



Award of Excellence winner



Vol. 15, No. 1

January/February 2007

in depth

news from the west virginia department of environmental protection

INSIDE



Sensitive equipment, technical staff keep watch on state's air quality, pages 3-4

Counties can REAP benefits

Those with good litter control plans will get help

By **Lalena Price**

CHARLESTON – County governments that work hard to keep West Virginia litter-free have been given an opportunity to improve their chances to land local economic development grants.



HAUGHT

The Department of Environmental Protection's REAP – The Next Generation program has informed local governments about Governor Manchin's commitment to litter control and education and his comprehensive three-year plan to help build successful litter control programs at the county level.

"Simply put, the more effort county

governments put into litter control and education, the greater the opportunity for local economic development grants," said REAP Chief Danny Haught.

County governments have received a letter explaining the Rehabilitation Environmental Action Plan, or REAP – The Next Generation, which includes West Virginia Make It Shine, Adopt-a-Highway, Operation Wildflower, Statewide Recycling and Pollution Prevention Open Dump programs. These programs provide tools to clean up communities across the state.

"We are impressed with the efforts of our county governments – many of them do great work cleaning up their communities," Haught explained.

"Governor Manchin is committed to helping those communities that help themselves. We want them to know that REAP is here to help them in their efforts and that we have tools and programs that can be of service."

In the letter, details from the REAP Standard Operating Procedure explain how

governments will be held accountable for the measures they implement to clean up their communities and for the adoption and enforcement of litter control laws.

A comprehensive three-year plan to assist counties in building successful litter control programs outlines 16 criteria for counties to meet. In any given year, four of the criteria must be met to qualify for local economic development grants from the West Virginia Development Office.

Counties have been asked to submit a pre-evaluation questionnaire which will enable the REAP staff to create an inventory and establish a baseline of current practices or programs including ordinances, practices, programs or resolutions that already exist in their litter control efforts.

The completed forms are due April 2.

The Standard Operating Procedure, questionnaire (in Word format) and a slide presentation outlining the REAP implementation schedule are available online at <http://www.wvdep.org/item.cfm?ssid=18&ssid=841>.

Sustainability program in Fayette, Gilmer

Communities in Nicholas, Braxton also included in team's focus this year

By **Lalena Price**

LANSING – The newest members of the West Virginia Sustainable Communities project are now conducting free energy, water and waste assessments to help

citizens in four counties.

The assessments are part of a yearlong pollution prevention effort sponsored by the West Virginia Department of Environmental Protection, Student Conservation

Association and Claude Worthington Benedum Foundation. Six interns and a project leader will be working to educate residents about opportunities to conserve energy and water and reduce waste. The program is a continuation of a pilot based in Braxton and Nicholas counties in 2005-2006. This year, the momentum continues in those areas while also targeting Gilmer and Fayette.

"The response through just word of mouth has been fantastic," said Doug



Members of the West Virginia Sustainable Communities project are living in Lansing and working to help citizens in Fayette, Nicholas, Braxton and Gilmer counties reduce their energy costs, save water and minimize waste. For bios, go to Page 2.

Arbogast, project leader. "We've only been on the job a few months and already the calls are rolling in. With today's soaring utility bills, people really appreciate the help we can give them."

Arbogast said the community of Lansing where the interns live and their office is based, has welcomed the team. "We appreciate their hospitality and helping us get settled. They are the reason we are up and going so quickly and they made us feel at home instantly."

Energy, water and waste tips and resources are provided by a team of interns who look for ways to conserve in homes, businesses, schools or other community institutions. A

statewide outreach and education campaign also is part of the program.

Interns emphasize the Three Rs – reduce, reuse and recycle. They will head into schools and work with youth groups to conduct environmental outreach and educational activities as well as provide lessons related to community sustainability. The team also will lead community workshops for the public and launch a statewide outreach campaign to get citizens involved in sustainability issues.

Interns are helping Summersville, Fayetteville and Fayette County Schools



Interns share interest in a better environment

Project leader brings expertise in ecotourism, sustainable communities

Doug Arbogast is an expert in sustainable communities with a special interest in ecotourism and is the project leader of the team. He's a Pennsylvania native and avid outdoor enthusiast who earned his bachelor's degree in environmental geoscience and a master's in recreation, parks and tourism resources from West Virginia University.



Arbogast was involved in the implementation in Richwood and Pineville of "Creating A Value Added Community Curriculum," a pilot project for Appalachian communities developed to provide a business plan for poverty reduction and the creation of community wealth. He has served as a project coordinator for the West Virginia Ecotourism Association and earned a certificate in ecotourism planning and management from Humboldt State University in Arcata, Calif.

Michael Costello is originally from Elkview. He recently graduated from West Virginia University's P.I. Reed School of Journalism with a focus in news editorial and political science. He served as vice president of the Sierra Student Coalition at WVU. He has also studied post-secondarily at Stellenbosch University in South Africa.



Sarah Cross is a West Virginia native who grew up on a small farm in Fort Ashby. With her passion for farming and the state's beautiful forests, she has lobbied Congress for additional wilderness preservation in the Mountain State. She will earn her bachelor of arts degree in environmental studies with a minor in wilderness studies from the University of Montana in December. She is an avid hiker who enjoys caving, canoeing, farming and Appalachian music.



Melissa Osquist hails from Michigan where she just earned a chemistry degree from the University of Michigan. She hopes to gain valuable experience in the environmental field and to have a positive impact on others and the environment. Osquist comes to the program fresh from a three-month internship in South Carolina where she did invasive species removal.



Amanda Dubrowski graduated from Clark University in Massachusetts in 2004 with a degree in psychology and sociology before serving with AmeriCorps in the southeast region of the United States focusing on educational and environmental issues. She spent 10 months in western Massachusetts teaching environmental education and working on conservation and restoration projects as well as reclaiming trails.



Hannah Graeper is currently a student at Binghamton University in New York majoring in urban environmental planning. She grew up in a small town near Ithaca, N.Y., and has also attended Queen's University in Kingston, Ontario. She also worked with the Coconino Rural Environment Corps in Flagstaff, Ariz., building trails and working with the city of Flagstaff in its fire prevention efforts.



Andrew Must has lived in West Virginia for most of his life and just graduated with a degree in geography from West Virginia University. He brings with him a strong interest in environmental issues and a desire to better understand community dynamics. He looks forward to moving to Fayetteville and having the chance to help make a positive difference in energy consumption patterns.



Streams

continued from pg. 1

with recycling programs. Interns are capable of providing support to addition communities interested in recycling. The team is assisting in the development of a farmer's market in Fayette County. Interns are encouraging mayors in the county to sign the U.S. Mayor's Climate Protection Agreement to reduce emissions that contribute to climate change. Look for the group at the Earth Day celebration in Fayetteville on April 22.

Such efforts have not gone unnoticed. DEP Cabinet Secretary Stephanie R. Timmermeyer is pleased with the program and plans to participate in upcoming projects.

"Helping our communities become sustainable is an issue I'm pleased we're addressing," Timmermeyer said. "All of us, whether we live in rural towns or metropolitan areas, stand to benefit from sustainable practices that will improve our quality of life both economically and environmentally. I expect to see great things from this program."

Greg Adolfson, a public outreach specialist with the DEP, helped bring the program to the state. After a positive response in Nicholas and Braxton counties last year, the program enters its second year.

"This is the definition of grassroots," he explained. "These young women and men are living where they work. They are educating their neighbors, their businesses, schools and homeowners about resource conservation and waste reduction. It's an incredibly effective way to make a difference."

The most important aspect of the project is involving and investing citizens. To schedule a free assessment of your energy and water use or to bring the program to your community organization, please contact the West Virginia Sustainable Communities project at (304) 574-1444, (304) 619-0668 or e-mail the team at wvscp@thesca.org or contact Greg Adolfson at the DEP at (304) 926-0499, ext. 1332, or e-mail him at gadolfsen@wvdep.org.



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Sign up to get news, info from Save Our Streams program

You can sign up to receive electronic updates and activity notices from the West Virginia Save Our Streams Program.

Go to <http://www.wvdep.org/dwvm/wvsos>. The form is located on that page.

For more information, contact Timothy Craddock, citizens monitoring coordinator, West Virginia Save Our Streams Program, (304) 926-0499 x1040 or tcraddock@wvdep.org.



Take a nice deep breath

As you do, our monitoring group is tracking what's in the air you inhaled

By Lalena Price

CHARLESTON – It's a big job to monitor the air quality of the state, particularly when the bad guys are microscopic matter so small you can't see them with the naked eye.

It takes a team of trained specialists, scientists and millions of dollars worth of equipment so highly tuned it can track what cannot be seen and provide data otherwise unable to be gathered.

Within the Department of Environmental Protection is a small group of air monitoring specialists housed in the Division of Air Quality. They are the hunters and gatherers of the division, collecting data gathered at specific locations across the state and compiling it to keep the federal and state governments apprised of the quality of the air we breathe.

In West Virginia, there are approximately 187 major sources and hundreds of minor sources of air pollutants that are subject to federal and state standards. They are big facilities such as power plants, chemical plants, metal manufacturers, and refineries as well as smaller facilities such as dry cleaners, paint booths and concrete batch plants. Other sources include emissions from cars and diesel engines.

"Our guys are like the U.S. Postal Service," said Tim Carroll, assistant director of air monitoring. "They are out in rain, sleet, snow and blazing heat gathering filters and calibrating equipment. They don't ever get a break from it."

The monitoring program is comprised of 12 employees located in Charleston, Wheeling and Fairmont, including data analysts, site operators and supervisors. The staff works constantly to track ground-level ozone, particulate matter, sulfur dioxide, carbon monoxide, certain air toxics and meteorological data. There are also three chemists and a supervisor that work in the Guthrie laboratory. The equipment used to track data has changed drastically in the last 15 years. Simple samplers have evolved into computer-controlled instruments that monitor and log several parameters.

Derek Hancock, who regularly can be found climbing on rooftops to get to the instruments, is a monitoring specialist. Not only does he have to have a healthy respect for heights, he must adapt to continually advancing technology. All of the continuous monitors are now microprocessor-based. Calibrators have been automated and require a much higher level of

At top, a view of the monitoring site in South Charleston. Above, Derek Hancock climbs atop the Baptist Temple monitoring site in Charleston. At right, Mark Drake inspects equipment at the Charleston site.





knowledge and troubleshooting skills. Toxic samplers and continuous particulate monitors have been added to the section's core equipment.

"And within the next two years, a new form of sampling that is highly sophisticated and even more precise will be coming out," Hancock said. "We have to keep our fingers on the pulse of all of this technology because we're the ones who have to maintain it and repair it if it fails."

Hancock is one of seven employees who trek to different sites around the state where air monitoring stations are operating. They gather data, monitor, repair and calibrate instruments onsite and in the agency's Charleston headquarters lab. Preparing a single ozone monitor for the field takes one person approximately 40 hours.

"We do 95 percent of the repair work on all of the instrumentation and that's by no means a simple task," Hancock said. "It's complex and we're often under tight time constraints because we can't miss gathering any required data."

The data gathered by this group is reported to the Environmental Protection Agency national air quality database. It is the principle way to measure the state's performance in meeting federal clean air standards. The information gathered shows what areas in West Virginia meet those standards and what areas don't. It lays the groundwork for the division's planning, permitting and enforcement sections.

"We know that the work we do directly affects the health and prosperity of our friends, family and neighbors," Hancock said. "That's why we are so diligent about getting the data, getting it right, and keeping the instruments at the top of their game."

The group's numbers tell the story. According to EPA Region 3 statistics, West Virginia's data recovery rate is far above the national requirement and it's one of the highest recovery ratings in the nation. The federal government requires at least 75 percent data recovery. Over a three-year period, the division's recovery rate was as follows:

- PM_{2.5} above 90 percent recovery (excluding special purpose sites, it was 95 percent)

- Ozone above 91 percent recovery

- Sulfur dioxide above 97 percent recovery

That's where the mailman reference comes in. Hancock, Mark Drake, Matthew Kemper in the Charleston office, David Chadwell in the North Central Regional Office and Jon Wharton, Russ DeGarmo and James Ebert in the Northern Panhandle Regional Office cover a large geographic area and are out in the field regardless of weather to collect and set up samples. With only a two-day window to set



up and collect PM_{2.5} filters before the next run, some employees have been known to be on rooftops late into the night repairing an instrument that must run the next day.

"Some of us have even hiked up a snow-covered road that a four-wheel drive truck with chains on the tires cannot access just to collect and set up filters to run," he said.

Carroll admires the dedication it takes for his team to do a consistent job.

"It is challenging to maintain, troubleshoot, repair and calibrate both the analog and digital instruments," Carroll said. "Our group handles it incredibly well."

So, where does all this data go? The field monitoring operations begin the process. They gather the data that is monitored continually and sent digitally over phone lines to databases maintained by Pat Adkins and Jeanne Wagner. Or, the information is gathered by the site operator using PDAs and laptops, brought back to the agency, uploaded and samples sent to the laboratory located in Guthrie for further analysis.

The air monitoring lab at Guthrie performs gravimetric analysis, in a specialized clean weighing room, on fine particulate matter found on filters taken from the sites. Three chemists, Diane Manning, Amy Molgaard, Jason Thomas and a supervisor Todd Jackson, work at the lab. They weigh filters before and after sampling to determine a mass concentration that is then compared to

Monitoring sites

There are 21 ambient air quality sampling sites located throughout West Virginia that monitor air pollutants on either a continuous or periodic basis. Sampling sites are located to assess air quality levels based on exposure by population, of industry emissions, determination of background levels and other special purposes. Nearly all air quality monitoring equipment is located at permanent sites, in buildings or shelters designed for monitoring purposes.

Beckley	New Cumberland
Charleston	New Manchester
Chester	Morgantown
Clarksburg	Moundsville
Fairmont	Sam Black Church
Follansbee	South Charleston
Guthrie	Vienna
Huntington	Weirton
Lawrenceville	Wheeling
Martinsburg	



Above left, Derek Hancock explains the function of monitors in Charleston. Left, an air monitoring site operator braves a big snow to attend to equipment. Above is a total suspended particulate monitor. It's used to capture particulate for metals analysis.

the EPA health-based standards. That data is entered into the division's database. The Guthrie lab also analyzes other types of particulate filters for toxics metals from sites located in West Virginia and the National Air Toxics Trends Site in Washington, D.C., and additional EPA Region 3 states including Philadelphia, Allegheny County, Virginia, Delaware and Pennsylvania. Ron Plecha processes and weighs filters in the Wheeling office. Lab personnel at Guthrie also operate a particulate monitoring site at the Agricultural Complex.

The other data for ozone, sulfur dioxide and particulate that is collected on a continuous basis, is transmitted automatically from the site by a modem directly to the data analyst's computer.

Joel Maddy is a supervisor within the monitoring section. He's been with the agency for 17 years, has hands on experience with operating the sites and has seen the program and requirements for air monitoring advance through the years.

"Particulate matter is so small that when it's inhaled, it can enter directly into the bloodstream," Maddy explained. "People with asthma, children and the elderly or those with compromised breathing can be harmed by particulate matter. Actually, it affects us all, so that's why the job the chemists at the lab and the field monitors do is so very important."

"Our findings help the Division of Air Quality shape its entire program," he said. "In recent years, we've made great strides in bringing industries into compliance and it's reflected in our data."

Blaster refresher training set for April

By Colleen O'Neill

CHARLESTON – Blasters have the chance to keep sharp and on top of the latest advances in their field, thanks to an upcoming refresher training being offered by the Department of Environmental Protection.

The DEP's Office of Explosives and Blasting is will host the training April 3 and 4 at the Charleston House Holiday Inn in Charleston. Blasters who attend will fulfill their required 12 hours of refresher training required by law.

"This training was designed to encompass topics required to meet the West Virginia recertification guideline requirements," said Jim Ratcliff, assistant chief of OEB. Blaster certification and training is one of the programs for which he has responsibility. "The primary purpose is to provide certified blasters with a review of

current technology, safety practices and regulatory issues.

"As dictated by the Surface Mine Blasting Rule, 199 CSRI section 4.6.a., blasters must have 12 hours of refresher training before they are certified, and this 12-hour requirement must be met within the normal three-year certification period prior to recertification," Ratcliff said

Blasting design, safe blasting practices, seismograph uses, flyrock cases and prevention, drilling patterns and layout, regulatory compliance, and inventory and recordkeeping will all be covered during the two-day event.

"We offer this training as a convenient and affordable way blasters can meet their training requirement," Ratcliff said. The course is free. If a blaster can only stay for the first day of the training, he can complete the OEB Home Study Course for four hours of refresher training credit to meet the 12-

hour requirement.

The home study course is available for \$25, which includes a series of worksheets that must be completed correctly.

Registration is required. As space is limited, preference will be given to active West Virginia certified blasters. For more information or to request a registration form, call the Office of Explosives and Blasting at (304) 926-0464. The deadline for registration is March 15.

For information on other OEB-approved training, go to www.wvdep.org.

Tune into latest installment of 'Environmental Update'

By Colleen O'Neill

The Department of Environmental Protection's national award-winning videography unit brings environment and education together through the production of its TV program "Environmental Update". The 30-minute program tackles a variety of environmental issues and takes its audience through an indepth look at the subject of the month.

The program covers a broad range of topics. "Environmental Update" has tackled topics including mountaintop mining, coal-fired power plants, watersheds and remediation. Programs have also highlighted DEP events such as e-cycling, the annual Environmental Awards ceremony, the unveiling of the State of the Environment report and REAP projects.

Program ideas are welcome and may be submitted to Jessica Greathouse, DEP's Chief Communications Officer. Just send your idea by e-mail to jgreathouse@wvdep.org or call (304) 926-0440.

The current program takes a look at federal and state government partnerships.

TITLE: Environmental Update #54

TOPIC: EPA and DEP- Federal/state partnerships

Host: Stephanie R. Timmermeyer, DEP cabinet secretary

Guest: Eric Carlson, EPA Congressional state liaison

Here are a few of the points covered in the show.

1. The unique relationship between the federal government and the state of West Virginia.

2. What is the EPA's role in setting environmental standards that states must adhere to and how is that standard decided.

3. A perspective on the expectation for the 2007 Congress and the administration's expectations for environmental regulations.

4. The 2007 West Virginia legislature; what roles do DEP and EPA play in the state legislative process?

The program airs statewide on the Library Television Network and in the Charleston-Huntington market on WLPX-TV and has a potential household audience of more than a half million homes.

Each program is available at the local library through the West Virginia Library Commission. Libraries may order any episode through the Library Commission. To receive a copy of any show, contact Rich Carter, DEP's videographer, at rcarter@wvdep.org or by calling (304) 926-0440.

Use these tips to protect groundwater, drinking water

By Colleen O'Neill

Fifty percent of all Americans rely on groundwater for their primary source of drinking water. In rural populations, that number climbs to 95 percent.

National Ground Water Awareness Week is March 12-16. The Groundwater Protection Council is a national, nonprofit organization geared toward promoting and ensuring the use of best management practices and fair, effective laws regarding comprehensive groundwater protection. Go to www.gwpc.org to become more knowledgeable.

Here are some tips on using less water:

- Run full loads of dishes and laundry.
- Check for leaky faucets. Fix them.
- Purchase water-efficient appliances.

■ Utilize drought tolerant landscaping. Rainfall in urban areas can carry contaminants into groundwater. Here are some examples of what you can do to prevent groundwater contamination:

- Dispose of chemicals properly.
- Recycle used motor oil.
- Decrease or eliminate fertilizers, pesticides.
- Wash your car at a car wash.
- Clean up automotive spills.

Here are a few things you can do to protect your source of drinking water:

- Minimize the waste you produce – reduce, reuse, recycle and compost.
- Properly dispose of pharmaceutical products.
- Use nontoxic cleaning products.
- Minimize the amount of road salts you use in the wintertime.

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DEP correcting subsidence problems in Harrison

CLARKSBURG – The West Virginia Department of Environmental Protection is working to fix a subsidence hole in Harrison County.

The Office of Abandoned Mine Lands and Reclamation has awarded a \$19,799 contract to Grafton Coal Company to repair the hole located in a residential area of Clarksburg on Vine Street.

A mine subsidence void approximately 5 feet in diameter and 4 feet deep appeared suddenly in a yard within 15 feet of a house in a populated area. When the hole appeared, a children's sandbox fell in.

The hole is being excavated to solid material and filled with concrete eliminating the hazard. The concrete will be covered with up to 3 feet of topsoil. The disturbed area will be graded and seeded.

Funding for this emergency project comes from the Abandoned Mine Land Fund, which is supported by fees on each ton of coal produced by active coal mining operations. Congress recently reauthorized the fund through 2024. West Virginia is expected to receive nearly \$1 billion of that money.

Four deep mine portals being reclaimed by DEP

HERNSHAW – Problematic deep mine portals at the former Hershaw Coal Company in Kanawha County are being reclaimed by the West Virginia Department of Environmental Protection.

Fourteen portals – some of which are open and/or draining – are causing problems for residents living near the site. The agency's Office of Abandoned Mine Lands and Reclamation will oversee the yearlong contract project, which was awarded to J&B Excavating, Inc. of Charleston for \$190,545. The project is to be completed by early February 2008.

The portals are located in Ring Hollow off of County Route 119/25 from County Route 94 at Hershaw. The site consists of 14 portals, some of which are draining. Seven are open and may be used as bat habitat. The contractor will eliminate drainage issues and construct wet seals and bat gate seals. Approximately 690 linear feet of ditches and 600 linear feet of underdrains will be constructed. Sediment controls will be put into place and 3 acres will be revegetated.

Funding for this project comes from the Abandoned Mine Land Fund, which is supported by fees on each ton of coal produced by active coal mining operations. Congress recently reauthorized the fund through 2024. West Virginia is expected to receive nearly \$1 billion of that money.

AML working to stop acid mine drainage from site

SALTWELL – The West Virginia Department of Environmental Protection is working to stop the rapid discharge of acid mine drainage in Harrison County.

The Office of Abandoned Mine Lands and Reclamation has awarded a contract to Breakaway Inc. of Sutton for \$224,933 to complete this project by mid-November 2007.

The site is located on County Route 13/3 (Nixon Run Road) in the Clay District.

The contract will close one open portal to the abandoned Consol 32 Mine. The portal is discharging acid mine drainage at a rate of 235 gallons per minute. Nixon Run flows into Shinn's Run.

Work will include the construction and upgrade of access roads and the installation of one wet mine seal with a bat gate. The contractor also will backfill and grade the wet seal installation, remove a failed treatment system, open a previously installed limestone channel, construct drainage controls and seed all disturbed areas. Vegetated, riprap and grouted ditches will be used. Four pipes, 175 feet of subsurface drains and approximately 600 feet of barbed wire fence also will be installed.

Mining at the site ended prior to 1977 and the responsible party is unknown.

Funding for this project comes from the Abandoned Mine Land Fund, which is supported by fees on each ton of coal produced by active coal mining operations. Congress recently reauthorized the fund through 2024. West Virginia is expected to receive nearly \$1 billion of that money.

DEP to put out burning refuse pile in Monongalia

EVERETTSTVILLE – The West Virginia Department of Environmental Protection is working to extinguish a burning refuse pile in Monongalia County.

The Office of Abandoned Mine Lands and Reclamation has awarded a \$74,574 contract to S.C.J.L. Leasing Corporation, Inc. to smother a burning refuse pile on Pick Hand Road near the town of Everettstville north of Fairmont.

The fire has been causing air quality issues in the area. The site encompasses approximately 1/3 of an acre and is also a threat to surrounding forest.

The contractor is excavating the burning refuse from the site and dousing it to ensure that the material is extinguished. It will be placed back on the site in engineered lifts and covered with up to 4 feet of soil before being revegetated.

Funding for this emergency project comes from the Abandoned Mine Land Fund, which is supported by fees on each ton of coal produced by active coal mining operations. Congress recently reauthorized the fund through 2024. West Virginia is expected to receive nearly \$1 billion of that money.

Two conferences to focus on energy efficient technologies

The West Virginia Development Office's Energy Efficiency Program is providing two opportunities this spring to attend a seminar on cost effective commercial building technologies for surpassing both the energy code and ENERGY STAR standards.

"The Commercial Energy Code and Beyond" seminars, co-sponsored by the West Virginia Department of Environmental Protection, will be April 9 in Wheeling and April 10 in Martinsburg. The focus will be on the practical provisions of the International Energy Conservation Code with special attention to key recent findings regarding moisture control and mold prevention.

For more information, contact Kelly Bragg, West Virginia Energy Efficiency Program, 558-2234, ext. 2004 or e-mail kbragg@wvdo.org.

Kids, youth groups could win hundreds

CHARLESTON – Kids and teens working to keep the state's roadways pristine could walk away with a little green, too.

The Department of Environmental Protection will give a cash award for the top three Adopt-A-Spot sites kept clean by youth groups or individuals 18 years old and under. The program is popular with youth groups because the sites are no longer than a quarter mile and can include roadside parks, underpasses, turn around areas, entrances to communities and pull-off areas.

"We want to continue to encourage the state's youth to make a difference in their communities," said DEP Cabinet Secretary Stephanie R. Timmermeyer. "And because kids and teens are high energy and enthusiastic, they often raise the bar for the rest of the volunteers. As always, we want to reward that kind of spirit."

The Youth Environmental Program has teamed up with Adopt-A-Spot to provide another way kids and teens can increase their community involvement. The cash awards are \$300 for first place, \$200 for second and \$100 for third. They will be presented May 19 at North Bend State Park during Youth Environmental Day.

Individual kids, teens or any organized youth group may select a spot with Division of Highways approval. The site must be kept free of litter for at least one year and the adopter must report at least three organized cleanups annually. Each site must feature flowering plants for each blooming season and the flowerbeds must be maintained.

The deadline to enter this year's competition is April 15. To enter, please include the following information:

- Before and after pictures of the adopted spot;
- Pictures of the flowers, one for each blooming season;
- A cover sheet with the name of the award on top, followed by the name of the individual or the youth group. Youth groups must include the name of their leaders.

Please note that entries without this information will be disqualified. Submit entries to Diana Haid, Youth Environmental Program coordinator, Department of Environmental Protection, 601 57th St. S.E., Charleston, WV, 25304. For more information, call (800) 322-5530. Digital submissions are also accepted. Send them to dhaid@wvdep.org.

The Youth Environmental Program encourages participating youth groups throughout West Virginia to participate in community service and environmental projects such as litter control, recycling, tree planting, soil conservation and environmental education. Each year, more than \$11,000 in cash awards are offered as incentive and a four-year scholarship is made available annually to a graduating high school senior who is a member of a YEP group.

Adopt-A-Spot is a joint effort between the DEP and the Department of Transportation's Division of Highways. It is also a component of Governor Manchin's REAP – The Next Generation program, which contains all of the state's cleanup programs including Adopt-A-Highway, West Virginia Make It Shine, Operation Wildflower, Statewide Recycling and Pollution Prevention Open Dump programs.

Three watersheds in focus

By Steve Young

Impaired streams within the Elk, Lower Kanawha and North Branch of the Potomac watersheds are slated for total maximum daily load development.

The West Virginia Department of Environmental Protection is proposing to begin the TMDL process for 58 streams in the three watersheds. TMDLs are water quality improvement plans specifically designed to restore the impaired waters.

The DEP's preliminary selections are made in accordance with the TMDL development program plan and the West Virginia Watershed Management Framework. The framework process divides the state into 32 watersheds and five hydrologic groups. TMDLs are synchronized with the framework's five-year cycle, allowing specific amounts of time for data gathering, water quality sampling, model development and pollutant source reduction strategy. The 2010 selections should be made from Hydrologic Group B. Group B includes the Coal, Elk, Gauley, Lower Kanawha, North Branch of the Potomac and Tygart Valley watersheds. The development process lasts for approximately 48 months.

The TMDL process will begin this year for the selected streams with public meetings, then data gathering and sample collection efforts. New water quality monitoring and pollutant source tracking activities will provide reliable information to develop TMDLs, and also generate the information necessary to identify the significant stressors associated with biological impairment. In addition to known impaired waters, monitoring and source tracking will also be conducted in other geographically proximate waters, where existing water quality information is limited and impairment is suspected. If those efforts

The following streams from the 2006 West Virginia Section 303(d) list are proposed for TMDL development.

LOWER KANAWHA WATERSHED

Pond Branch	Sleepy Creek	Joplin Branch
Poplar Fork	Rider Creek	Pocatalico River
Jakes Run	Armour Creek	Harmond Creek
Saltlick Creek	unt/Scary Creek at river	Rocky Fork
Buckelew Hollow	mile 0.13	Spring Branch
unt/unt at river mile	Rockstep Run	Grapevine Creek
0.4/Little Buffalo Creek	unt/unt river mile 0.4/	Broadtree Run
at river mile 1.0	Scary Creek at river mile	unt/Dog Fork at river
Hurricane Creek	2.1	mile 2.0
Cow Creek	Gallatin Branch	Raccoon Creek
Long Branch	Ward Hollow	Leatherwood Creek
unt/Crooked Creek	Rays Branch	Camp Creek
	Coal Hollow	Anderson Lick Run

ELK WATERSHED

Green Bottom (Belcher Hollow)	Camp Creek	Lilly Fork
Newhouse Branch	Laurel Fork	Big Branch
Coonskin Branch	Reed Fork	Jacks Run
Kaufman Branch	Summers Fork	Upper Mill Creek
Whiteoak Fork	Grassy Fork	Bear Run
Mudlick Branch	Leatherwood Creek	unt/Granny Creek
Big Sandy Creek	Buffalo Creek	Old Woman Run

NORTH BRANCH OF THE POTOMAC

Patterson Creek	Mill Creek
Pargut Run	unt/unt at river mile 0.5, New Creek at river
unt/Patterson Creek at river mile 16.0	mile 4.3

identify additional impaired waters, then TMDLs will be developed as a part of the 2010 effort. Throughout the process, the public will have many opportunities to become involved with the development and implementation of the TMDLs. The stream selection process is the first of many public participation opportunities.

Detailed information regarding the

location, length and impairments for each stream selection can be found at www.wvdep.org/groupb or can be obtained by contacting the agency.

Those wanting to offer information or comment on the DEP's proposal should do so by April 9. Comments or questions should be directed to Steve Young at (304)926-0495 or e-mail syoung@wvdep.org.

It's not too early to think of conservation camp

By Lalena Price

RIPLEY – West Virginia students are invited to spend a week learning how to become young stewards of the environment during Junior Conservation Camp sponsored by the West Virginia Department of Environmental Protection.

The annual camp will be held June 18-22 in Jackson County at Cedar Lakes Conference Center near Ripley. The DEP's Youth Environmental Program is in charge of the event, which is for kids aged 11 to 14.

"This is a wonderful opportunity for kids to get hands-on conservation experience,"

said DEP Cabinet Secretary Stephanie R. Timmermeyer. "We have a fantastic staff dedicated to making sure that every camper learns a lot about environmental protection while having a great time."

Environmental education classes and activities on forestry, fishing techniques, nature walks, wildlife, water study, recycling, soil conservation, and hunter education will be offered. Afternoon and evening activities will include archery, canoeing, geocaching, orienteering, swimming, volleyball, miniature golf, relay races and much more.

State and federal environmental and conservation experts will be instructors and

counselors during the camp.

The cost is \$125 per camper and includes food and lodging. Local organizations and businesses are encouraged to sponsor students for the camp.

For sponsorship information or to get a camp application, contact Diana Haid, camp director, at the Department of Environmental Protection, Youth Environmental Program, 601 57th Street, S.E., Charleston, WV 25304, by phone at (304) 926-0499, ext. 1114, or by e-mail at dhaid@wvdep.org.

Application deadline is May 1. Camper registration forms must be received by June 1.

REAP program cleans up Kanawha tire pile

SOUTH CHARLESTON – A large tire dump in a residential area has been cleaned up by the West Virginia Department of Environmental Protection.

More than 2,000 tires were discovered discarded along a long section of Rock Crest Road in South Charleston. The dump, which is located just past the South Charleston Sanitary Board office, was reported by a citizen.

"Citizens know best where these tire piles are located because they may drive by them

every day," said Cabinet Secretary Stephanie R. Timmermeyer. "We appreciate it when people tell us where they are so we can see that they get cleaned up."

REAP – The Next Generation is the program funding the cleanup. PNS Transporters of Teays Valley was awarded the \$4,610 contract. The cleanup was finished by the end of January.

Last year, REAP oversaw the cleanup of 160 tire piles. A tire pile is defined as having more than 100 tires on site.

To report a tire pile in your area, call (800) 322-5530, or visit us on the Web at www.wvdep.org/reportadump.

REAP — The Next Generation was started by Governor Manchin to help keep West Virginia wild and wonderful. REAP stands for Rehabilitation Environmental Action Plan, which encompasses all of the state's cleanup programs including West Virginia Make It Shine, Operation Wildflower, Pollution Prevention Open Dump, Statewide Recycling Program and Adopt-A-Highway.

Potomac water improvement plans set

By Jessica Greathouse

CHARLESTON—The West Virginia Department of Environmental Protection has developed plans to improve water quality in the Potomac Direct Drains watershed.

Section 303(d) of the Clean Water Act requires states to identify waters that are not meeting water quality standards and develop total maximum daily loads, or TMDLs, for those waters. A TMDL is a calculation of the maximum amount of a pollutant that can be deposited into a waterbody and still allow the waterbody to meet water quality standards. Draft TMDLs have been developed for numerous impaired waters in the Potomac Direct Drains watershed. The draft TMDLs

culminate an extensive data collection, modeling and pollutant allocation effort and will be finalized when they receive approval from the U.S. Environmental Protection Agency.

A 30-day public comment period begins on Feb. 14, and runs through March 15, 2007. DEP will respond to comments in a responsiveness summary that will be a component of the submissions to EPA. The responsiveness summaries will document comments received, resultant agency actions and the rationale for those actions.

A public meeting was also held in Martinsburg in late February to explain the TMDL conclusions and to facilitate public review and comment.

The TMDL documents may be reviewed

at www.wvdep.org/wvtmdl. Copies of the document may also be obtained by contacting Steve Young at syoung@wvdep.org, or by calling (304) 926-0495 (TTY/TDD (304) 926-0489).

The deadline for comments is March 15.

Comments should be addressed to: Steve Young, West Virginia Department of Environmental Protection, 601 57th Street S.E., Charleston, WV 25304. Attn: Potomac Direct Drains TMDL

Comments may also be faxed to (304) 926-0496 or sent by e-mail to syoung@wvdep.org.

Comments are preferred in electronic format to expedite the review and response process.

DEP repairs subsidence issue in Harrison County

BRIDGEPORT—The West Virginia Department of Environmental Protection has corrected subsidence issues at a residence in Harrison County.

The Office of Abandoned Mine Lands and Reclamation paid \$13,327.20 to Ten-A-Coal Company to repair the subsidence void.

During a grading project at a residence on Lee Ann Lane near the town of Bridgeport, a dozer fell into an old 14-foot-deep mine opening. The DEP's contractor excavated and filled with the subsidence void with durable stone to eliminate the site hazard. The stone fill was covered with a 3-foot layer of topsoil and the disturbed area was graded and seeded.

Funding for this emergency project came from the Abandoned Mine Land Fund, which is supported by fees on each ton of coal produced by active coal mining operations. Congress recently reauthorized the fund through 2024. West Virginia is expected to receive nearly \$1 billion of that money.

Both Gauley Coal Sales Co. and B&S Contracting were operating at this site until their permits were revoked in 1994 and 1995, respectively. The land was reclaimed in July 2001 for both permits at a total cost of \$170,216.70.

Funding for the project is supplied by the Special Reclamation Fund, which gets its money from forfeited bond collections, civil penalties, and the special reclamation tax on mined coal.

DEP repairs subsidence issue in Barbour County

PHILIPPI—The West Virginia Department of Environmental Protection is filling a subsidence crater at a residence in Barbour County.

The Office of Abandoned Mine Lands and Reclamation has contracted Ten-A-Coal Company for \$26,200 to repair the problem.

A mine subsidence hole suddenly formed in a driveway directly beside Pepper Road (CR 16/2) near Philippi. The hole is approximately 1 foot in diameter at the surface enlarging underground into a deep mine passageway. The passageway continues under both the county road and the driveway. There is approximately 5 feet of overburden on the collapsed passageway.

The void will be excavated to solid material and filled with durable stone eliminating the hazard. The site will be graded to finish and all disturbed areas seeded as needed.

Funding for this emergency project came from the Abandoned Mine Land Fund, which is supported by fees on each ton of coal produced by active coal mining operations. Congress recently reauthorized the fund through 2024. West Virginia is expected to receive nearly \$1 billion of that money.

DEP working to repair acid mine drainage in Nicholas

SUMMERSVILLE—Work is under way at a former mine in Nicholas County to construct an active chemical treatment facility to improve the quality of water coming off of the site.

Water at this site has a slightly low pH and is high in iron, aluminum and manganese. It is discharging into Muddlety Creek, a tributary of the Gauley River.

The West Virginia Department of Environmental Protection's Office of Special Reclamation has awarded a \$561,500 contract to Collins Building and Contracting of Flatwoods for the project, which is to be completed in January 2008.

The contractor will:

- construct a collection drain for acid mine drainage;
- install a concrete manhole and more than 1,000 feet of pipe for intake and discharge purposes;
- build more than 3,000 feet of V ditch and limestone channels;
- construct a chemical treatment facility consisting of an Aquafix dosing system with a 40-ton silo along with associated piping, ditches, and channels;
- remove all existing culverts;
- build check dams and weirs for proper water diversion;
- create five ponds with baffle curtains and 509 feet of spillway.
- build two sludge cells along with associated piping, splash pads, spillways and ditches;
- construct more than 600 feet of access road and a turn around area near the treatment facility.

Approximately 11 acres of disturbance will be properly reclaimed as well.

Warm Springs PSD gets loan for infrastructure

By Jessica Greathouse

BERKELEY SPRINGS—The West Virginia Department of Environmental Protection's Clean Water State Revolving Fund is providing financial assistance to a Morgan County community to upgrade its wastewater treatment system.

The Warm Springs Public Service District recently closed on a \$3 million Clean Water State Revolving Fund loan from DEP. The loan carries a 0% interest rate and will be repaid over a 30-year period. The total project cost is over \$15 million. The West Virginia Infrastructure and Jobs Development Council has provided the balance of the funding.

The money will be used to replace the 0.4 million gallons per day existing wastewater treatment plant with a 1.74 MGD plant. Two existing pump stations will also be replaced with a gravity interceptor. The PSD is under a consent decree with DEP to upgrade its plant in order to comply with the effluent limits contained in its National Pollution Discharge Elimination System permit. The existing collection system is aged and has severe inflow and infiltration problems that the PSD has been working diligently to correct for the past few years.

In addition, the wastewater collection system will be extended to serve 255 new customers. The soils in the area are severely limited for use as septic tank drain fields and many of the septic systems are failing.

Water quality will be improved in Warm Springs Run, a tributary of the Potomac River, as a result of this project.

The Warm Springs PSD serves about 1,247 customers. Completion of this project should be completed in 2008. The contractors are Beitzel Corporation of Grantsville, Md. and Glenn Johnston, Inc. of McKeesport, Pa.

\$70,000 in watershed grants available

By Jessica Greathouse

CHARLESTON — The West Virginia Stream Partners Program is accepting grant applications from community groups interested in improving local stream health.

More than \$70,000 is available this year through West Virginia's Stream Partners Program. Community-based watershed associations wishing to implement a watershed improvement project may apply for up to \$5,000. The deadline to apply for grants is April 16.

According to Stream Partners Program Coordinator Jennifer Pauer, volunteers have used the money in the past for everything from stream monitoring to environmental education.

"Watershed groups manage to make a big difference in their communities with their

Stream Partners funds," said Pauer. "The money and expertise that the program provides helps serve as a catalyst for groups to make a name for themselves and make a difference in local water quality."

Pauer says that groups in the state have access to local help through the Department of Environmental Protection and the West Virginia Conservation Agency.

"If any group or citizen would like to get involved in watershed protection, Stream Partners offers assistance through five regional basin coordinators," said Pauer. "Basin coordinators have the expertise to assist citizens with watershed planning, project development, grant writing, partnership building and community education."

The Stream Partners Program, established in 1996 and housed within the DEP, is a

cooperative effort among four state agencies – the Division of Forestry, the Division of

Natural Resources, the Conservation Agency and the DEP. These agencies provide support and resources in many areas including project planning and technical advice. Their representatives also serve on the Stream Partners Program Review Team, which determines grant allocations each year.

For more information on the Stream Partners Program, the 2007-2008 grant application process, or the organization of watershed groups, call the Stream Partners hotline at (800) 654-5227 or e-mail Pauer at jpauer@wvdep.org

To apply online visit <http://www.wvca.us/stream.cfm>.

Sparking interest



Several offices and programs had exhibits on display for lawmakers and citizens to enjoy during an agencywide outing to the Capitol complex during the legislative session. The Division of Air Quality's booth was a hit featuring several hands-on tools including an energy-efficient model house, a bulb power comparison display and a crank generator.

Upcoming conference focuses on investment information on brownfields for bankers

CHARLESTON — Investment information on brownfields will be the focus of an upcoming conference for bankers.

The West Virginia Brownfields Assistance Centers and the Department of Environmental Protection are sponsoring the Recycling Real Estate: Lending Opportunities for Bankers conference April 3 at Stonewall Resort in Roanoke, W.Va.

The conference is aimed at providing potential lenders and investors with information on strategies for managing environmental risk and minimizing lender liability in order to maximize business opportunities in West Virginia.

Brownfields are properties that may be contaminated from a former industrial or commercial use. Brownfields have great

redevelopment potential, because most have existing infrastructure and can be cleaned up for reuse as a new industry or business location.

The cost of the conference is \$150 and registration is required. For more information, go to www.wvbrownfields.com or call Patrick Kirby at (304) 293-2867, ext. 5459, or e-mail Patrick.Kirby@mail.wvu.edu.