2013



# **Environmental Awards**



Earl Ray Tomblin, Governor

Randy C. Huffman, DEP Cabinet Secretary



west virginia department of environmental protection

#### CONGRATULATIONS

The West Virginia Department of Environmental Protection's annual Environmental Awards recognize the accomplishments of state industries, municipalities, educators and community leaders who strive to protect the environment, work to be good corporate neighbors, and educate the state's citizens.

The DEP's mission is to promote a healthy environment. These awards are being presented to those who share our mission and practice environmental stewardship.

Eligibility for the industrial awards includes exemplary environmental performance, a history that shows no outstanding violations and a record of compliance with regulatory authorities. Award winners were nominated by the environmental inspectors who work to ensure their compliance with the law and by other DEP personnel who work with volunteer efforts.

#### CLEAN ENERGY

# **Community and Technical College System of West Virginia**

Charleston, W.Va.

DEP Sponsor: Gene Coccari

In 2010, the West Virginia Community and Technical College System was awarded a grant from the West Virginia Division of Energy to build capacity among its colleges toward establishing and implementing green-collar job training curricula and certification programs in West Virginia. Over a period of two years, several community and technical colleges were awarded funds to lead efforts within their regional districts to produce meaningful and long-lasting impacts toward green-collar job development and public awareness.

The projects at each institution varied in scope and reach, but shared a common goal of moving West Virginia forward in green-collar initiatives. The following provides a highlight of various successful efforts at each institution.

WV Northern Community College and Pierpont Community and Technical College (CTC) focused their efforts on utilizing the Building Performance Institute (BPI) to increase the number of trained energy auditors. Bridgemont and New River CTC, with help from WVU-Parkersburg, educated the public and promoted the acceptance of the 2009 Energy Codes in WV. Eastern began the Wind Turbine Technician Training with a publicized town meeting. WVU-Parkersburg provided training in solar energy systems design, installation and maintenance and increased awareness of the benefits of solar energy use.

Several key indicators of success can be directly attributed to the community and technical colleges' commitment to furthering environmental awareness and the promotion of green-collar industries.

#### **CLEAN ENERGY**

# **American Public University**

Charles Town, W.Va.

DEP Sponsor: Gene Coccari

In addition to building the largest solar array in West Virginia and a LEED Gold-Certified building, American Public University System (APUS) is being considered for a national Brownfields Award. The APUS Academic Center, built on the site of a former metal salvage yard, recently received LEED Gold certification. Environmentally friendly features were used in construction and materials selected were designed to contribute to a healthier work environment, reduce greenhouse gas emissions and save energy.

APUS is now seeking LEED-Silver Certification for a recently constructed Finance Center that straddles the boundaries of Ranson and Charles Town. A major feature of the Finance

Center is a solar array that covers the building's largest parking lot. The solar array utilizes 1,660 solar panels to generate a majority of the Finance Center's energy requirements -- enough electricity to supply 30 homes. The solar array parking lot also has 14 electric car charging stations for use by employees, visitors and local residents with electric or hybrid vehicles. Highlights of the Finance Center include a roof designed to eliminate the heat island effect; advanced energy-efficient construction; construction materials derived from recycled content including structural steel, studs, drywall, hardware and floorings; and landscaping with native and adaptive plants.

# MUNICIPAL STORMWATER

# **West Virginia University**

Morgantown, W.Va.

DEP Sponsor: Tim Hodge

West Virginia University Environmental Health and Safety (EHS) is making great strides in the design, development and implementation of the outreach and education pieces of its stormwater program by displaying information during WVU functions. EHS has partnered with the WECAN sustainability program to spread awareness about stormwater management during Earth Day and Campus Sustainability Awareness Week. Over 300 employees completed a stormwater survey and over 150 students have participated in tree plantings and litter clean-ups in the past year. WVU students have also submitted innovative proposals to the EPA Rainwater Challenge. WVU is a major sponsor of the Monongalia County Household Hazardous Waste Collection Day.

Over the past year, WVU has been mapping its campus storm sewer systems. During routine field inspections of outfalls, two illicit discharges were identified and eliminated. EHS also made amendments to WVU design guidelines and construction standards to further improve the quality of runoff from post-construction sites using Low Impact Development (LID) techniques. WVU has installed four Bioretention Cells during construction of several new buildings and parking lots on campus. WVU's award-winning stormwater program is sure to serve as a replicable model to provide examples, knowledge, and expertise for local communities in West Virginia and beyond.

#### MUNICIPAL STORMWATER

# **Beckley Sanitary Board**

Beckley, W.Va.

DEP Sponsor: Jennifer Garlesky

The Beckley Sanitary Board's stormwater program works to fulfill its mission to protect and improve water quality of the Beckley urban watershed through innovative solutions. Whether repairing leaking sewers, building rain gardens or creating partnerships, BSB continually shows a commitment to clean water. The city leads the state in the adoption of green infrastructure and is home to 18 rain gardens that treat runoff from over 14 acres of urban landscape. BSB promotes these practices through frequent rain garden tours and presentations across West Virginia and beyond.

BSB believes partnerships with like-minded organizations help empower citizens to help solve water quality problems and collaborates with the Piney Creek Watershed Association and Raleigh County Make It Shine to implement successful service projects such as storm drain marking, rain barrel workshops, pet waste initiatives, and water monitoring programs. The staff also facilitated the formation of the New River Clean Water Alliance and serves as advisors on efforts to improve New River water quality. BSB continually seeks input from watershed stakeholders through the Stormwater Advisory Committee and most recently teamed with the Boy Scouts of America to plan a rain garden project during the 2013 National Jamboree. These efforts and many more, clearly show clean water is BSB's passion and it hopes to inspire the same appreciation in the Beckley community.

#### MUNICIPAL STORMWATER

#### **City of Charleston**

Charleston, W.Va.

DEP Sponsor: Tomi Bergstrom

The City of Charleston's MS4 program, which is housed within its engineering department, has demonstrated its commitment to West Virginia stream health by creative implementation of its stormwater management program. The program has been built through community outreach, an updated Web page, and eye-catching informative brochures to educate the public on stormwater issues. Charleston's MS4 program has acted as a catalyst for MS4 permit holders statewide, working to organize and collaborate compliance and implementation efforts for MS4s statewide. Over the last several years, Charleston's MS4 program staff has promoted the use of innovative stormwater control measures such as rain gardens. Charleston's MS4 program has made its presence known by educating the public and hundreds of young people on stormwater issues during community outings in Charleston, such as ArtWalk and the Earth Day celebration at the Clay Center.

Additionally, through the spring of 2013, MS4 stormwater program staff has teamed with the DEP's Non-Point Source Program (NPS) to host four rain barrel workshops at four different locations within Charleston. These workshops were promoted by local artists' painted barrels, which are being displayed throughout the city. This provided the city's stormwater staff with an opportunity to plug in stormwater education to several hundred citizens and visitors to Charleston, while embracing the local art community that Charleston is becoming known for.

#### MUNICIPAL LANDFILL

## **Enviro Solutions Inc. - Copper Ridge Landfill**

Welch, W.Va.

DEP Sponsor: Mike Puckett

Copper Ridge Landfill is located near Welch, in McDowell County and consists of a permitted area of 1,600 acres with an 8-acre active cell. The site is permitted under the McDowell County Solid Waste Authority and is operated by Enviro Solutions, Inc., of Manassas, Va. The site is a Class A landfill, has a monthly tonnage limit of 50,000 tons and can accept waste from West Virginia counties and the contiguous states of the U.S. It is one of the few landfill sites in the region that is permitted to accept rail waste and has an 80-plus car sidetrack capacity. The projected capacity of the site is 28,623,000 cubic yards and is currently accepting waste at the rate of 386 tpd with a compaction rate of over 1,850 pounds per cubic yard.

While Copper Ridge can accept waste from around the country, it primarily serves the southern West Virginia region. Its largest waste streams are auto fluff shred, municipal waste and contaminated soil. Although Copper Ridge is part of a large corporate group, it works with the McDowell County Solid Waste Authority to serve McDowell County and to ensure the growth of the site.

#### INDUSTRY GREATER THAN 100 EMPLOYEES

# Norfolk Southern Corp. Mullens Wastewater Recovery System

Mullens, W.Va.

DEP Sponsor: Mike Puckett

Some of the challenges to treating iron include using large amounts of chemicals and energy-consuming pumps. The system must be constantly maintained. If the system is overloaded with iron, clogged filters must be replaced, adding to the cost of maintenance of the system.

Norfolk Southern's vision was to reduce that increased operational and maintenance cost by installing a passive treatment system to remove iron and other metals from treated water. The construction of a passive treatment system includes aerating the water and then passing it through a settling pond, where the dissolved iron oxidizes and precipitates out of the water, settling at the bottom of the shallow pond. In addition, any hydrocarbons not retrieved by the oil/water separator are able to volatize during the retention time in the settling pond. The water then travels through a constructed wetland at the end of the second pond where vegetation like cattails, bulrushes and other organic matter utilize the phytoremediation, filtering the water with this biological process and removing additional iron, manganese, aluminum and other metals from the water. The treated flow is then discharged through a cascading spillway, which again adds oxygen to the water before re-entering the Guyandotte River at the monitored outflow. This type of system requires little energy input, and maintenance costs are low. Norfork Southern has had no reported NPDES exceedance or mechanical issues since this process was brought on line.

#### INDUSTRY GREATER THAN 100 EMPLOYEES

## Toyota Motor Manufacturing, W.Va.

Buffalo, W.Va.

DEP Sponsor: Diana Haid

Environmental issues are a priority for Toyota Motor Manufacturing. Its commitment to the environment is founded on a commitment to the local community, constant innovation and respect for the planet. Its goal is to demonstrate through its actions a company that looks beyond compliance with the law and shows consideration for the environment by promoting sustainable systems and solutions. Toyota continually seeks new ways to improve its manufacturing processes and aims to be an admired and trusted company in West Virginia.

Toyota's commitment to compliance is demonstrated by its record. To ensure continued compliance, Toyota has been ISO 14001 certified since 2001, joined with DEP and EPA in the "Sustainability Partnership" in 2009, and adheres to its corporate Enhanced Environmental Management System.

Some examples of Toyota's commitment to the community can be seen in its annual scholarship support of children attending DEP's youth environmental camp, maintaining zero landfill since 2003, and its large recycling program, including a partnership with the Jackson County Development Center, where Toyota donates its plastic. Income generated from the plastic helps fund the Center's job training for local handicapped residents.

Innovative thinking has reduced Toyota's environmental footprint. Recently, it upgraded the plant's lighting and installed Variable Frequency Drives on HVAC motors. These two projects save millions of kilowatt hours of electricity each year and are the equivalent of taking almost 700 West Virginia homes off the grid.

#### SEWAGE TREATMENT PLANT GREATER THAN 400,000 GALLONS PER DAY

# Princeton Sanitary Board Princeton Wastewater Treatment Plant

Princeton, W.Va.

DEP Sponsor: Mike Puckett

The Princeton Sanitary Board (PSB) is in the final stages of completing a \$12.1 million systems upgrade. Completion of this project will be a milestone that will set the "standard" for all other West Virginia cities. With strategic planning over the last 27 years, Princeton has gone from one of the state's "worst" compliance records, (under a previous administration) to one of the "best" as proven by state and regional environmental awards won by the city.

Princeton started this journey in 1985 with 243 major and minor NPDES violations and an "Administration Order of Immediate Compliance" issued by state environmental regulators. DEP records show that the Princeton Wastewater Treatment Plant has achieved an unparalleled record of 20-plus years of compliance.

PSB eliminated the dangerous practice of using chlorine and sulfur-dioxide for disinfection purposes. The installation of a 14MGD capacity Trojan 3000+ UV disinfection system is sized to disinfect all plant effluent and stormwater discharged to the receiving stream. Princeton has also upgraded the solids handling process to a "state of the art" Thermal Process "Auto Thermal Aerobic Digestion" (ATAD) system with a "Storage Nitrification De-nitrification Reactor" (SDNR). This process produces a Class "A" biosolid that is considered "exceptional quality sludge."

Finally, the PSB has installed an extensive SCADA control system to monitor plant operations 24/7 by operations personnel. SCADA will allow immediate changes to the operations when needed and is manned by "on-call" personnel 24/7.

#### SEWAGE TREATMENT PLANT LESS THAN 400,000 GALLONS PER DAY

#### **Bramwell Public Service District**

Bramwell, W.Va.

DEP Sponsor: Mike Puckett

Bramwell Public Service District owns and operates a .1 MGD activated sludge extended aeration plant. The average daily flow is approximately 23,000 GPD. The sewage collection system is comprised of Air Vac vacuum, grinder pumps and gravity lines. The facility is required to sample once per month using established sampling procedures over an eight-hour period for the following parameters: TSS, BOD, Ammonia Nitrogen, Fecal Coliform, pH, Dissolved Oxygen, Total Residual Chlorine, Total Nitrogen, Total Phosphorus, Copper, Lead, and Zinc. Since 2008, Bramwell has had three excursions of its limits – and they were only for the percentages of the pollutants removed.

Established daily/weekly operational and process control techniques include flow measurement, aeration dissolved oxygen concentration, 30-minute settleable solids, mixed liquor suspended solids concentration, settled sludge depth in the secondary clarifiers, return and waste activated sludge rates, and grit and screening removal. Other operation and maintenance tasks that are performed on a regular scheduled basis include, but are not limited to, maintenance to blowers, pumps, and motors; cleaning and replacement of aeration diffusers, cleaning of effluent weirs and chlorine contact tanks. Each of these operational tasks is important and have contributed to the successful compliance history of the facility.

#### WASTEWATER COLLECTION SYSTEM

#### **Summit Park Public Service District**

Clarksburg, W.Va.

DEP Sponsors: Melisa Powers, Kirk Powroznik

The Summit Park Public Service District staff does inspections of its five pump stations daily. It has also contracted with a company to conduct a more thorough inspection of the pumps weekly in order to make repairs prior to complete failure. Summit Park has stepped up the inspection of the pump stations both in number and in thoroughness.

The PSD has equipped all of the pump stations with visual alarms, as well as a telemetry system to alert PSD personnel if there is an issue. This is the only collection system in the area that utilizes telemetry to notify personnel of an issue with the pump station. This greatly speeds response time and helps prevent or reduce the volume of spills. Two of the pump stations have onsite generators in the event of a power failure and the PSD maintains a third mobile generator that can be used at the other pump stations. For a small PSD, it is well-prepared for a power outage.

The PSD is taking a proactive approach to determining what is causing the frequent spills at Pump Station D. It is working with the WV Rural Water Association to identify issues and illegal connections. It also keeps thorough records on all inspections, maintenance and repair work to the system, not just because it is required, but because the PSD wants to try to figure out issues so they can be fixed.

#### ENVIRONMENTAL STEWARDSHIP

## **McDowell County Solid Waste Authority**

Welch, W.Va.

DEP Sponsor: Mike Puckett

Nestled in Welch, in the heart of the Pocahontas Coalfields, the McDowell County Solid Waste Authority serves all 538 sqare miles of McDowell County with a staff of only two and the support of a proactive board. Ever vigilant in its effort to make mountainous McDowell County totally litter-free, the McDowell SWA participates in the annual tire amnesty program, E-cycling, the DARE Program, McDowell Legislative Day, the Twin Branch cleanup, the Elkhorn Creek Watershed cleanup, the Make It Shine Adopt-a-Highway and the Make McDowell Proud annual cleanup. In the midst of all the activity, the SWA still manages to write three grants per year, conduct litter presentations in county schools and maintain an antilittering ad campaign that includes billboards, local papers, PSA radio announcements and the use of their mascot, Stowie, who reminds the public: "Stow it. Don't Throw it. It's the Law."

Working in cooperation with towns, the DNR and the sheriff's office, the SWA makes an average of 300 contacts per year and issues 75 to 100 tickets. With the assistance of REAP, the McDowell SWA eradicates over 40 dumpsites per year. "We'll never let it be until our world is completely litter-free" remains the McDowell SWA mindset and mission.

#### ENVIRONMENTAL STEWARDSHIP

#### Mike Saffel

Princeton Sanitary Board DEP Sponsor: Mike Puckett

Mike Saffel is the Princeton Sanitary Board general manager and the Princeton stormwater director, positions he's held since 1986. When Mike took over the program, the Princeton Wastewater Treatment Plant had numerous compliance issues with the state. But through his hard work, insight and dedication to doing what's best, the facility today is a model operation and not only continues to meet standards but exceeds them as well. In addition, Mike has provided technical assistance to numerous small operators located in Mercer County and has been instrumental in helping bring these systems into compliance with the law when they were experiencing difficulty.

Mike has accomplished many projects in his 27 years in Princeton and has worked closely with the Division of Highways, Department of Environmental Protection, City of Princeton, Oakvale Road Public Service District and the GreenValley Public Service District. Under Mike's leadership, Princeton has been recognized numerous times by state and federal regulators for its outstanding compliance record.

#### ENVIRONMENTAL STEWARDSHIP

# **Big Coal River Branch/Coal River Group**

St. Albans, W.Va.

DEP Sponsor: Tomi Bergstrom

The Big Coal River Branch is a committee of the Coal River Group, made up of community members from the Big Coal River area of Boone County. Through the dedicated leadership of Chairman Mary Ann Browning, the Big Coal Branch is fostering a culture of environmental stewardship in Boone County. Each year, committee member Teresa Perdue hosts two stream cleanups, where over 200 community members and children remove litter from Lick Creek and White Oak near Ashford, W.Va. In 2012, Perdue led the first Big Coal tire cleanup in which volunteers removed 586 tires from 1.5 miles of river, and also worked with officials to renovate Dartmont Park, which is now a great asset to the community.

While focusing primarily on water, the Big Coal Branch also engages in bringing positive change to the communities along the Big Coal River. The Branch coordinates two commu-

nity events each year: the 11-mile Kevin's Lazy River Adventure float trip and the Big Coal Heritage Festival. By instilling a sense of pride and appreciation in the local area, the CRG's Big Coal Branch is changing community attitudes toward conservation.

# ENVIRONMENTAL STEWARDSHIP Berkeley County Solid Waste Authority

Martinsburg, W.Va.

DEP Sponsor: Katie Willard

The Berkeley County Solid Waste Authority operates the county's recycling program. The program operates at three fixed drop-off locations and supports a variety of curbside collections. Two key facilities within the recycling program are the Grapevine Road Recycling Center (GVRC) and the South Berkeley Recycling Center (SBRC).

Both centers are open six days each week and are considered two of the most comprehensive drop-off recycling centers in the state, each accepting over 20 categories of items. All items are accepted for free, except for brush. Collectively, these centers offer recycling services for mixed paper; cardboard; electronics; plastic No. 1 – No. 7; plastic bags; CFL; automotive and household batteries; computer media; wiring; brush; Christmas trees; steel and aluminum cans; clear, brown, green, yellow and blue glass bottles; lumber; textiles; books; scrap metal; oil; antifreeze; deer carcasses and yard waste. Additionally, these facilities are used for the collection of tires, paint and paper-shredding events.

From 1995 to 2012, over 38,320 tons of solid waste has been recycled, representing a financial saving of \$1.9 million in landfill costs for citizens. In 2012 alone, over 51,090 vehicles entered the SBRC while over 47,300 vehicles entered the GVRC.

#### OUTSTANDING LITTER CONTROL OFFICER

# **Wendell Hatfield - McDowell County Solid Waste Authority**

Welch, W.Va.

DEP Sponsor: Michael Puckett

Since becoming a McDowell County Solid Waste Authority litter control officer 16 years ago, Wendell Hatfield has gone above and beyond the call of duty to fulfill the obligations of his job and to the community he serves and loves. On an average day, Wendell drives 100 or more miles in an ongoing effort to eradicate litter. Wendell not only educates the public about the importance of not littering, but leads through example by often assisting litterbugs in their cleanup efforts, especially if those litterbugs are the young, the impoverished or the elderly.

Firm but always fair, Wendell recently dipped into his own pocket to pay someone to clean up and properly dispose of an abundance of trash on the property of a destitute single mother with two small children. On other occasions, he has donned work gloves and boots to help teenagers clean up litter-infested public hangouts they created during the course of their "partying."

With binoculars in hand, Wendell has often hidden on vine-covered mountainsides in an attempt to identify those responsible for creating illegal dumps. Treating all offenders the way he wishes to be treated, Wendell practices supreme diplomacy with those who find themselves on the wrong side of the law. Though he makes over 300 contacts per year, Wendell generally ends up having to write between 75 to 100 tickets annually.

#### **VOLUNTEERS OF THE YEAR**

#### **Teter CEOS**

Buckhannon, W.Va.

DEP Sponsor: Callie Cronin Sams

The Teter CEOS Club of Buckhannon has been diligently cleaning up the area surrounding the recycling drop-off center near Wal-Mart in Buckhannon. The CEOS had already been doing this for some time before the DEP learned of their efforts early in 2012. At that time, the DEP contacted the group leader and urged her to participate in the Adopt-A-Spot Program. It seemed fitting that since they were already doing the work they should at least have the gloves and bags provided. They agreed to sign up and have continued to clean up the area every other weekend, which is way above and beyond the required three times per year to participate in the Adopt-A-Spot Program. The area around the recycling center is near the exit ramp from Route 33, where many visitors and residents enter town. It is also adjacent to the Wal-Mart parking lot. Therefore, it is highly visible and also unfortunately a highly littered area. The Teter CEOS Club's efforts have drastically improved the aesthetics of the area, making it a more enjoyable place to visit for people who come to recycle.

#### EDUCATION AND COMMUNITY INVOLVEMENT

#### **City of Hurricane**

Hurricane, W.Va.

DEP Sponsor: Kim Maxwell

For three years, the City of Hurricane has sponsored, co-coordinated, and provided volunteers for a West Virginia Water Festival. Each year, the festival has expanded to reach more of the area's fifth- grade students. The Hurricane Water Festival has become a two-day event, which has a wide variety of water education stations hosted by different local and government organizations. Fifth-grade students from Hurricane's public school system rotate through 30-minute, interactive stations throughout the day. The students engage with professionals from many different careers, learn about our precious water resources, and have a great time. The City of Hurricane recognizes the value of bringing water education to its community and works to make that consistently happen year after year.

#### EDUCATION AND COMMUNITY INVOLVEMENT

#### Friends of Milam Creek

McGraws, W.Va.

DEP Sponsor: Kim Maxwell

The Friends of Milam Creek (FOMC) has been an integral part of bringing water education to the fifth-grade students of Wyoming County. In collaboration with many other organizations, including the WV Department of Environmental Protection, Army Corps of Engineers, Upper Guyandotte Watershed Association, and the National Park Service, FOMC has planned, sponsored, and volunteered at an annual Wyoming County Water Festival for four consecutive years. The Water Festival is a one-day event, reaching between 150 and 200 fifth-grade students each year with a wide variety of water education activities. The Friends of Milam Creek strongly believes in the importance of educating its community about water resources and it puts this belief into action year after year by making this festival happen in Wyoming County.

#### EDUCATION AND COMMUNITY INVOLVEMENT

# **Wastewater Treatment Coalition of McDowell County**

Welch, W.Va.

DEP Sponsor: Kim Maxwell

The Wastewater Treatment Coalition of McDowell County (WWTCMC) works toward healthy water in its community in many different ways. One component of its work is the hosting of an annual West Virginia Water Festival. This organization works with a multitude of other organizations -- federal, state, and local -- to plan, sponsor, and staff a McDowell County Water Festival. It has sponsored a festival the past four years. The Water Festival is a one-day event, reaching between 150 and 200 fifth-grade students each year with a wide variety of water education activities. The WWTCMC strongly believes in the importance of educating its community about water resources and it puts this belief into action year after year by making a West Virginia Water Festival happen for the fifth-grade students of McDowell County.

#### EDUCATION AND COMMUNITY INVOLVEMENT

# **Potomac Valley Audubon Society**

Shepherdstown, W.Va.

DEP Sponsor: Katie Willard

The Potomac Valley Audubon Society is most effective in its efforts to connect people with their natural environment. The Society sponsors programs for kids, adults, and families that range from in-school programs to outdoor experiences. It sponsors Natural History Workshops open to the public, as well as bird walks and other monthly public programs. But some of its biggest impacts come from its Fourth Grade Watershed Education Initiative.

This program has been offered in the public and private schools in the Eastern Panhandle since 2003 and now reaches about 1,500 students each year. They learn how their local school is connected to the Chesapeake Bay through a series of watersheds. The 10-hour program allows the students to experiment with the properties of water, learn about watersheds, erosion concerns, and buffer zones, water quality testing/benthic macro invertebrates, food chains and webs, and put it all together on a trip to the Potomac River or one of its tributaries. The program has been well received by teachers, students, and parents alike.

#### EDUCATION AND COMMUNITY INVOLVEMENT

#### **Indian Creek Watershed Association**

Union, W.Va.

DEP Sponsor: Nicki Taylor

The Indian Creek Watershed Association (ICWA) has been around since 1996. Its mission is "The preservation and protection of Monroe County's abundant pure water." Indian Creek has a broad spectrum of folks, from outdoor enthusiasts and social workers, to homemakers. They are committed to educating the public about water quality. Monroe County has a unique topography not too common to the rest of the state. It is full of sink holes, caves and springs, which are typical of karst topography and makes maintaining clean water that much more critical. ICWA realizes this important fact and focuses on teaching the residents of Monroe County how they can make a difference.

Over the past year, Indian Creek has installed three informational kiosks at the Indian Creek Covered Bridge, which educates visitors about the watershed. "The Year of The Karst" was declared for 2012, which brought awareness to the unique characteristics of karst topography that underlies much of the county.

Other activities that ICWA has completed include a six-mile Make It Shine canoe trip to clean up trash along Indian Creek; articles about karst and watershed habitat published in the Monroe Watchman; an interactive aquifer model at Farmer's Day; Project Underground and a workshop for 128 Monroe County 4-H campers; a four-page color karst poster for the Monroe Watchman; and a public workshop on karst by Rocky Parsons and Dr. Alfred Ziegler.

#### ENVIRONMENTAL PARTNERSHIP

#### **Cacapon Institute**

High View, W.Va. DEP Sponsor: Alana Hartman

Cacapon Institute's laboratory and office is based in Hampshire County, but its staff of four also works in many surrounding counties and states. For over a decade, Cacapon Institute has been a valuable partner in the development, writing, and implementation of West Virginia's

strategies to reduce pollution in the state's rivers and streams that flow to the Chesapeake Bay. In the past few years, its work with students to make school campuses more pervious and covered with tree canopy has resulted in the reduction of stormwater runoff from many urban and suburban areas.

Carrying out projects with so many busy teachers and classes takes constant work, and Cacapon Institute is tireless in that regard. The Institute is also great at matching state and federal funds with other grants, donations, and in-kind contributions, which helps West Virginia's Chesapeake Bay-related funding go much farther than it otherwise would. Its work is reliable, science-based, and fruitful and it constantly updates its user-friendly Web site, www.cacaponinstitute.org, which results in an even larger impact. There, you can learn about Project CommuniTree, try the Stream Cleaner computer game and see its real-life relative. the Stream Cleaner pinball game, and take a virtual sample of benthic macroinvertebrates from a stream.

#### **CABINET SECRETARY AWARD**

#### **Buffalo Creek Watershed Association**

Man. W.Va.

DEP Sponsor: Randy Huffman

Logan County's Buffalo Creek Watershed Association is a model example of how concerted grass-root efforts by dedicated West Virginians can make a difference in the state. Not yet 10 years old, the Buffalo Creek Watershed Association has already helped transform Buffalo Creek from a litter-infested creek with virtually no fish habitat into an inviting stream with improved water quality and plenty of trout fishing opportunities for area anglers.

The local watershed association has worked extensively with state agencies, local businesses and concerned citizens to bring Buffalo Creek back to life and increase recreational opportunities on the 16-mile Logan County stream that empties into the Guyandotte River at Man. From cleanup projects along the creek, to the annual Youth Fishing Day, which attracts hundreds of youngsters for an afternoon of fun on the water, the Buffalo Creek Watershed Association continues to serve as a catalyst for the preservation of Buffalo Creek.

The watershed association's efforts have helped secure funding for the installation of more than 150 rock and log restoration structures on the stream. The structures not only help create riffles and pools for a more natural fish habitat, but also help improve water quality by flushing sediment from Buffalo Creek, still recovering from the effects of pre-law mining and, to a certain extent, the 1972 Buffalo Creek dam disaster that claimed the lives of 125 people and left thousands homeless. One of the Association's founding members, Perry Harvey, fished on Buffalo Creek for trout the day before a coal slurry dam failed, sending 132 million gallons of water raging through the Buffalo Creek hollow.

Continued goals of the watershed association include to educate school children about litter control on Buffalo Creek; get more local communities involved in cleanup projects; construct more access points and handicap platforms on the stream; secure funding for additional restoration structures on the creek; and to make Buffalo Creek the best trout stream in southern West Virginia.



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