

## Chapter 3: Building Partnerships

### 3.1 Stakeholders for the Watershed Restoration Plan

As the watershed restoration planning effort was initiated, the Milwaukee Metropolitan Sewerage District (MMSD) decided to use the newly formed Southeastern Wisconsin Watersheds Trust (SWWT) as the stakeholder group for the effort. The SWWT is the ideal stakeholder group because it was formed to improve water quality throughout the Greater Milwaukee Watersheds (GMW), and the goal of the watershed restoration plan (WRP) is to develop the next steps to be initiated to improve water quality in the greater Milwaukee area.

The watershed restoration planning process is an ongoing collaborative effort. Work to date includes the following:

- ◆ identification of key stakeholders
- ◆ identification of issues of concern
- ◆ establishment of preliminary goals
- ◆ development of indicators
- ◆ public outreach

Building partnerships is the cornerstone of the SWWT and its mission is one of collaboration to achieve healthy and sustainable water resources throughout the GMW. The SWWT is building an active membership of organizations committed to its mission, purposes, and goals. Participation is open to a large membership of diverse non-traditional stakeholders that actively participate in all activities of the SWWT and take personal and community responsibility to improve our water resources.

The SWWT collaborates with non-governmental organizations (NGOs) as part of this effort and specifically identified five activities to help restore the watersheds in southeastern Wisconsin. For each activity, specific objectives, tasks and measurable outcomes are defined. The activities and participating organizations are listed below.

- 1) Perform monitoring, modeling, and science work. (Milwaukee Riverkeeper, Clean Wisconsin, River Alliance of Wisconsin)
- 2) Participate in the development and implementation of WRPs (Milwaukee Riverkeeper, Clean Wisconsin, River Alliance of Wisconsin, 1000 Friends of Wisconsin, River Revitalization Foundation, Sixteenth Street Community Health Center)
- 3) Initiate legal and policy implementation of the WRPs (Midwest Environmental Advocates, Sixteenth Street Community Health Center and Clean Wisconsin)
- 4) Develop an outreach and communications strategy (1000 Friends of Wisconsin, Clean Wisconsin, Milwaukee Riverkeeper, Midwest Environmental Advocates)

- 5) Provide SWWT administration and committee support (create an integrated and long lasting structure that supports watershed restoration across municipal and organization boundaries)

### 3.2 Southeastern Wisconsin Watersheds Trust

The SWWT and its committee members are the stakeholders for this WRP and provide the structure for ongoing engagement and action. The SWWT is comprised of members who are committed to actively and publicly support the mission, goals, and objectives of the SWWT as established by its members and approved and amended by the Executive Steering Council (ESC).

Initially, a list of potential stakeholders in all the watersheds was compiled, including NGOs, municipalities, permit holders, universities, industries and others as part of the restoration planning effort. Potential stakeholders were invited to participate on Watershed Action Teams (WATs). Appendix 3A lists the groups invited to participate.



**FIGURE 3-1: SWWT MEMBERS**

As shown in Figure 3-1, the SWWT consists of a general membership and four main committees: Executive Steering Council, Science Committee, Policy Committee and the Watershed Action Teams. The functions and members of the committees are discussed in subsections 3.2.1 – 3.2.4 below. When the SWWT was first developed in February 2008, an organizing committee appointed the members of the SWWT Executive Steering Council. Soon after it was created, the Executive Steering Council appointed the Science Committee. The Science Committee established a modeling subcommittee (to collaborate on water quality modeling issues) and a Habitat subcommittee (formed to develop preliminary ideas on habitat-related watershed improvements). The trust formed two Watershed Action Teams - one for the Menomonee River watershed and one for the Kinnickinnic River watershed. Each Watershed Action Team has a set of co-chairs.

The SWWT members filling committee roles may include independent units of government, special purpose districts, agencies, organizations, companies and members at large. Members may be asked to commit institutional resources to help fulfill the mission, goals and objectives adopted by the SWWT. In return, members expect collaborative actions that work toward achieving healthy and sustainable water resources that benefit them and any constituents they might represent.

Upon initiating the WRP, the project team (consultants and MMSD staff) worked with the SWWT and met with the ESC, the WATs and the Science Committee. Several general meetings were held with the ESC at the beginning of the project. From October 2008 to October 2009, eight meetings were held with the Science Committee, one meeting was held with the modeling subcommittee, four meetings were held jointly with the Menomonee River WAT and the Kinnickinnic River WAT, and three meetings were held separately with the Menomonee River WAT.

### **3.2.1 Executive Steering Council**

The SWWT is managed by a subset of its participant members on the ESC. The 15 member ESC undertakes management and administrative functions of the SWWT. The Council uses input from the WATs to review annual watershed priority lists of projects and programs supported by the SWWT. The ESC considers and recommends projects to undertake and fund at the watershed or subwatershed level and monitors and reports on project results.

Current membership of the ESC is listed below.

*Ann Beier, City of Milwaukee*

*Ken Yunker, Southeastern Wisconsin Regional Planning Commission (SEWRPC)*

*Nancy Frank, UW - Milwaukee*

*Tom Grisa, City of Brookfield*

*Henry Hamilton III, National Association for the Advancement of Colored People (NAACP) - Milwaukee Branch*

*Andy Holschbach, Ozaukee County*

*David Lee, We Energies*

*Scott Mathie, Metropolitan Builders Association*

*Peter McAvoy, Sixteenth Street Community Health Center*

*Christine Nuernberg, City of Mequon*

*Neil Palmer, Village of Elm Grove*

*Kevin Shafer, MMSD*

*Reggie Newson, Wisconsin Department of Transportation (WisDOT)*

*Dan Stoffel, Washington County Board*

*Sharon Gayan, Wisconsin Department of Natural Resources (WDNR) (non-voting member)*



### 3.2.2. Science Committee and Modeling and Habitat Subcommittees

The Science Advisory Committee advises the SWWT ESC on important science and technical issues. The committee ensures that a wide range of interests are considered in scientific discussions and focuses on issues of a scientific and technical nature to achieve watershed objectives. The science committee identifies and makes recommendations on scientific and technical issues, including identifying areas where further study is necessary. It also provides scientific and technical input to project selection, project progress monitoring, and watershed/subwatershed project implementation.

The following are members of the Science Committee:

*Bob Nauta, RSV Engineering, Inc*

*Cheryl Nenn, Milwaukee Riverkeeper*

*Chibby Alloway, Veolia Water North America*

*Claus Dunkelberg, Milwaukee 7 Water Council*

*Eric Loucks, AECOM*

*Ezra Meyer, Clean Wisconsin*

*Ginny Plumeau, Cedarburg Science, LLC*

*Jennifer Runquist, League of Women Voters*

*John Hoopes, University of Wisconsin - Madison*

*Ken Potter, University of Wisconsin - Madison*

*Chris Magruder, MMSD*

*Marsha Burzynski, WDNR*

*Mike Hahn, SEWPRC*

*Peter Hughes, United States Geological Survey (USGS)*

*Sandra McLellan, University of Wisconsin – Milwaukee, Great Lakes WATER Institute (GLWI)*

*Steve Melching, Marquette University*

*Tim Ehlinger, University of Wisconsin – Milwaukee*

*Tony Remsen, University of Wisconsin – Milwaukee, GLWI (retired)*

*Val Klump, Chair, University of Wisconsin – Milwaukee, Director GLWI*

Meeting dates: October 28, 2008; January 20, 2009; March 4, 2009; April 9, 2009; May 14, 2009; June 30, 2009; July 30, 2009; and September 28, 2009.

The Modeling Subcommittee members are listed below.

*Cheryl Nenn, Milwaukee Riverkeeper*

*Chris Magruder, MMSD*



*Claus Dunkelberg, Milwaukee 7 Water Council*  
*Eric Loucks, AECOM*  
*Ezra Meyer, Clean Wisconsin*  
*Ginny Plumeau, Cedarburg Science, LLC*  
*Jennifer Runquist, League of Women Voters*  
*John Hoopes, University of Wisconsin - Madison*  
*Ken Potter, University of Wisconsin - Madison*  
*Marsha Burzynski, WDNR*  
*Mike Hahn, SEWRPC*  
*Peter Hughes, USGS*  
*Peter Taglia, Clean Wisconsin*  
*Sandra McLellan, University of Wisconsin – Milwaukee, GLWI*  
*Steve Melching, Marquette University*  
*Tim Ehlinger, University of Wisconsin – Milwaukee*  
*Tony Remsen, University of Wisconsin – Milwaukee, GLWI (retired)*  
*Val Klump, Chair, University of Wisconsin – Milwaukee, Director GLWI*

Meeting date: February 18, 2008.

The Habitat subcommittee members are listed below:

*Chris Magruder, MMSD*  
*Marsha Burzynski, WDNR*  
*Tom Slawski, SEWRPC*  
*Steve Melching, Marquette University*  
*Tim Ehlinger, University of Wisconsin – Milwaukee*  
*Val Klump, Chair, University of Wisconsin – Milwaukee, Director GLWI*

This subcommittee met informally during the period May 2009 thru October 2009.

### **3.2.3 Watershed Action Teams (WATs)**

The WATs advise the SWWT ESC on important watershed-specific issues pertaining to its activities and implement projects either as a body or by enabling its member organizations. In fulfilling its roles, the WATs perform the following tasks:

- 1) Ensure that a wide range of interests are considered in all watershed discussions.



- 2) Focus on issues that cut across existing lines of authority to achieve watershed objectives.
- 3) Work with the SEWRPC to develop this WRP.
- 4) Identify issues and prepare a priority list of watershed-specific projects and programs to be supported by the SWWT, based on this WRP. Recommend the list to the ESC for their review and approval.
- 5) Identify and make recommendations on watershed-specific issues.
- 6) Undertake projects or advise on member projects that have been awarded by the ESC.
- 7) Record action team meeting notes and report out to the ESC.

The following co-chairs were elected to lead the Menomonee WAT:

*Cheryl Nenn, Milwaukee Riverkeeper*

*Gail Epping Overholt, University of Wisconsin Extension*

The membership list is included in Appendix 3B.

Joint meeting dates with the Kinnickinnic River WAT: November 11, 2008; December 8, 2008; February 2, 2009; and May 5, 2009. Separate meeting dates: August 5, 2009; September 22, 2009; October 21, 2009.

### **3.2.4 Policy Committee**

The Policy Advisory Committee advises the SWWT ESC on important public policy and legal issues pertaining to its activities. It is expected that the Policy Committee will do the following:

- 1) Ensure that a wide range of interests are considered in all public policy and legal discussions
- 2) Focus on issues that cut across existing lines of authority to achieve watershed objectives
- 3) Identify and make recommendations on public policy and legal issues
- 4) Record Policy Advisory Committee meeting notes and report out to the ESC

The current Policy Advisory Committee members are listed below.

*Peter McAvoy, Chair - South Sixteen Community Health Center*

*Ann Beier, City of Milwaukee*

*Dan Collins, Elutions*

*James Fratrick, WDNR*

*Shawn Graff, Ozaukee Washington Land Trust*

*Susan Greenfield, Root-Pike Watershed Initiative Network*

*Henry Hamilton III, NAACP - Milwaukee Branch*

*Jill Hapner, Washington County Land Conservation*

*Andy Holschbach, Ozaukee County*



*Steve Keith, Milwaukee County*

*Bruce Keyes, Foley & Lardner LLP*

*Scott Mathie, Metropolitan Builders Association*

*Ezra Meyer, Clean Wisconsin*

*Mike Murphy, City of Milwaukee Alderman*

*Neil Palmer, Village of Elm Grove*

*Melissa Scanlan, Midwest Environmental Advocates*

*Kevin Shafer, MMSD*

*Ken Yunker SEWRPC*

### **3.3 SWWT Linked Goals (concurrent with RWQMPU Pollutant Reduction Goals)**

In order to establish goals for the WRP, the ESC suggested combining the goals established by the SWWT and the goals from SEWRPC's Regional Water Quality Management Plan Update (RWQMPU). A document entitled *Linked Goals and Objectives for the Southeastern Wisconsin Watersheds Trust and SEWRPC's Regional Water Quality Management Plan Update* was developed in April 2009. In order to continuously focus and strive to accomplish its mission, the SWWT developed and approved the following four goals:

- 1) Make measurable progress toward improving the water resources in the region.
- 2) Identify/support land use practices and designs that enhance/improve water resources and promote and restore ecological benefits.
- 3) Forge and strengthen relationships to leverage funding and recommend policies to assist in the implementation of projects to produce lasting water resource benefits and cost savings throughout the GMW and nearshore Lake Michigan.
- 4) Implement cost-effective projects that result in measurable improvements in water quality and water resources.

The focus of the SWWT will be on implementing these goals; however the SWWT recognizes that its efforts must build on the goals, the objectives and recommendations of SEWRPC's RWQMPU.<sup>1</sup> The RWQMPU provides a relevant and transparent foundation for moving forward.

Below is a detailed listing of the RWQMPU measurable water quality improvement goals for the Menomonee River Watershed, and its objective categories paired to an extensive list of recommendations and/or implementation strategies. Programs and projects supported by the SWWT will be evaluated relative to their potential to make progress toward these measurable goals.

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<sup>1</sup> SEWRPC implements Section 208 of the federal Clean Water Act toward the goal of achieving water use objectives for surface waters within the region through a sound and workable plan for the abatement of water pollution.

### **Measurable Water Quality Improvement Goals**

In general, the degree of improvement in water quality resulting from implementation of the plan recommendations will be evaluated through comparison over time of existing measured water quality conditions with conditions measured in the future. These measurable goals can serve as indicators of progress being made toward improving water quality conditions. Those, which are to be achieved by 2020, can be reviewed in the Plan Summary of the RWQMPU ([http://www.sewrpc.org/publications/planningprogramreport/pr-050\\_summary\\_water\\_quality\\_plan\\_greater\\_mke\\_watersheds.pdf](http://www.sewrpc.org/publications/planningprogramreport/pr-050_summary_water_quality_plan_greater_mke_watersheds.pdf)) which details the goals for the entire RWQMPU.

Specific to the Menomonee River Watershed, the RWQMPU goals are:

#### A. Land use changes

- 1) Converting 2.3 square miles of marginal cropland to prairie or wetland conditions.
- 2) Establishing or expanding riparian buffers along about 69 miles of stream bank.

#### B. Habitat/Aesthetics Improvements

- 1) Renovating and rehabilitating concrete channels where concrete lining removal can be accomplished without creating flood or erosion hazards
- 2) Preparing abandonment and associated riverine restoration plans for dams, specifically addressing sedimentation issues
- 3) Limiting culverts, bridges, drop structures, and channelized stream segments and designing such necessary features to allow the passage of aquatic organisms
- 4) Developing restoration and remediation programs for riverine and impoundment sites with contaminated sediments
- 5) Extending the Milwaukee Estuary Area of Concern to include reaches of the Little Menomonee River and additional reaches of the Menomonee River
- 6) Improving the habitat of stream systems by:
  - ◆ Enhancing streambank stability,
  - ◆ Limiting instream sediment deposition,
  - ◆ Implementing techniques to moderate the effects of channelization
  - ◆ Restoring instream and riparian habitat.

#### C. Pollutant Load Reduction Goals

Based upon the comparison of the Year 2020 (the estimated future condition as defined in Chapter 4) and the Baseline (the existing condition as defined in Chapter 4), the following pollutant load reductions are estimated for the Menomonee River Watershed:

- 1) Total Phosphorus: 32% (17,231 pound reduction)



2) Total Suspended Solids:	24% (4.2 million pound reduction)
3) Fecal Coliform Bacteria:	42% (6,900 trillion cell reduction)
4) Total Nitrogen:	26% (104,000 pound reduction)
5) Biochemical Oxygen Demand:	17% (224,000 pound reduction)
6) Copper:	15% (281 pound reduction)

The detailed derivation of these load reductions is presented in Chapter 6 of this document in Section 6.1.

### 3.3.1 WAT Visioning Session

The Menomonee River WAT participated in a visioning session in December 2008. Technical team staff asked the following three questions to help discover values-based water resource expectations from the members:

- ◆ How do you want the Menomonee River to look?
- ◆ What activities do (or would) you like to do in the Menomonee River?
- ◆ On behalf of aquatic and plant life, what do you think the Menomonee River needs?

While some respondents directly answered the questions and others responded more generally, it was staff's opinion that answers were generally in line with recommendations of the RWQMPSU. The compiled list of responses that was developed from the WAT visioning session and considered by the Science Committee is shown below.

#### Manmade channels:

- ◆ Concrete channels
  - Underwood Creek, Honey Creek (downstream of 84<sup>th</sup> Street and upstream at McCarty Park) and Menomonee River should have no concrete and should be naturalized (See the Underwood Creek Baseline Water Quality Report for examples of drop structures and concrete-lined channels<sup>2</sup>).
  - Concrete at Miller Park is an impediment for fish passage
- ◆ Streams should be daylighted (remove streams from enclosed conduit)
- ◆ Caveat
  - Consider safety and unintended consequences (e.g., flooding)
- ◆ Reintroduce meanders

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<sup>2</sup> Milwaukee Metropolitan Sewerage District, Underwood Creek Baseline Water Quality Report (2003-2005), accessed online October 2009, <http://v3.mmsd.com/AssetsClient/Documents/08-266%20UC%20web.pdf>

**In-stream conditions:**

- ◆ Free-flowing without barriers to fish passage (add fish ladders)
- ◆ Clear water and clear streams vs. dark brown/green
- ◆ Free of trash
- ◆ More pools and riffles
- ◆ Decrease flashiness
- ◆ No fish advisories
- ◆ Reduce solids in streambeds
- ◆ Less salt
- ◆ Reduce thermal discharges
- ◆ Seawalls/fish condos (idea from Chicago) – look at the lower portion of the Menomonee River to create habitat
- ◆ Plant wild rice in the Burnham Canal (Milwaukee Riverkeeper is undertaking a pilot project)
- ◆ Restore original meanders upstream of 124<sup>th</sup> Street (or between 115<sup>th</sup> and 124<sup>th</sup>)
- ◆ No fecals
- ◆ Increase levels of dissolved oxygen (DO)
- ◆ Decrease nutrient loads

**Riparian areas:**

- ◆ Keep vegetation wild, but maintained
- ◆ Balance natural vegetation with recreational use needs
- ◆ Provide increased riparian areas (i.e., buffers), 75' minimum
- ◆ Remove all homes and businesses from the floodplain
- ◆ More wetlands / restored wetlands
- ◆ Reduce or eliminate nutrient inputs from manure spreading in rural areas
- ◆ Improve public access to river

**In-stream and riparian areas:**

- ◆ Invasive species removal
- ◆ For projects, start at the headwaters and work progressively downstream
- ◆ Superfund site cleaned up and delisted (Little Menomonee River – clean up work still underway in assessment point area MN-11 in the Menomonee River watershed)
- ◆ More aquatic life diversity, plants and animals that would use the waters in a safe manner



**Desired uses:**

- ◆ Swim
- ◆ 25<sup>th</sup> Street and downstream on the Menomonee River: riverwalk with some public access
- ◆ Access points for fishing at Petit Point, 12<sup>th</sup> Street and Bruce Street
- ◆ Kayaking/canoeing
  - But evaluate woody debris within streams

**Overarching:**

- ◆ Consider cost-benefits
- ◆ Citizen involvement and education
  - Lawn care education, regulations
  - Positive association/identity with water; ways to generate adoration for water resource assets
  - Work with the river asset – create an identity for the river with the communities
- ◆ Green infrastructure focus
- ◆ Sustainable solutions
- ◆ More flow monitoring to match to needs

**3.3.2 RWQMPU Pollutant Reduction Goals**

The Science Committee used this input to determine parameters that should be focused on in the WRPs that would help address this input received from the WATs. They also determined what should be recommended for future analysis. The following parameters were recommended to be focused on in the WRPs:

- 1) Bacteria (harmful to human health) - warm weather months - concentrate on unknown sources, failing sanitary sewer infrastructure and illicit connections
- 2) Habitat (concrete channels are poor for aquatic life and for downstream hydrology; however flooding considerations must be taken into account) - restoration of watersheds with buffers, etc. – consider the parameters of:
  - ◆ Chloride (harmful to aquatic life)
  - ◆ Total Suspended Solids (TSS)
  - ◆ Sediment
  - ◆ Dissolved oxygen (DO)/Biochemical Oxygen Demand (BOD)
  - ◆ Water temperature
  - ◆ Trash - defined as pet litter, waterfowl impacts, and refuse - with the understanding that there is some overlap with other pollutants

- ◆ Flow/flood impacts
- 3) Nutrients - Phosphorus (even if algal growth is not a problem and standards are met, this may still be of concern due to the amount reaching the Lake Michigan nearshore area)
- 4) Use of new real time water quality data to facilitate understanding on various parameters:

<http://waterdata.usgs.gov/wi/nwis/current/?type=quality>

Four pollutants were deferred for later study:

- ◆ Nitrogen
- ◆ Copper
- ◆ Historical pollutants (Polychlorinated Biphenyls (PCBs), et. al.)
- ◆ Personal Care Products (PCP) and other emerging contaminants of concern

### **3.3.3 Habitat Considerations**

Preliminary water pollution goals from the RWQMPPU did not directly address habitat improvement. However, the RWQMPPU did recommend restoration of prairies and wetlands and the establishment or expansion of riparian buffers.

## **3.4 Education and Outreach**

A strong information and education component enhances public understanding of both watershed planning and the project and encourages early and continued participation. Efforts include work by the SEWRPC, MMSD, SWWT, and others.

### **3.4.1 Internet**

Online resources throughout the region include web pages launched and maintained by SEWRPC, MMSD, SWWT, United States Geological Survey (USGS) and others.

The SEWRPC maintains a web page for the RWQMPPU (<http://sewrpc.org/waterqualityplan/>) that documents the plan update process consistent with the United States Environmental Protection Agency's (USEPA's) watershed planning process. Topics documented include an overview section, planning background, the current effort, public involvement, study meetings, advisory committees, final plan summary, plan chapters, environmental corridors, yard care, related fact sheets, links and contact information. The final RWQMPPU report (SEWRPC Planning Report No. 50, *A Regional Water Quality Management Plan Update for the Greater Milwaukee Watersheds*, December 2007) and the companion technical report (SEWRPC Technical Report No. 39, *Water Quality Conditions and Sources of Pollution in the Greater Milwaukee Watersheds*) are available on the web site. The website includes opportunities to contact staff.

The MMSD website for the 2020 Facilities Plan planning process was used intensively by committees, citizens and stakeholders and afforded all the opportunity to comment on documents



as they were drafted. The MMSD continues to maintain the project website at <http://www.mmsd.com/wqi/>. The site includes background on the project, a record of committee activities, information about watersheds, presentations, publications, links, and contact information.

In the spring of 2009, the MMSD launched an online tool, H<sub>2</sub>OInfo, which tracks water quality indicators. On this interactive site, users can click on a monitoring location on a map and view data that are virtually real time and chart data over time. The MMSD collects data with remote sensors and transmits it, in cooperation with the USGS, and then posts the data to the H<sub>2</sub>OInfo website. Water quality variables tracked include conductivity, DO, turbidity, water temperature, flow (discharge) and stage. Precipitation data are also available from several precipitation monitoring stations.

The SWWT website (<http://www.swwtwater.org/>) documents the formation of the group, posts meeting information and also provides technical information. It includes a calendar of events, publications, project listings, and lists committee members and activities. The MMSD hosts an E-forum, accessible through the SWWT website, which is a tool designed to enable stakeholders to participate in online discussions. The E-forum may be used by all committee members to share information, discuss concepts, and comment on draft documents (<http://www.swwtwater.org/swwtforum/>), such as the WRPs, as they are developed.

### **3.4.2 Watershed Booklets**

As a precursor to the WAT meetings, the MMSD produced a booklet about each watershed that included information about the status of the water quality within the watershed, the geography of the watershed, and information about what local governments, MMSD and others are doing to improve water quality. These booklets also outlined additional actions that individuals and groups could do to further advance improvements to water quality.

### **3.4.3 Annual Conference**

The annual Clean Rivers Clean Lakes conference is attended by hundreds of people dedicated to improving the region's water quality. Originally convened by the MMSD, SEWRPC and others as part of the Water Quality Initiative, 2009 marks its 6<sup>th</sup> year. The event draws people involved in many aspects of water resource management and protection including scientists, regulators, planners, elected officials, engineers, developers, environmentalists and community activists.

### **3.4.4 Other SWWT Education and Outreach Initiatives**

The SWWT education and outreach materials and tools can be used by municipalities and counties throughout the watersheds. This ultimately may include an information and education curriculum for elected officials as well as a communication plan. Print or electronic publications may include an annual magazine, periodic newsletters and special topic newsletters focusing on critical habitat and WAT efforts and results. Ultimately, SWWT envisions development of an annual water-quality report card for all the watersheds, based on agreed to parameters and measured data.