



**2010**

**Karl Mason Award  
Presentation Luncheon**

**Pennsylvania Association of  
Environmental Professionals  
Annual Conference**

**May 13, 2010**

# Road to the 2010 Karl Mason Awards

## Nominees and Winners

Each year, at the Pennsylvania Association of Environmental Professionals (PAEP) Annual Conference, the Karl Mason Award is presented to meritorious nominees selected by the PAEP Board of Directors from two categories as follows:

- An individual who demonstrated exemplary leadership in the field of environmental management.
- An organization, project or program that has made a significant contribution toward maintenance or restoration of Pennsylvania's environmental quality.

Six nominations for the 2010 Karl Mason Awards were received by the PAEP Conservation Heritage Committee. Nominations were as follows:

### Individual

- Gary Bloss, Consultant, Past Executive Director, Susquehanna Greenway Partnership, nominated by Robert Hosking.
- Richard Piacentini, Executive Director, Phipps Conservatory and Botanical Gardens, nominated by Keri Rebeck.

### Organization, Project, or Program

- Bear Creek Mountain Resort, nominated by Camille Otto.
- Alliance for Aquatic Resource Monitoring, Dickinson College, nominated by Sarah Brylinsky.
- Bureau of Public Transportation, Pennsylvania Department of Transportation, nominated by Angela Schreffler and Chris Spahr.
- Phipps Conservatory and Botanical Gardens, nominated by Keri Rebeck

All are deserving of recognition. Votes were accepted from the PAEP Board of Directors through April 12<sup>th</sup>. Karl Mason Award winners were announced at the April 13<sup>th</sup> PAEP Board meeting conference call.

### 2009 Karl Mason Award winners are as follows:

- **Individual: Gary Bloss**
- **Organization, Project, or Program: Alliance for Aquatic Resource Monitoring, Dickinson College**

Congratulations to the winners and the nominees.

Sincerely,

Eric H. Buncher  
Chair, Karl Mason Award  
Pennsylvania Association of Environmental Professionals

# **Gary D. Bloss**

## **2010 Karl Mason Award Recipient**

Gary has over 30 years experience in the field of community planning and landscape architecture. Most recently Gary serves as the first Executive Director of the Susquehanna Greenway Partnership. Prior to serving the Susquehanna Greenway Partnership, Gary spent 10 years running his own consulting firm specializing in community planning, watershed conservation, greenways, open space, and trails. Among other projects, as a consultant Gary contributed to completion of the Monroe County 2020 Vision & Plan; the River to Bay Greenway; Pennsylvania Center for the Performing Arts; and the Nittany and Bald Eagle Valleys Greenway & Bikeway Plan. Gary has a Masters in Landscape Architecture from Harvard and a Bachelor of Science in Landscape architecture from Penn State, which included a semester of foreign study at the University of Lisbon, Portugal. Gary lives in Cherry Valley, Pennsylvania, which includes one of our newest National Wildlife Refuges.

# Alliance for Aquatic Resource Monitoring, Dickinson College

## 2010 Karl Mason Award Recipient

The Alliance for Aquatic Resources Monitoring (ALLARM), a project of the environmental studies department at Dickinson College, has provided technical assistance to volunteer stream monitors in the state of Pennsylvania since 1986. Pennsylvania has more stream miles per land area than any other state in the nation. It comes to no surprise that Pennsylvania citizens are protective of this prized natural resource as indicated by the hundreds of volunteer-based watershed focused organizations in the state. In order to maximize volunteer efforts, ALLARM recognized the need for scientific and organizational training and resources in watershed communities. Many watershed organizations have identified stream monitoring as a central element to achieving their water quality goals. ALLARM enhances local action for the protection and restoration of Pennsylvania watersheds by empowering communities with scientific knowledge and tools to implement watershed assessments. Through the work of student and professional staff, ALLARM offers comprehensive services to enable groups to use critical scientific tools to enhance environmental quality and fully participate in community decision-making. To date ALLARM has worked with 35 Pennsylvania watershed partners, and over 2,500 community water monitors, who have conducted over 10,000 square miles of watershed assessment.

The strengths of the program lay in the ability to provide tailored, customized assistance to communities. ALLARM does not prescribe a standardized monitoring road map for communities, because each watershed organization has unique concerns and water quality goals. In the initial stages of assistance ALLARM facilitates a process where group members identify their watershed concerns and how stream monitoring will address concerns. Additionally, community ownership is promoted at every stage of the scientific process, from defining the questions to collecting and analyzing data, to finding the story in the data and communicating it to constituencies. ALLARM provides a number of resources for watershed organizations interested in stream monitoring, including:

- Study Design Facilitation – a 10-step process to help groups develop their scientific studies.
- Biological, Chemical, and Physical Monitoring Workshops – to train volunteers on scientific data collection and analysis techniques.
- Quality Assurance/Quality Control – to ensure that volunteers are using their equipment correctly and collecting the best data possible.
- On-going Equipment Research – ALLARM continually researches and tests volunteer-friendly equipment in order to make the best recommendations to groups based on their monitoring goals.
- Data Management – ALLARM has developed a database template and data entry tips and suggestions that can be tailored to group's monitoring scope.
- Data Interpretation – ALLARM works with the data managers to do basic statistical analysis with the group's data set, develop maps, and then train volunteers to identify the story in their data.

Additionally, ALLARM is a founding member of the Consortium for Scientific Assistance to Watersheds (C-SAW), which has provided free technical assistance to watershed groups across the state since 2001. If a group requires technical assistance outside of ALLARM's abilities they have access to assistance from a diverse group of scientists and service providers through C-SAW.

Since its founding in 1986, ALLARM has employed several operational models to working with volunteers. ALLARM (originally Alliance for Acid Rain Monitoring) was founded as an acid deposition data-gathering project by Dr. Candie Wilderman, Professor of Environmental Science at Dickinson College in Carlisle, PA. The program was developed in response to an observation by Pennsylvania state legislator John Broujos that although Pennsylvania receives the most acidic deposition of any state in the nation, Pennsylvania citizens were mostly unaware of the problem and it was unclear how extensively acid rain was affecting Pennsylvania's waterways. To raise awareness and to examine the effect of acid deposition on streams, ALLARM trained over 700 volunteers in 66 out of 67 Pennsylvania counties, to collect pH and alkalinity data for seventeen years. Acid rain participants received annual reports including analyses of the patterns found at their stream site(s) within the larger context of all sites sampled. This data collection effort has resulted in the most comprehensive database in the state looking at the effects of acid deposition on Pennsylvania waterways, made available through the Pennsylvania Spatial Data Analysis website, the ALLARM website, and the Pennsylvania Keystone Monitoring Database. As ALLARM conducted acid rain trainings across the state it became apparent that volunteers wanted to collect stream data that could answer diverse questions about land use impacts. Therefore in 1996, ALLARM shifted its focus to work cooperatively with volunteer stream monitoring groups to identify watershed concerns specific to each community and to provide training for volunteers to address these issues.

Today, ALLARM's central work is focused on providing watershed organizations in Central Pennsylvania with the technical assistance they need to carry out their monitoring, restoration, and protection goals. In addition ALLARM has a locally based K-12 environmental education program, conducts aquatic research, works with the Borough of Carlisle on the LeTort Stormwater Education Campaign, and publishes an annual newsletter that is distributed to over 1,300 Pennsylvania residents.

## **ALLARM Achievements**

### 1986: Acid Rain Project

From 1986-2003, the acid rain project worked with more than 700 volunteers to document the effect of acid deposition on Pennsylvania streams and educate communities about acid deposition. In the realm of conservation, the project desired to help participants first build a strong sense of place by visiting a single site on a weekly basis and then to build a sense of stewardship for that place. Finally, the project aimed to empower participants with first-hand knowledge of the responses of streams to acid rain so that they could, if they chose, participate in community efforts to find solutions.

### 1996: Transitioned from Alliance for Acid Rain Monitoring to Alliance for Aquatic Resource Monitoring

ALLARM hired its first full-time director and underwent a name and organizational change to respond to community requests to monitor streams for diverse water quality issues. ALLARM's new focus was to provide technical support to watershed organizations to carry out scientific stream studies. ALLARM piloted this new approach with the Conodoguinet Creek Watershed Association in 1996, followed by Shermans Creek Conservation Association in 1998, and the Ridge and Valley Streamkeepers in 2000.

### 1999-2002: Mully Grub Restoration Project

The LeTort Spring Run is a unique groundwater-fed tributary to the Conodoguinet Creek in that its entire watershed is underlain by limestone. It is designated as an exceptional value coldwater fishery by the state and considered to be a world renowned trout stream by anglers. When the LeTort flows through Carlisle it is adversely affected by stormwater runoff. The Mully Grub is a piped stream under Carlisle that receives stormwater through storm drains and is the first major urban outfall into the LeTort Spring Run. Using data collected by Dickinson College's Environmental Studies department, ALLARM implemented a three phase restoration project on the Mully Grub and LeTort Spring Run in collaboration with community partners with funding support from the PA Department of Environmental Protection Growing Greener Grant Program and the GB Stuart Foundation.

### 2001 - 2011: Consortium for Scientific Assistance to Watersheds

ALLARM is a founding member of the Consortium for Scientific Assistance to Watersheds, a nine member consortium of scientists and service providers to provide technical and programmatic assistance to watershed organizations statewide, funded by PA Department of Environmental Protection Growing Greener. This grant enabled ALLARM to hire a second full-time director and to increase the number of community partners from 3 to 35.

### 2002-2003: West Perry High School Project

ALLARM, Shermans Creek Conservation Association, and West Perry High School received an EPA grant (\$5,243) to connect high school students to local watershed issues. ALLARM provided technical support to nine science fair students and three oral history students to conduct research and present findings in a Town Hall meeting.

### 2002- 2003: Citizen's Guide to Dam Removal Monitoring and Restoration

ALLARM collaborated with the PA Organization for Watersheds and Rivers, American Rivers, and the Alliance for Chesapeake Bay to develop a dam removal monitoring and restoration guide for community groups. Funded by the Environmental Protection agency through the Chesapeake Bay Small Watershed Grant Program, administered by the National Fish and Wildlife Foundation.

### 2003-2004: Shermans Creek: Portrait of a Watershed Technical Status Report

Candie Wilderman, ALLARM, published a study of Shermans Creek using data collected by Shermans Creek Conservation Association, Dickinson College, and West Perry High School. Partially funded by PA Department of Environmental Protection Growing Greener Grant Program, League of Women Voters Water Resource Education Network, and Environmental Protection Agency.

### 2004-2005: Shermans Creek Stream Upgrade Petition

ALLARM worked with Shermans Creek Conservation Association and the Chesapeake Bay Foundation to upgrade the PADEP's designation of the main stem of Shermans Creek from warm water fishery to exceptional value warm water fishery. The petition is still awaiting review by PADEP.

2005: Siloam Dam Removal on Conococheague Creek

ALLARM provided stream monitoring technical assistance to the Conococheague Watershed Alliance, where they documented the impact of Siloam Dam on the creek. Since the dam no longer served its original purpose, was a safety threat, and creating water quality concerns as evidenced through volunteer data, CWA collaborated with American Rivers to remove Siloam Dam.

2007-2012: LeTort Stormwater Education Campaign

With an inception grant from the League of Women Voters Water Resource Education Network, ALLARM is working with the Borough of Carlisle, Cumberland Valley Trout Unlimited, and the LeTort Regional Authority to educate watershed residents and business owners about stormwater in the LeTort Spring Run. ALLARM developed "Healthy Stream Habits" educational materials including posters and movie theater advertisements to target specific behaviors that residents can change to improve the LeTort Spring Run. ALLARM has also hosted two LeTort Festivals, with a third in the planning stages to raise the profile of the LeTort in the Carlisle and celebrate the stream. The first two festivals drew more than 700 participants.

2008: Data Interpretation – Action Workshop in New Jersey

ALLARM was contracted by the NJ Department of Environmental Protection to share resources that ALLARM developed for PA watershed groups for NJ watershed groups. To this end, ALLARM started tackling a challenge for watershed groups to use their data by developing training resources to help troubleshoot this challenge.

2009: Organizational Assistance Resource Development

In response to watershed organization demand, ALLARM developed and piloted two forms of organizational assistance – strategic planning and volunteer recruitment – as a part of its work through the Consortium for Scientific Assistance to Watersheds. ALLARM piloted its strategic planning assistance with the Yellow Breeches Watershed Association in summer 2009.

2009: Mid Atlantic Volunteer Monitoring Conference

With a grant from the Environmental Protection Agency, ALLARM hosted a conference for 133 volunteer monitors from seven states and the District of Columbia, with support from EPA, PA Department of Environmental Protection, VA Department of Environmental Quality, and Delaware Nature Society.

2009-2010: Online Technical Assistance Toolkit

In 2009 ALLARM received a grant from the Foundation for Pennsylvania Watersheds to translate monitoring training materials (including: study design; biological, chemical, and physical monitoring; and data interpretation) into manuals for online dissemination.

2010-Future: Marcellus Shale Volunteer Monitoring

In response to the requests by communities to document stream health where natural gas drilling is taking place in the Marcellus shale, ALLARM is taking a leadership role to develop volunteer monitoring protocols.

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## Recipients of the Karl Mason Award

**2010 - Gary D. Bloss**, for thirty years of exemplary leadership in professional environmental management specializing in community planning, landscape architecture, watersheds, greenways, open space and trails. Notable projects include the Susquehanna Greenway, Monroe County 2020 Vision and Plan, River to Bay Greenway, Pennsylvania Center for the Performing Arts, and Nittany and Bald Eagle Greenway and Bikeway.

**2010 - Alliance for Aquatic Resource Monitoring, Dickinson College**, for twenty four years of significant contributions to Pennsylvania's environmental quality by providing professional technical assistance and training to volunteer environmental groups and watershed associations to carry out their missions of environmental monitoring, restoration and protection.

**2009 - Devra L. Davis**, for outstanding and courageous leadership as an environmental professional protecting public health. For a lifetime of exemplary achievements researching and documenting public health issues and hidden costs associated with pollution.

**2009 - Montour Run Watershed Association**, a small grassroots organization of dedicated volunteers that has made a real difference in the community by improving water quality through stream bank stabilization and acid mine drainage treatment projects resulting in 10 miles of improved streams and removal from streams of 40 tons of acidity per year and 10 tons of metals per year.

**2008 - Terry A. Rightnour**, for his innovative work in developing and applying natural designs and ecology based technologies to meet water resource protection, restoration, and management needs. Also for outstanding leadership and generosity mentoring future environmental professionals.

**2008 - Pennsylvania Association of Resource Conservation and Development Councils**, for the work it and its nine regional councils are doing to enhance the environment and quality of life in communities throughout Pennsylvania.

**2007 - CHEMSWEEP, PA Dept. of Agriculture**, for the successful program that removes hundreds of thousands of tons of dangerous chemicals from storage places (many causing actual or potential groundwater pollution) and disposes them in an environmentally safe manner. Pennsylvania's program has received national recognition and has been copied by many States.

**2007 - Senator Noah Wenger**, Senator Wenger's commitment to the environment, conservation, and the health of family farms has left a lasting legacy in Pennsylvania. He has long understood that the health of our agricultural economy is crucial to the water quality in our rivers and streams, and has acted to ensure the health of both

**2006 - Frank H. Felbaum**, for his steadfast commitment and dedication as an environmental professional to protecting, restoring and enhancing Pennsylvania's wildlife resources through his leadership of the Wild Resource Conservation Fund.

**2006 - R. John Dawes**, for his steadfast commitment and dedication as an environmental professional to protecting, restoring, and enhancing Pennsylvania's land and water resources through the effective application of and advocacy of sound agricultural resource conservation, water resource management, and energy conservation practices.

**2005 - Gary Alt**, for his steadfast commitment and dedication as an environmental professional to protecting, restoring and enhancing Pennsylvania's ecological resources through the effective application of science to black bear and deer management.

**2005 - Eastern Pennsylvania Coalition for Abandoned Mine Reclamation**, for its non-profit, non-partisan, local, state, federal, and industry partnerships to improve water quality through cooperative efforts to reclaim abandoned mine lands in the Commonwealth's Appalachian coal communities.

**2004 - Somerset Conservation District**, for the successful *Casselman River Watershed Major Nonpoint Pollution Assessment and Restoration Plan* which exceeded its intended objectives of

assessing major nonpoint pollution sources in the watershed and by producing a Restoration Plan to guide future restoration activities.

**2004 – Dan Kunkel**, Executive Director of the Wildlife Information Center, recognized for his dedication and involvement in establishing the Wildlife Information Center and negotiating the purchase of what is now the Lehigh Gap Wildlife Refuge.

**2003 – Pennsylvania Department of Environmental Protection** in recognition of the Growing Greener Program, which supports local watershed groups, county conservation districts, local governments, business people, farmers, teachers, and students by funding local watershed restoration and protection projects, abandoned mine reclamation projects and oil and gas well plugging projects.

**2002 - Dr. Arthur C. Hulse**, recognized for his career interest in amphibians and reptiles and gravitation to the structure of snake communities, population ecology of aquatic salamanders, and the distribution and abundance of amphibians and reptiles through Pennsylvania.

**2001 – Larry J. Schweiger**, President, CEO of the Western Pennsylvania Conservancy, recognized for his lifetime commitment to the protection of Pennsylvania's environment.

**2000 - Don Hopey**, for his role as an environmental journalist and investigative reporter for the Pittsburgh Post Gazette since 1992

**2000 - Dr. Ann F. Rhoads, Ph.D.**, for her lifetime contribution to cataloging and monitoring the health of Pennsylvania's flora, and her role in co-authoring *The Vascular Flora of Pennsylvania, Annotated Checklist and Atlas*.

**1999 - Wayne W. Kober** as Director of PennDOT's Bureau of Environmental Quality and Charter Member of PAEP.

**1999 - Dr. Bernard Sweeny** as Director of the Stroud Water Research Center and lifetime service.

**1998 - William R. Adams, Jr.**, PennDOT Geotechnical Engineer, for his pioneering work in hazardous waste management.

**1998 - Paul O. Swartz**, Executive Director of the Susquehanna River Basin Commission.

**1998 - Dave Witwer** for his lifetime achievement as an Environmental Professional including nearly 20 years as the Executive Director of the Pennypack Watershed Association and as Executive Director of the Delaware and Lehigh Canals National Heritage Corridor Commission.

**1997 - Harvey Knauer**, for creativity in environmental management while with PennDOT for thirty years (1967-1997).

**1987 - Ralph W. Abele**, Executive Director of the PA Fish Commission, for producing an inventory and classification system for the fishery resources of Pennsylvania, and for his support of the State's Environmental Protection programs.

**1981 - Robert W. McCullough** for his leadership in preserving the Pine Creek watershed.

**1981 - Clifford L. Jones** for his work in providing financial assistance to small drinking water systems in Pennsylvania's establishment of the Water Facilities Loan Program.

**1981 - Fred Jones**, Conservation Editor of the Pittsburgh Press, whose articles informed many Pennsylvanians about environmental degradation, which helped enhance and strengthen mining legislation.

**1980 - Governor Raymond B. Shafer** for his efforts in creating the Pennsylvania Department of Environmental Resources.

**1980 - Walter A. Lyon** for his leadership of Pennsylvania's Clean Streams (1957 to 1979) and work in dam and drinking water safety.

**1980 – Senator Franklin L. Kury** for his work on environmental legislation, i.e., amendment to the Pennsylvania Constitution.

**1980 - Water Pollution Control Association of Pennsylvania** - recognized in the name of the many municipalities and industries that contributed significantly to the cleanup of 45,000 miles of streams.

**1980 - Maurice K. Goddard** for his leadership in the field of environmental programs and for serving as the outstanding first Secretary of the Department of Environmental Resources.

**1979 - Wesley H. Gilbertson** for his accomplishments as Mason's successor in leading the State's Environmental programs through a most difficult period of transition and growth.

**1977 - Professors Kardos, Sopper, Farrell and Myers** for their accomplishments in connection with The Penn State Living Filter Project.

**1971 - Thomas J. Foerster** for his work with the Allegheny County Conservation Program.