

2014 Growth and Opportunity for our District! The Annual Report of District Manager, David R. Rupert.....

The Armstrong Conservation District changed once again to cope with the fast changing times. The completion of substantial construction on our abandoned mine drainage project in partnership with the Clarion conservation District, and numerous unanticipated situations and opportunities required the District to update our Action Plan. Our “2014 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 met.

In our continuing effort to build the District Capacity, several 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 expand the Cooperator Assistance and Outreach Programs through updates to our website, informational brochures and field days, and the use of our Dayton Fair and crops night displays. The District continued to participate in the Americorps program and welcomed new corpmember- Alex Veto from Somerset County and said good bye to our previous member-Chelsea Walker who left for an employment opportunity with the Westmoreland Conservation District as a Watershed Technician. 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 also partnered with Municipal entities to submit Growing Greener Grants and grants to the Commonwealth Finance Agency for consideration. The District continued to be represented with delegates appointed to the Pennsylvania Association of Conservation Districts, Western Pennsylvania Coalition for Abandoned Mine Reclamation, Penn’s Corner Resource Conservation & Development Council, 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. The District Dirt and Gravel Road Specialist closed out work with our Municipal partners on worksites sites affecting their municipal roads. This year also marked the major expansion of the Dirt and gravel Road Program with a significant increase in funding and the rolling out of a new program to address non-point source pollution issues on Low Volume Roads. Specific information regarding the Dirt, Gravel, and Low Volume roads Program may be found under the DGLVR Specialist section of the report. District Staff also worked to expand participation by local elected municipal officials in the creation and maintenance of Agricultural Security Areas (ASA’s) within the County. Americorps and District Staff participated in continuing to update the theme layers for public sewage and water and maintained a specific layer for Agricultural Security Area parcels. This theme layer was then given to the County for use with their GIS based tax map parcel system.

In the field of Resource Conservation, the District completed most Erosion and Sediment Pollution Control Plan reviews and conducted most of the required site inspections of active earthmoving sites within timeframes established by the Commonwealth. Specific accomplishments of our Erosion and Sediment Control Technician may be found in her specific section of the annual report. District staff participated in Southwest Project Grass and provided technical and administrative assistance to the County Agricultural Lands Preservation Board as they progressed with the purchase of the fifth Agricultural Conservation Easement on the Rich Shirey farm in Redbank Township. The Farmland Preservation Coordinator will continue to work towards the purchase of developmental rights on this and other farms offered through the program as funding permits. You will find the specific accomplishments of our Agricultural Technician under her portion of the Annual Report. Work proceeded on several Watershed restoration Projects and those specific accomplishments may be found under the Watershed Specialist section of our Annual Report.

In 2014, the District continued its Outreach and Education efforts. Those efforts included the junior Naturalist and adventure Camp, the continued growth of the County Envirothon to include additional schools, the Arbor Day Program, the Fruit Tree and Seedling sale, the Annual Combined Awards Banquet in conjunction with the Armstrong County Farm Bureau, complete revamping of 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. We will continue to offer technical assistance to our County Commissioners and ATV owners and riders to provide safe, environmentally friendly off road places to ride by participating in efforts being undertaken by the County Commissioners for our area ATV riders.

For these and the many other efforts of the District Staff, I am proud of what the Armstrong District has accomplished in 2014 and look forward to implementation of our 2015 Action Plan. 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 2015 doesn't blow by as fast as it seemed to in 2014. I know that approaching 35 years as your Conservation District Manager it seems that time goes by more quickly.

Should you have any questions about our annual report, or any of the District Programs, please stop by our office, call me at 724.548.3425 or email me at drupert@co.armstrong.pa.us

Erosion & Sedimentation Technician I

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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. Effective November 19, 2010, major changes were made to the Chapter 102 regulations that include: update agricultural planning and implementation requirements, update E&S control requirements, incorporate the federal Clean Water Act "Phase II" National Pollutant Discharge Elimination System (NPDES) permit requirements for stormwater discharges associated with construction activities, update and amend the permit fee requirements, codify Post Construction Stormwater Management (PCSM) requirements, including long-term operation and maintenance requirements of PCSM Best Management Practices (BMPs), include specific anti-degradation implementation provisions to satisfy requirements under 25 Pa. Code Chapter 93; and establish riparian buffer and riparian forest buffer provisions.

New permit review procedures went into effect on December 14, 2012. With these new proposed changes to the E&SPC Program and the NPDES Permitting System, the Armstrong Conservation District (ACD) had another busy year for 2014.

Some of the activities for the past year have been:

1. E&SPC plans were received for 203 new and revised plans for district review, public reviews, environmental reviews, prime farmland reviews, DEP issued permits, and informational purposes.
2. Reviews were completed on 41 E&S plans received in this office.
3. E&S plan reviews were conducted on a total of 697 acres with a total of 175 acres of disturbed earth.
4. Assistance was given in the review of 7 prime farmland reviews
5. Environmental reviews were completed on 4 proposed projects.
6. NPDES permits were received, processed, and reviewed for 10 new General and 1 Individual Permits.
7. New district cooperator agreements were received for 2 landowners.
8. Received and investigated 13 complaints relating to erosion and sedimentation.
9. Technical assistance was given to 358 persons during the year.

10. Conducted 65 inspections on earthmoving sites to make sure plans were properly implemented, controls were installed, and sequences were being followed according to submitted and approved plans.
11. Terminated 5 permitted projects that were completed during the year.
12. A Legislative Breakfast Meeting is held annually and attended by State Senators, State Representatives, County Commissioners, District Directors, Associate Directors, Cooperating Agencies, Pa. Farmers and District Staff to inform the Legislators and public of the goals and accomplishments of the Armstrong Conservation District. This was held March 21, 2014 with approximately 30 persons attending.

During 2014, review fees received totaled \$8,925; NPDES permit fees totaled \$4,000; and DEP disturbed review fees totaled \$3,300. There was 1 Civil Enforcement action taken in 2014 with penalty fees of \$300. Two enforcement conferences were held during 2014 on 2 earthmoving projects within the county that did not properly stabilize before leaving the sites.

Erosion and sediment control project plan review fees are evaluated every 3 years to determine if an increase is necessary for the plan reviews. The Armstrong Conservation District increased the review fee per acre from \$150 (effective 1/1/2011) to \$175 per acre that became effective July 1, 2014. All other fees remained the same.

In November 2010, the State revised the NPDES permitting system for construction activities. Any construction activity that is greater than one (1) acre now needs a permit for earthmoving activities. Any earthmoving project that will result in more than one (1) acre of earth disturbance will require an NPDES permit from the ACD or the Commonwealth in addition to an E&SPC plan. Any earth disturbance that disturbs 5,000 square feet to less than 1 acre will need an E&SPC plan prepared and implemented, but will not need to be submitted to the ACD for review and approval unless it is a municipal or county requirement, is needed as part of a DEP general permit, or it is located within a High Quality (HQ) or Exceptional Value (EV) Watershed. A project disturbing 0-5000 square feet does not require a written plan unless it is a municipal or county requirement, is needed as part of a DEP general permit, or it is located within a High Quality (HQ) or Exceptional Value (EV) Watershed.

Training and update events are held yearly in State College for District personnel on these changes. Webinars are also conducted throughout the year on the changes and updates. Workshops are held on a regular basis for contractors, earthmovers, consulting engineers, surveyors, and others who prepare E&S plans and NPDES permits to keep them updated on changes to the regulations and newest developments on the PA Stormwater Manual and Post Construction Stormwater Management (PCSM). A Contractors Workshop was held on Thursday, March 13, 2014 at the Belmont Complex in West Kittanning with 17 contractors in attendance. Information on small and large earthmoving projects, co-permittees, preconstruction meetings, understanding your plan before earthmoving begins, adding/deleting plan items, installing E&S measures, silt sock, waste areas, visual inspections, and notice of terminations were presented by District and DEP personnel. A presentation was also given by OSHA.

An informational booklet entitled "A Guide to Developing an Effective Erosion and Sediment Pollution Control Plan for Small Projects" was prepared and handed out during the Contractors Workshop. The purpose of this booklet is to give guidance in developing an Erosion and Sediment Pollution Control Plan for small grading projects that do not necessary need to have a permit obtained for the earthmoving work as long as it meets certain criteria.

Due to the many changes and updates in the NPDES permitting system and the reduced size of disturbed acreage that requires a permit, the workload of the District Technician has increased greatly in the past several years. The following are some of the larger and many projects during the 2014 construction season and planning stages.

NORTHPOINTE AT SLATELICK INDUSTRIAL PARK

This project began in 2000 on 910 acres adjacent to Exit 18 of the Allegheny Valley Expressway. This has been an ongoing project with permit renewals and new permits issued as construction continued and new buildings were constructed. Presently, there are 10 buildings located in the park and a hiking trail. The permit was renewed to allow the final grading of the main parcels of 61 acres of disturbance in Phase I for future development and an additional new permit was secured for a Phase 2 with 19 additional acres planned for timber removal, grading, and leveling lots for future developments. All grading has been completed and this portion of the project is expected to be terminated in 2015.

NI SOURCE MIDSTREAM SERVICES, LLC – BIG PINE PIPELINE PROJECT

This 208 acre project for a pipeline/transmission lift and lay replacement line was located in Burrell, Gilpin, Kiskiminetas, Parks, South Bend, South Buffalo Townships, and Freeport Borough. The total project consisted of installation of approximately 60 miles of 20” and 24” natural gas pipelines that ran through Butler, Armstrong, Indiana, and Westmoreland Counties. Armstrong had approximately 23 miles of pipe and directional bores under the Allegheny River and most streams and major highways in the county. Construction began in 2012 and completed in 2013. Final inspection and permit termination is scheduled in 2015.

ARMSTRONG SCHOOL DISTRICT – ARMSTRONG JR. SR. HIGH SCHOOL

This 68 acre project along Buffington Drive in Manor Township began in 2013 for the construction of a new junior/senior high school with access to the facility off SR 422. The project includes the widening and extending Buffington Drive, construction of the high school, parking areas, utility installation, stormwater facilities, retaining walls and landscaping. The project is scheduled for completion in 2015 and ready for the 2015-16 school year.

MAHONING CREEK HYDROELECTRIC COMPANY, LLC

This project began in 2013 with Phase I of the project consisting of 10.4 acres for the construction of a new powerhouse 1,200 feet downstream from the existing US Army Corps of Engineers Mahoning Creek Dam to accommodate a turbine generating system with a gross head which varies from 75 to 96 ft. and an installed capacity of 6.0 MS. A new intake structure and penstocks were installed at the Dam to supply the powerhouse for a total disturbed area of 4.1 acres. A Ribbon Cutting Ceremony was presented by Enduring Hydro and the US Army Corps of Engineers on September 24, 2014 for the Powerhouse facility. Final earthmoving and stabilization is being completed in 2014 and termination is anticipated in 2015. Phase II of 8.84 acres is complete with two new access roads, widening of the transmission corridor, and upgrades of the power poles for the existing 12.5 kV distribution line extending 1.12 miles north from Belknap switching facility with total disturbed acreage of 2.31 acres.

McVILLE AIRPORT

The construction of a new 2,800 foot by 60 foot asphalt runway and a small stub taxiway 100 feet off the edge of the runway began in 2013. This was previously a public airport with turf runways prior to the recent reclaimed strip mining on the site. Total project area of 166 acres with 47 acres of disturbed area contained drainage and stormwater controls. Electric lighting was installed along the runway to enable night landings and a wind cone area has also been added. This project was completed in 2014 and will be terminated in 2015.

LENAPE TECHNICAL SCHOOL – ADULT EDUCATION CENTER

Construction began in 2013 for a new 80' by 135' Adult Education Center school building, driveway and parking areas. The project is located on a 1.62 acre parcel located at the intersection of Chaplin Avenue and Armstrong Street in Manor Township. The project includes a stormwater management pond and detention pond for increased storm water and was completed in 2014. Final termination to be done in 2015.

PENNSYLVANIA AMERICAN WATER

Construction began in 2013 at the Kittanning Water Treatment Plant on a water storage facility, a small on-site chemical storage building, gravel access drive and parking area on the 6 acre site in East Kittanning. Earth disturbance will be 2.37 acres with anticipated completion in 2015.

FIRST ENERGY – TrAILCo

This project began in 2014 and consisted of constructing approximately 1.6 miles of 345 kV overhead electric transmission line originating at Homer City to approximately 725 feet southeast of its crossing of Spring Run Road in Washington Township. This route traveled in a northeast direction and parallel to the existing Armstrong-Kittanning 138 kV transmission line for approximately 0.8 miles to the Armstrong Substation at Reesedale. The project had 10 structures installed with an average span of 850 feet between structures on a new 100 foot wide Right of Way and overlapping 30 feet of the existing West Penn ROW. The project was completed during the 2014 construction season and terminated in 2014.

LUTHERAN SR. LIFE CENTER

Construction began on the Armstrong County Memorial Hospital 7 acre site in East Franklin Township in 2014 for the construction of a new senior center building, parking lot, sidewalks, and porches on 1.7 disturbed acres. Construction was completed in the Fall of 2014 and final inspection and termination will be done in 2015.

KITTANNING STATE POLICE BARRACKS

Construction began in 2014 for the new Kittanning State Police Barracks located in the West Hills Industrial Park, East Franklin Township for a 12,055 square foot building, access driveways, parking areas, and stormwater facilities. Total project areas of less than 7 acres will disturb a total of 5 acres with anticipated completion in 2015.

COUNTY WATER AND SEWER PROJECTS

RAYBURN TOWNSHIP SANITARY SEWER COLLECTION & SEWAGE TREATMENT PLANT

This 30.4 acre site in Rayburn Township began in the Fall, 2012 with the installation of approximately 42,427 feet of 8" and 10" sanitary sewer line along SR 85 in the Armsdale and Sunnyside areas that will flow into an existing pump station built in the Phase II of the project. Renovations and additions are being done to the existing Armstrong Sewage Treatment Plant and a rain garden will be constructed near the sewage treatment plant at the completion of the project. The sanitary line was completed in 2013 with final inspection and termination in 2014. The pump station was completed in 2014 and final inspections and permit termination is anticipated in 2015.

WEST HILLS AREA WATER POLLUTION CONTROL AUTHORITY

This sanitary sewerage system project began in 2013 with the installation of sewer lines, force mains, and one pump station in East Franklin Township and North Buffalo Township. There has been approximately 56,983 L.F. of sewer lines installed in 3 separate areas: Furnace Run,

Walkchalk and Center Hill. A total of 43 stream crossings and 8 wetland crossings were proposed on this 463 acre project that disturbed 13 acres. Project was completed in 2014 and final inspections and permit termination to be done in 2015.

PA. DEPARTMENT OF TRANSPORTATION PROJECTS

FREEMPORT BRIDGE – SR 356/128

This 4 county project in Armstrong, Allegheny, Butler, and Westmoreland Counties began in August 2010 and was completed in 2014 with total project of 43.8 acres with 23.9 acres of disturbed earth with Armstrong County having approximately 9 disturbed acres. The project consisted of rehabilitation of the existing bridge over the Allegheny River and providing northbound and southbound approach structures. A new roadway design was developed to simplify and improve traffic safety on the northern structure approach in Butler and Armstrong Counties, reduce the number of intersections and weave areas, eliminate all skewed intersections, and reduce travel times. The old Laneville bridge over Buffalo Creek was demolished in 2013 and this project was scheduled for final inspections and permit termination in 2014.

SR28; SEC. 164 – SLABTOWN BRIDGE/BAUM CURVE

This 25 acre phased realignment project began in 2013 and disturbed 19 acres and four waste areas in Boggs Township. The project involved the reconstruction and realignment of SR 28, Section 164 corridor, replacement of the existing Slabtown Bridge with a two-span multi-girder structure, replacement of existing culverts, and alignment of various township roads to connect with the new facility. The Baum Pump Station curve culvert replaced the arch culvert that carried PA 28 over the tributary to the north fork of Pine Creek near Baum Curve and resulted in a stream realignment and an open channel. The project was completed in 2014 and final inspection and termination to be done in 2015.

RT. 422 THEATER ROAD ALIGNMENT

This project for a roadway realignment of SR 422 beginning at Lasher Road (T-850) in Manor Township and ending near the State Stockpile Road in Kittanning Township began in 2013. The project disturbed 35.1 acres and two waste areas that included the realignment of Rt. 422, the Theater Road, Graham Road, and Rupp Church Road intersections and the permanent addition of a center turning lane beginning east of Lasher Road and extending to just beyond Rupp Church Road (T-570). There also was extended site grading, drainage upgrades, and sight distance improvements with the scheduled completion in 2014. Final inspection and termination to be completed in 2015.

UPCOMING PROJECTS

SHEETZ

A new Sheetz convenience store and service station facility will be constructed at the intersection of SR 66 and Pleasantview Drive in Manor Township. The project will include a service station, convenience store, and parking area on a 2.11 acre site. The site will also have a subsurface stormwater detention system and a rain garden/subsurface infiltration bed to handle any changes in stormwater. Demolition of the existing Armstrong School District Administration Building was done in 2014. Anticipated starting date of the new Sheetz Store is 2015.

ARC MANOR

ARC Manor is proposing to construct a new 20,235 square foot two-story medical facility near the Armstrong Memorial Hospital at the southeast corner of Nolte Road and South Park Drive. It

will consist of the building, courtyard, parking areas, access roadways, storm sewer system, landscaping, and a detention basin with forebay on 4 acres. Permit was issued in 2013 with no construction start date established.

LEECHBURG BOROUGH SANITARY SEWER SEPARATION PROJECT

This 250 acre project that will disturb 18 acres is scheduled to begin in 2015 in Leechburg Borough. The project proposes to install a separate sanitary system of approximately 35,855 linear feet of new sanitary sewer pipe adjacent to the existing system within the improved areas of the borough.

CWM BUILDING & SITE DEVELOPMENT

Construction of a new facility for CWM Environmental is scheduled to begin in 2015 on Lot 29 within the West Hills Industrial Park, East Franklin Township. The proposed project will be located on 5.2 acres that will disturb 3.9 acres for a new office and laboratory area, parking lots, loading and unloading areas, and driveways.

ECHO BRIDGE REPLACEMENT

This project located in Wayne Township proposes to replace the existing steel through-truss structure over the South Fork of Pine Creek with a single-span, 4 beam prestressed concrete superstructure with integral abutments on 2.33 acres of disturbance. The roadway approaches to the bridge structure will be to permit a higher design speed and the total project length is 1,050 feet. The project also includes modification of the intersection with T-601, replacement of several drainage pipes, and installation of drainage channels. The railroad crossing adjacent to the bridge site will be replaced concurrent with the roadway and bridge construction. This project is scheduled to begin in 2015.

SR 2029 - LOGANSPORT BRIDGE REPLACEMENT

This 5.78 acre project is located in Bethel Township and will disturb 5.04 acres with the replacement of the bridge which carries SR 2029 (Logansport Road) over Taylor Run. The project will include replacing the existing rolled steel beam bridge with a precast concrete arch culvert. The roadway alignment will be altered to meet current horizontal and vertical alignment design criteria with full reconstruction of the roadway within the project limits. Total length of the project will be 0.32 miles from the intersections of SR 0066 to SR 2030 (Kelly Station Road). The project is scheduled to begin in the 2015 construction season.

PEOPLES NATURAL GAS – P-5717 PIPELINE REPLACEMENT PROJECT

This project located in Manor Township proposes to disturb 2.3 acres with the replacement of approximately 1,220 feet of pipeline with 8” plastic line within an existing corridor. The project will cross 2 unnamed tributaries to the Allegheny River and 1 wetland which will be done by horizontal directional drill to minimize disturbance. This project is scheduled to begin and end during the 2015 construction season.

ONGOING PROGRAMS

SOIL STEWARDSHIP PROGRAM

Since the early 1960s, through the Soil Stewardship Program, the ACD has offered educational materials to the county churches, schools, libraries, and interested groups to aid them in celebrating the weeklong event in soil and water conservation. In 2014, the ACD filled requests for 8 churches and 15 schools and/or classrooms. These church requests were for 460 bulletin covers, 605 bulletin inserts, 155 litanies, 80 children’s activity sheets, and 97 bookmarks. School requests were for 187 booklets for K-1, 425 for grades 2-3, 603 for grades 4-5, 11 for

grades 6-8; 885 bookmarks, and 37 Educator Booklets. This program will be offered again for 2015.

TOPOGRAPHIC MAP SALES

The Armstrong Conservation District has been a dealer for topographic quadrangle maps since 1981. The District currently stocks all Armstrong County 7.5 minute quadrangle maps at a cost of \$6.00 each and county topographic maps at \$8.00 each. Other maps can be ordered upon request.

Watershed Specialist

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The year 2014 was among the busiest of my tenure with the Armstrong Conservation District.

Project 1 Our initial project was the stabilization and fish habitat improvement of a 300' reach of Carnahan Run in Parks Township. The stream was eroding the embankment along the northwestern end of Lee Lake. A series of 4 rock and log cross vanes and j-hook vanes were installed by Paul Atkinson and Son Inc to stabilize the situation and provide some nice holding water for fish. The project was made difficult because the location is over ½ mile from a public road.

Project 2 The South Branch of Plumcreek Grant was closed out but not before some leftover funds were used to stabilize a bank erosion problem near the mouth of Dutch Run. A cross vane and parallel root wad were installed. Construction was carried out by T Peters Construction.

Project 3 The watershed specialist assisted in the hosting of approximately 700 students at the Crooked Creek Environmental Learning Center. All 4th and 8th grade classes from the Armstrong School District were given instruction in tree identification, wildflowers, plants, and wildlife during a 50 minute hike along the hillside facing Crooked Creek. Thirteen days were spent by CDWS Beale in this effort.

Project 4 CDWS Beale assisted the Lenape Tech Environmental Science Class in their efforts at the local and state Envirothon competition.

Project 5 CDWS Beale assisted Lenape Tech Environmental Science Class and the Divine Redeemer Classes with their Trout in the Classroom release day programs. Classroom instruction was provided to the West Shamokin in school their Trout in the Classroom Program.

Project 6 ARRI replanting at Roaring Run. The 12-acre ARRI site planted by volunteers in 2013 was replanted using a contractor from Michigan.

Project 7 In the summer of 2014 a new Growing Greener Grant round was open and the Armstrong Conservation District prepared grant applications for an AMD discharge on Huling Run in Washington Township; 2 erosion sites requiring culvert replacements on Scout Run Road in Manor Township and a farm BMP project on Rattling Run tributary to Roaring Run in Kiski Township.

- Project 8** Armstrong Conservation District hosted a National Civilian Community Corps Team (NCCC Raven 4). This was the third consecutive year that Armstrong hosted such a team which consists of 18 – 24 year olds from across the USA. They performed work for the Cowanshannock Creek Watershed Association, Crooked Creek Watershed Associations, Arrowhead Trout Unlimited and the Allegheny Valley Land Trust under the supervision of CDWS Beale.
- Project 9** CDWS Beale obtained a grant from the Western Pennsylvania Coalition for Abandoned Mine Reclamation to do a small project to control sediment from an old mine refuse pile along the Armstrong Trail near Rimer. The grant was through the ARRIPPA Pennsylvania Foundation.
- Project 10** Cravenor Hollow Bridge – The Cowanshannock Creek Watershed Association obtained a grant from GenON to do a stream stabilization / fish habitat project at the Cravenor Hollow Bridge – a private bridge serving eight residences in Valley Township. A rock cross vane was installed to direct the current of Cowanshannock Creek into the center of the channel and away for the bridge abutments.
- Project 11** Burns Residence – This is a home located in North Buffalo Township on an unnamed tributary to Glade Run which was seriously damaged by the flood of August 28, 2013. The Armstrong Conservation District designed a restoration project at the site involving the placement of R8 limestone riprap, R4 riprap and the construction of a rock vane. Funding was provided by the Burns Family. Construction was carried out by Paul Atkinson and Son Inc.
- Project 12** Brush Creek - Beaver County – This project involved the contracting of the Armstrong Conservation District by Beaver County Conservation District to design and supervise construction of 15 rock and log vanes and the installation of 9 root wad structures at Brush Creek Park and Green Valley Park on Brush Creek. The Brush Creek Park site was completed in December 2014 and involved 6 vanes and 3 root wad structures.

In addition to the above described projects the watershed specialist continued to monitor and interpret data from our data loggers; led a Winter Wonderland Hike at the Crooked Creek Environmental Learning Center for the Crooked Creek Watershed Association; served as the ACD representative to the ELC, WPCAMR, and Penns Corner RC & D. He also participated in the spring legislative breakfast and the fall tour of projects for public officials. The CDWS also presented a talk to the ELC canoe sojourn at the Canfield Holmes Sanctuary on Cowanshannock Creek. The CDWS conducted a tour of various streambank stabilization projects for watershed specialists from Greene County and Indiana County. Two additional tours were conducted for two representatives from the Southwest Planning Commission with emphasis on flood sites in Armstrong County. The flood site tour visited approximately 50 sites in the County. The CDWS attended the annual CDWS training at State College in October.

Agricultural Conservation Technician / Nutrient Management Specialist

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 jjschaub@co.armstrong.pa.us

Nutrient Management

Armstrong County has 8 agricultural operations that have current Act 38 approved Nutrient Management Plans for a total of 2,500 managed acres. I am currently working with 6 farmers in West Franklin, Mahoning, Manor, Kiskiminetas, Kittanning, and Redbank 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 March 26 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.

In 2014, The Armstrong Conservation District completed the installation of agricultural best management practices on the Carnahan Run Ag BMP Grant (Phase I) at the Billy Porter Farm. Billy Porter installed over 189' of access road, Heavy use area, gutters/drip line drain, roof, and waste storage facility. Billy Porter also volunteered to let us showcase their farm at our 2014 Fall Conservation Tour.

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 his Heavy Use Area (HUA) with manure storage, stream crossings, and streambank fencing this year.

In 2015, the Armstrong Conservation District was awarded 1 Growing Greener Grants 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. We received **\$88,555** in funding for this project through the DEP Growing Greener Grant.

The Armstrong Conservation District would like to apply for a Growing Greener Grant for the 2015 application round for the Garrett's Run Watershed. We are currently working with 2 farmers in the watershed to install agricultural BMPs.

The Armstrong Conservation District helped 4 farmers fill out REAP applications in 2014/2015 for a total of **\$120,125.00** in tax credits in Kittanning, Kiskiminetas, Parks, and Redbank Townships. I also helped 2 farmers in West Franklin and Mahoning Townships complete their REAP project completion paperwork. 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, Ed Dilick, 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 4 agricultural conservation easements from the following landowners; Suzanne and Edgar Bruce (Burrell Township), Meredith Patterson (Kiskiminetas Township), Scott Morrison (South Buffalo Township), and George and Marsha Kepple (Sugar creek Township) for a total of 370 preserved acres. The ACALP Board is currently working on purchasing an agricultural conservation easement from Richard Shirey for 105 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, and 5 times in 2014. 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 9th Armstrong County Envirothon was held at the Crooked Creek Environmental Learning Center on April 30, 2014. Twelve teams of high school students from Apollo-Ridge High School, Ford City High School, Kittanning Senior 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 2014 current environmental issue was “Sustainable Agriculture.”

Technical expertise was provided by the following individuals: Kristi Niekamp (PA Fish & Boat Commission) at the Aquatics station; Gary Toward 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 2014 Envirothon are the Armstrong County Farm Bureau, Keystone Generating Station, CWM Environmental, Cowanshannock Creek Watershed, Crooked Creek Watershed, Arrowhead Chapter of Trout Unlimited, Senate Engineering, Bankson Engineers Inc., Roaring Run Watershed, and J. H. Hickman Surveying. Ford City Subway donated lunches to the students and volunteers.

The Lenape Tech winning team represented Armstrong County at the Pennsylvania State Envirothon at Susquehanna University and PPL Montour Preserve on May 20th- 21st, 2014.



1st Place- Lenape Tech (“Green Machine”).



2nd Place- Kittanning Sr. High School (“Cytokinetics”)



3rd Place Team- West Shamokin Jr. Sr. High School (“Wolves 2”)

The next Armstrong County Envirothon will be held on April 29, 2015 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. This 2015 current issue is “Urban and Community Forestry.”

Any interested teachers may contact me at 724-545-3628 or e-mail jjschaub@co.armstrong.pa.us. For more information about the Envirothon, please visit www.envirothonpa.org.

Annual Fruit Tree and Seedling Sale

In 2014, over 300 fruit trees varying from apple, pear, cherry, nectarine, peach, and plum were sold. In addition, approximately 3,000 evergreen seedlings were sold. The species sold included American Elderberry, Black Gum, Colorado Blue Spruce, Concolor Fir, Eastern White Pine, Heartnut, Norway Spruce, Osage Orange, and White Flowering Dogwood. The Armstrong Conservation District also provided their annual donation of evergreen seedlings to all the 3rd grade students in Armstrong County. These totaled over 925 seedlings distributed. I would like to thank Mr. Steve Misera and his students from Lenape Tech Natural Resources Department for all of their help. The Annual Tree Sale and Arbor Day distribution would never be successful without their support and assistance. Thank you!

Dirt, Gravel & Low Volume Roads Specialist

Gregg Smith - agsmith@co.armstrong.pa.us

724-545-610

The Dirt Gravel & Low Volume Roads Specialist is responsible for administering the Dirt, Gravel & Low Volume Roads Program (DGLVRP) within the County. After serving the District as an AmeriCorps volunteer, I accepted a position as the DGLVRP Specialist. I have a degree in Civil Engineering Technologies and have been certified as a DGLVRP 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 DGLVRP annual funding is required to be used for training and education purposes. The District uses this money to perform demonstration projects on eligible municipal roads. This allows us to meet these requirements of the program and also get the maximum amount of materials into road maintenance projects.

Dirt & Gravel Roads Program

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) reviews project proposals from municipalities and scores the environmental benefits. The QAB recommends which projects should be funded by the Conservation District. The District makes grants to local municipalities to perform ESM projects on worksites identified as environmental pollution problems in their municipalities. To be eligible for these grants, an employee or official responsible for performing the road maintenance for the municipality must attend a two day training workshop on Environmentally Sound Maintenance practices. The attendee remains qualified to participate in the program for five years before attending additional trainings. The 2014 funds enabled the District to perform ESM on 5.7 miles of roadway and host an Underdrain Placement Demonstration Workshop. To date, the program has assisted local municipalities apply these ESM practices on 82.4 miles of roadway by installing:

- 657 cross pipes
- 19 stream culverts
- 30,000 feet of piping
- 150,000 feet of under drains
- 255,000 sq. ft. of ditch stabilization
- 350,000 sq. ft. of bank stabilization
- 1,200,000 sq. ft. of vegetative management

2015 Grant Recipients

Twenty two municipalities have received grants to complete Dirt & Gravel Roads projects in 2015 construction season totaling \$735,000.00. These municipalities are Bethel, Cadogan, City of Parker, Cowanshannock, Elderton Borough, Gilpin, Kittanning, Madison, Manor, Manorville Borough, North Apollo Borough, North Buffalo, Parks, Pine, Plumcreek, Rayburn, Redbank, South Buffalo and Valley Townships.

2015 Low Volume Roads Grant Applications

The District is accepting applications for the Low Volume Roads grant program to perform ESM practices on paved or tar & chipped roads until April 2, 2015 at 4:00 p.m. Application packets can be picked up at the District office from 8:00 a.m. to 4:00 p.m. Monday through Friday. Additional information can be obtained by calling the DGLVR Specialist at 724 545-3610.

Additional information about the DGLVR Program can be found on the Armstrong Conservation District website: armstrongcd.org

AmeriCorps Member

Alexander Veto – alveto@co.armstrong.pa.us

724-545-3658

I am the Armstrong Conservation District AmeriCorps Member. PMSC AmeriCorps is the Pennsylvania Mountain Service Corps division and through my affiliation I am focused on environmental stewardship.

Working with ACD I support district staff in daily functions including; site inspections, documenting projects, and the construction/organizations of grant applications. I provide assistance and administrative efforts in collaboration with the Watershed Specialist, Nutrient Management Specialist/Ag Technician, E&S Specialist, and Dirt and Gravel Road Specialist.

Watershed Specialist Assistance

In collaboration with the watershed specialist I seek funding for conservation district projects through environmental programs such as PennVest, Growing Greener, and other environmental stewardship grants. At any given site, I take pictures to document phases of projects and to aid in community understanding through the visualization and illustration of projects.

I assisted in surveying the Shay property which will be the site of future bank stabilization or fish habitat structures. I assisted the Watershed Specialist with timber marking and valuing for a Growing Greener funded AMD project. I assisted the Watershed Specialist in Armstrong County and the Watershed Technician in Beaver County by constructing/compiling bid packets and performing site inspections on bank stabilization projects at two community parks in Beaver County.

Data Logger Program

I have continued to collect data from six stream monitoring locations in Armstrong County for non-point source pollution. Data loggers measure temperature, pH, total dissolved solids, and conductivity at 15 minute intervals 24 hours a day. Field measurement of chloride and alkalinity accompany the bi-monthly data collection. These parameters of stream quality help to determine how upstream sources of pollution influence a stream. Measureable sources of pollution could be nutrient runoff from farms or mine discharges. Interpretation of the stream data is done by the Armstrong Watershed Specialist and the Kiski-Conemaugh Stream Team.

Expansion of the data logger program is achieved through an increased number of streams which are monitored and the amount of public knowledge. A new data logger unit will be installed on Plum creek upstream from the bridge on Race Track road. Additional stream sites for data logger monitoring are under consideration. I am frequently accompanied in the field on data collection days by John Linkes, Associate Director Armstrong Conservation District and Katie Good, AmeriCorps. If you are interested in these monitoring practices, contact me and I will take you into the field during a collection day.

Training and Conferences

- ❖ Southwest Project Grass: Grazing Field Day
- ❖ Ohio River Watershed Celebration
- ❖ Southwest Regional Roundtable Meeting
- ❖ Western Pennsylvania Coalition for Abandoned Mine Reclamation
- ❖ DEP hearing with Butler Petroleum
- ❖ No Till Conference

Will soon attend:

- ❖ Introduction to Conservation Planning
- ❖ Dirt & Gravel Road Program Training

Future work with the Conservation District

- ❖ In cooperation with the Allegheny Valley Land Trust, identify sites for remediation along the Armstrong County Trail that are experiencing large amounts of erosion.
- ❖ Upgrade the infrastructure by installing new materials at the Rural Valley Trout Nursery.
- ❖ Acquire wetland plants like silky dogwood for the creation of a riparian buffer along at stream bank stabilization project on Carnahan run near Lee Lake.
- ❖ Provide educational outreach to youth during the Envirothon and at the Environmental Learning Center.
- ❖ Continue to search for funding opportunities for ACD and the cooperating organizations.