

2012

Bucks County Conservation District

Annual Report



YEARLY HIGHLIGHTS

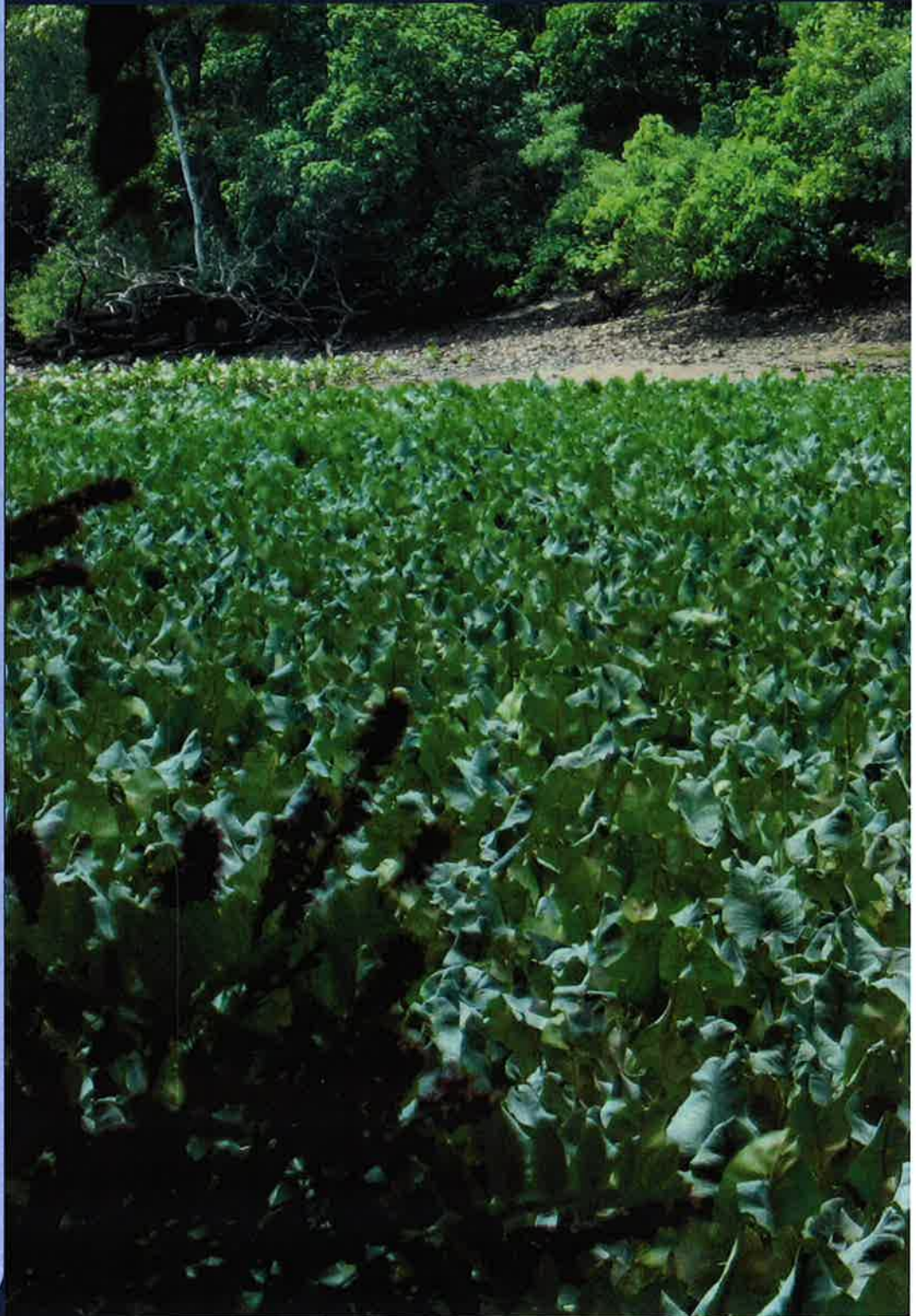
BCCD becomes the Bucks County affiliate for Keep Pennsylvania Beautiful and removes over 3 tons and 200 tires from an illegal dump site

Route 202 by pass opens in December

Over 1500 shrubs and trees planted thanks to volunteer hours and the coordination efforts of our watershed specialist

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Gretchen
Schatschneider,
District
Manager

Cover photo:
Bristol Marsh

Photo at right:
Gretchen presents
2012 Conservation
Awards to Kathy
Leber and Diane
Smith

Manager's Report

Welcome to the 2012 Bucks County Conservation District Annual Report. It is time once again to look back over a year spent working towards environmental excellence in Bucks County.

Beginning in 2012, residents were able to take advantage of the new regional planting trailer for riparian buffer projects. In addition, BCCD began the group Keep Bucks Beautiful, an affiliate of Keep Pennsylvania Beautiful, and completed our first illegal dumpsite cleanup.

2012 also brought with it changes in regulations, new permit authorizations, and new processing procedures for permit applications. All are meant to create a more streamlined and efficient statewide permitting system. BCCD explored new funding sources for projects as well, and we were successful in obtaining several grants for beneficial implementation projects throughout the county.

This past year also brought Hurricane Sandy, and as a result many projects to repair and restore both homes and habitat. Although due to an unpleasant experience, it has been pleasing to witness so many agencies and organizations eager to work together to provide assistance for those in need.

This year also brought farewells to the District. We said goodbye to both Sandra Tucker and Eric Wightman at the close of 2012. Everyone at BCCD wishes them every happiness in their future endeavors.

Please enjoy reading the 2012 Annual Report. We at the BCCD have enjoyed being part of what makes this a wonderful county to live in for another year.



Financial Statement 2012

Revenue:

Fees for Services	\$ 557,158
Grants	301,725
Contributions	2,204
Interest	4,083
Miscellaneous	6,575
Total Revenue	<u>\$ 871,745</u>

Expenses:

Building Maintenance	\$ 12,816
Capital Purchases	8,843
Computer	10,410
Dues and Subscriptions	3,997
Education Projects	4,335
Grants and Programs	96,892
Insurance	18,104
Interest expense	1,564
Meetings and Seminars	6,080
Miscellaneous	1,202
Office Supplies	10,802
Payroll and Benefits	464,155
Payroll Taxes	31,500
Postage	7,005
Professional Fees	12,285
Publicity and Promotion	712
Travel	3,426
Utilities	17,352
Vehicles	20,147
Total Expenses	<u>\$ 731,627</u>

Excess of Revenues over Expenses	<u>\$ 140,118</u>
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Lisa Dziuban
Eric Wightman
Rich Krasselt
Jake Borden
Erosion
Control
Technicians

Erosion and Sedimentation

If you were lucky enough to catch the Ken Burns film, The Dust Bowl, on PBS, you know how important soil is to the livelihood of this country. Advertized as a “morality tale about our relationship to the land that sustains us... The Dust Bowl chronicles one of the worst man-made ecological disasters in American history; the frenzied wheat boom of the “Great Plow-Up” which was followed by a decade long drought during the 1930s that nearly swept away the breadbasket of the nation.”

With the election of Franklin D. Roosevelt as President in 1932, conservation of soil and water resources became a national priority. The National Industrial Recovery Act (P.L. 73-67) passed in June 1933 and the Soil Conservation Act of 1935 included funds to fight soil erosion. With this money, the Soil Erosion Service (SES) was established in the Department of Interior. Many states followed suit with similar laws and in 1945 Pennsylvania passed its own Soil Conservation District Act which provide for the formation of county-based districts. Even though the Bucks County Conservation District (BCCD) was not formally established until 1961 by the County Commissioners, concerned citizens and farmers had been advocating for its formation for over 20 years.

Since the establishment of the BCCD in 1961, land use has dramatically changed in Bucks County. BCCD still works in concert with the Natural Resource Conservation Service assisting farm operations in the county to understand environmentally sensitive areas on farms and to implement practices to minimize polluted runoff, but today our main focus lies with erosion and sedimentation control on construction sites.

Any time there is soil disturbed for construction, whether it be for houses, roads or even swimming pools, there is the chance that this loose soil will enter our waterways after rain or snow melt. In southeast Pennsylvania, soil sediment is the number one pollutant of our waters.

BCCD's team of Environmental Specialists regulate soil disturbance, from the planning stages of a project through its completion, to assure that stormwater does not carry soil away from the construction site and into our water sources. Proper erosion and sedimentation control reduces flooding and prevents pollutants from entering our waterways and more importantly keeps soil in its place preventing another Dust Bowl event.



Officials tour one of the new dirt and gravel roads after completion.

Route 202 Bypass Completion

The long awaited 202 Parkway and shared use path opened with a ribbon cutting ceremony on December 3, 2012. After over two years of construction the new 202 "bypass" finally welcomed traffic, both vehicular and pedestrian.

Some final landscaping and stabilization measures will be completed in the spring of 2013, but most landscape planting of trees and shrubs were completed in the fall of 2012. The detention basins have been converted to their final design with water quality gabion baffles installed in 16 of the basins. PennDot's formula "L" has been used to stabilize many of the berms within the project. Formula "L" is a grass seed mixture composed of 55% hard fescue, 35% creeping red fescue and 10% annual rye. This produces a fine textured sod that can be used on low maintenance slopes which will not be mowed.

In conjunction with the Parkway construction new ball fields were constructed at Doylestown Central Park. Much of the soil overburden that was generated by the road construction was used to fill in and balance the grade requirements needed for the ball fields. The proximity of the ball fields to the Parkway project provided the earthmoving contractors with an ideal opportunity for disposing of the excess material.

In August, 2012, the Pennsylvania Department of Environmental Protection's (DEP) new regional director, Cosmo Servidio, toured the Parkway in Doylestown Township. Cosmo visited projects currently under construction in the southeast region as part of his plan to become familiar with the four Conservation Districts in the region. Michael Di Bello, Senior Project Engineer for PennDot, met with Cosmo and other DEP representatives during the tour.

Dirt and Gravel Road Program

In 2012 the Bucks County Conservation District received Bucks County received \$17,790.00 from the FY 2011-2012 allocations. Springfield Township submitted four grant applications for improvement projects. Three of the road applications were approved at a QAB meeting on March 28, 2012 and were completed in 2012. The projects in Springfield Township were for School Road, Martin Lane and Springhouse Lane. Driving surface aggregate (DSA) was applied to School Road. Penn-Suppress was applied to both Martin Lane and Springhouse Lane for dust control.

As in 2011, Bucks County experienced another hurricane in 2012. Hurricane Sandy wrecked havoc in upper Bucks, winds being clocked at 93 mph at Van Sant Airport. Again, favorable comments were received from participating municipalities that had used the driving surface aggregate on their gravel roads; the roads experienced little or no erosion during the storm event.

The 2012 Dirt and Gravel Road Maintenance Workshop was held on September 25 and 26th at Treasure Lake in Dubois, Pa. Field visits included a geosynthetically reinforced soil bridge, a mobile rock crusher demonstration, and a stop at the Elk County Visitors Center.

* Best Wishes to Eric Wightman (the most interesting man at BCCD) as he embarks on a new career in Maine in 2013 and to Sandy Tucker, our Permits Coordinator who was lucky enough to retire and is now spending time with her family.

Watershed Programs



Meghan Rogalus,
Watershed Specialist

“The true meaning of life is to plant trees under whose shade you do not expect to sit.”
Nelson Henderson

In 2012 Bucks County Conservation District sponsored the installation of approximately 4 acres of riparian buffer and stormwater mitigation projects through TreeVitalize Watersheds grants.

Approximately 1,600 trees and shrubs were planted this year thanks to the time and effort of 180 volunteers. The \$18,454 provided by this program was leveraged with \$26,256 from in-kind donations such as volunteer time and material donations of local municipalities and non-profit organizations who participated.

Thanks to Pennsylvania Horticultural Society and funder Aqua PA who made this year’s projects possible. This year’s participants included Bucks County Department of Parks and Recreation, Chalfont Borough, Delaware Riverkeeper Network, Greenbelt Overhaul Alliance of Levittown, Heritage Conservancy, New Britain Township, and Warrington Township EAC.

Lake Galena Shoreline before



Lake Galena Shoreline after



Lake Galena Shoreline Restoration Projects

BCCD was awarded two grants from the Pennsylvania Lake Management Society (PALMS) to repair two eroding sections of Lake Galena's shoreline and improve the lake's water quality in April 2011. BCCD contracted with Envirosapes, Inc. and CLEER Environments, LLC to design and construct measures to remediate shoreline erosion that had occurred from a combination of heavy foot traffic, stormwater runoff and wind and wave action.

The design for each restoration project employed bioengineering, in which a combination of live and dead plant materials are utilized for bank stabilization. Construction of both projects was completed from middle to late January 2012. First, boulders were placed along the water's edge to protect the toe of the bank from waves and winter ice. Then each of the eroding areas were regraded to a more gradual slope. In addition to alleviating safety concerns, reducing the grade enhances bank stability and allows for vegetation to become established and hold the soil in place. Live stakes, or dormant cuttings of native dogwood and viburnum, were installed along the regraded banks at regular intervals. Although they look like sticks at the time of installation, the plants are quick to establish from the cuttings and help reinforce the shoreline with their root structure.

In April 2012, BCCD followed the construction with shoreline buffer plantings at each of the sites to help slow and absorb stormwater before it reached the newly repaired areas. In addition to protecting the recent investment, the native trees and shrubs improve water quality by filter out excess nutrients and cooling the water, which allows it to hold more oxygen. The native plants also enhance the lake's shoreline habitat. Over two Saturdays, BCCD worked with 60 volunteers from Boy Scout Troop 24, Delaware Valley College's Project Earth, GE Water, Groveland Elementary 6th Grade Club, North Branch Watershed Association, Target, Peace Valley Park teacher naturalists and several other local volunteers. The volunteers planted 260 trees and shrubs and 330 herbaceous plugs, contributing a combined 180 hours of time.

Thanks to our project partner, Bucks County Department of Parks and Recreation and the dedicated volunteers who contributed their time and energy at the planting events. Thanks to the collective efforts highlighted above, an estimated 16.2 fewer tons of sediment is entering Lake Galena each year!



Eric Wightman observes workers as they place live stakes during construction.

Invasive Water Chestnut Control

The invasive plant water chestnut (*Trapa natans*) covers the surface waters of impoundments and slow-moving creeks, threatening native plants and animals by reducing available habitat, restricting recreational access and depleting oxygen levels and water quality. BCCD has been working to help manage two infestations, to alleviate the impacts on our waterways and prevent further spread of these noxious plants.



Bradford Reservoir – In 2012, BCCD completed a second year of water chestnut mitigation with funding received from the Pennsylvania Lake Management Society. Aqua Link, Inc. was retained for the project and through a series of three targeted chemical applications eradicated the water chestnut from the lake's surface.

Thanks to Bucks County Parks and Recreation for partnering on this grant and providing landowner commitment and necessary permissions to work on the lake. In addition, Warrington Township Public Works Department were integral to the successful completion of this project by providing for site access, securing an approved location for the composted plant material and donating staff time and equipment to assist in a responsible, final disposal of the plants. BCCD is hoping to build upon the successful partnership at Bradford Reservoir to secure funding and continue to implement similar control measures into the future, especially since water chestnut seeds that have built up on the lake bottom can remain viable for up to 10 years.

Lake Towhee – In early July, community volunteers, Pennsylvania Department of Environmental Protection (PA DEP), Pennsylvania Fish & Boat Commission (PFBC), the Friends of Nockamixon and BCCD staff collaborated on a fourth annual aquatic invasive plant removal project at Lake Towhee County Park. Volunteers logged a collective 120 hours over four work days, removing 6 truckloads, approximately 8 cubic yards, of water chestnut from the lake by hand. Plants were hauled off-site a wooded and secluded section of the park to decompose. The early July removal prevented these plants from releasing their seeds this year which will help prevent the continued spread of this plant downstream to Lake Nockamixon. Special thanks to PA DEP staff who made multiple trips from Harrisburg for these events.



Kent
Himelright,
Agricultural
Conservation
Technician

Agricultural Technician

The 2012 year was a time of building relationships and reaching out to the Bucks County agricultural community. The District's Agriculture Conservation Technician, Kent Himelright, was committed to working with NRCS staff to develop conservation plans and implement agricultural Best Management Practices on all types of farming operations. NRCS provides leadership in a partnership effort with the Bucks County Conservation District to help conserve, maintain and improve our natural resources and environment. Through cooperative effort, relationships were built with many different agricultural operators and producers throughout the County.

<i>Number of operators assisted...</i>	<i>32</i>
<i>Acres of Ag land assisted...</i>	<i>1139</i>
<i>Number of conservation plans written...</i>	<i>14</i>
<i>Conservation plan acres...</i>	<i>628</i>
<i>Acres with applied conservation practices...</i>	<i>380</i>

Kent also administers the Act 38 Nutrient Management Program, Chapter 91 Manure Management, Chapter 102.4 Ag Erosion and Sediment requirements for the county. The Agricultural Conservation Technician reviewed 2 new Volunteer Nutrient Management Plans (VAO), conducted 10 Nutrient Management status reviews and responded to 23 Ag complaints. Currently there are 10 Concentrated Animal Operations (CAOs), and 10 Volunteer Animal Operations (VAOs), with Nutrient Management plans.



The farm of Jimmy Harris, Bucks County Farmer of the Year for 2012

In 2012, the Agricultural Conservation Technician assisted with the following programs:

Manure Management Manual Outreach

Along with the help of Penn State Extension and PA DEP, the BCCD staff held a comprehensive Manure Management Manual Workshop to help the agricultural community develop their very own manure management plans. Workshops were held on weekends and weekdays to provide the most opportunity to Bucks County farmers. BCCD staff also took advantage of local seminars promoted by Penn State Extensions and Delaware Valley College, to educate over 100 people about Pennsylvania's Manure Management requirements.

PENNVEST: BUCKS COUNTY EQUESTRIAN INITIATIVE

The Bucks County Conservation District has applied and been offered a grant of \$122,078 to address agricultural resource concerns on equine operations throughout the County. The District will be managing two projects that will break ground in 2013. The projects include the installation of a roofed manure storage facility and a restoration project on approximately 1000 feet of impaired stream.

Resource Enhancement and Protection Program

The Resource Enhancement and Protection (REAP) Program allows farmers and businesses to earn tax credits in exchange for "Best Management Practices" (BMPs) on agricultural operations that will enhance farm production and protect natural resources.

One application was submitted for a 50% PA-income tax credit for the total cost of conservation work on the farm. Total tax credit awarded for 2012/2013 was \$18,913.50.



This rock outlet was installed as part of a field diversion project



Mary Ellen Noonan,
Environmental Educator

*We do not inherit
the earth from our
ancestors; we
borrow it from our
children”
Chief Seattle*

Environmental Education

Mary Ellen continued her work to fulfill the mission of the District, cooperating with public agencies, private groups and individuals. In 2011 BCCD worked with Delaware Valley College, Middle Bucks Institute of Technology, Doylestown Township, the Doylestown Dog Park, The Society for the Prevention of Cruelty to Animals, No Child Left Inside—Bucks County Coalition, Honey Hollow and Audubon Bird Town, Bowman’s Hill Wildflower Preserve, Delaware River Experience, Department of Conservation and Natural Resource, Fish and Boat Commission, Silver Lake Nature Center and Heritage Conservancy teaching about soil and water issues.



Delaware Valley College Project Earth Club works to maintain the new Rain Garden at Mercer Museum

Outdoor Water Education Programs in partnership with Doylestown Township



2012 Envirothon held at Honey Hollow Environmental Center in Solebury

Macroinvertebrate Assessments with Pennridge Middle School students at Ralph Stover State Park



Keep Bucks Beautiful



“Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it’s the only thing that ever has”

Margaret Mead

On December 1, students from Delaware Valley College’s Project Earth, Central Bucks East’s See Green and Central Bucks South’s Environmental Club joined Bucks County Conservation District and our KBB partner the Greenbelt Overhaul Alliance of Levittown in cleaning up an illegal dump site in Warrington. Thanks to the efforts of this dedicated group over 200 tires and 3 tons of scrap metal, recyclables and trash were removed from the site. Special thanks to our sponsors Thompson Volkswagen, Manhattan Bagel and Warrington Township

Thanks to a grant from the Pennsylvania Association of Conservation Districts, this sign encourages dog owners at the Doylestown Dog park to “paws” and think about the importance of cleaning up after their dog to insure a supply of clean water now and in the future.





Camille Peters, Receptionist, takes a break from the office to observe teachers completing a macroinvertebrate study at Ralph Stover State Park.



Rene Moyer, Permits Coordinator shows off the Conservation Planting Trailer which is available to groups doing tree planting projects.

Many Thanks to our Board of Directors and our Associate Directors

- Jeffrey Garton, Chairman**
- Thomas Trycieki, Vice Chairman**
- John Frederick, Secretary**
- Jeffrey Vey, Treasurer**
- Robert Loughery, County Commissioner**
- Joseph Matejik, Farmer Director**
- David Wolfinger, Farmer Director**
- Lynn Bush, Associate Director**
- Ben Ciliberto, Associate Director**
- Catherine Skwara, Associate Director**
- Dr. Joseph Brosnan, Associate Director**
- Malcolm Crooks, Associate Director**

Meghan at the SPCA showing off the Bags On Board canister which is attached to her dog's leash. These canisters were provided to dog owners as part of the PACD grant project.



George Ngo (left) and Justin Guerrini, (right) our intern from Delaware Valley College at the Lake Galena tree planting. Both are students at Delaware Valley College in Doylestown.



Students from Middle Bucks Institute of Technology first year woodworking class working to cut lumber and assemble bird house kits for the 2012 Healthy Kids, Get up, Get out and Play event. Many thanks to Wehrung's Home Center, Fisher's Ace Hardware and Wild Birds Unlimited for their support of this project, to the MBIT students who worked on the kits and the members of the Bucks County Birders who volunteered to help assist and teach children about birds while they assembled the bird houses at the event.



Bucks County Conservation District

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The mission of the Bucks County Conservation District is to provide for the wise use, management and development of the county's soil, water and other natural resources. This is accomplished with the cooperation of public agencies, private groups and individuals.



County Commissioners congratulate the 2012 Conservation Award Winners!

