

FINAL Report: Evaluation of the Small Watershed Grants Program

Prepared for the National Fish and Wildlife Foundation

Submitted by Blue Earth Consultants, a Division of ERG

July 23, 2019



Creating sustainable solutions

Photo Credits

Left: Kirwan Creek in Queen Anne's County, MD

Photo credit: Alec Lambert, PG Environmental

Right top: Tree planting in Annapolis, MD

Photo credit: Will Parson, Chesapeake Bay Program Flickr

Right bottom: Nanticoke River Wetlands

Photo credit: Matt Rath, Chesapeake Bay Program Flickr

Contact Information

Blue Earth Consultants, a Division of ERG

283 4th Street

Suite 202

Oakland, California 94607

510-268-8207

Disclaimer

Blue Earth Consultants, a Division of Eastern Research Group, Inc. (ERG), led an independent evaluation, and the National Fish and Wildlife Foundation provided guidance throughout the evaluation. Blue Earth's research is drawn from grant documents, interviews, metrics, site visits, and surveys. While Blue Earth strives to present the most accurate information possible, it cannot always guarantee the accuracy of the information shared as perception by interview respondents or included in grant documents.

Table of Contents

Photo Credits	i
Contact Information	i
Disclaimer	i
Table of Contents	i
Acronyms and Abbreviations	ii
Background, Purpose and Approach	1
Building Capacity for Water Quality Restoration in the Chesapeake Bay Watershed	1
Evaluation Purpose and Questions	3
Methodology Summary	3
Summary of Evaluation Findings	4
Evaluation Question Set 1: Project Types, Outcomes, and Maintenance	5
Evaluation Question Set 2: Increases in Grantee Capacity	9
Evaluation Question Set 3: Strengthened Capacity of Non-Grantee Partners	13
Evaluation Question Set 4: Development of Regional Partnerships	16
Evaluation Question Set 5: NFWF’s Role in Strengthening Capacity	19
Conclusions and Recommendations	25
Encouraging Site Maintenance	26
Continuing to Build Grantee Capacity	26
Strengthening Multi-City/County Partnerships	27
Further Improving SWG Program Investments	28

Acronyms and Abbreviations

BMP	best management practice
CBP	Chesapeake Bay Program
CI	Cacapon Institute
ECC	Earth Conservation Corps
EPA	U.S. Environmental Protection Agency
ERG	Eastern Research Group, Inc.
INSR	Innovative Nutrient and Sediment Reduction
NFWF	National Fish and Wildlife Foundation
ORP	Oyster Recovery Partnership
SWG	Small Watershed Grants

Background, Purpose, and Approach

Building Capacity for Water Quality Restoration in the Chesapeake Bay Watershed

As the largest estuary in North America, the Chesapeake Bay and its associated watershed of more than 64,000 square miles support more than 3,600 species of plants and animals. The Bay also provides critical ecosystem services to a vibrant human community of over 18 million people, more than half of whom live near the shoreline.¹ Despite the importance of these ecosystems, a suite of issues—from intensifying agricultural development to urban development and population growth—are threatening the watershed and compromising the integrity of its ecosystems.² In 1983, leadership from three of the six states in the watershed (Maryland, Pennsylvania, and Virginia), the District of Columbia, and the U.S. Environmental Protection Agency (EPA) signed the first Chesapeake Bay Agreement to establish a collaborative approach to restoring and protecting the Bay watershed.³ Since the initial signing of the 1983 Chesapeake Bay Agreement, the Chesapeake Bay Program (CBP) has evolved to encompass a wide range of public and private partners in all six watershed states and the District of Columbia.

In 1999, Congress established the Small Watershed Grants (SWG) Program to offer technical assistance and grants to local governments, nonprofit organizations, and individuals for implementing water quality improvement strategies and other locally based natural resource protection and restoration programs. The National Fish and Wildlife Foundation (NFWF) successfully competed to manage the SWG Program in 2000 and has since successfully re-competed to secure subsequent agreements for continued SWG Program administration.

The purpose of the SWG Program is to promote community-based efforts to develop conservation strategies that protect and restore the diverse natural resources of the Chesapeake Bay and its



*Aerial footage of the Chesapeake Bay
(Matt Rath, CBP Flickr)*

Box 1. SWG Program Highlights (2005–2017)

- Awarded \$50.9 million to 533 Implementation grants.
- Granted nearly \$4.9 million to 89 Planning and Technical Assistance grants.
- Leveraged \$79.2 million in local matching funds.

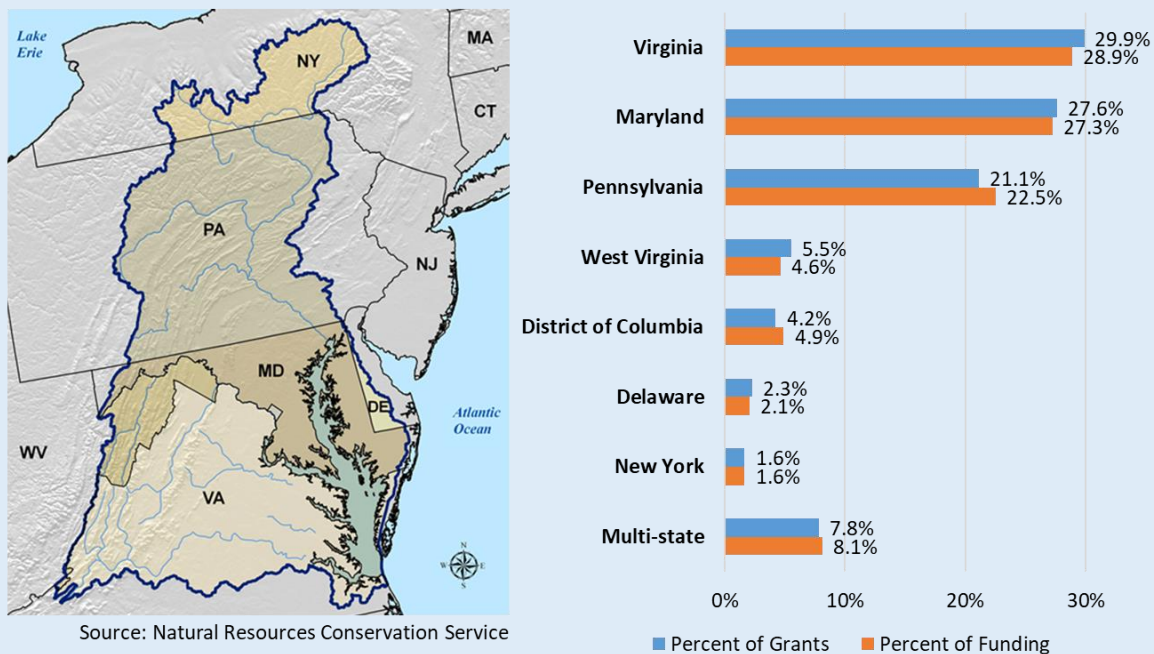
¹ Chesapeake Bay Program. 2019. Facts & Figures. Accessible online at <https://www.chesapeakebay.net/discover/facts>. Accessed 3/1/19.

² National Fish and Wildlife Foundation. 2018. Chesapeake Bay Business Plan. Accessible online at <https://www.nfwf.org/chesapeake/Documents/chesapeake-business-plan.pdf>. Accessed 3/18/19.

³ Chesapeake Bay Program. 1983. The Chesapeake Bay Agreement of 1983. Accessible online at https://www.chesapeakebay.net/documents/1983_CB_Agreement2.pdf. Accessed 3/1/19.

watershed. In doing so, the SWG Program helps further the established goals and outcomes of the CBP partnership. To fulfill its purpose, the SWG Program awards Implementation grants of \$20,000 to \$200,000 focused on direct, on-the-ground efforts to protect and restore the Bay watershed and its associated natural resources. The SWG Program also includes Planning and Technical Assistance grants, where technical service providers offer targeted assistance to strengthen the capacity of nonprofits and local governments to implement future restoration projects. For the Implementation grants, eligible organizations include nonprofit 501(c) organizations, local and municipal governments, tribes, and K–12 educational institutions. For Planning and Technical Assistance grants, eligible organizations include nonprofits, local and municipal governments, state agencies, tribes, educational institutions, and for-profit entities.⁴ From 2005 to 2017, the SWG Program allocated \$50.9 million in Implementation grants and \$4.9 million in Planning and Technical Assistance Grants to a variety of local partners across the Bay watershed to support and promote community-based efforts to protect and revitalize the Bay region’s diverse natural resources. Specifically, SWG investments fund community-based organizations and local governments across the six Chesapeake watershed states and the District of Columbia (Figure 1) in their planning, capacity building, and implementation of best management practices (BMPs) to support habitat and water quality restoration projects.

Figure 1. Geographic distribution of SWG Program grants, 2005–2017. Source: NFWF Metrics.



⁴ National Fish and Wildlife Foundation. 2019. Small Watershed Grants. Accessible online at <https://www.nfwf.org/chesapeake/Pages/small-watershed-grants.aspx>. Accessed 3/20/19.

Evaluation Purpose and Questions

NFWF contracted the first independent evaluation of the SWG Program in 2007, which made recommendations to improve program performance. In 2018, NFWF hired an independent entity—Blue Earth Consultants, a Division of ERG—to evaluate SWG Program outcomes and grantee capacity changes over time. Specifically, the purpose of the 2019 evaluation was to understand the performance of the SWG portfolio in the decade since the 2007 evaluation and determine how grantee capacity changed in response to the 2007 evaluation’s recommendations. The multidisciplinary Blue Earth team, including members with expertise in social and natural sciences, worked in coordination with NFWF and the CBP Management Board to identify five sets of key questions to guide the evaluation. The evaluation question sets focused on the following themes:

1. Types of projects implemented by grantees, the outcomes these projects achieved, and how grantees and partners maintained them over time.
2. How grantee capacity to implement watershed protection and restoration projects changed over time.
3. Ways in which the capacity of organizations that partnered with SWG grantees increased over time.
4. Regional partnerships that formed as a result of the SWG Program and its grants.
5. NFWF’s role in contributing to capacity building among grantees and partners and in implementing the 2007 SWG evaluation recommendations.

Methodology Summary

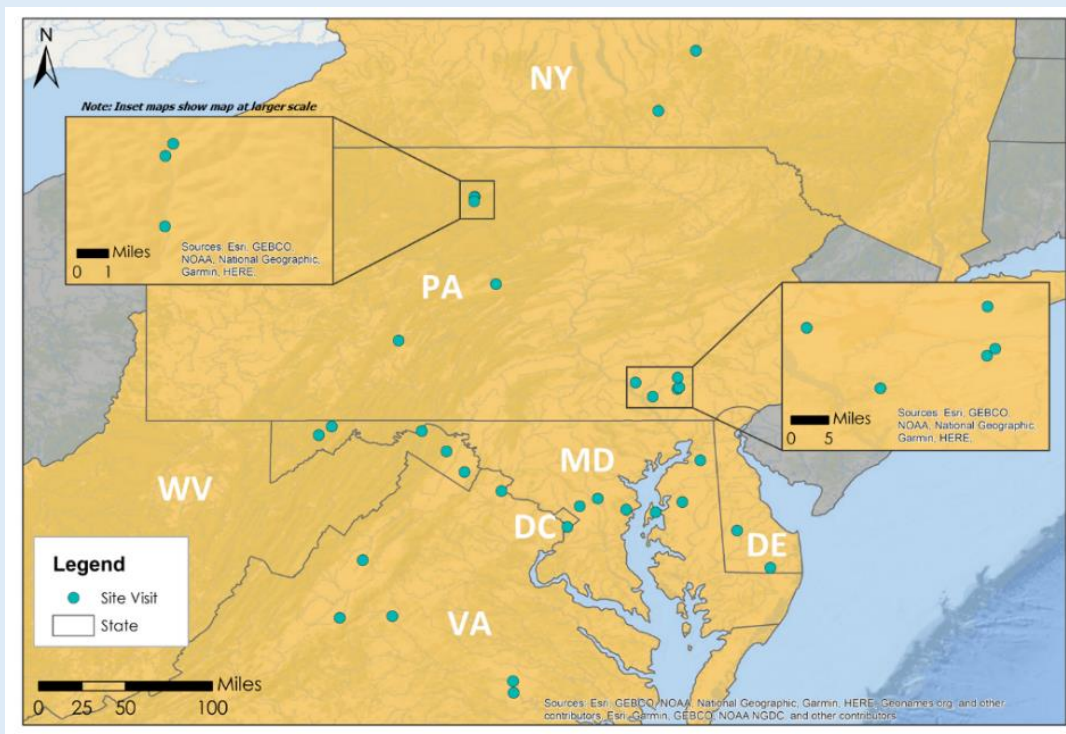
The evaluation team used an integrated, mixed-methods data collection and analysis approach to address the evaluation questions. This approach encompassed a range of social, organizational, and biophysical data collection methods, which allowed the team to compare, verify, and triangulate results. (See Appendices A and I for a full description of how the team integrated these data collection and analysis methods to answer the evaluation questions.) The team employed five main methods:

- **Document review:** The evaluation team reviewed **800 grant documents** provided by NFWF, covering 622 grants, along with **62 internal** SWG Program documents. (See Appendix B for the document review framework.)
- **Site visits:** Members of the evaluation team visited **32 unique sites** (Figure 2) across each of the Chesapeake states and the District of Columbia, representing 29 grantees. (See Appendix C and D for the site visit protocol.)
- **Online survey:** The evaluation team distributed an online survey (Appendix F) to all grantees, as well as partners that grantees indicated were involved in their grants. **Ninety-two grantees and 60 partners** (response rates of 40 and 34 percent, respectively) completed the online survey (Appendix G).
- **Metrics analysis:** Using a dataset of metrics that NFWF collected from grantees from 2007 through the present, the evaluation team analyzed metrics from **303 closed and active grants** to

determine outcomes achieved by these grants.⁵ (See Appendix E for a summary of the metrics data collection framework.)

- **Interviews:** The evaluation team conducted **73 interviews**, including 30 grantee interviews, 29 partner interviews, seven interviews with technical assistance providers, and seven interviews with regional experts (Appendix H).

Figure 2. Map of site visit locations for this evaluation.



Summary of Evaluation Findings

The evaluation found that the SWG Program contributed to the improvement and restoration of fish and wildlife habitat by funding a diversity of restoration and protection projects—including projects focused on water quality improvements, habitat restoration, capacity building, and planning/assessment. Through the SWG Program, grantees increased their technical and operational capacity, and non-grantee partners

⁵ Over time, NFWF improved the way it collects project metrics from SWG grantees, including new requirements that increased the completeness of reporting and new tools and guidance that improved the quality and consistency of the data. NFWF conducted quality control reviews and identified 303 grants (223 closed, 80 still active) issued from 2007 to 2017 that had sufficiently complete metrics to support quantitative evaluation. This represents 49 percent of the total number of grants that were in scope for this evaluation. Most of the grants without metrics were implemented during the early part of the evaluation period.

built capacity through collaboration with grantees. The SWG Program is also beginning to contribute to the development of regional partnerships among grantees, partners, and others in the watershed by helping to identify shared regional goals and initiate partnerships on new projects. Overall, the findings demonstrated that NFWF played a critical role in increasing capacity in the Chesapeake region and has many opportunities to build upon its successes. Opportunities to further strengthen and improve the SWG Program relate to four key themes: 1) encouraging site maintenance to help promote long-term outcomes for water quality, habitat, and wildlife; 2) continuing to strengthen grantees' organizational capacity and enhance their ability to achieve project outcomes; 3) strengthening multi-city/county partnerships through actions such as coordinating local events and funding regional pilot projects; and 4) further improving SWG Program investments, such as NFWF-funded events, the field liaison program, and monitoring and metrics reporting.

The following sections describe the evaluation findings in greater detail in relation to the five evaluation question sets, which pertain to 1) project types, outcomes, and maintenance; 2) changes in grantee capacity; 3) benefits and impacts to non-grantee partners; 4) regional partnerships; and 5) the role of NFWF in contributing to capacity building among regional restoration partners. Each section begins by highlighting key findings, then provides additional details about specific themes.

Evaluation Question Set 1: Project Types, Outcomes, and Maintenance

As on-the-ground implementation, capacity building, and technical assistance are core funded activities in the SWG Program, it is essential to understand the characteristics of projects that received funding, project outcomes, and the extent to which funded projects have been maintained over time so as to continue to provide water quality benefits and habitat for fish and wildlife. To explore these themes, the evaluation drew upon data from a review of grant documents, site visits, interviews, and surveys to help answer the following questions:

- What types of restoration, capacity building, and planning and assessment projects did grantees implement between 2005 and 2017?
- What habitat and water quality outcomes have stemmed from these projects and how are they anticipated to benefit fish and wildlife?
- Have the projects been maintained over time, who is doing the maintenance, what factors have limited or hindered site maintenance, and what factors have contributed to or facilitated continued site maintenance?



*A site visit to Big Spring Branch watershed, VA.
(Alec Lambert, PG Environmental)*

This section provides a summary of the types of funded projects; realized project outcomes related to habitat, water quality, and fish and wildlife benefits; and project maintenance activities.

A majority of grants from 2005 to 2017 addressed water quality.

- **Project type:** Water quality improvement projects made up a majority of SWG grants; stormwater and green infrastructure projects were the most common.
- **Benefits to fish and wildlife:** Projects contributed to an estimated cumulative reduction of annual loads of at least 574,416 pounds of nitrogen, 38,159 pounds of phosphorus, and 61,448,825 pounds of sediment per year in the Chesapeake Bay watershed, as well as at least 2,714 acres of wildlife habitat and 524 miles of stream and riparian habitat.
- **Site maintenance:** Almost all projects implemented are still in place and have some type of plan or agreement for site maintenance. Support from project partners and funding for maintenance were essential to ensuring continued site maintenance.

Water quality improvement projects made up a majority of SWG grants.

The most prevalent project types funded under the SWG Program were for water quality improvements, followed by those supporting capacity building and planning/assessment (Figure 3). Water quality improvement projects included:

- **Stormwater or green infrastructure:** bioretention, rain gardens, swales, green roofs, impervious surface removal.
- **Agricultural:** livestock exclusion/fencing, grazing/pasture management, nutrient/manure management, cover crops/tillage.
- **Multi-sector:** watershed-scale projects or programs that involved multiple project categories.



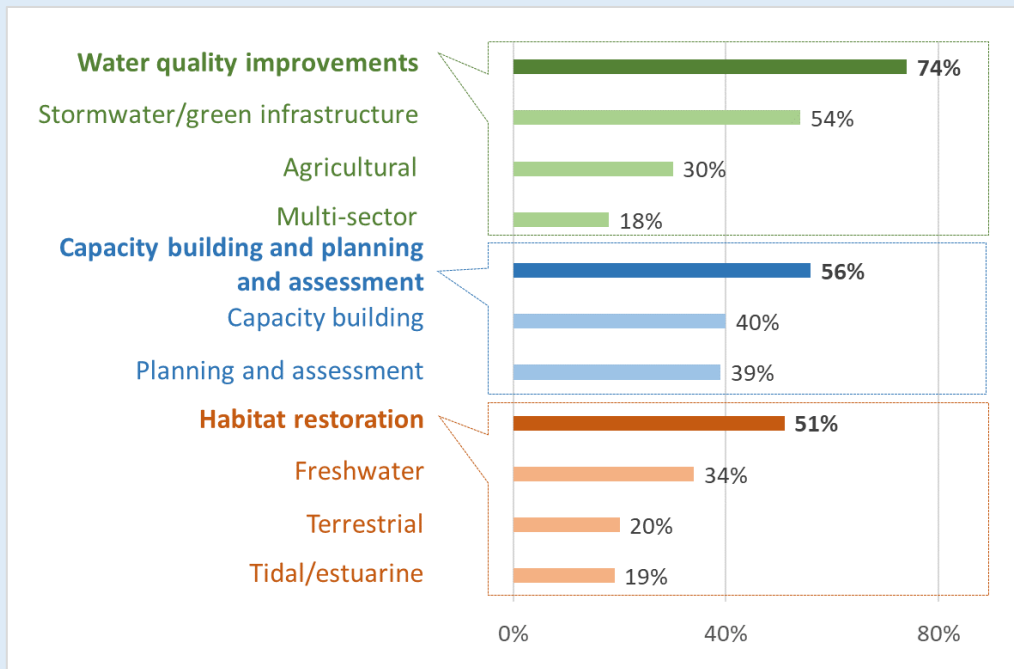
Cattle fencing to keep livestock out of streams and protect water quality in Lancaster County, PA. (CBP Flickr)

Examples of implemented capacity building and planning and assessment projects include behavior change campaigns, networking and information sharing, and watershed/habitat planning and assessment. Nonprofit organizations were responsible for implementing about three-quarters of the grants that focused on capacity building. About one-quarter of these nonprofits reported working at a regional scale, followed by smaller numbers working at local or multi-state scales.

Grantees conducted a variety of specific activities to achieve their project goals. Examples of activities for key project types include:

- **Water quality improvements:** Installation of bioretention areas and rain gardens to help remove sediment and contaminants from rainwater; design and installation of livestock fencing and exclusion structures, as well as grazing and pasture management activities, to reduce manure and associated nutrient input to streams.
- **Capacity building and planning and assessment:** Outreach and community engagement activities, such as holding volunteer planting events and disseminating fact sheets and brochures on key topics (e.g., green infrastructure, water quality restoration), as well as education through workshops, training programs, and sharing of developed materials (e.g., instructional videos, training manuals, books, lesson plans).
- **Habitat restoration:** Riparian restoration activities, fish habitat improvement (e.g., through stream shading), fish passage improvements (e.g., through dam removal) to improve habitat available for key species such as eastern brook trout, and removal of invasive vegetation and non-native aquatic species.

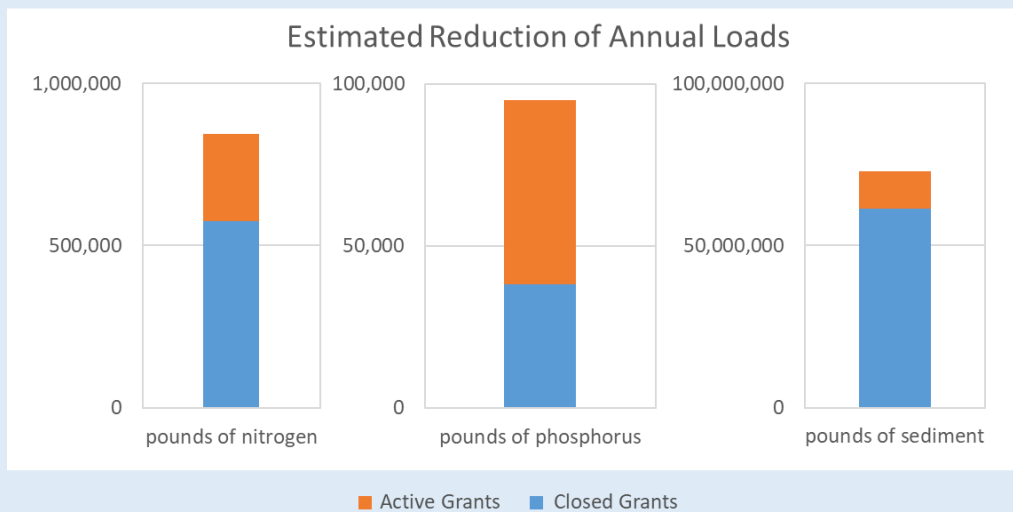
Figure 3. SWG Program grantee project types identified in grantee and partner surveys. Note that survey respondents were able to select more than one project type.



Grants reduced nutrient and sediment loads, in addition to benefiting fish and wildlife.

As part of metrics reporting, NFWF asked SWG grantees to estimate the reductions in nutrient and sediment loads that would result from their projects. The 223 closed grants with metrics (see footnote #5 on page 4) collectively reduced annual nitrogen, phosphorus, and sediment loads by an estimated 574,416 pounds, 38,159 pounds, and 61,448,825 pounds, respectively (Figure 4). Pennsylvania accounted for the largest share of nutrient reductions: 63 percent of all nitrogen and 54 percent of phosphorus reductions. Maryland, Virginia, and multi-state projects had the next-highest totals. Currently active grants are projected to lead to reductions of an additional 268,774 pounds of nitrogen, 56,873 pounds of phosphorus, and 11,347,894 pounds of sediment per year (Figure 4). Multi-state projects account for approximately half of the total projected nutrient and sediment reductions, and Pennsylvania accounts for approximately two-thirds of the remainder.

Figure 4. Estimated cumulative annual nitrogen, phosphorus, and sediment reduction contributed by active and closed SWG Program grants.



The 223 closed grants with adequate metrics data contributed to the restoration of at least 2,714 acres of wildlife habitat and 524 miles of stream and riparian habitat in the Chesapeake Bay watershed (Box 2). The 80 active grants with available metrics data accounted for approximately:

- 9 acres of restored wetland
- 4 acres of added oyster habitat
- 24 miles of restored riparian habitat
- 9 miles of stream opened for fish passage
- 13 miles of restored instream habitat

Through grant documents, grantees reported on project outcomes that benefited fish and wildlife, such as the

Box 2. Restoration Impacts of Closed SWG Grants (2007–2017)

- 2,691 acres of restored wetland
- 23 acres of added oyster habitat
- 392 miles of restored riparian habitat
- 129 miles of stream opened for fish passage
- 3 miles of restored instream habitat

protection and restoration of fish and wildlife habitat (three-fourths of all grants), creation or restoration of fish passage on streams, and management and control of invasive vegetation and non-native aquatic species. At least 69 grantees opportunistically reported specific wildlife species that directly benefited from their grant activities, including the eastern brook trout, black duck, river herring, American eel, and native oysters—which were typically associated with the restoration of oyster reefs. For instance, at least 16 grants resulted in the protection and restoration of oyster habitat, and at least eight grants created or restored habitat for eastern brook trout.

Funding and support from partners enabled maintenance of a majority of projects.

In interviews and surveys, representatives for a majority of projects reported that they had some form of ongoing site maintenance. The site visits validated this finding, as nearly all of the sites visited had BMPs that were still fully intact and functioning. Twenty-seven of the 32 sites visited had a designated entity responsible for maintenance. More often than not, an organization other than the original grantee—most commonly a private landowner—now holds this responsibility.

“I would [...] highlight the importance of collaborative partners [in maintaining sites] because they can continue to provide opportunities to share resources. When capacity changes, having strong partnerships is key to keeping things moving.”

In interviews and surveys, grantees and partners emphasized the importance of ongoing site maintenance to preserve site conditions and project outcomes. About three-fourths of interviewees ranked available staff capacity, financial resources, and technical knowledge or expertise as essential elements for ensuring continued site maintenance. Additionally, a majority of grantees and partners interviewed discussed the importance of having multiple organizations collaborate on site maintenance, stressing that partnership helped ensure ongoing maintenance capacity and allowed grantees and partners to fill complementary roles and responsibilities. In some instances, grantees and partners also developed innovative solutions to sustain long-term maintenance and monitoring. The Lafayette Wetlands Partnership and the City of Norfolk, for example, established a “sharing shed” of restoration tools and training for volunteers, which enabled more cost-effective long-term monitoring and maintenance and optimized municipal restoration operations.

Evaluation Question Set 2: Increases in Grantee Capacity

A main goal of SWG Program grants is to strengthen the capacity of community-based nonprofits and local governments to implement watershed restoration and protection efforts. Thus, exploring how grantee capacity has changed over time was a crucial element in assessing the performance of the SWG portfolio. To determine the types of changes in capacity that SWG grantees experienced over time, the evaluation explored the following questions:

- How has SWG grantee capacity to implement conservation and restoration projects changed over time?



A site visit to Kirwan Creek in Queen Anne’s County, MD. (Alec Lambert, PG Environmental)

- Have subsequent restoration projects and practices implemented by the grantee increased in size, scale, impact, and level of difficulty of BMPs implemented?
- What operational attributes of the grantee organizations account for increases in size, scale, impact, and level of difficulty of BMPs implemented?

The sections below outline findings in relation to these questions and the key ways in which grantee capacity increased due to receipt of SWG Program funds.

Grantee capacity has increased over time.

- **Increases across multiple capacity dimensions:** Since receiving their first SWG Program grants, grantees experienced increases in their organizations' budget, number of staff, breadth of services, number of projects, and number of partners.
- **Critical factors for increasing operational capacity:** Organizational factors—including financial resources, ability to demonstrate project success, and project management and planning expertise—were critical for increasing grantee capacity.
- **Changes in project complexity:** There were no clear trends over time regarding changes to the acreage of project area grantees worked on, the scale of project activities, the impact of projects, or the level of difficulty of BMPs implemented.

Grantees' operational and technical capacity increased across multiple dimensions.

Interview and survey respondents highlighted multiple ways in which grantee capacity to implement conservation and restoration projects changed over time. Key themes included:

- **Technical capacity growth:** In interviews, the most common theme emphasized by respondents related to growth in technical capacity was that SWG Program grants increased grantees' knowledge and understanding of conservation and restoration methods. Grantees also gained understanding of factors such as how to improve ecosystem function through restoration efforts, innovative planning and restoration techniques, and geographic information system expertise. A majority of grantee survey respondents also highlighted ways in which they experienced moderate to large improvements in technical capacity, including project design and engineering capacity, project implementation capabilities, and the ability to transfer knowledge to target audiences.
- **Operational capacity growth:** In surveys (Figure 5), more than three-quarters of grantees reported that they have increased their number of projects/initiatives, number of partners that they work with, and breadth of services since their initial SWG award. More than half reported increases in budget and number of staff. Many of these grantees represented small, local organizations: nearly half had fewer than 10 staff, had less than \$1 million in their annual budget, and focused their work at the county scale.
- **Ability to leverage funds:** Nearly all interview respondents indicated that the SWG grants provided opportunities to leverage funds to implement projects. Among grantees who received

multiple SWG grants, slightly more than half experienced an increase in total project budget (calculated as the sum of the SWG funding and matching amount) in subsequent SWG grants.

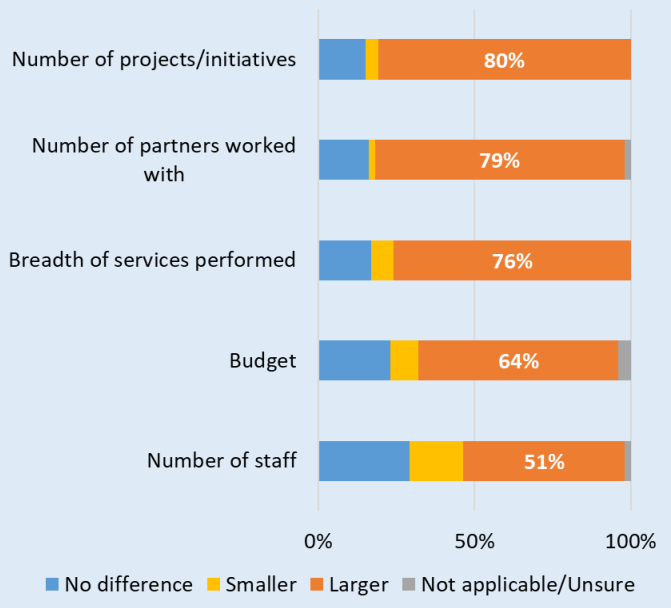
Changes in project complexity over time showed no clear trends.

The evaluation also analyzed whether the SWG Program contributed to increases in the complexity of grantees and partners' subsequent projects. The evaluation team did this to determine whether changes in grantee capacity extended beyond the program's core purpose of promoting community-based restoration.

While many grantees and partners interviewed and surveyed perceived increases in complexity over time, the integrated quantitative and qualitative data analysis did not show consistent or clear trends in project size, scale, impact, or level of difficulty over the course of successive grants. For instance, metrics that indicate project size, including acres or stream miles restored, fluctuated over time and did not show conclusive trends. Similarly,

integrated results from the document review, interviews, surveys, and metrics did not reveal changes in project scale (e.g., number of municipalities/districts, counties, states, and/or sub-watersheds involved in projects) in subsequent grants implemented by grantees or in project impact (i.e., habitat or water quality change, awareness, or behavior changes). A final proxy used to assess grantees' capacity change over time was the level of difficulty of BMPs that grantees implemented in subsequent grants. These results also did not demonstrate conclusive trends; overall, there was no broad evidence of change in the level of difficulty of BMPs that repeat grantees implemented over time. These results notwithstanding, many grantees and non-grantee partners interviewed and surveyed did perceive increases in dimensions of project complexity, such as project size and impact. They cited factors such as increased acreage of project work and number of project partners over time.⁶ Overall, while the evaluation identified individual examples of changes in complexity, it was difficult to detect trends due to changes in grantee reporting requirements over time and a lack of consistent grantee data related to organizational capacity outcomes and impacts to fish and wildlife.

Figure 5. Grantee increases in operational capacity reported in surveys.



⁶ In thinking about how their projects shifted over time, grantees may have considered projects beyond SWG Program grants, whereas the document review and metrics limited the evaluation team to analyzing change across subsequent SWG Program grants. Thus, the team could not quantitatively assess each grantee's larger body of work as an organization.

Organizational factors were critical to changes in capacity.

Both grantees and partners stressed the importance of organizational factors in increasing their operational capacity. In interviews, for instance, grantees and partners discussed how SWG Program grants and the successes stemming from these projects helped grantees leverage additional financial resources that supported increases in the size of future projects. Interviewees also noted that obtaining funds to support the ongoing development of organizational capacity is still a major challenge, despite how critical these funds are in helping achieve long-term sustained growth and outcomes. Though SWG Planning and Technical Assistance grants helped grantees build useful capacity related to knowledge, skills, and techniques for planning and implementing restoration activities, they did not focus on strengthening organizational capacity. Grantees can seek organizational capacity support through other regional efforts; however, only about one-third of grantees received some form of assistance from such sources.

Grantees and partners also indicated in the interviews that their ability to demonstrate successful project approaches helped make a case for scaling up future projects and highlighted how increased community support also helped increase project impact in relation to both ecological and social outcomes. Additionally, when survey respondents reported increases in the size, scale, and complexity of subsequent projects, they attributed the increases to multiple themes, including technical knowledge and expertise, project management capacity, and strong organizational leadership. The example in Box 3 illustrates how one particular grantee organization grew in several ways.

Box 3. Example: Expansion of Staff Capacity at the Cacapon Institute Through Receipt of Multiple Grants

Since the inception of the SWG Program, 36 percent of its grantees received more than one grant. The Cacapon Institute (CI), for example, received five grants from 2005 to 2014, which supported the incremental expansion of watershed management, research, education, and restoration as the organization gradually grew its overall budget from \$72,000 in 2006 to more than \$260,000 today.

A Model for Steady Growth in Technical and Operational Capacity

- Implemented professional development efforts, including staff training and certification courses.
- Expanded a certified water quality laboratory and increased the number and size of projects.
- Expanded CI's mission, which led to diversification of programs and new project areas.

New Staff and Diversification of Programs

- Built operational capacity after receipt of SWG funding, increasing staff from one full-time employee to four full-time and two part-time employees.
- Enabled new programs and services centered on BMPs for cistern installation in schools and regional green infrastructure programs.

Evaluation Question Set 3: Strengthened Capacity of Non-Grantee Partners

Beyond its focus on building the capacity of grantees, the SWG Program also strives to bolster the capacity of partners with whom grantees work. The SWG Program encourages grantees to collaborate with community-based partners in planning and implementation of restoration and protection projects. In theory, through partnership, increases in capacity that accrue to grantees can spill over to their partners. The evaluation tested these assumptions and explored how partnership with SWG Program grantees influenced other organizations' capacity. To determine the impacts non-grantee partners experienced through their collaboration with SWG grantees, the evaluation explored the following questions:

- Have non-grantee partners benefited from collaborating with grantees on SWG Program grants? How so?
- How have technical approaches and lessons learned been shared with non-grantee partners?
- What resources have been provided to support capacity building and project replication to non-grantee partners (e.g., funding presentations at conferences)?

The sections below outline findings in relation to these questions and the key ways in which non-grantee partner capacity increased due to collaboration with SWG Program grantees.

Partners built capacity through collaboration with grantees.

- **Technical and operational capacity:** Partners experienced increases in their technical (e.g., knowledge of restoration processes, monitoring skills) and operational capacity (e.g., stronger staff support and financial resources) through collaboration with SWG Program grantees.
- **Organizational growth:** Following collaboration with grantees, partners highlighted increases in the number of projects and initiatives undertaken, partners worked with, and breadth of services offered.
- **Diverse support activities:** Grantees shared knowledge and resources with partners through activities such as on-the-ground trainings and demonstration activities and by offering access to personnel (e.g., contractors and volunteers).

Partners experienced technical, operational, and organizational growth through collaboration with grantees.

The knowledge and resources that grantees shared with partners resulted in multiple capacity impacts for partner organizations. In interviews, nearly all grantees, partners, and regional experts noted that collaboration with grantees helped partners increase their operational and technical capacity, which in turn helped the partners implement critical project activities. Partners described specific ways in which

their capacity tangibly increased—from increased knowledge of watershed management practices and large increases in budget to the ability to scale up funding and resources and tackle larger projects. In surveys, a majority of partners indicated that since working with SWG Program grantees, they were able to perform more projects, work with more partners, and offer a larger breadth of services (Figure 6).

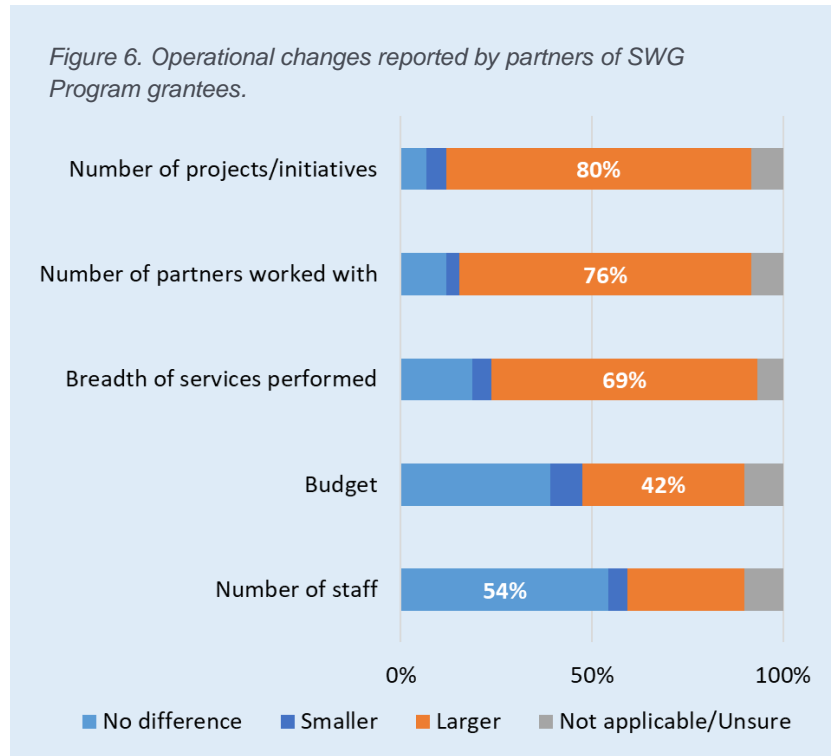
Though grantees transferred some technical capacity to partners, the grantee-partner relationship was often multidirectional; in many instances, grantees worked with partners specifically so that partners could lend services and capacity to grantees. Partners provided support such as education and outreach to landowners and community members, financial support and assistance in leveraging funding, and technical expertise and services.

Grantees helped to boost partners’ capacity by sharing technical information and resources in a variety of ways.

The three most common ways in which grantees helped to increase partner capacity were:

- **Providing increased operational capacity for partners:** Grantees provided operational capacity in terms of staff support, financial resources, equipment, and more that were critical in helping partners implement project activities.
- **Offering increased technical capacity for partners to implement projects:** Grantees provided technical capacity for aspects of restoration and conservation that partners were not skilled in—such as biological monitoring, engineering and project design, and community outreach and engagement techniques.
- **Helping partners learn new skills and knowledge to apply in project implementation:** In addition to on-the-ground technical capacity that grantees lent to partners, collaboration with grantees enabled partners to learn new restoration and planning techniques to apply to future projects.

“[Our] primary [role] was the administration of the grant. [Our partners] had the interest in doing these things for a long time; we went out and pursued the funding opportunities We got the money, administered the grant, [wrote] the reports, got the designs put together, and got the contractors.” – Grantee



The grant documents further illustrated the types of benefits grantees provided to non-grantee partners. These benefits included:

- **Technical and training resources:** This was the most common benefit, cited by about half of all grantees. It includes activities such as on-the-ground trainings, workshops, presentations, and demonstration activities offered by grantees. These activities gave non-grantee partners the capacity to undertake new restoration activities on their own. Additionally, partners received tangible information regarding best practices and restoration techniques that resulted in behavioral change. For example, a grantee noted that they saw a difference in the quality of buffer maintenance and tree survivorship after providing training to their partner organizations.



Monitoring water quality in Baltimore, MD. (Will Parson, CBP Flickr)

- **Personnel resources:** About one-third of grantees noted that they provided partners with access to personnel resources, such as staff, contractor, and volunteer support. These personnel resources helped partners undertake water quality and habitat restoration or capacity building and planning projects.
- **Educational resources:** About one-third of grantees provided transformative education resources (e.g., written materials, in-person meetings and presentations, webinars, and online tools) to support partners in achieving concrete outcomes related to changes in behavior or policy (e.g., implementation of more environmentally friendly practices, building of political will and public support for projects and activities).

Interviews indicated that grantees commonly shared information with partners through attendance at conferences, which provided opportunities for grantees to share lessons learned. Grantees also shared information with partners through regular calls, meetings, and email correspondence. While not a formalized method of sharing lessons learned, respondents noted that this ongoing communication allowed both grantees and partners to stay abreast of their respective activities, strengthen their relationships, and build trust. In grant documents, the development of written hard-copy and online materials (e.g., reports, newsletters, toolkits) to disseminate information to partners was a key mode of information sharing that about three-quarters of grantees reported. Other common modes of sharing information highlighted in the grant documents included trainings and/or workshops (about one-third of grantees) and field demonstrations of technical approaches (about one-quarter). Generally, about half of partners in interviews rated the level at which grantees disseminated lessons learned from projects as extensive or high.

“We gained knowledge as we watched the project and worked with [the] SWG grantee. [It was a] learning experience [for] staff and management.... [We gained an] environmental watershed understanding we didn't have before.”
– Non-Grantee Partner

Evaluation Question Set 4: Development of Regional Partnerships

By funding Implementation and Planning and Technical Assistance grants, as well as additional investments in regional events and forums, the SWG Program aims to help grantees develop and strengthen regional partnerships. For instance, the SWG Program provides funding for multiple conferences, including the Chesapeake Watershed Forum and ForumPlus events, the Bayside Stormwater Partners Retreat, and the Choose Clean Water Conference. These events offer grantees and partners an opportunity to meet peers from throughout the broader Chesapeake watershed, share ideas and lessons learned, and form relationships that could result in future collaboration on projects in the region. To determine the extent to which the SWG Program promoted regional partnerships and projects, the evaluation investigated the following questions:

- To what extent are SWG investments contributing to the development of regional scale partnerships and projects?
- Which SWG investments have been most effective for partnership building?

The sections below present evaluation findings regarding how SWG Program grantees developed regional partnerships and projects.

The SWG Program is beginning to contribute to the development of regional partnerships.

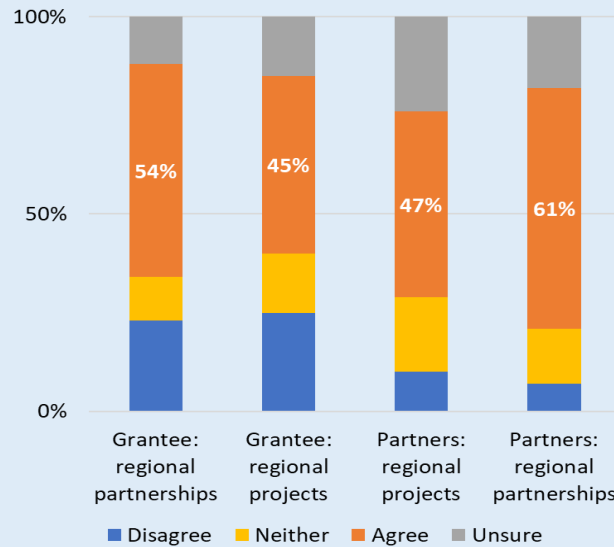
- **Formation of new regional efforts:** The SWG Program is helping grantees and partners engage in regional collaborations. Through these partnerships, grantees and partners are starting to build productive working relationships and identify shared regional goals, in addition to initiating partnerships on new projects. Results demonstrated, however, that the number of projects, outcomes, and sustained partnerships at multi-city and multi-county scales thus far is limited.
- **NFWF investments:** For investments beyond Implementation grants, grantees surveyed indicated that the Chesapeake Stormwater Network and the Chesapeake Bay Watershed Forum and ForumPlus events contributed the most to strengthening restoration capacity.

NFWF funding has begun to contribute to the development of regional partnerships.

In both the interviews and surveys, a majority of grantee and partner respondents agreed that the SWG Program contributed to regional partnerships (i.e., collaborative bodies such as commissions, associations, and working groups) and projects (i.e., discrete restoration efforts that received funding to implement). Specifically, in interviews, respondents discussed how SWG Program projects furthered and strengthened existing regional partnerships, such as work through regional commissions or watershed associations focused on specific issues like land protection or water quality. For grantees, SWG projects

also allowed them to pilot, demonstrate, and implement successful project approaches, thus bolstering their credibility to serve as viable partners for future projects. Of the grantees in interviews who indicated that SWG funding resulted in the development of regional partnerships or projects, close to half of these organizations focused on work across multiple states. The results of the survey corroborated those of the interviews (Figure 7) and confirmed that SWG Program projects allowed grantees and non-grantee partners to strengthen and develop new partnerships at the regional scale. An example is presented in Box 4.

Figure 7. Survey respondent perceptions of development of regional partnerships and projects.



Box 4. Four Interconnected Organizations: Sustained Growth in Capacity in the Anacostia Watershed

Earth Conservation Corps (ECC) spearheads community watershed restoration efforts in the Anacostia watershed. ECC helped spin off a new nonprofit organization, Wings Over America. ECC also collaborates closely with two other nonprofit organizations in the region: the Anacostia Watershed Society and Anacostia RiverKeeper. Collectively these organizations secured more than \$1.1 million through nine SWG Program grants from 2006 to 2014.

Best Practices: Strategic Partnerships and Robust Volunteer Programs

- Developed 13 long-term partnerships through engagement with federal, state, and local organizations.
- Aligned diverse community needs with social and environmental outcomes (e.g., riparian habitat and endangered species, green jobs training) through programs and partnerships.
- Conducted highly effective restoration training to support a year-round volunteer base and expanded youth programs with partner organizations in the region.

Outcomes: Environmental Programs Serve as Vehicle to Address Community Needs

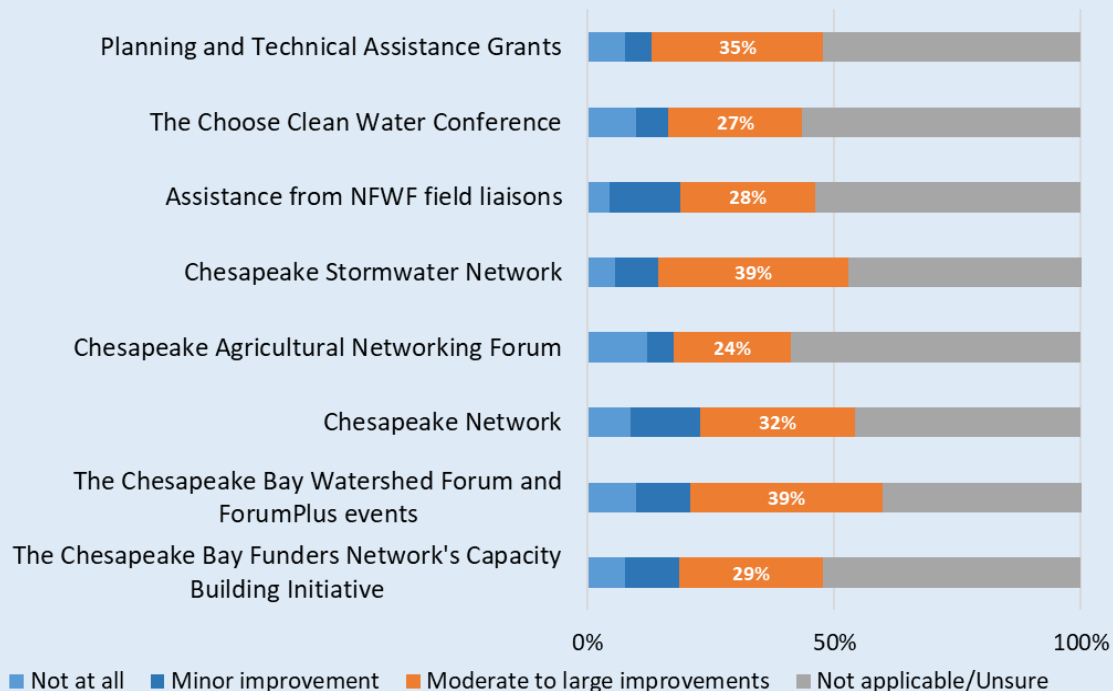
- Conducted multi-stakeholder engagement and leveraged protocols for shared regional resources.
- Implemented green jobs training, supported bald eagle populations, and cleaned up native turtle habitat.
- Continues to draw attention to opportunities in the Anacostia River watershed and District of Columbia region.

Although SWG funding contributed to some regional partnership development, results demonstrated that the number of projects, outcomes, and sustained partnerships at multi-city and multi-county scales thus far is limited. To help achieve outcomes and impacts at a larger scale, experts interviewed highlighted the need for strengthened multi-city and multi-county level planning and capacity building to build political will for restoration and conservation activities; identify shared regional goals and strategies; develop projects with linkages among restoration, climate, and ecosystem services; and implement pilot projects.

NFWF investments helped build regional capacity.

The SWG Program provided multiple types of support to strengthen partnerships, including Implementation and Planning and Technical Assistance grants, assistance from field liaisons, and events and platforms such as the Chesapeake Network and the Watershed Forum. A total of 81 grantees received Planning and Technical Assistance grants from NFWF, which paired organizations with technical assistance providers who helped them with partnership development, project planning, and implementation. In surveys, grantees indicated the extent to which they thought selected NFWF investments contributed to strengthening overall capacity for restoration in the Chesapeake watershed. The two investments that grantees felt had the most impact were the Chesapeake Stormwater Network and the Chesapeake Bay Watershed Forum and ForumPlus events, with about one-third of grantees indicating that both of these investments contributed to strengthened capacity in the region (Figure 8). However, about half of grantees were not sure how these investments or others had impacted restoration capacity. In interviews, informants were not familiar enough with all investments to comment on their relative effectiveness.

Figure 8. Survey respondent perceptions of the extent to which NFWF investments contributed to strengthening capacity for restoration and partnership.



Some grantees commented on the assistance they received from NFWF field liaisons. Though only about one-third of grantees indicated that they received assistance from the field liaisons, those who did said they benefited from assistance, including forming connections with potential project partners, which helped lay the groundwork for regional partnership development. (For more details regarding the effectiveness of NFWF's investments, see the following section.)

Evaluation Question Set 5: NFWF's Role in Strengthening Capacity

Through its grant-making and directed investments as part of the SWG Program, NFWF is a key player in enabling organizations in the Chesapeake region to undertake restoration and protection projects. In response to the recommendations from the 2007 evaluation of the SWG Program, NFWF undertook multiple activities to strengthen the program and its impact. To better understand NFWF's role in strengthening capacity for organizations throughout the Chesapeake watershed, the evaluation investigated the following questions:

- How have SWG-funded activities increased grantees' technical capacity for implementing Chesapeake Bay watershed restoration projects?
- How have grantees benefited from or used the activities or tools NFWF implemented in response to the 2007 evaluation?
- What role or niche can NFWF fill in capacity building in the Bay watershed in the future?

The sections below outline findings in relation to these questions and the key ways in which NFWF worked to increase capacity in the region.

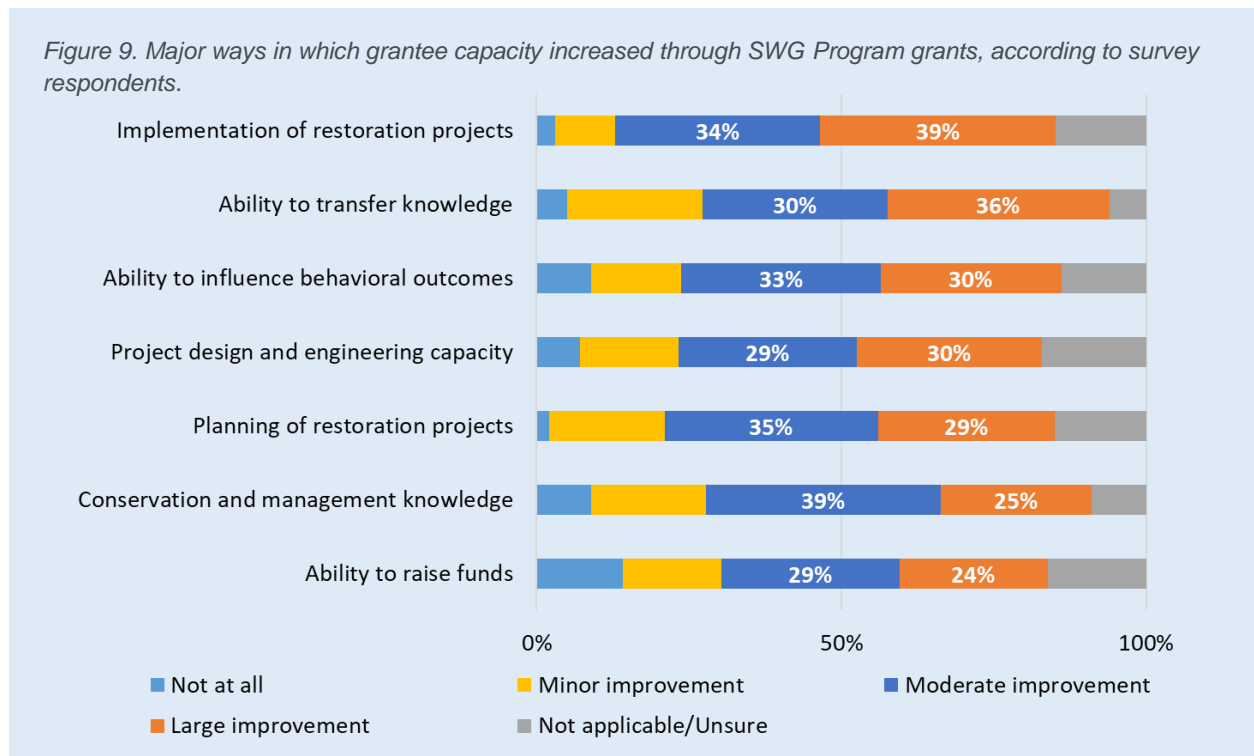
NFWF played a critical role in increasing capacity in the Chesapeake region.

- **Improvement in technical capacity:** SWG-funded activities resulted in moderate to large levels of improvement in grantees' technical capacity for implementing Chesapeake Bay watershed restoration projects.
- **Impact from program changes:** The changes NFWF made based on the 2007 evaluation contributed to strengthening grantee organizations' capacity and improving grant-making.
- **Future NFWF role:** Respondents suggested that NFWF focus on supporting regional restoration and protection approaches in the future.

SWG activities resulted in improvements to grantees’ technical capacity.

Grantees and partners indicated in interviews that SWG activities helped grantee organizations increase their knowledge and understanding of conservation and restoration methods. Relatedly, selected regional experts and technical assistance service providers noted in the interviews that the SWG grants have strengthened the technical capacity of small organizations—including small nonprofits and local government organizations—in the region overall. In particular, they explained that the SWG Program provided financial resources to grantees that allowed them to expand internal technical capacity and increase their understanding of how to implement restoration projects. Similarly, in surveys, grantees indicated that their participation in the SWG Program led to moderate to large levels of improvement across various dimensions of technical capacity (Figure 9).

Figure 9. Major ways in which grantee capacity increased through SWG Program grants, according to survey respondents.



NFWF’s responses to the 2007 evaluation benefited grantees and the watershed.

The 2007 evaluation highlighted five specific recommendations regarding how the SWG Program could improve its operations and strengthen grant-making. Table 1 summarizes these recommendations, as well as the activities that NFWF took in response to them.

Table 1. NFWF responses to the 2007 evaluation.

Recommendation	NFWF Activities
1. Expanding community conservation and approach to capacity building	<ul style="list-style-type: none"> ■ Required SWG Program grants to incorporate local collaborative efforts. ■ Increased emphasis on the use of social marketing approaches to more effectively engage key audiences. ■ Supported cross-watershed learning forum and events.
2. Planning	<ul style="list-style-type: none"> ■ Included project planning and design as eligible activities for funding. ■ Encouraged grantees to integrate their efforts into local planning processes. ■ Developed guidelines regarding what planning and design projects could aim to accomplish.
3. Types of grants	<ul style="list-style-type: none"> ■ Funded planning and capacity building projects. ■ Supported direct, one-on-one technical assistance for grantee organizations. ■ Funded selected grantees through both SWG and Innovative Nutrient Sediment Reduction (INSR) grant programs.
4. Continuation of improved grant-making	<ul style="list-style-type: none"> ■ Required SWG Program to develop clear and consistent grant evaluation criteria. ■ Implemented EasyGrants and FieldDoc for grant management and tracking. ■ Contracted field liaisons to assess project sites and provide technical assistance.
5. Monitoring	<ul style="list-style-type: none"> ■ Supported the development of monitoring protocols.

2007 Evaluation Recommendation 1: Expanding Community Conservation and Approach to Capacity Building

NFWF's actions in response to this recommendation centered around community-based partnerships, social marketing, and coordinating cross-watershed learning events and platforms.

- **Community-based partnerships:** Following the 2007 evaluation, NFWF began requiring applicants to incorporate approaches that emphasized local partnerships and strengthening of grantees' ability to conduct outreach to new sets of stakeholders. In interviews, grantees and partners stressed that by forming partnerships on projects with local communities, grantees were able to gain skills that helped them think about how to best engage and get buy-in from partners.
- **Social marketing:** As one means of increasing community engagement in conservation activities, following the 2007 evaluation, NFWF encouraged grantees to use social marketing approaches to reach and engage local stakeholders. While findings demonstrated that grantees incorporated some elements of social marketing into their projects, social marketing was not a common approach across grantees.

- **Cross-watershed events and platforms:** NFWF funded learning events and platforms for grantees and partners to strengthen capacity and support partnership development. A majority of grantee, partner, and regional interview respondents had some familiarity with platforms (including the Chesapeake Network and the Chesapeake Stormwater Network) and events that NFWF funded to support regional partnerships, though most did not feel familiar enough with all events to comment on their relative effectiveness in enhancing capacity for on-the-ground restoration and conservation efforts. The Chesapeake Watershed Forum and ForumPlus events were the most widely known investments, followed by the Choose Clean Water Conference, the Baywide Stormwater Partners' Retreat, the Chesapeake Network, and the Stormwater Network (the least well-known investment). Grantees from organizations based in Virginia were the most familiar with the NFWF-funded events and platforms, followed by grantees working in multiple states. For both grantees and partners, the NFWF-funded events and platforms helped strengthen partnerships by providing opportunities for participants to network and form connections with each other.

"Hearing people talk about how they have made things work, particularly for us in a rural and conservative region, [is] very helpful.... To create the environment with watershed groups where leaders can meet with each other and learn from each other, network, and support each other, is probably one of the more productive and lasting things." – Grantee

2007 Evaluation Recommendation 2: Planning

NFWF's actions in response to this recommendation focused on funding project planning and design activities for grantees. In 2007, project planning and design was added to the list of eligible areas of focus under SWG Implementation grants. Since then, nearly half of grantees reported planning and assessment as one of their project goals, and numerous organizations received grants that specifically focused on planning activities. Interviews with 11 organizations that received planning grants highlighted that these grants allowed the organizations to identify priorities and projects to implement in future efforts with partners while also offering opportunities to build technical expertise and knowledge and share approaches and lessons learned internally and externally. Furthermore, half of grantees who received planning grants indicated that planning grants resulted in additional funding from NFWF or another funder to implement a new restoration project.

NFWF also hoped to promote integration into local planning processes by encouraging grantees to engage key stakeholders—for example, by building a community watershed plan. Within the scope of this evaluation, however, it was not possible to objectively assess the extent to which planning grants successfully engaged the broader community.

2007 Evaluation Recommendation 3: Types of Grants

In addition to its core SWG Implementation grants, NFWF refined the program to broaden the types of projects it supported. As noted above, NFWF began to fund grants that involved technical assistance for planning and capacity building under both the SWG and INSR programs. These changes contributed to the following results:

- **Technical assistance:** Eighty-one grantees received Planning and Technical Assistance grants from NFWF. These grants paid for a technical assistance provider (typically a higher-capacity organization) to directly assist a lower-capacity organization with planning and capacity building

activities. These grants generally provided additional technical capacity and expertise that helped organizations with low capacity plan and implement projects, and in some cases, secure subsequent SWG funding.

- **SWG to INSR grants:** At least 28 grantees started with SWG funding and then graduated to the INSR program. See Box 5 for two examples of how SWG funding enabled grantees to grow and to pursue and secure larger INSR grants.

Box 5. The Road to Larger Grants

A key component of NFWF's response to Recommendation 3 of the 2007 evaluation (Types of Grants) was to coordinate delivery of SWG and INSR grants. This coordination envisioned SWG and Planning and Technical Assistance grants as stepping stones to larger INSR grants, which support restoration to accelerate the implementation of water quality improvements. Since the SWG Program's inception, NFWF has awarded 130 INSR grants to 70 organizations, including 28 that successfully secured INSR funds after receiving SWG and/or Planning and Technical Assistance grants. The following two examples illustrate how an expansion of technical expertise and operational capacity under the SWG Program led to larger grants.

- **ShoreRivers:** ShoreRivers formed through a merger of the Sassafras River Association, Chester River Association, and Midshore Riverkeeper Conservancy, all of which had received SWG grants. The merger allowed ShoreRivers to bring multiple grants and projects under one larger umbrella and strengthen collaboration on restoration projects across the Maryland Eastern Shore. Through initial SWG and INSR grants, ShoreRivers increased technical expertise related to total maximum daily loads and BMPs, which helped the organization secure a third INSR grant in 2018.
- **Oyster Recovery Partnership (ORP):** ORP received SWG grants in 2009, 2011, and 2012; secured its first INSR grant in 2013; and subsequently received two additional INSR grants and one more SWG grant. The organization has experienced steady growth throughout this time. ORP had seven staff at the time of its first SWG grant; subsequent funding has helped the organization expand its capacity and increase its staff to 20. ORP now has the capacity to produce and plant 1.5 billion oysters annually—a tenfold increase from a decade ago prior to SWG funding—and it continues to transfer technical expertise to partner organizations.

As noted above in the section “Evaluation Question Set 2: Increases in Grantee Capacity,” while Planning and Technical Assistance grants helped grantees build useful capacity, they did not focus on helping grantees build organizational capacity, and only a small percentage of grantees received support through other organizational capacity building initiatives.

2007 Evaluation Recommendation 4: Continuation of Improved Grant-Making

The 2007 evaluation found that “there is an urgent need for an adequate information system so that [SWG Program] managers and staff can be more effective and improve grant-making and performance through an adaptive management process.” At that time, NFWF was moving toward an electronic grant-making system but had not yet implemented it. Since then, NFWF has transitioned its grants management to the online EasyGrants system. Additionally, it implemented the online FieldDoc platform

to assist grantees in tracking and reporting on project outcomes. Finally, NFWF contracted with two “field liaisons” to assess project sites and provide technical assistance to grantees in the grant application process, as well as in implementation of grants. This evaluation noted the following results:

- **FieldDoc and EasyGrants:** A majority of grantees used these systems and found them helpful in reporting on and tracking their grants. Though grantees found EasyGrants to be an accessible system and had very few suggestions regarding improvements, they suggested in the interviews that FieldDoc could benefit from more metrics targeted toward land protection projects and more accessible systems for entering metric data. In interviews, a majority of grantees indicated that the metrics helped their organizations consider the impact of their projects on the environment.

- **Grant evaluation:** Grantees indicated that NFWF’s required metrics reporting helped their organizations consider the impact of their projects. There was, however, limited reporting by grantees on specific impacts of their projects to fish and wildlife, pointing to a need for increased monitoring and reporting on species-specific outcomes.

- **Field liaisons:** A minority of grantees interviewed indicated they received assistance from field liaisons. Out of those grantees who had received assistance from the field liaisons, about one-third were one-time grantees and the rest received multiple SWG grants. These grantees represented a range of organization types, with the most common being national nonprofits. Forms of assistance included answers to questions about projects or proposals, support on proposal development and project implementation, and help to connect grantees with potential project partners.



Volunteers planning a rain garden in Severna Park, MD. (Matt Rath, CBP Flickr)

2007 Evaluation Recommendation 5: Monitoring

The 2007 evaluation recommended that NFWF contract with outside entities to conduct Bay-wide or regional water and habitat quality monitoring, as well as to monitor the results from social marketing efforts. In response to this recommendation, NFWF supported the development of protocols to monitor wildlife and water quality outcomes by contracting with the Chesapeake Research Consortium and member academic institutions to publish *Metrics and Protocols for Progress Assessment in Chesapeake Bay Stewardship Fund Grants*. The purpose of these protocols is to standardize monitoring of physical conditions at grantee sites to enable establishing baseline conditions and allow for comparative monitoring of condition before and after grants. Strengthened monitoring throughout the Chesapeake watershed will help identify conditions and threats—information that NFWF and others can use in the future to inform restoration and protection priorities and investments. Additionally, in its 2018 Business

Plan,⁷ NFWF outlined that it will contract outside support for ongoing field-based monitoring efforts to regularly validate water quality, species-specific, and capacity and planning outcomes.

With respect to social marketing, following the 2007 evaluation, NFWF began requesting that grantees report on relevant social metrics, including the number of volunteers/participants engaged in the project and the number of people with changed behavior. While these metrics provide a useful baseline for gauging outreach and engagement, they do not provide enough precision to quantify trends in “reach” and volunteer participation, nor do they provide a reliable way to characterize behavior change.

Future role: Respondents suggested NFWF fund regional restoration approaches.

Grantee, partner, and regional expert interview respondents commented on how NFWF could expand its roles in the future. Regional respondents stressed that NFWF could fund projects that take an ecosystem approach to deliver multiple water, wildlife, and community benefits; incorporate climate resilience and adaptation considerations; and support implementation at various geographic scales. Respondents also emphasized that NFWF could fund projects that incorporate sustainability and community development into restoration and conservation efforts. Other suggested roles included leading outreach to and engagement with a broader set of stakeholders in conservation and restoration activities and providing support to grow opportunities for grantees and partners to share ideas and approaches. Regional experts noted that NFWF could build on the successes of existing forums like the Watershed and Agricultural Forum and scale these events regionally to create more connections among grantees and potential partners.

Conclusions and Recommendations

Overall, the SWG Program is achieving its goals of protecting and restoring the Chesapeake Bay watershed and enhancing the capacity of organizations in the region. This evaluation demonstrated that the SWG Program has funded a diversity of restoration and protection projects, most of which are still functioning and being maintained. Through SWG Program funding, grantees are increasing their organizational and technical capacity, in addition to strengthening the organizational and technical capacity of their partners. However, the 2019 evaluation did not find conclusive evidence of increases in project complexity (including size, scale, impact, and BMP difficulty) over time. Additionally, while NFWF is making good progress on the recommendations of the 2007 evaluation, and grantees are engaging in multiple partnerships, there are still few partnerships operating at the multi-city/county scale.

Drawing from the information presented in this report, Blue Earth identified recommendations that NFWF and the SWG Program could follow to increase the positive impacts of their work. The recommendations outlined below fall under four main categories:

1. **Encouraging site maintenance:** Methods NFWF could consider to ensure continued support of grantees’ efforts toward long-term site maintenance.

⁷ See <https://www.nfwf.org/chesapeake/Documents/chesapeake-business-plan.pdf> for the 2018 NFWF Chesapeake Bay Business Plan.

2. **Continuing to build grantee capacity:** Actions NFWF could consider taking to leverage technical assistance funding and support strengthening grantees' organizational capacity.
3. **Strengthening multi-city/county partnerships:** Potential strategies NFWF could use to help grantees and non-grantee partners identify shared priorities and improve outcomes at the multi-city/county scale.
4. **Further improving SWG Program investments:** Tools NFWF could implement to strengthen strategic use of its field liaisons.

The sections below highlight six specific recommendations that fall under these categories and suggest actions and ideas that NFWF could use to implement the recommendations.

Encouraging Site Maintenance

The SWG Program works to protect and restore water quality, species, and habitat in the Chesapeake Bay watershed. Grants aim to achieve long-term outcomes in these areas, with the hope that grant funding can result in projects with long-term outcomes that grantees and partners can maintain over time. SWG Program grantees achieved a variety of outcomes to strengthen the condition of habitat, fish, and wildlife. The majority of SWG projects were maintained in some form, and maintenance generally appeared to be working well. Grantees and partners stressed the importance of long-term funding and other mechanisms (e.g., partnerships, funds for development of monitoring protocols) to support long-term site maintenance.

Recommendation 1: Encourage and help grantees plan for development of long-term site maintenance financing mechanisms.

NFWF could consider addressing this recommendation through actions such as:

- Within existing SWG Program grants, continuing to provide mechanisms to help grantees plan for ongoing site maintenance.
- For new grants, requiring grantees to develop a monitoring plan or agreement to maintain projects and help ensure that mechanisms are put in place to support long-term site maintenance.
- Showcasing and disseminating lessons learned regarding innovative maintenance strategies (e.g., through regional events and forums, newsletters, updates on the website, and chesapeake.network.org).

Continuing to Build Grantee Capacity

In support of its primary goal to foster water quality and habitat improvements, the SWG Program aims to enhance the capacity of community-based organizations and local governments in project planning, design, and assessment. Theoretically, SWG funding can help set grantee organizations on a path to experience organizational growth over time (e.g., larger budgets and staff size); obtain sustainable revenue to help achieve their restoration and conservation goals; and progressively implement projects that increase in size, scale, and impact over time and can achieve long-term biophysical outcomes.

This evaluation found that both grantees and partners experienced some increases in technical and operational capacity over time. Conversely, the evaluation did not find conclusive evidence of sustained

increases in project size, scale, and impact over time, and it noted a lack of consistent grantee data related to organizational capacity outcomes and impacts to fish and wildlife. Additionally, as described above, while the Planning and Technical Assistance grants helped grantees build useful capacity in terms of the knowledge, skills, and techniques needed to plan for and implement restoration activities, they did not focus on helping grantees build the organizational capacity critical for long-term sustained growth and outcomes. Furthermore, findings highlighted the need for strengthened regional (i.e., multi-city and multi-county) partnerships to identify and build support for regional goals and priorities, in addition to implementing regional projects.

Recommendation 2: Leverage technical assistance funding and training to strengthen and maximize grantees' organizational capacity.

NFWF could consider addressing this recommendation through actions such as:

- Expanding the focus of Planning and Technical Assistance grants beyond project planning and implementation activities to support “soft” organizational capacity building activities (e.g., strategy development, project management trainings, and sustainable long-term funding).
- Developing strategies to raise grantee awareness of and help grantees obtain training funds from the Chesapeake Bay Funders Network Capacity Building Initiative.
- Increasing the flexibility with which grantees can use SWG funding to strengthen critical “soft” skills (e.g., project management, strategic planning, partnership development and planning) that enhance organizational effectiveness.
- Providing opportunities for learning sessions on organizational capacity at existing NFWF events.

Strengthening Multi-City/County Partnerships

The SWG Program operates on a theory that building grantee capacity also leads to increased capacity for non-grantee partners. Additionally, the SWG Program aims to build capacity throughout the Chesapeake watershed by promoting new regional partnerships and projects stemming from activities started through SWG Program funding. While the evaluation found evidence of grantees helping to increase partner capacity, there was limited documentation of sustained partnerships at the regional (i.e., multi-city and multi-county) level. Given that there was not conclusive evidence of increases in project complexity over time, increased regional partnerships could be one strategy to help organizations more effectively scale projects and approaches and achieve greater outcomes over time.

Recommendation 3: Invest in strengthening regional (multi-city/county) partnerships, planning, and projects.

NFWF could consider addressing this recommendation through actions such as:

- Supporting grantees and projects that address regional restoration and protection goals and priorities.
- Building on existing events and coordinating similar but smaller-scale and more frequent regional-scale events in key geographies. NFWF could think about how to use events to identify regional restoration priorities and develop plans for implementing scalable projects.

- Assessing opportunities to support partnerships that bring in diverse new partners, build political will surrounding regional priorities, and result in the development of new regional-level plans and innovative activities.
- Providing seed funding for new regional-scale partnerships to develop and implement regional plans and pilot projects to test new approaches; create regional projects that link to climate and socioeconomic priorities and issues; plan for and pilot new funding and financing mechanisms; and develop long-term, sustainable programs.

Further Improving SWG Program Investments

As part of the SWG Program, NFWF coordinates external events and forums, funds field liaisons, and develops grantee reporting and tracking systems to provide additional mechanisms to support its goals and promote monitoring, evaluation, and adaptive management of the SWG Program. NFWF is making progress toward the recommendations of the 2007 evaluation. Through its SWG funding, Planning and Technical Assistance grants, and additional mechanisms like funded events and forums and the field liaisons, NFWF is helping to advance the overall program goals. Further refining some of NFWF's internal systems and funded events could help strengthen goal achievement and facilitate internal improvements.

Recommendation 4: Continue to adaptively manage NFWF-funded events and determine strategies to increase their effectiveness and accessibility.

NFWF could consider addressing this recommendation through actions such as:

- Considering strategies for implementing and strengthening evaluative tools (e.g., post-event surveys of participants) to determine event efficacy, potential future topics, and areas of improvement.
- Identifying opportunities to provide incentives and support (e.g., travel funding, honoraria) to ensure that small organizations can attend events.
- See Recommendation 3 about coordinating smaller, more frequent events to foster increased participation.

Recommendation 5: Increase visibility and strategic deployment of field liaisons to more effectively link grantees with key partners and technical resources.

NFWF could consider addressing this recommendation through actions such as:

- Determining strategies to strengthen awareness of field liaisons so grantees are aware of their services and role and know how to use the field liaisons to help with key items (e.g., partnership and grant development).
- Continuing to strengthen the use of field liaisons to create linkages across grantees and connect grantees with technical partners and resources.

Recommendation 6: Strengthen monitoring and metrics reporting from grantees on organizational capacity, water quality, and impacts to fish and wildlife to allow for a deeper assessment of changes to grantee organizational capacity and the linkages between organizational capacity and conservation, protection, and restoration outcomes.

NFWF could consider addressing this recommendation through actions such as:

- Requiring grantees to report on fish and wildlife impacts, focusing on NFWF's key species.
- Allowing grantees to categorize their own projects, according to NFWF's project categorization approach, when submitting final grant reports.
- Determining organizational capacity metrics and requiring grantees to report on these metrics.
- Identifying strategies for gathering more consistent social metrics to accurately capture social and political outcomes of grants over time.

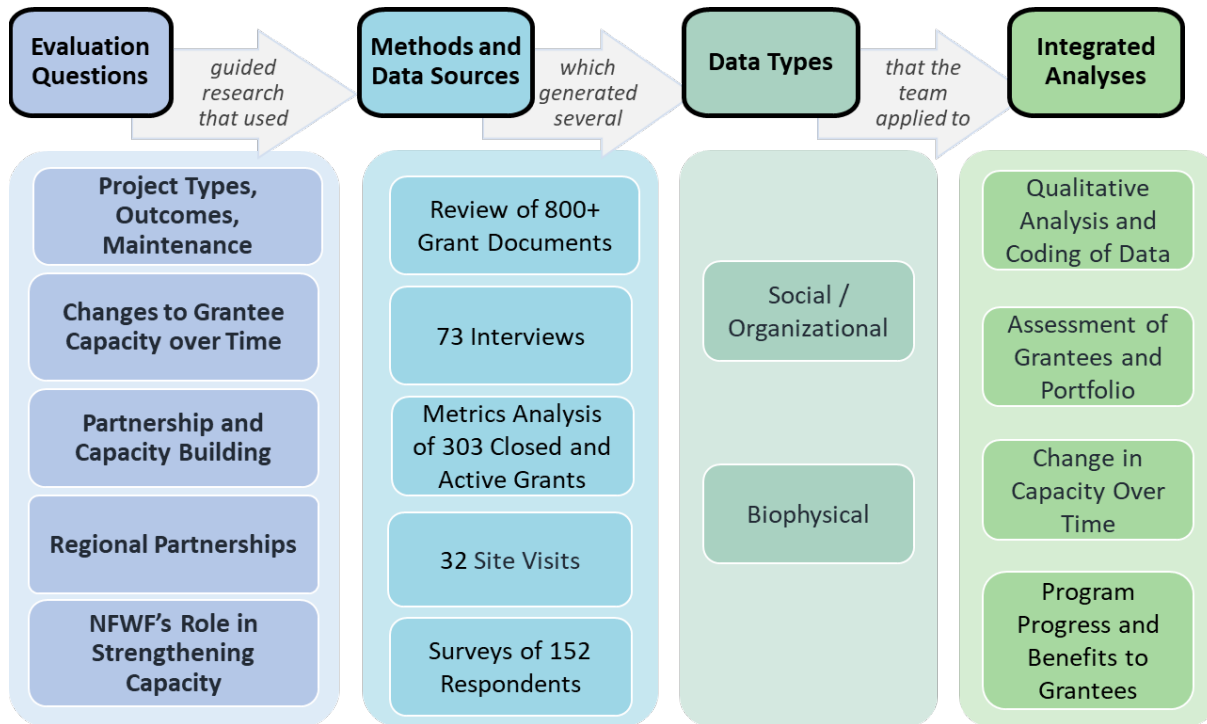
Appendices

Table of Contents

Appendices	1
Appendix A. Evaluation Methodology Overview	2
Appendix B. Document Review Methods Summary and Review Framework	4
Appendix C. Site Visit Protocol	11
Appendix D. Site Visit Data Collection Form	14
Appendix E. Metrics Methods Summary and Analysis Framework	35
Appendix F. Online Survey Methods Summary and Surveys	37
Appendix G: Non-Response Bias Analysis	48
Appendix H. Interview Guides and Analysis	56
Grantee Organization Interview Guide	56
Partner Organization Interview Guide.....	64
Regional Expert Interview Guide	71
Appendix I. Bird’s Eye View of Methods and Evaluation Questions	73
Appendix J. Key Findings and Preliminary Recommendation PPT	76

Appendix A. Evaluation Methodology Overview

Figure 1. Methodology Overview



Document Review

The evaluation team reviewed grant documents, including proposals, interim and final reports, for 336 unique grantees across 533 restoration grants, 89 technical assistance grants, in addition to reviewing documents for 25 non-competitive investments and other SWG programmatic documents.

Site Visits

The purpose of the visits was to assess site conditions, evaluate maintenance activities, and determine factors that facilitated or hindered ongoing site maintenance (see Appendix X for the site visit protocol). The team also interviewed representatives at most sites and conducted follow-up interviews with 15 of the site visit grantees and nine associated partners.

Surveys and Interviews

Through surveys and interviews, the evaluation targeted four specific types of respondents:

- **Grantees:** Recipients of SWG Implementation grants; three grantee respondents were also beneficiaries of Technical Assistance grants.

- **Partners:** Respondents representing organizations nominated by grantees as key partners in SWG grant implementation. Partner organizations generally included non-profits, local or regional government entities and K-12 schools or universities.¹ For interviews, partner organizations also included five organizations who were ghost grant beneficiaries.
- **Technical assistance service providers:** Individuals whose organizations served as technical assistance providers to beneficiary organizations on Technical Assistance grants.
- **Regional experts:** Individuals who were knowledgeable about capacity for restoration and conservation activities in the Chesapeake watershed, including NFWF field liaisons.

After collecting data, the evaluation team analyzed data from each method individually to distill key findings and trends. The team conducted quantitative (i.e., conducting statistical analysis and generating summary statistics) and qualitative (i.e., conducting iterative qualitative coding and case study research to identify key themes and examples) analyses as appropriate for each method.² The team then administered a set of integrated analyses across all data collected to answer the evaluation questions and determine the impacts of the SWG Program on grantee and partner capacity. Analyses also aided in the development of a set of potential recommendations for NFWF to consider in strengthening the program moving forward.

¹ The evaluation team asked grantees to nominate partner organizations that fit these criteria; however, in three instances the only key partners nominated by grantees who were key project partners were representatives of state and federal agencies.

² Please note that in reporting on evaluation results, the report uses the following terminology to summarize quantitative results: None (0%); Weak Minority (1 – 25%); Minority (26-49%); Half (50%); Majority (51-75%); Strong Majority (76-99%); All (100%). The report does not include n-values for interview results due to the lower sample size of respondents answering each question.

Appendix B. Document Review Methods Summary and Review Framework

Overview and Purpose

The evaluation team used the following framework to guide review and analysis of SWG Program documents. The document review examined patterns and trends in the impact of the SWG Program across all grantees within the scope of the evaluation, including:

- **Over 800 grant and investment documents** for 622 competitive grants (including 533 restoration grants and 89 technical assistance grants) and 25 non-competitive investments. Documents consisted of proposals, interim reports, closure memos, and/or final reports related to SWG Program Implementation and Planning and Technical Assistance grants, direct partnership investments and directed contracts.
- **62 internal SWG Program documents** that included SWG RFPs, workplans, and budgets; Planning and Technical Assistance Grant RFQs and RFPs; and CBSF annual reports and field liaison SOWs.

The analysis consisted of a combination of inductive and deductive approaches to analyze qualitative data and calculating summary statistics for quantitative data. The evaluation team developed thematic categories to code the qualitative data and generated summary statistics when relevant. To tease out any reported changes to grantees' capacity to implement watershed restoration projects, for grantees who received more than one SWG Program grant, the evaluation team analyzed the document review data through the lens of each grantee organization.

Category	Description
Project Background	
Funding Cycle Year	Four-digit year
EZG ID	Number identifier for the grant
Grantee Organization Name	Name of grantee organization
Organization Type	Type of organization (Choose one): <ul style="list-style-type: none"> ■ Conservation District ■ Local Land Trust ■ Local Nonprofit ■ Regional Nonprofit ■ Multi-State Nonprofit ■ National Nonprofit ■ Municipality ■ Local or Regional Board/Association ■ State Agency ■ University
Project Title	Name of project title
Project Location	Description of the project location

Category	Description
Grant \$ (SWG)	The grant amount from the SWG Program (then categorize the data into the following grouping and conduct summary statistics: \$50,000 and less, \$50,001-\$100,000, \$100,001-\$150,000, \$150,001-\$200,000, and greater than \$200,001)
Project Description	Copy project description from the SWG Program grants database compiled and shared by NFWF
Project Goals	Type of project goal (Can choose multiple): <ul style="list-style-type: none"> ■ Water Quality Restoration ■ Habitat Restoration ■ Capacity Building and Planning
Project Focus	Type of project focus (Can choose multiple): <ul style="list-style-type: none"> ■ Stormwater ■ Agriculture ■ Multi-sector ■ Freshwater ■ Tidal/estuarine ■ Terrestrial ■ Capacity building ■ Planning and assessment ■ Other
Project Approach	Select 1-2 Primary Approaches and 2-3 Secondary Approaches: <ul style="list-style-type: none"> ■ Environmental site design/low impact development ■ Bioretention/rain gardens/swales ■ Impervious surface removal/management ■ Urban forestry/urban tree canopy ■ Livestock exclusion/fencing ■ Grazing/pasture management ■ Nutrient/manure management ■ Cover crops/tillage ■ Watershed-scale projects/programs ■ Non-tidal wetland restoration ■ Stream/streambank restoration ■ Fish habitat improvement ■ Invasive species management ■ Riparian restoration ■ Tidal wetland restoration ■ Fish passage/dam removal ■ Oyster reef restoration ■ Invasive species management ■ Forest management ■ Land conservation

Category	Description
	<ul style="list-style-type: none"> ■ Behavior change campaigns ■ Training and education ■ Outreach and community engagement ■ Networking and information sharing ■ Watershed/habitat planning and assessment ■ BMP planning and design ■ Program and policy review/assessment ■ Financing/economic assessment/analysis ■ Other approaches
Project Outcome and Capacity Building of Non-Grantee Partners	
Anticipated Benefits to Fish and Wildlife	Description of reported anticipated benefits to fish and wildlife (then categorize in themes: habitat improvement/restoration, fish passage on streams, invasive species control/management, fish and wildlife species protection/restoration, other)
Types of Benefits to Non-Grantee Partners from Increased Grantee Technical Capacity	Description of reported benefits to non-grantee partners from increased grantee technical capacity (then categorize in themes: financial resources, personnel resources, technical and training resources, infrastructure/capital resources, transformative education resources)
Modes of Sharing Technical Approaches/Lessons Learned with Non-Grantee Partners	Description of reported modes of sharing technical approaches/lessons learned with non-grantee partners (then categorize in themes: in-person meetings, webinars, conducting trainings and/or workshops for partners to attend, providing written and virtual materials, demonstrating technical approaches in field, working side by side and sharing responsibility for aspects of restoration projects, social marketing)
Types of Resources for Capacity Building & Project Replication	Description of reported resources shared by the grantee for capacity building and project replication
Additional Partnerships or Projects as Outcomes or Outgrowths (of Projects) or as Planned	Yes or No (and add name of the partnership or project in separate list)
Partnership-Building Details	Description of reported grantee activities related to partnership-building
Change in Capacity Over Time	
Change Over Time of Grantee Ability to Implement	<ul style="list-style-type: none"> ■ For grantees with single grant: enter "n/a (one-time grantee)" ■ For grantees with multiple grants: collect information related to grantee's ability to implement by project completion

Category	Description
Restoration Projects Change in Size	<ul style="list-style-type: none"> ■ For grantees with single grant: enter "n/a (one-time grantee)" ■ For grantees with multiple grants: collect information regarding project costs
Restoration Project and/or Practice Change in Scale	<ul style="list-style-type: none"> ■ For grantees with single grant: enter "n/a (one-time grantee)" ■ For grantees with multiple grants: copy text from "Project Location"
Restoration Project and/or Practice Change in Complexity³	<ul style="list-style-type: none"> ■ For grantees with single grant: enter "n/a (one-time grantee)" ■ For grantees with multiple grants: collect information related to # of BMPs, # of project sites, # of partners, # of project goals, # of affected population
Restoration Project and/or Practice Change in Impact	<ul style="list-style-type: none"> ■ For grantees with single grant: enter "n/a (one-time grantee)" ■ For grantees with multiple grants: collect information related to the following definition: <ul style="list-style-type: none"> — Definition of impact: Results and outcomes produced by an intervention. Intended and unintended results in such areas as environmental condition, policy, behavior, etc. Conservation impacts (e.g., habitat change), physical (e.g., water quality), and social behavioral (e.g., awareness, education, action) impacts to the region.
Changes in Operational Attributes	<ul style="list-style-type: none"> ■ For grantees with single grant: enter "n/a (one-time grantee)" ■ For grantees with multiple grants: collect information regarding changes in the number of staff or volunteers.
Reported Critical Factors for Capacity Building	Description of reported factors that may have been critical for capacity building (then categorize in themes: grants, networking activities, training/technical assistance, in-kind services and/or resources, and other)
Project Maintenance	

³ The evaluation team initially collected data to assess change in project complexity as outlined in this framework. However, through additional discussion with NFWF, the evaluation team re-defined project complexity to encompass elements of the change in project size, scale, and impact. In lieu of project complexity, NFWF and the evaluation team decided to assess the change in the level of difficulty of BMPs implemented by grantees in subsequent grants. The hypothesis was that through additional SWG funding in subsequent grants, the grantee may have strengthened their capacity to work on BMPs with increased level of difficulty. The evaluation outlined the data and methods of this analysis in the section "Analysis in the Change in Level of BMP Difficulty of Subsequent Grants."

Category	Description
Existence of Maintenance/Monitoring Plan at Time of Project Closure	Indicate either: Yes, No, or Not applicable
Organization in Charge with Maintenance and/or Monitoring	Name of organization(s) responsible for maintenance and/or monitoring (then categories in themes: grantee organization and grant partner)
Facilitating & Hindering Factors for Maintenance and/or Monitoring During Project	Description of reported factors that may have either facilitated and/or hindered maintenance and/or monitoring during the project (then categorize in themes of existence or lack of: a maintenance plan, technical knowledge or expertise, access to appropriate equipment, support from partners, interest or support from the community, support from the county/city).

Analysis in the Change in Project Budget of Subsequent Grants

The evaluation team assessed the project budget (e.g., total amount of SWG award amounts and matching amounts) of subsequent grants for grantees with more than one grant (107 unique grantee organizations). The analysis of the change in project budget of subsequent grants implemented by the grantee focused on three aspects: additional funding per successive grant, average change in funding from one project to the next project, and average growth in subsequent projects (as compared with the first project). Based on the values in the three categories, the evaluation team scored the grantees using the following criteria:

- **Increase:** All three values are positive.
- **Decrease:** All three values are negative.
- **No change:** All three values are zero.
- **Indeterminate:** One or two of the values are negative.

Analysis in the Change in Level of BMP Difficulty of Subsequent Grants

To further assess the impact of SWG funding of watershed restoration projects on the local and regional scales, the evaluation team investigated how the level of difficulty in BMPs changed in subsequent grants implemented by 83 grantees characterized as local or regional organizations and with more than one grant. Based on the grantee organization’s scope of work, the evaluation team categorized local or regional organizations as either conservation districts, local land trust, local or regional board/associations, municipalities or counties, local nonprofits, or regional nonprofits. The evaluation team used the project approach data collected from the document review to determine the BMP, and then ranked the level of difficulty of BMPs implemented in each grant using Table 1. The team calculated the average level of difficulty in BMPs implemented per grant and determined whether grantees experienced an increase (e.g., sequential positive change), decrease (e.g., sequential decline), no change (e.g., level

of difficulty remained the same), or indeterminate (e.g., the level of difficulty fluctuated in between the first and last SWG grant).

Table 1. Ranking of Level of BMP Difficulty

Project Approach	Level of Difficulty	Ranking	Ranking Rationale
Environmental site design/low impact development	Medium	2	Many management actions
Bioretention/rain gardens/swales	Low	1	One BMP
Impervious surface removal/management	Medium	2	Moderate management actions
Urban forestry/urban tree canopy	Low	1	One BMP
Livestock exclusion/fencing	Low	1	One BMP
Grazing/pasture management	Medium	2	Moderate management actions
Nutrient/manure management	Medium	2	One BMP
Cover crops/tillage	Low	1	One BMP
Watershed-scale projects/programs	High	3	Many management actions
Non-tidal wetland restoration	High	3	Many management actions
Stream/streambank restoration	High	3	Many management actions
Fish habitat improvement	Medium	2	Moderate management actions
Invasive species management	Medium	2	One BMP
Riparian restoration	Medium	2	Many management actions
Tidal wetland restoration	High	3	Many management actions
Fish passage/dam removal	High	3	Moderate management actions
Oyster reef restoration	High	3	Moderate management actions
Forest management	Medium	2	Many management actions

Project Approach	Level of Difficulty	Ranking	Ranking Rationale
Land conservation	Medium	2	Many management actions
Behavior change campaigns	Medium	2	Many management actions
Training and education	Low	1	Moderate management actions
Outreach and community engagement	Low	1	One BMP
Networking and information sharing	Low	1	One BMP
Watershed/habitat planning and assessment	Medium	2	Many management actions
BMP planning and design	Medium	2	Moderate management actions
Program and policy review/assessment	Medium	2	Moderate management actions
Financing/economic assessment/analysis	Medium	2	Moderate management actions

Appendix C. Site Visit Protocol

Overview and Purpose

The evaluation team completed visits to sites representing 32 unique SWG-funded projects (Task 5). The purpose of these site visits was to collect site-specific information that informed evaluation of restoration status and functioning, maintenance of restoration over time, habitat and water quality outcomes, and the extent to which the SWG program has helped to build grantees and partners' technical and organizational capacity. Blue Earth designed the site visit protocol to ensure that each site visit produced information that help to answer one primary evaluation question and two secondary questions:

- Primary question:
 - (1.2) Have the projects been maintained over time?

- Secondary questions:
 - (1.3) Who is doing the maintenance?
 - (1.4) What factors have limited or hindered site maintenance, and what factors have contributed to and/or facilitated continued site maintenance (e.g., funding, staff over time, access to equipment, partnerships, etc.)?

Data collected through site visits helped to inform the answers to several additional questions regarding habitat/water quality outcomes and organizational capacity.

Site Assessment Process

The evaluation team conducted site assessment activities in three main phases: planning, implementation, and analysis. Key components of each step are as follows:

Phase 1: Planning. This phase involved selecting sites that cover a broadly representative sample of SWG implementation grants, contacting the sites to schedule visits, arranging travel, training the assessment team to ensure consistent use of the site visit protocol, and collecting and reviewing NFWF relevant data and project reporting and documents from the grantees, such as monitoring and maintenance plans and/or budgets as well as site maps and schematics, to help inform each site visit. This document collection and review step was critical to provide a sense of baseline conditions against which onsite observations can be compared.

Phase 2: Implementation. During this phase, site assessors from PG Environmental (Blue Earth's project partner) traveled to each of the 32 selected sites; met with project representative(s); conducted a walk-through of each site; asked questions through discussion with the project representative(s); recorded all observations, interview responses, and other notes on a site visit data form; and took photographs to support the assessment. PG staff conducted these activities according to the detailed site visit protocol presented below. Depending on field conditions, the site assessor may have determined whether to use an audio recording device for portions of the site walk-through and related discussions. If no project representative was able to accompany the visit, the site assessor simply gathered as much information as possible through observation. A portion of the 32 sites selected for a visit were included in follow-up phone interviews (Task 6), which the evaluation team conducted using a separate instrument.

These interviews provided an opportunity to corroborate, supplement, or expand upon the data collected onsite.

Phase 3: Analysis. Activities included digitally transcribing field notes, compiling and analyzing observational and interview data, and ultimately incorporating this information into the final NFWF SWG evaluation report and appendices. The evaluation team prepared a data analysis plan—a separate document for NFWF review—to explain how we intend to analyze site visit results and incorporate them into the evaluation. Among other things, the analysis phase was the most appropriate time to convert site visit observations into measures of organizational capacity that are not easily assessed “on the fly.”

Planning Phase: Logistical Arrangements, Data Collection, and Document Review

The following activities occurred before site visits took place:

1. Blue Earth and NFWF agreed on a list of sites to visit.
2. Blue Earth staff established contact with each of the selected grantees via email and worked with NFWF to resolve any discrepancies in contact information.
3. PG contacted each site representative by email, with follow-up phone calls as needed, to:
 - a. Arrange a specific date, time, and meeting place for the visit.
 - b. Obtain permission to visit the site (especially if the visit might be unaccompanied), interview the site representative onsite, and take photographs.
 - c. Discuss site conditions, to the extent that they inform the need for any specific clothing or personal protective equipment.
 - d. Request the following documentation from the site, if it is available:
 - i. Diagrams/schematics/plans that show what was constructed or implemented.
 - ii. Maintenance plans.
 - iii. Written monitoring reports.
 - iv. Data and information on observed/measured fish and wildlife outcomes.
 - v. Any other written information that would help the evaluation team learn about what has happened at the site since the project was implemented.
4. Blue Earth expedited the NFWF document review (Task 2) for the 30 grants selected for site visits, and shared key findings with the PG assessment team.
5. PG reviewed the documentation provided by the site and the results of Blue Earth’s document review and used it to pre-populate the site visit data collection form with information about expected/baseline conditions.

Implementation Phase

Each site visit included the following activities by the site assessor:

1. **Visual observations.** Some of these observations may be relevant to many or all BMP types, so they were captured at all sites—for example, observations related to the presence of invasive species, erosion, or other obvious impairments. PG collected additional observations that are relevant to specific BMP types. Each assessor followed a series of checklists that prompt him or her to look for specific signs that suggest that a project is being maintained or not maintained effectively. Each checklist provided the opportunity to record “other” observations, so the

assessor used his or her professional judgment and respond to each site's unique conditions rather than being limited to just the attributes that happen to have been included in the protocol. Some attributes were measured or estimated numerically, but in many cases, it was more appropriate to note the presence or absence of certain attributes and then add a descriptive narrative, rather than attempting to assign rigid numeric scores.

2. **Onsite interview questions.** Visual observations alone cannot tell us whether monitoring has taken place, what maintenance actions are occurring (aside from a few obvious clues, perhaps), who is conducting monitoring and maintenance, and what the condition of the site might reveal about factors such as organizational capacity and political will. To get more complete answers on these topics, the site assessor asked a series of questions to the onsite representative. These questions complemented the questions that Blue Earth asked selected grantees and partners (including some of the same grantees and their partners who receive site visits) via phone interviews (Task 6).
3. **Photographs.** With permission from the site contact, the site assessor took digital photographs to back up key visual observations.

PG conducted visual observations and onsite interviews using the detailed instruments provided in Appendix D.

References

Criteria in this site visit protocol have been adapted from numerous sources, including:

- Chesapeake Bay Program. 2014. Strengthening Verification of Best Management Practices Implemented in the Chesapeake Bay Watershed: A Basinwide Framework. Chesapeake Bay Program Water Quality Goal Implementation Team, BMP Verification Committee.
- GHK Consulting Inc. 2007. Evaluation of the National Fish and Wildlife Foundation Chesapeake Bay Small Watershed Grants Program. Final Report.
- Scott, T., C. Lane, and T. Schueler. 2013. Bioretention Illustrated: A Visual Guide for Constructing, Inspecting, Maintaining and Verifying the Bioretention Practice. Version 2.0. Chesapeake Stormwater Network.
- Sellner, K., M. Palmer, L. Wainger, A. Davis, B. Benham, E.J. Ling, and G. Yagow. 2011. Metrics and Protocols for Progress Assessment in Chesapeake Bay Stewardship Fund Grants. Final Report to the National Fish and Wildlife Foundation.
- Starr, R., W. Harman, and S. Davis. 2015. Function-based Rapid Stream Assessment Methodology. Final Draft. U.S. Fish and Wildlife Service, Chesapeake Bay Field Office.

Appendix D. Site Visit Data Collection Form

This is the data collection form that the site assessors used on the site visits. The form contained key introductory points for the site assessor, general information of the site visit, pre-site visit data collection, visual observations of site conditions, BMP-specific observations and onsite interview questions.

Key Introductory Points for the Site Assessor

- I work for PG Environmental.
- Recently, the National Fish and Wildlife Foundation (NFWF) hired Blue Earth Consultants, a Division of ERG, to lead an evaluation of the Chesapeake Bay Stewardship Fund's Small Watershed grant (SWG) Program. PG is working under contract to ERG to conduct the site visits.
- I am visiting this site because the project here was funded at least in part by a NFWF SWG.
- As you may know, the SWG Program has provided targeted support for organizations in prioritized small watersheds through investments to achieve water quality improvements, fish and wildlife habitat restoration, and species recovery.
- NFWF conducts periodic, independent evaluations of their programs to learn about program progress and strengthen activities. The purpose of the evaluation is to assess the impact of SWG investments on grantee and partner organizations, specifically on potential changes to organizational and technical capacity for conservation and restoration and development of regional partnerships and/or projects.
- We randomly chose 30 restoration/conservation projects to visit.
- We are also conducting a survey of a much larger group of grant recipients and partner organizations, along with phone interviews of a sample of grantees. Your organization might also be selected for a 60- to 90-minute phone interview.
- Today's site visit will take one to two hours.
- All information you share today is confidential, and we will trend responses across all grantees to share with NFWF, EPA, and their program partners. If we are interested in showcasing any example from your organization and its projects in our final report, we will follow up with you to obtain permission for sharing any details that we learn about through this site visit.
- Do you have any questions before we begin?

General Information

Site name: _____ Site ID: _____

Site ownership: _____ Site coordinates: _____

Site assessor: _____

Onsite representative name(s) and affiliations:

Date: _____ Start time: _____ End time: _____

Weather conditions: _____

Other notes: _____

Pre-Site Visit Data Collection

1. Type of BMP (select all that apply):

- | | |
|--|--|
| <input type="checkbox"/> Stormwater/green infrastructure | <input type="checkbox"/> Manure management |
| <input type="checkbox"/> Low-impact development | <input type="checkbox"/> Cover crops |
| <input type="checkbox"/> Rain barrels | <input type="checkbox"/> Riparian buffers |
| <input type="checkbox"/> Green roofs | <input type="checkbox"/> Habitat restoration |
| <input type="checkbox"/> Bioretention/rain gardens | <input type="checkbox"/> Non-tidal wetland |
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Tidal wetland |
| <input type="checkbox"/> Livestock exclusion | <input type="checkbox"/> Stream/streambank restoration |
| <input type="checkbox"/> Pasture management | <input type="checkbox"/> Forest management |

2. As quantitatively as possible, summarize the BMPs that are expected to be in place, based on grant document review and other sources (e.g., 300 linear feet of livestock exclusion fencing, 50-foot vegetated buffer, 25 new trees):

3. Date of BMP installation or implementation: _____

4a. Does the site have a maintenance plan?

4b. If so, what does it say about the type and frequency of maintenance and who will perform it?

5a. Does the site have a monitoring plan?

5b. If so, what does it say about the type and frequency of monitoring and who will perform it?

6a. Has the site provided monitoring data?

6b. If so, what data have they provided and what do they indicate about the condition of the site and related water quality, habitat, and fish and wildlife outcomes?

7. Has the site provided plans or diagrams to show what was implemented and where?

8. Additional information provided by the grantee or the document review team that could help to inform baseline condition and/or site visit assessment:

Visual Observations of Site Condition

General Observations

1a. To what extent are the BMPs described in the grant documents and the grantee's diagrams/plans still present at the site?

Fully present Partially present Not present

1b. Describe the basis for your response to Question #1a. Be as quantitative as possible (e.g., "grantee planted 25 trees but only 15 live trees are present now"). Identify length of fencing, number or density of trees, area covered by a BMP, etc.:

2. Does public access to the site appear to be controlled? If so, how?

3. Landscape and vegetation:

a. Slope: _____

b. Percent tree canopy cover: _____

c. Ground cover (e.g., soil, leaf litter, exposed rock): _____

d. Plant species present:

e. Other landscape-related observations:

4. If the site contains a body of water, record the following parameters as applicable:

a. Water body type (e.g., freshwater stream, freshwater pond, vernal pool, tidal channel):

b. Approximate dimensions (length/width and depth): _____

c. Water temperature: _____

d. Clarity: _____ e. Water color: _____

f. Presence of algae, sediment, debris, etc.: _____

g. Odor: _____

h. Signs of fish or invertebrates: _____

i. Direction of flow: _____

j. Velocity of flow (circle one number):

Stagnant 1 2 3 4 5 High velocity

k. Buffer width (on average, in feet): _____

l. Streambank stability (circle one number):

Steep and eroding 1 2 3 4 5 Gentle and vegetated

m. Other water-related observations:

5. Note and describe any general impairments or other undesirable conditions that you see at the site:

Condition	Examples	Detailed observations
<input type="checkbox"/> Erosion	Streambank erosion, exposed roots	
<input type="checkbox"/> Property damage	Vandalism, broken fencing, other damaged structures	
<input type="checkbox"/> Undesirable material	Litter, evidence of other dumping, discolored soil/sediment/water	
<input type="checkbox"/> Distressed vegetation	Dead or dying trees, shrubs, or ground cover	(Estimate the % of vegetation cover that is distressed and/or the number of trees that appear to be dead)
<input type="checkbox"/> Invasive plants ⁴	Phragmites, purple loosestrife, Japanese knotweed, etc.	(Estimate the % of the site that is covered or affected by invasive plants)
<input type="checkbox"/> Invasive animals	Sightings of, or evidence of damage by: nutria, zebra mussel, emerald ash borer, gypsy moth, etc.	

⁴ Invasive plant and animal examples from the Chesapeake Bay Program:
https://www.chesapeakebay.net/news/blog/ten_invasive_species_of_the_chesapeake_bay.

Condition	Examples	Detailed observations
<input type="checkbox"/> Other		



BMP-Specific Observations

The following observations may serve as visual indicators of the extent to which a BMP has been maintained over time. Check the box next to each attribute that you observe, and provide elaboration (with quantification, if appropriate) in the “Detailed observations” column. Use the “other” option to record other site-specific observations that you feel indicate the presence or absence of effective maintenance, based on your professional judgment.

BMP type	Indicators of impaired BMP efficacy	Indicators of maintenance activity	Detailed observations
Stormwater/green infrastructure			

BMP type	Indicators of impaired BMP efficacy	Indicators of maintenance activity	Detailed observations
Low-impact development	<input type="checkbox"/> Pervious pavement deterioration (potholes, cracks, crumbling) <input type="checkbox"/> Pervious pavement replaced with impervious material <input type="checkbox"/> Pooling, ponding, or other evidence of declining infiltration capacity (e.g., due to clogged pore space) <input type="checkbox"/> (see specific examples below for rain barrels, green roofs, etc.) <input type="checkbox"/> Other (describe)	<input type="checkbox"/> Pervious pavement repairs <input type="checkbox"/> Evidence that pavement has been swept, powerwashed, or vacuumed <input type="checkbox"/> (see specific examples below for rain barrels, green roofs, etc.) <input type="checkbox"/> Other (describe)	

BMP type	Indicators of impaired BMP efficacy	Indicators of maintenance activity	Detailed observations
Rain barrels	<input type="checkbox"/> Barrels uncovered; mosquitoes <input type="checkbox"/> Cracks or leaks <input type="checkbox"/> Clogging <input type="checkbox"/> Downspout disconnection <input type="checkbox"/> Unclean water, algae, pollen, and/or leaves in barrels <input type="checkbox"/> Overflow or other evidence of inadequate capacity <input type="checkbox"/> Other (describe)	<input type="checkbox"/> Rain barrels added or replaced since original implementation <input type="checkbox"/> Other (describe)	
Green roofs	<input type="checkbox"/> Ponding <input type="checkbox"/> Erosion <input type="checkbox"/> Distressed vegetation (too much or too little water) <input type="checkbox"/> Reduced (e.g., <75%) vegetated cover <input type="checkbox"/> Other (describe)	<input type="checkbox"/> Vegetation trimmed, replanted, etc. <input type="checkbox"/> Other (describe)	

BMP type	Indicators of impaired BMP efficacy	Indicators of maintenance activity	Detailed observations
Bioretention/ rain gardens	<input type="checkbox"/> Ponding <input type="checkbox"/> Erosion, sediment buildup, or other obstructions at the inlet <input type="checkbox"/> Obstructed or non-functional overflow/outlet/ underdrain structure(s) <input type="checkbox"/> Erosion within the basin <input type="checkbox"/> Evidence of standing water or bypass of pretreatment area <input type="checkbox"/> Distressed vegetation (too much or too little water) <input type="checkbox"/> Reduced (e.g., <75%) vegetated cover <input type="checkbox"/> Other (describe)	<input type="checkbox"/> Vegetation trimmed/ mowed (if appropriate), replanted, etc. <input type="checkbox"/> Other (describe)	
Agriculture			
Livestock exclusion	<input type="checkbox"/> Damaged or incomplete fencing <input type="checkbox"/> Evidence that livestock have entered restricted area (e.g., tracks, manure, vegetation damage) <input type="checkbox"/> Other (describe)	<input type="checkbox"/> Fencing in good working order <input type="checkbox"/> Alternative watering system or stream access controls visibly in use <input type="checkbox"/> Other (describe)	

BMP type	Indicators of impaired BMP efficacy	Indicators of maintenance activity	Detailed observations
Pasture management	<input type="checkbox"/> Active gullies or rills <input type="checkbox"/> Runoff from feeding pad area <input type="checkbox"/> Damaged fencing <input type="checkbox"/> Noxious weeds or invasive plants (e.g., nightshades or pokeweed) ⁵ <input type="checkbox"/> Bare ground (estimate the % of unvegetated area, which may indicate overgrazing) <input type="checkbox"/> Other (describe)	<input type="checkbox"/> Evidence that gullies or rills have been repaired <input type="checkbox"/> Pasture rotation in effect (livestock excluded from certain areas to allow recovery) <input type="checkbox"/> Written mgmt./O&M plan available ⁶ <input type="checkbox"/> Other (describe)	
Manure management	<input type="checkbox"/> Manure storage or accumulation outside of waste management facility <input type="checkbox"/> Other (describe)	<input type="checkbox"/> Waste utilization equipment and facilities in good working order <input type="checkbox"/> Nutrient mgmt. plan available with established application schedule <input type="checkbox"/> Manure application records available ⁷ <input type="checkbox"/> Inspection records available <input type="checkbox"/> Other (describe)	

⁵ See additional regionally relevant examples from Penn State University Extension at <https://extension.psu.edu/poisonous-pasture-weeds>.

⁶ Guided by a written management and operations and maintenance plan that address various pasture management issues, including water sources, environmental impact of winter-feeding pad location, runoff from the feeding pad area, soil fertility maintenance, access lanes, fencing needs, wetlands, minimum cover or grazing heights, carrying capacity of the land, and rotational schedules.

⁷ Maintained records of quantities and types of wastes produced and their nutrient content, manure test results, dates and types of waste application methods, crops grown, and crop yields.

BMP type	Indicators of impaired BMP efficacy	Indicators of maintenance activity	Detailed observations
Cover crops	<input type="checkbox"/> No cover crop present (e.g., between crop rotations) <input type="checkbox"/> Physical gaps in vegetated cover (estimate the % of bare ground) <input type="checkbox"/> Invasive weeds and/or volunteer plants <input type="checkbox"/> Evidence of concentrated runoff and soil erosion <input type="checkbox"/> Other (describe)	<input type="checkbox"/> Spot replanting or reseeding to maintain cover <input type="checkbox"/> Other (describe)	
Riparian buffers	<input type="checkbox"/> Bare or eroded areas (estimate the % of ground cover that is unvegetated) <input type="checkbox"/> Rills or scour paths that concentrate runoff <input type="checkbox"/> Sediment deposition at the field-buffer strip interface <input type="checkbox"/> Invasive plants (e.g., phragmites, purple loosestrife, Japanese knotweed) <input type="checkbox"/> Other (describe)	<input type="checkbox"/> Evidence of replanting <input type="checkbox"/> Repair of rills or scour paths <input type="checkbox"/> Structures added to reduce erosion <input type="checkbox"/> Other (describe)	
Habitat restoration			
Non-tidal wetland	<input type="checkbox"/> Invasive plants (e.g., phragmites, purple loosestrife) <input type="checkbox"/> Evidence of damage by animals such as muskrat or nutria <input type="checkbox"/> Filling or other loss of connectivity to adjacent water bodies <input type="checkbox"/> Dead or distressed vegetation (suggests changes in hydrology, etc.) <input type="checkbox"/> Other (describe)	<input type="checkbox"/> Filled ditches maintained <input type="checkbox"/> Additional plantings <input type="checkbox"/> Other (describe)	

BMP type	Indicators of impaired BMP efficacy	Indicators of maintenance activity	Detailed observations
Tidal wetland	<input type="checkbox"/> Exposed roots <input type="checkbox"/> Invasive plants (e.g., phragmites, purple loosestrife) <input type="checkbox"/> Evidence of damage by animals such as muskrat or nutria <input type="checkbox"/> Filling or other loss of connectivity to adjacent water bodies; loss of fish passage <input type="checkbox"/> Dead or distressed vegetation (suggests changes in hydrology, etc.) <input type="checkbox"/> Other (describe)	<input type="checkbox"/> Addition or relocation of structures (e.g., groins, sand fences) <input type="checkbox"/> Additional plantings <input type="checkbox"/> Fencing, trapping, or hunting to reduce herbivory <input type="checkbox"/> Living shoreline in good condition. ⁸ <input type="checkbox"/> Other (describe)	
Stream/ streambank restoration	<input type="checkbox"/> Structures or debris blocking fish passage <input type="checkbox"/> Concentrated flow paths through riparian corridor <input type="checkbox"/> Streambank erosion <input type="checkbox"/> Bare ground that was previously vegetated (estimate % bare ground) <input type="checkbox"/> Invasive plants (e.g., phragmites, purple loosestrife) <input type="checkbox"/> Evidence of livestock in areas from which they were originally excluded (tracks, manure, grazing) <input type="checkbox"/> Other (describe)	<input type="checkbox"/> Replanting of native vegetation <input type="checkbox"/> Evidence that streambank stabilization structures have been updated or maintained <input type="checkbox"/> Other built features (e.g., step pools) in good condition <input type="checkbox"/> Well-maintained hardened access for livestock that need water <input type="checkbox"/> Other (describe)	

⁸ Living shorelines consist of restoration, protection, and/or enhancement of the natural shoreline using soft stabilization techniques (e.g., vegetative plantings) or in a combination with non-structural techniques, such as sand fills or oyster reefs. Source: NFWF: <http://www.nfwf.org/chesapeake/Documents/Metrics%20and%20Protocol%20Report.pdf>.

BMP type	Indicators of impaired BMP efficacy	Indicators of maintenance activity	Detailed observations
Forest management	<input type="checkbox"/> Dead or distressed trees <input type="checkbox"/> Trees damaged by wildlife, insects, diseases <input type="checkbox"/> Competing vegetation (e.g., planted saplings crowded out by Japanese knotweed) <input type="checkbox"/> Concentrated flow paths <input type="checkbox"/> Other (describe)	<input type="checkbox"/> Active removal of competing vegetation <input type="checkbox"/> Spot replanting or reseeding <input type="checkbox"/> Exclosures (e.g., fencing, netting, plastic tubing) to protect young trees from herbivory <input type="checkbox"/> Other (describe)	

Onsite Interview

#	Question	Response
1	What was your organization's role in implementing this project? What was your individual role?	
2	What is your organization's role in monitoring or maintaining this project? What is your individual role?	
3	Describe the project. What are its goals?	
4	<p>Is the project achieving its goals and functioning as your organization intended?</p> <ul style="list-style-type: none"> ■ What observations or measurements tell you how well the project is functioning? ■ If you said "partially" or "no," what parts of the project are not functioning as intended? ■ If you said "partially" or "no," why do you think the project has not been as successful as intended? 	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially
5	Have you had to perform any repairs or make any modifications to the site since the project was completed? If so, what did you have to do? (for example, replant vegetation?)	
6	In general, what maintenance activities are needed to keep this project functioning effectively?	

#	Question	Response
7	<p>What maintenance activities are formally planned or budgeted for this site?</p> <ul style="list-style-type: none"> ■ Are these plans documented? (for example, a written maintenance plan?) ■ What is the prescribed frequency? 	
8	<p>What maintenance activities actually take place?</p> <ul style="list-style-type: none"> ■ How often do they take place? What time of year? ■ How does each of these activities help maintain the ecological condition or function of the site? 	
9	<p>Who is responsible for these maintenance activities?</p> <ul style="list-style-type: none"> ■ What organization(s)? ■ How many people support maintenance activities? ■ Are they paid staff? ■ Are they volunteers from the community? 	
10	<p>How much do these maintenance activities cost?</p> <ul style="list-style-type: none"> ■ How are they funded? ■ Is it a dedicated source of funding? ■ Is it a long-term or a short-term source? ■ To what extent does the funding cover the work that needs to be done? 	
11	<p>Did your organization or partner organizations encounter any challenges related to the planning, implementation, and upkeep of site maintenance activities?</p> <ul style="list-style-type: none"> ■ If so, could you describe how you overcame these challenges? ■ Could you describe any additional factors that have hindered your ability to maintain the site? (for example, operational capacity, financial sustainability, ecological factors?) 	

#	Question	Response
12	What additional resources or capacity do you think would help to improve maintenance of this site?	
13	<p>Is any monitoring conducted to evaluate whether the project is working?</p> <ul style="list-style-type: none"> ■ For example, does someone periodically inspect the site? ■ If so, how often? 	<p>Select all that apply, then describe. Ask for a copy of results.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Physical inspection <input type="checkbox"/> Water quality testing <input type="checkbox"/> Biota assessment <input type="checkbox"/> Other <input type="checkbox"/> Monitoring planned but not done
14	<p>Does your organization provide any kind of annual reporting for this site?</p> <ul style="list-style-type: none"> ■ If so, what to you report? ■ Who do you report to? ■ Can you provide a recent report? 	
15	Does your organization conduct any kind of annual planning for this site? Please describe.	

#	Question	Response
16	<p>Besides your organization, what other organizations were involved in developing this project?</p> <ul style="list-style-type: none"> ■ What roles did they play in development? ■ Do they still play a role in monitoring and maintenance? If so, how? ■ Was the partnership(s) helpful? ■ Did you assist partners with any of their own projects? ■ Have there been “offspring/spin-off” projects? ■ Has the relationship been sustained? If so, how? 	<p>Number of government orgs.: _____</p> <p>Number of non-government orgs.: _____</p> <p>Describe:</p>
17	<p>What effect do you think this project has had on community awareness and involvement?</p> <ul style="list-style-type: none"> ■ What is the current level of community involvement? ■ Have you seen any behavior change as a result of this project? If so, how? 	
18	<p>How much support do you feel you have for protecting this site and maintaining this project...</p> <ul style="list-style-type: none"> ■ ...from local political leaders? ■ ...from the community overall? ■ Please describe. 	
19	<p>Is there anything else you learned as a result of this project? Anything you would do differently next time, or that you would recommend to others?</p>	

Appendix E. Metrics Methods Summary and Analysis Framework

Blue Earth analyzed metrics for the following grants:

- SWG grants issued from 2007 to 2014. Metrics were available for 224 grants during this time period.
- SWG grants issued from 2015 to 2017. Metrics are available for 7 closed grants and 72 active grants during this time period. The evaluation team analyzed active grants separately from closed grants.

The metrics analysis did not capture the grants awarded through the Planning and Technical Assistance Grants Program. In addition, metrics were not readily available in digital form at an individual grant level prior to 2007. NFWF indicated that there were at least 194 grants in-scope of this evaluation but were awarded prior to 2007 – the metrics analysis did not include the 194 grants issued prior to 2007.

Blue Earth used data that NFWF conducted quality control on and provided in a metrics workbook. Metrics included the following:

- Year
- EZG ID
- Organization
- EZG Status
- Award Amount
- Matching Amount
- State
- Acres protected under conservation easement
- American Oyster - Population - Acres occupied by the species
- Miles of stream opened for fish passage
- Miles of livestock exclusion fencing installed
- Acres under BMPs for nutrient and sediment reduction
- Acres with conservation tillage for nutrient and sediment reduction
- Acres with cover crops for nutrient and sediment reduction
- Acres with enhanced nutrient mgt for nutrient and sediment reduction
- Acres with manure injection for nutrient and sediment reduction
- Acres with rotational grazing for nutrient and sediment reduction
- Acres with BMPs treating stormwater runoff
- Green Infrastructure - Acres under urban nutrient mgt
- Square feet impervious surface removed
- Erosion control - Miles restored
- Instream restoration - Miles restored
- Miles of riparian habitat restored
- Floodplain restoration - Acres restored
- Land restoration - Acres Restored
- Wetland restoration - Acres restored
- Pounds of Nitrogen avoided (annually)

- Pounds of Phosphorus avoided (annually)
- Pounds of sediment avoided (annually)
- CBSF - BMP implementation for stormwater runoff - Volume stormwater prevented
- CBSF - Eastern Brook Trout - Habitat Quality - # of habitat units improved
- CBSF - Eastern Brook Trout - Habitat Quality - # reintroduced sub-watersheds
- CBSF - Green Infrastructure - Square feet of bioretention installed

The evaluation team conducted quantitative analysis of the metrics data to characterize habitat and water quality outcomes of SWG grants. For the water quality analysis, the team assessed the estimated annual reductions of nitrogen, annual reductions of phosphorus, and annual reductions of sediment in several dimensions, including total reductions of each pollutant during the entire period of interest, as well as per year; reductions by state; and reductions by headwaters states versus Bay states. In addition, the team generated and analyzed totals for metrics that point to specific species endpoints, such as oysters and eastern brook trout, and total physical habitat units (e.g., acres, miles).

To characterize the growth in the size, scale, complexity, or impact of subsequent projects implemented by the grantee, the evaluation team compared projects over time if metrics for multiple grants were available. A grantee who received one grant prior to the onset of detailed metrics collection and one for which do not have metrics were not evaluated by this method. This approach did not distinguish whether the team looked at a grantee's second and third grants (if, for example, their first grant came in 2004) or truly looked at their first and second grants. For those organizations with multiple grants with available metrics, the team examined the following variables, which when viewed over time may indicate some form of growth in subsequent projects that these organizations undertake:

- Total project budget
- Project size (acres or miles restored)
- Complexity, as measured by
- Water quality impact

Appendix F. Online Survey Methods Summary and Surveys

Overview and Purpose

This document provides the methods for the online grantee and partner surveys conducted by the evaluation team. Table 1 provides a list of the evaluation questions, the contribution each survey makes to answering the question (e.g., primary, secondary, or not at all), and the specific survey questions that address each evaluation question; additional detail in the Table 2 provides the exact wording of the survey questions that are associated with each evaluation question.

Table 1. Cross-Walk Between Evaluation Questions and Grantee and Partner Survey Questions

Evaluation Question	Grantee Survey		Partner Survey	
	Survey Contribution to Analysis	Survey Questions	Survey Contribution to Analysis	Survey Questions
1.1 What types of restoration projects did grantees implement between 2005 and 2017?	Secondary	1a, 1b	Secondary	3
1.2 Have the projects been maintained over time?	Primary	2, 3, 6	Primary	4, 5, 8
1.3 Who is doing the maintenance?	Primary	4	Primary	6
1.4 What factors have limited or hindered site maintenance, and what factors have contributed to and/or facilitated continued site maintenance (e.g., funding, staff over time, access to equipment, partnerships, etc.)?	Primary	5	Primary	7
1.5 What habitat and water quality outcomes have stemmed from these projects and how are they anticipated to benefit fish and wildlife?	-		-	
2.1 How has SWG grantee capacity to implement conservation and restoration projects changed over time?	Primary	7, 16	-	
2.2 Have subsequent restoration projects and practices implemented by the grantee increased in size, scale, complexity, and/or impact?	Primary	8, 9, 10, 17, 18	-	
2.3 What operational attributes of the grantee organizations account for increases in size, scale, complexity, and impact?	Primary	19, 20, 21	Primary	17 [a]
3.1 How effective have SWG-funded activities been at increasing grantees' technical capacity for implementing Chesapeake Bay watershed restoration projects?	Primary	13, 14, 15, 29, 30	-	
3.2 What role have the changes NFWF and EPA made based on the 2007 evaluation played?	-		-	
3.3 What other factors have likely played a critical role in increasing this capacity?	-		-	

Evaluation Question	Grantee Survey		Partner Survey	
	Survey Contribution to Analysis	Survey Questions	Survey Contribution to Analysis	Survey Questions
3.4 What role or niche can NFWF fill in capacity building in the Bay watershed in the future?	-		-	
4.1 Has increased technical capacity among SWG grantees benefitted non-grantee partners? How so?	Secondary	23, 24, 27	Primary	10-13, 15-16, 18-19
4.2 How have technical approaches and lessons-learned been shared with non-grantee partners?	Primary	11, 12, 27	Primary	20-21, 23
4.3 What resources have been provided to support capacity building and project replication to non-grantee partners (e.g., funding presentations at conferences)?	Primary	23	Primary	18
5.1 To what extent are SWG investments contributing to the development of regional scale partnerships and projects?	Primary	25	Primary	22½[b], 23
5.2 Which SWG investments have been most effective for partnership building?	Primary	30		20-21

Table 2. Cross-Walk Between Evaluation Questions and Grantee and Partner Survey Questions

Evaluation Question		Grantee Survey Questions	Partner Survey Questions
1.1	What types of restoration projects did grantees implement between 2005 and 2017?	SQ1a: Please identify all topical project types or technical services your organization has performed under SWG program grants. SQ1b: Please select up to two project types or technical services that you feel represent the PRIORITY topical areas of focus for your SWG program grants.	SQ3a: Please identify all topical project types or technical services your organization has partnered with grantees on under SWG grants. SQ3b: Please select up to two project types or technical services that you feel represent the PRIORITY topical areas of focus you have partnered with grantees on under SWG program grants.
1.2	Have the projects been maintained over time?	SQ2: Are the conservation or restoration practices implemented through the projects still in place? SQ3: Are written or formal maintenance plans in place for the projects? SQ6: To what extent do you agree with the following statements about the projects implemented under your Small Watershed Grants program grant(s)? <ul style="list-style-type: none"> ■ Most or all projects were successfully implemented. ■ Most or all projects are currently functioning at their intended levels. ■ Most or all projects have been maintained over time. ■ Maintenance activities have been adequate to maintain most or all projects. ■ Most or all projects receive adequate monitoring to ensure ongoing adaptive management. 	SQ4: <i>Identical wording to grantee SQ2</i> SQ5: <i>Identical wording to grantee SQ3</i> SQ8: <i>Identical wording to grantee SQ6</i>
1.3	Who is doing the maintenance?	SQ4: Who was/is responsible for site maintenance for the projects	SQ6: <i>Identical wording to grantee SQ4</i>
1.4	What factors have limited or hindered site maintenance, and what factors have contributed to and/or facilitated continued site maintenance (e.g.,	SQ5: Considering all of your SWG projects as a whole, to what extent are the following factors important contributors to ensuring continued site maintenance? <ul style="list-style-type: none"> ■ Financial resources ■ Existence of a maintenance plan ■ Technical knowledge or expertise ■ Support from partners ■ Interest and support from the community ■ Available staff capacity 	SQ7: Considering all of the projects you have partnered with Small Watershed Grants grantees on as a whole, to what extent are the following factors important contributors to ensuring continued site maintenance? <i>See response options for SQ5 in grantee survey</i>

Evaluation Question		Grantee Survey Questions	Partner Survey Questions
	funding, staff over time, access to equipment, partnerships, etc.)?	<ul style="list-style-type: none"> ■ Other 	
2.1	How has SWG grantee capacity to implement conservation and restoration projects changed over time?	<p>SQ7: Has your organization performed subsequent conservation or restoration projects following the ones funded under the Small Watershed Grants program grant? Please include projects funded by NFWF and/or other organizations as well.</p> <p>SQ16: To the best of your knowledge, comparing your organization between now and when it received its first Small Watershed Grants program grant in [Field-YEAR], to what extent has your organization changed over that time with regard to the following?</p> <ul style="list-style-type: none"> ■ Number of staff ■ Budget ■ Breadth of services performed ■ Number of projects/initiatives ■ Number of partners we work with 	
2.2	Have subsequent restoration projects and practices implemented by the grantee increased in size, scale, complexity, and/or impact?	<p>SQ8: Compared to the projects funded under the Small Watershed Grants program grants, how would you describe the size of the additional restoration projects?</p> <p>SQ9: Compared to the projects funded under the Small Watershed Grants program grants, how would you describe the complexity of the additional restoration projects?</p> <p>SQ10: Compared to the projects funded under the Small Watershed Grants program grants, how would you describe the scale of impact on the Chesapeake Bay of the additional restoration projects?</p> <p>SQ17: To the best of your knowledge, comparing the restoration projects that your organization performs now with projects that occurred prior to your organization receiving its first Small Watershed Grants program grant in [YEAR], to what extent have the projects changed over that time with regard to the following?</p> <ul style="list-style-type: none"> ■ Geographic size 	

Evaluation Question	Grantee Survey Questions	Partner Survey Questions
	<ul style="list-style-type: none"> ■ Number of unique types of BMPs (e.g., rain barrels, livestock exclusion, riparian buffers) implemented during projects ■ Number of times BMPs implemented in projects (e.g., 100 rain barrels installed, 1,000 trees planted) ■ Funding ■ Number of partners involved ■ Jurisdictions (e.g., counties, cities) covered ■ Diversity of project types <p>SQ18: To the best of your knowledge, comparing the projects that your organization performs now with projects that occurred prior to your organization receiving its first Small Watershed Grants program grant in [YEAR], to what extent would you agree with the following statements? Projects now...</p> <ul style="list-style-type: none"> ■ Focus more on the restoration, enhancement, and protection of vital habitats for fish and wildlife ■ Address issues related to reducing pollutants and toxic contaminants to improve water quality ■ Take into account the interactions between different ecosystems to support a healthy Chesapeake Bay watershed ■ Do more to influence behavioral change and promote stewardship of the Chesapeake Bay ■ Do more to inform decision-makers ■ Do more to influence policy change and promote stronger policies surrounding and management of the Chesapeake Bay 	

Evaluation Question		Grantee Survey Questions	Partner Survey Questions
2.3	What operational attributes of the grantee organizations account for increases in size, scale, complexity, and impact?	<p>SQ19: In your opinion, how important are the following factors in helping to increase the size, scale, and complexity of projects?</p> <ul style="list-style-type: none"> ■ Number of staff ■ Financial resources/ budget ■ Technical knowledge or expertise ■ Number of partners ■ Support from partners ■ Coordination among organization staff ■ Project management capacity ■ Strong organizational leadership ■ Support from local community <p>SQ20: In your opinion, how important are the following factors in helping to increase the impact of projects?</p> <ul style="list-style-type: none"> ■ Strengthened operational capacity ■ Increased knowledge and technical capacity ■ Greater support from partners ■ Increased funding ■ Strengthened political will for conservation and restoration ■ Increased community support for conservation and restoration <p>SQ21: To what extent do you agree with the following statement regarding the impact of projects your organization has undertaken with Small Watershed Grants funding?</p>	<p>SQ17a: To what extent do you agree with the following statement regarding the impact of projects you have partnered with Small Watershed Grants grantees on?</p> <ul style="list-style-type: none"> ■ These projects have promoted the increased health of vital habitats for fish and wildlife. ■ These projects have promoted the increased health of vital habitats for fish and wildlife. ■ These projects were critical to strengthening the technical capacity of project partners and stakeholders to undertake restoration and conservation activities.
3.1	How effective have SWG-funded activities been at increasing grantees' technical capacity for implementing	<p>SQ13: To what extent has participation in NFWF Small Watershed Grants program grants improved the following aspects of your organization's technical capacity or ability to achieve positive outcomes?</p> <p>SQ14: To what extent has participation in NFWF Small Watershed Grants program grants improved the following aspects of your organization's operational capacity?</p>	

Evaluation Question		Grantee Survey Questions	Partner Survey Questions
	Chesapeake Bay watershed restoration projects?	<p>SQ15: To what extent has participation in NFWF Small Watershed Grants program grants improved the following aspects of your organization's partnerships?</p> <p>SQ29: To the best of your knowledge, comparing your organization now to prior to your organization receiving its first Small Watershed Grants program grant in [YEAR], how have the following activities and resources impacted your organization's capacity: <i>[response options listed regarding Chesapeake events and forum sponsored through the SWG programs]</i></p> <p>SQ30: To what extent have the following contributed to strengthening the overall capacity in the Chesapeake Bay watershed region for restoration? <i>[response options listed regarding Chesapeake events and forum sponsored through the SWG programs]</i></p>	
4.1	Has increased technical capacity among SWG grantees benefitted non-grantee partners? How so?	<p>SQ23: To what extent do you agree with the following statements about how your organization worked with your partners as part of your Small Watershed Grants program grant? <i>[response options regarding different ways in which grantees worked with project partners]</i></p> <p>SQ24: To what extent do you agree with the following statements about how you impacted your partners? <i>[response options regarding impacts of projects and partnership on non-grantee partners]</i></p> <p>SQ27: To what extent do you agree with the following statements about how your organization works with its partners? <i>[response options regarding various ways in which grantees collaborated with partners on SWG-funded projects]</i></p>	<p>SQ10: To what extent has being a partner on Small Watershed Grants program grants improved the following aspects of your organization's technical capacity or ability to achieve positive outcomes?</p> <p>SQ11: To what extent has being a partner on Small Watershed Grants program grants improved the following aspects of your organization's operational capacity?</p> <p>SQ12: To what extent has being a partner on Small Watershed Grants program grants improved the following aspects of your organization's overall partnerships?</p> <p>SQ13: To the best of your knowledge, comparing your organization now to prior to when it first partnered with a Small Watershed Grants grantee, to what extent has your organization changed over that time with regard to the following?</p> <ul style="list-style-type: none"> ■ Number of staff ■ Budget ■ Breadth of services performed ■ Number of projects/initiatives

Evaluation Question	Grantee Survey Questions	Partner Survey Questions
		<ul style="list-style-type: none"> ■ Number of partners we work with <p>SQ15: To the best of your knowledge, comparing the restoration projects that your organization performs now with projects that occurred prior to partnering with Small Watershed Grants grantees, to what extent have the projects changed over that time with regard to the following?</p> <ul style="list-style-type: none"> ■ Geographic size ■ Number of unique types of BMPs (e.g., rain barrels, livestock exclusion, riparian buffers) implemented during projects ■ Number of times BMPs implemented in projects (e.g., 100 rain barrels installed, 1,000 trees planted) ■ Funding ■ Number of partners involved ■ Jurisdictions (e.g., counties, cities) covered ■ Diversity of project types <p>SQ16: To the best of your knowledge, comparing the projects that your organization performs now with projects that occurred prior to partnering with Small Watershed Grants grantees, to what extent would you agree with the following statements?</p> <ul style="list-style-type: none"> ■ Focus more on the restoration, enhancement, and protection of vital habitats for fish and wildlife ■ Address issues related to reducing pollutants and toxic contaminants to improve water quality ■ Take into account the interactions between different ecosystems to support a healthy Chesapeake Bay watershed

Evaluation Question		Grantee Survey Questions	Partner Survey Questions
			<ul style="list-style-type: none"> ■ Do more to influence behavioral change and promote stewardship of the Chesapeake Bay ■ Do more to inform decision-makers ■ Do more to influence policy change and promote stronger policies surrounding and management of the Chesapeake Bay <p>SQ18: To what extent do you agree with the following statements about how you worked with Small Watershed Grants grantees? <i>[response options regarding different ways in which partners worked with project grantees]</i></p> <p>SQ19: To what extent do you agree with the following statements about how your organization was impacted by working with Small Watershed Grants grantees? <i>[response options regarding different ways in which non-grantee partners were impacted by working with SWG grantees]</i></p>
4.2	How have technical approaches and lessons-learned been shared with non-grantee partners?	<p>SQ11: To what extent has your organization shared technical approaches and lessons learned from Small Watershed Grant-funded projects with non-grantee partners in the greater Chesapeake Bay community?</p> <p>SQ12: How has your organization shared technical approaches and/or lessons learned with non-grantee partners in the greater Chesapeake Bay community?</p> <p>SQ27: To what extent do you agree with the following statements about how your organization works with its partners? <i>[response options regarding various ways in which grantees collaborated with partners on SWG-funded projects]</i></p>	<p>SQ20: What are the most effective approaches Small Watershed Grants grantees have deployed to build your organization's technical capacity?</p> <p>SQ21: What are the most effective approaches Small Watershed Grants grantees have deployed to share your organization's lessons learned?</p> <p>SQ23: To what extent do you agree with the following statements about how your organization works with its partners? <i>[response options regarding various ways in which non-grantee partners collaborated with SWG grantees]</i></p>
4.3	What resources have been provided to support capacity building and project replication	<p>SQ23: To what extent do you agree with the following statements about how your organization worked with your partners as part of your Small Watershed Grants program grant? <i>[response options regarding different ways in which grantees worked with project partners]</i></p>	<p>SQ18: To what extent do you agree with the following statements about how you worked with Small Watershed Grants grantees? <i>[response options regarding different ways in which partners worked with grantees]</i></p>

Evaluation Question		Grantee Survey Questions	Partner Survey Questions
	to non-grantee partners (e.g., funding presentations at conferences)?		
5.1	To what extent are SWG investments contributing to the development of regional scale partnerships and projects?	<p>SQ25: To what extent do you agree with the following statements?</p> <ul style="list-style-type: none"> ■ The Small Watershed Grants program grant contributed to the development of regional (including multi-county and multi-state) scale partnerships. ■ The Small Watershed Grants program grant contributed to the development of regional (including multi-county and multi-state) scale projects. 	<p>SQ22.5b: <i>Identical wording to grantee SQ25.</i></p> <p>SQ23: To what extent do you agree with the following statements about how your organization works with its partners? [<i>response options regarding various ways in which non-grantee partners collaborated with SWG grantees</i>]</p>
5.2	Which SWG investments have been most effective for partnership building?	<p>SQ30: To what extent have the following contributed to strengthening the overall capacity in the Chesapeake Bay watershed region for restoration? [<i>response options regarding various events and resources funded through the SWG program</i>]</p>	<p>SQ20: What are the most effective approaches Small Watershed Grants grantees have deployed to build your organization's technical capacity?</p> <p>SQ21: What are the most effective approaches Small Watershed Grants grantees have deployed to share your organization's lessons learned?</p>

Online Survey Analysis

Generally, for both the grantee and partner survey, we conducted tabulations of responses to questions, as well as conducting cross tabulations of related survey questions (e.g., a set of questions that all relate to responding to one of the larger evaluation questions or question sets). For the grantee and the partner survey, many of the questions we asked are the same. While we conducted parallel analyses that separate out each respondent group, for relevant questions, we also combined the datasets and provided a synthesized interpretation and assessment of the results as a whole, given that grantees and partners responded to questions for the same set of projects and grants. This allowed us to compare differences in attitudes and perceptions of grantees vs. partners, thus helping elucidate responses to Evaluation Question Set 4.

Blue Earth assessed the extent to which the grantee survey data are representative of the population of grantees. Blue Earth calculated the response rate (number of eligible responses divided by eligible respondents) among the grantees. Blue Earth recommended that 40 percent would be a reasonable response rate to consider as a necessary condition for the data to be representative. Additionally, Blue Earth considered whether the collected data mirror two key aspects in the population of grantees: (1) the distribution between grantees that have one and more than one grant and (2) the distribution over the years in which grants were received. Thus, a response that exceeds 40 percent combined with a distribution of respondents across single/multiple grants and grant award years that mirrored the population of grantees would provide a strong indication that the survey data are representative of the population.

For the partner survey, Blue Earth did not expect to be able to collect a representative sample. First, the process used to develop a sampling frame involved asking grantees to provide up to five names of partners; that process could be assumed to result in some level of selectivity in the partner sampling frame. Second, partners were asked to provide information about grantees they have worked with but are not told which grantee nominated them to be on the list; thus, the partners may have provided information about grantees who did not nominate them. Combined, these two aspects could be assumed to result in a non-representative sample.

Appendix G: Non-Response Bias Analysis

This appendix provides an overview of the data, methods, and results of a nonresponse analysis conducted by Blue Earth to assess whether some types of organizations were more likely to respond to the survey. The non-response analyses that Blue Earth performed for this work focused on organizations, rather than grants, since the survey requested responses from organizations who had received grants but did not ask the organizations to respond with regards to specific grants.

In summary, our results indicate the following:

- Organizations that had more recent grants were more likely to respond compared to organizations that had less recent grants.
- Organizations that were identified as “conservation districts” were more likely to respond compared to other types of organizations.
- Organizations that were identified as “national non-profits” were less likely to respond compared to other types of organizations.
- Organizations that had at least one grant where the focus was on “stormwater,” “tidal/estuary,” or “planning” were more likely to respond compared to organizations that did not have these types of grants.
- There is weak evidence that organizations that had grants with larger average budgets (not just award amount) were more likely to respond compared to organization that had smaller average budgets, but the results were not statistically significant.

Data

To analyze non-response, Blue Earth compiled information collected through the document review on 532 restoration grants (i.e., all restoration grants in-scope of the evaluation). The evaluation team converted the data to an organization-level dataset by compacting the data down to one record per organization. In doing so, we created the following variables:

- A yes/no (1/0) indicator for whether the organization responded to the survey.
- The year in which the organization received its last grant from NFWF.
- The total number of NFWF grants among the data used for this analysis for each organization.
- The average award amount over all grants for the organization (measured as a natural log).
- The award amount for the last grant received by the organization (measured as a natural log).
- The average budget over all grants for the organization (measured as a natural log).
- The budget for the last grant received by the organization (measured as a natural log).
- A set of variables that account for the goals noted in the grants. Blue Earth created two sets of variables; a set that measured the percentage of each organization’s grants having specific goals and a set that measured whether or not (yes/no) the organization had at least one grant with the specific goal. The set of goals were:
 - Water quality restoration

- Habitat restoration
 - Capacity building or planning
- A set of variables that account for the focus areas noted in the grants. As with the goals-related variables, Blue Earth created two sets of variables; one measuring the percentage of grants with each focus area and one that measured whether or not (yes/no) the organization had at least one grant with the specific focus area. The focus areas were:
 - Stormwater issues
 - Agriculture issues
 - Multi-sector issues
 - Freshwater issues
 - Tidal or estuary issues
 - Terrestrial issues
 - Capacity building
 - Planning and assessment
- A set of yes/no (1/0) variables for different organization types. There were small numbers for some organization types, so Blue Earth only created the yes/no variables for “conservation districts,” “local non-profits,” “multi-state non-profits,” “municipalities or counties,” “national non-profits,” and “regional non-profits.”

Methods

To analyze survey non-response, Blue Earth formulated simple logistic regression models using the yes/no indicator for a response as the outcome variable. The explanatory variables included in models were:

- The number of grants
- The year of last grant
- The average award amount measured as a natural log. Blue Earth ran a set of preliminary statistical models and determined that the average award amount was a better choice for the analysis compared to the award for the last grant. Given the high correlation with budget amount, Blue Earth did not include both award amount or budget amount in the same statistical models.
- An average budget amount measured as a natural log. Blue Earth ran a set of preliminary statistical models and determined that the average budget amount was a better choice for the analysis compared to the budget for the last grant. Given the high correlation with budget amount, Blue Earth did not include both award amount or budget amount in the same statistical models.
- The variables for grant focus or the variables for grant goals. Using focus and goals together resulted in low-level collinearity in the data, so Blue Earth estimated models for each set separately. Blue Earth performed preliminary analyses and determined that the yes/no indicators were a better choice for the statistical modeling compared to the percentages of grants having the goals or focus areas.
- The yes/no indicators for organization type. Blue Earth ran separate models for each organization type. This was done since the construction of these variables created a mutually exclusive set of yes/no values (i.e., when grouped with an “other” category, only one can have a value of 1) and using all measures in a model together leads the estimated regression coefficients to be

measured relative to the excluded group. Using one at a time, however, allows the coefficient to be interpreted as the likelihood of responding relative to all other types.

Results

The results of the statistical estimations appear in Table 1 to Table 4. As noted above, the models do not include both award amounts and budget amounts in the same estimations and the models do not include both focus and goal indicators in the same models. Table 1 provides the results for the statistical models that combined budget amounts and focus areas, Table 2 provides the results for award amounts combined with focus areas, Table 3 provides the results for budget amounts combined with goals, and Table 4 provides the results for award amounts combined with goals. Each set of runs contains six separate models since we performed a separate estimation for each organization type (within each combination of award/budget amounts and focus/goals). The estimated coefficient values in the tables reflect odds ratios.

The details of the results were as follows:

- Number of grants. As the number of grants increased, response was less likely, but the relationship was not statistically significant.
- Year of the last grant. Organizations that had more recent grants were more likely to respond, and the relationship was statistically significant. Each year back in time reduced the likelihood of response by approximately 15 percent.⁹
- Award amounts. Higher average award amounts were not associated with increased likelihood of response.
- Budget amounts. Higher average budgets were not statistically significantly associated with higher likelihood of response, but the results tend to point that way.
- Goal. Organizations that had at least one grant with a “water quality restoration” goal did not have a statistically significant higher likelihood of response, but the results tend to point that way. No other goals were associated with a trend in response likelihood.
- Focus. Organizations that had at grants with a “stormwater,” “tidal/estuary,” or “planning” focus were statistically significantly more likely to respond. Organizations with a “stormwater” focus or with a “tidal/estuary” focus were more than twice as likely to respond (compared with organizations without those types of grants) and organizations with a “planning” focus were approximately 70% more likely to respond. None of the other focus areas were associated with higher or lower likelihood of response.
- Organization type. “Conservation districts” were statistically significantly more likely to respond and “national nonprofits” were statistically significantly less likely to respond. A “conservation

⁹ This numerical value was relatively stable; BEC tested stability by dropping organizations with last grant in 2017 from the analysis and came up with approximately the same value. BEC then repeated the analysis by dropping organizations with the last grants in 2017 and 2016 and then ones with the last grant in 2015-2017 as well. In each case, the results remained at 15 percent or above.

district” was 3.5 more likely to respond compared to other organization types. A “national nonprofit” was 5 times less likely to respond compared to other organization types.

Table 1. Non-Response Logistic Regression Models Using Focus Areas and Budget Amounts

Variable	A1	A2	A3	A4	A5	A6
Number of grants	0.933 (-0.98)	0.926 (-1.05)	0.932 (-0.82)	0.914 (-1.24)	0.942 (-0.86)	0.924 (-1.09)
Year of last grant	1.157*** (4.09)	1.151*** (4.09)	1.149*** (4.05)	1.148*** (4.01)	1.162*** (4.16)	1.151*** (4.12)
Average budget of all grants (natural log)	1.228 (1.21)	1.183 (1.01)	1.180 (1.01)	1.184 (1.04)	1.175 (0.95)	1.173 (0.96)
At least one grant with a stormwater focus	2.475*** (2.66)	1.955** (2.04)	2.101** (2.28)	2.203** (2.41)	1.832* (1.79)	2.118** (2.30)
At least one grant with an agricultural focus	1.285 (0.64)	1.722 (1.46)	1.642 (1.35)	1.610 (1.30)	1.719 (1.45)	1.647 (1.36)
At least one grant with a multi- sector focus	0.313 (-1.32)	0.346 (-1.29)	0.382 (-1.16)	0.359 (-1.23)	0.327 (-1.33)	0.388 (-1.13)
At least one grant with a freshwater focus	1.257 (0.75)	1.376 (1.06)	1.364 (1.02)	1.399 (1.11)	1.428 (1.15)	1.369 (1.04)
At least one grant with a tidal/estuary focus	2.425** (2.19)	2.080* (1.88)	2.171** (1.97)	2.201** (2.00)	2.335** (2.19)	2.207** (2.03)
At least one grant with a terrestrial focus	1.156 (0.30)	1.029 (0.06)	1.056 (0.11)	1.007 (0.01)	1.040 (0.08)	0.966 (-0.07)
At least one grant with a capacity building focus	1.306 (0.87)	1.251 (0.74)	1.254 (0.74)	1.238 (0.70)	1.360 (1.00)	1.234 (0.68)
At least one grant with a planning focus	1.650* (1.67)	1.663* (1.71)	1.645* (1.65)	1.710* (1.80)	1.528 (1.41)	1.668* (1.72)
Org type: conservation district	3.424*** (2.79)	-	-	-	-	-
Org type: local nonprofit	-	1.483 (1.13)	-	-	-	-
Org type: multi-state nonprofit	-	-	0.755 (-0.28)	-	-	-
Org type: municipality or county	-	-	-	0.629 (-1.24)	-	-
Org type: national nonprofit	-	-	-	-	0.181** (-2.13)	-
Org type: regional nonprofit	-	-	-	-	-	1.432 (1.02)
N	286	286	286	286	286	286
pseudo R ²	0.161	0.144	0.140	0.145	0.160	0.143
Chi-Squared	46.21	43.20	43.42	46.17	47.83	48.46
Exponentiated coefficients (odds ratios); z statistics in parentheses * p < 0.10, ** p < 0.05, *** p < 0.01						

Table 2. Non-Response Logistic Regression Models Using Focus Areas and Award Amounts

Variable	B1	B2	B3	B4	B5	B6
Number of grants	0.931 (-0.99)	0.925 (-1.05)	0.928 (-0.87)	0.913 (-1.24)	0.941 (-0.88)	0.922 (-1.11)
Year of last grant	1.167*** (3.49)	1.160*** (3.50)	1.160*** (3.51)	1.157*** (3.45)	1.171*** (3.56)	1.162*** (3.55)
Average budget of all grants (natural log)	1.063 (0.26)	1.052 (0.22)	1.030 (0.13)	1.050 (0.22)	1.048 (0.20)	1.027 (0.12)
At least one grant with a stormwater focus	2.508*** (2.72)	1.989** (2.10)	2.143** (2.36)	2.238** (2.48)	1.862* (1.85)	2.160** (2.38)
At least one grant with an agricultural focus	1.351 (0.76)	1.784 (1.54)	1.714 (1.45)	1.671 (1.38)	1.777 (1.52)	1.715 (1.45)
At least one grant with a multi-sector focus	0.307 (-1.33)	0.339 (-1.31)	0.375 (-1.17)	0.352 (-1.25)	0.319 (-1.35)	0.382 (-1.14)
At least one grant with a freshwater focus	1.301 (0.86)	1.406 (1.12)	1.400 (1.11)	1.431 (1.18)	1.464 (1.22)	1.402 (1.11)
At least one grant with a tidal/estuary focus	2.489** (2.26)	2.137* (1.95)	2.244** (2.07)	2.256** (2.07)	2.402** (2.27)	2.268** (2.11)
At least one grant with a terrestrial focus	1.195 (0.37)	1.063 (0.13)	1.088 (0.17)	1.038 (0.08)	1.075 (0.15)	0.996 (-0.01)
At least one grant with a capacity building focus	1.287 (0.81)	1.235 (0.69)	1.240 (0.69)	1.224 (0.65)	1.339 (0.95)	1.218 (0.64)
At least one grant with a planning focus	1.613 (1.60)	1.625 (1.64)	1.616 (1.60)	1.674* (1.73)	1.496 (1.35)	1.633* (1.65)
Org type: conservation district	3.289*** (2.72)	-	-	-	-	-
Org type: local nonprofit	-	1.476 (1.12)	-	-	-	-
Org type: multi-state nonprofit	-	-	0.795 (-0.22)	-	-	-
Org type: municipality or county	-	-	-	0.633 (-1.23)	-	-
Org type: national nonprofit	-	-	-	-	0.178** (-2.12)	-
Org type: regional nonprofit	-	-	-	-	-	1.438 (1.03)
N	286	286	286	286	286	286
pseudo R ²	0.158	0.141	0.138	0.142	0.158	0.141
Chi-Squared	45.60	43.20	42.95	45.48	47.27	48.26
Exponentiated coefficients (odds ratios); z statistics in parentheses * p < 0.10, ** p < 0.05, *** p < 0.01						

Table 3. Non-Response Logistic Regression Models Using Goals and Budget Amounts

Variable	C1	C2	C3	C4	C5	C6
Number of grants	0.994 (-0.10)	0.986 (-0.22)	1.008 (0.11)	0.976 (-0.38)	1.003 (0.05)	0.982 (-0.29)
Year of last grant	1.156*** (4.17)	1.151*** (4.09)	1.149*** (4.09)	1.149*** (4.07)	1.159*** (4.13)	1.151*** (4.17)
Average budget of all grants (natural log)	1.240 (1.32)	1.220 (1.23)	1.223 (1.26)	1.210 (1.22)	1.225 (1.23)	1.204 (1.17)
At least one grant with a water quality restoration goal	1.528 (1.40)	1.535 (1.44)	1.569 (1.51)	1.594 (1.56)	1.485 (1.31)	1.579 (1.54)
At least one grant with a habitat restoration goal	1.332 (0.91)	1.388 (1.07)	1.371 (1.03)	1.410 (1.12)	1.400 (1.08)	1.368 (1.02)
At least one grant with a cap. building/planning goal	1.278 (0.63)	1.322 (0.71)	1.312 (0.69)	1.244 (0.55)	1.390 (0.82)	1.282 (0.63)
Org type: conservation district	2.587** (2.41)	-	-	-	-	-
Org type: local nonprofit	-	1.553 (1.32)	-	-	-	-
Org type: multi-state nonprofit	-	-	0.480 (-0.77)	-	-	-
Org type: municipality or county	-	-	-	0.684 (-1.04)	-	-
Org type: national nonprofit	-	-	-	-	0.204** (-2.27)	-
Org type: regional nonprofit	-	-	-	-	-	1.441 (1.07)
N	286	286	286	286	286	286
pseudo R ²	0.128	0.118	0.115	0.116	0.133	0.116
Chi-Squared	43.76	37.36	37.38	40.22	41.44	39.31
Exponentiated coefficients (odds ratios); z statistics in parentheses * p < 0.10, ** p < 0.05, *** p < 0.01						

Table 4. Non-Response Logistic Regression Models Using Goals and Award Amounts

Variable	D1	D2	D3	D4	D5	D6
Number of grants	0.996 (-0.05)	0.991 (-0.14)	1.010 (0.13)	0.980 (-0.31)	1.008 (0.12)	0.985 (-0.23)
Year of last grant	1.159*** (3.51)	1.149*** (3.33)	1.150*** (3.41)	1.148*** (3.37)	1.159*** (3.41)	1.152*** (3.46)
Average award of all grants (natural log)	1.125 (0.54)	1.157 (0.67)	1.134 (0.59)	1.141 (0.63)	1.152 (0.64)	1.128 (0.57)
At least one grant with a water quality restoration goal	1.561 (1.48)	1.552 (1.49)	1.596 (1.58)	1.617 (1.61)	1.505 (1.36)	1.604 (1.59)
At least one grant with a habitat restoration goal	1.401 (1.08)	1.439 (1.19)	1.430 (1.17)	1.463 (1.24)	1.462 (1.22)	1.416 (1.13)
At least one grant with a cap. building/planning goal	1.252 (0.57)	1.297 (0.66)	1.284 (0.63)	1.222 (0.51)	1.359 (0.77)	1.257 (0.58)
Org type: conservation district	2.507** (2.34)	-	-	-	-	-
Org type: local nonprofit	-	1.561 (1.34)	-	-	-	-
Org type: multi-state nonprofit	-	-	0.508 (-0.69)	-	-	-
Org type: municipality or county	-	-	-	0.678 (-1.06)	-	-
Org type: national nonprofit	-	-	-	-	0.202** (-2.25)	-
Org type: regional nonprofit	-	-	-	-	-	1.458 (1.10)
<i>N</i>	286	286	286	286	286	286
pseudo <i>R</i> ²	0.125	0.115	0.112	0.113	0.130	0.114
Chi-Squared	43.68	37.51	37.43	39.97	41.14	39.49
Exponentiated coefficients (odds ratios); z statistics in parentheses * <i>p</i> < 0.10, ** <i>p</i> < 0.05, *** <i>p</i> < 0.01						

Appendix H. Interview Guides and Analysis

About this Document:

The interview guides outlined in this document informed the evaluation of the Chesapeake Bay Stewardship Fund's Small Watershed Grant (SWG) Program. Blue Earth used this document during semi-structured interviews with key interviewees from grantee and partner organizations selected as part of a purposeful sample, using a maximum variation sampling approach. Interviewees included key contacts from 30 SWG-funded organizations, 29 partner organizations, seven technical assistance providers, and seven regional experts. The evaluation team analyzed respondent responses through coding of identified key themes. Given the interview guides were semi-structured and not all questions were applicable for each respondent, the evaluation team determined percentages and trends based on the number of interviewees who responded to each question.

This document includes two separate semi-structured interview guides tailored for SWG grantees and project partners. Text in *italics* indicates information the interviewer shared with the interviewee, while information in **[brackets and bold]** is an internal note for the interviewer and was not be communicated to the interviewee. The evaluation team labeled each interview question to show which of the Evaluation Questions each question relates to in parentheses.

Interview Objectives:

The interviews gathered insight on the impact of SWG-funded projects in the Chesapeake Bay watershed and on the grantee organizations and their project partners, including the following areas:

- Key outcomes related to habitat, water quality, and fish and wildlife
- Organizational and technical capacity over time
- Role of the SWG Program and other factors in capacity-building
- Impacts beyond the SWG Program

Grantee Organization Interview Guide

Pre-Interview Task:

[The evaluation team referred to the document review, including the proposal and final report, and if relevant for interviewee, the site assessment, to get familiar with the project (e.g., project goals, conservation and restoration outcomes, level of effort in site maintenance).]

Opening Script:

Thank you for taking the time to speak with me today; your thoughts and opinions will be very valuable to this project. We're excited to have the opportunity to speak with you today as part of an evaluation of the National Fish and Wildlife Foundation's (NFWF) evaluation of the Chesapeake Bay Stewardship Fund's Small Watershed grant (SWG) Program. As you may know, NFWF administers the SWG program under a grant agreement with the Environmental Protection Agency's Chesapeake Bay Program Office, with additional funding from other federal and private partners. The goal of the SWG program is to promote community-based efforts to develop and implement conservation strategies to protect and restore the

diverse natural resources of the Chesapeake Bay and its watershed. The SWG program includes competitive grants for implementation of habitat, water quality, capacity building, and planning and assessment projects, as well as technical assistance grants, directed subawards to partner organizations, and program support contracts. NFWF conducts periodic, independent evaluations of their programs to learn about program progress and strengthen activities.

As we noted in the email we sent you, this evaluation will assess the impact of SWG investments on grantee and partner organizations, specifically on potential changes to organizational and technical capacity for conservation and restoration and development of regional partnerships and/or projects. We are conducting interviews with selected SWG grantees, as well as organizations who have partnered with grantees funded by the SWG Program. Specifically, we are eager to hear today about **[grantee organization name's]** SWG grants and their impact on the organization.

Before we begin, I want to let you know that we expect the interview to take approximately an hour to 90 mins. All information you share today is confidential, and we will trend responses across all the respondents to share with NFWF, EPA, and their program partners. If we are interested in showcasing any example from your organization and its projects in our final report, we will follow up with you to obtain permission for sharing any details that we learn about through this interview.

Do you have any questions before we begin?

Questions

Background

1. How long have you been with **[organization name]**, and could you describe your role there?
2. Could you please describe how you were involved with the NFWF SWG grant(s) your organization received?
3. Have you been involved with any other NFWF grants that your organization received?
4. Have you partnered with any other organizations who received SWG grants in their implementation of grant activities?

We reviewed the final report for the SWG project(s) [title(s) of project], funded in [year] and completed in [year]. [Interviewer will give a brief description of the project background, goal(s), and outcomes].

NFWF Easygrant ID #:

Primary goal of SWG-funded project:

Conservation and restoration outcome(s) of SWG-funded project:

Non-grantee partners (if applicable):

PROJECT OUTCOMES AND MAINTENANCE

1. **(1.2)** Since the completion of the SWG award(s), what type of conservation and restoration activities did **[grantee organization]** continue to maintain as part of the same project, program, or initiative? **[for respondents whose organizations received multiple grants, interviewer to go through this question for each of the grants that the interviewee is familiar with]**

- a. **(1.2) [For grantees who worked on site-based restoration projects]** How would you characterize the current condition of the restoration project site?
- 2. **(1.2)** Does **[grantee organization]** have a plan that guides the maintenance and sustainability of the SWG funded project after the life of the grant?
 - a. **(1.2) [If yes]** Could you please describe the plan in place for the project and how this plan was developed?
- 3. **(1.2) [For completed projects]** Has the project been maintained after the life of the grant?
 - a. **(1.3) [If yes]** Please describe who is responsible for maintaining the project and what activities they are undertaking to maintain the project.
 - b. **(1.3) [If yes]** Please describe factors that facilitated successful maintenance of the project after the life of the grant.
 - c. **(1.4) [No]** Was maintenance planned as part of the after the life of the grant?
 - i. **(1.4) [If yes]** What factors hindered your organization's ability to maintain the project?
- 4. **(1.4) [If yes to Question 2]** Does **[grantee organization]** have dedicated funding in place to maintain the project?

[If yes]

 - a. **(1.4)** How much money is dedicated to maintaining the project and what is (are) the source(s) of funding?
 - b. **(1.4)** Could you describe whether you think this funding is sufficient to support the maintenance and monitoring of project?
 - c. **(1.4)** Do you have ideas about any additional and/or new funding sources and/or mechanisms **[grantee organization]** could pursue to support the project?

[If no]

 - d. **(1.4)** Do you have ideas about any additional and/or new funding sources and/or mechanisms **[grantee organization]** could pursue to support the project?
- 5. **(1.5)** Based on our review of the project documents and other data, it looks like the project achieved outcomes related to **[brief description of outcomes]**. Could you highlight what you see as the key outcomes for fish and wildlife that resulted from this project?
 - a. Could you explain why you see these as the most important outcomes?

ORGANIZATIONAL CAPACITY OVER TIME

- 6. **(2.1 and 3.1)** To the best of your knowledge, has your organization experienced any changes in its organizational and technical capacity for implementing conservation and restoration activities since your organization first received SWG funding in **[state year that the organization first received SWG funding]**?
 - a. What, if any, role do you think that SWG funding has had in driving these changes?
 - b. Could you describe any new skills or knowledge staff gained to support watershed conservation and restoration work?
- 7. **(2.1)** In your opinion, do you think there was sufficient organizational and technical capacity for project implementation and upkeep? Please explain why.

8. **(2.2 and 2.3)** We'd like to ask you a few questions regarding how projects conducted by your organization **after** receiving SWG funding differed from previous projects.
 - a. Specifically, could you describe if subsequent restoration projects undertaken by your organization increased in size (e.g., leveraged funding, number of volunteers, staff, and/or partners, or area of restoration)?
 - i. If so, what are the factors that contributed to the increase in project size?
 - b. Could you describe if subsequent projects increased in scale (e.g., number of municipalities/districts, counties, states, and/or sub-watersheds involved in project)?
 - i. If so, what are the factors that contributed to the increase in project scale?
 - c. Could you describe if subsequent projects increased in complexity (e.g., number of primary project activities, challenges addressed, institutions involved, or project sites)?
 - i. If so, what are the factors that contributed to the increase in project complexity?
 - d. Could you describe if subsequent projects had a greater impact (e.g., habitat or water quality change, awareness, or behavioral change) than projects before receiving SWG funding?
 - i. If so, what are the factors that contributed to the increase in project impact?

ROLE OF SWG PROGRAM AND OTHER FACTORS IN CAPACITY-BUILDING

9. **(3.2 – relates to Evaluation Recommendation 1) [If relevant]** Could you describe the ways in which activities that occurred as part of your SWG grant related to **building and strengthening community-based partnerships** impacted your organization's capacity to execute conservation and restoration projects?
10. **(3.2 – relates to 2007 Evaluation Recommendation 2)** [For organizations who received planning grants] Could you describe the ways in which the project planning and design grant impacted your organization's technical capacity?
 - a. Following receipt of the project planning and design and/or capacity building grant, did your organization implement a new related, on-the-ground restoration project funded either by NFWF or another funder?
 - b. **[If yes]** Could you describe how you think the planning and design and/or capacity building grant enabled your organization's implementation of new, additional on-the-ground project(s)?
11. **(3.2 – relates to 2007 Evaluation Recommendation 3) [For organizations who received implementation grants]** Could you describe the ways in which the **implementation grant** impacted your organization's technical capacity to execute conservation and restoration projects?
12. **(3.2 – relates to 2007 Evaluation Recommendation 1 and 3)** As part of activities conducted under the SWG grant you received, did you conduct or participate in any of the following SWG-funded **networking and information sharing** events and forum with other SWG grantees: the Chesapeake Watershed Forum and ForumPlus events, the Baywide Stormwater Partners Retreat, the Choose Clean Water Conference, or the Chesapeake Network? Please indicate which of these forum and events you participated in.
 - a. **[If yes]** Could you describe the ways in which these **networking and information sharing activities among grantees** impacted your organization's technical capacity?

13. **(3.2 – relates to 2007 Evaluation Recommendation 1, 3, and 4)** As part of activities conducted under the SWG grant you received, did you conduct or participate in any other **networking and information sharing** activities with other SWG grantees?
 - a. **[If yes]** Could you describe the ways in which these other **networking and information sharing activities among grantees** impacted your organization's technical capacity?
14. **(3.2 – relates to 2007 Evaluation Recommendation 1 and 4)** In developing or implementing your SWG grant project or in other interactions with local, regional, or national partners, did your organization receive direct assistance from one of NFWF's Chesapeake Bay field liaisons **[Kristen Saacke Blunk or Katie Ombalski]**?
 - a. **[If yes]** Could you describe the ways in which these field liaisons impacted your organization's technical capacity?
15. **(3.2 - relates to 2007 Evaluation Recommendation 1)** Either as part of or separate from your direct SWG grant award, did your organization receive capacity building assistance or training through the Chesapeake Bay Funders Network's **Capacity Building Initiative**, an initiative that provides support to watershed organizations and Riverkeepers through grants, one-on-one training, networking, and tailored technical assistance to increase the operational effectiveness of these organizations?
 - a. **[If yes]** Could you describe the ways in which the **Capacity Building Initiative** impacted your organization's technical capacity to execute conservation and restoration projects?
16. **(3.2 - relates to 2007 Evaluation Recommendation 1 and 3) [For Stormwater Grants Only]** As part of activities conducted under the SWG grant you received, did you participate in training or educational opportunities offered by the **Chesapeake Stormwater Network**?
 - a. **[If yes]** Could you describe the ways in which these **training and educational opportunities** increased your organization's technical capacity to execute stormwater projects and actions?
17. **(3.2 - relates to 2007 Evaluation Recommendation 4)** Do you think that the reporting systems NFWF has implemented (including the FieldDoc tracking and reporting system and EasyGrants) have helped your organization report on and track its grants?
 - a. Do you have any recommendations regarding how these systems could be improved?
18. **(3.2 - relates to 2007 Evaluation Recommendation 1 and 5)** As part of activities conducted under the SWG grant you received, did you conduct or participate in any **social marketing** trainings or initiatives to promote behavior change among intended audiences?
 - a. **[If yes]** Could you describe the ways in which these **social marketing** trainings or initiatives impacted your organization's ability to incorporate social marketing into its activities, projects, and programs?
19. **(3.2 - relates to 2007 Evaluation 5)** Have the NFWF reporting metrics been useful to your organization in assessing project outcomes and informing next steps for your work?
20. **(3.1) [For grantees who received multiple SWG grants or graduated from SWG to INSR grants]** Do you think that the technical capacity your organization gained through receipt of the SWG grant, as well as the other capacity building efforts described through the SWG program that we just discussed, helped your organization gain subsequent funding from NFWF or other donors?
 - a. **[If yes]** Has your organization received an Innovative Nutrient Sediment Reduction (INSR) grant? If so, how did SWG grant funding help your organization obtain an INSR grant?

21. **(3.3)** Overall, how would you describe the relative importance of your SWG funding and the capacity building efforts of the SWG program in general for building the capacity of your organization to implement Chesapeake Bay restoration projects?
 - a. Have you received any other funding related to restoration efforts in the Chesapeake Bay that has significantly bolstered your organization's capacity to implement restoration projects?
22. **(3.3)** Could you describe any other factors that may have played a critical role in impacting your organization's technical capacity? Note that this can include factors related to the SWG grant, as well as other factors that have helped increase your organization's capacity.
23. **(3.4)** What do you think NFWF can do to strengthen capacity-building in the Chesapeake watershed in the future?

IMPACTS BEYOND SWG PROGRAM

24. **(4.1)** Based on our document review of grantee documents, we noted that your organization partnered with **[partner organization(s)]** for the SWG-funded project. Could you describe how you think the SWG investment impacted organizational and technical capacity of your partner organization(s)?
25. **(4.2)** How has your organization shared technical approaches and lessons learned from the SWG-funded project with the greater Chesapeake Bay community?
 - a. **(4.2)** Would you describe the extent of dissemination as low, moderate, high, or extensive? Please explain.
 - b. **(4.2)** To what extent has your organization continued dissemination of technical approaches and lessons-learned continued past completion of the SWG project?
 - c. **(4.2)** Who have been the target audiences for your dissemination activities?
26. **(4.3)** Could you describe the resources (if any) allocated from your organization's SWG funding to non-grantee partners in support of capacity building and/or project replication?

ROLE OF SWG IN REGIONAL PROJECTS AND PARTNERSHIPS

27. **(5.1)** Did the SWG grant money help establish or further regional-scale (i.e., covering multiple cities or at the county level) partnerships and/or projects that continued to operate beyond the SWG project's lifetime?
 - a. **(5.1) [If yes]** Could you please describe the types of activities that the regional-scale partnership(s) and/or project(s) prioritize(s)?
 - b. **(5.1) [If yes]** Has the regional-scale partnership(s) and/or project(s) also received SWG funding?
 - c. **(5.2) [If yes]** Could you describe the benefit or value added of these developments in partnerships and/or projects for health of the Chesapeake Bay?
28. **[5.2]** As we discussed above, through the SWG program, NFWF has funded multiple investments designed to help develop partnerships in the Chesapeake Bay region, such as the Stormwater Network; the Chesapeake Watershed Forum and ForumPlus events, the Baywide Stormwater

Partners Retreat, the Choose Clean Water Conference, and the Chesapeake Network. Are you familiar with any of these investments, and if so, which ones?

- a. **[If yes]** For the investments that you are familiar with, which of these do you think has been the most effective at building and strengthening partnerships in the Chesapeake Bay region?
- b. **[If yes]** Could you describe why you think these investments have been effective at building partnerships?
- c. Do you have any thoughts regarding additional actions NFWF could take to build and strengthen partnerships in the Chesapeake Bay region?

SITE VISIT FOLLOW-UP [For the sites that are also part of the Site Assessment]

As you may know already, our site visit team conducted an assessment of the restoration status and functioning, maintenance of restoration over time, habitat and water quality outcomes, and related grantee and partner technical and organizational capacity building for the project funded by SWG.

29. Could you describe any key actions that may have played a critical role in maintaining the ecological conditions of the site? **[ask about site-relevant ecological conditions]**
 - a. **Water quality improvements related to stormwater and green infrastructure actions**, including low-impact development, rain barrels, green roofs, bioretention/rain gardens
 - b. **Water quality improvements related to agricultural management actions**, including livestock exclusion, pasture management, manure management systems, cover crops, riparian buffers
 - c. Water quality improvements related to multisector water quality restoration actions, such as implementation of watershed-scale projects and programs
 - d. **Habitat restoration actions related to freshwater habitat**, including non-tidal wetland restoration, stream restoration, fish habitat improvement, invasive species management, riparian restoration, etc.
 - e. **Habitat restoration actions related to tidal/estuarine habitat**, including tidal wetland restoration, fish passage/dam removal, oyster reef restoration, etc.
 - f. Habitat restoration actions related to terrestrial habitat, including forest management, land conservation, etc.
30. For the actions you noted above, could you describe how these actions helped with the ongoing maintenance of the site's ecological condition?
31. Did your organization or partner organization encounter any challenges related to the planning, implementation, and upkeep of site maintenance activities? If so, could you describe these challenges?
 - a. **[If so]** Could you describe how your organization or partner organization overcame these challenges?
32. Could you describe any additional factors that hindered your organization or partner organization's ability to maintain the site (e.g., operational capacity, financial sustainability, ecological factors, etc.)?

33. Do you think your organization and partners had the necessary **technical capacity** to implement and maintain the project? Please explain your answer.
 - a. **[If yes]** What were/are the technical capacity areas expertise and skills that made this project successful?
 - b. **[If no]** What technical capacity areas expertise and skills were/are missing?
 - i. What is needed for your organization and partners to gain this lacking technical capacity and skills?
34. Do you think your organization and partners had the necessary **operational capacity** to implement and maintain the project? Please explain your answer.
 - a. **[If yes]** What were/are the operational capacity aspects that made this project successful?
 - b. **[If no]** What additional operational capacity is needed for your organization and partners to gain the ability to implement and maintain the project?
35. Could you describe any lessons learned related to watershed and habitat restoration and maintenance in the Chesapeake Bay watershed?
36. Do you have any lessons learned or recommendations related to building an organization's technical capacity to implement and maintain a project?
37. What do you think are potential opportunities for the SWG program to be more effective in building capacity for watershed restoration and maintenance in the Chesapeake Bay watershed in the future?

Wrap-up

Script:

That brings me to the end of my prepared questions.

38. Do you have any final recommendations regarding priority areas for the SWG program to focus on moving forward?
39. Is there anything we have not yet discussed that you think would be important for us to know as we evaluate the SWG Program?
40. Would you be willing to potentially have highlights from your SWG project showcased in our final report? If we choose to highlight your site, we would be in touch to obtain permission to share any relevant details that we think would be useful to include in the report.

Closing Script:

I want to thank you again for taking the time to speak with me today and for your time and valuable insights. If you have any additional information that you'd like to share, please feel free to contact me via email. Thanks, and enjoy the rest of your day!

Partner Organization Interview Guide

Pre-Interview Task:

[The evaluation team referred to the document review, including the proposal and final report, and if relevant for partner interviewee, the site assessment, to get familiar with the project (e.g., project goals, conservation and restoration outcomes, level of effort in site maintenance).]

Opening Script:

Thank you for taking the time to speak with me today; your thoughts and opinions will be very valuable to this project. Recently, the National Fish and Wildlife Foundation (NFWF) hired Blue Earth Consultants, a Division of ERG, to lead an evaluation of the Chesapeake Bay Stewardship Fund's Small Watershed grant (SWG) Program. As you may know, NFWF administers the SWG program under a grant agreement with the Environmental Protection Agency's Chesapeake Bay Program Office, with additional funding from other federal and private partners. The goal of the SWG program is to promote community-based efforts to develop and implement conservation strategies to protect and restore the diverse natural resources of the Chesapeake Bay and its watershed. The SWG program includes competitive grants for implementation of habitat, water quality, capacity building, and planning and assessment projects, as well as technical assistance grants, directed subawards to partner organizations, and program support contracts. NFWF conducts periodic, independent evaluations of their programs to learn about program progress and strengthen activities.

As we note in the email we sent you, this evaluation will assess the impact of SWG investments on grantee and partner organizations, specifically on potential changes to organizational and technical capacity for conservation and restoration and development of regional partnerships and/or projects. We are conducting interviews with selected SWG grantees, as well as organizations who have partnered with grantees funded by the SWG Program. Specifically, we are eager to hear today about **[partner organization]** and your organizations involvement with **[organizations names]** as part of **[project names]**.

Before we begin, I want to let you know that we expect the interview to take approximately an hour to 90 mins. All information you share today is confidential, and we will trend responses across all respondents to share with NFWF, EPA, and their program partners, and will not share information that could attribute responses to you specifically.

Do you have any questions before we begin?

Questions

Background

1. How long have you been with **[organization name]**, and could you describe your role there?
2. Could you please describe how you were involved with the implementation of NFWF SWG grant(s)?
 - a. Have you been involved in this project following the close of the grant?
3. Has your organization directly received any NFWF SWG grants?

PROJECT OUTCOMES AND MAINTENANCE

1. **(2.1 and 4.1)** We'd like to hear more about the working relationship between your organization and the grantee organization(s). Could you describe the nature of this partnership?
 - a. Specifically, was this partnership in place prior to the SWG-funded project?
 - b. How formal is the partnership? (e.g. MOUs, partnership agreements, compacts or covenants, etc.)
 - c. Has the partnership been maintained following completion of the SWG-funded project?
 - d. Have you partnered with **[organization name]** on other projects, or do you plan to continue partnering in the future?
2. As part for your partnership with **[organization name(s)]**, are you aware of or have you been involved in any activities related to ongoing maintenance of the restoration site? **[If no, move to Q7]**
3. **(1.2) [If yes to Q1]** Since the completion of the SWG award(s), what types of conservation and restoration activities did **[partner organization]** continue to maintain as part of the same project? **[for respondents who partnered with multiple grantees, interviewer to go through this question for each of the grants that the interviewee was involved with]**
 - a. **(1.2) [For partners who worked on site-based restoration projects]** How would you characterize the current condition of the restoration project site?
4. **(1.2) [If yes to Q1]** Does **[grantee organization]** or **[partner organization]** have a plan that guides the maintenance and sustainability of the SWG funded project after the life of the grant?
 - a. **(1.2) [If yes]** Could you please describe the plan in place for the project and how this plan was developed?
5. **(1.2) [If yes to Q1 and for completed grants]** Has the project been maintained after the life of the grant?
 - a. **(1.3) [If yes]** Please describe who is responsible for maintaining the project and what activities they are undertaking to maintain the project.
 - b. **(1.3) [If yes]** Please describe factors that facilitated successful maintenance of the project after the life of the grant.
 - c. **(1.4) [No]** Was maintenance planned as part of the after the life of the grant?
 - i. **(1.4) [If yes]** What factors hindered your organization's ability to maintain the project?
6. **(1.4) [If yes to Q1]** Does **[partner organization]** have dedicated funding in place to maintain the project?
[If yes]
 - a. **(1.4)** How much money is dedicated to maintaining the project and what is (are) the source(s) of funding?
 - b. **(1.4)** Could you describe whether you think this funding is sufficient to support the maintenance and monitoring of project?
 - c. **(1.4)** Do you have ideas about any additional and/or new funding sources and/or mechanisms **[grantee organization]** or **[partner organization]** could pursue to support the project?
[If no]

- d. **(1.4)** Do you have ideas about any additional and/or new funding sources and/or mechanisms **[grantee organization]** or **[partner organization]** could pursue to support the project?
- 7. **(1.5)** Based on our review of the project documents and other data, it looks like the project achieved outcomes related to **[brief description of outcomes]**. Could you highlight what you see as the key outcomes for fish and wildlife that resulted from this project?
 - a. Could you explain why you see these as the most important outcomes?
 - b. Are there any additional outcomes to fish and wildlife that you would like to highlight?

ORGANIZATIONAL CAPACITY OVER TIME

- 8. **(2.1 and 3.1)** Based on your experience partnering with **[organization name(s)]** and thinking about your partners' organizational and technical capacity for implementing conservation and restoration activities, have your partners experienced any changes in their organizational and technical capacity for implementing conservation and restoration activities since they first received SWG funding?
 - a. What, if any, role do you think that SWG funding has had in driving these changes?
 - b. Could you describe any new technical skills or knowledge these organizations gained to support watershed conservation and restoration work?
- 9. **(2.1 and 4.1)** Thinking about **your organization's** organizational and technical capacity for implementing conservation and restoration activities, how do you think this has changed following partnership with **[organization names]** as part of their SWG projects?
 - a. What, if any, role do you think that partnership with the SWG grantee and resources received through that partnership, have had in driving these changes?
 - b. Could you describe any new technical skills or knowledge staff gained to support watershed conservation and restoration work?
 - c. Could you describe any aspects of operational capacity your organization gained from partnering with the SWG-funded organization(s)?
 - d. In your opinion, do you think there was sufficient organizational and technical capacity for project implementation and upkeep? Please explain why.
- 10. **(2.2 and 2.3)** We'd like to ask you a few questions regarding how projects conducted by the SWG grantees you partnered with shifted **after** these organizations received SWG funding.
 - a. Specifically, could you describe if subsequent restoration projects undertaken by your partners increased in size (e.g., leveraged funding, number of volunteers, staff, and/or partners, or area of restoration)?
 - i. If so, what are the factors that contributed to the increase in project size?
 - b. Could you describe if subsequent projects undertaken by your partners increased in scale (e.g., number of municipalities/districts, counties, states, and/or sub-watersheds involved in project)?
 - i. If so, what are the factors that contributed to the increase in project scale?
 - c. Could you describe if subsequent projects undertaken by your partners increased in complexity (e.g., number of primary project activities, challenges addressed, institutions involved, or project sites)?
 - i. If so, what are the factors that contributed to the increase in project complexity?

- d. Could you describe if subsequent projects undertaken by your partners had greater impacts (e.g., habitat or water quality change, awareness, or behavioral change) than projects they implemented prior to receiving SWG funding?
 - i. If so, what are the factors that contributed to the increase in project impact?

ROLE OF SWG PROGRAM AND OTHER FACTORS IN CAPACITY-BUILDING FOR PARTNERS

- 11. **(4.1) [If relevant]** Could you describe the ways in which activities that occurred as part of the SWG grant related to **building and strengthening community-based partnerships** impacted the capacity of you and your partners to execute conservation and restoration projects?
- 12. **(4.2)** As part of your partnership with **[organization name(s)]**, did you participate in any of the following SWG-funded **networking and information sharing** events and forum with other SWG grantees and partners: the Chesapeake Watershed Forum and ForumPlus events, the Baywide Stormwater Partners Retreat, the Choose Clean Water Conference, or the Chesapeake Network? Please indicate which of these forum and events you participated in.
 - a. **[If yes]** Could you describe the ways in which these **networking and information sharing activities** impacted your organization's technical capacity?
- 13. **(4.2)** As part of activities conducted under the SWG project, did you conduct or participate in any other **networking and information sharing** activities with other SWG grantees and partners?
 - a. **[If yes]** Could you describe the ways in which these other **networking and information sharing activities among grantees and partners** impacted your organization's technical capacity?
- 14. **(4.2)** Either as part of or separate from your partnership with SWG grantees, did your organization receive capacity building assistance or training through the Chesapeake Bay Funders Network's **Capacity Building Initiative**, an initiative that provides support to watershed organizations and Riverkeepers through grants, one-on-one training, networking, and tailored technical assistance to increase the operational effectiveness of these organizations?
 - a. **[If yes]** Could you describe the ways in which the **Capacity Building Initiative** impacted your organization's technical capacity to execute conservation and restoration projects?
- 15. **(4.2) [For Stormwater Grant Partners Only]** As part of activities conducted through your partnership with **[organization name(s)]**, did you participate in training or educational opportunities offered by the **Chesapeake Stormwater Network**?
 - a. **[If yes]** Could you describe the ways in which these **training and educational opportunities** increased your organization's technical capacity to execute stormwater projects and actions?
- 16. **(4.2)** Do you have any ideas of other factors related to your partnership with **[organization name(s)]** that may have played critically impacted your organization's technical capacity?
- 17. **(3.3)** Overall, how would you describe the relative importance of SWG projects and the capacity building efforts of the SWG program in general for building the capacity of your organization and your partners to implement Chesapeake Bay restoration projects?
 - a. Have you received any other funding related to restoration efforts in the Chesapeake Bay that has significantly bolstered your organization's capacity to implement restoration projects?

18. **(3.4)** What do you think NFWF can do for capacity-building in the Chesapeake watershed in the future?

IMPACTS BEYOND SWG PROGRAM

19. **(4.2)** Are you aware of ways in which the technical approaches and lessons learned from the SWG-funded project been shared with the greater Chesapeake Bay community? If so, could you describe how these technical approaches and lessons learned have been shared?
- (4.2)** Would you describe the extent of dissemination as low, moderate, high, or extensive?
 - (4.2)** To what extent has dissemination of technical approaches and lessons-learned continued past completion of the SWG project?
 - (4.1 and 4.2)** How effective do you think the dissemination of technical approaches and lessons learned has been?
 - (4.1 and 4.2)** What do you think the grantee(s) could have done to increase the effectiveness of the technical approaches and lessons learned?
20. **(4.3)** Could you describe the resources (if any) allocated from **[grantee organization]**'s SWG funding to your organization or any other non-grantee partners in support of capacity building and/or project replication?

ROLE OF SWG IN REGIONAL PROJECTS AND PARTNERSHIPS

21. **(5.1)** Are you aware of whether the SWG grant money helped establish or further regional scale (i.e., covering multiple cities or at the county level) partnerships and/or projects that continued to operate beyond the SWG project's lifetime?
- (5.1) [If yes]** Have you participated in these regional scale partnerships and/or projects?
 - (5.1) [If yes]** Could you please describe the types of activities that the regional scale partnership(s) and/or project(s) prioritize(s)?
 - (5.1) [If yes]** Do you know whether the regional scale partnership(s) and/or project(s) also received SWG funding?
 - (5.2) [If yes]** Could you describe the benefit or value added of these developments in partnerships and/or projects for health of the Chesapeake Bay?
22. **[5.2]** As we discussed above, through the SWG program, NFWF has funded multiple investments designed to help develop partnerships in the Chesapeake Bay region, such as the Stormwater Network; the Chesapeake Watershed Forum and ForumPlus events, the Baywide Stormwater Partners Retreat, the Choose Clean Water Conference, and the Chesapeake Network. Are you familiar with any of these investments, and if so, which ones?
- [If yes]** For the investments that you are familiar with, which of these do you think has been the most effective at building and strengthening partnerships in the Chesapeake Bay region?
 - [If yes]** Could you describe why you think these investments have been effective at building partnerships?
 - Do you have any thoughts regarding additional actions NFWF could take to build and strengthen partnerships in the Chesapeake Bay region?

SITE VISIT FOLLOW-UP [For the sites that are also part of the Site Assessment]

Our site visit team conducted an evaluation of the restoration status and functioning, maintenance of restoration over time, habitat and water quality outcomes, and related grantee and partner technical and organizational capacity building for the project funded by NFWF.

23. As part for your partnership with **[organization name(s)]**, have you been involved in any activities related to ongoing maintenance of the restoration site? **[If no, move to Wrap-Up]**
24. Could you describe any key actions that may have played a critical role in maintaining the ecological conditions of the site? **[ask about site-relevant ecological conditions]**
 - a. **Water quality improvements related to stormwater and green infrastructure actions**, including low-impact development, rain barrels, green roofs, bioretention/rain gardens
 - b. **Water quality improvements related to agricultural management actions**, including livestock exclusion, pasture management, manure management systems, cover crops, riparian buffers
 - c. Water quality improvements related to multisector water quality restoration actions, such as implementation of watershed-scale projects and programs
 - d. **Habitat restoration actions related to freshwater habitat**, including non-tidal wetland restoration, stream restoration, fish habitat improvement, invasive species management, riparian restoration, etc.
 - e. **Habitat restoration actions related to tidal/estuarine habitat**, including tidal wetland restoration, fish passage/dam removal, oyster reef restoration, etc.
 - f. Habitat restoration actions related to terrestrial habitat, including forest management, land conservation, etc.
25. For the actions you noted above, could you describe how these actions helped with the ongoing maintenance of the site's ecological condition?
41. Did your organization or any other partner organizations (e.g., grantee organization, other partners) encounter any challenges related to the planning, implementation, and upkeep of site maintenance activities? If so, could you describe these challenges?
 - a. **[If so]** Could you describe how your organization or partner organization overcame these challenges?
26. Could you describe any additional factors that hindered your organization or partner organization's ability to maintain the site (e.g., operational capacity, financial sustainability, ecological factors, etc.)?
27. Do you think your organization and partners had the necessary technical capacity to implement and maintain the project? Please explain your answer.
 - a. **[If yes]** What were/are the technical capacity areas expertise and skills that made this project successful?
 - b. **[If no]** What technical capacity areas expertise and skills were/are missing?
 - i. What is needed for your organization and partners to gain this lacking technical capacity and skills?
28. Do you think your organization and partners had the necessary **operational capacity** to implement and maintain the project? Please explain your answer.
 - a. **[If yes]** What were/are the operational capacity aspects that made this project successful?
 - b. **[If no]** What additional operational capacity is needed for your organization and partners to gain the ability to implement and maintain the project?

29. Could you describe any lessons learned related to watershed and habitat restoration and maintenance in the Chesapeake Bay watershed?
30. Do you have any lessons learned or recommendations related to building an organization's technical capacity to implement and maintain a project?
31. What do you think are potential opportunities for the SWG program to be more effective in building capacity for watershed restoration and maintenance in the Chesapeake Bay watershed in the future?

Wrap-up

Script:

That brings me to the end of my prepared questions.

32. Do you have any final recommendations regarding priority areas for the SWG program to focus on moving forward?
33. Is there anything we have not yet discussed that you think would be important for us to know as we evaluate the SWG Program?

Closing Script:

I want to thank you again for taking the time to speak with me today and for your time and valuable insights. If you have any additional information that you'd like to share, please feel free to contact me via email. Thanks, and enjoy the rest of your day!

Regional Expert Interview Guide

Questions

Background

1. How long have you been with **[organization name]**, and could you describe your role there?
2. Could you please describe your involvement with NFWF and the SWG program?
3. Have you partnered directly with any organizations who received SWG grants in their implementation of grant activities?

Regional Capacity

4. **(3.1)** How do you think the SWG program has impacted the technical capacity of the grantees it has funded for implementing conservation and restoration projects in the Chesapeake Bay watershed?
5. Are there any notable examples you could provide regarding the ways in which the SWG program has increased technical capacity of grantees?
6. **(4.1)** How do you think the SWG program has impacted the technical capacity of non-grantee partners who have worked with SWG grantees?
7. **(4.3)** What resources do you think are needed to support capacity building and project replication for non-grantee partners (e.g., funding, presentations at conferences)?
8. **(3.1)** Overall, how do you think the SWG program has strengthened the technical capacity of small organizations in the region?
9. **(3.3)** What other factors (e.g., programs, investments, partnerships, etc.) do you think have been critical for increasing capacity for implementing watershed restoration projects in the region?
10. What lessons do you think NFWF could learn from these other initiatives?
11. **(3.4)** What lessons do you think NFWF could learn from how its SWG investments have helped build capacity?
12. How can NFWF use these lessons to help strengthen capacity building efforts in the future?
13. **(3.4)** Could you describe what you see as the greatest capacity needs for conservation and restoration activities in the region?
14. What specific actions do you think NFWF can take to fill these needs and strengthen capacity-building in the Chesapeake watershed in the future?
15. **(3.4)** What role or niche do you think NFWF should serve in future capacity building efforts in the Bay watershed?

Partnerships

16. **(5.1)** How do you think the SWG program has contributed to developing and strengthening regional partnerships and projects for the conservation and restoration of the Bay?
17. **(5.2)** Through the SWG program, NFWF has funded multiple investments designed to help develop partnerships in the Chesapeake Bay region, such as the Stormwater Network; the Chesapeake Watershed Forum and ForumPlus events, the Baywide Stormwater Partners

- Retreat, the Choose Clean Water Conference, and the Chesapeake Network. Are you familiar with any of these investments, and if so, which ones?
18. **[If yes]** For the investments that you are familiar with, which of these do you think has been the most effective at building and strengthening partnerships in the Chesapeake Bay region?
 19. **[If yes]** Could you describe why you think these investments have been effective at building partnerships?
 20. **[If yes]** What do you think has been the value added of these partnerships in **strengthening capacity** for conservation and restoration in the region?
 21. **[If yes]** What do you think has been the value added of these partnerships in **increasing the health** of the Chesapeake Bay?
 22. **(5.2)** Do you have any thoughts regarding additional actions NFWF could take to build and strengthen partnerships in the Chesapeake Bay region?
 23. **(3.4/5.2)** What other opportunities do you see for NFWF to strengthen the impact of the SWG program moving forward?

Wrap-up

Script:

That brings me to the end of my prepared questions.

24. Do you have any final recommendations regarding what the SWG program could do to build capacity and strengthen regional partnerships?
25. Is there anything we have not yet discussed that you think would be important for us to know as we evaluate the SWG Program?

Closing Script:

I want to thank you again for taking the time to speak with me today and for your time and valuable insights. If you have any additional information that you'd like to share, please feel free to contact me via email. Thanks, and enjoy the rest of your day!

Appendix I. Bird’s Eye View of Methods and Evaluation Questions

KEY:	
Primary	Data/information expected to play Primary role in answering the evaluation question
Secondary	Data/information expected to play a Secondary role in answering the evaluation question (e.g., there may not be full/complete data from this source)
Supporting	Data/information will be scanned and/or checked for relevant information, but not expected to play prominent role or provide substantial amount of information.

Set/#	Evaluation Question	Survey		Interviews			Site Visits	Document Review	Metrics
	Universe:	Grantees (92 responses; 40% response rate)	Partners (60 responses; 34% response rate)	Grantees (30 interviews: 15 site visit interviews and 15 non-site visit interviews)	Partners (29 interviews)	Regional experts (7 interviews and 7 service provider interviews)	32 restoration grants; including subsequent phone interviews with 15 grantees and 8 partners, collectively associated with 15 of these sites	533 restoration grants, 89 Walk-Up Technical Assistance and Capacity Building grants, 25 non-competitive investments, and SWG programmatic documents	223 completed and 80 active restoration grants; completed grants represent 169 unique grantees
1.1	What types of restoration projects did grantees implement between 2005 and 2017?	Secondary	Secondary					Primary	

Set/#	Evaluation Question	Survey		Interviews			Site Visits	Document Review	Metrics
1.2	Have the projects been maintained over time?	Primary	Primary	Primary	Secondary		Primary		
1.3	Who is doing the maintenance?	Primary	Primary	Secondary	Secondary		Secondary	Supporting	
1.4	What factors have limited or hindered site maintenance, and what factors have contributed to and/or facilitated continued site maintenance (e.g., funding, staff over time, access to equipment, partnerships, etc.)?	Secondary	Secondary	Primary	Secondary		Primary		
1.5	What habitat and water quality outcomes have stemmed from these projects and how are they anticipated to benefit fish and wildlife?			Supporting	Supporting			Primary	Primary
2.1	How has SWG grantee capacity to implement conservation and restoration projects changed over time?	Primary		Primary	Secondary			Supporting	
2.2	Have subsequent restoration projects and practices implemented by the grantee increased in size, scale, complexity, and/or impact?	Primary		Primary	Secondary			Primary	-
2.3	What operational attributes of the grantee organizations account for increases in size, scale, complexity, and impact?	Primary		Supporting	Supporting				
3.1	How effective have SWG-funded activities been at increasing grantees' technical capacity for implementing Chesapeake Bay watershed restoration projects?	Primary		Primary	Primary	Primary			
3.2	What role have the changes NFWF and EPA made based on the 2007 evaluation played?	Supporting		Primary	Primary			Secondary	Supporting
3.3	What other factors have likely played a critical role in increasing this capacity?			Primary	Secondary	Secondary		Supporting	

Set/#	Evaluation Question	Survey		Interviews			Site Visits	Document Review	Metrics
3.4	What role or niche can NFWF fill in capacity building in the Bay watershed in the future?			Primary	Primary	Primary			
4.1	Has increased technical capacity among SWG grantees benefitted non-grantee partners? How so?	Secondary	Primary	Secondary	Primary	Secondary		Secondary	
4.2	How have technical approaches and lessons-learned been shared with non-grantee partners?	Primary	Primary	Primary	Primary	Supporting		Primary	
4.3	What resources have been provided to support capacity building and project replication to non-grantee partners (e.g., funding presentations at conferences)?	Secondary	Secondary	Primary	Primary	Supporting		Secondary	
5.1	To what extent are SWG investments contributing to the development of regional scale partnerships and projects?	Primary	Primary	Primary	Primary	Primary			
5.2	Which SWG investments have been most effective for partnership building?			Primary	Primary	Primary			

Appendix J. Key Findings and Recommendations PPT

The following pages contain the presentation the Blue Earth team shared with NFWF on June 4, 2019.

Key Findings and Recommendations: Evaluation of the Chesapeake Bay Stewardship Fund's Small Watershed Grants Program

*Prepared for the National Fish and Wildlife Foundation
by Blue Earth Consultants, a Division of ERG*



Matt Rath/CBP Flickr



Will Parson/CBP Flickr



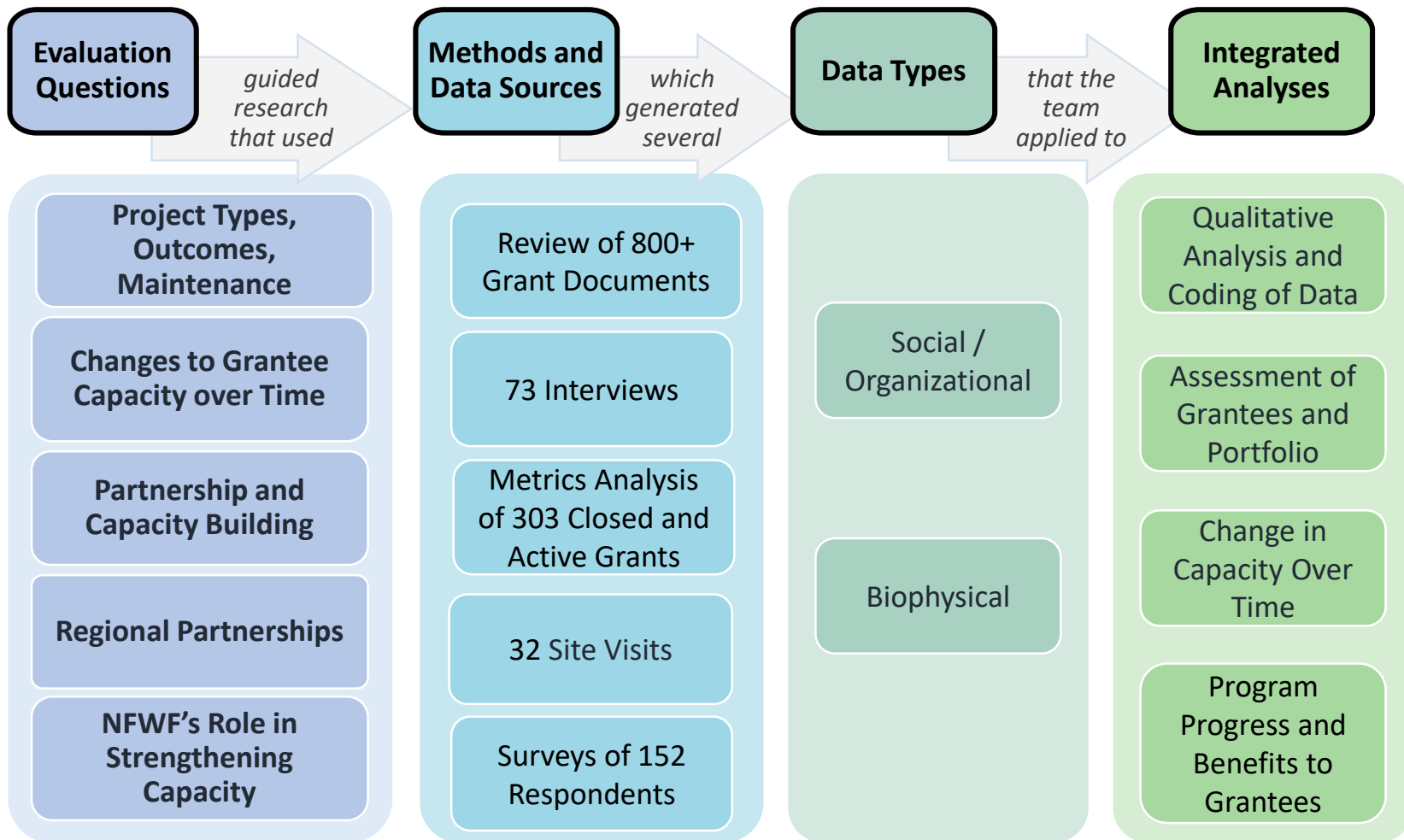
EVALUATION AND PORTFOLIO OVERVIEW

Evaluation Objectives

- **Evaluate the changes** to SWG Program performance and grantee capacity changes in response to the 2007 evaluation recommendations
- **Develop recommendations** for opportunities to modify and strengthen the SWG Program
- **Investigate five overarching sets of evaluation questions:**
 1. What types of projects did grantees implement between 2005 and 2017?
 2. How has SWG grantee capacity changed over time?
 3. Have non-grantee partners benefited from collaborating with SWG Program grantees?
 4. To what extent are SWG Program investments contributing to the development of regional scale partnerships and projects?
 5. How have SWG Program investments increased grantees' technical capacity?

Will Parson/CBP Flickr

Methodology

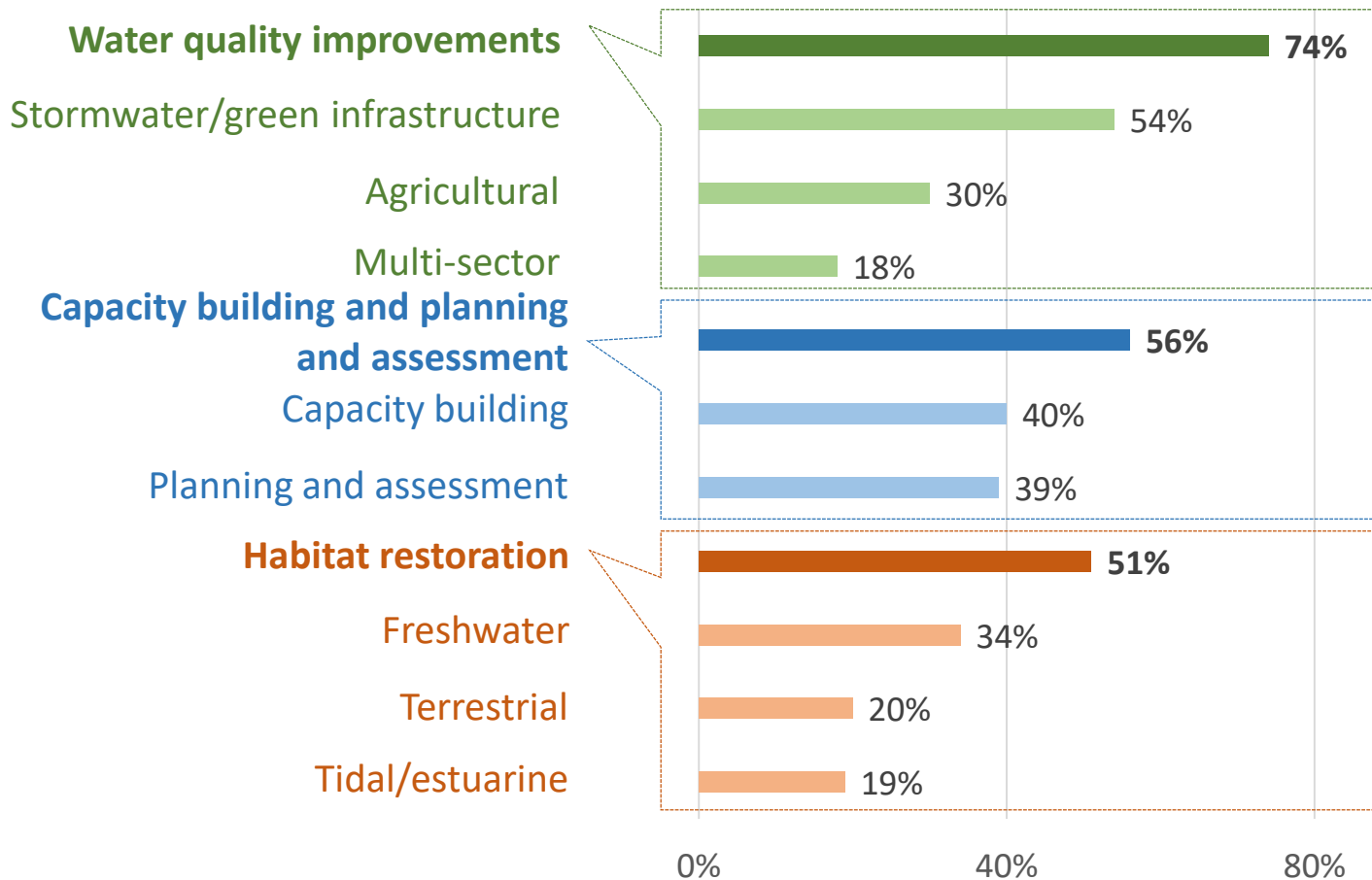


Disclaimer

Blue Earth led an independent evaluation, and NFWF provided guidance throughout the evaluation. Blue Earth's research is drawn from grant documents, interviews, metrics, site visits, and surveys. While we strive to present the most accurate information possible, we cannot always guarantee the accuracy of the information shared as perception by interview respondents or included in grant documents.

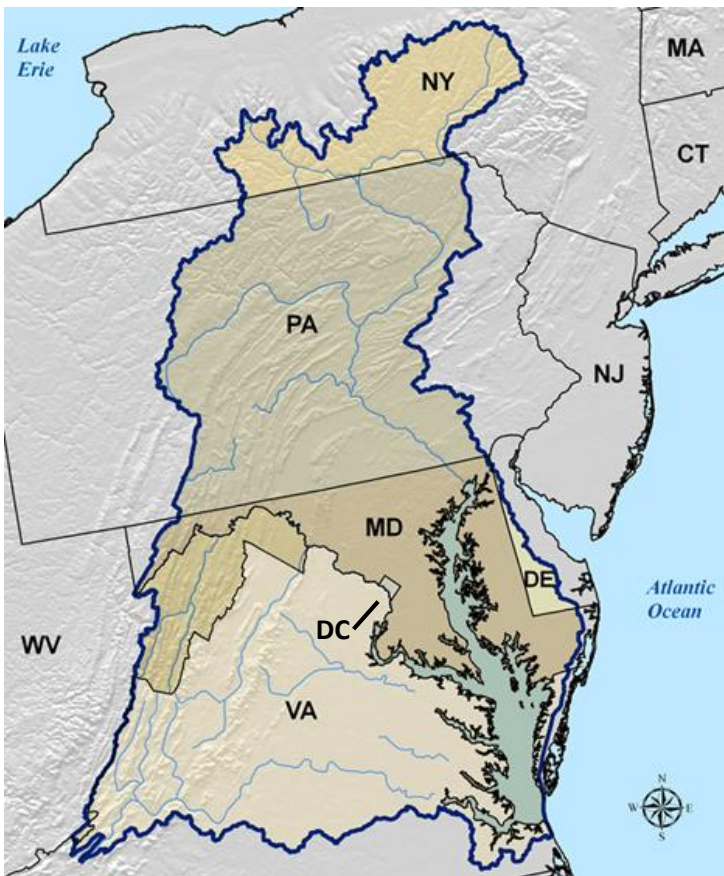
Will Parson/CBP Flickr

A Majority of Grants Addressed Water Quality (2005 to 2017)

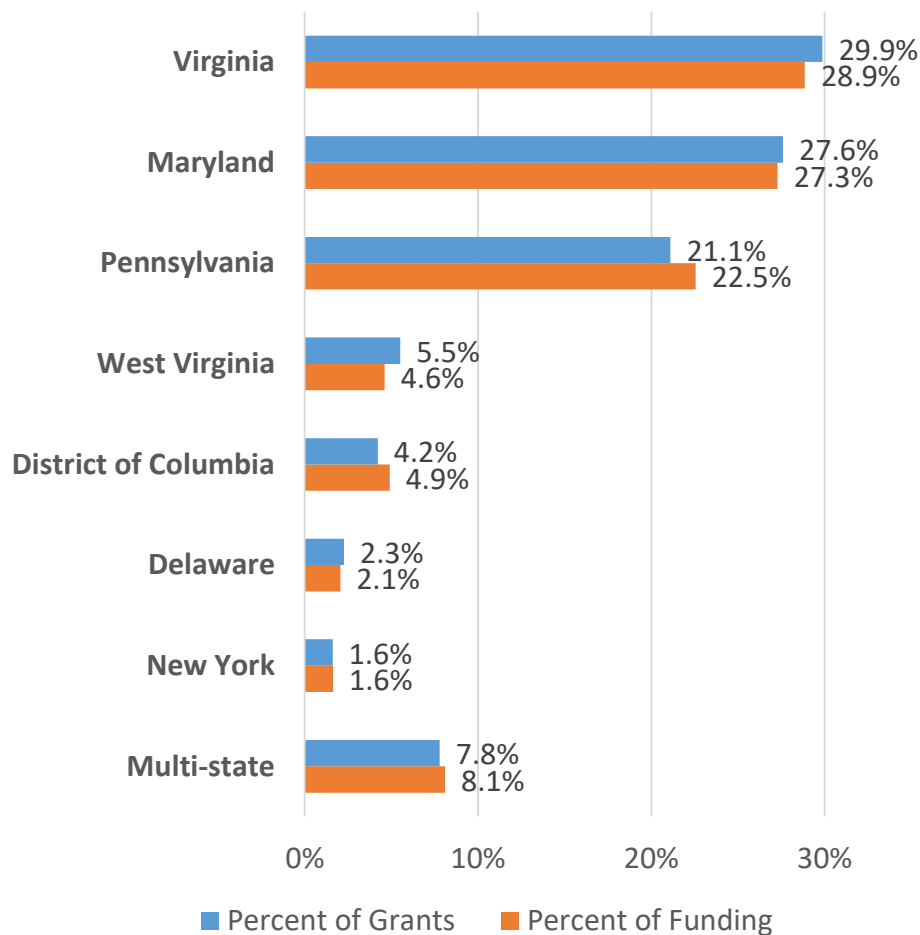


Source: Grantee and partner surveys (n=152)

A Majority of SWG Grants Were Located and Funded in Virginia and Maryland (2007 to 2017)



Source: Natural Resources Conservation Service



Source: Metrics (n=303)

Grants Reduced Sediment Load and Benefited Fish and Wildlife (2007 to 2017)

574,416 pounds of nitrogen reduced annually*

38,159 pounds of phosphorus reduced annually*

61,448,825 pounds of sediment reduced annually*

2,714 acres of wildlife habitat restored

524 stream and riparian miles of habitat restored

69 grantees reported specific wildlife species benefited from grant activities

* Estimated cumulative annual reductions of grants undertaken during 2007 to 2017

Source: Metrics (n=223)

Will Parson/CBP Flickr

The SWG Program Supported Organizations Across the Chesapeake Bay Watershed

**Awarded
\$50.9 million to
533 restoration
grants, a majority
of which are still
maintained**

**Awarded nearly \$4.9
million to
89 technical assistance
grants across 81
watershed organizations**

**Leveraged
\$79.2 million in
local matching
funds**

Alicia Pimental/CBP Flickr

KEY FINDINGS

Changes to Grantee Capacity Over Time

Key Findings

- Grantees' **operational and technical capacity** increased across multiple dimensions.
- Changes in **project complexity** over time were inconclusive.
- **Organizational factors** were critical to changes in capacity.

Grantee Organizational Capacity Increased Over Time



Sources: Document review (n=106); grantee and partner interviews (n=50); metrics (n=38); grantee and partner surveys (n=91)

Increases in Organizational Capacity – Respondent Testimony

“[Since] the first NFWF SWG funds...[we had a] a big jump [in project budget] from \$250,000, to one million.” – Technical assistance grant beneficiary

“We used to have one grant and seven people. Now we have 15 to 20 grants and 25 people.” – Grantee

Will Parson/CBP Flickr

Changes in Project Complexity Showed No Clear Trends

No Clear Trends

No Change

Increase

Strong Increase

BMP difficulty

Impact

Scale

Size

Sources: Document review (n=106); grantee and partner interviews (n=50); metrics (n=38); grantee and partner surveys (n=91)

Grantees Perceived Organizational Factors as Critical to Capacity Change That Occurred

Financial Resources

- SWG Program grants helped grantees leverage additional funding to increase the size of future projects

Ability to Demonstrate Project Success

- Successes stemming from their SWG projects helped grantees scale future partnerships
- Project success also increased community support for and awareness of conservation and restoration activities

Project Management and Planning Expertise

- Aspects such as project planning and implementation helped grantees address projects at a larger scale
- Project partners also provided complementary capacity
- Grantees emphasized that increased “soft skills” in this area could be critical in the future

Sources: Grantee and partner interviews (n=38) and grantee surveys (n=92)

KEY FINDINGS

Partnership and Capacity Building

Key Findings

- Non-grantee partners **increased capacity** through collaboration with grantees.
- Grantees used **diverse modes of knowledge transfer** to build non-grantee partners' capacity.
- Non-grantee partners experienced **operational growth** across multiple dimensions.
- NFWF funding helped grantees **develop partnerships** with others in the Chesapeake Bay watershed.

Non-Grantee Partners Experienced Capacity Increases

Most Popular Response



Least Popular Response

Provided increased operational capacity

Provided increased technical capacity for non-grantee partners

Helped non-grantee partners learn new skills and knowledge

Helped non-grantee partners build new relationships/partnerships

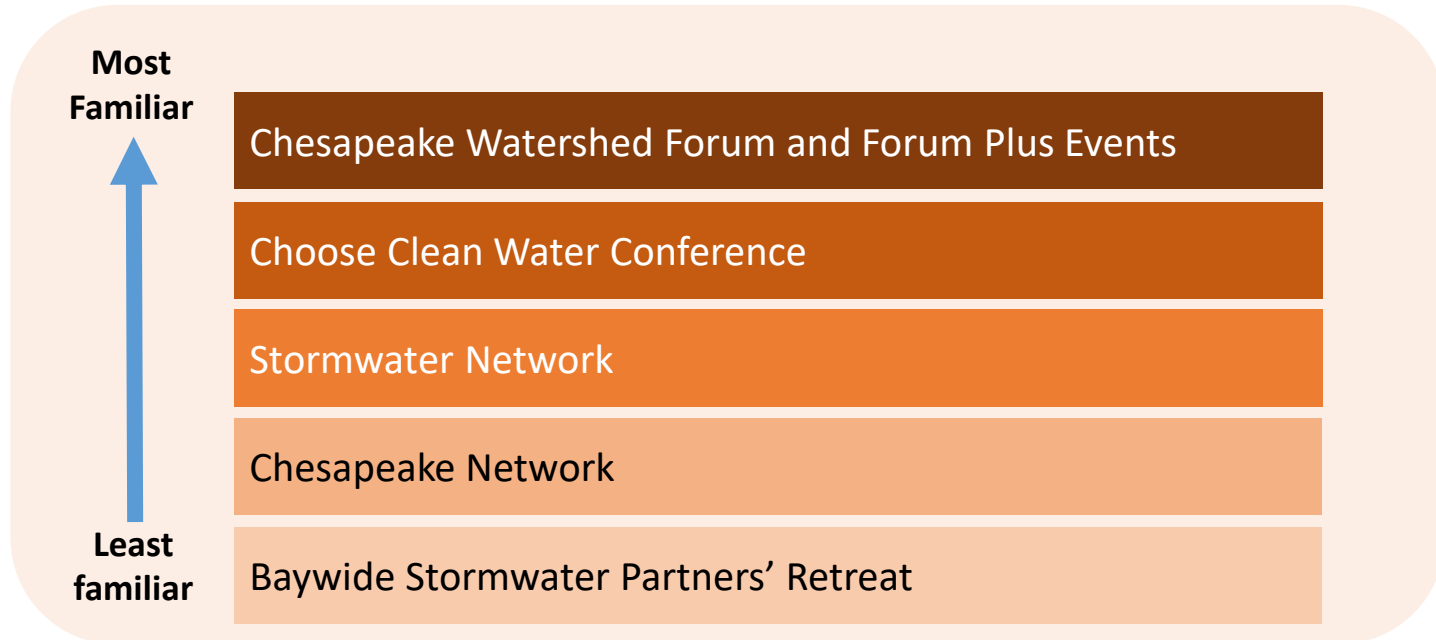
Helped non-grantee partners build credibility/leverage funds

Unsure

Did not increase capacity

Sources: Grantee, partner, and regional informant interviews

Grantees Could Have Greater Awareness of NFWF-Funded Events and Platforms



Sources: Grantee, partner, and regional expert interviews (n=64)



Caitlín Flannery/ CBP Flickr

Grantees Suggested NFWF Fund Scalable Approaches

Future Role

- Fund holistic, scalable conservation approaches that take an ecosystem approach and address multiple, complementary goals
- Support expanding and broadening participation in existing forums

Sources: Grantee, partner, and regional expert interviews



CBP Flickr

KEY FINDINGS

NFWF's Role in Strengthening Capacity

Key Findings

- NFWF's responses to the 2007 evaluation **benefited grantees and the watershed.**
- The SWG program was **critical for increasing the capacity** of organizations in the Chesapeake Bay watershed.

Alec Lambert/PG

NFWF's Actions Benefited Grantees and the Watershed

2007 Evaluation Recommendations	Benefits
1. Expand community conservation and approach to capacity building	Funded more grants with approaches that emphasized local efforts ; encouraged grantees to use social marketing approaches; and supported cross-watershed learning that helped grantees form connections with their colleagues.
2. Planning	Included project planning and design as eligible activities for funding to ensure engagement of all stakeholders in the planning process; 43% of grantees reviewed indicated planning and assessment as one of their project goals.
3. Types of grants	Funded planning and capacity building projects; supported 81 Technical Assistance grantees; and focused on coordination between SWG and Innovative Nutrient and Sediment Reduction program grants.
4. Continuation of improved grant making	Implemented EasyGrants and FieldDoc systems to improve grantee metric reporting; contracted field liaisons , which grantees found useful in project development and implementation; and clarified proposal selection criteria.

Case Study: The Road to Larger Grants

Best Practice

ShoreRivers and Oyster Recovery Partnership used NFWF SWG Program grants to:

- Scale their technical and operational capacity
- Prepare the organizations for future success and grant funding

Outcomes

The SWG Program grants allowed ShoreRivers and the Oyster Recovery Partnership to:

- Grow their internal operational and fundraising capacity
- Build larger, more sustainable programs
- Win higher-value grants, including Innovative Nutrient Sediment Reduction grants

Army Corp of Engineers/Flickr

RECOMMENDATIONS

Continue to Build Grantees' Organizational Capacity

Key Findings

- Organizational capacity **enabled grantees to achieve** project outcomes, though respondents noted that it would be useful to support **strengthening grantees' "soft" skills** to enhance outcome achievement.

Continue to Build Grantees' Organizational Capacity

Key Findings

- Organizational capacity **enabled grantees to achieve** project outcomes, though respondents noted that it would be useful to support **strengthening grantees' "soft" skills** to enhance outcome achievement.

Recommendation 1

- Leverage technical assistance funding and training to strengthen and maximize grantee's organizational capacity.

Strengthen Multi-City and County Partnerships

Key Findings

- Findings demonstrated a **lack of regional** (i.e., multi-city/county) partnerships.
- Respondents emphasized that it would be useful to **strengthen planning for and implementation and financing** of sustainable regional partnerships.

Strengthen Multi-City and County Partnerships

Key Findings

- Findings demonstrated a **lack of regional** (i.e., multi-city/county) partnerships.
- Respondents emphasized that it would be useful to **strengthen planning for and implementation and financing** of sustainable regional partnerships.

Recommendation 2

- Invest in strengthening multi city/county partnerships and planning to enable improved regional outcomes.

Continue to Strengthen SWG Program Investments

Key Findings

- NFWF is making **good progress** toward the 2007 evaluation recommendations, though there is room to continue strengthening the SWG Program.

Continue to Strengthen SWG Program Investments

Key Findings

- NFWF is making **good progress** toward the 2007 evaluation recommendations, though there is room to continue strengthening the SWG Program.

Recommendation 3

- Continue and adaptatively manage NFWF-funded events, and determine strategies to increase their effectiveness and accessibility

Continue to Strengthen SWG Program Investments

Key Findings

- NFWF is making **good progress** toward the 2007 evaluation recommendations, though there is room to continue strengthening the SWG Program.

Recommendation 3

- Continue and adaptatively manage NFWF-funded events, and determine strategies to increase their effectiveness and accessibility.

Recommendation 4

- Increase visibility and strategic deployment of field liaisons to strengthen linking grantees to key partners and technical resources.

Continue to Strengthen Site Maintenance

Key Findings

- **A majority of SWG projects have some form of maintenance, though respondents emphasized that it would be helpful for NFWF to continue supporting and encouraging grantees to maintain sites.**

Continue to Strengthen Site Maintenance

Key Findings

- A **majority of SWG projects have some form of maintenance**, though respondents emphasized that it would be helpful for NFWF to **continue supporting and encouraging grantees to maintain sites**.

Recommendation 5

- Continue support of grantee efforts toward long-term maintenance.



Thank you!

Matt Rath/ CBP Flickr

BLUE EARTH
CONSULTANTS
A Division of  NERG

Creating sustainable solutions

NFWF Administers the Small Watershed Grants (SWG) Program

Promotes
community-based
efforts with grants of
\$20 – \$200K for non-
profits, local/
municipal agencies,
tribes and schools

Protects and
restores water
quality, species and
habitat in the
Chesapeake Bay
watershed

Enhances local
capacity in project
planning, design and
assessment

Zak Erickson/ERG

Financial Resources Provided to Non-Grantee Partners – Grantee Testimony



“[Our] primary [role as grantee] was the administration of the grant. [Our non-grantee partners] had the interest in doing these things for a long time; we went out and pursued the funding opportunities We got the money, administered the grant, [wrote] the reports, got the designs put together, and got the contractors.”

– Grantee

Will Parson/CBP Flickr

Case Study: Long-Term Partnership in the Anacostia Watershed

Best Practice

- Earth Conservation Corps utilized strategic partnerships to build a robust volunteer base

Activities and Outcomes

- Helped launch one non-profit (Wings Over America) and collaborated closely with two others in the Anacostia watershed (Anacostia Watershed Society, Anacostia Riverkeeper) to target key issues (e.g., debris and waste, degraded habitat)
- Developed partnerships and resource-sharing strategies to achieve social and environmental outcomes
- Aligned community needs with diverse stakeholder groups to establish durable regional partnerships

“We've been able to put together hundreds of acres of conservation easements, and D.C. has become an amazing green city. This has brought a lot of attention to the Anacostia River, fishing, [and] education.” – Grantee