

# CHESAPEAKE WATERSHED LOCAL LEADERSHIP DEVELOPMENT PROGRAMS



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## By Environmental Leadership Strategies (ELS)

ELS **researches** the Chesapeake Watershed's current leadership development needs and capacity then **recommends** how to support local officials to advance the Watershed Agreement's Local Leadership Outcome.

## Contents

#### EXECUTIVE SUMMARY

I) RESE	EARCH	1		
1.	Introduction	1		
2.	Interviews with Local Officials	1		
3.	Assessment of Leadership Programs	2		
II) REC	OMMENDATIONS	7		
1.	Focus on Elected Officials	7		
2.	Maximize Program Relevancy	7		
3.	Educate about Watershed Fundamentals and Local Best Practices			
4.	Use the Best Educational Activities	9		
5.	Implement Certification Programs	10		
6.	Investigate Strategies for Funding and Evaluation	10		
7.	Coordinate Existing Programs			
8.	Choose a Delivery Mechanism			
Acknow	Acknowledgments			

## EXECUTIVE SUMMARY

The 2014 Chesapeake Watershed Agreement establishes the goal to "[c]ontinually increase the knowledge and capacity of local officials on issues related to water resources and the implementation of economic and policy incentives that will support local conservation efforts." Environmental Leadership Strategies (ELS) researched the needs of local officials and assessed the capacity of existing programs to meet these needs. Building on this background ELS recommends three potential delivery mechanisms to fill the needs that are not currently met. A preference for one of the three recommendations is also expressed along with the reasons supporting it.

To gain insight into the capacity and needs of local officials, ELS interviewed sample of 18 officials or their high level staff. Including both elected and senior appointed officials, the diverse interviewees represented jurisdictions facing challenges typical of rural, suburban, and urban areas. They worked throughout the watershed, with four each from Pennsylvania and the District of Columbia, and five each from Maryland and Virginia. Two of the 18 local officials gave a second interview to provide further input as we finalized our recommendations, for a total of 20 interviews.

Based on the advice we received from the interview sessions with local officials, we believe that the most effective way to achieve the Chesapeake Watershed's goal of increasing the knowledge and capacity of local officials is to target elected leaders. They expressed the greatest need for information on both big picture watershed issues and requirements, and for discussions on specific best practices and policies to meet their requirements. They asked that the big picture information be conveyed in formats that were concise and sensitive to the time constraints that all elected local officials face. But, interviewees said they would prefer discussions on best practices and policies to be in information-sharing, discussion formats that offer the elected officials the opportunity to ask their peers questions and to actively assimilate the information.

Next, we assessed the ability and capacity of 20 existing educational/leadership development programs to see if any could meet this need. We investigated these programs, located both within and outside the Chesapeake Bay watershed, through web-based research. Programs were selected among known programs with the guidance of the Chesapeake Bay Program GIT 6 members. ELS followed up with interviews of the top 10 program's principal staff. These existing programs are accomplished in many respects and could provide some of the necessary components. However, we found no single program, as they are currently structured, that demonstrated the ability and capacity to meet all of the needs expressed by the local officials. Therefore, we concluded that a new delivery mechanism for conveying knowledge and building capacity would be the most effective way to fill this gap and ensure that local officials have access to needed content through the best program designs.

Based on our assessment of existing leadership development programs, interviews with their principal staff, and the needs of local officials, we concluded that any programs targeted at elected local officials must be tailored to, and specialized for, these leaders. Programs should provide five types of educational experiences: 1) exposure to expertise, but not through one-sided presentations, 2) peer-to-peer workshops where elected officials can discuss challenges and success stories with other local officials, 3) site visits to see first-hand what has worked and what has not, 4) a "Shed Talks" film series to concisely convey watershed issues and requirements, and 5) an online discussion forum, information repository, and action toolkit tailored for elected officials. Programs could be further specialized into best practices and policies with a rural/agricultural or suburban/urban focus, as well as subdivided by geography to tailor the information for the different jurisdictional requirements (federal, state, or local). We also advise any program to implement certification programs to incentivize and reward participation of local officials.

Although a new delivery mechanism is needed, our recommendations seek to maximize coordination of existing leadership programs, as we believe collaboration and leveraging current resources to be keys to the delivery mechanism's ultimate effectiveness. Many of the top programs that we interviewed, such as Sustainable Jersey,

Virginia Natural Resource Leadership Institute, Harry R. Hughes Center for Agro-Ecology, and the Pennsylvania State Association of Township Supervisors, may participate and/or be used as models.

We propose that three alternative delivery mechanisms be considered for developing a program that will satisfy the Chesapeake Watershed Agreement's goal to "[c]ontinually increase the knowledge and capacity of local officials..." The first is a Bay-wide umbrella entity, developed using lessons learned from Sustainable Jersey, to coordinate and maximize the resources of existing Bay watershed programs. The second is a multi-pronged program involving each state selecting an entity within its state to be the primary delivery mechanism of information and sponsor of the discussion. The third alternative involves information and discussion forums being delivered on specific topics or best practices by selected organizations in stages as resources become available.

The first option, an umbrella program, combines the benefits of the other two options. It would require the most investment, but would be the most comprehensive, coordinated, consistent, and effective. State-led programs, although enabling states to tailor information to address their unique political structures, would, by definition, not be as coordinated and would not be able to share resources as effectively as an umbrella organization. The third option would deliver information, but it would be in a piecemeal fashion lacking the cohesiveness we believe is needed to adequately meet the Agreement's goal.

We advise that the next step in the planning process should be to bring together an advisory committee, representing a broad cross section of watershed stakeholders, to design a program. We believe by engaging cross sector support, providing strategic educational experiences, and maximizing large-scale coordination of existing leadership programs, a program and delivery mechanism can be designed that will fill gaps in current capacity to meet elected local officials' needs and thereby increase the ability of local leaders to advance conservation measures, budgets, and policies in the Chesapeake Bay Watershed.

#### 1. Introduction

The new Chesapeake Watershed Agreement, signed in 2014, guides the inter-state and inter-agency collaboration toward a healthy Chesapeake Bay. The Watershed Agreement recognizes that engaged communities are vital to watershed protection. A signature component of this mission is to help provide local officials with the tools needed to restore and protect the watershed. The Bay Agreement's Local Leadership Outcome is to: "Continually increase the knowledge and capacity of local officials on issues related to water resources and in the implementation of economic and policy incentives that will support local conservation actions."

Many other goals in the Watershed Agreement, including land conservation, water quality, and toxic contaminant goals, rely on local government action, so increasing the ability of local leaders to take action is critical to achieving success. Yet despite more than 30 years of high-profile efforts to restore the watershed, there is still a widespread need for local officials to learn more about the big picture of watershed restoration, including how each locality's actions contribute to the overall restoration effort and what actions locals are legally required to take to restore the watershed. This is partially due to constant turnover of local officials, competing demands and priorities, and the complexity of Bay restoration. After surveying local leaders and assessing existing leadership programs, this report concludes that a new program targeted to elected local officials is needed, and recommends three delivery mechanisms for leadership programs.

#### 2. Interviews with Local Officials

#### a. Knowledge and Capacity of Local Officials

To gain insight into the capacity and needs of local officials, we interviewed sample of 18 officials or their high level staff. Officials were selected from attendees to the Bay Program's local leader's forum, recommended by the GIT Team 6 and Chesapeake Bay Commission members and staff, or known to the consultant team. Including both elected and senior appointed officials, the diverse interviewees represented jurisdictions facing challenges typical of rural, suburban, and urban areas. They worked throughout the watershed, with four each from Pennsylvania and the District of Columbia, and five each from Maryland and Virginia. Two of the 18 local officials gave a second interview to provide input as we finalized our recommendations, for a total of 20 interviews.

Local officials shared their perspectives on the importance of watershed heath and the experiences that shaped their leadership. Leaders agreed that outdoor experiences were often the basis for their caring about and taking action to protect nature. Though officials expressed a range of opinions when asked to rank the importance of watershed health, most placed it in the middle, some specifying it was mostly a long-term priority, relative to other issues including education, social services, infrastructure, crime, and heath care. The interviewees who ranked it highest were generally appointed officials whose job focused on improving water quality, while those who ranked it in the middle were mostly elected officials. The interviews revealed that most of the leadership preparation officials received was through on-the-job experience or a limited amount of training in the beginning of their careers though higher education. Many have had no additional training. Finally, several interviewees agreed that officials prefer "education opportunities" to "leadership development," because they already see themselves as leaders and they are in need of technical knowledge.

The interviews identified several challenges they faced in supporting and implementing conservation programs. All officials have limited resources to allocate among many important demands and priorities. Lack of time and funding were common challenges, both to investing in leadership programs and to implementing projects. High turnover rates due to election cycles especially constrained elected officials. Finding funding to meet strict environmental

requirements from grants, states, and federal cost-share programs was a common difficulty. Other challenges were lack of knowledge about fundamentals of watershed conservation, restoration, and the role of local government in watershed health. Some stated it was hard to maintain momentum for local stewardship projects without a big picture view of how their actions contributed to meaningful solutions. Many were curious about the efforts, especially success stories, of other leaders and expressed interest in finding and asking questions of peers who faced similar challenges.

#### b. Needs of Local Officials

Based on our interviews with local officials, the two best ways to support these leaders are 1) provide a way to quickly gain a big picture perspective on watershed stewardship efforts, including the fundamentals of watershed conservation and restoration, and 2) create a platform for local officials to problem solve and build networks with peers who face similar issues and/or requirements.

Officials expressed a need for big picture knowledge of watershed conservation and restoration efforts. Big picture knowledge includes education on fundamentals of watershed conservation and restoration, or in other words knowing "what is broken, why it matters, and how to fix it." However, it is also essential that programs be relevant to local officials. This may mean tailoring educational activities to the targeted audience, including the different needs of each region and community. In particular, leaders want to know how their actions fit into the big picture environmental efforts, including what actions states or localities are taking. Several elected officials expressed the need for skills to articulate the value of these projects to their constituencies, considering the difficulty of raising taxes or otherwise finding resources to allocate to environmental initiatives.

Several elected officials expressed the need for a greater understanding of the benefits of protecting the environment. Considering the difficulty of raising taxes or otherwise finding resources to allocate to environmental initiatives, they could use more information to help them articulate the value of these projects to their constituencies. Local officials seek to justify their decisions with as much hard data as possible. Accordingly, natural services translated into economic value would be particularly helpful at the local scale.

The complexity of the watershed's environmental issues and the multitude of local requirements are inherently dense topics. In light of this, officials asked that the big picture information be conveyed in formats that were concise and sensitive to the time constraints that all local officials face. On the other hand, the interviewees said they would prefer discussions on best practices to be in information-sharing, discussion formats that offered the officials the opportunity to ask their peers questions.

Officials expressed the need and desire for opportunities to learn from peers the skills needed for solving local problems and meeting local requirements. Officials had an interest in learning from their peers about what had and hadn't worked in other communities. For example, they sought strategies to make projects politically palatable. They requested case studies of best practices used in other jurisdictions facing similar challenges to their own and were especially interested in site visits to both model projects and problem areas. Network-building activities are valuable to local officials. Officials need both to make contact with peers and have access to scientists and technical experts. In particular, officials were interested in advice about funding sources, cost-benefits of best management practices, and ecosystem service assessments. Many stated that technical assistance on complying with regulations would be very helpful. The more frequent turnover inherent in elected positions made these network-building resources especially valuable to elected officials. These requests demonstrated a need to develop community, which, beyond information sharing, could require building self-efficacy and collaboration skills.

#### 3. Assessment of Leadership Programs

Having identified the needs of local officials, we selected a diverse sample of top leadership development programs to research in order to assess their capacity to meet this need. Community leaders, the research team, and online

resources generated 50 candidate programs. In consultation with the Chesapeake Bay Program GIT Team 6, we selected 20 programs with strong reputations, representative geographic locations, as well as a range of content specialties and program designs. All programs were analyzed using the same assessment instrument to ensure consistent, thorough examination of each. This resulted in the selection of 10 top programs, which are described below. We then interviewed each program's principle staff to provide insight on their organizations, their work with local officials, and ideal program design.

#### a. Programs within the Chesapeake Bay Region

The Harry R. Hughes Center for Agro-Ecology has diverse, state-wide connections which contribute to its reputation as a balanced, credible resource for municipal leaders. The non-profit, affiliated with the University of Maryland College Park and the University System of Maryland engages in scientific research, policy analysis, and outreach and education efforts to retain Maryland's working landscapes and the industries they support while protecting and improving the health of the Chesapeake Bay and its tributaries. The Center partners with a wide variety of Maryland organizations to offer their educational one-day workshops, which vary in cost and draw from agriculture, forestry, and environmental conservation to present on topics such as Watershed Implementation Plans (WIP) and Total Maximum Daily Loads (TMDL). They have established long, trusting relationships with many municipalities due to their objective, independent, and scientifically-based approach to education. Beyond modeling collaborative educational styles and cross stakeholder support, their curriculum is also exemplary. It is accessible, basic, and convenient for local officials. Many participants are municipal officials and community leaders, but at this time only a small percentage of their audience are elected local officials. The center is interested in engaging more elected officials, especially in the context of this project. To do so, they would need to develop programs and materials aimed specifically for an elected official audience. In their current structure, they have a small staff and would need expanded capacity to reach a larger audience. As such, the Hughes Center is an excellent candidate for potential partnerships.

Leadership Maryland This program identifies leaders and prepares them for critical leadership by providing a yearlong program consisting of eight monthly two-day sessions, where they discuss and learn about current issues, challenges, and opportunities facing the state. It is a mainstay of leadership development and a well-established resource for Maryland leaders to learn about their state and join an extensive alumni network. The strong alumni community could benefit local officials. Also, site visits with community members are an influential part of the programs, and are an educational activity that would likely appeal to local officials. On the other hand, because the program covers many state-wide issues, it is relatively long, involving eight monthly two-day sessions. Only one session covers environmental issues, and those are only partially watershed focused. As such, the program lacks the environmental expertise and is too long a time commitment for most elected officials. At \$7,300 per participant it may also be too expensive for most officials to be interested in. Moreover, the organization is shifting away from elected officials and leadership skills training toward a more diverse audience including private industries and topical education. The length, expense, limited watershed content, and movement away from elected officials all suggest that Leadership Maryland may not be an ideal partner for the purposes of this project.

Watershed Stewards Academy (WSA) is a locally targeted program which brings community members together on local water quality projects for 15 sessions over six months, costing \$250 per participant, and culminating in a Master Watershed Steward certification. Their in-depth programs are based on substantial audience research in order to be as locally relevant as possible. Given the large time-commitment and the specific focus on community members, the WSA does not meet the needs of this project to educate local officials. However, the WSA's program structure could be a model for other programs. A "technical consortium" connects private and public experts with community members in a county network. It also creates personal bonds and a common understanding focused on water quality. Graduates are certified as Master Watershed Stewards, who serve as a community resource, conduct outreach, and attend networking events. The certification process both supports

strong leadership and provides incentive for completing the program. Although the WSA program itself is not targeted to local officials, their audience research, technical consortium, and certification elements are program components worth emulating.

Legacy Leadership Environmental Institute (LLEI) is an environmental education volunteer leadership institute offered as a non-credit course through Howard County Community College. The program is eight day-long sessions over as many weeks at \$100/participant. In Howard County, Maryland, the program uses guest lectures and site visits to offer a "global to local focus" on the science behind environmental issues. NASA and community experts give engaging environmental science lectures on how global issues connect to local problems. LLIE's experiential education component takes participants on site visits to see lecture topics firsthand. A great asset to Howard County, the program may be too locally focused to reach a state or region-wide audience. Additionally, the large time requirement, eight day-long sessions in as many weeks, is likely a deterrent to many elected officials. Moreover, the curriculum may be too detailed and detached from municipal issues and regulations, and is not geared toward local officials. While an excellent model of educational activities, through expert presentations and site visits, the organization does not serve the specific needs of local officials.

Environmental Leadership Program (ELP) offers fellowship programs for Maryland environmental leaders to develop professional skills and connections, at \$3,500 per participant for three four-day retreats over one year. They focus on both issue education and developing participants' leadership capacity through research-based active learning educational activities, such as personal leadership plans. The program encourages participants to "shed the posturing," building trust and sharing vulnerabilities to create long-lasting personal relationships. These relationships in turn support strong alumni networks. To do this requires a large time and financial investment. ELP uniquely gives alumni access to special grant funding, which would be valuable to many local officials. However, the extended duration as well as the focus on personal relationships and leadership development, may be less attractive to officials who need concise, big picture information and specific, topic-based forums for peer dialogue. While ELP's research-based learning activities are an impressive model for other programs, the program is not ideally designed for the needs expressed by elected local officials.

Pennsylvania State Association of Township Supervisors (PSATS) provides training resources such as courses, workshops, webinars, and certifications for elected and appointed municipal officials. Many resources are offered at no cost, while some courses and workshops cost up to \$125 per participant. The Association has a long-established history, state-wide reach, and a multitude of local government, industry, and agency partnerships. This means they have the platform to deliver new content almost instantaneously to officials across the state. The PSATS Municipal Government Academy (PMGA) awards certifications for attending events and workshops. These programs, offered online and face-to-face, range from under an hour to four-days long. Program content is tailored to local officials' various experiences and levels of knowledge (pre-basic, basic, intermediate, and advanced). However, PSATS does not focus on environmental issues. For example, engineering best practices are emphasized more heavily than conservation or restoration. This means PSATS would need to develop, or receive, new watershed educational materials to meet local officials' needs. The annual PSATS conference, with attendance of 4,000 participants, may be the ideal situation to execute a partnership program. Overall, PSATS is an efficient way to access many local officials, elected and appointed, because its programs are so excellently tailored to this audience. Though it does not have the capacity to meet local officials' watershed content needs at this time, it is a strong candidate for future partnerships.

Rural Urban Leadership Program (RULE) is a program out of The Pennsylvania State University which offers state-wide multi-year community leadership program distinguished by its tight-knit alumni network and participant learning contracts. Programs cost \$1,500 per participant for 10 three-day sessions over two years. Trust building activities during the program coupled with an online alumni listserv and annual service-project-based

reunions build a tight-knit alumni network. This network along with state wide partnerships are assets to reaching municipal leaders, but RULE does not specifically target elected officials. The multi-year programs, ten three-day sessions over two years, may deter many elected local officials. However, RULE has partnered with municipal organization to host one-time workshops. One of RULE's unique educational activities is individual learning contracts. Participants set personal goals for the program and design a process to evaluate their success. Goals may focus on personal skills or topical knowledge. Similarly, programs balance leadership skill development with topical issue education. Program leaders expressed interest in strengthening RULE's environmental content, particularly about the Chesapeake Bay. However, currently it has little content on natural resource issues. The alumni network activities and learning contracts are components worthy of emulation, however due to program's length, cost, and lack of watershed content, at this time RULE does not meet all of local officials' needs.

Virginia Natural Resources Leadership Institute (VNRLI) teaches collaborative problem solving and negotiation in relation to Virginia's natural resources, through six monthly three-day sessions for a cost of \$2,950 per participant. VNRLI models the importance and effectiveness of program evaluation; programs include pre/post surveys for each session, a yearly evaluation, peer to peer feedback, and alumni evaluations. Though individuals may attend a single session if they desire, most participate in all of the program's six three-day sessions which helps build a class cohort. VNRLI strives to create a safe environment for asking questions where participants cultivate trusting personal relationships. Faculty specialize in leadership development and rely on partnerships to teach technical skills. Compared to other NRLI programs, the Virginia program seems to incorporate the most natural resource orientation and alumni are mostly environmental professionals. Overall, programs focus broadly on regional issues rather than on local challenges, in addition to the program's expense and length, this means few alumni are elected local officials. However, in the past VNRLI has partnered with faculty from University of Virginia's Institute for Environmental Negotiation (IEN) and technical experts to put on programs for local officials focused on conflict management and negotiation. Future collaborations of a similar nature might be attractive to elected local officials. VNRLI is a model for incorporating evaluation into programming and combines high-quality leadership development with environmental content; if it were to develop shorter programs catered to topics of interest to elected local officials then it would be an excellent candidate for any potential partnerships.

#### b. Programs Outside the Chesapeake Bay Region

National Network for Nonpoint Education for Municipal Officials (NEMO) is a conglomerate of programs that educate local officials on natural resource management to protect water quality. All programs abide by the same guiding priorities: research-based education, natural resource land use planning, and education through geospatial technology. They are offered at no cost, and are typically short presentations or partnered projects. Usually housed in university extension and SeaGrant programs, state NEMO programs distribute big-picture outreach materials, but focus on locally relevant educational materials and events tailored for local officials. Through a listserv and conferences NEMO built a national community of professionals who share resources and strategies for promoting sustainable policies and procedures in their local communities, which would fill the networking needs expressed by local officials. In short, NEMO fits the target audience, offers relevant types of environmental content, and does so through local officials' preferred mechanisms. However, NEMO no longer operates within the Chesapeake Bay, and the National Network lost most of its capacity three years ago when a restructuring of the USDA Water Quality Division discontinued funding. Since then the Network has lost most of its functionality, although some individual state NEMO programs remain strong.

The challenges NEMO has faced provide lessons about how to best develop lasting collaborations, and NEMO's successes model the potential of coordination between existing programs. A major weakness in NEMO conglomerates are inherent in their structure. Since each state's NEMO is not a standalone agency, it requires the time and resources of professionals from pre-existing programs. This, along with inconsistent funding streams, may be the reasons that some state's programs wax and wane based on the energies of a few dedicated individuals. Also,

principal NEMO staff explained that a disconnect developed between national and regional outreach material creation and program delivery. This highlights the importance of a separate standalone entity to coordinate large-scale program partnerships. In any case, the NEMO programs' strong history of success with local officials in regard to sustainable policies and practices models the potential of collaboration between existing programs which are supported by a central coordinating entity. Applying the NEMO collaborative model to a coordinating entity with dedicated resources would provide long term stability.

Sustainable Jersey is a nonprofit organization which provides municipality-centered tools, convenient training and certification incentives to support communities as they pursue sustainability programs; it was formed through a collaborative stakeholder-centered approach. Sustainable Jersey works exclusively with municipalities; approximately 20 percent of its participants are elected officials and the rest are staff, board, and commission members. As such materials are tailored to local officials, for instance providing convenient workshops often 30 to 40 minutes in length, brought to local officials in the community rather than hosted offsite, and which include an engaging talk from a local champion to convey the relevance of the topic at hand. Other resources are offered at no cost to support municipalities and include trainings, expert guidance, grant funding, and an online resource repository of convenient tools to help implement local sustainability projects, such as draft ordinances. Sustainable Jersey's certification system incentivizes municipalities to implement sustainability projects and rewards completion. Sustainable actions fall within 19 categories, from energy efficiency to diversity and equality. Actions are accorded different amounts of points with points adding up to bronze or silver level certification. Points are not awarded for the status quo, like meeting requirements. Certification lasts for three years after which municipalities must recertify to retain their designation. Mayors drove the adoption of a certification approach, urging that it provided an unambiguous definition of success. This is just one example of how Sustainable Jersey provides valued, relevant tools to local officials by giving participating organizations and stakeholders the power to guide program design.

The success of Sustainable Jersey's program through diverse stakeholder investment at the onset provides a model of how to launch collaborative leadership programs. The organization started as a steering committee with task forces made of diverse stakeholders interested in the same issue. A wide cross-section of professional groups provided design input including businesses, non-profits, higher education, state agencies, agricultural bureaus, and urban planning groups. Early buy-in from as many stakeholders as possible was key to the program acceptance. An initial survey of municipal officials identified key issues, clarifying officials' goals for their jurisdictions. Program leaders used these goals to develop basic educational content and program design. Moreover, when stakeholders convened they continued to play a large role in creating programs. Work groups became regional hubs. These created a social network and learning community around a subject as well as identified the technical resources available within a community. Sustainable Jersey serves the coordinating entity between these hubs. Sustainable Jersey eventually became a nonprofit associated with the College of New Jersey in order to seek funding more easily, but it does not consider this organizational design as vital. What is critical is that the final design represents partnerships between a broad cross-section of stakeholders. Overall, diverse investment at the onset, programs designed by stakeholders, and a certification system together produced the organization's rapid growth, broad acceptance, and impressive outcomes.

#### c. Conclusion – Do Existing Programs Meet the Needs?

Certain programs stood out by meeting parts of local officials' needs; these groups might serve as models and/or partners moving forward. Some had relevant, high quality environmental content, such as the Harry R. Hughes Center for Agro-Ecology. Others, such as the Pennsylvania State Association of Township Supervisors (PSATS), did a good job of reaching local officials. The Virginia Natural Resources Leadership Institute (VNRLI) combines highquality leadership development with environmental content. The National Nonpoint Education for Municipal Officials (NEMO) models the power of collaboration between existing programs which are supported by a central coordinating entity. Sustainable Jersey emerged from a collaborative process that brought together diverse stakeholders, and as such has gained significant acceptance and traction across diverse audiences. However, due to the scale of the watershed's leadership training needs and gaps in each program's abilities no program alone was suitable to shoulder the Watershed Agreement's call to action.

Many of the organizations described above contain aspects that could help meet the Watershed Agreement's Local Leadership Outcome, however no one program was able to address the entire need. Therefore, a new delivery mechanism for leadership advancement is needed to weave together existing expertise and fill gaps in current program offerings for elected officials. There are a wide scope of existing programs in terms of audience, but few target elected officials. There is a wide scope of program content, but none that delivers needed content to the target audience. No single program has emerged to adopt the coordinating role needed to address elected local officials' needs. Thus, the Watershed needs a new coordinating delivery mechanism to advance the Local Leadership Outcome. Fortunately, there is no need to start from scratch. There are many leadership development programs doing important and impressive work in the Bay. These organizations may be solicited as partners, engaged in collaboration, and used as models.

## II) RECOMMENDATIONS

#### 1. Focus on Elected Officials

We believe that the most effective way to achieve the Chesapeake Watershed's goal of increasing the knowledge and capacity of local officials is to target *elected* local officials. Elected officials are directly responsible for decisions that impact many Watershed Agreement Goals and outcomes, like water quality, land use, conservation, fisheries, habitat, and public access, yet many elected officials lack a sufficient understanding of environmental principles to make fully informed decisions. They appear to have the greatest need for information on both big picture watershed issues and local requirements, and expressed keen interest in information on what practices their peers used when facing similar challenges and requirements. In our interviews elected officials tended to rank the priority of watershed health lower than appointed officials ranked it. When interviewing principal staff of leadership development programs, there was general agreement among leaders about the need to focus on elected officials. However, interviewees also confirmed that elected officials are a difficult audience to engage, in part due to the high turnover inherent in their positions and their many competing priorities. In light of time constraints and competing priorities, it is crucial that programs make elected officials themselves the target audience to prevent program attendance from slipping towards staff. For this reason, we recommend that programs allow officials to bring a staff person to accompany them, but not to stand in their place.

It is estimated that there are approximately 1800 units of local government in the Chesapeake Watershed, but we were unable to identify a source or even basic assessment of how many local elected officials comprise these units. We recommend that, as further steps in the development of the workplan, the Bay Program or the Stewardship GIT undertake such an assessment and also develop a methodology for targeting local elected officials for the local leadership increased knowledge and capacity outcome.

#### 2. Maximize Program Relevancy

To best engage and support elected local officials, based on our interviews and program research, we believe it is vital that programs provide content which is both relevant to and specialized for these leaders. Diverse constituencies, wide-ranging environmental challenges, and unique jurisdiction requirements can mean general environmental education programs have limited value to elected local officials. Offering content for general audiences, rather than content tailored to elected local officials' needs, may explain why many of the watershed's leadership development programs have little participation from these leaders. Programs that did reach this target audience, NEMO, PSATS, and Sustainable Jersey, were explicitly designed with elected local officials in mind.

To provide content relevant to, and specialized for, elected officials we suggest programs offer educational tracks focused on rural/urban and agricultural issues. Some content, for instance riparian buffers, might be relevant to both tracks; and could be included in both, but presented differently in each. Beyond providing targeted educational content, these two tracks would provide program cohorts with better opportunities for peer-to-peer problem solving and information sharing. In terms of targeted education, PSATS modeled how content can be tailored to local officials' various experiences and levels of knowledge. Their program was broken into pre-basic, basic, intermediate, and advanced categories. It is also pertinent for programs to offer educational opportunities tailored to different jurisdictional requirements (federal, state, or local). NEMO showcased how partnerships with expert stakeholders and/or organizations can offer educational materials which are relevant to the issues faced by different states, regions, or localities. Offering both the suburban/urban and rural/agricultural tracks as well as programs for discrete jurisdictional requirements are not mutually exclusive. An organization may offer some educational opportunities organized by topic/professional role (e.g. agricultural pollution control workshops) as well as some educational opportunities organized by geographic/political boundaries (e.g. workshops about best practices to comply with state regulations).

#### 3. Educate about Watershed Fundamentals and Local Best Practices

From interviews with officials and leadership program staff, we identified local officials' need for education which includes 1) fundamentals about big picture watershed conservation and restoration activities and 2) best practices for implementing these activities and policies at the local level. In environmental education research, these two types of education would be characterized as declarative (factual) and procedural knowledge. While educators have historically focused on declarative knowledge, research shows that procedural knowledge can be even more important to producing program outcomes.

From interviews with officials and leadership program staff, we found that local officials need educational opportunities to be in formats which 1) allow convenient, concise information sharing and 2) offer opportunities for peer discussions and network building. Traditional educational strategies like lecturing, when engaging, can convey volumes of information quickly. However, educational research overwhelmingly supports the value of active learning strategies such as peer-based problem solving and discussions. Therefore, when considering educational content and teaching strategies together, we recommend that programs offer 1) declarative knowledge on watershed fundamentals through concise, engaging lectures and 2) procedural knowledge on local best practices through active learning in peer networks.

In our interviews and leadership program research we identified a variety of educational activities that could be used to teach watershed fundamentals and local best practices; some were online while others were in person. Online resources are convenient and reach wide audiences, but in person programs are impactful and develop networks more effectively. After upfront costs, online resources are relatively inexpensive to maintain considering their potential for economy of scale. To users, these resources are often free or are made available to program alumni. In contrast, in person programs require greater financial investment to maintain. They also require a greater investment of time and money from participants.

The matrix on the next page shows how educational activities about watershed fundamentals and local best practices can be taught through either in-person or online methods. Each educational activity, e.g. site visits, is explained in detail in the next section. A program will provide needed content so long as it includes lectures on watershed fundaments (activities in the unshaded column) and peer-to-peer active learning strategies about local best practices (activities in the shaded column). For instance two-day workshop sessions could include expert presentations with peer-to-peer workshops and site visits. On the other hand, a shorter conference session could effectively pair an expert presentation with an introduction to an online forum and toolkit.

## **Educational Content**

	Watershed Fundamentals Engaging Concise Lectures	Local Best Practices Peer-to-Peer Active Learning
In Person Targeted Audiences	Expert Presentations	Peer-to-Peer Workshops and Site Visits
<b>Online</b> Broadly Accessible	"Shed Talks" (Film Series)	Online Forums with Action Toolkit

#### 4. Use the Best Educational Activities

We recommend five types of educational activities to best advance local leader stewardship. These activities will fill elected local officials' wants and needs, as identified by interviews with officials themselves and top leadership development program's principle staff. They were also chosen because of their high caliber performance in existing programs and their effectiveness proven by educational research.

1) Expert Presentations would bring leaders and technicians in environmental fields to give presentations to local officials. These talks would focus on Chesapeake Bay fundamentals. This would provide context for how officials' actions play into the big picture of watershed health. Talks could also include technical advice from the expert's field that is relevant to officials' interests. This would give officials contacts and guidance in technical fields. To be effective, expert presenters must be hand-picked, and must be knowledgeable, engaging orators, and personable. It is crucial that their role be to support, help and advice, as opposed mandating or talking down to officials.

2) Peer-to-Peer Workshops are excellent active learning tools because they give learners practice solving problems collaboratively. These programs, especially ones where cohorts attend multiple sessions, establish interpersonal trust, build networks through personal relationships, and inspire individual commitment. In these environments, sharing information and asking questions is safe because everyone is "in it together." Moreover, these workshops could create a horizontal learning community for officials where they could build cohort networks to problem solve with others facing similar issues and jurisdictions. We believe this is especially important because we found that elected officials learn best when "mayors are teaching mayors," as opposed to outsiders providing one-sided education. In peer-to-peer workshops, educators and technical experts bring expertise to the table, however the focus in on harnessing the thoughts and experiences of everyone in the room. This creates vibrant meetings, peer-encouragement to act, and builds lasting empowerment and relationships.

3) Site Visits embody active learning by engaging deep, critical analysis of real world problems. Educational research and our interviews with local officials agree that spending time in nature, especially with guided reflection and mentoring, increases people's caring for and desire to protect the environment. Moreover, site visits can be an incentive to participate in educational programs as they provide a change of pace, a chance to network, and a novel learning environment. In interviews, local officials requested trips to both see successful projects as models and degraded areas to get a first-hand sense of problems and solutions on the ground.

4) A "Shed Talks" Film Series would be a film series made specifically for local officials where environmental experts give engaging, concise talks on watershed fundamentals. Named to reference "Ted Talks," this film series would follow a similar style. The talks would start with the very fundamentals, assuming no prior knowledge about the watershed's environmental issues. A logical sequence would lead viewers through the big picture context, while showing how individual efforts contribute to real solutions. Topics might include ecosystem services, governmental structure, geomorphology, and pollutant Total Maximum Daily Loads. Very high quality speakers and editing are crucial, so this component might need to be produced in partnership with film makers.

5) Online Forums with Action Toolkits could provide officials a repository of technical resources including contacts with technical experts. It could also offer a platform for information sharing among officials facing similar challenges. In our interviews officials were curious about the efforts of their peers facing similar challenges, and were eager to find ways to connect with these peers to problems solve and share information. They were also interested in access to technical expertise that would help them understand and meet regulations as well as prove benefits of stewardship actions to constituents. Sustainable Jersey's online platform is a good model for this approach. It provides a resource repository for educational materials and local contacts as well as provides convenient tools, such as draft ordinances, to help implement local sustainability projects.

#### 5. Implement Certification Programs

In our interviews some elected officials agreed that certification could be an effective means to incentivize and reward participation in leadership programs. Leadership development program leaders explained that certification is valuable to elected officials because it defines success. It can be given additional value by offering eligibility or special consideration in granting situations. Beyond providing evidence of progress and accomplishments, a legitimate verification processes protects officials from being accused of making inflated, unsubstantiated, and amorphous claims. Finally, it provides documentation of what an officials has done, which facilitates information and expertise sharing. In our research on leadership development programs we found certification was a powerful tool for rewarding sustainably projects, as seen by Sustainable Jersey, and providing incentives for participation in programs, as seen by the Watershed Stewards Academy. For these reasons, we recommend programs provide certification systems for elected local officials.

Successful certification programs have several defining features. Firstly, they are usually broadly implemented, longlasting, and supported or recognized by a centralized, highly regarded entity. If dozens of organizations offer similar or short-lived programs, each will become effectively meaningless. Certification systems are most effective when framed as a reward to recognize exceptional performance. Competitive or compulsive certification programs are less likely to be supported. A possible downside to certification programs is that they can be expensive. So it is logical to work certification opportunities into existing frameworks. For instance it would be efficient to offer courses that count towards certification at existing forums that local leaders already attend, for instance at an Association of Counties' summer conference. Finally, well-crafted certification programs are a process, not a means to an end. For example certification programs designed around discrete outcomes lose power over time because they inadvertently reward participants who do the minimum, and as more awards are distributed each becomes less valuable. However process based, for example annually expiring, certification encourages ongoing participation and keeps certifications up to date. The best programs encourage initiative, guide action, and reward completion.

## 6. Investigate Strategies for Funding and Evaluation

Several important program aspects are beyond the scope of this report, however investigating these topics in early phases of program design is critical. The first is program evaluation. It is important that evaluation systems are established at the same time programs are developed. This will ensure program goals are concrete and measurable. It will allow baseline monitoring, and establish a shared definition of success. Evaluation metrics can include measures of transactions, e.g. number of program participants, or square miles of watershed reached. Yet to allow meaningful measurement of impacts there must also be measures of transformations, e.g. pre/post changes in watershed fundamentals knowledge and in confidence about using technical resources to support sustainability

projects. The success of VNRLI's programs demonstrates the power of weaving evaluation into the fabric of an organization and its educational offerings; VNRLI could also provide a model for incorporating evaluation into future programs. The second program aspect not covered by the scope of this report is program funding. The NEMO Network's difficulty maintaining programs due to inconsistent funding highlights how important reliable funding is to program effectiveness, stability, and longevity. Funding structures are inherently power structures, and therefore finding stable funding provides a great asset to any future programs or partnerships. Moreover, designing a program's financial systems will be a key component of program design.

#### 7. Coordinate Existing Programs

Traditionally leadership was associated with individual efforts, but ideas on leadership are rapidly changing. Our era is characterized by complex problems which need coordinated solutions, but also by unprecedented information sharing and communication. It is becoming clear that collaborative leadership is key to success. This can be seen in how many leadership development programs are now focusing on educational activities like network building and collaborative skills. Likewise, environmental leadership efforts to address society's large-scale social and environmental problems are shifting from isolated work to collective and networked campaigns. Emerging collaborative leadership theories take into account the nature of these collaborative efforts and recommend elements key to successful collaborations.

One of the most widely respected collaborative leadership models is the theory of collective impact. This model explains the importance of common goals, shared evaluation metrics, constant communication through networks, partnerships through mutually reinforcing (not duplicative) specializations, and finally a backbone support organization. This support organization is important because collaboration takes time, money, and staffing, which no participating organization has to spare. When there is no standalone entity dedicated to holding the collaboration together, partners voluntarily devote resources to the common cause. According to the tragedy of the commons, this creates a system which rewards those who contribute less while penalizing those who volunteer more. Like Chesapeake NEMO, these types of systems are vulnerable to disruption, infighting, and loss of momentum. Yet a backbone entity with dedicated resources can facilitate collaboration, organize partnerships, and mediate conflicts, thereby holding the collaboration together.

We recommend coordinating leadership programs to work together in partnership to advance the Local Leadership Outcome. Coordination could weave together existing expertise to leverage current work, as well as identify and fill gaps in the watershed's leadership development capacity for local officials. It would allow collaborators to share information and educational materials as well as enable consistent programming, reducing redundancy of effort. Collaboration will also ensure that a big picture view of leadership development efforts is maintained, keeping up momentum towards common goals. To organize and maintain such a collaborative leadership effort it is important that a coordinating entity provide support to hold the partnership together, acting as the 'backbone' in the collective impact model.

## 8. Choose a Delivery Mechanism

We propose that three alternative delivery mechanisms be considered for developing a program that will satisfy the Chesapeake Watershed Agreement's goal to "[c]ontinually increase the knowledge and capacity of local officials..." The first approach is a Chesapeake Bay Watershed Umbrella Program to coordinate and maximize the resources of existing Bay watershed programs, and designed through a stakeholder-centered approach. The second approach is a multi-pronged program involving each of the primary Chesapeake watershed states selecting an entity within its state to be the primary delivery mechanism of information. The third alternative involves information being delivered on specific topics or best practices by selected organizations in stages as resources become available.

The contract for providing these services calls for an estimated budget for the three programs chosen as finalists. This would have been straightforward had our recommendations been existing programs. However, given our primary recommendation to develop a delivery mechanism with stakeholder input, it would be inappropriate to suggest a specific budget at this phase. While future planning grants will be able to describe more specific budgets, what we are able to provide in this report is budget ranges calculated by benchmarks from existing similar programs. The budget figures reflect what could be anticipated in the first several years of operations. Budgets could scale up to meet the broader need in future years. None of these budgets factor in tuition. Tuition is often a significant revenue source; however elected officials in the experience of leadership programs nationally, often are unable or unwilling to pay a significant tuition fee.

#### 1) Chesapeake Bay Watershed Umbrella Program

This entity would weave together existing organizations' programs across the watershed, identify gaps in current capacity, and fill these gaps itself with new programs or through additional partnerships. As was so effective in the NEMO networks, the Chesapeake Bay Watershed Umbrella Program (Umbrella Program) would leverage and amplify existing efforts by recognizing the expertise of partner organizations – for instance top-performers in leadership development like VNRLI, specialists in technical watershed content like Harry. R. Hughes Center for Agro-Ecology, and those established with local officials like PSATS. In order to circumvent the challenges NEMO faced with maintaining programs through time, the Umbrella Program, as a standalone entity, would have dedicated staff and stable funding sources instead of relying on staff from preexisting programs and piecemeal funding. In other words, the Umbrella Program would organize and hold together partnerships as the backbone support organization of this collaborative leadership approach. Unlike NEMO, in this case the Umbrella Program's central cohesive structure would be watershed wide, not national, but it would offer the same benefits of coordination, including shared, consistent outreach. At the same time, it would use local partnerships to remain closely attuned to unique local, state, and/or regional needs and power structures to offer locally relevant programming, curriculum, and events across the watershed, all tailored to elected local officials. While NEMO organized delivery into state chapters, the way delivery would be organized for the Umbrella Program would be up to stakeholders and partners to decide during the program's collaborative formation process.

The most distinguishing characteristic of the Umbrella Program would be its collaborative formation, based on the successful Sustainable Jersey model of involving stakeholders in program design right from the onset. Stakeholders would include, but not be limited to, elected and appointed local officials along with representatives from non-profits, industry, higher education, government agencies, urban planning groups, and agricultural organizations. As such, the first step in forming the Umbrella Program would be developing a steering committee of diverse stakeholders, which in turn would be advised by the Bay Program's Local Government Advisory Committee. To incentivize participation, this planning process would include stipends to remunerate participants. To spearhead various aspects of early program design, stakeholders with relevant knowledge and experience would come together to form workgroups around topics of common interest. These workgroups would form a diverse network of learning communities as happened in the formation of Sustainable Jersey.

Early and close involvement of local officials will respect their position of authority in the process, will ensure that the program is relevant to them and meets their needs, and will help develop early buy-in. Besides participating in the steering committee, elected local officials would be surveyed to gain a more complete understanding of their diverse needs and interests. Active and successful local officials, both elected and appointed, as well as leadership program experts from the top programs recognized in this report, could be brought together to help a contractor conduct this research.

Next steps would involve early states of collaborative program design, guided by the steering committee, Local Government Advisory Committee, and information on elected local officials' needs and interests. Workgroups and the steering committee would develop recommendations on how best to decide upon and achieve program goals.

They would develop recommendations on how current programs could be woven together as partners, and moreover advise what new ones would be needed to meet the interests and fill the needs of local officials. Another step will be to continue to build support from elected local officials. Certification programs would be investigated; while perhaps similar to those offered by Sustainable Jersey in being time-bound, broadly recognized, and multi-tiered certification could perhaps be awarded to officials, rather than municipalities, and for participation in educational programs, rather than project implementation. Finally the advisory committee and workgroups will make recommendations about designing program evaluation and establishing funding structures.

The budget range for the initial phase of the Umbrella Program is \$200,000 - \$300,000 per year. This will develop the infrastructure such as website, curriculum development, include a limited staff, and begin small pilot programs. It will not fund even modest implementation, where additional funds would be needed for instructors, facilities, overnight accommodations, food, travel, and field trip expense. This figure was generated using benchmarks from both Sustainable Jersey and NEMO programs. Donna Drewes, Sustainable Jersey Director, who assisted founding the organization, offered this range as her professional estimate. She explained that Sustainable Jersey started with \$40,000 planning grant and now has an over \$2 million budget, \$900,000 of which is disseminated in a small grants program. Drews suggests 2-4 staff at a minimum at first, in addition to other partner staff. She also suggests a number of jurisdictions contributing to the budget so that one jurisdiction does not shoulder the entire budget. A second benchmark for this estimate is the cost of the NEMO programs. A Chesapeake NEMO, now discontinued, was originally funded with a one-time \$99,500 grant from NOAA. There are several reasons this would not be sufficient for the Umbrella Program. Firstly, Chesapeake NEMO's, focus was only on fast-growing towns in coastal communities, and now that the TMDL affects all local governments, the scope needs to be expanded so the cost would be greater. Secondly, NEMO generally relies on one full-time person per state who serves as a champion, and often coordinates others, through a train the trainer model. However, even NEMO found one full-time staff person was not always sufficient. Finally, the NEMO model uses Sea Grant offices as primary partners, and often those offices provide in kind office support, and staffing. David Dickson, national NEMO Director, estimated that \$200,000/year would be a workable budget to begin a program like NEMO with a single office. However, Dickson also said due to the watershed's size it may require more than one office. For these reasons we believe the NEMO example also corroborates our \$200,000 - \$300,000 per year estimate.

#### 2) State Led Programs

In this multi-pronged alternative each of the primary Chesapeake watershed states would select an entity within its state, either an existing leadership program or higher education institution, to be the primary delivery mechanism. In this approach states, not stakeholders or leadership programs, would be the main force behind program development. The benefit of this approach is that it is likely to produce programs which are tailored to the unique challenges and requirements of the different states. Several impressive university programs such as VNRLI could potentially be recruited as partners and expanded into state-wide delivery mechanisms. However, to operate on a state-wide scale VNRLI, or another university program, would need to greatly expand its capacity, reach, and programming. It would also need to be open to changing its program content and structure to meet the needs and requirements of both the state that coordinates them and the target audience of elected local officials. It may be difficult to find institutions willing to expand and change so greatly. A limitation of this approach is inherent in its structure. Since each state would have a different delivery mechanism, there would be little consistency in program content or design between them. Coordination and resource sharing would also be difficult. The Chesapeake watershed's environmental challenges are larger than state boundaries, so with discrete delivery mechanisms by state, this would make it challenging to coordinate watershed scale conservation, restoration, policy, and planning efforts.

The first step to developing state led programs is for the Bay Program to convene a temporary advisory committee to bring together experts and stakeholders, similar to the approach recommended for the Umbrella Program.

However, in this case the advisory groups would have a more direct process with less stakeholder input and investment. The advisory group would 1) assess key issues for which local officials most want support, 2) recommend what type of institution, agency, or university should provide the programs, and 3) decide whether a request for proposal or sole source grant is a more effective strategy. An important duty of the advisory committee would be to coordinate between states to encourage some consistency of program content and design. This might include developing a shared core curriculum.

The budget range for the initial phase of state programs is \$50,000-\$100,000 annually per state. This calculation is based on the per day cost of Virginia Natural Resources Leadership Institute (NRLI), Environmental Leadership Program (ELP), and the Chesapeake Bay Foundation's (CBF) overnight programs. The approximate expense per participant ranged from \$163/day for the Virginia Natural Resources Leadership Institute (VNRLI), to \$291/day for the Environmental Leadership Program (ELP), to \$167/day for the CBF residential island programs. Estimating these costs per participant to train 100-200 elected officials/year for three days each, or conversely 300-600 elected officials for one day each gave us the \$50,000-\$100,000 figure. However, most of these programs involved a significant investment of time, making them relatively costly per person. A third benchmark is the now defunct Rawlings Center for Public Leadership, for incoming members of the Maryland General Assembly. It was a nine month course that consisted of two weekends, and three one-day training sessions. The Center was funded \$500,000/year through the Maryland General Assembly, which is a significant cost per participant.

#### 3) Individual Topic-based Programs

The third alternative involves information being delivered on specific topics or best practices by selected organizations in stages as resources become available. The Bay Program would issue periodic requests for proposals (RFPs) for either 1) curricula on a particular topic or 2) programs to fit a particular need. These RFPs would be put out individually, to be delivered by the organizations that are awarded the contract. Topics would be selected with input from the Bay Programs' Local Government Advisory Committee and the Bay Program Goal Implementation Teams, and RFPs would be released as funding and interest allowed.

For the topical curricula approach, the Bay Program would annually or biennially put out an RFP to develop curricula. The organization selected would produce curricula to share with existing leadership and watershed organizations. It would be important that the Bay Program select a trusted, unbiased organization to fill this role. The curriculum would be updated regularly and would start with the big picture to teach the fundamentals of Bay and watershed restoration, but also include topics of local and regional concern, e.g. meeting federal stormwater permit requirements.

For the individual program approach, the Bay Program's RFP would be for a program to fill a certain need. An example of the type of program this could produce is the new Municipal Online Stormwater Training (MOST) Center project, a project by the University of Maryland's Environmental Finance Center. MOST will be a web-based resource to help municipalities implement stormwater management by offering technical expertise and training. Many aspects of the initiative are well suited to filling the needs of elected local officials, such as a platform for watershed wide peer-to-peer networking and content designed specifically for municipalities. While poised to do an excellent job at filling a critical need, the MOST program is solely focused on stormwater and elected local officials have need for similar resources on other topics, such as land use planning. This highlights the major inherent disadvantage of the Individual Topic-based Program approach.

While individual programs and curricula have the potential to be incredibly valuable and well designed – for instance by being watershed-wide, catered to officials, and conducted through partnerships – they will always be inherently discrete. Since they would be produced by various organizations, at different times, and cover isolated topics, the information delivery will be inherently piecemeal. As a state program could not offer cohesive coordination across the entire landscape of the Chesapeake watershed, programs and curricula on individual topics cannot offer the

cohesive big-picture view of how the many sustainability challenges like stormwater, land use, and water quality are linked.

The budget range for the initial phase of state programs is \$70,000-\$350,000 per year. One benchmark is the Municipal Online Stormwater Training (MOST) Center. MOST has been funded by a \$350,000 per year grant for five years from the National Fish and Wildlife Foundation. It is unclear how many people the program would eventually train, moreover it only covers one area of need, stormwater. A second benchmark is the Harry R. Hughes Center for Agro-Ecology, Inc.'s WIP workshops. Five workshops were offered to local governments in different parts of the state in 2014 and it was made possible through a \$70,000 grant from the Town Creek Foundation, which paid for meeting and consultant expenses. The Hughes Center for Agro-Ecology contributed staffing. The significant budget range, \$70,000-\$350,000 represents these two significantly different approaches. The \$70,000 figure would reach 150 elected officials, assuming five workshops were conducted at training sites conducive to elected leader participation. Whereas the \$350,000 figure could represent a robust program with one delivery platform, such as the online courses being developed by MOST.

#### We Recommend the Umbrella Program

We believe based on the benefits of large-scale coordination, the power of stakeholder investment at the onset, and the importance of cohesive consistent programming, that the best alternative for delivering leadership development is establishment of a Chesapeake Bay Watershed Umbrella Program. In contrast, the state led programs, although enabling states to tailor information to address their unique political structures, would, by definition, not be as coordinated and would not be able to share resources as effectively as an umbrella organization. The Individual Topic-based Programs option would deliver information, but it would be in a piecemeal fashion lacking the cohesiveness we believe needed to adequately meet the Agreement's goal.

Elected local officials are only likely to participate if programs are tailored to their needs and availability, and if the delivery mechanism for these programs respects their professional positon. What the Umbrella Program uniquely offers is a delivery mechanism which puts power in the hands of elected local officials throughout its program design process, demonstrating the desire to support, not change, them. It is able to do this because of the flexibility inherent in its stakeholder-driven design. This process recognizes that successful partnerships need the right power dynamics, and so it provides a forum for collaborators to work together as equals toward the common mission to support local leaders. The Umbrella Program would require the most investment, but would be the most comprehensive, coordinated, consistent, and effective.

This report is the result of collaboration between with many national experts in the Chesapeake Bay watershed, environmental education, and leadership development. The project team included: Don Baugh, President, Environmental Leadership Strategies; Bob Hoyt, Principal, Ecologix; Georgia Sorenson, Leadership Scholar, Cambridge University; Charlie Stek, President, Environmental Stewardship Strategies; and Genevieve Leet, Project Manager, Environmental Leadership Strategies.

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## About Environmental Leadership Strategies

Environmental Leadership Strategies is a private environmental education and leadership consulting firm with the mission to connect students and key individuals, teams, organizations, schools, businesses, and government agencies to the environment.