http://www.chesbayfunders.org>
 - b. University of Maryland Environmental Finance Center
<http://efc.umd.edu/assets/stormwater2pager.pdf>
 - c. American Rivers – Funding Green Infrastructure
<http://www.americanrivers.org/initiatives/pollution/green-infrastructure/funding/funding-green-infrastructure.html>
 - d. Virginia DCR -
http://www.dcr.virginia.gov/stormwater_management/wqnpsgrants.shtml
 - e. Virginia DEQ – Coastal Zone Management Program
 - f. *See Section 2 of Wetlands Watch report*

Appendix E : Summit Agenda

Day One: Wednesday, February 13, 2013

- 8:00** **REGISTRATION** *****Coffee & Exhibits in Colony Foyer area*****
- 9:00** **SUMMIT WELCOME AND OPENING** *****Convene in Colony DE*****
- Skip Stiles, Executive Director, Wetlands Watch
 - Pam Mason, Senior Coastal Management Scientist
 - Frank Dukes, Director, and Tanya Denckla Cobb, Associate Director, UVA Institute for Environmental Negotiation
- 9:15** **Protecting Water Quality on Urban-Suburban Properties:
Where Are We Now and What Are the Latest Developments?**
- **Current Conditions/Status of Pollution Prevention/ Reduction on Individual Properties**
 - ◆ Findings from Wetlands Watch Study: Shereen Hughes, Assistant Director, Wetlands Watch
 - *What are the 2 or 3 most striking findings that led you to decide a gathering was needed specifically for urban/ suburban private properties?*
 - ◆ Context: Chesapeake Bay Model: James Davis-Martin, Chesapeake Bay TMDL Coordinator, Virginia Department of Conservation and Recreation
 - *Why does the Model matter to what happens on urban and suburban properties? How is it shaping state and local policy and planning?*
 - ◆ RiverWise Program Practices: Nissa Dean, Virginia Director, Alliance for the Chesapeake Bay
 - *What is the vision for RiverWise? Why did you think a Summit was needed to create the platform for the RiverWise program? What is your largest hope for this Summit?*
 - ◆ Facilitated Q/A
 - **(9:50) Emerging Strategies, Technology, Tools, & Resources:
Discussion Panel: What are we trying to achieve in Virginia?**
Moderated by: Frank Dukes, Director, IEN
 - ◆ BMPs: science and bay-wide crediting: Tom Schueler, Executive Director, Chesapeake Stormwater Network
 - *Why is it important to track what is happening in “backyards” on urban and suburban properties?*
 - ◆ Making it real in Virginia: Joseph Battiata, P.E., Senior Water Resources Engineer, Center for Watershed Protection
 - *How can implementation on urban and suburban properties help localities with their restoration goals? What’s your current thinking about what strategies will be MOST effective at reducing stormwater pollution?*
 - ◆ Direction of future state agency activities: Ginny Snead, Regulatory Programs Manager in the Division of Stormwater Management, Virginia Department of Conservation and Recreation



- *How has the Bay TMDL and Model driven the recent changes in Virginia's regulations? Why are the changes so important?*
- *How can the state facilitate and assist localities in meeting the requirements?*

10:35 **BREAK** ****coffee served in Colony Foyer****

10:55 **Protecting Water Quality on Urban-Suburban Properties:
Where Are We Now and What Are the Latest Developments?**

- **Individual Property-level Tools**

- ◆ Reporting Tools: Amanda Rockler, Regional Watershed Protection Specialist, University of Maryland
 - *How are BMP reporting tools changing? What are the biggest challenges in using these reporting tools for private urban/ suburban properties?*
- ◆ Community-Based Social Marketing: Erin Ling, Water Quality Extension Associate, Virginia Polytechnic Institute and State University
 - *How might social marketing make a difference in local efforts? Briefly describe the tool that you are developing. How can attendees give you feedback to support your effort?*
- ◆ Facilitated Q/A

- **Specific Case Studies**

- ◆ Addressing Maintenance & Inspections in Maryland: Richard Klein, Founder/Director, Community & Environmental Defense Services
 - *How can your program be adapted to address the need for maintenance and inspection of stormwater BMPs on private urban/ suburban properties?*
- ◆ Pulling It All Together in Arlington County: Christin Jolicoeur, Watershed Planner, Arlington County, Virginia
 - *What lessons have you learned during the process of adapting your stormwater BMP programs?*
 - *What are Arlington and CCLC doing to empower the Private Sector and have you seen a market response to your programs?*
- ◆ Facilitated Q/A
 - *Where are the gaps in programs/resources/tools between what we've done and what we need to do?*

12:00 **NETWORKING LUNCH** - Buffet served in Colony Foyer & Seating in Colony ABC

1:00 **Going Forward: What Are Our Challenges, Barriers and Emerging Trends?**
****Please reconvene to Colony DE****

3 Circle Conversations, in sequence, by main interest and function:

Group 1- Regulatory/ Funding/ Accountability;

Group 2 - Education/ Training/ Outreach;

Group 3 - Installation/ Design/ Maintenance

QUESTIONS For Each Affiliation Circle

- ④ **What are the biggest challenges/ barriers to implementing best management practices on existing urban/suburban properties?**
- ④ **Where are the biggest gaps / needs in programs/ resources/ tools between what we've done and still need to do?**
- ④ **Where are the biggest opportunities for improving implementation of BMPs on urban/ suburban properties?**
- ④ **What (specifically) do you need to be able to partner and collaborate effectively with other sectors?**

2:45 **BREAK** ****Coffee, Sodas, Dessert in Colony Foyer****

3:05 **What do You Think? Comparing Perceptions v. Reality** ***Reconvene in Colony DE***

Interactive Polling of Summit Participants – please connect to the intranet

3:45 **Creating the Vision and Path Forward**

- **We envision 2030 as a time when we've met our collective goal of clean waters, healthy, vibrant habitat, wildlife, and economies in Virginia and the Bay Region, because of a large, widespread increase actions (BMPs) on individual urban-suburban properties.**
- **What initiatives and collaborations in these 7 strategic paths would help us achieve this vision?**
 1. BMP guidance and accounting
 2. Education and social marketing
 3. Training programs
 4. Communication / networks
 5. Partnerships between/ within all government levels and with all NGOs & the private sector.
 6. Oversight/management of watershed restoration efforts and programs within localities.
 7. Funding strategies for runoff reduction, pollution prevention and watershed/habitat restoration.
- **You may offer to lead a work session, yourself, on a topic that you deem worthy of your time and energy. Or you may choose to attend a handful of work sessions led by others. Or you may float around, spreading ideas and enthusiasm between groups.**
 - *Thinking about the 7 strategic paths, is there a particular project you are passionate about and would like to make happen?*
 - *Is there an issue you feel is critical for the group to discuss? A topic related to one or more of these 7 strategic paths*
 - *Are there possibilities for continuing and enhancing current projects*

- - **By the end of this segment, a complete agenda for the Day 2 morning will be physically posted on the Summit wall, for all to see and review.**

4:25 Previewing Day 2

4:30 EXHIBITS and SOCIAL MIXER **In Colony Foyer & Colony ABC******



6:30 Adjourn

Day Two: Thursday, February 14, 2013

8:30 Registration *Coffee and Exhibits in Colony Foyer*****

**9:00 Welcome, Review of Day 1, Review Ground rules of “Open Space” Discussions
 Convene in Colony E**

9:15 Creating Our Collaborative Vision and Path Forward *Locations TBD on Day 1*****

OPEN SPACE SESSION

Small group work sessions (agenda/ topics pre-established on Day 1), reflecting specific discussions involving these 7 strategic paths

1. BMP guidance and accounting
2. Education and social marketing
3. Training programs
4. Communication / networks
5. Partnerships between/ within all government levels and with all NGOs.
6. Oversight/management of watershed restoration efforts and programs within localities
7. Funding for pollution prevention

11:30 Sharing Outcomes
Discussion leaders post their outcomes
Review of outcomes, with group Q/A

12:15 NETWORKING LUNCH * Served in Colony Foyer & Colony ABC*****

1:15 Refining Our Collaborative Path Forward
Group discussion
Prioritizing most important issues to work on next
Possible work groups and ongoing steering committee

2:30 Next Steps and Final Discussion

2:45 Adjourn

Appendix F : Circle Conversations, Polling Results & Outcomes

Circle Conversations

The circle conversations were designed to give participants an opportunity to both speak and listen to each other more intentionally, to enable learning about each others' challenges in implementing best management practices on existing urban/suburban properties, and to also identify gaps in programs, resources and tools.

The room was configured with a circle of 15 chairs at the center of the room, surrounded by the conference tables of participants. Those who came forward to take a seat in the central circle were essentially volunteering to join the facilitated discussion on this issue, while those who remained at their tables were asked to be completely silent, just listening to the facilitated discussion at the center of the room. Experience with this process has proven that even large groups of people, when listening in this particular manner, can have the experience of a personal and deliberate discussion. People who may be reluctant to speak in front of a large group of people may be more willing and able to participate in this kind of small circle conversation. A different dynamic establishes itself quickly, and people often report a refreshing authentic quality to the nature of the circle conversation, as well as an ability to elicit meaningful ideas quickly.

Each circle conversation lasted between 30 to 40 minutes, during which time a staff team on the sidelines was recording issues identified by participants. At the end of the circle conversation, all participants in that group were asked to cast two sets of votes: 1) the most important issues identified by their group, overall; and 2) the highest priority issues for discussing at the Summit. The voting took place through an online website that participants could access via their own laptops, smartphones, or a bank of computers that were provided at the voting station in the front of the room. The voting tallies for each group were instantly tallied and presented back to Summit participants using a new, interactive, online tool that the School of Architecture, University of Virginia modified specifically for the Summit.

Polling Results

Circle 1: The Regulatory, Funding, Accountability Conversation

The first circle conversation included participants who self-identified with regulatory, funding and accountability functions. The following are the first circle's issues, as prioritized by those who participated in this conversation. The bullets represent individual participant comments during this conversation. In hindsight, many of these issues could and should have been consolidated during the recording phase. This was one of the lessons learned in using the interactive polling device, and corrective action was instituted for the second Circle conversation. However, to ensure that we are accurately representing what happened at the Summit we are presenting them here in the same way they were recorded and voted on.

Priority Issue 1. Maintenance (tied for #1)

- Need a dedicated stream of funding for all pieces (volunteers, etc.) to work.
- Even if you can incentivize individual property implementation, who regulates the ongoing maintenance, pays for implementation – ensures credit for project stays in place? If a third party is needed, how do you do that reliably?
- Maintenance concerns center on the unknown of how the whole system works – most systems are less time consuming than the average maintained lawn.
- Homeowners' principal concern is beautification. All of that starts with soil and soil quality. Let the little critters do the work for us.
- Every BMP is not created equally; we can't allow all that to interfere with the things we *can* fix.

Priority Issue 2. Funding (tied with #1)

- How to encourage long-term maintenance to ensure continuing credit.
- There is a need to clarify funding: where is the steady stream funding – everyone needs to be paid for their time – local level citizens can possibly do the work higher level agencies are unable to do.
- Funding is slim.
- Incentivize the BMP program, non-profits doing work, homeowners doing work.
- We need to stop soaking each other for money. Maybe we need to stop doing things at the lower level so money can be available at the higher levels. If you fix at the top, those benefits will create opportunities down the chain. Believe in our institutions again.

Priority Issue 3. Clear Roles for Partners

- How do we establish clear roles for different parties, educated citizens.
- We need to define clear roles between governmental organizations, albeit state or local, and the volunteer educated citizenry (such as master watershed stewards). How does everyone know their role (lack of clarity currently)?
- How can we get these onsite projects done? We need to have some form of clearinghouse that would house all the BMPs for each geographical area, what to stay away from. We need an entity to aggregate all this information.
- Bringing those on the frontline to the front row is important. All the various levels of agencies have a lot of like-minded ideas. We can't allow the regulations get in the way.

- We need to have a BMP clearinghouse – DCR & Virginia Tech website – which could be improved and expanded. There is a process in the pipeline to get real data, so that BMPs can be verified and then promoted to public; new practices can be brought to market through program to verify the efficiency of each product.
- An opportunity can be to have some clarity around the various roles of the different levels of government – how every level feeds into one another to achieve the same goal. Some organizing of what each group is doing is needed so that all groups can help one another. Instead of an organization saying they have (x) problem and not being able to find a solution themselves, using other similar organizations to help solve these issues would free up the whole system.

Priority Issue 4. Social Marketing

- Funding is not going to grow on trees; need to focus on social marketing to catalyze change.
- The hardship with MS4 communities as well as most other communities is to tackle the 900-pound gorilla of addressing retrofitting of already developed land. How do local governments regulate property owners without compromising property rights?
- Trying to simplify everything is key. Most operate with the idea of less money and more people know how. Social marketing offers an exciting tool.
- We aren't going to get more money or resources. Social marketing is worth the investment.

Priority Issue 5. Local Authority (tied for #5)

- Do local governments have authority to require retrofits.
- In Dillon Rule states, such as Virginia, do local governments have any authority to impose new restrictions on property owners? How do these governments entice property owners to implement these changes? Where you have constrained real estate issues you will have a constrained ability of local governments to act.
- TMDL is a specific mandate, not a regional regulation. Therefore localities do not work together because of the way things are set up. Some of the implementation strategies the state is using do not foster collaboration amongst localities.
- The regulatory process is not in line with the implementation of best management practices – VDOT right of ways can be an opportunity but if permit process slows process and burdens the initiator too much than can act as a deterrent. Permit process is currently seen as a nightmare which hampers any movement on this issue.

Priority Issue 6. Educating Homeowners (tied for #5)

- Helping HOA's/neighborhoods really understand what they need to do.
- Doing neighborhood assessments and reaching out to homeowners. Interested homeowners agree, and funds from the local government are provided to install stormwater best management practices. Obstacles are getting them to understand what the plants are and what they will have to do. We have developed a spreadsheet with plant pictures, what the plants do, seasonality, etc. There are lots of concerns over what it means to sign on to a maintenance agreement or easements.
- It's important to have neighbors who are conduits to direct others to resources, that are on perhaps a neighborhood list-serve, and can promote and explain these strategies and implementation to the rest of the neighborhoods. Having people they know and trust creates enthusiasm which from experience creates a night and day difference.

Priority Issue 7. Out of Sync Regulations

- Regulations are not aligned, costly, and a deterrent.

Priority Issue 8. Information Sharing (tied for #8)

- Learning from pilots and models to help design/ plan watershed-wide efforts.
- How do you solve the question of getting these regulatory BMPs done? There are a lot of different BMPs. If we had a clearing house of BMPs and models that work best for each type of area. Is it better to have an inspection program? We need an entity to get this information together and out there.

Priority Issue 9. Simplify! (tied for #8)

- Need to simplify, simplify - budgets, work, everything is too difficult, complex.

Priority Issue 10. Educating Community (tied for #10)

- Helping communities know what's needed: what's regulated, what's voluntary.
- All the regulatory changes involved with the Chesapeake Bay TMDL create a great implementation challenge for the State. We do not have staff resources or time to reach out to citizens groups, because we're so busy getting info out to localities. This one of the greatest challenges that I'd like to articulate.

Priority Issue 11. Integrate Biosystems (tied for #10)

- How to incorporate biological processes into regulatory systems better than done now.
- We are looking for ways to implement biological systems into stormwater regulations.
- We lack an understanding of the biological systems themselves. Unrecognized is the true power of these systems in regulations. The biophilic aspect should be factored into engineering (time, scale, location).
- All of the engineering practices have a place but we need to start thinking about the simpler things which are enticing to homeowners. Homeowners principle concern is beautification.

Priority Issue 12. Maintenance Costs (tied for #10)

- Local governments may wish to assume cost of maintenance. This would be a helpful idea.

Priority Issue 13. Identify Effective Strategies (tied for #13)

- Need a list of most effective strategies for different roles (state, local, NGOs).

Priority Issue 14. State Role in Partnership (tied for #13)

- The State is not leveraging availability of partnerships at local level.

Priority Issue 15. Identify/Promote Simple Acts (tied for #13)

- Need to identify simple things (e.g. improving soil quality) which homeowners can do easily.

Priority Issue 16. Clarify State-Local Roles (tied for #13)

- Clarity about various roles and responsibility (state, local).

Priority Issue 17. Credit System Non-Structural BMPs (tied for #13)

- Would be helpful to establish a credit system for non-structural BMPs.
- Want to explore providing credit for volunteer system and practices and getting credit for getting more information.

Priority Issue 18. Share Resources (tied for #18)

- Different groups would be more effective if shared resources, stopped chasing our tails for money.

Priority Issue 19. BMP Information Clearinghouse (tied for #18)

- Clearinghouse of BMPs that have been tried, what works/doesn't at what kinds of sites, etc.
- How do you solve the question of getting these regulatory BMPs done? There are a lot of different BMPs. We need a clearing house of BMPs and models that work best for each type of area.

Priority Issue 20. Availability of Sites (tied for #20)

- No properties or sites are readily available to implement these retrofits.

Priority Issue 21. User-Friendly Monitoring (tied for #20)

- Need for user-friendly ways to interact, inform, help people monitor.

Priority Issue 22. Cost-Effective Accounting (tied for #20)

- Need to find most cost-effective ways to verify and bean count appropriately.

Priority Issue 23. Assisting Homeowners (tied for #20)

- Legal and technical requirements are difficult for homeowners.

Priority Issue 24. Neighborhood Liaisons (tied for #20)

- Identifying neighborhood leaders/ catalysts for helping others is huge opportunity.

Priority Issue 25. Use Right-Of-Ways (tied for #20)

- Opportunities in right-of-ways.
- The regulatory and permitting practices are not really in line.

Priority Issue 26. Expand Virginia Tech Clearinghouse (tied for #20)

- A clearinghouse does exist, but it is not well known or connected.

Priority Issue 27. Citizen Technical Skills

- Citizens don't have technical ability to know right plants and how to maintain.

Priority Issue 28. Sharing Technologies

- Need staff to get technology out to citizen/advocacy groups.

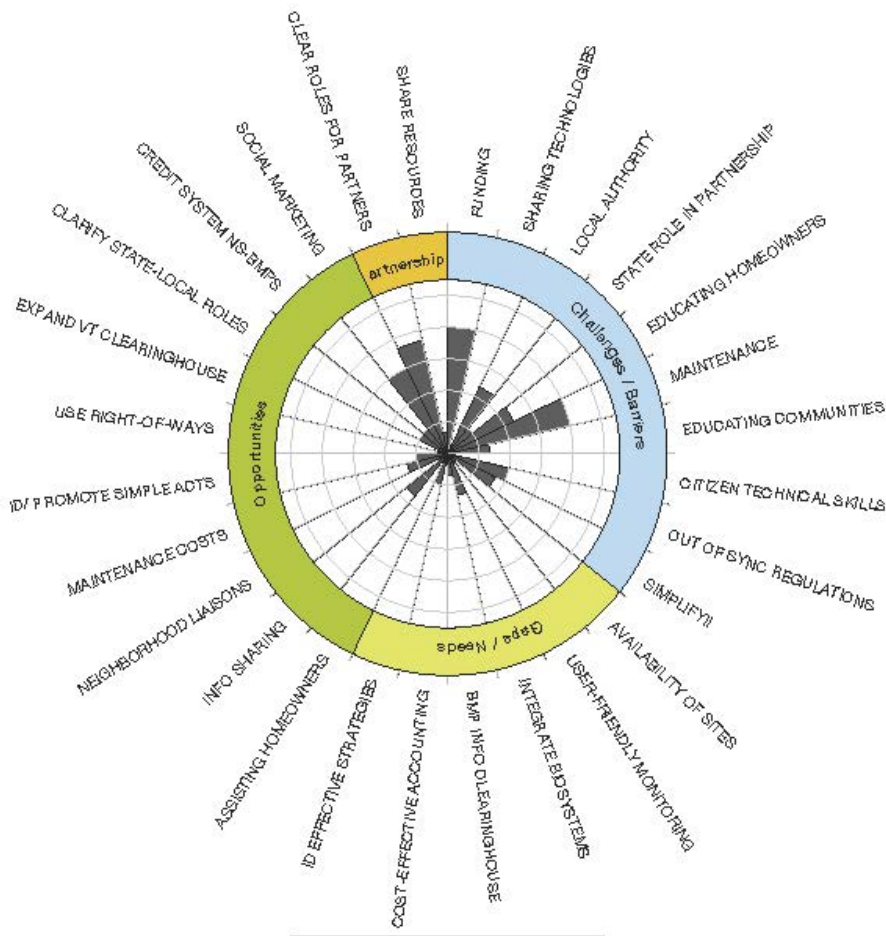


Figure 1: Poll results for the Most Important issues for Circle 1. Each ring of the circle represents three votes. Each person cast three votes.

Maintenance	12	
Funding	12	
Clear roles for partners	11	
Social marketing	9	
Local authority	7	
Educating homeowners	7	
Out of sync regulations	6	
Simplify!!	5	
Info Sharing	5	
Educating communities	4	
Integrate biosystems	4	
Maintenance costs	4	
ID/ Promote Simple acts	3	
ID effective strategies	3	
Clarify State-Local roles	3	
Credit system NS-BMPs	3	
State role in partnership	3	
Share resources	2	
BMP Info Clearinghouse	2	
User-friendly monitoring	1	
Availability of sites	1	
Neighborhood liaisons	1	
Cost-effective accounting	1	
Expand VT clearinghouse	1	
Assisting homeowners	1	
Use Right-of-Ways	1	
Sharing technologies		
Citizen technical skills		

Challenges / Barriers Gaps / Needs Opportunities Partnerships Other

Circle 2: The Education, Training and Outreach Conversation

The second group included participants who self-identified with education, training and outreach functions. The following are this circle's issues, as prioritized by those who participated. The bullets represent individual participant comments during this conversation.

Priority Issue 1. Environmental Literacy in Schools

- A way to reach more people is to push for environmental literacy in our schools; this allows parents to be educated through the children bringing this curriculum home with them.
- Need to get kids more connected with stormwater.
- UVA's Learning Barge (a floating classroom) and Paradise Creek Natural Park both provide educational opportunities.
- There will be value in education years down the line.

Priority Issue 2. Compelling Messaging

- The past ingrained behavior is difficult to change, such as lawns are good, vegetative areas are bad, regulations are expensive. Need to create best education practices, such as plants are good, natural areas are desired, which teaches that this issue is important.
- Why should private property do anything different? How do we go about convincing folks that plants are good, natural areas are beautiful?
- Celebrating successes is important. Making people proud is important. Too focused on the end goal but we are not recognizing the successes in the meantime.
- Best education practices need to be established, localities have a reluctance to do this type of outreach because outcomes are hard to gauge; may collaborate with non-profits to do that.
- There is a need to expand on the initiatives that already exist not to reinvent the wheel.
- Health based messages can be a powerful way to reach people. Could be a missed opportunity and can catch people's attention.

Priority Issue 3. How to Expand the Choir? (tied for #3)

- People involved seem to be the educated, affluent, retired, i.e., the people who have time to participate (easiest to reach). Need to find ways to reach everyone else so that there is a common level of knowledge and participation.
- We need to make volunteering easy and on the schedules of those people who want to participate

Priority Issue 4. Qualified Contractors (tied for #3)

- A way to change what people are doing is to change the commercial culture that drives the consumer habits.
- Need to reach industries and land management, if they change the landscape around us, more people will be apt to change.
- People will want to be included in movements and be like their neighbors; getting examples of these best management practices in clear view of the public through landscape architects and contractors using them will help the promotion.
- We have a problem finding qualified educated contractors that can actually do the implementation of the work for a BMP.

Priority Issue 5. Engaging Industry business (tied for #5)

- We need economic incentives to engage private industry (e.g. turfgrass) and businesses.

Priority Issue 6. Fund Social Marketing (tied for #5)

- People respond to people they know and in their community already. The more personalized the training and interaction outreach, the more receptive they are, but that requires a lot of resources and labor (labor-intensive) and it is hard to find funding for that kind of work.
- How do we describe the TMDL and have a shared language shaping the definition in a way that is useful for organizations and inspires action amongst community members.

- We want to see social marketing campaigns established by Federal and State Authorities that can be modified by on-the-ground local groups.

Priority Issue 7. Targeted Messaging (tied for #5)

- Need to educate yourself constantly through various mechanisms in place; VIMS has a lot of workshops.
- The general public needs to be educated on new things coming out. We need to be able to present statistics to homeowners to really drive home the effectiveness of best management practices. Then they are more willing to work with you.
- Professionals need to be part of that education and outreach and establish a consistent message. If you want to convince someone to do something, you need to get across how it will benefit them.

Priority Issue 8. Leadership Needed

- Landscape and building fields need to act as leaders.
- We need to change the commercial culture.

Priority Issue 9. Engaging Youth (tied for #9)

- There will be value in education years down the line.
- We need to push for environmental literacy so 4th graders educate parents and parents aren't scared when someone approaches them about these practices. Need to hit the schools and hit the schools hard in teaching students what BMPs are.

Priority Issue 10. Scarce Resources (tied for #9)

- Non-profits can do the work of educating the public for a locality who might not have the resources to do so themselves. Tapping into this expertise is much cheaper and also taps into increased credibility that non-profits may have.

Priority Issue 11. Best Educational Practices

- There is a difference between educating and convincing; need to just disseminate the information and chip away at the ideas the population currently has.
- There will always be some of the population that will not want to listen, which should be understood, and we should not get hung up on this population.

Priority Issue 12. Health-based Messaging (tied for #12)

- Health is a critical catalyst for change.

Priority Issue 13. Personalize Approaches (tied for #12)

- People respond to people they know; the more personalized, the more effective.
- Difference between educating and convincing. Some people just don't want to get it, which is terribly frustrating. Want people to actively participate.

Priority Issue 14. Need Metrics to Show Change (tied for #12)

- Other fields can show their results; we need to find ways that outreach creates change.

Priority Issue 15. Government Skill Building

- Government representative need training for better communication-with-public skills.

Priority Issue 16. Celebrate Successes

- Knowing what works helps others become successful.
- Celebrating successes is just as important as everything else. Making people proud is important. We are remaining too focused on the end goal and by doing so we aren't recognizing the successes in the meantime.

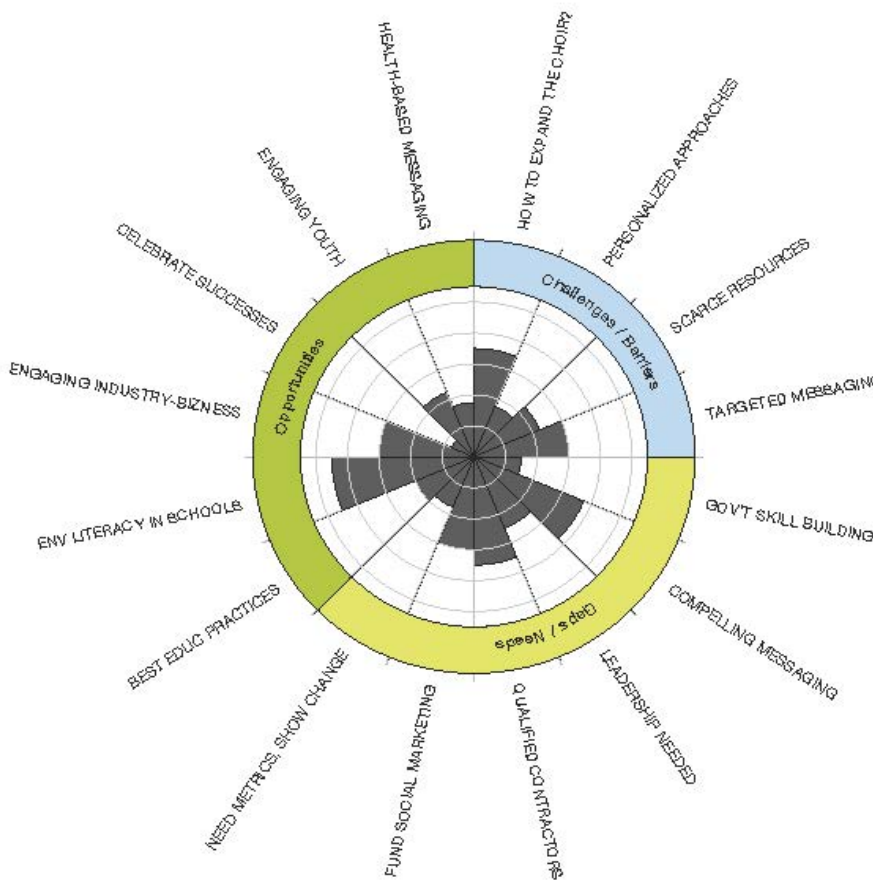


Figure 2: Poll results for the Most Important issues for Circle 2. Each ring of the circle represents four votes. Each person cast three votes.

Challenges / Barriers Gaps / Needs Opportunities Partnerships Other

Incentives to homeowners	11	
Maintenance of facilities	11	
Educate landscape commun	11	
Maintenance-free design	9	
Keep it Simple!	9	
Connect w. Landscapers!	8	
Educate/empower homeowner	8	
Science-based practices	8	
Scalability	8	
Funding for monitoring	7	
New Normal: Self-funding	7	
Accountability/enforcemnt	5	
ID simple practices	5	
Feasibility study	5	
Use Models (Ag BMPs+NC)	3	
Mini-grants	2	
Use existing resources	1	

Circle 3: The Installation, Design and Maintenance Functions Conversation

The third group included participants who self-identified with installation, design and maintenance functions. The following are the circle's issues, as prioritized by those who participated. The bullets represent individual participant comments during this conversation.

Priority Issue 1. Maintenance of Facilities (tied for #1)

- The challenge for homeowners is to invest in something that will require maintenance.
- The overflow location of the small-scale projects needs to be taken into consideration so that additional problems are not created.

Priority Issue 2. Educate Landscape Community (tied for #1)

- The challenge is to connect with the landscape and volunteer community so post-construction is not ruined.
- There is a lot of information on rain gardens and these types of practices. I want to commend the Virginia DCR and Virginia Tech on their clearinghouse website and stormwater design manual. If you read it from page to page, it is a great tool. Everything you need for design and maintenance is right there.
- Most clients are interested in practices when they have a better understanding of them and there is money for them. Make it simple: don't use acronyms, let them see examples. People are interested in what benefits them. Make it understandable and fun.

Priority Issue 3. Incentives to Homeowners (tied for #1)

- Need a way for counties, with SWCDs, to create incentives for homeowners.
- How a system is designed and the initial education that is given can have a huge difference.
- One opportunity for the implementation of best management practices is cost-share programs; North Carolina has a very successful cost-share program.
- Need to know if the end of the day result is beautification and minimal maintenance. Knowing the end goal, you can make it simple, save them money.
- The maintenance costs and time commitment can be a hindrance.
- There is a lot of eagerness for private landowners to get involved, usually interested if there is cost-share funding, funding, or credits associated with the practices.

Priority Issue 4. Keep It Simple (tied for #4)

- Make the whole process as simple as possible; at the single lot level focus on one or two projects that are known to be effective (ex. soil amendment). Projects must be cost effective and easily understood by the public.
- Building successful projects onto one another in order to build awareness and trust in the community is important.
- Stormwater is not of interest to the average person; normal reasons to install stormwater projects are to save money or for the beautification of property.
- Cannot engage landowner with TMDL type acronyms, need to use more of a 5th grade level of jargon and always keep in mind what the goals of the homeowners are from the outset.
- Most clients if interested in topic of stormwater are easily empowered through education that expands their horizons on what they can do on their property. Keeping things simple will let people feel as if they have the knowhow and power to implement these projects.
- Make it fun.
- Some of the regulations associated with the designs are intimidating. It would be helpful if there were a light DCR best management practices clearinghouse that was less technical and easier to understand for everyday people.
- Most clients are interested in practices when they have a better understanding of them and there is money for them. Make it simple: don't use acronyms, let them see examples. People are interested in what benefits them. Make it understandable and fun.

Priority Issue 5. Maintenance Free Design (tied for #4)

- The maintenance considerations of stormwater installations are a top priority because they can be very costly. What we need to look for is a changed approach to the design guidelines. Homeowners should have a maintenance free, natural system.

Priority Issue 6. Connect with Landscapers! (tied for #6)

- There is a missed opportunity if Landscapers aren't included. We need to connect with green landscapers that are certified, skilled, and dedicated, because they are the "middle man". Want to build support for this in the private sector away from grant funding and the public sector. Private homeowners need to come to landscapers; the base is going to come out of private citizens. This would be a lot more sustainable in the long-run.

Priority Issue 7. Educate/Empower Homeowners (tied for #6)

- We need to educate homeowners about GOOD and helpful debris and lawn maintenance.

Priority Issue 8. Scalability (tied for #6)

- Need to make sure BMPs are effective for small lots as well.
- Need to make sure the overflow of water (water quantity) does not negatively influence the water quality.

Priority Issue 9. Science-based Practices (tied for #6)

- We need to simplify while not compromising the installation integrity. This must be science based.

Priority Issue 10. Funding for Monitoring (tied for #10)

- There is a need for funding in order to monitor the effectiveness of existing BMPs.

Priority Issue 11. New Normal: Self-Funding (tied for #10)

- We need to find a way to make stormwater mitigation more self-funded eventually. We can rely on government funding forever.
- Want to build support for this in the private sector away from grant funding and the public sector.

Priority Issue 12. Accountability/Enforcement (tied for #12)

- There should be a system for enforcement. This would need political will for funding and support.
- Most homeowners think stormwater just goes away, anyone with a working knowledge of how the systems actually work have a duty to convince and educate the population that these systems do not work this way.
- Must educate population to the fact that the more stuff that enters the system the more costs are associated with maintenance and capacity. Must see yourself as a whistleblower on this issue to the public at large.

Priority Issue 13. Feasibility Study (tied for #12)

- Need for upfront analysis to make sure the installation will be effective.

Priority Issue 14. Identify Simple Practices (tied for #12)

- We need to identify a few simple practices (e.g. soil amendment practice).
- On lot stuff should be simple.

Priority Issue 15. Use Models

- Implementing agricultural BMPs takes times.
- These models should follow lessons learned through practice.
- North Carolina Urban BMPs are an excellent model.

Priority Issue 16. Mini-Grants

- SWCD is an important partner who has mini-grant funding. We need increased State funding to do more.

Priority Issue 17. Use Existing Resources

- The Virginia Tech clearing house is a great tool and resource.

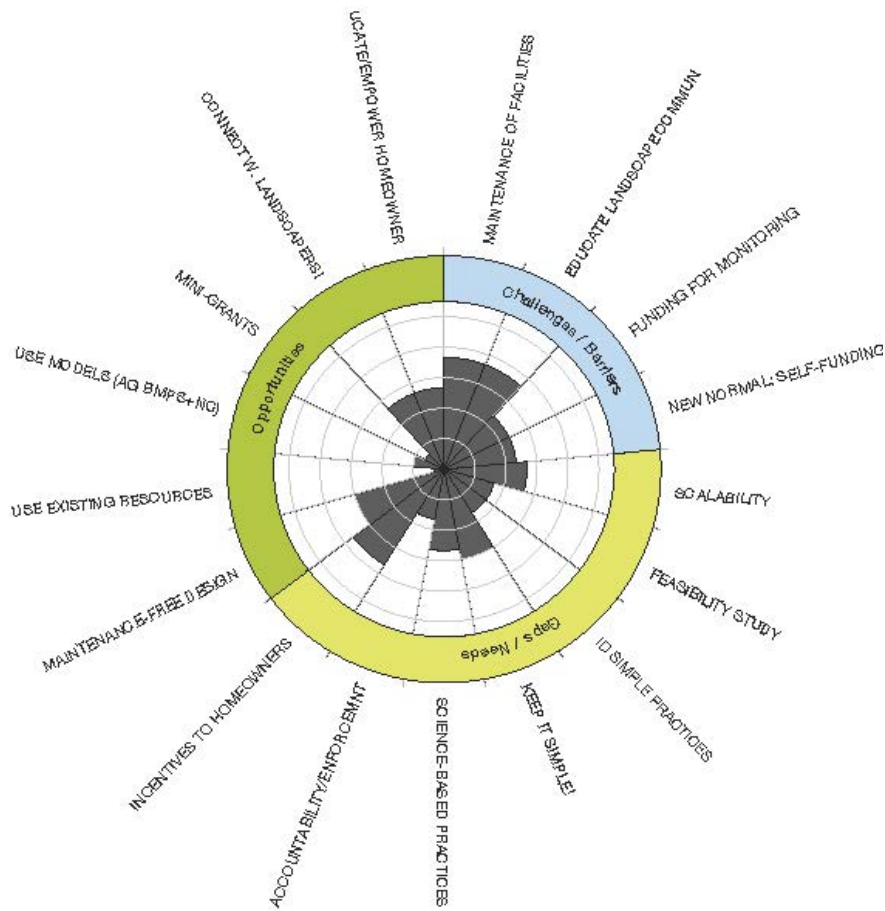


Figure 3: Poll results for the Most Important issues for Circle 3. Each ring of the circle represents three votes. Each person cast three votes.

Issue	Count	Category
Env Literacy in Schools	18	Opportunities
Compelling messaging	15	Gaps / Needs
How to expand the choir?	14	Challenges / Barriers
Qualified contractors	14	Gaps / Needs
Fund social marketing	12	Gaps / Needs
Targeted messaging	12	Challenges / Barriers
Engaging industry-bizness	12	Opportunities
Leadership needed	10	Gaps / Needs
Engaging youth	9	Opportunities
Scarce resources	9	Challenges / Barriers
Best Educ Practices	8	Opportunities
Health-based messaging	7	Opportunities
Need metrics, Show Change	7	Gaps / Needs
Personalized approaches	7	Challenges / Barriers
Gov't skill building	6	Gaps / Needs
Celebrate successes	3	Opportunities

Outcomes

In the polling following each circle conversation, the number of participants identifying themselves within each sector was relatively comparable (50 voters in Circle 1, 57 voters in circle 2, and 40 voters in the 3rd circle conversation). Following the three circle conversations, the next poll was to be a survey of the *overall* “most important issues and topics.” The idea was to compile priority issues originating from all three circle groups and ask all Summit participants to vote on the “overall most important issues” in stormwater work.

Unfortunately, the UVa internet server, that supported the poll, crashed during this exercise. However, it is recommended in future work with this process and polling tool that an all-encompassing poll be included at the end of group conversations as a means to see which issues and concerns are most important overall, specifically to determine if sentiments change with increased understanding of challenges faced by others.

Analysis of the three separate circle conversations and their polling results showed that all three sectors (Regulatory, Funding, and Accountability; Education, Training, and Outreach; Installation, Design, and Maintenance) demonstrated a desire to educate and empower homeowners. Educating homeowners was in the top five issues for Circle 1, the primary discussion subject of Circle 2, and among the top six issues in Circle 3. No other issue was explicitly voiced by all three sectors to this degree.

Additional topics that garnered significant discussion among multiple groups were Maintenance, Social Marketing, and Simplicity. Concerns surrounding Maintenance were ranked as the number one priority in Circle 1, and the first and fourth ranked priority issue in Circle 3. Maintenance issues in both conversations circulated around long-term effectiveness and, in some part, the associated funding. Social Marketing was also mentioned specifically in two circle conversations, both Circle 1 and Circle 2. Having a compelling messaging system that requires minimal time and effort was seen as a highly lucrative opportunity for both sectors. The outcomes of successful social marketing practices, however, would no doubt trickle through the community to directly include persons within the installation, design and maintenance sectors, i.e. Circle 3. The last issue that rose to the top during the circle conversations was the subject and desire of Simplicity. In Circle 1, topics surrounding Simplicity were divided by two priority issues “Simplify!” and “Identify/Promote Simple Acts.” This inevitably split the vote; however, if votes from both categories had been combined, the issue of Simplicity would have been among the top five priority issues for Circle 1. Simplicity, within Circle 2, was discussed more as an overarching theme throughout the entire conversation,

rather than an explicitly singular topic. In the final circle conversation, Circle 3, topics of Simplicity were again split amongst two priority issues, “Keep it Simple” and “Identify Simple Practices”. Had these two issues been combined into a single issue, Simplicity would have been the number one priority issue of Circle 3.

One issue that remained under the radar within the circle conversations, but was seen more powerfully in Open Space groups, was the idea of a central resource hub, or clearing house. Each of the circle conversations mentioned using or creating this type of resource; however, participant votes following the circle conversations did not demonstrate this issue to be a top priority within any of the sectors.

Appendix G : Open Space & Outcomes

Open Space

Open Space is a unique tool for strategic planning that is based on the premise that people will take responsibility to pursue and follow-through on what they are passionate about. Open Space is creative, dynamic and high energy. It ensures that all of the issues most important to the group are heard and that each issue will be addressed by the participants most passionate about moving it forward. **For those who would like to learn more about Open Space, visit:**

<http://www.openspaceworld.org/cgi/wiki.cgi?AboutOpenSpace>

Summit participants proposed and led, with the help of on-site facilitators, 21 different open space discussion topics that occurred over the course of 2-¼ hours. Priority topics were self-proposed by the participants; the only criteria for proposing a topic was (1) the nominator-participant must lead the discussion and (2) the topic should address real water quality and stormwater issues, barriers, and opportunities. The range of topics was very broad, including comprehensive planning, roles and responsibilities among water quality and stormwater actors; social marketing; best ways to reduce practice, planning, and implementation-related risks, uncertainties and costs; inclusion of minor groups; and sea level rise.

Each group was asked to generate a report at the conclusion of its discussion. Using a preformatted flip chart form, the group reports covered: the discussion leader contact; the 7 Strategic Paths that most related to their discussion; the discussion outcomes and conclusions; and proposed next steps. At the conclusion of the Open Space discussions, group leaders posted their reports in the central meeting room where participants had an opportunity to review all the outcomes.

After lunch, each participant was given six votes and they could place their votes however they felt appropriate. In this way, participants could place all six of their votes on a single topic if they felt that topic deserved that importance. Approximately one-third of the Summit participants were still present for this final vote on the discussion topics that most important for priority actions

Outcomes

The following group reports are arranged according to how many votes their topic received, in other words, how important Summit participants viewed the issue.

Open Space Discussion Group	Votes Received
1. (Group G1) - Integrating state and local water quality programs. Roles and responsibilities.	49
2. (Group A1)- How to promote comprehensive local stormwater planning	43
3. (Group F3)- Reaching the un-reached	37
4. (Group E1&2)- Roles and responsibilities of partners	33
5. (Group C2)- Educating decision-makers to connect environmental issues with funding	29
6. (Group H2)- Homeowner and practitioner network development	28
7. (Group A3)- Coordinating voluntary on-lot BMP implementation	26
8. (Group H3)- Maintenance	26
9. (Group G2)- Connecting contractors to projects and customers	22
10. (Group G3)- Keeping it simple – more small efforts on a large scale	22
11. (Group D1) - Building capacity to deliver Community-Based social marketing	19
12. (Group B1)- Developing a community of practice	18
13. (Group C3)- Using funding more efficiently and effectively	18
14. (Group H1)- Stream monitoring to document improvement	16
15. (Group B2)- How to collect and distribute best education practices	14
16. (Group D2) - Native plant marketing partnership	14
17. (Group F1)- Multi-cultural eco-literacy/action	13
18. (Group A2)- Promote citizen volunteers to do hot-spot and BMP site scouting	12
19. (Group E3)- What can citizen activists do?	11
20. (Group C1)- Alternative funding system(s)	10
21. (Group B3)- Sea-level rise	6

Group G1 – 49 Votes

How to integrate local/state water quality programs and engage volunteer organizations. Coordination of roles and responsibilities.

Leader Name : Joan Salvati & Kevin Byrnes

OUTCOMES / CONCLUSIONS :

1. Need local, regional, state, federal intra-agency collaborative workshop on mandated responsibilities and water quality improvement
 - a. Local and regional staff and elected leadership is critical
 - b. Must be relevant to local problems
2. Communicate successes of other local models (catalogue successes on website)
 - a. Give roundtables more direction
 - b. Identify clear goals for water quality
3. State: internal audit of roles and responsibilities – crosswalk between programs
4. Outsource/augment via non-profits for alignment on Total Maximum Daily Load, Chesapeake Bay Preservation Area, No Discharge Zones, Municipal Separate Storm Sewer System Permits
5. How to Integrate? Inter-department/agency forum – Clean Water Task Force (What does/does not work? and Who is doing what?)
6. Consistency of integration process via roundtables? Need state leadership and direction on desired outcomes

1-2 NEXT STEPS:

1. Describe/ define model
2. Compare model to roundtable
3. Inventory what else is going on around state
4. Get leadership behind model
5. Take baby steps not one size fits all
6. Work with the Virginia Association of Counties/Virginia Municipal League
7. Use grant work plans to facilitate process

Supporting Material:

Local Inter-Department Collaboration

- Task force organized by sub-watersheds (II)
- Spawned new community based watershed action committee
- Needs leadership

Regional Level (Planning District Commission vs. Joint Environmental Roundtable)

- City and locals in Planning District Commission
- Leadership

State /Federal Water Quality Programs

- Virginia Stormwater Management Program
- Constant general permitting
- Total Maximum Daily Load
- Municipal Separate Storm Sewer System Permits (MS4)
- Erosion and Sediment Control (E&S)
- Tidal Wetlands
- Sections 303(d)/305(d) in the Clean Water Act
- No Discharge Zones
- Spill Prevention, Control and Countermeasure (SPCC)
- Floodplains
- Virginia Water Protection Permits for wetlands
- Chesapeake Bay Preservation Area (CBPA)
- Coastal Zone
- Section 404 in the Clean Water Act
- Stormwater Rule Making
- Clean Water Act
- Bay Program

Major Players

- Federal agencies
- Interstate communities
- State agencies
- Regional
- Local government
- Homeowner associations
- Watchdog non-government organizations
- Academia
- Professional/ trade associations

Group A1 – 43 Votes

How to Promote More Comprehensive Local Stormwater Management Planning

Leader Name : Scott Crafton and Cecilia Lane

OUTCOMES / CONCLUSIONS :

1. Better coordination among departments, bring all stakeholders to the table, aggregate existing data (including nonprofits)
2. Watershed based planning to engage neighboring communities
3. Better integration in implementation at the local level

1-2 NEXT STEPS:

1. Integrates those recommendations into Virginia Stormwater Handbook by summer 2013
2. Create “Watershed Task Forces” to accomplish these goals

Will assist with this action:

- Scott Crafton
- Justin Shafer
- Greta Hawkins

Supporting Material:

How to promote more comprehensive local stormwater management planning?

- More coordination among local engineering and planning departments, etc.
- Accumulation of all available data (local, state, citizen groups)
- Take a watershed approach so neighboring localities can work together
- Identification of sites that can be considered for removal of nutrients/sediment
- Local programs needed to simplify process to encourage homeowners to install best management practices such as rain gardens
- Engage the nonprofit community
- Take comprehensive approach to look at all pollutants and focus on hot spots, environmentally sensitive areas
- Integrated purposes at the local level related to stormwater, such as wetlands, open space

Next Steps

- Integrating these outcomes into the Stormwater Handbook as guidance
- Set up watershed task forces to bring together local planning, engineering, and other departments as well as community groups

Group F3 – 37 Votes

Reaching the Un-reached

Leader Name : Dot Field

OUTCOMES / CONCLUSIONS :

1. Identify audiences to connect with diverse groups
2. Identify messages/branding that resonates/community strategy
3. Identify local champion (someone with established trust)

1-2 NEXT STEPS:

1. Convene local groups (include all stakeholders) using collective impact method
2. Conduct needs assessment to drill down to next level, compile and map data

Supporting Material:

Reaching the Un-reached

- Go where they already are (Home Depot, Social Services Offices, local gardener, etc.)
- Identify barriers (ex: can't make it to training)
- Identify group/audience
- What is the message?
 - May need multiple for different audiences
- Involve people that audience already trusts (meal on wheels sheriff)
- Utilize Hispanic liaison or business group (ex: James River State Park)
- Churches install practices on church property (ex: Adopt a Road)
- Identify role-models in neighborhood/spokesman
- Engage youth groups, Boy and Girl Scouts, Envir-thon
- Signage in public areas (limit texts, simple, universal images)
- Cleanup campaign/incentives (ex: "Clean up the dirty runs of ditches")
- Approach property managers to be leaders or drivers
 - Especially in low income areas
- Consistent and creative branding
 - (Light switch example) "Provocative", positive, careful of stigmatism/anti-message impact
- How do we engage the Chamber of Commerce?
 - Cindy Miracle
 - Environmental Sector
 - Amy is currently working on this
- Include economic message (supplement environmental message)
- Quality of life
- Local celebrities as spokesperson
- Service learning programs like Virginia Commonwealth University and others (George Mason, University of Richmond)
- Give incentives to landscape company to promote (hired by management company)
- Engage Local-State-National Parks for education programs, display demonstration sites
- Utilize bottom-up approach
 - Engage diverse groups from the start

- “Meaningful watershed experience and school-based outreach
- “Make more meaningful”
- Leverage/expand to neighborhoods, etc.
- Messaging via local radio station

Group E 1&2 - 33 Votes

Roles and Responsibilities of Various Partners

Leader Name : Karen Forget and Laura Grape

OUTCOMES / CONCLUSIONS :

1. Clearinghouse and directory
2. Consistent best management practices tracking system
3. Develop consistent certification program

1-2 NEXT STEPS:

1. Group/committee to fund/develop/implement/manage clearinghouse and directory, connected with universities.
2. Survey and examine the existing best management practice tracking system.

Will assist with this action:

- Greta Hawkins
- Karen Forget

Supporting Material:

Partners

- Federal government (Environmental Protection Agency)
- State agencies (Department of Conservation and Recreation, Department of Environmental Quality, Department of Game and Inland Fisheries, etc...)
- Planning District Commissions
- Trade Association
- Independent private contractors
- Universities and schools
- Foundations -> private
- Soil and Water Conservation Districts
- Virginia Cooperative Extension
- Non-profits
- Local governments
- Utilities

Federal Agencies

- Certification program development

State

- E-Permitting (Department of Conservation and Recreation)

Local Governments

- Inspections of best management practice facilities

Universities/Schools

- Development of online clearinghouse and directory placed on Chesapeake Network

Non-profits

- Host regular networking/lessons-learned opportunities

Funders

- Share common efforts to avoid duplication

Roles

- Private Engineers working with local government
- Local government utility department
- Local/Statewide non-profit with outreach to faith communities
- Cooperative Extension agent or horticulture education focus
- Environmental Protection Agency/ Urban Waters Program
- Regional Non-profit
- Soil and Water Conservation District / State
- Local non-profit

Next Steps

- Group/committee to develop/fund/implement/manage clearinghouse and directory, connected with universities
- Survey and examine the existing tracking systems

Group C2 - 29 Votes

Educating Decision-Makers to Connect Environmental Issues with Funding

Leader Name : Margaret Smigo and Kelly West

OUTCOMES / CONCLUSIONS :

1. Need to invite decision makers and engage them in project so they are a part of it
2. Until environmental groups come together to stop fighting and competition, they won't be effective
3. Need to create effective arguments to show quantitative benefits and impacts

1-2 NEXT STEPS:

1. Giving credit and recognition to decision makers and holding them accountable
2. "March on Richmond"- legislative day to elect better legislators and create local coalitions

Supporting Materials:

- Need to make education a community-supported issue so decision makers must support
 - Are decision makers even getting the correct or all of the information from constituents?
- Local level is also a major challenge
 - The squeaky wheel gets the attention, while real needs left unmet
- Advocacy groups need to become active at the local level
 - Effective “power mapping”- understand what decision makers care about and how they can gain leverage

How to Influence Decision Makers

- Invite them and engage them in project so they are part of it
 - At state level, influence is increased through partnerships with other organizations
 - Bring more awareness of issues and make it easy for decision makers to support
 - Take advantage of environmental legislation day?
 - Bring local groups into the partnerships to show breadth of support
 - Field Days and Trips are very effective; bring different groups together; build lasting partnerships
- Missed opportunity: Be more focused on giving credit and show link between actions and long-term benefits
 - Flip-side: negative reinforcement needs to be avoided
- Shouting can work- getting business to become vocal
- Need guidance for outreach
 - “Bingo,” branding, visibility
 - Is there an umbrella organization that can foster these partnerships, networks, and give guidance? E.g. Enviromatch.com
- Don’t ask for money for programs: Ask for money for specific actions and outcomes
 - Explain how can this support other issues
 - E.g. supporting sea level rise helps keep jobs here, etc.
- Need to create local-based coalitions with diversity of local groups- including utility companies
- Need larger pot of money to focus on stormwater projects
- Need National Rifle Association-like influence: Coming together for common cause
- Until environmental groups come together and stop fighting/competing, they won’t be effective
 - “March on Richmond”
- Also need “halo”: Clarity, transparency
- Legislators will hear cohesion, not clamor

Group H2 – 28 Votes

Develop A Resource Network of Practitioners and Homeowners

Leader Name : Fred Rose

OUTCOMES / CONCLUSIONS :

1. Regulatory based incentives (establish a credit for residential)
2. Economize practices, i.e. cheap rain barrels
3. Strive to create smaller based/neighborhood groups and celebrate them

1-2 NEXT STEPS:

1. Establish partnerships with vendors to economize practices and make improvements easy
2. Establish communication/network of summit attendees to keep actions moving and learn

Will assist with this action:

- Wyn Price

Supporting Material:

How to Duplicate Successful Neighborhoods

- Find a new champion in new neighborhoods
- Implement regulations around yard appearance/maintenance could have some impact
- Might runoff management in local codes make a difference in action?
- Integration of simple practices
- Should we work towards crediting these practices?
- If it is a serious enough issue does some kind of regulation kicker make an impact?

Resource Network of Practitioners and Homeowners

- As a locality you cannot recommend specific firms
- Homeowner not willing to spend a lot of money for design/implementation
- How to build a central repository
- Practitioners network
- Groups are: (1) willing homeowners who want to act (2) The rest – apathetic
 - Group 1 – Strategy developing sub watershed neighborhood based groups
 - Group 2 – the rest – biggest challenge?
- Financial incentives make the most sense
- If actions do count as a credit – the value of that credit can support the incentives
- Do the practitioners have to include the suppliers – need to be involved
- Functional landscaping
- Technical assistance providers for National Fish and Wildlife Foundation
- Large scale general feasibility that can be praised

Group A3 – 26 Votes

Better Coordinate Voluntary On-Lot Best Management Practice Implementation

Leader Name : Scott Crafton and Cecilia Lane

OUTCOMES / CONCLUSIONS :

1. Create a task force to play a leadership role and coordinate with non-governmental organizations and watershed groups
2. Development and dissemination of common tools for reporting, tracking, verification, implementation to local groups, and to provide training on tools
3. Identify and overcome homeowner association obstacles to best management practice implementation at the local level

1-2 NEXT STEPS:

1. Development of tools
2. Identification of groups and local government point person

Will assist with this action:

- Justin Shafer

Supporting Material:

- Task force needed to play leadership role, such as “watershed level,” planning district commission, etc.
- Make available common tools to community groups as well as educational opportunities
- Develop tracking system at the local level to track best management practices and provide information to local groups
- Overcoming obstacles to have best management practice implementation of homeowner association covenants; local governments need to address

Next Steps:

- Make available common tools for reporting, tracking, and aggregating
- Identify all of the organizations and volunteer groups

Group H3 – 26 Votes

Maintenance

Leader Name : Fred Rose

OUTCOMES / CONCLUSIONS :

1. Tech training on commercial and residential resources
2. Defining the agreement for maintenance
3. Partnerships for business/vendors

1-2 NEXT STEPS:

1. Build partnerships with vendors, practitioners, to do maintenance and make it affordable
2. Build regional training for local programs to understand best management practices and maintenance needs

Supporting Material:

- Developing a homeowner stewardship agreement
- Is the credit enough value to drive homeowner action for maintenance – enough to drive applications
- All tied to Municipal Separate Storm Sewer System (MS4) permits
- In the long run is it better/more valuable for locality to take ownership
- Engage business opportunity to maintain – making simple
- Master gardeners are a resource
- With the exception that more and more best management practices on the ground mean more maintenance and more responsibility – How to do it?
- Tech resources to do the maintenance – get locality staff to understand best management practices
- Richmond – one staff person handling credit application / did inventory
- Needing agreements to have access to fix residential best management practices in place
- Mapping resources
- Formal agreement with residential
- Is this similar to conservation easement? Serve as an example

Group G2 – 22 Votes

Connecting Contractors to Projects and Customers (training ideas)

Leader Name : Carol Heiser

OUTCOMES / CONCLUSIONS :

1. Need bay-wide standards/ accountability for qualified contractors to design/install/maintain practices that contribute to the health of the bay
2. Communication mechanism to connect “qualified” contractors with customers and vice versa

1-2 NEXT STEPS:

1. Engage non-government organizations to connect trained contractors to customers and trainings to contractors; consolidate, clearing house role
2. Coordinate approach to local governments to be aware of (1)educate procurement office, obtain buy-in (2) collaboratetion of local governments and non-government organizations on process

Will assist with this action:

- Carol Heiser – facilitate a meeting
- Scotty Dilsworth – spread word and inform stakeholders
- Corey Miles – NVRC
- Dot Field- native plant training

Supporting Material:

Stakeholders

- Contractors
- Alliance for the Chesapeake Bay
- James River Green Building Council
- Department of Environmental Quality
- Department of Conservation and Recreation
- Department of Game and Inland Fisheries
- Sensitive Security Information

Contractors

- Landscape Design/Install
- Construction/Installation
- Consultants/Planning/Engineering
- Maintenance Companies/Crews
- Any Landscape – homeowner, shopping center, park, municipality, church, etc.

Barriers

- Homeowners have to identify who they need/ what service they need
- Need time to research what contractor to use
- What are resources? Low versus High bid?
- How to identify quality work?
- Contractor may be generalist, but client needs a specialist – communicating service is vital

- Identifying services
- Will require an education process for contractors to buy into certification (it takes a lot of effort/ time to pre-qualify – may be some resistance)
- Need way to communicate to home owner which contractors have which training = qualifications
- Giving references = validation of quality of service
- Word of mouth

Tools (Methods for Communicating)

- Public utility bill (local government) – include an insert of contractor list
- Organizations locally
- Website? Directory for different regions of the state
- Virginia Society of Landscape Designers and other professional organizations could do more to list services
- Use “Angie’s List” model for contractor listings and specialty services, such as stream restoration, green roofs, etc.

Certifications

- Include a hands-on component
- Maybe manufacturer puts you through training before you use their product
- Multi-lingual/Spanish
- Need incentivize the process – make a way for contractors to “pledge” commitment
- Need “support” once certification is awarded
- Where to “warehouse” data? (organizations like the Alliance for the Chesapeake Bay or Chesapeake Conservation Landscaping Council)
- Homebuilders could be a resource
- James River Green Building Council
- Role of local governments – they will benefit from conservation practices and could assist with supporting services
- Need oversight and quality control of the training content and certification levels
- Inspections/Feedback – Maybe trained contractors could provide “checks and balances” by visiting sites to confirm practices were installed correctly
- Avoid overkill! Not necessarily regulation – focus on voluntary participation and support
- Allows contractors to demonstrate their experience and knowledge

Group G3 – 22 Votes

Keeping it simple – more small efforts on a large scale

<p>Leader Name : Greg Osband</p> <p>OUTCOMES / CONCLUSIONS :</p> <ol style="list-style-type: none"> 1. Keep projects simple. Do not over engineer; get projects on the ground! 2. Outreach/ education regardless of credits/reporting <p>1-2 NEXT STEPS:</p> <ol style="list-style-type: none"> 1. Link best management practice actions to market-able products solve language barriers 2. Determine if simple will be accepted by Environmental Protection Agency - what then, if not?

Supporting Material:

Keep It Simple!

- Plant native/local ecological type/trees/shrubs – simple, cheap greatest value
- Educations regarding maintenance
- Highlight successes
- Virginia Cooperative Extension/Virginia Department of Transportation publications regarding parking areas/coastal plains – use existing resources
- Permaculture
- Plant systems
- Soil improvements
- Buffers
- Small scale can yield collective large-scale impact. How to get the Environmental Protection Agency to recognize?
- How to ensure long-term maintenance of small, private best management practices?
- Trust?
- Tracking/ Reporting is cumbersome – permitting/processing/approvals
- Process needs to be less expensive

Group D1 – 19 Votes

Building Capacity to Deliver Community Based Social Marketing

Leader Name : Erin Ling

OUTCOMES / CONCLUSIONS :

1. Background research
2. Ask some questions of a target audience- try to learn about barriers
3. Chesapeake Network- Community-Based Social Marketing that the Chesapeake Bay Group is doing, share tools and lessons learned, possible mentoring network

1-2 NEXT STEPS:

1. John, Erin D set up network, announce on Chesapeake Bay Network Alliance
2. Nissa and Amanda will contact National Fish and Wildlife Foundation funded Planning District Commission and Department of Conservation and Recreation projects and ask for resources and tools

Will assist with this action:

- Lisa Hardy
- Rogard Ross
- Karen Forget
- Amanda Bassow

Supporting Material:**Audiences:** Contractors, city employees, homeowners, churches/institutions, businesses**What Do We Need?**

- Develop a unifying message or branding
 - Noticeable
 - Stormwater
 - Call to action
- Pool resources across different localities to hire people
- Statewide, each community needs to be better able to adapt
 - Riverwise Development materials
 - What will it take?
 - Identify message
 - Need large-scale buy-in
 - This will allow the message to be “localized”
- Barriers to Entry
 - Lower the barrier
 - Messages need to bridge multiple objectives (ex. wildlife, stormwater, beautify, etc.)
 - This will allow the messages to be reach and be used by differing audiences
- Reach transient population
- Apply model to each locality
 - Once people are “in,” they’re more likely to adopt other behaviors

Messages: “No Rain Down the Drain”

- What is it?
- What do we want people to think they need to do?
- Bay friendly home
- Virginia trees for Clean Water
- Stream “Star” or River Star
- Identify how it improves water quality on the local scale
- Water quality starts in your backyard
- Clean, healthy
- Turf to trees
- Model parts of agricultural best management practices approach
- Contact community leaders
 - Are they models?
- Make it ready-made
 - Is this sustainable?
 - Ownership?
- Build in “pay it forward” - get a rain garden, help with the next installation (ex. Neighbors)
- Possible media messaging?
- Focus on landscaped and business
- Share
- Prompts
- Norms
- Incentives
- Overcoming external barriers
- Communication
- Commitment
- Diffusion
- Community Based Social Marketing Strategies
- St. Mary’s Watershed Association

Group B1 -18 Votes**Developing a Community of Practice**

Leader Name : Carl Hershner

OUTCOMES / CONCLUSIONS :

1. There is utility and need to organize a community of practice (forum for discussion) as well as share technical resources
2. May not need to create a new site, can be housed at an existing site (i.e. Center for Watershed Protection)
3. Need for continued meetings among Summit participants to share new information. Keep everyone up to date

1-2 NEXT STEPS:

1. Contact the Center for Watershed Protection and Virginia Environmental Professionals' Organization (VEPO) to gauge interest in hosting our information
2. Ask Wetlands Watch if they are interested in hosting more Summits and CELEBRATE successes!

Will assist with this action:

- Sharon Connor to contact VEPO

Supporting Material:**SAGE concept**

- Website that identifies practitioners, designers, policy, etc.
- Eventually will help organize meetings for a COMMUNITY OF PRACTICE – Summit participants
- WHERE will this be housed?
- Link stakeholders

Other Groups trying to do this

- Richard Street, Rappahannock River Basin Commission
- Virginia Environmental Professionals' Organization (VEPO)- volunteers/grassroots effort
- Center for Watershed Protection
- Chesapeake Network
- Re-inventing the wheel? Overlap?
- Solution –all in one place? Or in many places?

Solutions

- Clearinghouse to lead you back to other sites – all networked together
 - Need for experts, funding
 - Just for best practices, will help people find technical advice A FIRST STEP
 - One stop for technical information for people to access at home
 - SIMPLE solutions– inexpensive
 - Technical experts
- Community more trusting of non-profits
- Need PHOTOS/GRAPHICS to show RESULTS
- Connecting communities

- Develop small sub-watershed action groups
 - Do-able
- How to reach non-believers?
- First step: provide information on all the groups at Summit
 - Keep them linked
- Conference on successful strategies instead?
- Wetlands Watch or Center for Watershed Protection to develop a website or forum?
- Clearinghouse has a list of practices, local ordinances
- DIFFICULT to design a good website
 - Pick an existing site to congregate
 - Alliance for the Chesapeake Bay site
- LINKEDIN group?
 - Limitations for state employees?
- American Rivers is a good resource example
- Do people end up at State websites?

Group C3 - 18 Votes

Using Our Funding More Efficiently and Effectively

Leader Name : Karen Forget and Laura Grape

OUTCOMES / CONCLUSIONS:

1. Partnering
2. Communication of proposed efforts and funding
3. Need better ways to measure effectiveness

1-2 NEXT STEPS:

1. Mechanism for sharing information more regularly

Will assist with this action:

- Amanda Bassow

Supporting Material:

Questions to be addressed

- Is there an agency or network that tries to coordinate all of these efforts?
- How do we know what other people are doing?
- How do we become more efficient and complement each other's efforts?

Solutions

- Decision tree
 - What should things cost?
- Sharing expertise
- Monitoring and Measuring results
- Establishing baselines to measure efficiency and effectiveness

- Model Natural Area Sourcebook from Department of Conservation and Recreation Division of Natural Heritage
- Partnering with universities for interns and providing education and experience
- Promote existing resources and services
- Developing an accounting system
- Funding for coordination and partnerships to take place and be made available
- Get large pots of money
- Regional implementation
- Effective partnerships that don't lose individual goals

Opportunities

- Personal brokering to establish the partnerships
- Define needs and reach out to Soil and Water Conservation Districts to fill in the gaps
- Make information about awarded grants available and use as a foundation for future projects
- Encourage or consider bulk purchases of services, use economy of scale, National Fish and Wildlife Foundation, etc.
- Define roles in regard to working toward a common goal

Group H1 – 16 Votes

Stream monitoring to document improvement

Leader Name : Bill Shanabruach

OUTCOMES / CONCLUSIONS :

1. Need to establish protocols and guidance to meet multiple objectives (Local level and Limited resources)
2. Need to establish baseline data to assess specific project related change

1-2 NEXT STEPS:

1. Integration of levels/network
2. Establish leaders for planning/monitoring

Will assist with this action:

- Warren Smigo
- Anna Mathis
- Gene Yagow
- David Ruble

Supporting Material:

Monitoring

- Performance monitoring of individual best management practices
- In stream monitoring
- How are baselines for streams established?

- Establish parameters and collect baseline prior to full project roll out
- Surrogate – change in flow regime
- Total Maximum Daily Load – not supporting or enhancing local program
- Resources to effectively monitor an issue – local programs relying on volunteers
- Is technology the answer? – City of Richmond tried hydrolab and it did not end up as efficient as expected
- Monitoring structures – less frequency versus more frequent
- Visual stream survey – storm water volume – stream transects
- Where to monitor – prior project modeling
- How resource intensive is this?
- How soon to expect change?
- Stay away from performance monitoring – rely on established studies
- State regulations require best management practices inspection and monitoring

Virginia Water Monitoring Council (establishing protocols)

- Establishing what objectives to meet
- Long term plans that spreads resources
- Who manages?
- Cannot just focus on chemical parameters, have to include physical as well
- Interim metrics per best management practice
- How to deal with change in the watershed

Group B2 – 14 Votes

How to Collect and Distribute Best Education Practices

Leader Name : Rogard Ross

OUTCOMES / CONCLUSIONS :

1. Can piggyback on existing website (see notes for Group) to share outreach stories and lessons learned (i.e. Wetlands Watch)
2. There is a need to train the government/elected officials in how to discuss stormwater strategies with citizens – promote existing opportunities
3. Need for a neighborhood advocate to exemplify and promote best practices (best education practices and best management practices) in the neighborhood. Could include hosting workshops or information sessions

1-2 NEXT STEPS:

1. Contact the Center for Watershed Protection, Chesapeake Bay Program, Chesapeake Network, Wetlands Watch, and Virginia Environmental Professionals’ Organization (VEPO) to gauge interest in hosting our information
 - a. Outreach strategies
 - b. Training opportunities for citizens, elected officials, and the general public
 - c. Success stories

Will assist with this action:

- Justin Shafer

Supporting Material:

Solutions

- Where to find information on effective outreach strategies? BEST EDUCATION PRACTICES
- Rain barrels (cost share) got people interested – trial and error and takes time
- Is word of mouth most effective in certain communities?
- Rating or review system for outreach strategies
- Chesapeake Bay Program (Environmental Protection Agency collaborative) get environmental education resources to public
- What audience do we want to reach?
- Tools
 - One-on-one meetings
 - Demonstration – neighbor as advocate
 - Invest in one person
 - Workshops
 - Pamphlet
- How to guide “You’ve convinced me – now what?”
- Is rating outreach tools needed?
 - Is every community too different?
 - Hearing stories are helpful, can use pieces of lessons learned in your own communities
 - Browse stories, use components and case studies
- Would organizations submit their stories?
- Bay Backpack (for students)
- Could be a subsection of other website (see notes for Group 12)
- Share success stories – Do it Yourself information

Group D2 - 14 Votes

Native Plant Marketing Partnership

Leader Name : Virginia Witmer

OUTCOMES / CONCLUSIONS :

1. Virginia Native Plan Marketing Partnership Membership has expanded
2. Training sessions are held for partners about native plants (benefits, challenges, selection, etc.)

1-2 NEXT STEPS:

1. Reach out to potential partners: landscapers, farmers markets, plant resource programs, Department of Agriculture
2. Get funding for training partners

Will assist with this action:

- Lisa Hardy
- John McLeod
- Eric Gunderson
- Wyn Price
- John Farrell
- Robert Tapia

Supporting Material:

Initial Considerations

- What type of consideration is given to historical context
- Involve master gardeners and Native Plant Society
- “Anti” program- need proactive involvement from nurseries
- Provide alternatives to “common” plants
- Where do we get these plants?
- Need partnerships with nurseries
- Department of Conservation and Recreation Natural Heritage Program (website development)
- Native Plant Society
- Virginia Flora
- Virginia Coastal Zone Management Program (CZM)

What to do?

- Find out what people want
- What designs, locations are you targeting?
- People will start asking garden centers for native plants?
- Education about native plants’ benefits
- “Friends don’t let friends buy animals”
- Defining what is a native challenge- it’s worth the conversation to decide what you identify as native
- Right plant, right place
- As a group here we should decide this

Resources

- How to put together a reasonable list of native plants for the average homeowner
- Would like standardized rain garden plan with a list of native plants that are available locally
 - Which plants?
 - Aesthetic values
 - Wildlife uses?
- Address supply and demand challenges

Group F1 – 13 Votes

Multi-Cultural Eco-Literacy/Action (training materials, outreach to demographic, hangs on training opportunities)

Leader Name : Scotty Dilworth

OUTCOMES / CONCLUSIONS :

1. Relevant training to address language barriers
2. Expand partnerships/networking for translators – groups offering this now/how it works/how much does it cost?
3. Marketing opportunities/explore many options i.e. Youtube, bi-lingual helper/facilitators

1-2 NEXT STEPS:

1. Contact Virginia Nursery and Landscape Association - modeling after their programs
2. Contract other contractors doing this now

Will assist with this action:

- Werther Blanco

Supporting Material:

Training

- Resources
- Language barriers could be addressed by libraries and government
- YouTube videos
- Brochures
- Extend invite to trainings/certifications to other crew members
- Medical Community – role model – see what’s working
- Students/teachers who can translate
- College Graduate Students – help with how to create

On the Job Training – Volunteer and paid opportunities to learn hands-on

- Registering crews for workshops
- Live roof video for installers

- Something that's working
- English and Spanish available
- Werther Blanco - Medical interpreters *willing to help with education
- Pesticide training/piggy back for other subjects
- Planet/Other bi-lingual groups
- *Virginia Nursery and Landscape Association/Mid-Atlantic short course
- Crew management/Spanish for landscapers
- *Certifications in Spanish
- Contacting those teachers
 - How it works?
 - How much does it cost?

Availability

- Template is Spanish but open to other languages as need arises
- Keep it simple - how to easily communicate
- Keep it relevant
 - "Green" or new ways of doing something in the landscape
- Talk to foreman - ask what they need
 - Don't understand and address those needs/questions
- How to market it to others once you get a model/groups like Virginia Nursery and Landscape Association/others?
- Word of mouth/churches/schools
- Social marketing ideas
- Suppliers - have literature/product information
- "Community grandmothers"
- Leaders in the community

Grants - language missing here?

- Is this a financial opportunity?

Teachers - to help other cultures speak English!

- Make English the universal language?
- SPARK - Students and Parents teaching environmental issues

Group A2 – 12 Votes

How to Promote Citizens to Volunteer to do Hot-Spot Scouting and Best Management Practices Retrofit Site Scouting

Leader Name : Scott Crafton, Cecilia Lane

OUTCOMES / CONCLUSIONS :

1. Local governments and partners to provide specific needs, training, and outreach to citizens and community groups (pollution service control assessments)
2. Local governments target a commitment from volunteer groups to work on projects identified in implementation plans
3. Utilize students (college and K-12) to adopt areas, conduct assessments and inventories, inspect best management practices
 - a. Incorporate into educational courses

1-2 NEXT STEPS:

1. Identify local government point person for coordination and volunteer groups; identify non-governmental organizations and community groups to work with local governments
2. Development of homeowner best management practices technical memo

Will assist with this action:

- Cecilia Lane
- Justin Shafer
- David Ruble

Supporting Material:

What to do?

- Local governments could enable non-government organizations, community groups, and citizens to utilize plots of land that the locality owns (city right of ways)
- Obtain college interns to work for locality to inventory and inspect best management practices. Encourage colleges to create a course to train interns
- Outreach and training to citizens and community groups
- Utilize students (college and K-12) to adopt areas, creeks, to conduct hot-spot investigations
- Coordinate these volunteers with the local government
- Local governments need to provide specific needs for volunteers to monitor
- When implementation plans are developed get a commitment from volunteer groups and create a framework to keep them involved until funding is secured

Next Steps

- Identify who at local government level can work with the local governments to move the process forward, i.e. to identify all nongovernmental organizations and community groups
- Develop homeowner best management practices memo

Group E3 – 11 Votes

What Can Citizen Activists Do?

Leader Name : Kit Gage and Suzanne Etgen

OUTCOMES / CONCLUSIONS :

1. Specific programs to engage citizens in ACTION
2. Specific training/support for very simple specific need/role (i.e. best management practice monitoring)
3. Recognition from all parties on the critical role of engaged citizen

1-2 NEXT STEPS:

1. Identify 2-3 specific roles for engaged citizens
2. Identify pilots and existing programs that could be adapted
3. Identify incentives to engage citizens

Supporting Material:

What can engaged citizens do?

- What can they do?
- What support do they need?
 - Educate neighbors – pampered chef
 - Promote low-impact development
 - Facilitate the work of local government – help meet needs
 - Install/project management
 - Monitoring best management practices
 - Identify needs/hot spots/assessment
 - Demonstration – consume best management practices
 - Disseminate social marketing
 - Local government advocacy – support positive development in government

What	Who
Recognition/designation	Local government and other sustainability offices, local government rebate program
Training	Local non-government organizations
Incentive (monetary and non-monetary)	Regional non -government organizations/ government agencies
Standard for installation, etc.	Municipal employees
<u>Simplified</u> installation	(model of citizen monitoring)
Long-term support/engagement	Education institutions <ul style="list-style-type: none"> • Extension- master gardeners/naturally • Virginia Institute of Marine Science
<u>Specific roles</u> – mutually <u>recognized</u>	Environmental Leadership Program
Secondary resources – tool drop	<u>Professionals</u>
Simplified reporting WIP Voices	

Group C1 - 10 Votes

Alternative Funding System(s)

Leader Name : Michael Collins

OUTCOMES / CONCLUSIONS :

1. Common forms of measurement and communications about actions, open source language
2. Consortium of interested parties at the grassroots, private, and nonprofit levels to create mechanism to facilitate action
3. Create a funding model to test the platform, realize that failure is possible. Use model to acquire long-term funding from varied sources

1-2 NEXT STEPS:

1. Identify who to lead steering committee to create a business plan
2. Develop business plan for coalition

Will assist with this action:

- Kit Gage
- Shereen Hughes
- Amanda Bassow

Supporting Material:

River Friendly yards Business Model

- Private funding
- Beautification and wildlife focus
- Bringing cost to homeowner down to \$50.00

Lessons

- Need to lower homeowner costs
- Need to calculate cost-effectiveness
- Need to calculate credits over long-term
- Need balanced model between private and public groups
- Need funding two create collaboration, not competition

Alternate Funding

- In-lieu funds
 - Make sure these are spent
 - See if they can direct these to local best management practices
 - Fund people who can make things happen
 - Nonprofits
- Leverage private dollars- missed opportunity
 - Lynchburg "SAGE" model
 - Take Right Of Ways and enable private adoption of sections
 - Recognition, signs, recognition to landscapes
- Challenge:
 - Conversion of "Friendly Yard"
 - Funding create competition

- It cost 5 figures (10's of thousands of dollars) per pound of nutrient reduced, which is not cost-effective
- “River Friendly Yards”
 - Need private funding
 - Need locality to get credit
- State Funding to incentivize low-impact development practices
 - Local funding
 - But need model from Department of Conservation and Recreation to show what the credits are for
- Need to demonstrate that the method is cost effective
 - Create “in lieu” funds locality
 - Payment for disturbance
 - Go into special fund
 - Wetlands banks
 - Violation stormwater
- Need outreach to inform people regarding alternative funding
 - Enviro-thon?
- Grants

Missed Opportunity

- Stormwater fees: can be forgiven if yard converted to “river friendly”

Needs

- Private funding for workers in the field
- Examples of possible business models:
 - Virginia Tech LEAP: nonprofit, sells energy similar programs in other places

Group B3 – 6 Votes

Developing Overarching Strategies for Sea-Level Rise and Watershed Management

Leader Name : Tom Brasek

OUTCOMES / CONCLUSIONS :

1. Need for integrated approach to address sea level rise among all levels
2. Need to encourage good behavior and reward. Discourage bad behavior
 - a. Acknowledge human nature when acknowledging the problem

1-2 NEXT STEPS:

1. Hampton Roads community design competition (architecture firms submit renderings)
 - a. Contact American Planning Association, American Institute of Architects, American Society of Landscape Architects and Planning District Commissions
 - b. Need a leader

Will assist with this action:

- John Farrell

Supporting Material:

Solutions

- At what level should sea level rise strategies be addressed?
- Localities know best what is happening on the ground
- Need for integrated approach at all levels but informed by local knowledge
- Local government is participating
 - Federal government somewhat - Federal Emergency Management Agency (FEMA)
 - State government not sharing much
- Need for localities to take on these issues
 - Community leaders to advocate for sea level rise issues
- Design charrette in Hampton Roads (like the Manhattan competition)
- Be proactive, not reactive (i.e. waiting for FEMA regulations)
- Acknowledge, address THEN correct the issue
- Lack of understanding about recurrent flooding – looking for a simple solution
- First step: acknowledge sea level rise is happening in Virginia’s coastal communities
- More believers after storms
- Look into New Orleans as a case study
- Outreach to tell people that living shoreline installation is easier
- Need to demonstrate economic value to homeowners and work at the site scale
- Need to reach people online who are browsing the web at home
- Should focus efforts on Wetlands Board who are interacting with people

Appendix H : Analysis of the Process and Summit Evaluations

Analysis of the process based on survey and follow-up interviews

By all counts, the Summit produced a tremendous amount of synergy and creative ideas, raised awareness of and support for improved communication, networking and the pursuit of a more collective and integrated approach to watershed restoration and stormwater management in Virginia and the Bay region, and began the process of forming a coalition of people willing to work towards this common goal.

Based on the response to survey questions and post-summit follow-up conversations, the summit provided an unprecedented opportunity to connect with potential partners and network. The presentations on the first morning of the Summit were well received, with most participants (60%+) indicating that the information presented during this segment was helpful to the Summit and/or their work. Some even indicated they would have liked more information and some asked for copies of the presentations to review post-summit.

Both the Circle Conversations and Open Space processes were completely new experiences for most participants, and overall the feedback was very positive. For the Circle Conversations, evaluations indicated that the interactive polling tool was effective at facilitating dialogue and building consensus, as 63% or more of respondents agreed or strongly agreed that they gained understanding of the issues and priorities of others and the Circle process helped move the conversation forward. This process did encounter specific challenges, however, which are noted below, and which may be why as many as 20% were neutral about the value of the Circle process, and 17% did not think the Circle process helped move the conversation forward. Some participants voiced impatience with the pace of the Circle conversations, the length of time speakers were allowed to speak and the fact that some who wished to speak during the Circle were not provided the opportunity to enter the Circle because of time and space constraints. Experience with this process in other venues would indicate that, if these process glitches could be ironed out, it would be worth considering for future Summits.

For the Open Space discussions, the written evaluations similarly indicated this process was extremely effective for networking, as 64% of respondents agreed or strongly agreed that this process improved their work in the field of water quality, 69% agreed or strongly agreed that it helped build a strategic path forward, and 74% agreed or strongly agreed that it helped them build new partnerships with others. In addition, people noted in their evaluations that what they liked best about the Summit was “all the interaction,” “excellent networking,” the opportunity for dialogue and meaningful conversation, and the flexible format. For most people, it was a novel idea – and positive experience – that 21 focused, productive conversations could be held in one morning, and that clear outcomes could be reported from each group. The fact that most people showed up on the second half-day of the Summit to participate in these Open Space conversations indicated the strength and appeal of this Summit design. Also, very few people (7% or less) felt the Open Space process was not helpful.

The Summit did encounter specific logistical challenges, such as difficulty with microphones, which made it difficult for some people to hear, as well as an unanticipated crash of the UVA internet which caused the interactive polling device used at the end of each Circle Conversation to also crash. With the first Circle Conversation, staff learned that posting too many issues would make it difficult for the interactive polling to be effective, so for the second and third circle conversations they consolidated and issues into a shorter list to enable easier voting. Additionally, there was some confusion during the interactive polling: not all participants understood that they should cast *two* sets of votes: one vote for the “most important issues overall,” and a second vote for the “highest priority issues to tackle at the Summit.” Although these instructions were repeated numerous times, it is likely that the novelty of this process interfered with effective understanding. This resulted in high participation on the first vote, and lower participation on the second vote. In the future, when interactive polling is introduced it would be worth giving a live demonstration first, accompanied by written instructions about the voting.

Lastly, some felt there was too little time at the end of the Summit for a full sharing and reporting of the outcomes from the 24 open space discussions, which made it difficult for people to participate meaningfully in a discussion about “next steps.”

While any conference has its ups and downs, its critics and supporters, the final test of the Summit is whether it leads to the development of more effective networking and collaboration to get the job done. On this count, while time will be the final judge, a preliminary assessment of the Summit is that stakeholders were grateful for this unique opportunity and used it to their advantage to network, share ideas, and strategize on how to improve their own programs and stormwater management on private urban-suburban properties.

Post-summit discussions with several participants indicate many people left the summit motivated to work together on next steps identified during their Small Group Sessions and informal conversations. Comments from these individuals all indicated that the Summit successfully provided opportunities for people to network, connect, and find opportunities to work together on parallel, related efforts.

Evaluations

The following section provides more detail on participant survey feedback.

Day 1: Presentations

1. This information was helpful for the Summit +/- or will be helpful to my work.

Topic (speaker)	1 (strongly disagree)	2	3	4	5 (strongly agree)	Number of respondents
Current Conditions and Status of Pollution Prevention; Reduction on Individual Properties						
Findings From Wetlands Watch Study (Shereen Hughes)	1 (1%)	5 (8%)	12 (19%)	24 (38%)	22 (34%)	64, 100%
Context: Chesapeake Bay Model (James Davis-Martin)	0 (0%)	6 (9%)	18 (29%)	22 (34%)	18 (28%)	64, 100%
Riverwise Program Practices (Nissa Dean)	1 (1%)	4 (6%)	11 (17%)	28 (45%)	20 (32%)	64, 100%
Emerging Strategies, Technology, Tools & Resources						
BMPs: Science and Bay-Wide Crediting (Tom Schueler)	0 (0%)	3 (5%)	10 (16%)	24 (38%)	26 (41%)	63, 100%
Making it Real in Virginia (Joseph Battiata)	1 (1%)	0 (0%)	9 (14%)	26 (41%)	27 (44%)	63, 100%
Direction of Future State Agency Activities (Ginny Snead)	1 (1%)	0 (0%)	18 (29%)	22 (36%)	21 (34%)	62, 100%
Protecting Water Quality on Urban-Sururban Properties: Where Are We Now and What Are the Latest Developments?						
Reporting Tools (Amanda Rockler)	0 (0%)	2 (3%)	14 (22%)	24 (38%)	24 (37%)	64, 100%
Community-Based	0 (0%)	2 (3%)	9 (14%)	22 (34%)	31 (49%)	64, 100%

Social Marketing (Erin Ling)						
Specific Case Studies						
Addressing BMP Maintenance & Inspections in Maryland (Richard Klein)	1 (1%)	4 (6%)	16 (25%)	23 (36%)	20 (32%)	64, 100%
Putting it All Together in Arlington County (Christin Jolicoeur)	0 (0%)	1 (1%)	10 (16%)	29 (45%)	24 (38%)	64, 100%

*Blue text indicates most common response.

In all morning presentations, respondents indicated that information presented was helpful for their work. Depending on the topic, at least 63% of people agreed or strongly agreed that the information was helpful. Overall, more participants felt as though presentations regarding an assessment of Where We Are Now and the Latest Developments were the most helpful, followed by presentations on Emerging Strategies, Technology, Tools and Resources (based on participant responses of agreed or strongly agreed within each section).

Day 1: Circle Conversations

2. I gained understanding of the barriers and challenges faced by others in implementing BMPs.

1 (strongly disagree)	2	3	4	5 (strongly agree)	Number of respondents
1 (1%)	1 (1%)	8 (12%)	38 (58%)	20 (31%)	65, 100%

The circle conversations were extremely effective at building understanding, as 89% of the respondents agreed or strongly agreed that they gained understanding of the barriers and challenges faced by others.

3. I gained insight into the gaps and opportunities for implementing BMPs.

1 (strongly disagree)	2	3	4	5 (strongly agree)	Number of respondents
0 (0%)	2 (3%)	11 (16%)	32 (46%)	24 (35%)	68, 100%

4. I gained insight and ideas about building partnerships with others.

1 (strongly disagree)	2	3	4	5 (strongly agree)	Number of respondents
0 (0%)	4 (6%)	13 (20%)	19 (28%)	31 (46%)	68, 100%

5. I felt as though my interests were adequately represented.

1 (strongly disagree)	2	3	4	5 (strongly agree)	Number of respondents
0 (0%)	6 (10%)	17 (27%)	27 (44%)	12 (19%)	62, 100%

*Blue text indicates most common response.

Furthermore, 39 participants (or 63%) agreed or strongly agreed that their interests were adequately represented. In light of participants also feeling that though the exercise helped build understanding, circle conversations can therefore be considered an effective communication and facilitation tool.

Day 1: Interactive Polling

6. The polling tool was easy to understand and use.

1 (strongly disagree)	2	3	4	5 (strongly agree)	Number of respondents
2 (3%)	7 (11%)	14 (22%)	20 (32%)	21 (33%)	64, 100%

7. The interactive polling tool was helpful for building understanding of our issues.

1 (strongly disagree)	2	3	4	5 (strongly agree)	Number of respondents
1 (1%)	8 (12%)	15 (22%)	24 (36%)	19 (29%)	67, 100%

8. The polling results gave me insight into others' priorities.

1 (strongly disagree)	2	3	4	5 (strongly agree)	Number of respondents
2 (2%)	5 (8%)	16 (25%)	24 (37%)	18 (28%)	65, 100%

9. The polling was helpful for moving the conversation forward.

1 (strongly disagree)	2	3	4	5 (strongly agree)	Number of respondents
5 (8%)	6 (9%)	13 (20%)	23 (35%)	18 (28%)	65, 100%

*Blue text indicates most common response.

In the evaluations, 43 out of 67 participants (or 65%), agreed or strongly agreed that the interactive polling tool was effective. Over half of the participants felt as though the tool gave insight into others' priorities and was helpful for moving the conversation forward, 65% and 63% respectively (based on "agreed" and "strongly agreed" responses).

Day 2: Open Space

10. The Open Space discussions were useful for my work in improving water quality.

1 (strongly disagree)	2	3	4	5 (strongly agree)	Number of respondents
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disagree)				agree)	respondents
0 (0%)	4 (7%)	16 (29%)	20 (35%)	16 (29%)	56, 100%

11. The Open Space discussions were helpful for building partnerships.

1 (strongly disagree)	2	3	4	5 (strongly agree)	Number of respondents
0 (0%)	1 (2%)	14 (24%)	25 (43%)	18 (31%)	58, 100%

12. The Open Space discussions were helpful for building a strategic path forward.

1 (strongly disagree)	2	3	4	5 (strongly agree)	Number of respondents
0 (0%)	3 (6%)	14 (25%)	22 (41%)	15 (28%)	54, 100%

*Blue text indicates most common response.

Overall participants felt as though the discussions generated through Open Space were helpful. Sixty-four percent of participants agreed or strongly agreed that the discussions were useful for their own work in improving water quality. Additionally, participants either agreed or strongly agreed that the Open Space discussions were helpful in building partnerships and in building a strategic path forward, 74% and 69% respectively.

13. During the Summit, your affiliation is best described as:

Federal Government	State Government	Local Government	Non-profit	Private Business Sector	Private Property Owners	Education	Funding Sector
3	9	26	12	6	2	9	1

*Blue text indicates most common response.

Out of the participants that filled in the Summit evaluations, 26 out of 68 people (or 35%) identified as Local Government workers.

14. What did you like best about the summit?

Networking

- Networking, understanding issues and priorities.
- I found it to be a great networking opportunity. I like that there were ample opportunities to talk to others about what they are doing.
- Opportunity to meet other key leaders in order to partner on mutual priorities and objectives
- Networking, hearing ideas from colleagues. The social marketing sessions were great to get the conversation started. This is a topic that needs more to be done with localities.
- The ability to network and partner.

- Networking with others.
- Networking; learning what other entities are implementing.
- Networking-geographic extent of representation.
- Networking.
- Networking opportunities.

Open Space and Interactive nature of the summit

- Flexibility of design room for formal/informal discussion with different groups.
- I really liked the open space/self-writing agenda, very interesting approach to distilling “group speak” into topics and actions.
- All the interaction, especially opportunity to hear fresh ideas and perspectives from so many participants.
- A chance to interact, contribute.
- Interactive approach.
- 200+ people and the diverse nature of individual discussions, not the same old stuff. Good job Wetlands Watch.
- Dialogue/interaction.
- Logistics: location/accommodations, meeting facilitators and speakers.
- The interaction.
- The interactive portion where all participants could engage in the conversation. Also the small focus groups. I met some wonderful new people!
- Great idea exchange. Good conversations and excellent networking opportunities.
- Great at managing good discussion among so many people. Circle discussion on Day 1= great format.
- The collaboration of all sectors.
- Interaction! Different formats, great networking, Frank and Tanya letting us drive agenda items. BEST CONFERENCE EVER. Great range of participants.
- Interactive delivery and networking opportunities.
- The format. Very open and yet also structured. Liked having the group do the work; made it much more interesting. Better than being lectured all day.
- Interactive session.
- Interactive nature, great attendance, cross-section of participants.

Open Space discussion

- Open space discussion.
- Open space brain-storming collaboration.
- Open space dialogue for moving most important topics further toward a working solution.
- Open space discussions and choosing the groups to sit in on.
- I enjoyed the Day 2 open space discussions because we tackled specific issues, shared ideas, and connected.

- Open space format was useful in developing ideas, but worry some ideas may get lost if not in top 3.

Specific Issues, Substantive discussions, and presentations

- Getting reassurance that we will receive updates directly from the State.
- The group discussion on community based social marketing.
- Different topics that were very relevant and important to this subject.
- The structured part- presentations from knowledgeable persons. The circle discussions were. really too long and not productive for a group of 200+ people.
- Overall great conference- I enjoyed the open space discussions.
- The short and pertinent presentations made it easy to follow the speakers.

Participants

- The variety of authority, and many sectors of the environmental professional community that were present.
- Hearing from other participants and learning from their perspectives.
- Audience was truly engaged.
- The whole thing! Will there be more? Also, getting different groups to work together.
- Being with like-minded people working towards a goal we all feel passionate about. Feels very possible to work through this and see this group being a force of change for the health of the bay and its watershed.
- High level of participation on Day 2.
- The broad range of interest groups represented from federal government all the way down to citizens. It was great to get everyone's perspectives.
- The large variety of professionals that attended.
- The diverse sectors represented by the participants and the atmosphere for sharing dialogue.

15. What issues are important to focus on in follow-up meetings?

Partnerships

- Partnerships, finding funding sources, continued information sharing.
- Identifying partners/communities for targeted outreach/education and formulating questions (what do we need/what to know?).
- Coordination/information sharing/partnering between groups.
- Keep it going! We'll get there.
- Collaborate with other groups.
- How did we do with the priorities we initially identified? Have the priorities changed? How can we continue to collaborate?
- Coordination clearinghouse for information and process toward a common goal.
- Build network to continue discussion.

- Development of local integrated groups.
- Developing continuing discussions via message boards, forums, etc.
- Online sharing mechanism for continued connections.
- Outreach, coordination between local governments to get the ball rolling.
- Communication between groups and levels within groups; establishing a common language for everyone doing stormwater work; better cooperation.
- Have some politicians speak or get involved.
- Sharing of ideas and not overlapping projects; pooling resources.
- Integrated approach to problems, bringing everyone to the table.

Divide up responsibilities

- Collaboration and role of stakeholders. This may help with spending funds efficiently.
- Reaching broader audiences.
- Expanding the choir to reach out into the larger community. Find case studies on successful programs. Share information. Let the summit group become one big network.
- Establishment of explicit roles of federal and state partners. How to set up local partnerships
- Sharing/leveraging resources and efforts. Sharing not duplicating
- Sharing results of work. Educating local officials, integrating programs, clarifying roles to be more efficient.

Funding

- What already exists that we can target activity and action to? Devote more money to?
- Don't lose the energy on connecting the various groups- finding how ways to make the funding more sustainable than just grants.
- Keeping it simple and inexpensive.
- Aligning funding with collaborative approach to achieve economy of scale, efficiency and greater impact.

Periodic check-ins on progress and priorities

- We need to meet again and divide problems to work them out. We don't all need to reinvent the wheel- some of our groups need to merge and combine missions to be more efficient.
- Plans for more information like this.
- Follow-up! Must maintain momentum and energy already established.
- To actually follow-up. The ideas are many but it will take time, effort, and determination to result in any meaningful action.
- Progress on next steps.
- Progress of ideas.

Dealing with specific issues (sea level rise, BMP implementation and maintenance, etc.)

- Achieving water quality from the existing "polluters." Shipping industry, farming community, and water dependent uses.

- Simplify regulatory process for minor developments and homeowners trying to improve water quality.
- I would like to see more emphasis on habitat issues as they impact wildlife species of concern, for example: aquatic species in riparian habitats- are our BMPs actually benefitting particular species, or just wildlife in general
- SLR adaptation, “tool kit”.
- Tools for property owners to readily get help/information re: local government requirements for on-lot retrofit BMPs.
- Landscaping with native plants.
- To see that the issues identified are not parked on a shelf. Follow through is important, otherwise why did we even do this?
- Native plant partnerships. Community based social marketing.
- Sea level rise.
- BMP enforcement.
- Nitty-gritty details of implementing these BMPs on private property: design, maintenance, monitoring and crediting.
- Community based social marketing- reaching the un-reached. Staying informed about efforts, and improved networking across the Bay.
- Promoting voluntary incentive based BMP on private property (residential and non-residential properties). Also, developing verification tools- technology specifications for voluntary BMPs.
- How to utilize MS4 credits for LIDs on private lots.
- How is the Bay Program/EPA going to help us get credit for these actions in our TMDLs? This is a big unknown and we need to know that efforts are worthwhile.
- Specifics for meeting TMDL requirements through BMPs on private property.
- Long-term planning
- Maintenance
- Simple BMP maintenance
- Maintenance, BMP monitoring.
- I would use the outcomes of the voting of the 3 groups (interactive polling results).
- Social marketing to target specific audiences.
- Target resources to targeted audiences; messaging to solicit public involvement.

16. What did you learn from the discussions that you did not know before?

Collaboration efforts and work already being done

- The array of work in progress in Virginia.
- Too much to summarize here! Very good cross-section of stakeholders.
- There are capable and certified professionals to meet landscaping needs- there just needs to be a way to contact them.

- So much federal/state/localities are unaware of local qualified contractors in our area- it's as easy as Google'ing "sustainable landscape design and installation, rain gardens in Virginia, etc."
- The work being done by different agencies for the environment.
- I didn't know about all the other organizations and efforts- it was nice to know we're all in this together.
- I am amazed to learn of all these other diverse groups- who can I partner with?
- The large number of organizations.
- The size and diversity of potential partners.
- Resources available and opportunities to use resources.
- There are common concerns and themes across water quality disciplines.
- Did not know there were so many groups out there doing environmental work.
- Wide cross-section of groups already involved with their issue. There are broad engagements among environmental groups but the challenge is to get beyond our circle to bring others in.
- Innovative projects, technical expertise already out there.
- Lots of good work going on in many different sectors.
- So much! Great tips on community based social marketing, other groups are already doing successful things that we could piggy back on.

Tools available

- Using VAST to determine the BMPs which will get reductions for sediment within bacteria TMDLs.
- Community based social marketing.
- The overlap in programs and tools used by different groups.

Views and perspectives on the issue

- Different perspectives on stormwater issues.
- Different perspectives.

Regulatory issues

- Details on some challenges faced at local level.
- The complexity of myriad of federal and state regulations.
- Lack of central communication.
- Virginia regulations to integrate stormwater programs. Watershed roundtables want more directions. Examples of local success stories such as Virginia Beach watershed based issue groups.
- Complexity of programmatic elements at local governments.
- How government needs to operate in obtaining and allocating funding for public projects and needs of political leaders in mandating action.
- Municipalities are currently focused on finding the BMPs in their jurisdictions; they don't even know where they are.

17. What action(s) will you take as a result of the summit?

Continuing Education

- Educating myself of the various laws that I did not know existed.
- Continue to build on the things I learned during open space.

Networking

- Will continue to be part of steering committee. Signed up to complete one “next step.”
- Seek out partnerships-more networking.
- Re-connect with other disciplines and create/build opportunities in order to improve water quality.
- I made a lot of good contacts and identified many groups to follow up with either about what they’re doing or to follow up with.
- Continue planning/coordinating outreach efforts.
- Follow up with folks I met.
- Volunteering, sharing info, more networks and partnership building.
- Setting up network for community based social marketing on Chesapeake Network, work with RiverWise and other agencies on community based social marketing.
- Continue conversations with partners, include insights learned into ongoing projects.
- Network with a few folks.
- Keep in contact with people that I met about helping small localities develop and implement stormwater programs.
- Follow up on contact made and information I’d like to have from other attendees.

Using what I learned at the summit

- Try to share information between Maryland and Virginia.
- Apply lessons learned.
- The importance of working with native plant partnerships.
- Real community based social marketing concepts and try to apply these.
- Use some models of interactive polling to advance discussions of issues of work at local government level.
- Try to develop a “Clean Water Task Force” in my locality.
- Incorporate ideas and lessons into outreach efforts.
- More focused actions; development of a comprehensive communications strategy tied to what target audiences care about.
- Help break down federal silos and help advise development of homeowner BMP tracking tools so consistent with Bay Program models for tracking Bay TMDL implementation.

Reaching out to others, collaboration and partnerships

- Involve youth in environmental issues.
- Have ideas of what I can do for my community and have an idea of where to start.
- Develop and update the strategic plan of the James City County P.R.I.D.E. program.

- Like to be involved via existing roundtables which I'm already a member of.
- Continue to research, develop, and provide outreach regarding SLR adaptation strategies for Tidewater, VA (Norfolk in particular).
- There is a larger picture than what we do individually. Must take time to listen to others.
- Ask neighbors and others if they are aware of the issues and if they know how to get answers/assistance.
- Call and tell VDOT that they missed an important program! Call my local SWCD and ask them to apply their skills with agricultural cost share programs to my local stormwater program.
- Be more active when looking for partnering opportunities. Continue to be more engaged in promoting use of BMPs within the community
- I plan to personally engage my local government and environmental services departments to help streamline ability for homeowners to perform BMPS with a minimal permit process.
- Increase strength of our local roundtable.
- Connect with Carol Heiser to figure out some solutions for bridging the gap between qualified contractors and the work in front of us- be a force of change by working in this field and gaining more experience and expertise in this good work.
- Spread information to participants.
- Discuss with local staff how to emulate Virginia Beach collaboration model with sub-watershed focus.
- Identify non-profits in my region that can help. Working alternatives to support the network.
- Establishing a local partnership for implementation.
- Sit on work groups if offered the opportunity.
- Follow up with contacts and form partnerships.
- Attempt to put together a "task force" of local government and non-governmental organizations to start tackling issues at a watershed level.
- Start/participate in a group within our city to start plans/goals for local action, while still coordinating regionally and statewide.
- The format of the conference was innovative for a cutting-edge field.
- Become an engaged citizen; get more involved with other organizations.
- Try to build partnerships with other attendees.

Additional Comments

- I thought the meeting space was good and easy to get to/centrally located. However, I felt that the food left much to be desired. Given the quality of the venue and the \$75.00 fee for the meeting I expected the food to be much better than stale mini muffins and ham on white bread with bagged chips. Overall I found the food left a lot to be desired.
- In regard to the open space discussions: I understand the concept behind these but I felt that the group was too large for it to be effective. I found myself losing interest.

- In regard to the interactive polling: This seemed to be more of a tool for the conference organizers, not really for us. We interacted with you, not with each other.
- Do the open space discussion in morning (shorten presentations or have fewer of them on 1st day. Do the group work sessions on afternoon of first day. Then use Day 2 to synthesize and plan.
- Things to improve upon: less email before meeting. For steering committee and as participant need less spam. Also, some videos for collective impact weren't informative.
- While the location was excellent, I received no notification of the change in venue. I found out about the change the day before and fortunately able to change my reservation. The breakfast offered was not the best. While there were options, the food was not very appealing. I also expected better for lunch than ham and cheese sandwiches. The food was not up to par with what I thought it would be and lunch was awful on Thursday.
- In regard to the open space discussions: This approach may have worked better in a smaller group. Towards the end it was better.
- I would have liked to have seen the many buzzwords such as NFWF, WIP, MS4, etc. defined.
- In regard to Day 1 presentations, this respondent chose not to answer because: Could not hear most of the speakers. Awful sound!!! Could not hear. Very poor sound. People mumbled. Some talked too fast. Microphone was not loud enough. People didn't talk into mic.
- Would like to have had another date. This one conflicted with CVNLA symposium at Lewis Gunter in Richmond.
- In regard to Day 1 presentations: most talks were too short. Didn't receive enough information
- For as much money as this conference costs, the food was terrible! Next time, please provide better food and more options. It was highly disappointing!
- Regarding Day 1 circle conversations: might have been better and more inclusive to have 3 groups working concurrently- then bring results back to large group. It was too much sitting around just listening for most of the crowd and it was difficult to hear the conversations.
- Most helpful to focus presentations on what works and what doesn't as well as areas for improvement. Government needs to identify where nonprofits can help. Nonprofits need to identify where government can be more helpful to them. Essentially, identify nonprofit and government potential for synergy in this area. Have a final strategy session to identify goals throughout summit and circulate it to attendees after and ask for follow up. Identify some individuals to take up tasks.