

2016 - Changes, Changes, Changes

The Annual Report of District Manager, David R. Rupert

The Armstrong Conservation District grew to meet several new challenges and evolved itself once again to cope with the fast changing conservation environment. Spring saw the awarding of another Pennvest grant for constructing a non-point source pollution control project in partnership with the Allegheny Valley Land trust, The Redbank Valley trails Association, and Clarion Conservation District. Numerous unanticipated situations and opportunities required the District to update our Long Term Strategic Plan. Our “2016 Action Plan” set forth numerous objectives that the Board wished to see fully implemented by the end of the year. As you read the individual reports of our Staff, you will be able to see how each person contributed to completion of the Annual Action Plan. The Board continued to redefine our Annual Action Plan in four main areas-Capacity Building, Technical Assistance, Resource Conservation, and Outreach and Education. Specific measurable objectives were then adopted by the District Board and assigned to the appropriate individuals or the Board as a whole for implementation. The highlights of the individual staff in the Annual Report will tell you how well those objectives were achieved.

In our continuing effort to build the District Capacity, numerous professional development opportunities were made available to the Staff, Directors, and Associate Directors. Staff meetings were conducted by the Manager on a bi-weekly basis to keep the staff informed, exchange information, and coordinate resources. The District continued to grow the Cooperator Assistance and Outreach Programs through updates to our website, informational brochures, field days, and the use of our Dayton Fair and crops night displays. 2016 saw the District expand its outreach efforts with the awarding of a funding offer for our new Mobile Environmental Display that is being developed in conjunction with the Carnegie Science Center. The District continued to participate in the AmeriCorps program and welcomed back for a second year CorpMembers - Katie Good and Larissa Rice. The District continued to apply for Growing Greener Grants to help implement other facets of the District Program and worked to administer and close out those currently awarded grants. The District continued to be represented with delegates appointed to the Pennsylvania Association of Conservation Districts (PACD), Western Pennsylvania Coalition for Abandoned Mine Reclamation (WPCAMR), Penn’s Corner Resource Conservation & Development Council (RD&D), and the Dirt and Gravel Road Quality Assurance Board (QAB).

In the area of Technical Assistance, the District has provided assistance to several County organizations and Municipalities as they were striving to attain their conservation goals. District Staff also worked to retain participation by local elected municipal officials in the creation and maintenance of Agricultural Security Areas

(ASA's) within the County. The District hosted two field days, one in Rayburn and Wayne Townships for local municipal officials demonstrating Environmentally Sensitive Road Maintenance (ESM) Practices. The District, in partnership with the Arrowhead Chapter of Trout Unlimited (TU) and other local watershed associations continued to monitor the water quality of more sensitive streams in the Armstrong County area. The District continued its participation in the Commonwealth REAP program by providing assistance to area producers interested in applying for these tax credits.

In the field of Resource Conservation, the District conducted Erosion and Sediment Pollution Control Plan reviews and performed the required site inspections of active earthmoving sites within timeframes established by the Commonwealth. District staff participated in Southwest Project Grass and provided technical and administrative assistance to the County Agricultural Lands Preservation Board as they closed on the purchase of the fifth Agricultural Conservation Easement on the Rich Shirey of Redbank Township. The Farmland Preservation Coordinator conducted a sign up for interested participants and will continue to work towards the purchase of developmental rights on another farm offered through the program as state and local funding permits. Work proceeded on several Watershed Restoration Projects and those specific accomplishments may be found under the watershed specialist section of the Annual Report. The District for the first time in a long while had a summer work crew composed of seasonal AmeriCorps members that assisted staff with implementation and maintenance of various conservation projects throughout the County.

For 2016, the District continued its Outreach and Education efforts. Those efforts included the County Envirothon and active participation by all high schools within the County, the Arbor Day Program, the Fruit Tree and Seedling sale, the Annual Combined Awards Banquet-now in partnership with the Armstrong County Farm Bureau, The Penn State Cooperative Extension Service, and the USDA- Farm Service Agency. The District also completely revamped the District webpage, publishing our Annual Report, various articles for newsletters and participation in local, regional, and statewide workshops, and our use of multi-media presentations to area groups about the natural resources of Armstrong County. The District continued its annual Spring Legislative Breakfast meeting for our local, state, and federal elected officials and continued to host the annual fall conservation tour of recently completed conservation work within the County. District staff continued working with local officials to expand participation in our Dirt, Gravel, and Low Volume Road program in the recently enacted Comprehensive Transportation legislation. For 2016, we will continue to offer technical assistance to our Cooperators within the limits of our technical abilities and funding.

In 2016, two long term District employees left District employment. Dave Beale, long time Watershed Specialist retired in late 2015 and was replaced by Julie Zeyzus as the new Resource Conservationist - Watersheds in March 2016. Also in 2016 long time District E&S Technician Christine Cramer fought a long battle with cancer. Chris lost her battle with cancer in September 2016. Casandra Wagner was hired as the newest Resource Conservationist - E&S for the District in late October, 2016. During Chris's

illness, the entire staff filled in for her by being cross trained in E&S and performing her field, office, and compliant investigation work.

For all of these efforts by the staff, I am proud of what the Armstrong District has accomplished in 2016 and look forward to implementation of our 2017 Action Plan. In 2017, the District will be updating their current Strategic Plan with a new document that should guide the District for the next 5 years. The individual staff reports are also enclosed, so please review them over at your pleasure and provide us with your feedback so that we may better serve you in the future. I hope that 2017 doesn't blow by as fast as it seemed to in 2016. I know that as I approach 36 years as your Conservation District Manager it seems that time goes by more quickly.

Should you have any questions about the annual report, or any of the District Programs, please stop by our office, call me at 724.548.3425 or email me at drrupert@co.armstrong.pa.us Please visit our new webpage at www.armstrongcd.org or like us on Facebook

Resource Conservationist - Dirt, Gravel & Low Volume Roads

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The Dirt Gravel & Low Volume Roads Specialist is responsible for administering the Dirt, Gravel & Low Volume Roads Program (DGLVR) within the County. I have a degree in Civil Engineering Technologies and have been certified as a DGLVR Specialist through multiple trainings and workshops. I work with applicants to develop plans for projects and assist with the logistics of project work whenever possible. I am responsible for keeping all records of projects and maintaining an inventory of all completed and current work sites using a GIS system. Project inspections are done prior to work starting, during construction and when site work is completed. A portion of the annual DGLVR Program funding is required to be used for Training & Education purposes. The District applies these Training and Education funds toward demonstration construction projects and the purchase of equipment for the municipalities to borrow. This policy allows us to provide additional monies toward ESM construction and place more ESM techniques onto the roadways.

DIRT, GRAVEL & LOW VOLUME ROADS PROGRAM (DGLVR)

A statewide program passed into law in 1997, as Section 9106 of the PA Vehicle Code. The program was established to reduce sediment and dust pollution by utilizing Environmentally Sound Maintenance (ESM) practices generated by unpaved roads. A local Quality Assurance Board (QAB) consisting of members from the PA Fish & Boat

Commission, USDA Department of Conservation and Natural Resources and the District review and score project proposals and recommend which projects should be funded by the District. The District makes grants to the municipalities to perform ESM work on their roads. To be eligible for these grants, an employee or official responsible for performing the maintenance for the municipality must attend a two day training workshop on ESM practices. The attendee remains qualified to participate in the program for five years before additional training is required. In 2015 the Program was expanded to include any paved or tar and chipped road which has an average daily traffic count of less than 500 vehicles. The Program funded 25 projects during the 2016 construction season. The District installed three French mattresses which protected a wetland area while eliminating chronic road flooding for the municipality and an environmentally friendly and safer alternative pavement sealing application as demonstration projects in 2016. The District purchased a Jumping Jack Tamper and a Plate Tamper for municipalities to borrow to compact the fill materials when installing crosspipes. To date, the program has assisted local municipalities apply ESM practices along 290 miles of roadway by installing:

- 856 cross pipes
- 21 stream culverts
- 34,200 feet of piping
- 159,000 feet of under drains
- 324,000 sq. ft. of ditch stabilization
- 350,000 sq. ft. of bank stabilization
- 1,250,000 sq. ft. of vegetative management

2017 DGLVR SEASON

Twenty eight projects are scheduled for the 2017 construction season totaling almost one million dollars. The demonstration projects are under development. Additional information about the DGLVR Program can be found on the Armstrong Conservation District website.

ELEVATED SAND MOUND (ESM) DESIGNS

The District offers ESM design services if you are applying for an On Lot Sewage Disposal System Permit. You can contact me directly at 724 545 3610 or the District at 724 548 3425 for additional information.

MOBILE ENVIRONMENTAL DISPLAY (MED) PROGRAM

NEW for 2017! The MED Program is under development and is scheduled to debut in August of 2017 at the Great Dayton Fair. The District is partnering with the Carnegie Science Center (CSC) to build a condensed version of the CSC H2O Exhibit. This 24' traveling exhibit will contain interactive displays which will allow the District to reach both young and old audiences to impress the benefits and need to conserve our natural resources. Our partnership with the Science Center allows people in rural areas who are unable to travel to Pittsburgh, an opportunity to experience a piece of the Carnegie

Science Center. The MED will be used in District educational programs and travel to elementary, intermediate and secondary schools along with the Envirothon and Resource Stewardship Programs. The exhibit will be open for public viewing and offered to public gatherings such as the Great Dayton Fair, local festivals and community events. If you have an event you would like to have the exhibit attend, contact the District for more information and availability.

The Mobile Environmental Display was made possible through the generosity of the Colcom Foundation. The Colcom Foundation's primary mission is to foster a sustainable environment to ensure quality of life for all Americans by addressing the major causes and consequences of over population and its adverse effects on natural resources.

The EQT Foundation in partnership with the Armstrong Conservancy has agreed to provide a towing vehicle for the Mobile Environmental Display. This towing vehicle will be powered by Pennsylvania produced clean burning compressed natural gas. EQT is committed to contributing to the social and economic vitality of the regions where EQT employees live and work. By strategically providing financial, in kind and human capital. EQT seeks to promote the growth of strong, livable communities – an essential component of the company's long-term business success. The EQT Foundation is the primary driver of that effort. The EQT Foundation's environmental priorities are to support the preservation of local natural resources and encourage residents and businesses to employ acceptable conservation techniques and activities to minimize adverse impacts on the environment.

The Armstrong Conservancy was founded in 1982 and operates a charitable trust. The Conservancy mission is to establish and deliver programs of the highest quality that enable the protection of land through education, purchase, easements, and by partnering with individuals and organizations having similar goals. The Conservancy has been able to preserve more than 1,200 acres in Armstrong and Clarion counties.

These partnerships showcase how economic development and conservation efforts can work hand in hand to sustain our natural resources. Continue to visit the District website and follow us on Facebook for future updates on the Mobile Environmental Display.

Resource Conservationist - Watersheds

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Armstrong Conservation District's (ACD) watershed protection and restoration program works to restore degraded watersheds and provide technical, educational,

administrative, and financial support to landowners and land managers of Armstrong County. For the calendar year 2016, the Resource Conservationist for the watershed program had participated in 55 education/outreach activities and meetings, 54 watershed activities, applied for \$115,967.91 in grant funds, implemented or contributed to watershed projects valued at \$338,611.00, and engaged in 15 training events to improve water quality for present and future residents, for sustaining aquatic life, and for plant and animal use.

This annual report addresses watershed program activities from January 1, 2016 through December 31, 2016. The report addresses four prominent focus areas of ACD's watershed protection and restoration program including Educational Activities, Watershed Activities, Watershed Projects/Proposals, and Training.

EDUCATIONAL ACTIVITIES

The Resource Conservationist for the watershed program participated in educational activities focusing on environmental and natural resource conservation over diverse audiences. Educational activities included meetings and events at Crooked Creek Environmental Learning Center; local watershed association meetings; and Armstrong County K-12 school programs. Community outreach includes yearly events such as the Conservation District's Legislative Breakfast and Fall Tour and The Great Dayton Fair. Meetings associated with partnering organizations, presentation requests at public and social gatherings, updates to website, and staff and board meetings are also included in the educational activities. A list of educational activities is detailed below.

- Crooked Creek Environmental Learning Center
 - Young Naturalist Summer Camp: Implemented activities related to runoff, water filtration, and macroinvertebrate identification (four-hour program)
 - Attended three Steering Committee meetings
 - Attended a Fundraising meeting
- Watershed Association Activities
 - Attended three Crooked Creek Watershed Association
 - Attended two Cowanshannock Creek Watershed Association
 - Attended two Roaring Run Watershed Association
- School Programs
 - Assisted with Divine Redeemer Trout in the Classroom activities
 - Assisted with West Hills Trout in the Classroom activities
- Community Outreach and Events
 - Attended Legislative Breakfast and Fall Tour
 - Tended ACD table at The Great Dayton Fair
 - Contributed watershed information to new ACD website

- Assisted with ACD W.A.T.E.R. GeoTrail project by developing watershed project summary cards for inclusion in geocaches; assisted with obtaining landowner permission forms
- Prepared and presented information about the services provided by Armstrong Conservation District at a Kittanning Rotary Club meeting
- Miscellaneous Meetings
 - Attended an ACD Board Meeting
 - Attended two WPCAMR quarterly meetings
 - Attended an RC&D quarterly meeting (via telephone)
 - Attended two Trout Unlimited, Arrowhead Chapter meetings; provided updates on Huling Run project
 - Attended an Occupational Advisory Committee meeting at Lenape Tech
 - Attended AmeriCorps Supervisor meeting
 - Attended DEP Round Table meeting
 - Attended ACD bi-weekly staff meetings

WATERSHED ACTIVITIES

Armstrong Conservation District Resource Conservationist participated in 54 watershed projects or programs associated with restoration, protection, planning, and/or maintenance; water quality monitoring and assessment; dirt gravel, low volume road projects; and PA DEP Chapter 102, erosion and sediment pollution control implementation. Forty-seven project sites were visited for assessment or for on-going watershed restoration activities and 25 sites were assessed to determine feasibility for a potential future watershed restoration project. Maintenance occurred on 12 streambank stabilization structures at two locations and 18 projects were visited at least once for erosion and sediment pollution control inspections.

In addition to individual projects within Armstrong County watersheds, Armstrong Conservation District continues to partner with Kiski-Conemaugh Stream Team to collect monthly water quality data at two sites within Huling Run, two sites within Roaring Run, and one site within Patterson Creek, for a total of 27 data collection visits at five sites over the current reporting period. Each stream monitoring location includes a logger that collects stream quality data every 15 minutes. Data collected from the loggers includes date and time of collection, location altitude, temperature, conductivity, and water level. Data is downloaded on a monthly basis and in-field water chemistry testing occurs for alkalinity, chloride, conductivity, total dissolved solids, temperature, and pH. A list of watershed activities is detailed below.

- Roaring Run Watershed: Downloaded data from loggers, performed in-field water chemistry testing
- Cowanshannock Creek Watershed: Performed in-field water chemistry testing within an unnamed tributary, Performed maintenance tasks on streambank stabilization/aquatic habitat structures

- Huling Run Watershed: Downloaded data from loggers, performed in-field water chemistry testing, assessed watershed for potential restoration projects
- Buffalo Creek Watershed: Downloaded data from logger and performed in-field water chemistry testing within Patterson Run, performed maintenance tasks on streambank stabilization/aquatic habitat structures
- Carnahan Run Watershed: Assessed multiple areas for potential restoration projects
- Crooked Creek Watershed: Assisted Manor Township with Scout Run Road culvert replacement project, assessed watershed for potential restoration projects
- Tubmill Run Watershed: Assisted Manor Township with Route 66/Tubmill Run Flood Relief Project
- Redbank Creek Watershed: Performed site visits for photos, final erosion and sediment pollution control inspection, and to close-out environmental permitting for McCandless Abandoned Mine Drainage Remediation Project
- Various Watersheds within Armstrong County: Performed bankfull assessments for dirt, gravel, low volume road program; Performed inspections under PA DEP Chapter 102, Erosion and Sediment Pollution Control program; Assessed various stream segments for potential restoration projects

WATERSHED PROJECTS/PROPOSALS

During the current reporting period, three watershed protection and restoration projects funded through various grant sources valued at \$338,611.00 were implemented, remaining project tasks were completed, or the project was moved forward to the next phase. Additionally, six applications were submitted for \$115,967.91 in grant funds to complete additional watershed restoration and environmental education projects. Of these, \$220.00 had been awarded during this reporting period and receipt of the remaining \$115,747.91 had not yet been announced. A summary of grant funded projects and outstanding grant applications are detailed below.

Grant-Funded Projects (Grant Amounts include Match):

1. Department of Environmental Protection (DEP), Growing Greener Plus: Carnahan Run Stream Improvement Project (2013), Grant Amount = \$115,926.00; Coordinated final section of streambank stabilization/aquatic habitat improvement along Carnahan Run
2. DEP, Growing Greener Plus: RING Cowanshannock Project (2014), Grant Amount = \$37,320.00; Construction on third and final section of streambank stabilization/aquatic habitat improvement is underway
3. DEP, Growing Greener Plus: Huling Run Aluminaide Project (2015), Grant Amount = \$185,365.00; Project currently in design phase
4. DEP/WPCAMR, Quick Response Repair Grant: Cowanshannock Creek instream structure repair project (2016), Grant Amount = \$2,571.16; On behalf of

Cowanshannock Creek Watershed Association and by partnering with Lenape Tech students, six instream structures at risk of failure were repaired (project is complete)

Outstanding Grant Applications:

1. DEP, Environmental Education Grant
Prepared and submitted a grant application for funds to assist with long-term operation of Armstrong Conservation District’s upcoming Mobile Environmental Display
2. DEP, Environmental Education Grant
Prepared and submitted a grant application for funds to implement a rain barrel workshop for residents of Armstrong County
3. DEP, Environmental Education Grant
Prepared and submitted a grant application for funds to help establish Armstrong Conservation District’s Envirothon Resource Study Bin
4. DEP, Growing Greener Plus
Prepared a grant application for funds to improve 320 feet of eroding streambank (Submitted January 2017)
5. DEP, Growing Greener Plus
Prepared a grant application for funds to implement an alternative water quality evaluation, assessment, and monitoring tool and determine feasibility for state-wide use (Submitted January 2017)

TRAINING SESSIONS

Armstrong Conservation District’s Resource Conservationist attended 15 training events comprising diverse conservation and program implementation topics. A summary of training events is detailed in Table 1.

TABLE 1: Summary of Training Events from January 1, 2016 to December 31, 2016.

	Training Event Title	Primary Topics
1	2016 Engineers’ Workshop	E&S and Permitting
2	Basic E&S Technical Training	E&S Technical Implementation
3	Stream workshop	Overview of stream restoration projects such as stabilization/aquatic habitat improvement and riparian buffer creation
4	Driving Instruction	Mandatory Driving Review
5	Engineering Design Level I	Water Quality BMPs
6	Dirt, Gravel, Low Volume Road Environmentally Sensitive Maintenance	Program overview, implementation, and maintenance review

7	PA Abandoned Mine Reclamation Conference	AMD Treatment
8	In-House E&S Field Training (4 non-consecutive days)	E&S inspection reporting, project site visits
9	In-House DGLVR Field Training (2 non-consecutive days)	Project site visits
10	Difficult People and Situations	De-escalating difficult situations
11	River Alert Information Network (RAIN)	Safeguarding drinking water
12	In-House Dirt, Gravel, Low Volume Road Training	Project site visits
13	16 th Annual Conservation District Watershed Specialist Meeting	Watershed Specialist training and support
14	Datashed Workshop	Training on features of the Datashed online tool
15	DEP-PACD Annual 102-105 Training Meeting	Training on 25 PA Code Chapter 102 and 105 material for implementing DEP's erosion and sediment pollution control program

Resource Conservationist – Agricultural Conservation / Nutrient Management

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I coordinate the Armstrong County Agricultural Land Preservation Program, review Nutrient Management Plans, and perform fieldwork as an Agricultural Conservation Technician. I also coordinate the Armstrong County Envirothon, Annual Tree & Seedling Sale, and act as the Coordinator for the Armstrong County Animal Response Team. You can contact me by phone at 724-545-3628 or email me at jschaub@co.armstrong.pa.us

Nutrient Management

Armstrong County has 9 agricultural operations that have current Act 38 approved Nutrient Management Plans for a total of 4,000 managed acres. I am currently working with 4 farmers in Manor and Kittanning Townships to develop and/or update their Nutrient Management Plans.

A farm is required to get an Act 38 Nutrient Management Plan if they are a Concentrated Animal Operation (CAOs). CAOs are defined as operations where the animal density exceeds two animal units per acre on an annualized basis (AEU). An AU is defined as 1,000 pounds of animal live weight. However, farms with less than

8AEUs are not required under this law to have an approved Act 38 Nutrient Management Plan regardless of the animal density on the farm.

Manure Management

Every farm in Pennsylvania that land applies manure, whether they generate the manure or import it from another operation, is required to have a written Manure Manual Plan. For farms not defined as Concentrated Animal Feeding Operations (CAFOs) or Concentrated Animal Operations (CAOs), Manure Management Plans can be prepared by the farmer. Manure Management Plans do not have to be submitted for approval but must be kept on the farm and made available upon request to DEP or the local county conservation District.

Pennsylvania Chapter 91.36 addresses pollution control and prevention at agricultural operations. Chapter 91.36 refers to the DEP Manure Management Manual (MMM) as containing standards for development of a Manure Management Plan. The MMM is available to assist farmers to develop a written Manure Management Plan.

The Armstrong Conservation District will host a Manure Management Workshop on February 23 and March 21, 2017 for farmers in Armstrong County. I will continue to work individually with farmers to create Manure Management Plans and hold workshops in the County as needed.

ACT Program

I work with the NRCS staff at the Conservation District to assist producers and landowners with implementing Best Management Practices on their land. Funds from the PA Growing Greener Program, REAP, and other federal programs have provided cost-share incentives to farmers wishing to install Best Management Practices.

The Armstrong Conservation District is continuing to help farmers install best management practices (BMPs) in the Campbell Run Watershed (DEP Growing Greener Grant). Campbell Run Farms installed streambank fencing, riparian forest buffer, and a stream crossing. We are currently working on designing other agricultural BMPs for their operation. Howard Boarts will install stream crossings and streambank fencing in 2017.

The Armstrong Conservation District is working with Ron Baker to install BMPs on the Ron Baker Farm in the Roaring Run Watershed. The agricultural BMPs could include up to 1 Heavy Use Area with Manure Stacking Facility, Watering Facility, Stream Crossing, Streambank Fencing, Riparian Forest Buffer, and an Act 38 Nutrient Management Plan. A watering trough and pipeline was installed in 2016.

In 2016, the Armstrong Conservation District was awarded 1 Growing Greener Grant to install agricultural BMPs on 3 farms in the Garretts Run Watershed. The agricultural BMPs could include up to 2 Heavy Use Area with Manure Stacking Facility, 1 Manure

Storage Facility, Watering Facilities, Stream Crossings, and Streambank Fencing, and 3 Act 38 Nutrient Management Plans.

The Armstrong Conservation District applied for a Growing Greener Grant for the 2016 application round for Paul Stubrick's Farm in Kittanning Township to install agricultural BMPs such as Heavy Use Area with Manure Storage along Spra Run.

The Armstrong Conservation District helped 2 farmers fill out REAP applications in 2016/2017 for a total of **\$23,250.00** in tax credits in East Franklin and Wayne Townships. I am also currently working with a farmer in West Franklin Township. 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. Eligible applicants may receive between 50% and 75% of project cost as state tax credits for up to \$150,000 per agricultural operation.

Armstrong County Agricultural Land Preservation Program

The Armstrong County Agricultural Land Preservation (ACALP) Board consists of seven board members that reside in Armstrong County; Bill Kronen, John Bennett, Paul Stubrick, Spurgeon Shilling, Terry Bowser, Marlene Kammerdiener, and Troy Goldstrohm.

The purpose of the program is to protect viable agricultural lands by obtaining agricultural conservation easements, which prohibit the development or improvement of the land for any use other than agricultural production. This program provides up to \$2,000/acre compensation to landowners in exchange for them to voluntarily give up the right to develop their private property.

The ACALP Board and the County Commissioners purchased 5 agricultural conservation easements from the following landowners; Suzanne and Edgar Bruce (Burrell Township), Meredith Patterson (Kiskiminetas Township), Scott Morrison (South Buffalo Township), George and Marsha Kepple (Sugar Creek Township), and Richard Shirey (Redbank Township) for a total of 486 preserved acres. The ACALP Board is currently working on purchasing an agricultural conservation easement from Richard Shirey for 55 acres located in Redbank Township.

Armstrong County Animal Response Team

The Armstrong Conservation District is working with the Armstrong County Emergency Management Agency and the PA State Animal Response Team (SART) to develop a County Animal Response Team in Armstrong County. The Pennsylvania State Animal Response Team (PA SART) was created through a private-public partnership to serve as a unifying network of organizations, businesses, federal and state government agencies, and individuals that supports the prevention, preparedness, response, and recovery for emergencies affecting animals. Because disaster response needs to

happen at a local level, PASART builds County Animal Response Teams (CARTs) across the state.

The goals of the CART program are to facilitate a rapid, coordinated and effective response to any emergency affecting animals and to minimize the economic impact of emergencies affecting animals. One example of the role of a CART would be in the event of a large scale evacuation where homeowners would not be permitted to keep their pets with them at temporary shelters. CART would coordinate with local emergency managers to activate holding areas to temporarily house pets during the evacuation. CART would also be called out to help rescue livestock in an emergency such as a flood, barn fire, or a livestock trailer that overturned on the highway.

In 2008, ACART received a corral trailer, a 7 x 16 utility trailer, and a generator from PASART. In 2009, we received a \$500 purchase order from PASART to purchase emergency care and supplies for displaced pets. PASART also provided us with 30 animal cages and a large animal rescue glide. In 2010, ACART received 15 dog/cat collars, 20 dog leads, 2 Ketch-All poles, and 1,000 identification collars/bands. In 2011, ACART received \$383 from PASART to purchase emergency care and supplies for livestock. ACART also received a livestock rescue sling. In 2012, ACART purchased rope, livestock halters, swine panels, and sorting poles. All of the items that came from PASART were provided using funding from the federal Dept of Homeland Security, as awarded to them by PEMA. ACART Volunteers donated medical and office supplies in 2012. We received 2 small animal glides from PASART in 2014.

ACART was activated by 911 for the first time in 2012, once in 2013, 5 times in 2014, 6 times in 2015, and 0 times in 2016. In order to succeed, we need volunteers who are willing to donate their time and services to help animals at the local level. Participation in the program is completely voluntary and training is available through PASART. If you are interested in volunteering your time or resources, please contact me at 724-545-3628 or e-mail jjschaub@co.armstrong.pa.us. For more information on PA SART or to register to become a volunteer, please visit www.pasart.us.

The Environmental Learning Center

The Armstrong Conservation District regularly assists with programs and events held at The Crooked Creek Environmental Learning Center. The ELC is a multi-use facility originally built and operated by the United States Army Corp of Engineers. The Armstrong County Educational Trust now operates the ELC with guidance from the ELC Steering Committee, of which the Armstrong Conservation District is a member.

The ELC works closely with schools to provide environmental education. The overnight accommodations attract scouts, church groups, and clubs for weekend retreats and workshops. Groups like the Armstrong County Master Gardeners and 4H Homeschoolers use the facilities for meetings and classes. Businesses and are welcome to use the ELC as well for meetings and workforce development. The ELC is available year round to any organized groups or businesses.

For more information, visit the ELC website at www.crookedcreekelc.org or contact Program Coordinator Dennis Hawley by phone at 724-763-6316 or by email at elcaet@windstream.net.

Armstrong County Envirothon

The 11th Armstrong County Envirothon was held at the Crooked Creek Environmental Learning Center on April 27, 2016. Eleven teams of high school students from Armstrong High School, Apollo-Ridge High School, Leechburg High School, Lenape Tech School, and West Shamokin Jr. Sr. High School competed against each other in the event.

The Envirothon is designed to give students an opportunity to acquire and demonstrate their knowledge of environmental resources and their connection to each other and human activities. The students are challenged in the areas of aquatic ecology, forestry, soil / land use, wildlife, and a current environmental issue. The 2016 current environmental issue was “Invasive Species.”

Technical expertise was provided by the following individuals: Kristi Niekamp (PA Fish & Boat Commission) at the Aquatics station; Gary Fujak and Rod Burns (PA Game Commission) at the Wildlife station; Laurel Hoffman (Kittanning NRCS) at the Soils and Land Use station, Dr. Holly Travis (IUP) at the Current Issue station; and Gary Gilmore (DCNR) at the Forestry station.

Financial sponsors of the 2016 Envirothon are the Cowanshannock Creek Watershed, Crooked Creek Watershed, Bankson Engineers Inc., Roaring Run Watershed, J. H. Hickman Surveying, S&T Bank, Keystone Station, Elderton State Bank, EQT Foundation, Senate Engineering and Apex Energy, LLC. Ford City Subway donated lunches to the students and volunteers.

The West Shamokin High School winning team represented Armstrong County at the Pennsylvania State Envirothon at Susquehanna University and Camp Mount Luther on May 24 and 25, 2016.



1st Place - West Shamokin Hydrofights

Left to Right: Emily Kimmel, Zoe Eisenman-Hershman, Ethan Adamson, Sydney Dailey, Logan Grove



2nd Place - West Shamokin Planarians

Left to Right: Melody Trudgen, Emily Cornman, Bret Lundgren, Yorich Poole, Kristy Bish



3rd Place Team - Lenape Tech Warriors

Left to Right: Chance Cobbett, Jared Emminger, Abbey Laux, Nick Hawkins, Ben Shaffer

The next Armstrong County Envirothon will be held on April 26, 2017 at the Crooked Creek Environmental Learning Center. Competitors must be enrolled in grade levels 9 through 12 or equivalent home education program ranking. Teams comprising of five students are tested in the five subject areas including aquatics, forestry, soils, wildlife, and a current issue. A new current issue subject is chosen each year.

If you are a business or an individual and would like to donate to the Envirothon, please contact Jessica Schaub at 724-545-3628 or e-mail jschaub@co.armstrong.pa.us. For more information about the Envirothon, please visit www.envirothonpa.org.

Annual Fruit Tree and Seedling Sale

As a service to the area landowners, the Armstrong Conservation District conducts an annual fruit tree and seedling sale in April. The fruit trees and seedlings offered each year are dependent on the availability at the nurseries.

We sold 359 fruit trees and 4,250 seedlings for in 2016:

- Apple:** Gale® Gala, Initial, Pink Lady® Cripps Pink Variety, Royal Court
- Cherry:** Emperor Francis, Hartland™, Kristin, Stardust™
- Pear:** Potomac, AC™ Harrow Sweet
- Nectarine:** Fantasia, Flavortop
- Peach:** Desiree, Loring
- Plum:** Queen Rosa, Ruby Queen
- Seedlings:** Colorado Blue Spruce, Eastern White Pine, Norway Spruce, Sugar Maple, White Flowering Dogwood, Wild Black Cherry



The Armstrong Conservation District also provides an annual donation of evergreen seedlings to all the 3rd grade students in Armstrong County. These total over 900 seedlings distributed. We would like to thank Mr. Steve Misera and his students from Lenape Tech Natural Resources Department for all of their help to package the trees. The Annual Tree Sale and Arbor Day distribution would never be successful without their support and assistance. Thank you!

If you would like to receive an order form or if you would like to offer any purchase suggestions for next year, please contact Jessica Schaub at the Armstrong Conservation District Office at 724-545-3628.

RESOURCE CONSERVATIONIST - Erosion and Sedimentation

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My name is Casandra Wagner and I accepted the responsibility of the Armstrong Conservation District's E&S Technician in October 2016, following Chris Cramer's 42 years of dedicated service. I graduated from Saint Vincent College in 2014 with a BS in Environmental Science, receiving the Academic Excellence Award. Currently, I am working toward a MS in Park and Natural Resource Management, which I will be receiving from Slippery Rock University in May 2017. Under the guidance of the District Manager and staff, I am promoting the District's Erosion & Sediment Pollution Control Program.

Position Responsibilities: As the E&S Tech, my time is allocated to administrative plan review, site inspections, complaint investigation, education and outreach programs for the regulated community, pre-application/pre-construction meetings, field investigation, attendance at training events/District events, and finally, reporting and records keeping. Progress: During my time at the District (Oct-Dec 2016), I have personally approved 4 E&S Plans and reviewed 1 NPDES Permit.

Summary: I will be learning a great deal about the E&SPC Program over the coming year of 2017. I am dedicated to serving the Armstrong Conservation District and Armstrong County to the best of my ability.

Erosion & Sediment Pollution Control Program (E&SPC)

The Armstrong Conservation District (ACD) administers the Pennsylvania Clean Streams Law, Chapter 102, the Erosion and Sediment Pollution Control (E&SPC) Program through a signed delegation agreement with the Department of Environmental Protection, Bureau of Water Quality Protection. The ACD has been a Level III District since 1988. Level III Districts review E&S plans, perform field inspections on earth disturbance sites, investigate complaints, and take enforcement action under the PA Clean Streams Law.

Under this program, all earth disturbance activities must develop, implement, and maintain a plan to minimize accelerated erosion and sediment pollution. Erosion and sediment control project plan review fees are evaluated every 3 years to determine if an increase is necessary for the plan reviews. An updated list of fees can be found on the District website under Land Development: Fee Schedule Application.

AMERICORPS MEMBERS

Katie Good - AmeriCorps / krgood@co.armstrong.pa.us

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My name is Katie Good and I'm serving my third term as a Pennsylvania Mountain Service Corps (PMSC), (a local initiative of AmeriCorps) member at the Armstrong Conservation District. I started out as a 300-hour intern in December of 2014 and I am now currently serving my second fulltime internship that started August of 2016. My service consists of assisting the conservation District staff with their job duties and community service work as well. I work closely with the Watershed Specialist, Dirt & Gravel Road Specialist, and our Agricultural Technician/Nutrient Management Specialist

out in the field and in the office. My work ranges from helping in the office to taking samples in the stream.

My name is Larissa Rice and I'm in my second term as a Pennsylvania Mountain Service Corps member at Armstrong Conservation District. I am currently a full time 1700 hours' member and was previously a part time 900-hour member.

This National Service Movement engages thousands of Americans of all ages and backgrounds in a domestic Peace Corps. Members serve their communities in the areas of education, environment, public safety, and human needs and receive a living stipend, educational monies, and a wealth of experience. Located in Southwest and South Central Pennsylvania, PMSC provides service opportunities through nonprofit or government organizations across a 16,000 square mile region.

Armstrong Conservation District Support

This year, 2016, the AmeriCorps members oversaw a food drive and collected monetary donations during our Annual Awards Banquet. We collected boxes of perishable items and raised money which all benefits Armstrong Community Action Food Bank. We also volunteered our time for the Conservation District by manning our table at the Dayton Fair and got noticed by the community while talking about our program and handing out flyers. We also put a presentation together of some of the projects the Conservation Districts have done to be shown during the Spring Legislative Breakfast at the Belmont Complex.

Water Quality Monitoring

The Armstrong Conservation District's Watershed Specialist program has a continuous water monitoring devices called data loggers. These loggers give us information of the waters conductivity, level, and temperature. We also have a pH reader as well that tells us the pH, conductivity, temp, and total dissolved solids. The benefits of using both is the ability of being accurate with our monitoring systems. Our water sampling consist of Alkalinity and Chloride to determine if the water is acidic. This sampling determines whether a stream is healthy enough to support aquatic life.

Watershed Activities

Along with the data logger program we also provide assistance our Watershed Specialist, Julie Zeyzus on tours and help with environmental permits and photographing progress on the construction projects. We performed PNDI Environmental Reviews for many of these projects and assisted writing contracts for each I have been able to assist with. We participated in field trips to the RING streambank stabilization site and learned about the structures put into the stream. We have also participated in the Trout in the Classroom field trips and trout releases.

Fall Conservation Tour 2016

This year we were part of the Annual Conservation District Fall Tour. The tour consists of all Conservation District employees, board members, county elected officials, and partnering organizations to show the projects done and District involvement with. Sites we visited include Tub Mill Run, Rosston Circle, Scout Run Road, Baker Farm, and Crooked Creek. We gave a brief presentation on the ACD W.A.T.E.R. GeoTrail at the Rosston site, took photographs throughout the day, and assisted anywhere we were needed.

Agricultural Activities

We have spent most of our time out in the field with our Nutrient Management Specialist assisting with her projects. We've helped Jessica Schaub and John Bohonak with surveying for construction of the Baker project and have also taken many pictures. We assisted with the 2016 Armstrong County Envirothon competition and designed t-shirts for the 2017 Envirothon. We also assisted Ms. Schaub with the trees and seedling distribution of the tree sale and oversaw the packing of tree seedlings for the 3rd graders of Armstrong County for Arbor Day. We have also provided support and assistance in multiple workshops including Manure Management, Soil Health, CREP and other programs. We have also developed PowerPoints for ACART trainings.

Erosion and Sediment Activities

Due to the vacancy of the Erosion & Sediment program we have not given any assistance in this area of our service.

Dirt, Gravel, and Low Volume Roads Program

A major component of the Conservation District is DGLVR program. This program consists of environmentally sensitive maintenance road maintenance practices and funding for eligible municipalities of Armstrong County. This program assists in preventing stream pollution caused by runoff and sediment from the municipality's public roads. The Conservation District receives funding each year to award to eligible municipalities to perform this specific road maintenance. This funding covers the cost of mostly materials because the labor and equipment is usually donated by the municipalities.

Crooked Creek Environmental Learning Center

A significant portion of our environmental education efforts are focused at the Crooked Creek Environmental Learning Center. We educate children through weekend events, field trips, summer camps, and geocaching. High school students who have environmental knowledge can compete in the envirothon hosted every spring by the Conservation District. The winning high school team gets to move on to compete with other county winning teams in the state. We assist in the educational field trips by teaching the geocaching session and taking students on the trail to find some caches

placed specifically for field trips. The ELC educates students K-12 and most of our times spent teaching was with 4th and 9th grade students from Armstrong School District. We also attended monthly Crooked Creek steering committee meetings and volunteered a work day where we cleaned up the learning center and fix anything in need of repair.

2016 Canoe Sojourn

The Environmental Learning Center and the Armstrong Center for Community Learning work together to host a 4-day canoe/kayak event. This event took place on Mahoning creek, Crooked Creek, and the Kiski River. Along with the event will be educational programs and tours of Armstrong County. This was the 19th annual and still going strong. After the successful completion of this sojourn, we soon went into planning for the 2017 AKC Rivers Sojourn to be held in May, 2017.

Training Events

Since we assist every District staff member, we can attend many events and trainings offered to the Conservation District staff. We attended the Watershed Specialist meeting in October with Ms. Zeyzus and the Chapter 102/105 training in State College with all the staff.

Martin Luther King Jr. Day Food Drive

Part of an AmeriCorps duty is to give back to the community and that's where our service is needed. In order to celebrate Martin Luther King Jr. Day AmeriCorps held a Food Drive. This is a major holiday the Cooperation for National Service likes to emphasis service. The food drive consisted of four volunteers (two current AmeriCorps members and two former Summer Crew members). The food drive was located at the Kittanning Shop N' Save and the donations benefit to the Armstrong County Community Action Food Bank.

ACD W.A.T.E.R. GeoTrail

We successfully applied for a grant to fund a series of Geocaches that are placed on sites where we have conservation projects in place. We have designed every aspect of the GeoTrail, including promotional materials, brochures, webpage, information booklets in each cache with a brief history of the work done on the area, map used to keep track of your finds on the trail, the special coin you may receive for competing the map. The GeoTrail highlights conservation projects within Armstrong County.

Since the trail launched on December 2, more than 25 geocachers have visited our sites and logged those caches and learned about the conservation work done on streams, agricultural sites, dirt, gravel, and low volume roads best management practices. Several of those geocachers have completed the entire map and received the coin for doing so. Not only are local community members finding our caches, we've also

had catchers from other counties in Pennsylvania, Ohio, and West Virginia travel to Armstrong County to take part in the trail.

Summer AmeriCorps

This summer the Armstrong Conservation District brought on three 300 hour AmeriCorps interns to work on the Rails to Trails in Armstrong and Clarion County. Trail work consisted of placing new wooden post and concrete mile markers, painting gates and bollards. Along with those accomplishments the crew also put in a bench and placed fabric and stone down to complete part of the trail in East Brady. Under the direction of the Watershed Specialist, the summer Corps Members were able to repair and strengthen a number of fish habitat enhancement structures in the Buffalo Creek Watershed.