Schuylkill Action Network

Strategic Plan

2011-2015

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BACKGROUND

The Schuylkill Action Network (SAN) 2011-2015 Strategic Plan (the "Plan") was developed through an effort of the SAN Planning Committee to help guide the network's future growth and direction over the next 5 years. The Plan was informed by the SAN's original goals and purposes, past priorities and long-term agenda items, and the current and ongoing work of its various workgroups, committees, and partners.

The SAN facilitated a variety of processes for gathering new input from SAN partners and watershed stakeholders during the strategic planning update process. In 2009-2010, the SAN planning committee developed a list of future SAN priorities based on feedback from a brainstorming sessions by the SAN Executive Steering Committee and a facilitated planning event during the SAN annual meeting. Additionally, during the summer 2010, the SAN planning committee also held regional strategic planning listening sessions throughout the watershed in Pottsville, Reading, and Norristown. An online survey was also available for individuals who were not able to attend one of these sessions. In total, over 100 SAN partners provided feedback, which was then organized by the SAN planning committee and incorporated into new strategies and objectives, which are reflected in the Plan below.

The Plan is a tool to guide and coordinate the SAN's work over the next 5 years and to communicate SAN's intentions to the surrounding community of partners and potential partners (including funders). Planning is a fluid process and this plan was designed to be regularly revisited – and likely revised – each year and additionally as needed as part of the work planning process. The Plan is supported and further detailed by a series of supporting documents (appendices) that include a Strategic Planning Matrix (***Appendix B***) and 2011 Workplans for each SAN workgroup/committee (***Appendix C***). The Strategic Planning Matrix is a complete catalog (in Excel table format) of proposed SAN activities by strategy and goal area, as well as preliminary estimates of the time and funding resources involved in these activities (for planning purposes, not to be construed as specific commitments). 2011 Workplans – one for each workgroup and corresponding goal area – provide very similar information on SAN strategies and activities with a focus on action items for 2011, presented in a more readable text format.

The Schuylkill Action Network is a voluntary partnership dedicated to meeting its mission and vision for the Schuylkill River. The deadlines, actions steps, and commitments of this Plan are subject to the availability of sufficient resources and talents to carry them out. SAN leadership will periodically review the progress of the Plan, make adjustments as needed to reflect the latest priorities, needs and available resources, and continue to work toward the vision and mission of the Network at the quickest feasible pace.

VISION

The Schuylkill Watershed is a healthy natural ecosystem that is a vital part of a thriving network of communities. Residents recognize themselves as citizens of the watershed and they value its unique cultural and natural resources. Reflecting this common value, citizens, businesses, non-profit organizations, and governments actively work to address current and past threats to drinking water sources and watershed health while working to protect these natural resources from new stressors. Members of the Schuylkill Action Network share information, expertise, and technology to help each other achieve this shared vision of clean water and a healthy environment for the Schuylkill River and its tributaries. Management practices, restoration efforts, and protective measures are implemented using a reliable source of funding to improve and protect the water resources and water quality of the Schuylkill River Watershed.

MISSION AND PURPOSE

The mission of the Schuylkill Action Network (SAN) is to improve the water resources of the Schuylkill River Watershed by working in partnership with state agencies, local watershed organizations and land conservation organizations, businesses, academics, water suppliers, local governments, regional agencies, and the federal government to transcend regulatory and jurisdictional boundaries in the strategic implementation of protection measures. The SAN seeks to achieve this mission through enhanced communication and collaboration and, more specifically, by working cooperatively with interested parties to:

- Support existing efforts and implement actions to restore and protect water quality in the Schuylkill River Watershed;
- Promote the long-term coordinated stewardship and restoration of the watershed and educate others regarding their roles in protecting the watershed and water supplies;
- Transfer the experience and lessons learned to other communities; and,
- Enhance intergovernmental communication and coordination by working together on the identification and resolution of environmental issues with shared regulatory responsibility.

SAN OBJECTIVES

To improve watershed health as indicated by:

- Increased aquatic life, number and diversity.
- Restoration of impaired stream miles to attain designated uses.
- Protection of stream miles to maintain existing uses.

To improve public value as indicated by:

- Significant improvement in public perception of the Schuylkill River as a vital regional natural resource that should be protected.
- A return to the river by the public for the purposes of recreation, sport, and enjoyment.

Safer drinking water/reduced need for treatment as indicated by:

- Reduction in annual pollutant loadings to source water due to source water protection efforts.
- Estimated treatment cost savings through improved source water quality.

OVERVIEW OF SAN STRATEGIC GOALS

Strategic Goal	Workgroup / Committee Responsible
Focus efforts on improving watershed management, especially activities that will **enhance the quality and flow of Schuylkill waters** for the protection of public health and aquatic resources. Create and maintain an effective network that **maximizes the resources of its membership** to protect and restore the Schuylkill Watershed	Planning and Executive Steering Committees
Maximize reduction and/or treatment of **abandoned mine drainage** discharges.	Abandoned Mine Drainage (AMD) Workgroup
Maximize reduction and/or prevention of **agricultural impacts** to water quality.	Agricultural Workgroup
Maximize reduction and/or prevention of **stormwater runoff** pollution.	Stormwater Workgroup
Improve **NPDES compliance**, reduce discharges, and prevent drinking water outbreaks.	Pathogens/Compliance Workgroup
Promote a **sustainable landscape** in the Schuylkill River watershed through strategic conservation and efficient land resource use to protect the integrity of water supplies for future generations.	Watershed Land Protection Collaborative Workgroup
Improve **public support** for watershed protection actions.	Education/Outreach Committee
Provide **data, GIS, reporting and web support** enabling the SAN to track, measure, and report on its activities.	Data Team

STRATEGIC GOALS

PLANNING

FOCUS EFFORTS ON IMPROVING WATERSHED MANAGEMENT, ESPECIALLY ACTIVITIES THAT WILL ENHANCE THE QUALITY AND FLOW OF SCHUYLKILL WATERS FOR THE PROTECTION OF PUBLIC HEALTH AND AQUATIC RESOURCES.

&

CREATE AND MAINTAIN AN EFFECTIVE NETWORK THAT MAXIMIZES THE RESOURCES OF ITS MEMBERSHIP TO PROTECT AND RESTORE THE SCHUYLKILL WATERSHED.

OBJECTIVES

- Secure funding of $500,000 per year or more to support watershed restoration/protection and partnerships, with at least 50% coming from sustainable sources.
- Increase the number of participants contributing to the SRRF each year.
- Expand and enhance the SAN website as it continues to serve as a resource clearinghouse.
- Increase the participation and diversity of the SAN membership.
- Serve as a facilitator for improving the processes that guide restoration and protection efforts in the Schuylkill River Watershed.
- Provide guidance and take action to remove barriers that impede watershed restoration and protection.

STRATEGY

In order for the SAN to achieve long-term success in restoring and protecting the health of the Schuylkill Watershed, it is important that the Planning Committee continues its focus on maintaining the health of the network, providing guidance and resources to SAN partners for workgroup priorities. Since its creation in 2003, the SAN has successfully developed a system of prioritizing and implementing projects that advance source water protection in the watershed. In doing so, the SAN has been able to establish itself as a leader in the watershed and provide a forum for communicating and advancing discussions on activities that impact the watershed's natural resources. Over the next 5 years, the SAN must continue in this capacity and seek out new opportunities to sustain these efforts into the future.

In order to maintain network health and promote a progressive source water protection agenda for the Schuylkill Watershed, the SAN Planning Committee will work to secure resources, facilitate communication amongst its partners, and eliminate barriers to better watershed management. The Planning Committee will oversee the implementation of the SAN fundraising plan, aiming to increase and sustain the financial investments for source water protection in the Schuylkill Watershed. Also, through the various SAN outreach channels, including the SAN website, workgroup and network-wide meetings, and SAN publications, the Planning Committee will work to direct more needs-driven information and resources to its members. The Planning Committee will also facilitate an initiative that will examine the processes and policies that guide watershed management, identifying specific issues that impede or frustrate restoration and protection efforts in the Schuylkill Watershed. The Planning Committee will also work to connect the programs and projects of its partners to the greater watershed community.

The Planning Committee will focus specifically on the following strategies:

- Continue to strengthen the SAN communication infrastructure to maintain active communication among SAN members (website, newsletters, and meetings) and provide more needs-focused support to SAN workgroups.
- Implement elements of the SAN Fundraising Plan, securing both public and private funding for SAN priority projects, with a goal of establishing an annual fund of $500,000.
- Convene meetings of a new Watershed Practices Implementation Committee with the goal of examining the processes and policies that guide watershed management and developing and presenting strategies that improve them (See Appendix D).
- Support SAN partners as they continue their assessment of the impacts of climate change on the Delaware Estuary and identify linkages between workgroup activities and climate change adaptation recommendations.
- Provide support to SAN workgroups in projects that engage municipalities and water utilities in watershed restoration, protection, and planning.
- Work cooperatively with SAN partners to encourage and support regional integrated watershed planning efforts in priority watershed areas.
- Support source water protection activities within the City of Philadelphia, including education and outreach projects, planning initiatives, and other relevant endeavors, and disseminate information to upstream communities.
- Work to maintain and improve water flow and quality in the Schuylkill to sustainably meet instream and human needs.

ABANDONED MINE DRAINAGE (AMD)

MAXIMIZE REDUCTION AND/OR TREATMENT OF ABANDONED MINE DRAINAGE DISCHARGES.

OBJECTIVES

- Reduce surface water infiltration into the Pine Knot mine-pool to lessen discharge.
- Reduce legacy coal silt from streams.
- Remove 84 tons of iron 5 tons manganese, 7 tons aluminum annually from discharges and streams.
- Improve the pH of mine discharges/streams to pH 6.0 or above as needed to support aquatic life.
- Increase partner participation so at least two or more partners are actively involved in every AMD project.
- Complete 5 AMD remediation projects.

STRATEGY

Abandoned Mine Drainage (AMD) is the primary cause of pollution in the Schuylkill River headwaters and the biggest source of metals downstream, responsible for 24% of water quality impairments in the watershed. AMD is created deep below the ground in abandoned mines where streams, groundwater and stormwater fill tunnels that were once kept dry by active pumping operations. Water and oxygen react with lingering iron sulfide (pyrite) producing metal-laden and sometimes highly acidic discharges that exit the tunnels in telltale orange and silver plumes, easily visible in these regional surface waters. AMD interferes with vegetative growth and reproduction of aquatic animals by armoring the streambed with deposits of iron and other metals. Acidity and metals impair both surface and ground drinking water resources and quickly corrode pipes and industrial mechanisms. Legacy mining also causes sediment pollution as silt from coal refuse piles flows into nearby creeks and streams.

Over the next 5 years, the AMD workgroup will continue to implement projects that reduce the impact of legacy mining practices on the water quality of the Schuylkill River. The workgroup will target priority discharges by designing and constructing AMD treatment systems with the most current treatment technologies; implementing projects that keep unpolluted water clean by reducing surface water infiltration into mine pools; and assisting with projects that utilize best practices for mine land reclamation, including programs that promote reclamation through reforestation. The workgroup will also continue to assess the impact of their activities through project tracking, biological and chemical monitoring, and ongoing oversight of existing and future treatments systems. The workgroup will maintain and strengthen relationships with all stakeholders, including government agencies, landowners, mining operators, NGO's, and local governments. Additionally, to complete the above agenda, the workgroup will seek out and meet eligibility requirements for new and existing funding opportunities.

The AMD Workgroup will focus specifically on the following strategies:

- Complete requirements Qualified Hydrologic Unit Plan (QHUP) to be eligible for Abandoned Mine Land AML set-aside funding and implement projects under this program.
- Maintain focus on reducing surface water infiltration into the Pine Knot Mine pool, working with partners to identify the best opportunities for implementing projects.
- Promote, support, and demonstrate best practices for mine land reclamation, focusing on techniques promoted by the Appalachian Regional Reforestation Initiative (ARRI).
- Continue to assess and address AMD treatment system maintenance needs.
- Continue to monitor the impact of AMD treatment systems in the watershed.
- Provide support to the SAN planning committee as it works to address the gaps and barriers in local, regional, state, and national processes that focus on issues related to AMD and legacy mining impacts on source water.

AGRICULTURE

MAXIMIZE REDUCTION AND/OR PREVENTION OF AGRICULTURAL IMPACTS TO WATER QUALITY.

OBJECTIVES

- Rehabilitate and/or buffer 5 miles (26,000 feet) of streams.
- Through the Berks County Conservation District and Berks County Conservancy, complete 20 conservation and nutrient management plans annually.
- Through Natural Resource Conservation Services (NRCS), complete 25 conservation plans (2,500 acres) annually.
- Revisit 3 previous project monitoring sites for macro studies annually.
- Through NRCS, complete 15 Comprehensive Farm Management plans.
- Create database of manure storages/Animal Equivalent Units (AEUs)/farm acreage to develop nutrient and *Cryptosporidium* load reduction numbers.

STRATEGY

Agricultural runoff is a primary source of pollutants in streams and rivers in the Schuylkill Watershed and is responsible for over 30% of the watershed's water quality impairments. Pollutants carried in agricultural runoff include soil, nutrients, pesticides, bacteria, and other substances, all of which may increase water treatment costs and degrade aquatic habitats. Runoff from animal operations can contain manure, depositing high nutrient values and potentially disease-causing bacteria and pathogens into the local waterways. Nutrients cause excessive plant growth and algae blooms in waterways, which deplete the water of dissolved oxygen as the plant materials die.

The presence of pathogens in source water may increase the cost and complicate the processes of downstream drinking water treatment.

Over the next 5 years, the Agriculture workgroup will carry out projects that will reduce the impact of agriculture runoff on drinking water sources in the Schuylkill Watershed. Through a collaborative approach, the workgroup will engage key partners and watershed stakeholders in the strategic implementation of agriculture best management practices (BMPs), conservation and nutrient management plans, and progress monitoring. To accomplish the above agenda, the workgroup will identify and secure resources; support and help guide decisions on agriculture related programs; and continue to work with and strengthen its relationship with farmers, water utilities, and local watershed and conservation organizations.

The Agriculture Workgroup will focus specifically on the following strategies:

- Continue to update and map priority farms for workgroup assistance.
- Continue to maintain focus on BMP implementation on farms in priority subwatersheds that will have the greatest impact on improving drinking water sources.
- Identify and secure funding from new sources, including programs such as the Pennvest NPS pollution program, allowing for greater leveraging of farm bill appropriations in the watershed.
- Strengthen relationships with water suppliers in priority subwatersheds and pursue joint ventures for implementing BMPs on priority farms/sites.
- Support introduction of Conservation Reserve Enhancement Program (CREP)in the Delaware River watershed (?) and work with partners to implement projects through this program
- Document Agriculture BMP investments and successes in the watershed, including load reduction modeling results, and promote to watershed stakeholders.
- Provide support to the SAN planning committee as it works to address the gaps and barriers in local, regional, state, and national processes that focus on issues related to agriculture impacts on source water.

STORMWATER

IMPROVE MANAGEMENT OF STORMWATER TO REDUCE AND/OR PREVENT POLLUTION FROM RUNOFF.

OBJECTIVES:

- Complete 15 riparian buffer restoration projects (5,000 ft) on priority headwater streams.
- Conduct workshops, tours and educational events for watershed stakeholders on best practices for stormwater management.
- Perform targeted outreach and provide support to municipalities for better stormwater management.
- Support implementation and documentation of stormwater Best Management Practices by workgroup partners.
- Identify new partners/sites that are working to complete stormwater management projects.

STRATEGY:

Pollution carried by stormwater poses a serious threat to the health of the Schuylkill River, contributing to over 30% of the impairments to water quality in the watershed. Polluted stormwater degrades the quality of our river with sediment, excess nutrients, bacteria and pathogens, and debris. Poorly managed stormwater runoff also leads to increased flows during storm events, accelerating streambank erosion and causing flooding. Each of these issues negatively impacts the use of Schuylkill watershed streams as drinking water sources. Addressing stormwater

runoff requires a multifaceted approach that involves engaging all stakeholders, including municipalities, state and federal governments, homeowners, businesses, schools, planners, developers, and water suppliers.

Over the next 5 years, the SAN Stormwater Workgroup will focus its efforts on activities that will reduce the volume and velocity, and improve the quality, of stormwater runoff. Focusing on priority watershed areas, the workgroup will implement both outreach and implementation projects including technical assistance to municipalities to improve their stormwater management strategies, dissemination of information on best management practices for innovative stormwater practices, implementation of on-the-ground projects that reduce runoff, and provision of a forum for stormwater practitioners to share information and resources for managing stormwater. The workgroup will also work to identify and secure resources to accomplish this agenda.

The stormwater workgroup will focus specifically on the following strategies:

- Implement riparian buffer restoration projects on priority 1st and 2nd order headwater streams through the Schuylkill Action Student Program.
- Support and promote the implementation of stormwater BMPs through outreach, education and technical assistance in priority watershed areas.
- Assist municipalities to better understand, navigate, and fulfill their stormwater management responsibilities by providing technical assistance and support in priority areas.
- Work with the SAN Planning Committee to apply for and secure funds to implement stormwater Best Management Practices through new funding mechanisms such as the PENNVEST Nonpoint Source (Green Infrastructure) Program.
- Collaborate with the Philadelphia Water Department to disseminate information on the *Green City, Clean Water* initiative to other communities in the watershed.
- Provide support to the SAN planning committee as it works to address the gaps and barriers in local, regional, state, and national processes that focus on issues related to stormwater impacts on source water.

PATHOGENS AND COMPLIANCE

IMPROVE NPDES COMPLIANCE, REDUCE DISCHARGES, AND PREVENT DRINKING WATER OUTBREAKS.

OBJECTIVES:

- Institutionalize Overflow Standard Operation Procedure plans for all NDPES dischargers.
- Reduce discharges from unsewered communities (on-lot malfunctions and wildcat sewer discharges).
- Reduce discharges of phosphorous from NPDES permitted facilities by 50 %.

STRATEGY:

Over the next 5 years, the SAN Pathogens and Compliance Workgroup will maintain the current level of coordination and communication provided by wastewater treatment compliance practitioners, identifying opportunities to improve compliance and reduce threats to drinking water outbreaks. The workgroup will maintain a focus on reducing illegal discharges, supporting and promoting the Delaware Valley Early Warning System, and supporting planning efforts aimed at reducing pathogen introduction in the watershed. Additionally, the workgroup will also provide assistance in coordinating support for increased pathogen monitoring efforts in the watershed.

The SAN Pathogens/Compliance Workgroup will focus specifically on the following strategies:

- Utilize the permit and compliance process to minimize discharges from wastewater treatment and encourage/require upgrades.
- Implement a strategy to address any remaining and unidentified wildcat sewers.
- Improve discharger/water supplier communication of events through use of the Delaware Valley Early Warning System to minimize threats to drinking water in the event of a discharge.
- Provide assistance to the Philadelphia Water Department in the implementation of their proposed LT2 Watershed Control Program Plan for the Queen Lane intake.
- Support efforts that provide wet weather and high flow management education to WWTP operators.
- Explore options to improve monitoring of *Cryptosporidium* downstream of wastewater treatment plants.
- Support the development and/or completion of TMDLs and pollution budgets for nutrient control in the watershed.

WATERSHED LAND PROTECTION

PROMOTE A SUSTAINABLE LANDSCAPE IN THE SCHUYLKILL RIVER WATERSHED THROUGH STRATEGIC CONSERVATION AND EFFICIENT LAND USE/MANAGEMENT TO PROTECT THE INTEGRITY OF WATER SUPPLIES FOR FUTURE GENERATIONS.

OBJECTIVES

- Maintain or increase the pace of priority lands protected in the watershed (4,853 acres per 5 year period).
- Maintain or increase the pace of priority lands protected in the Delaware Valley Regional Planning Commission (DVRPC) area to keep pace with priority lands developed (approximately 2,345 acres per 5 year period).
- Conduct outreach to every priority township.
- Develop and administer a land transaction assistance program for the protection of priority lands.

STRATEGY

One of the greatest threats to source water in the Schuylkill Watershed is the loss of open space. When undeveloped land is converted to hardscapes such as roads, parking lots, buildings, etc, water quality is impacted by both the introduction of new pollutants and a loss of the watershed's filtering capacity. Undeveloped land generally does not contribute pollutants to our water sources, and when covered with natural grasses, wetlands, plants, shrubs and trees, it serves as a filter, removing pollutants before they get deposited into our water bodies. Water quality improvement is one of the most powerful benefits of preserving open space.

Over the next two decades, development is expected to increase by 40% in the Schuylkill Watershed. While it is both impossible and unnecessary to stop all development from occurring, it is critical that development is directed away from the most sensitive watershed areas. The Watershed Land Protection Collaborative (WLC) will work with key watershed stakeholders to implement projects and promote actions that will lead to the conservation of the highest priority lands for drinking water protection. The WLC will provide outreach and technical assistance to local governments in priority watershed areas and utilize planning tools such as the watershed land prioritization model to engage local decision makers in activities that will protect critical watershed lands. When appropriate, outreach efforts will also provide townships with information on other source water protection strategies, including surface water and wellhead protection opportunities. The WLC will provide resources to land conservation practitioners to incentivize the protection of high priority lands. The WLC will also maintain focus on the practices and policies that lead to the protection of the watershed's riparian areas.

The Watershed Land Collaborative Workgroup will focus specifically on the following strategies:

- Continue to promote the results of the watershed land prioritization model with local practitioners.
- Provide targeted outreach to priority townships with goal of providing technical assistance to townships for implementing conservation measures.
- Promote riparian buffer protection (Academy of Natural Sciences' Riparian Buffer Prioritization Tool, Buffers 100, etc.).
- Secure funding to provide transaction assistance to land trusts, local governments, and other land conservation practitioners for projects that result in the permanent protection of priority watershed land.
- Provide support to the SAN planning committee as it works to address the gaps and barriers in local, regional, state, and national processes that focus on issues related to protection of priority watershed lands.

EDUCATION AND OUTREACH

IMPROVE PUBLIC SUPPORT FOR WATERSHED PROTECTION ACTIONS.

OBJECTIVES

- Increase use of SAN website by the watershed community and SAN membership.
- Improve public perception of and/or connections with the Schuylkill Watershed.
- Post project descriptions, pictures, and/or videos on SAN website for every completed workgroup project.
- Increase media coverage of SAN events, projects and activities.
- Increase applicants for SAN school-based award programs.

STRATEGY

Once of the most important aspects of ensuring the long-term protection of the Schuylkill Watershed is raising awareness as to the resources it provides to residents. In the Schuylkill Watershed, residents are accustomed to turning on a tap and receiving clean, safe drinking water, with little or no thought given to the source of that water or its availability. However, clean water is not a given, and polluted water is everyone's concern. Through concentrated public education and outreach efforts, people learn how their decisions and daily actions can directly impact the water they drink, the recreation they enjoy, regional wildlife habitat, human health, and sustainability for future generations. Additionally, to gain public support for any BMP project, education and outreach must take place to raise awareness of the problems and solutions. Ideally, these efforts foster an appreciation and awareness of local water resources, inspiring stewardship and meaningful changes in the daily actions of residents.

Over the next 5 years, the SAN Education and Outreach (E&O) workgroup will continue to generate the support and awareness necessary for the long-term protection and restoration of the Schuylkill Watershed. To accomplish this, the SAN E&O workgroup will promote SAN projects and successes, watershed news and events, restoration and protection priorities, and individual opportunities for watershed action through the SAN website, media outlets, and within the network. The E&O workgroup will maximize these efforts, aiming to increase its reach by utilizing new social media tools and resources. The workgroup will also partner more closely with the Philadelphia Water Department, advancing city-wide watershed outreach initiatives and finding opportunities to replicate them in upstream communities. The workgroup will also continue to support school-based watershed activities through its annual awards programs and by assisting with workgroup school-based programs. To accomplish the above agenda, the workgroup will identify and secure resources; support and help guide decisions on outreach-related activities; and continue to identify new opportunities for working on collaborative projects that increase watershed awareness and appreciation.

The Education and Outreach Workgroup will focus specifically on the following strategies:

- Promote and maintain the SchuylkillWaters.org website to facilitate internal communication among SAN members, provide opportunities for online sharing of information among watershed professionals, and support public advocacy for protecting and restoring Schuylkill Waters.
- Recognize, promote, and support watershed education initiatives and schools/teachers/students as they implement water quality restoration, protection, and awareness projects.
- Provide assistance to SAN workgroups on educational elements of the Buffer the Schuylkill initiative.
- Maximize use of social media tools for outreach campaigns that aim to influence public perceptions/attitudes/behavior of watershed residents, encouraging them to view the watershed as a valuable resource.
- Work with the Philadelphia Water Department to model source water protection education and outreach projects in the City of Philadelphia and disseminate to upstream communities for replication and collaboration.
- Assist workgroups in communicating SAN current and past successes to build support from community leaders, elected officials, and corporate partners for future SAN activities.

DATA AND MONITORING

PROVIDE DATA, GIS, REPORTING AND WEB SUPPORT FOR TRACKING, MEASURING, AND REPORTING ON SAN ACTIVITIES.

OBJECTIVES:

- Create mechanism for sharing publicly available water quality data among SAN Partners.
- Re-establish USGS Stream Gauge Station in Norristown.

STRATEGY:

The SAN Data team will work over the next 5 years to maintain the current level of data, mapping, prioritization, and report production services provided to other SAN workgroups. A primary goal of the workgroup will be to provide a mechanism for sharing data among SAN partners to assist in identifying priority areas for program implementation, reducing contamination, and protecting public health. To accomplish this, the Data Team will utilize its existing resources, including the SAN website and communication tools, to share and promote use of new and existing data from SAN partners. The Data Team will also assist workgroups in summarizing and presenting water quality data for the purpose of promoting and educating stakeholders on watershed successes. The Team will also support continued and expanded monitoring initiatives and offer guidance and technical support when needed.

The SAN Data Team will focus specifically on the following strategies:

- Provide guidance and support to workgroups for determining and measuring workgroup objectives.
- Provide guidance and support to the Planning Committee for integrating watershed monitoring information into the SAN website and other outreach tools.
- Support PWD in re-establishing a USGS gauge station at Norristown.
- Coordinate watershed monitoring and analysis needs with current or new initiatives at local universities (e.g. West Branch stream integrity assessment with Kutztown University)
- Identify opportunities and provide support for connecting data and monitoring activities of the Delaware Valley Early Warning System with SAN watershed outreach and planning efforts.

LIST OF APPENDICES:

Appendix A: Background on SAN's Organizational Development

Background on SAN's Organizational Development (presented in a separate MSWord file) provides a brief history of SAN's organizational development resulting in how the Network functions today.

Appendix B: Strategic Planning Matrix

The Strategic Planning Matrix (presented in a separate MSExcel file) is a complete catalog of proposed SAN activities organized by strategy and goal area that also includes preliminary estimates of the associated timing and funding resources of activities for planning purposes (not to be construed as specific commitments.)

Appendix C: 2011 Workplans

2011 Workplans together provide detailed information on SAN strategies and activities very similar to that provided in the Strategic Planning Matrix, but with a focus on action items for 2011 and in a more readable text format. These workplans are presented as a series of eight MSExcel files, one for each workgroup and corresponding goal area.

Appendix D: Watershed Practices Implementation Committee (WPIC)

The WPIC overview guide explains the purpose and general function of the initiative.